

US DEPARTMENT OF TRANSPORTATION

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PIPELINE AND HAZARDOUS MATERIALS
SAFETY ADMINISTRATION

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GAS PIPELINE ADVISORY COMMITTEE

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WEDNESDAY
MARCH 28, 2018

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The Gas Pipeline Advisory Committee met in the Ballroom of the Hilton Arlington, 950 North Stafford Street, Arlington, Virginia, at 8:30 a.m., David Danner, Chair, presiding.

PRESENT

DAVID W. DANNER, Chair
W. JONATHAN AIREY, Member
STEPHEN E. ALLEN, Member
RONALD A. BRADLEY, Member
DIANE BURMAN, Member (via telephone)
J. ANDREW DRAKE, Member
SARA ROLLET GOSMAN, Member
ROBERT W. HILL, Member
SARA W. LONGAN, Member
TERRY L. TURPIN, Member

RICHARD H. WORSINGER, Member

ALSO PRESENT

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

DRUE PEARCE, Deputy Administrator

CHERYL WHETSEL, Advisory Committee Manager

JOHN GALE, Director, Standards and Rulemaking

ROBERT JAGGER, Transportation Specialist

CHRIS McLAREN, Program Manager

STEVE NANNEY, Program Manager

SAYLER PALABRICA, Transportation Specialist

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

2 8:41 a.m.

3 MR. DANNER: All right, good morning,
4 everybody. It is March 28th and Day 3 of Meeting
5 132 of the PHMSA GPAC Pipeline Advisory
6 Committee.

7 I'm Dave Danner, I'm chairing the
8 meeting today and we're going to be working
9 almost focused entirely on repair criteria today.

10 So, I am just going to hand it over to
11 Alan and Alan will tee up today's schedule.

12 Alan?

13 MR. MAYBERRY: Okay, thanks Mr.
14 Chairman. And for today we just have about I
15 think ten more slides to go through as we tee up
16 the repair criteria.

17 And we'll talk about how we're going
18 to organize getting in a position for a vote.
19 But before we get into that, I wanted to cover a
20 couple of topics.

21 First off, I'll do a check from the
22 Committee here. Is everyone doing okay? Is it

1 going at about the right speed?

2 I think there's been great discussion.
3 I'm very pleased so far, just -- everyone's doing
4 okay? I don't see any frowns so that's a good
5 thing.

6 And as you know, this Committee is
7 statutorily put in place to advise us, to advise
8 the Administrator or the Secretary on policy
9 direction.

10 And I think we've covered this and
11 we've come a long way in the last couple of years
12 of moving beyond trying to wordsmith text.

13 I mean, we're not -- your role is not
14 to write text, as you know, but it's to advise
15 us. And coming out of here -- and just to give
16 you an idea, we will take the advice of the
17 Committee.

18 And that's why we've worded it that we
19 will -- you know, as we vote or you've voted,
20 we've -- PHMSA will consider the input.

21 And we have to put it that way because
22 there are a lot of things that happen after we

1 leave here.

2 Now, certainly, the advice of the
3 Committee we take very seriously and normally, it
4 kind of goes through that way but tweaks can
5 happen and do happen as it goes through first --
6 you know, the first step will be we will be
7 writing the Final Rule.

8 And that'll be the staff that you see
9 here today.

10 And then from that point, it goes
11 through a vetting process within PHMSA that's
12 circulated through all Departments, obviously,
13 the Office of Chief Counsel up through the
14 Administrator.

15 And once it's signed off by the
16 Administrator, the entire leadership team of
17 PHMSA, including the Administrator, moves on to
18 the Office of the Secretary for review.

19 And there are various offices within
20 the Office of the Secretary that the rule will go
21 through related to policy, related to budget and
22 the like, as it heads beyond the Office of the

1 Secretary to the Office of Management and Budget,
2 which is kind of the final hurdle, if you will,
3 for significant rules such as this.

4 And the Office of Management and
5 Budget will review the rules, and obviously a big
6 component of that -- for good policy -- is the
7 cost and the benefit. And that whole timeframe
8 can take some months, as you know.

9 We've started this process, the NPRM
10 -- back in 2011 for the ANPRM so it's taken quite
11 a while but I don't think -- in fact, I'm sure
12 the process going forward, as is probably
13 obvious, won't be taking that long.

14 But this is a high-priority rule for
15 us to get right. But, yes, the last step is the
16 OMB before it comes back to PHMSA to sign the
17 Final Rule. And then it ends up as a Final Rule.

18 The timing of that is just really hard
19 to tell right now, but I would hope within the
20 next year we would certainly have something
21 finalized.

22 But I can't even predispose the

1 schedule because there were a lot of variables
2 there as you can imagine.

3 And we're not the only game in town,
4 there are other agencies there moving policies
5 through the process and other modes of
6 transportation within DOT for that matter.

7 Okay, so that was one topic. Any
8 questions about that or about the process? Okay,
9 many of you have been through this before. Okay,
10 Rich?

11 MR. WORSINGER: Rich Worsinger, Rocky
12 Mount. Alan, I just want to say thank you. I
13 appreciate that you and your staff does value our
14 input. It's obvious, the discussions we have
15 here, the discussions we have in preparation,
16 providing us with the slides ahead of time so
17 that we can be prepared.

18 It's very clear to me and other
19 members of the Committee that you do value our
20 input, that it is a two-way exchange.

21 And I just wanted to say thank you to
22 you, your staff for all your work, especially

1 burning the midnight candle in between the
2 Committee meetings to tweak the things so thank
3 you.

4 MR. MAYBERRY: I appreciate that
5 feedback, Rich. Yes, if you look at the history
6 of, you know, this whole process -- which is an
7 amazing process -- we don't always get unanimous
8 votes.

9 So, I think it's amazing we've had
10 unanimous votes, which shows the good
11 collaboration on the Committee.

12 But I know throughout time, the
13 Committee may decide one way and we try to go
14 that way but there is a history of varying from
15 that, I just wanted to make you aware of that.

16 But thanks for that feedback, Rich.

17 The other issue I wanted to bring back
18 up relates to just a matter of record-keeping.
19 We had some discussion yesterday on what do we
20 mean by TVC or traceable, verifiable and
21 complete?

22 And as you know, we are going to

1 address that in the preamble as far as record-
2 keeping goes.

3 We're not looking at rulemaking
4 language for that, but I want to make sure that -
5 - I really was going to open it up for input on
6 this, but when we're talking TVC, it -- you
7 certainly, as it came up when we issued our
8 advisory bulletin in the realm that we've been
9 talking, it was an issue related specifically to
10 MAOP.

11 But really, when you talk about
12 record-keeping, I mean, there's a matter of TVC
13 or element of TVC in just about any record. And
14 a record can vary depending on what you're
15 dealing with, the topic you're dealing with.

16 So, in some ways, I kind of wish we
17 weren't so focused on TVC but rather focused on
18 what is a credible record for proving something,
19 proving what you have.

20 Certainly, we found with the PG&E
21 incident record that says you have 30-inch
22 seamless pipe is probably not a credible record,

1 or there was a human error involved in that.
2 Because there isn't a 30-inch seamless pipe.

3 But what is a credible record? You
4 know, I want to approach it in sort of that vein
5 but I want your input.

6 For instance, if we're talking record-
7 keeping, if we're talking about pressure tests,
8 certainly we would be looking for data related to
9 what would go into a subpart J pressure test.

10 The test level tied to a line number,
11 perhaps -- you know, there are a variety of data
12 points that go in there. Perhaps the company,
13 perhaps the individual did it, but not
14 necessarily both.

15 Or if you're talking about a mill test
16 pressure, there's certain mechanical properties
17 that you're looking for in that. Or if you're
18 talking about a close-interval survey, perhaps
19 that would be tied specifically to a line number.

20 You would expect that, that you're
21 dealing with maybe the month and the year or
22 maybe just the year.

1 Or maybe, you know, if you didn't have
2 the exact date, would that be a show-stopper?

3 No, I wouldn't think so.

4 Would it be the company and the
5 individual, or just the company or just the
6 individual? I wouldn't think either one of those
7 would make a big difference either way.

8 And it just varies depending on what
9 you're dealing with. And I used to say this a
10 lot, it needs to pass the common sense test. It
11 needs to be common sense.

12 You can create scenarios for just
13 about everything and what if it to death but it
14 needs to -- you know, common sense needs to
15 prevail.

16 But anyways, as we look to leave you
17 today, at the end of today, and work towards
18 writing the rule -- which would include preamble
19 on this topic -- what are some thoughts you might
20 have related to record-keeping that we need to
21 consider?

22 I know I'm hitting you up cold with

1 that but if you had any thoughts on that, I'll
2 take them and then we'll move on to our favorite
3 topic, anomaly repair, for today.

4 Cheryl?

5 MS. CAMPBELL: So, I'm happy to throw
6 a couple of thoughts out, Alan.

7 And I appreciate your view of a common
8 sense approach, a practical and common sense
9 approach, as an operator who has a number of
10 records that might be almost complete, except
11 for, say, maybe the guy's signature on the
12 pressure-test record, right?

13 If I read some of this stuff to the
14 letter of the law, you would say that's an
15 incomplete record, right? We would like to think
16 that it's not, right?

17 That it's -- if everything else is in
18 line, that I have valid record-keeping for that
19 MAOP, that piece of critical information.

20 So, I think the thing that will be a
21 challenge for all of us is how do we make it
22 clear enough so that the operators don't get

1 crossed wires with the states, right?

2 And you have some people say, well,
3 this is what it says in black and white and this
4 is the way I'm interpreting it.

5 So, I don't know if that's something
6 that can be helped in the preamble or in some
7 guidance or something, so that we can get to a
8 practical level of record-keeping, right,
9 credible -- define what a credible record is in a
10 way that we don't spend a lot of time and energy
11 arguing with each other over it.

12 And I'm not worried about getting a
13 fine, right, because I'm missing a signature,
14 right, on something like that. Now, if we think
15 that that's a critical piece of information to
16 make that a complete record, then okay, let's --
17 but I mean, I think that's where -- at least for
18 the LDC segment, I think that's where a lot of
19 concern is, is around how will it be interpreted
20 by a lot of different people and -- over time as
21 well, right, in a way that we can all have some
22 certainty and say yes, we know this is -- and you

1 know me, I'm kind of a practical person.

2 I don't always like everything hard
3 black and white, right?

4 But there are some things that, just,
5 they generate a great amount of discussion and a
6 lot of energy for both the company and the
7 regulator that isn't necessarily energy well-
8 directed. Maybe that's the way -- we have bigger
9 fish to fry.

10 MR. MAYBERRY: Okay, thanks.

11 So, I think probably providing good
12 guidance obviously, which we do on rulemaking,
13 but a heavy focus on maybe helping guide the
14 states as they implement this.

15 MR. DANNER: So, we have a couple
16 other tents up over here.

17 MR. MAYBERRY: Who's first though?

18 MR. DANNER: So Andy was first.

19 MR. DRAKE: Andy Drake with Enbridge.
20 I appreciate Cheryl's comment.

21 I think what we're really looking for
22 is some sort of practical guide to the

1 enforcement folks on how to interpret this.

2 We've had a lot of discussion about
3 TVC as far as MAOP. I do have to admit we had a
4 conversation yesterday about it.

5 Is a single document acceptable? And
6 Number 2 still seems to indicate we need
7 something more than that.

8 But I think as we look beyond MAOP and
9 you start talking about records, I think the
10 question we flared yesterday was really what does
11 that mean? And I appreciate your counsel here,
12 your guidance, as something practical.

13 We're not terribly concerned about TVC
14 other than maybe the variations of how it would
15 be interpreted.

16 So, anything we can do to help give
17 folks some guidance on that I think would be
18 really, really helpful.

19 MR. DANNER: All right, Steve?

20 MR. ALLEN: Steve Allen, IURC. Yes, I
21 have to agree with Andy and Cheryl on that. I
22 think there needs to be actually guidance for

1 state inspectors.

2 I think documentation and records need
3 to be substantive but we don't need to get into a
4 situation where we have form over substance.

5 And I think that would probably be my
6 only advice I guess or feedback to you is make
7 sure whatever ends up into a rule is something
8 that can be interpreted by regulators in such a
9 manner that we don't have form over substance, if
10 that makes any sense.

11 MR. DANNER: All right, thank you.
12 John?

13 MR. AIREY: I have a suggestion that
14 there be real caution on historic records and the
15 nature of them.

16 Having worked on a few acquisitions of
17 pipelines, the missing batches of data and files
18 is occasionally a problem because of acquisition,
19 a change in location of offices.

20 Stuff gets dropped and it's not
21 readily available, and I just think there needs
22 to be real caution on historic records.

1 You can't expect it to be at the level
2 that going forward, it's going to be.

3 MR. DANNER: All right, thank you.
4 Sara?

5 MS. GOSMAN: I'll just add my voice to
6 thinking it's a good idea to clarify in the
7 preamble this concept.

8 And I can see a reason why we might --
9 you might, decide that certain records are
10 critical to understanding the safety of a
11 pipeline and need more evidence that they are
12 reliable and traceable and complete.

13 And those might be beyond those needed
14 for this individual MAOP determination. But I
15 think there has to be clarity about where we're
16 go to going to apply that and where we're going
17 to apply something else.

18 And if it's something else, right, do
19 we have any standards around what that document
20 is supposed to be? So, I think those would be my
21 thoughts.

22 MR. DANNER: All right, Ron?

1 MR. BRADLEY: Ron Bradley from PECO,
2 thank you Mr. Chair. So, I appreciate the
3 conversation. I also agree that there should be
4 a single record that could work here.

5 My sense is I think we've landed on
6 the position at the gold standard of a pressure
7 test as a winner.

8 We should be able to produce a
9 pressure test and have it documented in the
10 system somewhere.

11 I think the challenges from years ago
12 are various but I think going forward, one record
13 of a pressure test would make it happen.

14 MR. MAYBERRY: Yes, just to be clear,
15 we agree that one record can be what's needed so
16 we'll make sure that that's clarified in the
17 preamble.

18 Okay, are we ready to move on? All
19 right, if there's no further discussion, we'll
20 conclude that. I appreciate that, that was very
21 helpful.

22 We'll move on to repair criteria and

1 I'll turn it over to Mr. Nanney, Steve Nanney.

2 Or, no, Chris McLaren.

3 MR. DANNER: So, yes, yesterday we had
4 the review of the proposed notice and so now
5 Steve is going to discuss the changes that
6 PHMSA's going to propose to a specific repair
7 criteria.

8 MR. McLAREN: Chris McLaren with
9 PHMSA.

10 We have about 20 slides and some of
11 them are quite in-depth, so finish up repair
12 criteria and the summary of changes that PHMSA
13 has proposed to the specific repair criteria in
14 these next 20 or so slides.

15 So, this is the revised proposed
16 repair criteria, showing on the left the repair
17 criteria from the Notice of Proposed Rulemaking.

18 And on the right, PHMSA's current
19 proposed repair criteria that has been revised
20 for the Final Rule based on all the feedback
21 we've received, and then the subsequent
22 investigation we've done to this point.

1 There's about four slides, the first
2 one's for immediate conditions. An immediate
3 condition for an HCA and non-HCA would be when
4 the PFP is less than or equal to 1.1 times the
5 MAOP.

6 And that's the same as was proposed.
7 Originally in the NPRM we had proposed dents with
8 metal loss, cracking or stress riser.

9 We revised that proposal to be topside
10 dents with metal loss, cracking or stress riser,
11 unless the ECA demonstrates critical strain
12 levels are not exceeded.

13 The third one was a metal loss greater
14 than 80 percent, and that has remained the same.

15 The fourth is metal loss affecting a
16 direct-current, low-frequency/high-frequency ERW,
17 or an electric flash-welded seam. That's been
18 revised to have metal loss preferentially
19 affecting those seams unless the PFP exceeds 1.25
20 times MAOP.

21 The fifth one originally proposed was
22 significant SCC and significant seam-cracking.

1 As we've revised our definitions, we
2 have revised that repair criteria to be crack or
3 crack-like defects greater than 50 percent wall
4 thickness, exceeds detection limit of ILI tool,
5 or the third criteria, the PFP is less than 1.25
6 MAOP.

7 And then the sixth one is any other
8 anomaly requiring immediate action, and that
9 would remain the same.

10 The next couple of slides cover
11 scheduled conditions.

12 One of the scheduled conditions to
13 deal with dents that was proposed for the Final
14 Rule is bottom-side dent with metal loss cracking
15 or stress riser, unless an engineer or an ECA
16 demonstrates critical strain levels not exceeded.

17 The second one was regarding topside
18 dents greater than six percent. Proposed for the
19 Final Rule would be that topside smooth dent
20 greater than six percent, unless the ECA
21 demonstrates critical strain levels not exceeded.

22 The third one from the NPRM is a dent

1 that's greater than two percent at a girth or
2 seam weld.

3 And in the proposed repair criteria
4 for the Final Rule, we have dent greater than two
5 percent at girth or seam weld, unless the ECA
6 demonstrates critical strain levels not exceeded.

7 Originally in the NPRM regarding
8 predicted failure pressures, for Class 1, that
9 would be a scheduled condition of one year in an
10 HCA if it was less than or equal to 1.25 in a
11 Class 1, less than or equal to 1.39 in a Class 2,
12 and less than or equal to 1.67 in a Class 3, or
13 if the PFP was less than or equal to 2.0 for a
14 Class 4.

15 And that would remain the same, and
16 these are all schedule conditions for one year in
17 an HCA, proposed two years in a non-HCA. Sorry
18 about not clarifying that immediately.

19 As part of the looking at the Final
20 Rule, we added a schedule condition for metal
21 loss preferentially affecting the VCLF or HF-ERW
22 in flash-welded seams, if the PFP is less than

1 1.39 MAOP for a Class 1 or is less than the
2 reciprocal of class location factor times MAOP
3 for Class 2, 3, 4 respectively.

4 Continuing with scheduled conditions
5 which would be 1 year in an HCA and 2 years in a
6 non-HCA area, the first one here is metal loss
7 greater than 50 percent at a crossing or
8 circumferential corrosion or girth weld. And
9 that one would remain the same.

10 On the next two, PHMSA's proposing
11 deleting them, the gouge or groove greater than
12 12.5 percent or a general corrosion area greater
13 than 50 percent.

14 The fourth one in the NPRM was
15 structured in that way, such that it was any
16 indication of crack or crack-like defect that is
17 not an immediate condition.

18 We've refined that to be crack or
19 crack-like defect that is, 1, greater than 50
20 percent wall thickness, 2, the PFP is less than
21 1.39 times MAOP for a Class 1, or 1.5 times MAOP
22 for a Class 2, 3, or 4.

1 So those are the scheduled conditions
2 for HCA and non-HCA areas, and now we'll move on
3 the bottom of this slide and the next slide to
4 monitored conditions for high-consequence areas
5 and non-high-consequence areas.

6 The first one is any bottom-side dent
7 greater than six percent. The second one is a
8 topside dent greater than six percent that
9 analysis demonstrates critical strain levels not
10 exceeded.

11 To continue on with monitored
12 conditions, any dent greater than two percent of
13 the girth weld or long-seam weld analysis
14 demonstrates critical strain levels not exceeded
15 was proposed in the NPRM.

16 And we've refined that for a dent
17 greater than two percent at girth weld or long
18 seam weld and ECA demonstrates critical strain
19 levels not exceeded.

20 And this would be the same for HCAs
21 and added for the non-HCAs.

22 Additionally, another condition added

1 is a dent that has metal-loss cracking or a
2 stress rise, and ECA demonstrates critical strain
3 levels not exceeded.

4 Another monitored condition added
5 would be metal loss preferentially affecting
6 those seams and the PFP is greater than 1.39
7 times MAOP for Class 1 or the reciprocal of the
8 Class Location Factor times the MAOP for Class 2,
9 3, and 4.

10 And the last one added under the
11 monitored conditions would be a crack or crack-
12 like anomaly for which fracture mechanics
13 analysis determined the PFP greater than 1.39
14 times an MAOP for Class 1, or the reciprocal of
15 Class Location Factor times MAOP for Class 2, 3,
16 and 4.

17 So, in light of public comments
18 received at the NPRM and at the Committee
19 Meetings, specifically the March 2 one, we
20 suggest that the Committee consider a number of
21 revisions to the proposed repair criteria
22 summarized on the following slides.

1 One, PHMSA suggested to the Committee
2 to add an effective date to 192.711(b)(1) to
3 clarify that 192.713 is not retroactive.

4 And also, in 192.711(a), clarifying
5 that pressure reductions be required for
6 immediate conditions and in cases where repair
7 schedules cannot be met.

8 PHMSA suggests revising 192.711(b)
9 with the following, to avoid duplication, refer
10 to 192.713 for repairs and pressure reductions.

11 Two, clarify that 192.713(a) applies
12 to segments not covered under Subpart O.

13 For instance, 192.713 applies to non-
14 HCAs, clarify that 192.713(c) is to replace the
15 phrase, impairs the serviceability with a
16 reference to the repair criteria in 192.713(d),
17 and to revise 192.913(d) to clarify that the
18 repair criteria apply only to onshore
19 transmission pipelines.

20 PHMSA suggests revising 192.711(b) to
21 also revise 192.713(d)(2) to strike the lower of
22 and allow the pressure reduction to be the

1 calculated safe pressure based on the class
2 location, one.

3 Or, 80 percent of the operating
4 pressure, two. Or the third one, 1.1 times the
5 PFP based on situational safety to public and
6 operating personnel.

7 We would also require that operators
8 document and keep records of the calculations or
9 decisions used to determine the reduced operating
10 pressure in the implementation of the actual
11 reduced operating pressure for a period of five
12 years.

13 We would also suggest the following
14 revisions.

15 When anomalies cannot be repaired in a
16 specified timeframe, clarify that the pressure
17 reductions are required comparable to IM
18 requirements in Subpart O.

19 Add notification requirements in
20 192.713 comparable to IM requirements, to require
21 that operators notify PHMSA when, one, it cannot
22 meet the schedule for evaluation or remediation

1 required under 192.713 and cannot provide safety
2 through a temporary reduction in operating
3 pressure or through another action, and also when
4 a temporary pressure reduction exceeds 365 days.

5 PHMSA suggests modifying 192.713(d)
6 and 192.933(d) to require that operators use the
7 following assumed values needed to determine
8 predicted failure pressure or pressure reduction
9 when these records are not known or not
10 documented in TVC or other records.

11 One, the specified minimum yield
12 strength, assumed Grade A pipe, or determine the
13 material properties under 192.607, or three, use
14 the basis for the current MAOP.

15 Also pipe diameter and wall thickness
16 use a basis for the current MAOP or determine the
17 material properties under 192.607.

18 PHMSA suggests the following, strike
19 the proposed definitions of significant seam-
20 cracking and significant stress corrosion
21 cracking in 192.3, delete the phrase any
22 indication of from the repair criteria related to

1 cracking, combine the repair criteria for stress
2 corrosion cracking and seam-cracking, and require
3 that the PFP for all-time dependent cracking
4 anomalies be calculated using the fracture
5 mechanics procedure in 192.712.

6 PHMSA suggests adopting the below-
7 crack repair criterion for immediate conditions,
8 where crack depth plus corrosion is greater than
9 50 percent of the pipe wall thickness, where
10 crack depth plus any corrosion is greater than
11 the inspection tools maximum measurable depth, or
12 three, the crack anomaly is determined to have or
13 will have prior to the next assessment a
14 predicted failure pressure that is less than 1.25
15 times MAOP.

16 PHMSA suggests adopting the below-
17 repair criteria for one year in an HCA and two
18 years in non-HCA conditions for repair.

19 Crack depth plus corrosion greater
20 than 50 percent of pipe wall thickness, the crack
21 anomaly is determined to have or will have prior
22 to the next assessment a predicted failure

1 pressure that is less than 1.39 times MAOP for
2 Class 1, or 1.50 MAOP for Class 2, 3, and 4.

3 And crack anomalies that do not meet
4 either the immediate or one-year HCA, two-year
5 non-HCA conditions, would be a monitored
6 condition.

7 PHMSA suggests allowing but not
8 requiring engineering critical assessment
9 analysis for the following dent-related repair
10 criteria in HCA and non-HCA areas: a dent with an
11 indication of metal loss, cracking or stress
12 riser, a smooth topside dent greater than six
13 percent, or half-inch deep for a 12-inch pipe.

14 A dent greater than two percent or
15 greater than a quarter inch on the 12-inch pipe,
16 that affects pipe curvature at a girth weld or a
17 seam weld, and dents analyzed by an ECA but shown
18 to not exceed critical strain levels would be
19 monitored conditions.

20 PHMSA suggests revising this immediate
21 condition for non-HCAs as follows: allow ECA to
22 analyze dent anomalies with indications of metal

1 loss, cracking or stress risers, and prioritize
2 repair criteria as follows.

3 For an immediate topside dent that
4 exceeds critical strain level, for that non-HCA
5 two-year repair, it would be a bottom-side dent
6 that exceed critical strain levels, and four,
7 that monitored the defect that do not exceed
8 critical strain levels.

9 PHMSA suggests deleting the following
10 repair criteria for HCAs and non-HCAs, the gouge
11 or groove greater than 12.5 percent wall
12 thickness, and areas of corrosion greater than 50
13 percent.

14 Also proposed is revising 192.485(c)
15 to include a reference to 192.712 for evaluating
16 corrosion and proximity to cracks or crack-like
17 defects, and for operators to make and retain
18 records.

19 PHMSA suggests revising the repair
20 criteria for corrosion metal loss affecting a
21 long-seam in HCAs and non-HCAs as follows; allow
22 but not require ECA analysis for the evaluation.

1 If the PFP is less than 1.25 times
2 MAOP, the anomaly would be an immediate
3 condition.

4 If the PFP is less than 1.39 times the
5 MAOP for Class 1, or 1.5 times the MAOP for Class
6 2, 3, and 4, the anomaly would be a one-year
7 condition in an HCA and a two-year condition in a
8 non-HCA.

9 If the PFP was greater than 1.39 times
10 the MAOP in a Class 1, or greater than 1.5 times
11 the MAOP in a Class 2, 3, and 4, the anomaly
12 would be a monitored condition.

13 And then continuing that discussion of
14 the proposed revisions, we would insert the word,
15 preferentially, to assure that this criterion
16 would not be applied to small corrosion pits near
17 long-seam.

18 It would only apply to corrosion along
19 the seam that could lead to slotting-type,
20 grooving crack-like defects.

21 In light of the comments we've
22 received from the Committee, specifically from

1 March 2nd, we suggest the Committee consider the
2 following definitions: accept the definition of
3 wrinkle bend as proposed in the NPRM and accept
4 the definition of hard spot with minor edits as
5 follows.

6 Hard spot means an area on steel pipe
7 with a minimum dimension greater than two inches
8 or 50.8 millimeters in any direction, and a
9 hardness greater than or equal to Rockwell 35 HRC
10 or Brinell 327 or Vickers micro-hardness 345.

11 Thank you, sir.

12 MR. DANNER: All right, thank you.

13 So we are now going to turn to take
14 public comment but I want to clarify basically,
15 this is a lot of stuff so in order to make it
16 orderly, we're going to break it into four
17 buckets if you will.

18 So, we'll take comment on the first
19 bullet up there. It's applicability, general
20 provisions, pressure reductions, including
21 notifications and pressure reduction assumptions.

22 So, with regards to that first bullet,

1 are there any public comments?

2 MS. BYRNES: Good morning, Corinne
3 Byrnes, National Grid. I believe this is
4 appropriate for that section.

5 It's a comment on -- the assumption
6 stated that scheduled conditions are allowed to
7 grow until they become an immediate condition.

8 And the associated slides, Slide 173
9 through 174 show trends in immediate repairs,
10 however, it does not provide detail on the nature
11 of the defects that fall into that category.

12 In some cases, it may be possible that
13 these may be newly acquired damages such as
14 third-party damages. It's also possible that
15 maybe operators are reporting conservatively.

16 So, I think we need a little more
17 information before an assumption is made on
18 trends of immediate damages that have grown over
19 time.

20 Also, identified defects may not grow
21 at the rapid rate suggested by PHMSA, especially
22 for low SMYS pipe with minor to moderate pressure

1 cycles.

2 I know that at our company, pipelines
3 that are baseline-assessed and then re-assessed
4 using in-line inspection are compared side by
5 side to determine if previously-identified
6 anomalies that may have been under monitored
7 classification have grown since the baseline.

8 In most cases, any growth of the
9 anomaly has been minor if at all.

10 Defects that may be picked up through
11 external corrosion direct assessment are usually
12 repaired at the time that they're found because
13 it requires an actual excavation.

14 We believe that the existing repair
15 guidelines for corrosion defects adequately
16 address the threat of corrosion defects up to 60
17 percent of wall thickness.

18 Also, there's a new category for
19 corrosion found at crossings, which, sorry,
20 probably should be removed as a criteria because
21 it's a redundant requirement that's already in
22 the existing regulation.

1 Thank you.

2 MR. DANNER: All right, thank you.

3 Are there any other comments with
4 regards to the first bullet up there,
5 applicability, general provisions, and pressure
6 reductions?

7 That is the end of the public
8 testimony with regards to that first grouping.
9 So, I'll turn it over to the Committee.

10 Any comment from the Committee Members
11 with regards to this first grouping? Well, we
12 might be out by noon.

13 All right, no tents are up. Why don't
14 we, then, turn to public -- all right, so -- All
15 right, timeout.

16 MR. GALE: Mr. Chairman and Members,
17 for this area, you can see the different
18 suggestions as summarized from Chris and Steve's
19 presentation up here.

20 They've required us to put it on three
21 different slides because it's so long, this area.
22 So what we're recommending is that we break the

1 three slides into basically two votes.

2 But also, as you can see here, these
3 are the topics we're covering so we want to make
4 sure you guys are comfortable, that you've had
5 adequate time to deliberate in these areas.

6 MR. DANNER: Okay, Andy?

7 MR. DRAKE: This is Andy Drake with
8 Enbridge. I just want to make sure I'm clear
9 here so, Steve, I'll ask this, or Chris.

10 When you say -- where is it up there -
11 - pressure reductions, I think it's the second
12 bullet, pressure reductions would be required for
13 immediate conditions and in cases where repair
14 schedules cannot be met, what you're really
15 saying, I think, is even in immediate conditions,
16 there is a response schedule for immediate
17 conditions.

18 As long as you meet that immediate
19 condition response schedule, you're okay. It's
20 not that just because you found an immediate, you
21 have to do a pressure reduction.

22 Is that right?

1 And then in that case, it would read
2 the same, it would be the same effect. It would
3 be required in cases where repair schedules can't
4 be met, immediate or scheduled.

5 Is that the same intent as what you're
6 trying to do here?

7 MR. DANNER: Steve?

8 MR. NANNEY: Steve Nanney with PHMSA.

9 What we are proposing is to give the
10 operator, as far as looking at a safe pressure
11 for doing the immediate, if you're not doing it -
12 - even if you're doing it immediately based upon
13 what you're seeing for your ILI results, you may
14 have to take a pressure reduction before you put
15 people out there.

16 And we've noted that in our wording,
17 we would note that.

18 And we've given, as we've seen in some
19 of the comments, several options that you can
20 take to look at as far as what those safe
21 pressures -- realizing maybe operating below that
22 pressure to begin with so there's no pressure cut

1 or anything because that's what you were
2 operating at.

3 So, we've given several options.

4 One would be if it's something unknown
5 in an 80 percent pressure cut, a Class Location
6 Factor pressure cut or a 1.1 pressure cut, we've
7 got various options built in based upon some of
8 the comments and everything.

9 So, I hear what you're saying and
10 again, we've got wording based upon what you're
11 seeing in the log, you know, and what you're
12 actually looking at for you to have to make a
13 decision based upon the code-wording and what
14 you're doing at the time, and how long it's going
15 to take you.

16 In other words, if an immediate's
17 going to be a month or two months or 30 days or
18 five days or one day, if you see my point. And
19 the wording is set up that way.

20 MR. DANNER: John?

21 MR. AIREY: Jon Airey, I just have a
22 minor question.

1 The requirement to go to lower
2 pressure immediately concerns me a little bit if
3 you're in a peak day condition zone on a
4 transmission facility. That's the only concern
5 I've got.

6 MR. DANNER: All right, other
7 comments? Okay, John, it was your understanding
8 that we would take these votes up?

9 MR. GALE: That's correct, Chairman.

10 We would have two votes on this first
11 topic area, so this first vote would be on these
12 two slides together and then we'll tee up another
13 slide, and of course, if there's any need for any
14 discussion, we can have that as well.

15 MR. DANNER: Okay, very good.

16 So, with the slide before us right
17 now, is there any comment from the GPAC Members?
18 If not, we are probably ready to entertain a
19 motion.

20 Steve?

21 MR. ALLEN: Steve Allen, IURC.

22 Similar to the voting language from yesterday,

1 the heading here, does that need to be adjusted
2 to reflect that there's additional voting
3 language to follow?

4 The way it reads is, okay, the NPRM is
5 fine so long as these changes are made. But
6 there are more changes to be made after this.

7 MR. GALE: Well, it does specifically
8 say, remember, Alan, that it's regarding repair
9 criteria applicability, general provisions, and
10 pressure reductions.

11 So we are trying to zero it in to that
12 topic.

13 MR. DANNER: All right, thanks for
14 that question. All right, any other questions?
15 All right, again, has anybody prepared to make a
16 motion? Cheryl?

17 MS. CAMPBELL: I'm happy to make a
18 motion, thank you.

19 The proposed rule is published in the
20 Federal Register in the Draft Regulatory
21 Evaluation with regards to provisions for repair
22 criteria applicability, general provisions, and

1 pressure reductions, are technically feasible,
2 reasonable, cost-effective, and practicable, if
3 the following changes are made.

4 Add an effective date to Section
5 192.711(b)(1) to clarify that Section 192.713 is
6 not retroactive.

7 Clarify in Section 192.711(a) that
8 pressure reductions would be required for
9 immediate conditions and in cases where repair
10 schedules cannot be met.

11 Refer to Section 192.713 for repairs
12 and pressure reductions to avoid duplication in
13 these sections.

14 Clarify that Section 192.713(a)
15 applies to segments not covered under Subpart O,
16 i.e. non-HCAs.

17 Clarify Section 192.713(c) to replace
18 the phrase impairs the serviceability with
19 reference to the repair criteria in Section
20 192.713(d).

21 Revise Section 192.913(d) to clarify
22 that repair criteria apply to onshore

1 transmission pipelines.

2 Revise Section 193.713(d)(2) to strike
3 the lower of and allow pressure reduction to be
4 the calculated safe pressure based on class
5 location or 80 percent of operating pressure, or
6 1.1 times predicted failure pressure based upon
7 situational safety to public operating personnel.

8 Require that operators document and
9 keep records of the calculations or decisions
10 used to determine the reduced operating pressure
11 in the implementation of the actual reduced
12 operating pressure for a period of five years.

13 MR. DANNER: All right, thank you very
14 much. Is there a second?

15 MR. HILL: Robert Hill seconds.

16 MR. DANNER: Thank you. All right,
17 any further discussion before we go to a roll-
18 call vote?

19 All right, hearing none, let's take a
20 roll-call vote. Cheryl?

21 MS. WHETSEL: Okay, Steve Allen?

22 MR. ALLEN: Aye.

1 MS. WHETSEL: Dave Danner?
2 MR. DANNER: Aye.
3 MS. WHETSEL: Diane Burman?
4 MS. BURMAN: Aye.
5 MS. WHETSEL: Sara Longan?
6 DR. LONGAN: Aye.
7 MS. WHETSEL: Terry Turpin?
8 MR. TURPIN: Aye.
9 MS. WHETSEL: Cheryl Campbell?
10 MS. CAMPBELL: Aye.
11 MS. WHETSEL: Andrew Drake?
12 MR. DRAKE: Aye.
13 MS. WHETSEL: Ron Bradley?
14 MR. BRADLEY: Aye.
15 MS. WHETSEL: Rich Worsinger?
16 MR. WORSINGER: Aye.
17 MS. WHETSEL: And Chad on the phone?
18 Okay, Jim Airey?
19 MR. AIREY: Aye.
20 MS. WHETSEL: Robert Hill?
21 MR. HILL: Aye.
22 MS. WHETSEL: Sara Gosman?

1 MS. GOSMAN: Aye.

2 MS. WHETSEL: Okay, the motion passes,
3 thank you.

4 MR. DANNER: All right, thank you very
5 much, and just to clarify, I think that was John.
6 You said Jim but we'll call him Jim. All right,
7 so moving on to part 2 --

8 MR. GALE: Mr. Chairman, there's one
9 more vote that has to occur.

10 MR. DANNER: No, that's right.

11 MR. GALE: On this first bucket here.

12 MR. DANNER: All right, so take a
13 minute to read this next one.

14 MR. GALE: And just to be clear, it's
15 just one page, that's all. I see our Member who
16 likes to put forward the motion has left us.

17 MR. DANNER: Yes, so taking volunteers
18 for anyone else who has eyesight sufficient to
19 read that?

20 Robert, would you be willing to make
21 the motion? Would you be willing to make the
22 motion? Thank you.

1 MR. HILL: Do you want me to read this
2 now?

3 MR. DANNER: Would you please?

4 MR. HILL: The proposed role as
5 published in the Federal Register and the Draft
6 Regulatory Evaluation with regards to provisions
7 for repair criteria applicability, general
8 provisions, and pressure reductions, are
9 technically feasible, reasonable, cost-effective,
10 and practicable, if the following changes are
11 made.

12 When anomalies cannot be repaired in a
13 specified timeframe, clarify that pressure
14 reductions are required comparable to IM
15 requirements, Subpart O, and notification
16 requirements in Section 192.713 comparable to IM
17 requirements, to require that operators notify
18 PHMSA when they cannot meet the schedule for
19 evaluation and remediation required under Section
20 192.713 and cannot provide safety through a
21 temporary reduction in operating pressure or
22 through another action, and a temporary pressure

1 reduction exceeds 365 days.

2 Modifies Section 192.713(d) and
3 192.933(d) to require that operators use the
4 following assumed values needed to determine
5 predicted failure pressure, PFP, or a pressure
6 reduction when these values are not known or not
7 documented in records.

8 Specified minimum yield strength, the
9 SMYS, assume Grade A pipe, or determine material
10 properties under Section 192.607, or use basis
11 for the current MAOP.

12 Pipe diameter and wall thickness, use
13 basis for current MAOP or determined material
14 properties under Section 192.607.

15 MR. DANNER: All right, thank you very
16 much. So, I'll let the record reflect that
17 Robert Hill made the motion.

18 Is there a second?

19 MR. WORSINGER: Rich Worsinger,
20 second.

21 MR. DANNER: Thank you very much.
22 Okay, any discussion on this slide. All right,

1 if not, Cheryl, we'll go to a roll call?

2 MS. WHETSEL: Steve Allen?

3 MR. ALLEN: Aye.

4 MS. WHETSEL: Dave Danner?

5 MR. DANNER: Aye.

6 MS. WHETSEL: Diane Burman?

7 MS. BURMAN: Aye.

8 MS. WHETSEL: Sara Longan?

9 DR. LONGAN: Aye.

10 MS. WHETSEL: Terry Turpin?

11 MR. TURPIN: Aye.

12 MS. WHETSEL: Cheryl Campbell?

13 MS. CAMPBELL: Aye.

14 MS. WHETSEL: Andrew Drake?

15 MR. DRAKE: Aye.

16 MS. WHETSEL: Ron Bradley?

17 MR. BRADLEY: Aye.

18 MS. WHETSEL: Rich Worsinger?

19 MR. WORSINGER: Aye.

20 MS. WHETSEL: Jon Airey?

21 MR. AIREY: Aye.

22 MS. WHETSEL: Robert Hill?

1 MR. HILL: Aye.

2 MS. WHETSEL: Sara Gosman?

3 MS. GOSMAN: Aye.

4 MS. WHETSEL: The motion passes.

5 MR. DANNER: All right, thank you.

6 So, can we put up the slide with the four
7 buckets?

8 So, I think we're now going to turn to
9 public comment with regards to debt criteria,
10 including ECA allowance and non-HCA anomaly
11 types.

12 MR. GALE: And Chairman, if you allow,
13 we're also going to put on -- this is only one
14 voting slide on this.

15 So, it might help the discussion so
16 they can see the topic areas that we're going to
17 put the voting slide up early so that the public
18 and the Members can see the topic under
19 consideration.

20 MR. DANNER: That's good, thank you.
21 All right, and so this is the voting language
22 with regards to debt criteria?

1 MR. GALE: I'm verifying right now.

2 While we wait, we can thank those
3 people who did bring the donuts today for
4 continuing National Donut Day.

5 Are we good? Okay, we're good,
6 Chairman.

7 MR. DANNER: Okay, so this is one
8 slide with the voting language for debt criteria.
9 Is that correct?

10 MR. GALE: That is correct.

11 MR. DANNER: All right, thank you,
12 John.

13 All right, so we are now going to open
14 it up for public comment on debt criteria and you
15 see the language before you. Go ahead, sir.

16 MR. CHITTICK: I'm Dave Chittick with
17 TransCanada Pipelines, and to do with the
18 engineering critical assessment for the strain
19 level for dents, operators like TransCanada and
20 others, we have proven analytical methods to
21 calculate the strain on our dents.

22 And today we're implementing those

1 outside of the HCAs. We're very pleased to have
2 the opportunity now to apply those practices
3 inside of HCAs.

4 And I just want to confirm that on an
5 earlier slide, there was a reference to Finite
6 Element Analysis, and I just want to clarify that
7 FEA is not needed for many of these assessments.

8 It is needed in certain assessments
9 but just looking to verify that just basic strain
10 analysis is sufficient.

11 Thank you.

12 MR. DANNER: All right, thank you. Is
13 there other public comment on this slide? Okay,
14 hearing none, I'll open it up to the Committee
15 for discussion.

16 MR. GALE: Steve would like to respond
17 to that.

18 MR. DANNER: Yes, I was going to ask
19 Steve if he would do that. Steve?

20 MR. NANNEY: Steve Nanney with PHMSA.

21 Just to reply to the comment we got on
22 denting, the answer there would be yes, we agree

1 with the gentleman from TransCanada's comment
2 that Finite Element Analysis would not be
3 required on all dents.

4 MR. DANNER: All right, thank you for
5 that clarification. Is there other public
6 comment or other Committee comment on this slide?

7 All right, hearing none, are we
8 prepared to vote? Is there a motion -- oh, Sara?

9 MS. GOSMAN: I just have a quick
10 question. The critical strain levels here, are
11 these determined on a case-by-case basis?

12 MR. DANNER: I think that's a question
13 for Steve Nanney.

14 MR. NANNEY: This is Steve Nanney with
15 PHMSA. The answer would be probably yes. It may
16 be that some were put in a bucket, but the answer
17 is yes.

18 And right now, as you I think know
19 from the code, anything over -- there's a number
20 of cases where if it's over six percent, it would
21 require engineering critical assessment or
22 analysis, whichever way you want to term it.

1 And what we were doing here as we went
2 through in the slides, we wanted to put a
3 framework around it.

4 We agree with industry's comment that
5 we think we needed to put a bucket around it and
6 allow it in other places.

7 And I can show, and the reason we
8 thought that, we went back and looked at the
9 history on the gas lines versus the liquid lines
10 as far as dents.

11 And I think sometimes, the gas lines
12 get caught up in the liquid bucket because the
13 liquid lines are pressure cycling a heck of a lot
14 compared to the gas lines. So, you will have, in
15 dents, more cracking.

16 And what we found is it's sort of like
17 the other day, I think we had a couple of stats
18 and somebody said, well, maybe one or two of
19 them, one was offshore and somewhere else.

20 But we had gone through the stats on
21 dents for gas lines, and the incidents on
22 liquids, from about 2002 to 2017, there were

1 about three and a half incidents per year.

2 The gas lines were more -- and again,
3 somewhere between a half and less than one per
4 year, and they were very minimal. So, that's why
5 PHMSA is proposing this.

6 We agree, I think it's one of those
7 where stats matter and so we're trying to put
8 that into the code with what we're doing here.

9 MS. GOSMAN: Thanks for that
10 clarification.

11 MR. DANNER: Thank you. I know we
12 turned to Committee comments but I see that we
13 have one more public comment with your
14 indulgence.

15 MR. TOMAR: Thanks for the opportunity
16 and thank you, Steve, for the clarification and
17 for incorporating the fact that mechanical
18 damage-related failures in gas lines are much
19 less frequent.

20 My comment was --

21 MS. WHETSEL: Excuse me --

22 MR. DANNER: Can you identify

1 yourself?

2 MR. TOMAR: Sorry, Munendra Tomar from
3 Kinder Morgan. My comment was about the ECA and
4 the language around it.

5 I really appreciate and agree with the
6 framework that you've provided in the slides as
7 to what this should look like.

8 However, in that framework, you do
9 mention two aspects of the ECA, one is the
10 critical strain and the other is the fatigue
11 life.

12 But in the criteria, it doesn't seem
13 to allow for that so if we can consider leaving
14 the framework as sort of a guidance.

15 And in the criteria limiting the
16 language to say allow engineering critical
17 assessment, then the framework kind of defines
18 what comprises ECA.

19 And what that also does is there's a
20 lot of work going on in PRCI industry and also on
21 the European side with EPRG.

22 Some of the methods are FEA-based,

1 some of the methods are more analytical-based,
2 some are critical strain only, and some do look
3 into the fatigue life.

4 So, I guess keeping the language, just
5 suggesting that an ECA is an option rather than
6 defining the critical strain level as a criteria
7 does give the operators the ability to
8 incorporate the latest and greatest in science
9 and technology as things develop.

10 Thank you.

11 MR. DANNER: All right, thank you.

12 All right, so turning back to the
13 Committee, is there any comment on what you've
14 heard or any reaction to the public comments
15 you've heard?

16 So, Andy?

17 MR. DRAKE: This is Andy Drake with
18 Enbridge. I think the last comment was very
19 good. I'm sitting here trying to think on the
20 fly how we'd change that fourth red dash to pick
21 that comment up.

22 Steve, if you have any ideas?

1 I don't think that certainly is
2 counter to the direction thematically we're
3 trying to do here, but I don't know if you have
4 any thoughts on how to pick that up wording-wise.

5 MR. NANNEY: Steve Nanney, PHMSA. I
6 don't right now. We're going to take into
7 account the comments we've heard today.

8 My personal thought is it's not needed
9 to be in there.

10 MR. DANNER: It's not what?

11 MR. NANNEY: My personal thought would
12 be it doesn't need to be added, but if you wanted
13 to add, just say consider FEA analytical type of
14 reviews based upon the type of situation you
15 encounter.

16 And we understand what that's pointing
17 us to take a look at and everything. And I think
18 that would help summarize it.

19 MR. DANNER: This is Dave Danner. I
20 think that would be useful if we just added that
21 to the fourth bullet and just say PHMSA will
22 consider alternatives to ECA including FEA.

1 Where did it go? Should that be a
2 separate dash or should it be part of the fourth
3 dash? Yes, all right, that's great.

4 All right, thank you. Any other
5 comments from the Committee? Andy?

6 MR. DRAKE: I'm willing to propose a
7 motion.

8 MR. DANNER: All right, that's great.

9 MR. DRAKE: Voting language for repair
10 criteria Paragraphs 192.485(c), 192.711, 192.713,
11 and 192.933.

12 The proposed rule is published in the
13 Federal Register and the Draft Regulatory
14 Evaluation.

15 With regards to provisions for dent
16 repair criteria, they're technically feasible,
17 reasonable, cost-effective, and practicable if
18 the following changes are made.

19 One, allowing but not requiring ECA
20 analysis for the following dent-related repair
21 criteria, HCA and non-HCA, dent with indication
22 of metal loss, cracking or stress riser, smooth

1 topside dent greater than six percent diameter or
2 0.5-inch deep for diameters less than nominal
3 pipe size 12 inches, dents greater than two
4 percent diameter or greater than 0.25 inches deep
5 for nominal pipe -- for diameters of less than
6 nominal pipe size, 12 inches that affect pipe
7 curvature at a girth weld or seam weld.

8 Dents analyzed by ECA but shown not to
9 exceed critical strain levels, that would be
10 monitored conditions. PHMSA will consider
11 language to accommodate alternative ECA methods
12 such as FEA.

13 And two, revise the immediate
14 conditions for dent anomalies with indications of
15 metal loss, cracking, or stress risers in non-
16 HCAs as follows.

17 Allow an engineering critical
18 assessment to analyze dent anomalies with
19 indications of metal loss, cracking, or stress
20 risers, and prioritize repair criteria as
21 follows.

22 To immediate topside dents that exceed

1 critical strain levels, to your bottom-side that
2 exceed critical strain levels, and monitored
3 defects that do not exceed critical strain
4 levels.

5 MR. DANNER: All right, thank you. Is
6 there a second?

7 MS. LONGAN: I second.

8 MR. DANNER: All right, thank you.
9 So, we have a motion before us and second.

10 Is there any further discussion before
11 we go to a roll-call vote? Okay, hearing none,
12 Cheryl, we're ready for a roll-call vote.

13 MS. WHETSEL: Steve Allen?

14 MR. ALLEN: Aye.

15 MS. WHETSEL: Dave Danner?

16 MR. DANNER: Aye.

17 MS. WHETSEL: Diane Burman?

18 MS. BURMAN: Aye.

19 MS. WHETSEL: Sara Longan?

20 DR. LONGAN: Aye.

21 MS. WHETSEL: Terry Turpin?

22 MR. TURPIN: Aye.

1 MS. WHETSEL: Cheryl Campbell?

2 MS. CAMPBELL: Aye.

3 MS. WHETSEL: Andrew Drake?

4 MR. DRAKE: Aye.

5 MS. WHETSEL: Ron Bradley?

6 MR. BRADLEY: Aye.

7 MS. WHETSEL: Rich Worsinger?

8 MR. WORSINGER: Aye.

9 MS. WHETSEL: Jon Airey?

10 MR. AIREY: Aye.

11 MS. WHETSEL: Robert Hill?

12 MR. HILL: Aye.

13 MS. WHETSEL: Sara Gosman?

14 MS. GOSMAN: Aye.

15 MS. WHETSEL: Okay, the motion passes.

16 MR. DANNER: All right, thank you very

17 much. Okay, all right, so we're now going to

18 move into the third one, which is cracking

19 criteria.

20 And we don't have a Staff presentation

21 on that?

22 MR. GALE: No, Chairman, we do have

1 two voting slides which we think will help the
2 discussion from both the public and the GPAC as
3 well.

4 MR. DANNER: Okay.

5 MR. GALE: And we're pulling it up
6 here shortly.

7 MR. DANNER: Okay, so we're going to
8 put up the voting language and then we're going
9 to take public comment on the third bucket.

10 MR. GALE: It's coming up shortly.

11 There we go.

12 MR. DANNER: All right, so take a
13 moment to read that and then we will take public
14 comment on cracking criteria.

15 MR. OSMAN: CJ Osman with INGAA. I
16 have sort of a minor comment and this slide is
17 very helpful so thank you.

18 On the second sub-bullet on the second
19 bullet about predicted failure pressures and when
20 to schedule responses for cracking anomalies, I
21 just want to make sure we understand what the
22 intent of this, or will have prior to the next

1 assessment language, really means, and if that's
2 intentional.

3 Because what we're talking about in
4 this second bullet here is doing a calculation
5 for scheduled anomalies at a pretty conservative
6 --

7 MR. DANNER: Okay, you are on the
8 right side?

9 MR. OSMAN: Yes, the right side,
10 sorry, the right side, Slide 22, second section,
11 Bullet 2 where it talks about the crack anomaly
12 is determined to have or will have prior to the
13 next assessment, et cetera, et cetera.

14 So, those factors, 1.39 and 1.5, upon
15 which you'll be scheduling anomalies are fairly
16 conservative.

17 And then when you look at the state of
18 crack analysis today and the models and methods
19 that we use, to then add to that a requirement to
20 look at what it might be before the next
21 assessment, based on 1.39 or 1.5, that's going to
22 loop in the majority of crack anomalies that are

1 out there, probably the vast majority.

2 I think what might be the intent here
3 is to look at anomalies that might approach the
4 immediate response condition, the 1.25, prior to
5 the next assessment.

6 And I just want to get some clarity
7 from PHMSA and from the PAC on what the real
8 intent is there, and what the cutoff is for
9 forecasting into the future about what a crack
10 might be.

11 So, thank you.

12 MR. DANNER: All right, thank you.

13 MR. CHITTICK: Dave Chittick with
14 TransCanada Pipelines.

15 Building on some of the comments CJ
16 was just making, TransCanada, we have extensive
17 experience with crack in-line inspections for gas
18 pipelines.

19 We've completed over 200 inspections
20 with this new and evolving technology, so we have
21 learned a lot about this technology.

22 And there were some comments earlier

1 yesterday or the day before about this technology
2 is evolving and is not quite mature.

3 To a degree, those comments are fair
4 if we're looking at the low-level readings that
5 the tools are detecting.

6 We're implementing this technology
7 looking for cracks that are of concern, and these
8 are cracks that are six inches long, greater than
9 50 percent through the wall. And this technology
10 has no problem finding those cracks.

11 Where we're challenged with this
12 technology is the features that it reported with
13 10, 15, 20 percent depth.

14 But if you now take all of those
15 features and grow them out to your next
16 assessment period, that will lead to a lot of
17 digs.

18 And that may actually discourage
19 people from implementing this technology, which
20 is not what we want to do.

21 So, we really don't want to have a
22 condition that says you need to dig to 1.39 for

1 up to seven or 10 years out there and do that
2 within one year or two years. That's just not
3 the optimal approach.

4 I think what's more appropriate is the
5 year in which the feature would cross over that
6 barrier should be the area in which you do the
7 dig.

8 And another factor here, when you
9 hurry to do digs, you drive up the cost of doing
10 digs. Having opportunity to plan these things
11 out really helps optimize the costing of the
12 program. Thank you.

13 MR. DANNER: All right, thank you very
14 much.

15 MR. JOHNSON: Dave Johnson with Energy
16 Transfer.

17 My comment applies I think here and to
18 the next section when we talk about the corrosion
19 defects as well, but I thought I'd go ahead and
20 get it on the table here.

21 And it has to do with the predicted
22 failure pressure ratios that are suggested in

1 here.

2 There are several places throughout
3 these slides where these ratios are stated and
4 they are related to the Class Location Factors.
5 And this is one of those places on the right-hand
6 side, I think.

7 What seems to not have been considered
8 here is the ability of operators to utilize
9 what's commonly referred to as the class bump,
10 that is pipelines that have met certain
11 conditions can operate at a higher design factor
12 than would normally be designed for their class
13 location.

14 So, you can operate at a design factor
15 of 0.72 in a Class 2 area, and 0.60 in a Class 3
16 area.

17 And if you apply the reciprocals of
18 those, strictly as the Class Location Factors to
19 any of these pipes, say, a pipe that was designed
20 with 0.72 design factor that's operating that way
21 in a Class 2 area, if you apply the Class 2
22 factor to it, the pipe itself will not pass,

1 regardless of whether it has a defect in it.

2 So, I'd suggest that we carefully go
3 through all of this and one approach would be to
4 change all of the references to Class Location
5 Factors to something like Applicable Design
6 Factor, which then would allow the 0.72 in a
7 Class 2 area and a 0.60 in a Class 3.

8 MR. DANNER: All right, thank you. Go
9 ahead?

10 MR. TOMAR: Munendra Tomar, Kinder
11 Morgan.

12 My comment is about the requirement
13 for a crack anomaly to be an immediate indication
14 if the predicted failure pressure is less than
15 1.25 times MAOP.

16 Given the requirement for an immediate
17 and as Dave mentioned earlier, the cost of an
18 excavation skyrockets if it's an immediate versus
19 a scheduled condition.

20 On top of that, we do take into
21 account tool tolerance; our predicted failure
22 models are conservative. So, there's layers over

1 layers of conservatism in even the calculation of
2 the predicted failure pressure.

3 On top of that, having a further
4 conservative criteria for scheduling an immediate
5 dig I believe makes it more onerous than it could
6 be.

7 So, just for the consideration of the
8 Committee, if we can discuss this and see if this
9 is still appropriate? Thanks.

10 MR. DANNER: All right, thank you. Is
11 there any further comment on the cracking
12 criteria?

13 Okay, hearing none, I'll turn it over
14 to the Committee. Do you have any comments or
15 any response to the public comments?

16 Okay, all right, so what we're going
17 to do, we're going to take a short break right
18 now and then we'll come back and we will start
19 the Committee discussion on the cracking
20 criteria.

21 So, it is currently 9:58 a.m. and we
22 will be back here at 10:10 a.m.

1 (Whereupon, the above-entitled matter
2 went off the record at 9:58 a.m. and
3 resumed at 10:33 a.m.)

4 MR. DANNER: Okay. We're going to be
5 back on the record. I would like to just let
6 everyone know we've been joined by the Deputy
7 Administrator, Drue Pearce, so good morning.

8 MS. PEARCE: Good morning.

9 MR. DANNER: And now we are going to
10 begin the Committee discussion on the cracking
11 criteria. So as you can see, there's some new
12 language on the slides in front of you. Who
13 wants to start the discussion? Andy?

14 MR. DRAKE: This is Andy Drake with
15 Enbridge. I appreciate the break. These are --
16 at first, I think it's important to frame this
17 discussion. This whole section about cracks is
18 brand new, so, you know, we haven't been looking
19 at any kind of response criteria for cracks. The
20 whole thing is a brand new discussion. This is
21 all a value add, so to speak, to the industry,
22 and so there's a lot of trying to sort out what

1 does this mean.

2 I think part of the conversation we
3 had the other day I'd like to bring back to help
4 also with the perspective, and that is the tools
5 that we use to look at cracks in gas are on a
6 vertical developmental curve right now. So
7 they're getting better, we're making better use
8 of them. We also know better, quite frankly,
9 than to get a conspiracy of optimism going here
10 about their ability to look at size and
11 discriminate small features. So having really
12 aggressive numbers here is interesting, but
13 what's relevant is we can't practice some of that
14 because it's just not where the tools are right
15 now.

16 So I think as we look at this, I'd
17 start at the top. When we go to an immediate
18 event, you know, one of the things we're trying
19 to incentivize people to do is not use simple
20 solutions for complex problems. We need to be
21 looking at tool tolerance. We need to be looking
22 at colony crack length, not just crack length.

1 We need to be considering realistic growth rates
2 and things like that.

3 When we look at all of those things,
4 we would typically come in at a 1.1 as an
5 immediate. And what is an immediate? An
6 immediate is something that is urgent, it's
7 pressing. It's something that represents a
8 significant encroachment on the confidence
9 interval and needs to be addressed in a very
10 tight time frame. If you've done all of those
11 considerations, 1.1 is an appropriate number. If
12 we're not going to do all those things, all
13 right, well, then maybe 1.25 is the right number.
14 But I think what we're trying to do here as we
15 institute something new is: what behaviors are we
16 trying to create in the industry?

17 If you go to 1.25, I think what you're
18 going to do is get a gamesmanship thing going on
19 where people don't look at tool tolerance, they
20 don't look at colony length, they're not doing
21 the things you want them to do so that they don't
22 have to dig up half of the earth. And that's not

1 the right behavior that you're trying to
2 incentivize.

3 So, you know, if we're going to do
4 1.25, okay, I think people will start discounting
5 tool tolerances and other things, which is
6 probably not where you want to go. I would
7 actually opt for 1.1. It is an appropriate level
8 if you're doing this correctly with tool
9 tolerances, colony length considerations, and
10 things like that. That's actually better
11 engineering. That's actually better practice.
12 It's also congruent with how you handle corrosion
13 anomalies. So we'll just try to get in that same
14 rhythm of prudent practice.

15 The other thing that I would say is or
16 we'll have, prior to the next assessment, that
17 little paren there taken out. What you're trying
18 to do with urgency is you're trying to figure out
19 is it urgent right now and deal with it. If it's
20 not, then you go down to the scheduleds, and the
21 scheduleds is where what you're trying to do in
22 the scheduled. So my recommendation is take that

1 paren out. To me, you've got conservatism on
2 conservatism here. These are things that are
3 supposed to be dealt with immediately, so growing
4 them is down in the next category.

5 In the next category, what you're
6 trying to do here I think is try to figure out,
7 you call it a predicted failure pressure, we call
8 it FPRs, you know. But I think a number down
9 there of a 1.39 number is about the right number,
10 but it needs to be calibrated to the design
11 criteria. I think Dave had a good comment a few
12 minutes ago. Not class. Class is not the right
13 answer. It's the design criteria, and you want
14 to set that.

15 What that number is trying to do is
16 trying to tell you, based on the growth rates and
17 unity plots that you're doing, that number
18 actually does consider growth and is telling you
19 these are the ones to watch inside this time
20 frame before the next re-inspection. So I agree
21 with the striking of that "or prior to the next
22 assessment." That's the purpose of that number.

1 That is what it's trying to do. And I think
2 operators should be obligated to do some sort of
3 unity plot verification to make sure what they're
4 finding is lining up with that. I think that's
5 prudent practice.

6 I don't mean to be sounding like I'm
7 just tearing this to piece. I think this is a
8 really important juncture that we're at. You're
9 trying to institute something new and what
10 behaviors do you want to come along with that?

11 So, you know, my recommendations for
12 this right away would be taken the parens out. I
13 don't think they help in either place. Get the
14 numbers to line up with your design criteria,
15 which I think we're pretty close to that. And I
16 think the real question here is if you're going
17 to stay, I would encourage you to go to 1.1 and
18 then add things like operator should consider
19 tool tolerances and things like that. I think
20 that's really important here. But if we're not
21 going to do that, I think 1.25 can work. It just
22 has to have the parens taken out. Thank you.

1 MR. DANNER: All right. Thank you.
2 Is there any other comment on the language before
3 you? Cheryl?

4 MS. CAMPBELL: Cheryl Campbell, Xcel
5 Energy. Thank you, Chair. So I think Andy makes
6 a lot of interesting points and, again, just like
7 we were talking earlier in the week about
8 fracture mechanics, I mean, this is not my area
9 of expertise. I'm just going to admit that. But
10 I think that ensuring -- I agree, by the way,
11 that this is new, right? I mean, we've all found
12 some cracks and some features. The operators
13 have found cracks and features in their
14 pipelines, and I can remember standing next to
15 one one day staring at it going, gee, I wonder
16 what we're supposed to do with that. So, I mean,
17 I get where you're coming from, Andy. This is
18 kind of new, and we're trying to drive the right
19 behaviors for the operators and the technical
20 teams. How do we deal with that?

21 So I like adding some, maybe some
22 additional words that talk about some of those

1 expectations. I mean, you should be thinking
2 about tool tolerances and some of these other
3 things, right, when you're thinking about growth
4 rates.

5 I also agree with the comments about
6 immediate. I mean, if it's immediate, then, boy,
7 we better be out there taking care of it if we're
8 that concerned about it. So I would agree with
9 I'm not worried about "will have prior to the
10 next assessment." It doesn't feel like that
11 belongs there.

12 As far as -- I also, by the way, agree
13 about the design conditions or the design
14 factors. I think that makes more sense to me
15 from a technical standpoint than using the class,
16 and I do think it forces the operator into
17 thinking about the class because is it not true
18 that the design factor already takes the class
19 into account, right? I mean, that's my
20 recollection from long ago that the design factor
21 already takes the class location into account.
22 So I think that simplifies it and makes it a

1 little more straightforward. And then, you know,
2 give people the ability to repair within a time
3 frame as long as you're outside of that sort of
4 immediate category.

5 MR. DANNER: All right. Thank you.
6 Any other comment? Andy?

7 MR. DRAKE: This is Andy Drake. I
8 just want to follow up on one point, and I want
9 to be clear on this. I'm talking about an
10 either/or here with the 1.1 and tool tolerances.
11 I'm not talking about adding tool tolerances,
12 colony considerations, growth mod-ing, and stay
13 at 1.25. I think what that's going to do is
14 actually dis-incentivize people from running this
15 tool, especially given the developmental nature
16 of the tool. People are not going to take that
17 risk of running that thing and having to jump
18 over this humongous hurdle.

19 So I think you're trying to land here
20 in a place that incentivizes people to do the
21 right thing but not punishing them inordinately
22 for what they find, but keeps this in front of

1 them and manages it appropriately.

2 MR. DANNER: Sara?

3 MS. GOSMAN: I'm wondering if PHMSA
4 could expand a little bit about the basis of the
5 1.25 versus 1.1.

6 MR. DANNER: Steve?

7 MR. NANNEY: Yes, this is Steve Nanney
8 with PHMSA. I guess I need to put this closer.
9 What PHMSA did is on the 1.25, the 1.39, the 1.5
10 are, it's just like our public comment was. I'm
11 going to start there and just build into your
12 question.

13 When you say Class 1 pipe or whether
14 you say Class 2 or 3, that means you've got a
15 design factor based upon that class and that also
16 means that you would have pipe diameter wall
17 thickness grade attributes based upon that. From
18 Class 1 to Class 2, the reason the question was
19 asked and we added the comment in red was because
20 if you have a class change from 1 to 2, you've
21 had a pressure test in the past at a certain
22 amount to be able to do that. And so that design

1 factor would not change if it was a 0.72, which
2 is, 1.39 is the reciprocal 0.72, and they're both
3 interchanged depending upon how you're using
4 them. That pipe wouldn't change. That same wall
5 thickness and grade would be still there, so
6 that's why we clarified that. We thought it was
7 clarified in the notice, and we'll make sure we
8 clarify it.

9 As far as getting to the 1.25, what we
10 did when we were looking at this, there's
11 criteria in an ASME document called STP dash, I
12 think it's 01. I may be hitting me up right here
13 to remember. And it's on stress corrosion
14 cracking, but it deals with how to deal with
15 cracks as far as what the pressure failure ratio
16 should be. And it has a 1.25, it has a 1.39 or
17 100-percent SMYS. And what we tried to do is
18 look at the categories and the timing that it had
19 of when you need to be doing those repairs and be
20 consistent with it is what we were trying to do.

21 And so that's how we got the 1.25.
22 That's how we got the 1.39. You know, we're

1 always open to listening to additional
2 information, but that's how we got it.

3 MR. DANNER: All right. John?

4 MR. AIREY: Steve, Jon Airey. Could
5 you comment on Andy's suggestion of going to 1.1
6 in that first section? It made a lot of sense to
7 me, and I'm just curious about your comment about
8 it.

9 MR. NANNEY: Again, this is Steve
10 Nanney with PHMSA. Again, PHMSA would have to go
11 back and look at that to see if we agree or
12 disagree. The one concern I would have on the
13 comments is on tool tolerance and usage of tool
14 tolerance. Even though operators are doing
15 integrity management and uses of tool tolerance,
16 PHMSA finds a lot of times that they're not using
17 it or they're misapplying it. So I hear what
18 Andy says, but we would have to go back and
19 evaluate that fully before we would consider it
20 one way or the other.

21 MR. AIREY: Let me follow up on that
22 if I could. What if we just made the change to

1 1.1? It seems to me that that's a reasonable
2 trigger for immediate action, and we left out a
3 discussion of tool tolerance which I think Andy
4 was also proposing, and it would avoid that issue
5 that you're concerned about.

6 MR. NANNEY: Putting the 1.1? Well,
7 again, on other occasions, have stated how using
8 dent tools, whether it's an EMAT or whatever type
9 tool, is a developing technology, etcetera. So,
10 again, before PHMSA would consider anything other
11 than 1.25, we would have to look at what the
12 Committee suggests and look at the various
13 concerns before we would consider it.

14 MR. DANNER: Andy?

15 MR. DRAKE: This is Andy Drake with
16 Enbridge. For the record, I agree with Steve.
17 It's an either/or. I think the tool is in a
18 learning curve, and people need to be deliberate
19 about understanding the tolerances that they
20 have. But I think the point is trying to shape
21 the right behavior, which I hear you're trying to
22 get people to go this direction, consider that

1 tool tolerance, consider how to model these
2 cracks effectively. And then, once you do that,
3 then you should be looking at this in the
4 accurate lens of what is it you're trying to do
5 in an immediate, what is an immediate? An
6 immediate is something that's really getting
7 close, and we need to deal with it right now
8 because you've taken a really good look at it and
9 you know it's close. Well, if you do that, then
10 1.1 is right. But if you don't do the other
11 things, I think you need a little margin, and I
12 think that's the point of what Steve is trying to
13 do.

14 So I see it as sort of an either/or
15 proposition myself. I just wanted to be clear.

16 MR. DANNER: All right. Sara?

17 MS. GOSMAN: Sara Gosman. I'm trying
18 to think through this issue of sort of gaming the
19 system a little bit through tolerances, and I
20 guess my concern is, you know, we aren't putting
21 anything specific in here around tolerances, so
22 that's already something I think that can be

1 different, I suppose, based on the operator.

2 Here we actually have a particular
3 threshold, and I wonder whether that doesn't
4 apply to any sort of situation in which you're
5 going to set a threshold. I mean, that is the
6 incentive could be for somebody who isn't going
7 to do the full, go above and beyond is to pull
8 back based on other safety factors. So that's
9 just sort of one comment/question about whether
10 this applies here, whether it's sort of a broader
11 problem.

12 And then I guess the other question I
13 would have is back to data. Do we know what
14 we're looking at in terms of 1.1 versus 1.25, in
15 terms of numbers, right? I mean, a sense of the
16 scale here of the differences for purposes of
17 immediate conditions. Is this an issue around
18 we're suddenly going to be getting a ton more
19 anomalies between that 1.1 and 1.25 or not, or do
20 we even know?

21 MR. DANNER: Andy?

22 MR. DRAKE: This is Andy Drake. I

1 think the relevance -- your question is the right
2 question. I think it has a little twist to it,
3 and that is actually all we're really talking
4 about here is time to respond. What you're
5 saying is, urgently, I have to get out there if
6 it hits this hurdle rate, you know, 1.1 or 1.25.
7 If it doesn't, if it's not urgent, then it's
8 scheduled.

9 So now the real question becomes:
10 what's the likelihood of something between 1.1
11 and 1.25 growing to be a problem before we get
12 there? And that, I think, is where the unity
13 plots come in. The operator, as long as you've
14 got tolerances and things adequately considered,
15 we're not seeing things break out of those
16 models, which is good. I mean, that's actually a
17 very good confidence builder that the response
18 times on those unity plots are getting people out
19 there fast enough that, if they dealt with
20 tolerance and they've got the right assumptions
21 in the models about colonies versus crackling,
22 that they're responding on a schedule that is

1 commiserate with that threat. Does that make
2 sense? It's not so much the numbers.

3 What ends up happening is you move a
4 lot of anomalies that can be managed successfully
5 with time into a very urgent response situation,
6 which is expensive, frustrating, and not terribly
7 productive. And that's all you're trying to make
8 sure you understand as an operator.

9 MR. DANNER: All right. Sara, then
10 Cheryl.

11 MS. GOSMAN: Thanks again for helping
12 me understand this. So am I correct then that,
13 ultimately, this is about what the safety factor
14 is? That is the sort of underlying assumption
15 here relates to whether the particular safety
16 factor as represented by 1.25 or 1.1 is important
17 enough to move on immediate versus scheduled?
18 And that seems to be an assumption built into
19 then this conversation. And I'm listening to
20 PHMSA say they have, you know, they're supporting
21 this through an ASME report, and I'm just
22 wondering -- I'm trying to figure out whether

1 this is an issue of practicality, an issue of
2 differences around whether the risk is
3 significant enough, some combination of those
4 things, and a sense of the scale -- all of those
5 things combined. And it's just I'm lacking
6 clarity on why this is so important to go from
7 1.25 to 1.1.

8 MR. DANNER: All right. Andy, do you
9 want to respond to that?

10 MR. DRAKE: This is Andy Drake with
11 Enbridge. I think all we're really talking about
12 is: what is urgent, and how accurately can we
13 portray or define urgency? If you use tool
14 tolerances and these other things, I think you
15 have a much better sense of the shape and
16 sensitivity and urgency of the anomaly. If you
17 don't do that, then this more globular criteria
18 probably gets you to the same place.

19 If you go to 1.1, you have to bring in
20 these other considerations, which is, I think,
21 prudent from an engineering and operations
22 standpoint. But you're not losing track of the

1 other anomalies. You actually are, you have a
2 better lens. You're looking more accurately at
3 the world and you're making better choices about
4 what is really urgent and then what needs to be
5 scheduled.

6 With a fuzzier look or a more globular
7 look, you're kind of cleaving this a lot more
8 conservatively because you're not looking as
9 accurately about what is urgent. But you're not
10 dealing; you're not not dealing with it. It's
11 just is it urgent or can I schedule it, and I
12 think that's the difference is if you look at it
13 more accurately you can probably schedule it
14 because you can see it better or you're modeling
15 it better. If you can't, then I think you might
16 move it to where you deal with it more urgently.
17 But it's not that you're not going to deal with
18 it. I think that's the key. You will deal with
19 it; it's just can you see it precisely enough to
20 plan it versus just doing a lot more of them at
21 one time.

22 And I think there was a comment made

1 earlier that doing a lot more of them urgently is
2 not productive either. You know, that just puts
3 a lot more work in a very, very expeditious
4 period of time, which is not helpful for a lot of
5 other reasons if I know better. That's the
6 difference.

7 MR. DANNER: All right. Thank you.
8 Cheryl?

9 MS. CAMPBELL: Thank you. Cheryl
10 Campbell, Xcel Energy. I was just going to, I
11 want to expand on that point that Andy made there
12 about the urgency. I think that we're interested
13 in making sure that the items that are urgent are
14 in that category and that we are responding to
15 them appropriately. I'm actually okay with
16 having some that aren't urgent in that category,
17 too, right, because you want to err on the side
18 of caution here, right?

19 I think what makes people crazy,
20 operators crazy in particular, and, frankly, the
21 communities that we live in at times may be more
22 for the LDC group, Andy, than the interstates.

1 But when you start having a lot of things that
2 you're calling urgent in that urgent category and
3 they turn out not to be, right, then, A, it's
4 very, very expensive and, B, it's very, very
5 disruptive. So if I'm having to get emergency
6 permits and then I'm digging next to a big road
7 or a highway, I've got all kinds of road issues,
8 I have everybody and their brother mad at me
9 because I just impacted their commute, I mean,
10 it's really pretty amazing how quickly that sort
11 of can spin up on you.

12 So I think it's an interesting
13 balancing act. Again, we want things that should
14 be urgent in that category and a little beyond.
15 But we don't want so many things in that bucket
16 that we are disrupting a lot of things around
17 there. You can only go ask for emergency permits
18 so many times from the same community, frankly,
19 before they start not believing you.

20 So, I mean, I think that's Andy's
21 point of what we're trying to do is where is the
22 right line to draw because I agree we will deal

1 with these issues. The question is do I deal
2 with them in a very short period of time, or can
3 I be more thoughtful about how I schedule dealing
4 with these things?

5 MR. DANNER: All right. Thank you.

6 Rich?

7 MR. WORSINGER: Rich Worsinger, Rocky
8 Mount. First, let me use the same qualifier
9 Cheryl did. I am not an expert in any way on
10 transmission and cracks and all this, but I still
11 think that I have some points that need to be
12 considered.

13 Many of APGA's members are fed by a
14 single transmission line. And it's critical that
15 that line have the pressure that's needed to
16 serve these various LDCs, especially during high
17 load like the winter. And I'm concerned that
18 that line could have a pressure reduction that is
19 not actually needed that could affect the ability
20 of that LDC downstream of that transmission line
21 to serve its customers.

22 To build on Cheryl's point, it

1 certainly is easier to do scheduled work than
2 emergency work, especially if you can schedule
3 that work in the shoulder months, either spring
4 or fall, not in the high usage months, depending
5 upon the system, of course. And I guess a
6 question that could be answered either by PHMSA
7 or by Andy, maybe both: is this mature enough to
8 be able to be brought into regulation using these
9 tools, this evaluation? There seems to just be
10 some concern over what value you use, and I'm
11 wondering if this technology has matured enough
12 to be considered, especially if it's going to
13 take a line, a pressure reduction and a line that
14 could negatively affect the ability to serve
15 customers.

16 MR. DANNER: All right. Andy?

17 MR. DRAKE: This is Andy Drake. I
18 think we are at a place where the tools -- you
19 know, yesterday I was talking about a thing
20 finder. That was three years ago. I think the
21 algorithms and the assessment criteria and the
22 tools themselves have developed quite a bit where

1 they're actually very good at finding critical
2 size cracks, and I think that's really important.

3 But down below a certain threshold, we
4 almost mask that off because it's not able to
5 discriminate or size consistently and accurately
6 below a certain size. But it can find critical
7 things fairly consistently and accurately. And I
8 think that's just where the technology is which
9 is okay. We should use the part that's working,
10 but be conscious of the noise. When we start
11 trying to grow little things, we don't even want
12 to look at the little things because we're not
13 even sure they're real, which is really the
14 conversation that's happening here.

15 So I think we're moving forward in the
16 right direction. We're truly at the front of the
17 ship here. I mean, this is all brand new. The
18 technology is evolving, and I think that's part
19 of the conversation is: how do we set this up for
20 success where we're not dis-incentivizing people
21 to do this because we create a hurdle rate so
22 high but actually shaping the right thinking as

1 they got into using these tools and how to
2 accurately assess what they're finding.

3 MR. DANNER: All right. Other
4 comments? All right then. We have some language
5 before us. I'm not seeing any proposals for
6 amendments to that language right now. Alan, why
7 don't you go ahead?

8 MR. MAYBERRY: I guess what we're
9 looking for is if the Committee could provide
10 edits to this where you think it ought to be, and
11 then we'll take it and consider it. And that's I
12 think where we are right now.

13 MR. DANNER: All right. Andy?

14 MR. DRAKE: Andy Drake with Enbridge.
15 As a minimum, we're typing as we're watching
16 here, so it's sort of real-time thinking. But I
17 think in the third bullet on the immediate stuff
18 at the top, the material in parens is not
19 necessary and it's kind of counterproductive. It
20 is immediate or it is not immediate right now,
21 and that paren needs to come out.

22 When you get down to the next section

1 where you're talking about scheduled anomalies,
2 how we deal with "or could grow to an immediate
3 condition 1.25 or less prior to the next
4 assessment" is really what you're trying to
5 accomplish with what we call FPR, you call it
6 PFP, of 1.39. I had it in my mind that it was
7 kind of okay with taking the paren out like
8 you've done and then just leaving it at 1.39, but
9 I'm trying to figure out what we're trying to
10 accomplish with the next.

11 I think 1.39 accomplishes what you're
12 trying to say with that new red stuff below
13 because that's the unity plot. That's what
14 you're trying to achieve there. So, you know, I
15 would probably take that part out, and I think
16 you're pretty close. I do think -- yes, the
17 design criteria, we did take the words class --
18 well, there it is. Yes, you still have class in
19 there. I think you want to take the class stuff
20 out and talk about commensurate design criteria
21 for 0.72 design factor, 0.5 design factor.

22 The class isn't the right reference.

1 It's the design factor that you want to switch
2 out there. Now I think you're done dialing in on
3 what is the thing designed to do and how is it
4 responding to that, not the class. It's kind of
5 interesting you've got this class bump stuff
6 going on, and it throws everything off. Does
7 that -- sorry. I'm trying to keep up with you on
8 the redline stuff.

9 MR. DANNER: All right. While we're
10 waiting, Cheryl, do you want to weigh in?

11 MS. CAMPBELL: Sure. Thank you.
12 Cheryl Campbell, Xcel Energy. So I would ask, I
13 would ask probably PHMSA and the Committee both,
14 I mean, this is kind of my sense of what we're
15 trying to do here. You know, I'll go back to
16 what Andy was talking about earlier. That top
17 part really is about are we defining those items
18 that we should be taking immediate action on,
19 right, we should be responding to immediately and
20 taking care of.

21 And then, once you get those taken
22 care of, okay, so now I've responded and I have

1 another group of anomalies let's say. So now
2 which of these anomalies -- how do I deal with
3 them, right?

4 So I think you're intention, and I'm
5 asking for clarity, I think your intention is
6 that we, operators, are paying attention to those
7 anomalies, we are making sure we understand if
8 they're going to get -- and I'm not going to use
9 the right words -- if they're going to get
10 serious before I'm supposed to be assessing again
11 and I'm taking action. I mean, I think that's
12 what we're trying to say here is take care of the
13 stuff that's immediate and then be watching the
14 rest of them and understand where they're at and
15 how they might be changing, and do something
16 about them before they become a problem. Is that
17 where we're trying to -- I mean, that's my sense
18 of what we're trying to talk about here, or have
19 I just totally misunderstood?

20 MR. DANNER: Alan?

21 MR. MAYBERRY: I mean, that's
22 basically it is deal with the immediate but then

1 be aware that, you know, be aware of your system
2 essentially that you're able to snag the others
3 before they become critical size. You know, I
4 think, historically, you know, looking at what's
5 happened out there, when failures have happened,
6 you know, we often hear that, well, I allied that
7 in the recent past. I'm just speaking
8 anecdotally. It could involve a variety of types
9 of flaws or anomalies, but it's just essentially
10 know your system and be able to be in a position
11 to know that you need to take action to repair a
12 feature before the next, you know, before it
13 grows to a critical size to fail.

14 MR. DANNER: All right. Sara?

15 MS. GOSMAN: Sara Gosman. It looks to
16 me like what we're trying to do is essentially
17 use (d)(1) here as the standard for that last
18 crack anomaly, so that's the one that says 1.1,
19 right? Am I right on this? Okay.

20 So in that paragraph, there's a
21 discussion of the records that are needed and
22 what happens if the records are not available.

1 So I'm wondering if proposal here includes all of
2 the information about those records, as well, or
3 if the proposal is simply to go to 1.1.

4 MR. DANNER: All right. Does anybody
5 want to respond to that? Andy, do you have a
6 response to that?

7 MR. DRAKE: I don't know if I do or
8 not. My card was up for something else. But I
9 think the records for this are in 712 under
10 fracture mechanics modeling. And, you know, the
11 discussion we had yesterday about toughness
12 assumptions absolutely weighs in here, and that
13 was why it was so important to get some of that
14 because you may not have those records because so
15 much of the system doesn't have toughness tests,
16 what is that assumption, plays into this
17 discussion.

18 So I think we have kind of, we're sort
19 of closing down the size of the gap through all
20 these conversations over so many issues over so
21 many days. We're sort of getting down to we've
22 already talked about toughness, we've already

1 talked about some of these other pieces, and now
2 we're getting to leverage them. So I don't think
3 the records issue will -- I don't think that's a
4 big problem here because how we assume the lack
5 of records has been kind of dealt with. Well, I
6 mean, that's what we talked about yesterday.

7 Before I move on to my issue, I just
8 want to make sure that answered your question.

9 MS. GOSMAN: So I guess to be more
10 specific, I think you've answered my question,
11 but just to clarify, so the language in (1)(i)
12 there, would you be willing to put that entire
13 language into the bullet point that we're talking
14 about now?

15 MR. DRAKE: Okay. Which bullet point
16 are we talking about now?

17 MS. GOSMAN: Number three under the
18 immediate conditions.

19 MR. DRAKE: Okay. So number three
20 about immediate response criteria based on 1.25.
21 So what would we add to that?

22 MS. GOSMAN: The language in (1)(i).

1 MR. DRAKE: Okay. (1)(i). Can you
2 just read me that?

3 MS. GOSMAN: Am I looking at the right
4 place, 713(d)(1)(i)?

5 MR. DRAKE: I think (1)(i) is metal
6 loss. So we're talking fracture mechanics, which
7 is 713.

8 MS. GOSMAN: I apologize. Hold on.

9 MR. DRAKE: Everybody is scurrying about
10 looking at their codes back here. This is kind
11 of fun.

12 MS. GOSMAN: There's the same language
13 in this one. Okay. So 933(d)(1)(i). So let me
14 back up here. So what I want to be able to
15 understand here is, and if I'm getting it
16 correct, and I apologize my voice is leaving me
17 here, but if what we're trying to do is
18 essentially apply this general standard, we had
19 something specific for cracks before that related
20 to significant ones. We're now going to apply,
21 as I understand it, at least for this particular
22 bullet point, this 1.1, as opposed to 1.25 for

1 cracks, then, if we're going to do that, are we
2 also going to include all of the information
3 about records? Because it seems to me that then
4 we want to be really careful about making sure
5 that we have documentation that supports that
6 particular decision in the same way, I mean, if
7 we're going to do it for that general one, I
8 would assume we would want to do it for the
9 cracks.

10 MR. DRAKE: I'm getting a lot of help
11 here, which is good. I think you're exposed to
12 it, which I think -- not exposed to it. I think
13 you're accountable to follow it in 712, which is
14 good. So I think you're accomplishing what you
15 want, but I would be hesitant to add it here
16 also, rather than point to it. I mean, if we
17 want to point to it, that's fine. I just don't
18 like where you repeat sections of the code in
19 three or four different places because I think
20 you end up getting out of sync of how it applies.

21 I think you just want to point to it
22 in context in its entirety. But I think that

1 it's there is the point. You're accountable to
2 have those records to make that choice. Is that
3 fair, Steve?

4 MR. NANNEY: I was not listening, to
5 tell you the truth.

6 MR. DRAKE: I appreciate your
7 candidness about that. I didn't mean to catch
8 you off guard.

9 MR. NANNEY: I was reading something.
10 Don't take offense. It wasn't that I was not
11 trying to -- what did you say?

12 MR. MCLAREN: Yes, you would be
13 accountable for those records. And I think the
14 beginning of the discussion started by looking
15 for 192.710 of pipeline assessment Section D data
16 analysis, where all of the requirements are
17 taking into account tool tolerances and
18 accounting for other uncertainties and then doing
19 unity plots and making sure that you're
20 performing that integrity assessment correctly.
21 Maybe there might answer your question. Thank
22 you.

1 MR. DRAKE: This is Andy Drake with
2 Enbridge. I think in answer to your question, as
3 far as I can tell, the intent is to require the
4 operator to have that data to make these
5 decisions, and that is referenced in these 700
6 sections. I don't have a problem with that. I
7 think that's appropriate. We're just arguing or
8 talking through how to mechanically make sure
9 that happens, but I think the intent is clearly
10 there to make sure that happens.

11 MR. DANNER: All right. Sara?

12 MS. GOSMAN: Sara Gosman. I think
13 what I'm interested in doing is, however the
14 language is, is being sure that the language that
15 is in (d)(1)(i) there -- now that I've got the
16 correct section, 192.933 -- that that language
17 concerning records, right, and the TVC records
18 and the documentation that supports this kind of
19 determination, that that language, if found in
20 another place, we could certainly reference it.
21 But, like, the fact that we have that specific
22 language in that one paragraph, I would want to

1 see similar language as it relates to cracks
2 because then, again, if I'm understanding this
3 correctly, we now have a section that
4 specifically references this set of
5 documentation, but we're going to bring cracks
6 down to that particular section without that set
7 of safeguards around documentation.

8 MR. DANNER: Okay. So we want to add
9 to that bullet that we would add a cross
10 reference or cite to that section of 192.933?
11 Okay. The way I see that, though, that Andy's
12 concern about not picking up and repeating code
13 language in multiple places is not addressed, so
14 we just want to reference it. Oh, Ron, I'm
15 sorry, I didn't see your card was up.

16 MR. BRADLEY: Thanks, Mr. Chair. Ron
17 Bradley, PECO. So just sort of listening and
18 absorbing this conversation, I like the concept
19 of, I mean, it's what we do in the business. I
20 like the concept of having an immediate repair
21 criteria, whether it's transmission or
22 distribution. It's not the same, but we do have

1 criteria that are immediate, then we have
2 schedule, and then we have monitor only, and then
3 we're in the same condition with this.

4 I think what I'm listening to is us
5 trying to figure out what immediate is. If we
6 set the bar to a place where the risk that we
7 mitigate has us chasing something every day, then
8 everything is immediate and nothing is immediate
9 and we find out that we have our resources doing
10 things that don't really mitigate against the
11 risk. And that's a challenge, and that's a
12 challenge no matter what side of the business
13 you're in. We want to make sure that, if there's
14 anything that needs to be addressed immediately,
15 that we're out there, we're taking care of it,
16 and we're mitigating the immediate nature of it,
17 either permanently or taking some action that,
18 you know, in transmission, you're going to do
19 something permanently. In distribution, you can
20 do something permanently, or you can defer based
21 on where the actual levels of the gas are.

22 All along, we're documenting that. I

1 mean, so what I'm challenged with what we're
2 trying to do today is listening to the public
3 with the input, listening to the Gas Pipeline
4 Advisory Committee with the input, and then
5 walking away and trying to operationalize it in a
6 way that puts resources in the right place. And
7 I think that's really hard to do. I think we're
8 going to have to take the advice of the
9 Committee, and that's my ear. My ear is
10 listening for that because if we write something
11 here and then go away and then -- Andy, I love
12 the thing finder thing. I got the image of it,
13 but if we go out and start popping holes all over
14 the place and don't add value, that's not a good
15 thing because the real leak could be happening
16 right around the corner and we need to go focus
17 on what we got to focus on. Just a comment.

18 MR. DANNER: All right. Cheryl, your
19 tent was up.

20 MS. CAMPBELL: Thank you. Thank you,
21 Mr. Chair. Cheryl Campbell, Xcel Energy, and I'm
22 just reading the last bullet there under the top

1 section, "material necessary for correcting
2 defects." I would encourage us to consider, you
3 know, pointing, referencing your point, Chair,
4 referencing a piece of code that's already there,
5 right, rather than lifting, rather than lifting
6 and repeating here. That makes it easier in the
7 future to kind of keep it all, right, to kind of
8 keep it all straight, as well, rather than
9 redoing it. So that's really all I wanted to
10 support was the citation, as opposed to adding
11 specific language.

12 MR. DANNER: Okay. Andy?

13 MR. DRAKE: This is Andy Drake with
14 Enbridge. I'm trying to keep up with the typing.
15 I see -- first of all, I wanted to declare to
16 Sara: we're in agreement. You need to have the
17 records there that are appropriate. But when we
18 talk about what we're referencing, I think we
19 need to remember we voted on this yesterday, so
20 it wasn't that long ago. That section we should
21 be referencing is not 607, it's 712. That's
22 what's applicable to here. And I think if we

1 want to go back and look at what we talked about
2 yesterday. I mean, I'm fine with that, but
3 that's what fits here. You don't want to do all
4 of 607 every time we do a crack. I mean, that's
5 going to get to be really a lot of, you know,
6 machinations. You want to do 712 here.

7 And I think, I'm not trying to do
8 anything other than connect the conversation we
9 had yesterday to this conversation, which I know
10 we deal with a lot of stuff, but that's the
11 appropriate reference that goes there.

12 MR. DANNER: Okay. Are we there?
13 Okay. Oh, your tent is up again.

14 MR. DRAKE: On a separate issue. I
15 think, you know, again, I'm trying to keep track
16 of the editorial stuff that's going on here real-
17 time, but we talked about class, and I would
18 offer this as a blunt instrument solution, rather
19 than switching over to design factors, is where
20 you have 1.3 times, it's the second bullet under
21 scheduled and it says 1.3 times MAOP for Class 1.
22 I think if you put Class 1 and 2 in there you

1 accomplish the same thing. It's a little bit
2 more of a course cut, but you kind of back into
3 it because it deals with the class bump. And
4 what you're really saying is 1.39 is the sizing
5 criteria for Class 1 and 2 design factors. And
6 1.5 times MAOP for 3 and 4, what you're really
7 saying: is when you switch over to the Class 3
8 and 4 design factors, you can't have a
9 commensurately big crack. It has to adjust to
10 deal with design factors. And so you're sort of
11 cutting it in two sections.

12 I think that's an alternative way of
13 dealing with this, because I'm appreciative of
14 the complexity of trying to reference design
15 factors in here. But if you just group it in
16 Class 1 and 2 and 3 and 4 at 1.39 and 1.5, you
17 accomplish virtually the same thing.

18 MR. DANNER: So what would you have
19 the sentence read?

20 MR. DRAKE: Where it says in parens
21 "for Class 1," I'd just say "or Class 2." And
22 then it says "or 1.5 times MAOP for Class 3 and

1 4." You accomplish the same thing. You're just
2 sort of demarking that when you get into the
3 thicker materials you don't want to use a 1.3
4 ratio. You don't want to allow a crack that big,
5 and you're just sort of setting a stage gate that
6 says, okay, we switch over to a smaller or more
7 intense criteria. That's just an alternate way
8 of doing it because I can appreciate, I was
9 watching you guys' brow wrinkle and you're trying
10 to figure out how to do design factors on this,
11 and I think that accomplishes the same thing.

12 MR. DANNER: Okay. So I just want to
13 raise the fact that, once again, we've got a
14 reference to TVC here, and I believe we parked
15 the definition of TVC yesterday. So we're going
16 to have to revisit that after we approve that.
17 Steve.

18 MR. NANNEY: I was waiting until the
19 mixture got into the milk, I guess. The comment
20 I'd like to make on what Andy just said was I
21 really think adding that Class 2 and the 1.39 is
22 not quite what I would suggest that you consider.

1 I would say our Class 2 that has Class 1 design
2 pipe in it would be my thought there, would be
3 more appropriate.

4 MR. DANNER: Andy, do you want to
5 respond other than to wave your arms?

6 MR. DRAKE: Yes, it's hard to get that
7 on the record, I'm sure. This is Andy Drake with
8 Enbridge. I was just trying to cut a design --
9 where do you want to worry about getting a bigger
10 crack? If you want to cut it at 0.72 design
11 factor, that's okay. You just had to deal with
12 the class bump. I really think it becomes a
13 bigger problem when you get to the Class 3 and 4
14 design factors, 0.5 and 0.4, because you're now
15 allowing a pretty sizable crack.

16 So I don't want to get into splitting
17 hairs with you, Steve, but that was my intent.
18 It was just create some differentiation that
19 people can see pretty easily.

20 MR. DANNER: Steve?

21 MR. NANNEY: Again, I would suggest to
22 the Committee that you consider it being Class 2

1 where it's changed and the pipe hasn't changed
2 out. And the reason there is the 1.39 is times
3 MAOP for Class 1 is tied into the 100 percent of
4 specified minimum yield strength. In evaluating
5 whether it's a pressure test or using this for
6 monitored is more what you need to be looking
7 for. Class 2 is one that we had selected the
8 1.50 as being, I realize it would be 1.67 if it
9 was 100-percent SMYS, but as a compromise of it
10 being thicker wall and everything, but with the
11 Class 1 being thinner and you having cracks in
12 it, which means that it's low toughness and
13 everything. And the same thing with Class 2. I
14 just think it would be more appropriate to be in
15 the 1.5 area. And I realize the Committee can do
16 what it would like to suggest, but that's just a
17 comment.

18 MR. DANNER: So if I can clarify, you
19 had suggested, so you'd say for Classes 1 or 2,
20 when it involves -- what did you say? Class 1
21 pipe?

22 MR. NANNEY: When there's Class 1 pipe

1 in the Class 2. In other words, it's been a
2 class bump would be one of the colloquial terms
3 that we use.

4 MR. DANNER: Okay. And then you'd say
5 1.5 time MAOP for other Class 2 and 3 and 4?

6 MR. NANNEY: Yes.

7 MR. DANNER: Andy?

8 MR. DRAKE: This is Andy Drake with
9 Enbridge. I don't have a big problem with that.
10 I guess just the fracture mechanics side of me is
11 peeking out here, and that is this cracking
12 problem diminishes as the thickness gets heavier.
13 So the need to be super precise as we get into
14 the heavier wall materials is not as pressing as
15 it is on Class 1. And I guess, you know, my only
16 thought here is: is the juice worth the squeeze,
17 this incredible level of precision as we get into
18 thicker and thicker materials, because I was just
19 trying to create a step that didn't allow a big
20 crack to exist in heavy design factors.

21 If we feel, you know, strongly that
22 we've got a lot of data, I don't know about a lot

1 of data where we're having cracks that are
2 encroaching on this on the thicker material. Is
3 that a problem, Steve? I mean, are you seeing
4 problems with this, just for my own insight?
5 Because as we get to thicker materials, this
6 conversation and volume of issues should be
7 deteriorating.

8 MR. NANNEY: We will look at it as we
9 get more data, but until we do we should get it
10 as close to the 100-percent SMYS as we can. So,
11 again, I just recommend to the Committee that you
12 consider the higher number for Class 2. The
13 Committee can do what you would like to suggest.

14 MR. DANNER: Well, the recommendation
15 right now has "consider" in big red letters at
16 the beginning. And I think my own view of it is
17 let's just put it on the table that for Classes 1
18 or Class 2 that involves Class 1 pipe and then
19 1.5 times MAOP for other Class 2 or Classes 3 and
20 4. And I think that you have said that you would
21 go back and look at how much of a problem it
22 would be simply to say Classes 1 or 2, and we'll

1 just trust you to do that.

2 MR. DRAKE: This is Andy Drake. I
3 agree with that. Steve, I trust your judgment on
4 this. I mean, if you've got data that shows
5 we're having Class 2 cracking problems, well, all
6 right, if we want to cut it that fine. If this
7 doesn't hurt us, at least let's consider it.

8 MR. DANNER: Does that work for the
9 Committee? Okay. All right. Andy?

10 MR. DRAKE: In the interest of moving
11 forward, I'll make a motion.

12 MR. DANNER: I'd appreciate that.

13 MR. DRAKE: All right. Voting
14 language for repair criteria, paragraphs
15 192.485(c), 192.711, 192.713, and 192.933. The
16 proposed rule is published in Federal Register
17 and the Draft Regulatory Evaluation with regard
18 to provisions for cracking repair criteria are
19 technically feasible, reasonable, cost effective,
20 and practicable if the following changes are
21 made: strike the proposed definitions of
22 significant seam cracking and significant stress

1 corrode and cracking in paragraph 192.3; delete
2 the phrase "any indication from the repair
3 criteria relating to cracking"; three, combine
4 the repair criteria for stress corrode and
5 cracking and seam cracking; four, require that
6 PFP for all time-dependent cracking anomalies be
7 calculated using the fracture mechanics procedure
8 in paragraph 192.712; revise the definition of
9 hard spot to read as follows: hard spot means an
10 area on steel pipe material with a minimum
11 dimension greater than two inches or 50.8
12 millimeters in any direction, and hardness
13 greater than or equal to Rockwell 35 HRC, Brinell
14 327 HB, or Vickers 345 HV10; consider the below
15 crack repair criteria for immediate conditions:
16 crack depth plus corrosion of greater than 50
17 percent of pipe wall thickness, crack depth plus
18 any corrosion that's greater than inspection
19 tools maximum measurable depth, or the crack
20 anomaly is determined to have a predicted failure
21 pressure that is less than 1.25 times MAOP.
22 PHMSA to consider 1.1 times MAOP for immediate

1 conditions after tool tolerance has been field
2 verified and applied; clarify through a citation
3 that material records necessary for evaluating
4 crack defects are determined and documented in
5 accordance with 192.712; consider the below
6 cracking repair criteria for one-year HCA and
7 two-year non-HCA conditions; crack depth plus
8 corrosion of greater than 50 percent of pipe wall
9 thickness; the crack anomaly is determined to
10 have a predicted failure pressure that is less
11 than 1.39 times MAOP for Class 1 or Class 2 with
12 Class 1 design factor pipe or 1.5 times MAOP for
13 other Class 2, 3, or 4; and crack anomalies that
14 do not meet either the immediate or one-year/two-
15 year conditions would be monitored condition.

16 MR. HILL: Robert Hill, second.

17 MR. DANNER: All right. It has been
18 moved and seconded. Any further discussion
19 before we take a roll call vote? All right.
20 Hearing none, Cheryl, we're ready for a roll call
21 vote.

22 MS. WHETSEL: Steve Allen?

1 MR. ALLEN: Aye.
2 MS. WHETSEL: Dave Danner?
3 MR. DANNER: Aye.
4 MS. WHETSEL: Diane Burman?
5 MS. BURMAN: Aye.
6 MS. WHETSEL: Sara Longan?
7 MS. LONGAN: Aye.
8 MS. WHETSEL: Terry Turpin?
9 MR. TURPIN: Aye.
10 MS. WHETSEL: Cheryl Campbell?
11 MS. CAMPBELL: Aye.
12 MS. WHETSEL: Andy Drake?
13 MR. DRAKE: Aye.
14 MS. WHETSEL: Ron Bradley?
15 MR. BRADLEY: Aye.
16 MS. WHETSEL: Rich Worsinger?
17 MR. WORSINGER: Aye.
18 MS. WHETSEL: Jon Airey?
19 MR. AIREY: Aye.
20 MS. WHETSEL: Robert Hill?
21 MR. HILL: Aye.
22 MS. WHETSEL: Sara Gosman?

1 MS. GOSMAN: Aye.

2 MS. WHETSEL: Okay, then that carries.

3 MR. DANNER: Okay. Motion carries.

4 All right. So we are going to go into public
5 comments on the fourth grouping, which is
6 corrosion/metal loss criteria, including ECA and
7 anomaly type. Do we have any public comments on
8 that last bucket? Okay. Seeing none.

9 MR. JOHNSON: Nice try, Mr. Chairman.
10 Dave Johnson, Energy Transfer. To kind of
11 continue in the corrosion aspects, the same
12 discussion that we've just been having on class
13 location versus design factor, one of the aspects
14 that, again, has not been considered on this is
15 there doesn't seem to be any consideration of
16 alternative MAOP pipelines. So what this boils
17 down to is the two design factors that are
18 typically allowed in a Class 1 area are 0.8 and
19 0.72. The reciprocals of those are 1.25 and
20 1.39, which are numbers that we've been talking
21 about. But in a Class 2, it's possible for an
22 operator to have design factors of 0.8, 0.72,

1 0.67, or 0.60, and they have all of their
2 corresponding reciprocals that, again, range from
3 1.25 up to 1.67. And then in Class 3 locations,
4 it's possible for an operator to have design
5 factors of 0.67, 0.60, 0.56, and 0.50, again with
6 their corresponding reciprocals.

7 So I think if, you know, particularly
8 if we continue to talk about just class location
9 and the factors that are associated with the
10 class location, we miss the so-called class bump
11 or pipeline that is operating at typically one
12 design factor notch higher than would be designed
13 for its class location, and maybe it was intended
14 but this completely ignores the alternative MAOP
15 pipe which operates at about 11-percent higher
16 design factor than the traditional design factor.

17 So I think there's just a lot of
18 clarification that needs to be done here because,
19 as an operator, we have to deal with all of this.
20 And if there are gaps or uncertainties or things
21 that are mutually exclusive, where pipeline that
22 has undergone a class location change and is

1 operating at a higher design factor is subject to
2 a factor that makes even pristine undamaged pipe
3 unacceptable in that location is just not
4 appropriate. Thank you.

5 MR. DANNER: All right. Thank you.

6 MR. WARD: Good morning. Darral Ward,
7 Boardwalk Pipelines. Boardwalk shares the desire
8 to drive the immediate repair count down in HCAs.
9 In the slide deck, PHMSA asserts that changes are
10 necessary to a criteria for scheduling corrosion
11 anomalies in order to reduce the number of
12 immediate repairs.

13 Boardwalk evaluated some immediate
14 repair data for HCAs since 2010 and determined
15 that approximately 90 percent of the immediate
16 repairs were actually due to dent anomalies with
17 any indication of metal loss. Rather than
18 changing the corrosion criteria, we believe PHMSA
19 has proposed separation of top side and bottom
20 side dents with metal loss, and PHMSA's new dent
21 with metal loss ECA will allow operators to
22 appropriately prioritize dent anomalies

1 warranting immediate response. Thank you.

2 MR. DANNER: All right. Thank you.

3 MR. DIAL: Gary Dial with Enbridge.

4 Based on what Boardwalk said, we reiterate what
5 they've said. We've done an analysis as well,
6 and over the last three years our review has come
7 back with a 90 percent repair rate of immediate
8 anomalies due to dent anomalies, as opposed to
9 metal loss. And we support, rather than changing
10 the corrosion criteria, believe PHMSA's proposal
11 separation of the top side and bottom side dents
12 with metal loss, and PHMSA's new dent and metal
13 loss ECA will allow operators to appropriately
14 prioritize dent anomalies warranting immediate
15 response. Thank you.

16 MR. DANNER: All right. Thank you.

17 MR. CAREY: Good morning. My name is
18 Patrick Carey. I'm with Kinder Morgan. Like
19 Enbridge and Boardwalk, we did an analysis of our
20 data on immediate response from a time frame of
21 2012 to 2017 and had very similar results. And
22 we support what PHMSA has been doing in the way

1 of updating the response criteria for the top-
2 side dents, and I'd like to offer a different
3 model to consider when you're going through this,
4 and that would be the plan to check cycle.

5 When you look at the results that we
6 show, which are, in our case, 84 percent of the
7 immediate responses were due to dents with an
8 indication of metal loss, the updates that we've
9 made or have been proposed for top-side/bottom-
10 side dents will help to address and get better
11 clarity on that particular data, rather than
12 trying to change the corrosion data that would be
13 associated with the slides -- I think it's 170 to
14 176 under the revised deck.

15 So we haven't given that a chance to
16 take a look and see what it does to our immediate
17 response and really, when you look at that
18 particular model, we've gone through the plan of
19 the original HCAs. We've done the re-assessment
20 on a fair portion of that, and our time frame was
21 '12 to '17, so we were outside of that re-
22 assessment window or the initial assessment for

1 the bulk of the HCAs. So, you know, let those
2 changes that were reflected in the bottom-
3 side/top-side take effect and get us some better
4 data before we start trying to make some other
5 changes.

6 As a side note, when we looked at the
7 data, we did not see anything that was a 1.1 or
8 below 1.1 response criteria. So it was something
9 that, you know, while that would may be an
10 assumption that you'd make when you see that data
11 rising and the fact that people are letting the
12 anomalies grow to the 1.1 level, that's not the
13 case. And, again, we didn't have anything that
14 fell into that criteria. Thank you.

15 MR. DANNER: Thank you. Before you
16 go, could I just ask you, you said 84 percent,
17 the other 16 percent, could you tell me what
18 those were, and can you give me some idea of the
19 actual numbers?

20 MR. CAREY: We had one particular one;
21 we had one particular line that did have some
22 interaction of a different threat type that one

1 line represented 11 percent of the data. So we
2 had a total of 143 immediate responses over the
3 course of 3,500 miles of HCAs in that five-year
4 time frame. Again, 11 percent or I guess that
5 translates to about 14 or 15 of the immediate
6 responses were on that one particular line.

7 The other 5 percent were some
8 miscellaneous results; I don't have the details
9 on those.

10 MR. DANNER: All right. Thank you.

11 Yes, sir?

12 MR. OSMAN: CJ Osman with INGAA. I
13 had a few other data points I'd like to share
14 that may help inform the discussion on this
15 topic. Several folks have already covered some
16 of the concerns around whether the immediate
17 response data is appropriate to reference and to
18 try to respond to here.

19 I think the other important thing to
20 look at is the actual incident data. What's good
21 about the incident data is we can really drill
22 into what caused the different incidents. And if

1 we look at the corrosion incident trends going
2 back to 2010, over 70 percent of those incidents
3 occur on lines that have not had in-line
4 inspection. These requirements talk about what
5 you do after you perform in-line inspection and
6 then respond to those anomalies.

7 So I don't think changing the anomaly
8 response and repair criteria is going to have a
9 major impact on internal/external corrosion
10 incidence. So I think that's important to
11 consider, too, in looking at whether it really
12 makes sense to change the corrosion and metal
13 loss response criteria.

14 Also, on a related note, there's a
15 criteria proposed to a requirement related to
16 metal loss affecting the long seam. And we went
17 back and looked at data from 2010 to 2017 and
18 found zero corrosion or environmental corrosion
19 metal loss incidents affecting the long seam of
20 high frequency ERW pipes. Those pipes are not
21 known to be particularly susceptible to this type
22 of corrosion, so based on that incident review

1 and our knowledge of this type of seam, we don't
2 think high frequency ERW pipes should be included
3 in the response and repair requirements related
4 to metal loss preferentially affecting the long
5 seam. Thank you.

6 MR. DANNER: All right. Thank you.
7 Are there any other public comments on this
8 topic? All right. Seeing none, open it up to
9 the Committee for -- oh, should we go ahead?
10 Okay. So we are going to take a lunch break
11 right now. It is 11:49. We'll come back at
12 1:00. So see you all then.

13 (Whereupon, the above-entitled matter
14 went off the record at 11:49 a.m. and
15 resumed at 1:12 p.m.)

16 MR. DANNER: All right. We're back on
17 the record. We're going to continue our
18 discussion of corrosion metal loss criteria. I'm
19 going to turn it over to Alan.

20 MR. MAYBERRY: Okay. Thanks, Mr.
21 Chairman. If you recall, where we left off was
22 on corrosion. We had ended with public comment

1 before we took the break, the lunch break. Over
2 that time, we've done some tweaking of the voting
3 slides just to be a backdrop for the Committee
4 discussion, some tweaks based on the comments we
5 had heard and just really for the Committee's
6 consideration as you discuss corrosion.

7 But I'll turn it over to Steve. Do
8 you want to go through what we -- yes, we'll warm
9 it up here.

10 MR. NANNEY: This is Steve Nanney with
11 PHMSA. I'm going to give you a minute or two
12 just to look at slide 24 and 25. What we tried
13 to do was, based upon what you have already voted
14 on, we went back and did a QA/QC to make sure we
15 were not missing anything because we had added
16 some things based upon discussion in the other
17 voting slides. So we did make sure.

18 Also, a few of the comments we heard
19 from the public side and also the Committee side,
20 we made sure we were explaining what we had there
21 on the slide. So we'll give you a minute to look
22 at that.

1 And then also on slide 24, the
2 information in red is informational, and we'll
3 drop that after the vote. But we wanted you to
4 know what we were meaning there.

5 MR. DANNER: All right. Was Steve
6 going to walk us through it, or is --

7 MR. NANNEY: This is Steve Nanney with
8 PHMSA. Just to tell you what I was trying to do
9 was get some of the slides where I could read
10 them. So, anyway, I have contacts and I've got
11 one for mono-vision, so sometimes it makes it a
12 little difficult when the writing is real small.
13 Uh-oh. And it's real hard to read when the slide
14 disappears.

15 Okay. Just starting, again, what we
16 were showing here is revise the repair criteria
17 for scheduled conditions regarding the predicted
18 failure pressure as follows. And in the note,
19 what we wanted to make sure we conveyed and as
20 one of our slides showed, if operators run an in-
21 line inspection tool and they find anomalies in
22 the class locations below the pressure failure

1 ratios, PHMSA would not want these conditions to
2 be monitored and expects them to be remediated in
3 the one or two-year interval based upon them
4 being either HCA or non-HCA before the
5 reassessment interval. In other words, what
6 we're trying to do is what this next red bullet
7 is if you look at B31.8S in ASME, Figure 4, it
8 allows metal loss corrosion to grow to a pressure
9 failure ratio of 1.1 before the remediation
10 threshold. And if you look at, if you're in
11 Class 3 or 4, they have design factors of 2.5 for
12 Class 4 and 2.0 for Class 3. And if you go back
13 to the Figure 4, it's the middle line is the one
14 that says allows above 30 percent but not
15 exceeding 50 percent. It's that line going there
16 down to 1.1.

17 And the thing that we're trying to
18 make sure is that we just -- and I heard the
19 operators that got up and spoke earlier that they
20 were not doing that and also that, of their
21 immediates, they were between, like, 10 to 15
22 percent of the number that we're seeing is what I

1 heard based upon the three or four that we had to
2 get up and say because, like we had said earlier,
3 PHMSA gets immediates, but the data we get we
4 cannot tell if they're dents or if they're metal
5 loss or something else and everything.

6 So what we were trying to do is,
7 again, if you're in a Class 3 or 4 area where a
8 new pipe should be 2.0 or 2.5, we don't want them
9 to be allowed to just continue growing down to
10 1.1. In other words, when you run the ILI tool,
11 we want there to be a cutoff that if it's below
12 that, you just don't let them continue growing to
13 1.1. When you do it, there needs to be a point
14 where you go out and have to do remediation. You
15 wouldn't have to do it immediately, but we
16 wouldn't want it to fit in the monitored and go
17 seven years or five years and not be touched is
18 the point we're trying to make.

19 Also, if you go in and do in-the-ditch
20 remediation, you know, something like that, it
21 should be based upon the class location of the
22 MAOP, I mean, if you dug the pipe out and you

1 look at it, you know, those type of things.

2 So I guess that's the item that we've
3 got there. I just wanted to explain it. And if
4 you would, let's go to slide 25. Mr. Chairman,
5 would you like to allow questions before we go to
6 the other slide, or do you want me to go through
7 all the slides first and then come back?

8 MR. DANNER: Well, how many slides do
9 we have here?

10 MR. NANNEY: I think it's three total.

11 MR. DANNER: Why don't you --

12 MR. NANNEY: Two. Two slides. I'm
13 sorry.

14 MR. DANNER: So this is it?

15 MR. NANNEY: Yes.

16 MR. DANNER: What's in front of us?

17 So, yes, why don't we, if there are any questions
18 for Steve. Okay.

19 MR. NANNEY: Okay. Going to slide 25,
20 again, the items there that we've covered before,
21 we would revise the repair criteria for corrosion
22 metal loss affecting the long seam in HCAs and

1 non-HCAs as follows. And, again, we would add
2 the word "preferentially" to assure that this
3 criterion would be applied to corrosion pits near
4 a long seam. It would only apply to corrosion
5 along the seam that could lead to slotting type
6 crack like. It would not -- it would not apply
7 to corrosion along the seam. That's worded
8 incorrectly there. It would not apply -- not
9 only apply, it would not apply.

10 What we're trying to do there, and
11 we've heard what everyone has said, we're not
12 wanting where it's just very minor corrosion that
13 touches the weld seam or something, that, because
14 it touches it, that you have to go and remediate
15 it or do something. So we thought that was a
16 good feedback that we had gotten.

17 Also, the next item was delete the
18 following repair criteria for HCAs and non-HCAs,
19 which from past meetings we've heard is a gouge
20 or a groove greater than 12.5 percent wall
21 thickness and then the area of corrosion greater
22 than 50 percent. And then last is revise

1 proposed Section 485(c) to include reference to
2 Section 712 for evaluating corrosion in the
3 proximity to cracks or crack-like defects and for
4 operators to make and retain records.

5 MR. DANNER: Okay. Again, any
6 questions for Steve? All right. Andy?

7 MR. DRAKE: I want to set some
8 context. You know, I think we're hearing things
9 kind of funny and I want to make sure we get that
10 right. And, second, I'd like an opportunity to
11 come back to facts, so we'll get the facts in a
12 second.

13 First of all, the conversation we were
14 just having about cracks, we don't have a Figure
15 4 in cracks, okay? Like we were saying in that
16 conversation, this is all new. So we're at the
17 front of the ship here. I can't reference the
18 work that we have in the existing ASME documents
19 because there is no Figure 4. So that's where
20 the conversation has evolved into design factors
21 and other things, trying to figure out some crude
22 tools. We also know that the sensitivity of

1 those tools isn't as sharp and the data we have
2 isn't as precise and clear growth rate modeling
3 around cracks as it is for corrosion.

4 So the point is a lot needs to be
5 ears-up conservative, and that's why we were
6 trying to pick one to two-year criteria, that's
7 why we were trying to pick design factors, give
8 operators some clarity of what to do in this
9 unchartered water. We're trying to define some
10 hurdle rates that are practicable so that people
11 will actually go in the water with the tool, but
12 that's not, I would be careful -- well, not
13 careful. I don't agree to extend this to
14 corrosion, and so I just would stop there.

15 The conversations we were just having
16 I don't think come over the transom here very
17 well and apply. And so I'm happy to stop there
18 if we want to debate that for a few minutes, but
19 I would like to kind of go on to facts about why.
20 I think it's really important. So I don't hear
21 anybody throwing their tent up right away.

22 I think this is really important,

1 really important to get the facts right. We are
2 making a very, very significant decision here,
3 and I want to make sure we're clear on what the
4 facts are. Let's go back to slide, I think it's
5 your 74, 174. I had in the pre-read materials
6 172. It's one of the repair criteria showing gas
7 transmission incident history. It shows this
8 uptick in the incident history. That's all
9 incidents, all incidents. Well, that's
10 interesting. What's relevant is what of that has
11 anything to do with corrosion, which is what
12 we're talking about here?

13 When you look at the data, the vast
14 majority of the reason for the increase is
15 because of equipment failures and releases from
16 things like relief devices, OPP, O-rings, things
17 like that. Equipment failures, breakdowns.
18 That's what is causing a lot of that uptick. We
19 also changed the criteria, which caused that to
20 flash a little bit earlier.

21 CJ made an interesting comment that
22 also is interesting. Of the corrosion piece,

1 which is going down, 70 percent of that is
2 related to segments that are not pig-able. Okay.
3 What does that tell us? It tells us it has
4 nothing to do with the response criteria that
5 we're currently using because they're not getting
6 evaluated to that criteria because they're not
7 getting pigged.

8 So is the response criteria broken?
9 Not by anything I see so far. It looks like it's
10 working pretty good actually.

11 I think when we get into immediate
12 repairs, which was the next slide, we see a tick
13 up, which was your slide 175 I think. You see a
14 tick up. You know, it's miraculously
15 coincidental that that also coincides with the
16 infusion of high-res tools and, as people back
17 here were saying, the finding of corrosion inside
18 dents.

19 Again, that doesn't indicate that,
20 one, the things we're doing aren't working. I
21 think they're indicating things that we're doing
22 are working. We're getting better at seeing

1 things. We're using that data to make better
2 choices. It doesn't indicate that the repair
3 criteria is not working or that the systems are
4 coming unraveled. And I think this is really,
5 really important to set the context around this
6 discussion for public. The public, we have an
7 obligation to advance pipeline safety. Are we or
8 are we not? Let's use the data and the facts to
9 figure out are we making progress or not, and
10 make appropriate changes to the things we're
11 doing. Someone said earlier PDCA. Let's use
12 management systems here. Use the data to inform
13 the choices that we're making and focus our
14 energy in places that need to make big changes in
15 the improvement of pipeline safety. This tells
16 me: that's not the place to put our energy.

17 I think, you know, we can kind of keep
18 going on here about the facts, but I do think
19 it's important to probe into this and understand
20 what's underneath this, before we just decide at
21 50,000 feet to make a huge course change on
22 something that's actually working for us.

1 So I just want to pause there for that
2 and kind of let folks percolate on that for a
3 minute. And I'm glad to take questions on it,
4 but I really think this is the foundation of
5 making a choice.

6 MR. DANNER: All right, Cheryl and
7 then Sara?

8 MS. CAMPBELL: Thank you, Mr.
9 Chairman. Cheryl Campbell, Xcel Energy.

10 So, I have -- I echo what Andy said.
11 I mean, I can't remember the last time I had a
12 corrosion failure in a transmission pipe.

13 The tools have gotten so good at
14 finding corrosion, we are -- it is a true
15 statement, we are seeing more, but I think it's
16 more related to the tool tolerance and the
17 ability of the tool than it is that, you know,
18 we're struggling with -- we're waiting to repair.

19 So, I guess my question that I have
20 is, are we basing this change, this feels like
21 we're -- you're asking us, Steve, to be more
22 conservative, I think, in making repairs for

1 corrosion based anomalies.

2 And, it feels like we're doing that
3 based on those graphs that showed the anomaly up
4 tick or the failure up tick. And, if that's
5 true, then I would like more information on
6 what's causing those failures and those incidents
7 to make sure that they are corrosion related.

8 And then, to Andy's point, that we are
9 reacting appropriately to those changes, right,
10 in setting criteria that work for those changes.

11 Because I'm -- I guess I am not
12 convinced that operators are waiting to make
13 repairs and allowing them to become immediates.

14 MR. DANNER: All right, Sara?

15 DR. LONGAN: Thank you, Mr. Chair.

16 Sara Longan, DOI.

17 On slide 174, I had almost immediate
18 questions yesterday when we first saw this slide.
19 And, I think that it tells an important story, I
20 just don't know what the end of that story is.

21 For example, the light green line, I
22 had also questioned whether that was all

1 incidents or whether those were incidents that
2 mattered and led to corrosion?

3 So, as a suggestion, I don't have a
4 problem with still looking at that green line,
5 but maybe an additional line showing those
6 incidents that actually mattered or that led to
7 corrosion, I think is a very important addition
8 to the slide.

9 Furthermore, it wasn't clear to me how
10 PHMSA got to the orange line of significant
11 incidents which seems almost extremely flat to
12 me, or flat to me.

13 So, what's the delta and how did the
14 green line turn into the significance line, if it
15 did? And, how should we be considering that in
16 terms of being the need to be conservative as
17 we're looking at the repair criteria?

18 MR. DANNER: All right, Andy and then
19 Steve?

20 MR. DRAKE: This is Andy Drake with
21 Enbridge.

22 I think, you know, I want to, you

1 know, there's -- this is a lot of good stuff. We
2 really need to figure out what's working for us
3 and what's not and what we need to do.

4 PHMSA's proposed some really good
5 changes here and I don't want to get too
6 distracted and not recognize that.

7 But, when you're talking about 1.1,
8 industry assumes everything grows to 1.1. Can
9 you show Figure 4 up there? That's your slide
10 172. There you go.

11 That is currently in ASME. That was
12 developed back when the HCA or the integrity
13 management document was developed. It helps us
14 give time-based responses to corrosion.

15 What that is assuming is, once you
16 size an anomaly, you're predicting its growth
17 over time. That growth over time was a Battelle
18 model that used a very aggressive corrosion
19 growth rate to define conservatively an
20 appropriate response time before it crossed that
21 10 percent safety margin threshold.

22 So, there's a lot of conservatism

1 built into that. And, no, we're not waiting
2 until everything grows to 1.1. That is not
3 appropriately reflected in what's happening.

4 The model is providing conservative
5 criteria based on aggressive corrosion rates from
6 a from a known sized anomaly off a log as to when
7 you would encroach on if you used the aggressive
8 corrosion -- experienced the aggressive corrosion
9 rate before you got to 1.1.

10 What it was trying to do is a question
11 that I have and I don't understand why we're
12 doing this is, in essence, what we're doing here
13 is we have -- we are being told that corrosion
14 growth needs to be managed since that when you
15 pig the pipe, everything that you find that's
16 within a certain response criteria basically has
17 to be managed within one or two years.

18 That's not appropriate. We have no
19 data that shows that that's -- that this slide
20 right here is not working exactly as it was
21 intended to work, very conservatively.

22 Instead, what we're trying to do is

1 say, no, everything need -- everything that you
2 could find out here needs to be dealt with in one
3 to two years.

4 And then, basically, you wait years
5 three, four, five, six and seven until you re-
6 inspect and then we do it over again. That is --
7 that's just not appropriate.

8 I think this is functioning and it's
9 going to create an incredible unnecessary
10 consequence to producers, suppliers, the
11 transmission system, dealing with things in this
12 real lumpy fashion when, if we use our
13 engineering insights and knowledge, we are -- we
14 can deal with this conservatively and spread that
15 impact out which is, I think, appropriate for
16 everybody around this table.

17 But, I -- that's, in essence, what's
18 happening with the proposal we're looking at,
19 just to be very honest. You've taken a large
20 volume of the anomalies and moved them down into
21 one and two years and everything else is going to
22 wait until it gets to seven.

1 So, you've got a lot of work to do in
2 the first and second year, then you don't do
3 anything for five years. Then, you've got a lot
4 of work to do for one and two years. And then,
5 nothing to do for five years.

6 That just doesn't -- it's not real
7 inspirational that we're not smarter than that.
8 I mean, we have data, we have this, we have a lot
9 information from the corrosion anomalies. This
10 is a lot different than what we're talking about
11 with cracks.

12 This is pretty evolved technically and
13 the growth rates are in a much smaller window of
14 volatility. And, I think we should use that.
15 It's working for us. I don't understand why we
16 would change that.

17 MR. DANNER: All right, Steve?

18 MR. ALLEN: Thank you, Mr. Chair.

19 Steve Allen, IURC.

20 Back to, I think it's your slide 174
21 and back to Sara's comments or questions, I just
22 need some clarification.

1 The orange line, significant incidents
2 per 10,000 HCA miles, is that significant
3 incident as defined in 191?

4 MR. NANNEY: Yes.

5 MR. ALLEN: Okay. And, then the green
6 line, the leaks per 10,000 miles of HCA or 10,000
7 HCA miles, is there a breakdown on what those
8 leaks are caused from?

9 I mean, because if that's all
10 corrosion, that tells me one thing. If it's a
11 mixture of a lot of different reasons, that tells
12 me something else.

13 So, and, frankly, as I look at that,
14 we're looking at what an uptick to 80 leaks in
15 2017? Is that what I'm reading? But, I don't
16 know how many of those were --

17 I'm sorry, no, leaks per 10,000 HCA
18 miles? Okay, for 10,000 HCA miles.

19 And then, I guess, why has that kind
20 of crept up over time? Is that -- did I hear
21 Andy say that's because we're better at finding
22 them? Or, what?

1 MR. NANNEY: I don't think a failure
2 would be because you're better at finding them.
3 I think it would be because it failed.

4 MR. ALLEN: And, I'm sorry, a follow
5 up. The leaks and the failures, I guess, I just
6 would be interested in knowing what the breakdown
7 is. Are 50 percent of them corrosion related or
8 all they all corrosion related? Or, any of them,
9 you know, third-party?

10 MR. DANNER: Oh, and Steve?

11 MR. NANNEY: We have the data on our
12 website. I mean, the percentage on corrosion is
13 somewhere, without having it in front of me, is
14 probably around 20 percent or so.

15 But, and like some of the other
16 comments on relief valves, they -- depending upon
17 what time frame you look at them, they are
18 probably -- they could be probably about 9
19 percent.

20 If you break it out in another
21 separate years, it might be 15 percent.

22 But, I've got a list in front of me

1 that's about 9 percent of it.

2 But, again, I would say 10 to 15
3 percent would be those type things, in general,
4 of incidents across the system.

5 And, like I said, corrosion, metal
6 pipe, weld failure, those type things are going
7 to probably be somewhere around 30 percent. And,
8 to give you general 35 percent, somewhere in that
9 range.

10 But, the key point and the reason
11 PHMSA has this fraught up, again, I hear everyone
12 say that the tools are better and everything and
13 we've got better systems which means we should
14 have better CP and we've got better monitoring
15 and everything.

16 And, I guess the key point is, you
17 know, if you're in a Class 3 area or in a Class 4
18 area, is there a point where we shouldn't let it,
19 per the Figure 4, continue growing before we go
20 do a repair. That's the part we wanted to talk
21 about and that we have on the table is, should we
22 let it continue growing to a 1.1?

1 I mean, right now, you could do that,
2 but do we really want that to stay as part of the
3 code that you could do that?

4 Or, is there some point that an
5 operator goes and fixes it because, you know,
6 other things that are factored in the 1.1 is, you
7 know, you've got overpressure protection that,
8 depending upon what your operating pressures and
9 percentages are could be set 4 percent to 10
10 percent above your MAOP right there.

11 So, there's other things you need to
12 think about to take into account. And, that's
13 all we're trying to do is have a discussion and
14 take a look to make sure what we're doing there
15 is the right thing. And, if we aren't doing a
16 mini anomaly repairs --

17 And, like I heard, only 10 to 15
18 percent are corrosion related as we're trying to
19 get an idea of what that would mean.

20 MR. DANNER: So, Andy?

21 MR. DRAKE: This is Andy Drake with
22 Enbridge.

1 I appreciate that, Steve. That's
2 really the point. There's a lot of things on
3 that slide that's not a corrosion slide, that's
4 an everything slide and there's all kind of stuff
5 in there.

6 The key that we need to be
7 extrapolating out of there is the corrosion piece
8 getting better or worse? Is the criteria that we
9 use to manage it and respond to it effective or
10 not?

11 And, that's almost impossible to
12 conclude from that slide. But, what we know is,
13 that there's a lot of other things in there.

14 I think, you know, the other thing, if
15 we can go back to Figure 4, I'm trying to do my
16 cross counting here to your slide 172.

17 I think that when you look at that, if
18 you see the three lines, three lines are designed
19 to do what you're talking about, Steve. It's not
20 every type of design factor, every type of
21 situation would respond to 1.1, there's three
22 different lines to deal with different sizes of -

1 - different levels of stress to deal with.

2 You wouldn't want the big safety
3 factor pipes to encroach on 1.1 just because they
4 can. That's not the point, that could be a very
5 significant defect. That's what those three
6 different lines are intended to accomplish.

7 And, I think they are working very
8 well is the point.

9 So, I keep coming back to the same
10 question I asked in our teleconference meeting on
11 March 2nd. What is driving this significant
12 change that we're talking about? Is there a
13 problem with what we're doing that's not working?

14 Is there some facts or data that's
15 saying, we need to double up on the corrosion
16 factors and respond to everything within one to
17 two years? It's like, wow, that's a big deal,
18 especially in the context -- and why there's a
19 lot of energy on this conversation is, we're
20 getting ready to take the obligatory response
21 from HCAs to HCAs and MCAs which is a huge
22 increase in millage so people are going to be

1 accountable to respond to this.

2 Now, if we're going to do that, so
3 we're going to quintuple the amount of pipe or
4 more than that even, the amount of pipe we're
5 going to deal with and we're going to all of a
6 sudden do everything in one to two years, that's
7 not going to happen, folks.

8 I mean, let's just stop and think
9 about where we're -- what really do we need to be
10 doing here?

11 MR. DANNER: Cheryl?

12 MR. CAMPBELL: Thank you. Cheryl
13 Campbell Xcel Energy.

14 So, as I'm listening to all of this, I
15 don't -- I think our intentions are probably very
16 closely aligned in that we don't want these
17 corrosion anomalies to grow to a point where
18 they're an issue. Right?

19 I mean, we would like to respond to
20 them prior to them being an issue.

21 To your point, Andy, we don't
22 necessarily want to codify -- codify I guess is

1 the right way to pronounce that, the one to two
2 year response time. But, I hear you, Steve, when
3 you're saying let's not let them go for too long.

4 So, what is the right path forward?
5 Because, I mean, Andy's right, we are -- as we
6 move into MCAs and beyond the ACAs, we are going
7 to see more anomalies that we need to respond to.
8 How do we find that right place? Right?

9 And, by the way, I do believe that the
10 current corrosion processes work really pretty
11 well. But, as we move this forward and expand
12 the purview, how do we find the right place and
13 can we not sort of shove it all into that one or
14 two year when we know we have more time?

15 We know, based on the data we have,
16 that we have more time and we can be more
17 thoughtful and plan-ful about how we do our
18 repairs still wanting to make sure we get it done
19 before we have an incident, though.

20 MR. DANNER: Okay, anyone else?

21 Sara?

22 MS. GOSMAN: So, the industry folks

1 around the table, I'm just wondering, you know, I
2 feel like we keep coming back to this world of
3 trying to decide why we're not driving down
4 incidents as much as we might have expected we
5 would through IM?

6 And, you know, we've had this GAO
7 report, right? So, this is one part of it. It
8 doesn't explain all of it, right? But, it is one
9 part.

10 So, if this is not the problem, what
11 do you think is the problem here? If it's not
12 the fact that we're not repairing things earlier,
13 I guess I would say?

14 MR. MAYBERRY: Andy? Sorry, the Chair
15 left.

16 MR. DRAKE: Andy Drake with Enbridge.

17 I think when you look at the incident
18 rate, there's so many things in there, it's
19 almost impossible to discern that from that
20 level. That's a 50,000 foot summary of data.

21 I do think that the material, when I
22 look at it, the trends that I see that are going

1 up are equipment failures and material issues.
2 Those are what's on the rise that we need to be
3 watchful of.

4 Not that I want to dismiss equipment
5 issues, but, I mean, when we're counting relief
6 devices opening up, that's kind of what they're
7 designed to do. So, I'm not going to freak out
8 about that, I'm more worried about what's causing
9 them to open up.

10 Is it an operating issue, you know, a
11 controls issue?

12 But, it's not going, I hate to say it,
13 it's as worse as it's going to get, it's not
14 going to get much worse than what it is. That's
15 what the device is designed to do.

16 So, that's, to me, not the biggest
17 priority of our -- my focus right now. It is
18 putting a lot of energy into that.

19 I think we're seeing things, as C.J.
20 said, of the corrosion data which this -- that is
21 a subset of that greater incident data, which is
22 a much smaller line, as Steve is alluding to, 70

1 percent of that data is stuff that's not getting
2 pigged.

3 So, that's really illustrative of the
4 need to get the lines pig-able which is what's
5 extending the MCA definition really does is it
6 tries to drive people to get their pipes more
7 pig-able because it's quite burdensome to try to
8 do some of these other things on wide sweeping
9 miles of pipe.

10 And, I think that will get those miles
11 subjected to that Figure 4 criteria, which is
12 what we want. It's not broken; I think it's a
13 natural growth and evolution thing. That's what
14 we're trying to do with MCAs is get those pipes
15 in here.

16 And so, I think that's where I think
17 our energy should be going. I don't see any data
18 right now that would compel me that Figure 4 is
19 broken. I haven't seen anything, anything that
20 would say that.

21 And, I know how much energy went in to
22 developing that. And, it is a very conservative

1 position.

2 So, I just keep -- I had this question
3 last time on the phone is, I just want to see the
4 data that would say what's rationalizing us not
5 staying with this? Or, what's wrong with it?

6 You know, and I haven't got an answer
7 yet on that.

8 I do think, too, the last
9 conversation, we moved the reassessment
10 interfolds, if you remember in the last meeting
11 on MCAs down. Why? Because I'm using that
12 figure.

13 If I'm not going to use that figure, I
14 want to re-vote on the MCA re-inspection
15 interval, period. I mean, we -- I'm serious.
16 These all fit together. We're starting to make
17 assumptions that I'm going to fix things over
18 time based on those growth rates and that's going
19 to make sense. So, we should shorten that
20 inspection interval up to line up with that
21 diagram.

22 Well, if I'm going to have to fix

1 everything I can find in an extraordinary -- and
2 an incredible safety factor in the first one to
3 two years, then let's revisit the re-inspection
4 frequency. They fit together.

5 And, I think the other thing that I
6 just want to put out there is just as a data
7 point, right now, we have 180 days between when a
8 pig comes out of a trap and when we have to make
9 discovery, when we have to get the results in and
10 make a decision.

11 And Hurricane Harvey really
12 illustrated how close to the edge we are with the
13 current load on the system. We had to file a
14 blanket waiver for the industry to get data
15 provisions because everybody was within two weeks
16 of not meeting that 180 days.

17 That just tells you where the load is
18 on the -- on tool availability, vendor technical
19 capacity with 6 percent of the system being under
20 rule.

21 When we increase this, I think it's
22 prudent for us to consider some extension of the

1 180-day discovery, just inside the rule. Or,
2 you're going to get a flood of waivers because
3 everybody's going to be up against 180 all the
4 time.

5 And, I'm not proposing, you know, a
6 year or some big number. But I think we should
7 talk about. I mean, what's an appropriate
8 number? This is back to the bell curve thing.

9 I mean, okay, we just quadrupled or
10 quintupled the size of the stuff exposed to this.
11 The vendor load is going to be pushed on the 180
12 days. So, how many waivers do we want?

13 You know, I think there's some place
14 we should be preemptive or proactive to talking
15 about that.

16 MR. DANNER: All right, Sara?

17 MS. GOSMAN: Again, thank you for
18 helping me understand more. I think then the
19 second question I have is, you know, when I think
20 about risk-based systems, it seems to me to make
21 sense to be more conservative as you increase the
22 potential for consequences.

1 And so, when I look at the class
2 locations, I'm looking over here at Andy, but I
3 mean to look at everybody, when I look at the
4 class locations, what I understand that to be
5 doing is tier-ing, right, safety factors by the
6 consequences.

7 So, maybe these numbers are not right,
8 but I'm surprised that, if what we have right now
9 is one number that extends across and we're going
10 to extend it across even further to MCAs, that
11 doesn't look, to me, like a responsive to the
12 sort of risk criteria as it relates, again, to
13 consequences unless we think that 1.1 is so
14 conservative already that it doesn't matter if
15 it's a very populated area versus one that's not.

16 MR. DANNER: Do you care to respond to
17 that, Andy?

18 MR. DRAKE: This is Andy Drake with
19 Enbridge.

20 That's what the three lines represent.
21 That is increasing conservatism, each line.

22 MR. DANNER: All right, any other

1 comments?

2 Oh, Andy? Okay.

3 MR. DRAKE: Just finish the sentence,
4 when all -- a lot of what we're talking about
5 here is how to evaluate a log.

6 The last point that, well, yes, the
7 last point up there, that is how we do it, the
8 red dot over here, in-the-ditch remediation
9 should be based on classification and MAOP.

10 It is all the designs factors are
11 fully taken into effect because you're physically
12 measuring it and you take into all the safety
13 factors when you're actually physically measuring
14 it.

15 So, there is some certainty that you
16 actually, when you're in the ditch, you actually
17 deploy all of that.

18 What you're trying to do here is set
19 up some criteria for response and investigation.
20 Does that make sense? There's like staged gates
21 of things that are happening, that's -- they're
22 different, in the ditch, everything is plugged in

1 physically.

2 MR. DANNER: All right, so, I am -- I
3 haven't heard from everybody. I'm getting the
4 sense that the Committee is not prepared to adopt
5 this language today.

6 Is there anybody who has a contrary
7 view who wishes to communicate that?

8 MR. MAYBERRY: I don't know if you can
9 indulge me, Mr. Chairman.

10 If the Committee has a recommendation,
11 I think, you know, whether it's to working within
12 what's up here, although I think I understand, I
13 think we heard the position or, as the Chairman
14 was saying, you know, what option do you
15 recommend?

16 MR. DANNER: So, Andy?

17 MR. DRAKE: This is Andy Drake with
18 Enbridge.

19 I think there's a lot of good material
20 here. I mean, if we wanted to try to make a
21 motion, I'd ask for just a few minutes because
22 I'm going to get a lot of help otherwise and

1 that's probably not really the turbulence that we
2 need around the table.

3 But, I don't, you know, I think the
4 crux of where I am is, trying to make this
5 practical. I think we're expanding integrity
6 management significantly, which is a great thing.
7 It is a big step forward.

8 I don't see anything that's compelling
9 me to change off Figure 4. I don't, I don't see
10 any data, I'm not aware of any problems that
11 we're having. The criteria was very deliberately
12 put together with very conservative measures on
13 corrosion growth assumptions.

14 I think it's working. As we apply a
15 lot more pipe to it, I think that's actually
16 quite helpful, if that's working, keep using it,
17 especially not to make everything go down to a
18 one and two year response time.

19 So, I could probably fashion some
20 language around that, I think.

21 MR. DANNER: All right, I think what
22 we'll do, Andy, is let's take a -- it's 1:57,

1 we're going to come back at 10 after.

2 MR. DRAKE: All right.

3 MR. DANNER: And so, that'll give
4 everybody time to have their side conversations.

5 (Whereupon, the above-entitled matter
6 went off the record at 1:57 p.m. and
7 resumed at 2:24 p.m.)

8 MR. DANNER: All right, we are back on
9 the record.

10 As you can see, there's some amended
11 language in front of us. Andy, do you want to, I
12 think you may have had something to contribute to
13 this, so maybe you want to explain it.

14 MR. DRAKE: I don't know if I can take
15 full credit for this, but I'll make a motion,
16 well, maybe people can now read this, is there
17 any comments or concerns about what has been
18 typed up here in the break? I mean, that's fair,
19 as people are coming back in.

20 MR. DANNER: So, why don't -- I would
21 appreciate it if you would just explain the
22 practical effect of where this moves the ball

1 from what the status quo is today.

2 MR. DRAKE: The intent here is to
3 maintain Figure 4 and institute it into this
4 section with 713.

5 And then, to do the same thing for
6 HCAs and non-HCAs that we have been doing in HCAs
7 as far as response criteria to corrosion
8 anomalies.

9 There is a proposal at the bottom to
10 basically increase the discovery period by 60
11 days. That's just a proposal to try to give more
12 time for people to deal with the volume of inline
13 inspection reviews they're going to do.

14 I think the driver behind the, really,
15 the third bullet which is, I think, where the
16 crux of the issue is around, we have put a lot of
17 time and energy into Figure 4.

18 We think Figure 4 is very, very
19 conservative. It has demonstrated that through
20 its performance, through the baseline inspection
21 period for HCAs.

22 I think using that is, one,

1 conservative as proven; and, two, a great deal of
2 continuity for industry and others about what
3 we're doing in responding.

4 I think the thing that adds value is,
5 Figure 4 is designed to look at corrosion
6 anomalies and project their growth with the
7 corrosion -- conservative growth rate over a
8 period of time and provide a response for
9 investigation graduated over time for different
10 severity rates or severity, you know, defect
11 severity.

12 What's being proposed was that we, in
13 essence, would evaluate a log and end up
14 remediating the actionable anomalies in one or
15 two years, which is an incredible burden which I
16 can't see any data that supports that.

17 MR. DANNER: So, just put it -- if you
18 would explain to me, though, because my
19 understanding was with the note that was put up
20 there that basically excluded all the ILI, I
21 mean, how much volume are we talking?

22 I mean, is this really a lot of holes

1 that need to be dug over what the current system
2 is?

3 MR. DRAKE: I think it is going to be
4 a lot of holes to be dug. A lot of folks have
5 been inspecting pipes outside of HCAs as they pig
6 HCAs, which is good. That's prudent.

7 A lot of folks have not; a lot of
8 folks have not made their pipes pig-able. I
9 think as you extend this rule to include HCAs --
10 MCAs, it will create a business case and a driver
11 to people to make their pipes pig-able, which is
12 absolutely what we want because the sampling
13 frequency is much higher with the pig than with
14 DA.

15 It's much more physical or closely
16 aligned with assessing defects than DA is,
17 particularly for corrosion.

18 And so, I think you are going to pick
19 up a lot of volume which is good, that's the
20 point of this exercise, you know.

21 And, they are now obligated to
22 remediate them to the standard, which they were

1 not before, which is all good.

2 So, yes, I think there will be a
3 significant increase in volume.

4 MR. DANNER: Okay. Other comments?
5 Sara?

6 MS. GOSMAN: So, at this point, I
7 think this has been a great conversation. I
8 would like to ask that we take bullet point three
9 on slide 26 and separate that out into a separate
10 motion.

11 Because, I would like to vote yes on
12 the remaining part, but I am going to vote
13 differently on that particular part.

14 MR. DANNER: Okay, Cheryl?

15 MS. CAMPBELL: Thank you. Cheryl
16 Campbell, Xcel Energy.

17 So, I think what I'm trying to
18 understand and I -- so, this will -- this is more
19 of a question than anything else.

20 You know, I heard what Steve was
21 saying and I understand we've got, and again,
22 we're not talking about making rules for the

1 people in this room, we understand that.

2 We've got some people that are
3 probably more willing to push it, shall we say,
4 right, and let anomalies grow a little bit longer
5 than people may be comfortable with.

6 But, we're also trying to make sure
7 that prudent operators that are out there working
8 and making their lines pig-able, getting the
9 data, right, trying to do the right thing, they
10 have the time and the resources to respond
11 appropriately.

12 So, I guess my question is, these
13 changes, does that help us do that? Does that
14 help us give clear direction to operators that
15 might be allowing things to --

16 And, the example we were talking about
17 at break were operators that were allowing in
18 Class 3 and 4 allowing anomalies to go until they
19 got, you know, pretty close, right to the edge,
20 right, would be one way to talk about it.

21 Does it give them that clear guidance
22 to act sooner while still providing the operators

1 enough flexibility to go be --

2 Because I just don't want to get a
3 bunch a stuff jammed into one or two years.

4 I agree with Andy, as we pull in MCAs,
5 we're going to see more anomalies. We have to.
6 I mean, we are continuing to do new pipe every
7 year.

8 And, as I shared with Sara and Steve,
9 I have not seen a drop off in my number of
10 immediates every year, but it's not -- I'm not
11 seeing them on the pipe that I've assessed before
12 and I've reassessing. I'm seeing it on the new
13 pipe I'm pulling into the system -- into the
14 program. Right?

15 So, and that's exactly what you want
16 me to keep doing. Right? So, I'm looking for
17 clear direction to the operators that might be
18 pushing it too far, but allowing other operators
19 that are out there leaning forward the time to
20 work this appropriately and not try force them
21 into very short time frames that might be
22 impossible to meet.

1 MR. DANNER: And so, the language that
2 is up there on the right side, you thought did
3 that?

4 MS. CAMPBELL: I'm not sure. I'm
5 asking the question.

6 MR. DANNER: Okay, does anybody want
7 to respond to Cheryl's question?

8 So, your question has gone unanswered.

9 All right, Andy?

10 MR. DRAKE: I found it an awkward
11 position to respond to that. But, I think that
12 the code obligates people and so the ASME
13 standard to evaluate the corrosion rates in your
14 unity plots.

15 And, if you're aware of anything that
16 indicates that this is growing faster than the
17 assumptions on those models, you're obligated to
18 go investigate it at a shorter frequency.

19 And, I think that's the only breakdown
20 that I can think of. Where we're really getting
21 hung up is we're not seeing incidents where this
22 isn't working.

1 But, the -- there is a safety net
2 behind that and people are obligated to do unity
3 plots and check to see if they are finding
4 corrosion growth rates that are more aggressive
5 than what that model would indicate. And, if so,
6 then they're supposed to shorten those
7 frequencies up.

8 But, I mean, that's the best I can
9 answer your question. They are not falling into
10 that safety net, or at least I'm not aware of it.

11 MS. CAMPBELL: Well, and, I'm just
12 thinking about the conversation I had, Andy, and
13 I'm -- so, it feels like somewhere along the line
14 then that there might be a disconnect with
15 people's understanding.

16 And I don't know if it's the operators
17 or PHMSA about how the chart, you know, the AMSE
18 BS31.8 and the, you know, the different things
19 all fit together and should all work and how an
20 operator should respond and what those
21 obligations are already in the code.

22 I'm not trying to disagree, I'm just -

1 - because I thought the safety net was there as
2 well. Right? But, I'm just wondering if there's
3 some misunderstandings or we're not all
4 interpreting it the same way is the only
5 conclusion I can come to based on all the
6 different things I've heard.

7 And, I don't know if PHMSA's got a
8 thought on that.

9 MR. DANNER: All right, Alan?

10 MR. MAYBERRY: And, I was just kind of
11 reflect on a few accidents I've seen related to
12 corrosion or general corrosion.

13 But, you know, they involve other
14 factors as well like shielding, for instance.
15 That seems to be an issue that dogs us, but, you
16 know, how do you address that?

17 You know, is an operator doing their
18 close interval surveys?

19 You know, we saw what Appomattox, an
20 incident there that was pretty dramatic that
21 involved that type of issue where you had a good
22 reading nearby but that, you know, involved the

1 corrosion program, not necessarily how you assess
2 the corrosion.

3 You had system bill West Virginia,
4 there again, probably a shielding issue there,
5 but again, involving general corrosion, those
6 types of things are tripping us up.

7 I can think of numerous others that
8 involve general corrosion. But, you know, it's
9 just -- it's a variety of factors. But, I think
10 it really points to the fact that we need to
11 focus on this area certainly continue.

12 And, you know, obviously, we've, you
13 know, we're going to take the information we've
14 received however the Committee decides to vote on
15 this and go from here and, you know, see what we
16 need to do.

17 But, I think the experience out there
18 shows that we just all need to be vigilant at,
19 you know, all tools are there to, you know,
20 assess and prevent accidents related to
21 corrosion, we need to make sure we're using all
22 the tools as well.

1 MR. DANNER: All right, any other
2 comments?

3 (No audible response.)

4 MR. DANNER: All right, so, we have a
5 motion on the right side. Sara, you asked for it
6 to limited to those three, so perhaps you want to
7 make this motion?

8 MS. GOSMAN: I think --

9 MR. DANNER: Oh, I'm sorry.

10 MS. GOSMAN: It's two pages.

11 MR. DANNER: Oh, it's two pages, all
12 right.

13 MS. GOSMAN: All right, yes, that
14 seems appropriate.

15 Okay, voting language for repair
16 criteria Sections 192.485 , 192.711, 192.713,
17 192.933.

18 The proposed rule is published in the
19 Federal Register and the Draft Regulatory
20 Evaluation with regard to provisions for
21 corrosion metal loss repair criteria are
22 technically feasible, reasonable, cost effective

1 and practicable if the following changes are
2 made.

3 Revise the repair criteria for
4 corrosion metal loss affecting a long seam in
5 HCAs and non-HCAs as follows.

6 Insert the word preferentially to
7 assure that this criterion would not be applied
8 to corrosion pits near long seam. It would apply
9 to corrosion along the seam that could lead to
10 slotting-type, crack-like defects.

11 Delete the following repair criteria,
12 HCAs and non-HCAs -- is that gouge -- gouge or
13 groove greater than 12.5 percent WT wall
14 thickness -- thank you -- area of corrosion
15 greater than 50 percent.

16 Revise proposed Section 192.485 to
17 include reference to Section 192.712 for
18 evaluating corrosion in proximity to cracks or
19 crack-like defects and for operators to make and
20 retain records.

21 Revise the repair criteria for
22 scheduled conditions regarding the predicted

1 failure pressure as follows.

2 PHMSA will apply similar predicted
3 failure pressure factors to alternate MAOP
4 pipelines based on class location/design factor.

5 In-the-ditch remediation should be
6 based on class location and MAOP.

7 Change discovery period for non-HCAs
8 from 180 to 240 days.

9 MR. DANNER: All right, thank you.

10 Is there a second?

11 MR. HILL: Robert Hill, second.

12 MR. DANNER: All right, is there any
13 discussion before we go to a roll call vote?

14 Andy?

15 MR. DRAKE: I think you have to do the
16 Steve Allen comment here since we've exempted the
17 other stuff. You have to probably put that up in
18 there in the beginning.

19 The anomaly response -- that anomaly
20 response criteria has been exempted from or
21 excluded from this discussion.

22 MR. DANNER: It's actually -- it's my

1 understanding that we are going to put that up
2 for a separate vote.

3 Oh, I see. So, we need the --

4 Yes.

5 MR. HILL: The second agrees with
6 that.

7 MR. DANNER: All right, then, I think
8 that we have an agreement that the motion has
9 been modified.

10 All right, with that change, are we
11 ready to go to a roll call vote?

12 What's that? What? I'm sorry, I
13 can't hear you.

14 MS. WHETSEL: Okay, y'all ready for a
15 vote?

16 MR. DANNER: I think now we are.

17 Is there --

18 MS. GOSMAN: Chair, do you want me to
19 amend my motion or is what we've done for the
20 record --

21 MR. DANNER: Oh, I thought we were --

22 MS. GOSMAN: -- sufficient?

1 MR. DANNER: I think, well, yes, why
2 don't we just verbally just say that we have
3 added to the preamble there that after the words
4 loss repair criteria, we put comma, but excluding
5 the anomaly repair timing, comma.

6 MS. GOSMAN: Okay.

7 MR. DANNER: Okay? I think that --

8 MS. GOSMAN: So, with regard to my
9 motion, it is with regard to provisions for
10 corrosion metal loss repair criteria, but
11 excluding the anomaly repair timing.

12 MR. HILL: And, the second agrees.

13 MR. DANNER: Okay. So, we have the
14 amended motion before us then.

15 And, if there's no further discussion,
16 Cheryl, can we -- oh, I'm sorry, Andy, I didn't
17 see you.

18 MR. DRAKE: Since we're splitting
19 this, I just want to make sure; there was another
20 issue that we wanted to broach. I don't know
21 which section it now fits in, so I'm asking for
22 an interpretation by Steve or somebody.

1 The greater than 50 percent wall
2 thickness issue about being a whatever it's
3 called for road crossings and river crossing and
4 girth welds, is that in this piece or the next
5 piece?

6 MR. NANNEY: I think we've already
7 voted on it. It was in the one before lunchtime.

8 MR. DRAKE: Not for corrosion, we did
9 cracks, we did other things, I mean, but --

10 MR. DANNER: All right, Andy, we're
11 going to check on that.

12 (Whereupon, the above-entitled matter
13 went off the record at 2:41 p.m. and
14 resumed at 2:46 p.m.)

15 MR. DANNER: All right, we're back.

16 So, John, can you explain the response?

17 MR. GALE: Yes, so, we -- yes,
18 Chairman. We have slide 167 from the
19 presentation from yesterday up on the screen
20 right now which brings up this issue.

21 And so, at the time, we did not
22 recommend a change to this. So, if this is the

1 appropriate time to bring up that discussion to
2 change it. So, that's why the voting slide
3 didn't have anything on there to actually
4 recommend any kind of change.

5 We were going to be adopting it as we
6 proposed.

7 MR. DRAKE: This is Andy Drake with
8 Enbridge.

9 This -- I just didn't know which
10 section this was -- is in the vote that Sara's
11 proposing or is in the next discussion?

12 We can have it here. I think this is
13 -- actually, I would like to think this is
14 actually a pretty short conversation.

15 We talk about using depth as a trigger
16 to creating, you know, for brook crossing and
17 welds and things like that, that if it's 50
18 percent or more through the wall that we would
19 now have to repair this, you know, within one to
20 two years.

21 I think that this kind of fights
22 engineering logic that we've used for evaluating

1 defects, and I just want to make sure I'm clear
2 on why we're doing that.

3 What we're worried about is depth and
4 length and width and the stress that the pipe is
5 under.

6 I'll give you an example where this
7 creates a problem for me. I have a river
8 crossing right now. It has a 50-plus percent
9 through wall anomaly that is a pit. It's an HDD
10 crossing. There are on other anomalies on this
11 crossing.

12 The FPR this pipeline operates at 33
13 percent of SMYS. The FPR failure pressure rate
14 is 3. So, it is three times the MAOP.

15 The, you know, this thing isn't going
16 anywhere. It happened because when we installed
17 the rectifiers were installed incorrectly and
18 were anodic at that little anomaly. And, it's a
19 pit that's deep but not long or wide.

20 This would require, because it's a
21 river crossing, now I have to go out and replace
22 the river crossing for a pit. I can't believe

1 that's what we're trying to do here. But, that's
2 going to be what happens.

3 Now, I know there are issues with road
4 crossings and people aren't responding
5 appropriately. I'm fine if we set an FPR rating
6 of 1.75 or something.

7 But, if it's that bad, based on depth,
8 width, length and stress that you need to go get
9 this. But, just picking out depth I think is
10 going to create an unintended consequence that's
11 not constructive dealing with the problem.
12 Characterize the problem and deal with it.

13 I think girth welds is a whole other -
14 - not another thing, I mean, I don't know what --
15 I don't think depth, again, is the issue there.
16 I think there's another problem with girth welds.
17 Frankly, the Delmont incident taught us a lot
18 about circumferential modeling. FPR calculations
19 aren't real good at picking that up, neither is
20 depth.

21 I think we need to figure that out and
22 doing just depth is a disservice. And, I don't

1 think you're solving the problem.

2 I'm not just saying that we should
3 dismiss that, but I think you should solve the
4 problem. This does not solve the problem.

5 My recommendation is, get away from
6 just using depth, acknowledge FPR ratings which
7 is everywhere else in the code for evaluating
8 anomalies and set a threshold. Okay? That's
9 appropriate.

10 This is like a piece of an answer and
11 I don't know what was driving this. For cracks,
12 I'm in a different place because of some of the
13 comments we made earlier, where we are with the
14 tools, how the cracks grow, how we model them is
15 a lot less understood. But, for general
16 corrosion, that, I think that's just prudent,
17 frankly.

18 So, that -- I apologize for bringing
19 this, but we were so focused on Figure 4 when we
20 broke that's where we put all the energy.

21 MR. DANNER: So, do we want to just
22 put a bullet in there asking PHMSA to review this

1 section with regard to --

2 MR. MAYBERRY: Wouldn't you add this
3 section to the slide? The voting slide we had
4 just in case this --

5 MR. DRAKE: I think you just -- if you
6 added a bullet that just said, ask PHMSA to
7 evaluate the use of FPR ratings and an FPR
8 threshold. I think that solves the problem.

9 I just think --

10 MS. GOSMAN: That's fine with me.

11 MR. DRAKE: -- thickness is not --
12 thickness is interesting but it's not the
13 problem.

14 MR. MAYBERRY: Yes, okay.

15 MR. DRAKE: It's just a data point.

16 MR. DANNER: Okay. So, yes, if we
17 could add that.

18 MS. GOSMAN: I don't -- I'm glad you
19 raised it. So, I want to make a second amendment
20 to my motion.

21 (Whereupon, the above-entitled
22 matter went off the record at 2:50

1 p.m. and resumed at 2:54 p.m.)

2 MR. DANNER: Okay, Andy, does that
3 language address this? Okay, so, Sara, you want
4 to modify your motion again?

5 MS. GOSMAN: I'd like to amend my
6 motion to include additional language after
7 change discovery period for non-HCAs from 180 to
8 240 days.

9 After that, PHMSA will evaluate the
10 use of a predicted failure pressure rating
11 thresholds for remediation schedules of anomalies
12 at a crossing of another pipeline or --

13 MR. DANNER: Or at an area.

14 MS. GOSMAN: Or -- sorry.

15 Or at an area with widespread
16 circumferential corrosion or is in an area that
17 could affect a girth weld.

18 MR. HILL: And, the second approved of
19 the change.

20 MR. DANNER: All right, thank you.

21 Okay, so, we have an amended motion
22 and a second to the amended motion.

1 Anything further before we go to a
2 voice vote on this or to a roll call vote?

3 (No audible response.)

4 MR. DANNER: All right, Cheryl, we're
5 ready for a roll call vote.

6 Oh, Steve, I'm sorry.

7 MR. ALLEN: A bit of clarification
8 here as there's been a lot of discussion on this.

9 We removed the controversy that we
10 have been going back and forth on for the last
11 hour and a half out of this particular motion, is
12 that correct?

13 MR. DANNER: That's correct.

14 MR. ALLEN: And, we're going to pick
15 it up on another --

16 Thank you.

17 MR. DANNER: That's right.

18 MS. WHETSEL: Okay, we ready for a
19 roll call?

20 MR. DANNER: Okay, Cheryl, we're
21 ready.

22 MS. WHETSEL: Okay, Steve Allen?

1 MR. ALLEN: Aye.

2 MS. WHETSEL: Dave Danner?

3 MR. DANNER: Aye.

4 MS. WHETSEL: Diane Burman?

5 MS. BURMAN: Aye.

6 MS. WHETSEL: Sara Longan.

7 DR. LONGAN: Aye.

8 MS. WHETSEL: Terry Turpin? Terry

9 Turpin had to leave.

10 Cheryl Campbell?

11 MS. CAMPBELL: Aye.

12 MS. WHETSEL: Andy Drake?

13 MR. DRAKE: Aye.

14 MS. WHETSEL: Ron Bradley?

15 MR. BRADLEY: Aye.

16 MS. WHETSEL: Rich Worsinger?

17 MR. WORSINGER: Aye.

18 MS. WHETSEL: Sorry.

19 Jon Airey?

20 MR. AIREY: Aye.

21 MS. WHETSEL: I'm going to really mess
22 your name up, I can see this.

1 Robert Hill?

2 MR. HILL: Aye.

3 MS. WHETSEL: Sara Gosman?

4 MS. GOSMAN: Aye.

5 MS. WHETSEL: Okay, the motion
6 carries.

7 MR. DANNER: Okay, thank you.

8 So, now to the other part of this
9 motion which is on the right side. So, before we
10 get a motion, does anybody want to speak to this?

11 All right, Cheryl?

12 MS. CAMPBELL: So, I'm wondering --
13 thank you, Cheryl Campbell, Xcel Energy.

14 I'm wondering if it would be helpful
15 to the Committee if we walked through an example
16 using this chart so that we all understand how
17 conservative or not this is?

18 Because, I don't think the chart is
19 self-explanatory. And, I do think it takes some
20 experience and understanding of the assumptions
21 behind it.

22 So, I would ask --

1 Yes, I would ask -- that's the chart
2 we're talking about, right?

3 ASME B30 -- Figure 4, right?

4 So, I'm just asking us if that would
5 be helpful.

6 MR. DANNER: Any sense? I'd certainly
7 be interested. So, there we go.

8 Okay, so, before we go through that
9 exercise, Steve or Andy? Steve?

10 MR. ALLEN: Yes. Thank you, Mr.
11 Chair, Steve Allen, IURC.

12 I agree. As everyone was huddled up
13 here earlier at the break, I was delving through
14 B31.8S, the 2004 version and looking at Table 4
15 trying to get my head wrapped around this.

16 And, I have been to Oklahoma City
17 through some training, realizing I am an
18 accountant, okay, I need help here because I
19 don't feel comfortable on voting on something I
20 don't understand or have an appreciation for.

21 So, I think what Cheryl is saying
22 makes an awful lot of sense. I want to see the

1 delta between what we're doing today and what is
2 being proposed in the NPRM regarding additional
3 conservatism.

4 And, I am interested in the increase
5 in the number of digs. I mean, because, this
6 does have to be practicable and cost effective as
7 well.

8 So, but, I just want to get my head
9 wrapped around and I need some help. So, thank
10 you.

11 MR. DANNER: Okay, thank you.

12 Andy?

13 MR. DRAKE: This is Andy Drake with
14 Enbridge.

15 I've asked Mark Hereth with P-PIC to
16 sit up here next to me. We were heavily involved
17 in the development of ASME's B32.8S document when
18 it was written. And, between the two of us, I
19 think our memories can serve to get -- answer any
20 questions that come up on this document.

21 But, I do think that -- listening just
22 to the conversations at the break, how

1 misunderstood this is and how -- and, maybe
2 that's part of the problem, Steve, it's people
3 aren't using it correctly, too.

4 This document was developed to help
5 provide clarity about how people should interpret
6 inline inspection results and predict over the
7 reassessment interval the need to go investigate
8 them. Okay?

9 So, what it's telling you is, based on
10 three different curves, based on the SMYS level
11 which is back to basically design factors, if you
12 want to apply that.

13 We're looking at corrosion growth
14 modeling. The corrosion growth model that was
15 plugged in here was basically based on a half-
16 inch material corroding at, I think, 11 mils per
17 year.

18 Normal -- when you look at the bell
19 curve of distribution of corrosion, that's
20 extraordinary on the bell -- on the tail end.

21 Nominal corrosion rates in the two to
22 four range. So, you're at 11 mils per year.

1 That's what this is based on. That's just data.

2 What you're trying to do is, as you
3 look at the different stress levels, is predict
4 out if this anomaly, based on those corrosion
5 growth levels, was to cross that seven year or
6 whatever the re-inspection frequency that you're
7 setting is, if it crosses that line, then you
8 have to go look at it on that schedule.

9 So, you're basically assuming the
10 defect that you have, you project it on those
11 growth rates, and if it crosses -- where ever it
12 crosses those lines is when you have to go
13 inspect it.

14 So, you know, you can see the
15 different response curves. I mean, a defect
16 that's at 30 percent of SMYS would basically be
17 projected out to require a seven-year re-
18 inspection if it crosses at 1.5. Does that make
19 sense? If you follow the 30 to 50 percent line,
20 the middle line out, you would be at 1.5.

21 So, if it gets to 1.5 or be predicted
22 under those aggressive corrosion rates to get to

1 1.5 in seven, you have to go inspect it before
2 you re-inspect.

3 MS. CAMPBELL: So, Andy, can I just
4 ask a clarifying question around that? I'm not
5 trying to be -- right?

6 When you say 1.5, you mean a predicted
7 failure pressure that's 1.5 times the MAOP?

8 MR. DRAKE: Yes.

9 MS. CAMPBELL: Okay, thank you.

10 MR. DRAKE: Fifty percent safety
11 margin. So, that's a big safety margin. But --
12 and, it's dealing with the different stress
13 levels. It's trying to pick that up.

14 I think the other thing that it does,
15 it was intended to do, is it picks up the
16 different stress levels and predicts them over
17 time. So that you're actually dealing with
18 things that are in between 72 percent and 50
19 percent, in between 50 percent and 30 percent.

20 You're trying to model the entire
21 population over a very long period of time so
22 that you keep all of these anomalies kind of in

1 front of you from a growth modeling perspective.

2 It's not a cliff. It's not a binary
3 solution like you do a model now or you wait a
4 long time. No, you keep track of them all.

5 And, the obligation to the operator
6 is, as you're digging these up, you're supposed
7 to do unity plots. Unity plots are telling you,
8 are you on a different curve than this?

9 You can't use a less conservative
10 curve but you're obligated, if you find data that
11 tells you you're on a different curve, to
12 reevaluate that log run and go adjust all those
13 response criterias to get back out on the right
14 time frame.

15 So, the point is, is even if you're
16 conservative, there -- that was the safety net.
17 As you're doing your digs, as you're digging
18 these up from the first year, the second year,
19 the third year gathering data, if that data is
20 telling you that pig run was off or that
21 corrosion growth rate is off this model, you have
22 to recalibrate the entire log and recalibrate

1 your entire response criteria.

2 And, I think the point is, is this was
3 intended to be very conservative and address the
4 different stress levels so that you don't get
5 small anomalies -- you don't get big anomalies
6 growing on Class 3 and 4 pipe because they have
7 this huge wall thickness.

8 You're trying to get them where a
9 higher FPR is the standard for that response and
10 to avoid just that.

11 Now, I do think the whole point of
12 this conversation, people are not using this
13 right. You know, they're staying down on the
14 lower line. Well, that's not the right answer.

15 If you are at 50 percent, you know, if
16 you're at 40 percent of SMYS, you can't be on
17 that lower line.

18 And, I think the point is, we're not -
19 - the other part is, we're not seeing anomalies
20 when this is deployed. People are inspecting and
21 deployed, we're not seeing this breakout.

22 So, I don't know, Mark, if I --

1 Any other questions? But, that
2 basically is how this is used. It actually
3 predicts, based on hostile corrosion growth, from
4 where you are right now to where this anomaly
5 would be, when do you have to go look at it?

6 And, you're obligated, based on the
7 other data that you find on that log run, to do
8 unity plots to make sure you're on track. And,
9 if you're not on track, you need to make an
10 adjustment.

11 MR. DANNER: All right, Steve?

12 MR. ALLEN: Thank you, Mr. Chairman.
13 Steve Allen, IURC.

14 So, I was trying to go back to the
15 language that was originally proposed where it
16 talks about different RFPs, the less than or
17 equal to X number for each class. I don't know
18 if we can go back to that or not. The original
19 proposal, okay.

20 And then, my question is, is can you
21 compare then what this graph on the left is to
22 what that proposed language that they had before?

1 Does that make sense what I'm asking?

2 Okay.

3 So, Mr. Chair, may I?

4 MR. DANNER: Yes, Steve, go ahead.

5 MR. ALLEN: So, again, I'm looking for
6 a comparison of this table here on the right to
7 the chart from B32.8S, Figure 4.

8 MR. DANNER: Okay, Steve, do you have
9 more? Your tent is still up.

10 MR. ALLEN: That's right.

11 MR. DANNER: Okay.

12 All right, okay, we have a guest, so
13 please identify yourself.

14 MR. HERETH: I'm Mark Hereth from the
15 Blacksmith Group.

16 So, to address Mr. Allen's question
17 here, if you take the first one there of 1.25
18 which was the proposed level for Class 1, if you
19 go and look at that on Figure 4, since this is
20 Class 1, it would be above 50 percent of SMYS.

21 When you look at that 1.25, it puts
22 you just right in front of that seven-year

1 interval. But, it put -- it's just in front of
2 it.

3 If you look at the 1.39 in Class 2,
4 that's also, that's 60 percent of SMYS is that a
5 Class 2 design factor.

6 So, you would go up to 1.39 just below
7 the 1.4 and you would read over and that would
8 put you beyond that seven-year period.

9 So, the one thing that these -- this
10 curve does is it forces you to actively be
11 looking at anomalies year in and year out to know
12 where you are on that curve and to be checking
13 against that conservative corrosion growth rate.

14 When you simply repair things to a
15 threshold, it leaves the option for people to
16 walk away. And, that's not what we -- that's not
17 your intended -- that's an unintended
18 consequence.

19 The 1.67 in Class 3 would be between
20 the 30 --

21 Yes, it'd be the 30 and 50. So, it
22 would be 1.67. So, you go put to 1.67 which is

1 just above the ones -- it's between the 1.6 and
2 the 1.8 on that line. And, that goes beyond the
3 seven-year.

4 So, the approach that this figure
5 takes is that that takes you out to a response
6 time. So, for example, the 1.67 would put you at
7 a response time of, let's say, eight years.

8 But, you're constantly watching that
9 eight years as you go along. And, if you find
10 indications --

11 And, what the reference to Section 7,
12 and Andy said this earlier, is it forces you to
13 look at the corrosion growth rates if you have on
14 an ongoing basis, and if you're inside that
15 conservative rate, then you have to adjust that
16 rate and reflect that in how you're responding.

17 So, what this does is it gives you the
18 time to respond and then, typically, you're going
19 to reassess for things that have large safety
20 factor. You're going to reassess before you get
21 to the time where it would grow to 1.1.

22 And, in that time that you have two

1 measures to look at that anomaly and say, has it
2 actually grown?

3 If I go and repair that within one or
4 two years, you take away the options to see if
5 it's grown or not. You're assuming that it
6 grows.

7 We have numbers of cases where you
8 don't see growth. This gives you the opportunity
9 to reassess and not have to make a repair.

10 Questions?

11 MR. DANNER: All right, Cheryl and
12 then Steve?

13 MS. CAMPBELL: Thank you, Mr. Chair,
14 Cheryl Campbell, Xcel Energy.

15 So, Mark, is it fair to say, I mean,
16 what I heard Andy say originally was the
17 corrosion growth rate behind this chart is
18 assumed to be 11 mils per year.

19 So, what -- and that's -- that is
20 three to five times sort of the midpoint on the
21 bell curve of the corrosion that we see.

22 So, that's a -- that's an added safety

1 margin plus the 1.4 or whatever your factor is to
2 the predicted failure pressure. And, I think
3 that -- your point is, those are the additional
4 safety factors that are on this.

5 Now, the question, are operators
6 actually monitoring their corrosion growth rate
7 and reevaluating where they're at and readjusting
8 where they should be taking action?

9 I think that's the issue on the table,
10 is that fair?

11 MR. HERETH: Yes, that's fair.

12 The other thing that I would offer is
13 that they're taking tool uncertainty into account
14 by using tool tolerances. So, you're taking tool
15 tolerances into account, you're taking the
16 corrosion -- conservative corrosion growth rate
17 into account.

18 And, you're applying that to yield
19 this safety factor. So, you have a lot of margin
20 there. And, that's why we think we're not seeing
21 the fact that this model fails as a cause for
22 failures.

1 There are corrosion failures, but
2 they're not because of this -- the failure of
3 this model. So, the conservatism is there and
4 Section 7 requires that the operator look at,
5 through the use of unity plots and other
6 mechanisms, and some of that, you're already
7 built into the language that you voted on, is to
8 have those measures that causes the operator to
9 go and look and examine to make sure that they're
10 making sufficiently conservative enough decisions
11 to support the use of that conservative growth
12 rate.

13 MR. DANNER: All right, Steve?

14 MR. ALLEN: Steve Nanney, PHMSA.

15 Again, just to make the point, is when
16 you look at the lines, the middle line is for
17 Class 3 and 4 applied. And, the red line from
18 seven years going up is at the seven-year point.

19 And, I realized my vision's not that
20 great, but I -- what I think I'm seeing, it is at
21 about 1.5 at the seven years. And, that's for
22 Class 3 and 4 areas and that's a pressure failure

1 ratio of 1.5.

2 When you design a Class 3 area and
3 when you design a Class 4, a Class 3 area has a
4 safety factor of 0.5 which would be equivalent to
5 a pressure failure ration of 2 for Class 3 and
6 2.5 for Class 4.

7 And then, the point PHMSA is bringing
8 up in doing this is, do we -- I'm not debating
9 whether we've done it in the past. It started
10 out in integrity management early on because,
11 one, we didn't know what we were getting into;
12 and then, how many anomalies and what the timing.

13 Now, just like Cheryl said earlier,
14 what she's seeing in on new facilities. Well, if
15 you go look at the HCAs, they're not growing very
16 much. In fact, they're pretty flat in integrity
17 management.

18 If you look at what we're proposing in
19 this rulemaking to be under it, it's -- we've
20 gone through the mileage, it's about 4,500 miles.
21 So, we're not talking about 300,000 miles of
22 pipe, we're talking about areas where they're

1 either in Class 3, Class 4 or you've got a
2 certain amount of people around.

3 And so, the point that we were getting
4 at, and in the -- is the areas on the left-hand
5 side of the red line and the middle line that's
6 sloping down to 1.1, should we let it grow to
7 1.1?

8 In my opinion, if you get down to 1.2
9 and less and you're in a Class 3 and 4 and you've
10 got relief valves set at 4 percent above or 10
11 percent above and you're looking at tool
12 tolerance and everything, is that really the
13 safety factor you think you have? And, should
14 you be letting it grow when the safety factors on
15 new pipe is 0.5 or 2 and 0.4 or 2.5.

16 Also, in the evaluation criteria we
17 use, we're adding 10,000 pounds to it. And so,
18 if you've got one grade of pipe, if it's X52, in
19 these anomaly calculations, you're using 62,000.
20 So, you're adding like 15 to 20 percent onto that
21 grade when you do it. That's the point PHMSA's
22 bringing up.

1 That's why we wanted to have the
2 discussion, and again, we respect the Committee's
3 determination. But, we want you to understand
4 why we're bringing it up.

5 MR. DANNER: All right, Sara, did you
6 have your tent up?

7 MS. GOSMAN: No, I just wanted an
8 explanation from PHMSA about the delta and I just
9 got it.

10 MR. DANNER: Okay, all right, thank
11 you.

12 Andy?

13 MR. HERETH: Could I add other
14 perspective to address Steve's comment?

15 MR. DANNER: Yes, identify yourself.

16 MR. HERETH: Again, it's Mark Hereth
17 from Blacksmith Group.

18 Steve, you make a great point with the
19 noting that the Class 3 and 4 cross at exactly 10
20 years for 1.5 and they cross at 7 years for 1.39.

21 That was part of the design of this
22 figure, actually. The basis for these curves was

1 actually work that was done by John Kiefner and I
2 believe Brian Leis.

3 And, this was in the early 2000s.

4 And, actually, it was Battelle data, the same
5 people that did the ERW study that you guys have
6 referred to over the past few days.

7 The Battelle data actually supported a
8 re-inspection interval of about 12 to 14 years.
9 What we did on the Committee was actually get
10 conservative and use, for example, 10 years and
11 the hydro testing basis there.

12 And then, for Class -- above Class 1
13 and -- which is the 1.39 and the 1.5 test in
14 Class 3 and 4 which is the hydro testing basis
15 there.

16 So, the interval could have actually
17 been longer based on the data available. But, we
18 actually got conservative, and this is to
19 Cheryl's point again, of the conservatism that's
20 built in.

21 We decided to move back to the 10-year
22 interval and use the hydro testing basis as a

1 basis to establish this.

2 MR. DANNER: All right, any other --
3 Cheryl?

4 MS. CAMPBELL: Thank you.

5 I just want to make one further
6 comment. I'm not -- I'm, frankly, not
7 questioning the need to have the conversation or
8 PHMSA bringing it up, I think it's a valuable
9 conversation to have.

10 I think it's important for those of us
11 on the Committee, myself included, to understand
12 the chart and what's behind the chart and how
13 conservative it is or is not. Right?

14 Where the weak points and the strong
15 points are so that we can make an informed
16 decision on what we think the right path forward
17 is and provide that guidance to PHMSA.

18 And then, obviously, Allen, you and
19 your team will take that into account when you
20 think about what the final answer is.

21 So, I appreciate PHMSA bringing it up
22 and I appreciate very much the conversation

1 around it.

2 MR. DANNER: All right, thank you.

3 Steve?

4 MR. ALLEN: Yes, Steve Allen, IURC.

5 Steve Nanney, there was point that you
6 had made about when an anomaly reaches a point
7 where the predicted failure pressure is, you
8 know, 1.2 times MAOP, why would you not want to
9 go out and fix it or address it?

10 I think you said something to that
11 effect?

12 MR. NANNEY: This is Steve Nanney with
13 PHMSA.

14 I think you misunderstood me. All I
15 was doing was looking at the line up there. If
16 you look at where the two bottom lines go into
17 1.1, cross 1.2, if you're going from 1.2 to 1.1,
18 you would not have to do the repair until you got
19 to 1.1.

20 That was the only point I was making
21 is that you've got several years.

22 The other thing, if you look at the

1 red line at 7 for Class 1 and 2, where that
2 crosses it's about 1.3. And, where it crosses
3 for Class 3 and 4, is 1.5.

4 And so, the point PHMSA, you know, is
5 trying to get on record, should we be letting
6 Class 3 and 4 go all the way down to 1.1? Where
7 we're using an R-string, something along that
8 line to evaluate corrosion where you're adding
9 10,000 to the strength of the pipe and I realized
10 that we're -- operators, some are, most are
11 adding tool tolerance, should we be going down
12 that close?

13 Should the number, like if we do a
14 pressure test, it's 1.5 for Class 3 and 4 that
15 you do a pressure test. So, in year 1, if you
16 did a pressure test, it would meet that 1.5
17 that's on that red line.

18 If you did a hydrostatic test of a
19 Class 1 and 2, it would be 1.25 would be what you
20 would look at.

21 So, that would be the numbers if you
22 did a pressure test which, at some point, we were

1 hearing that a lot of these would be pressure
2 tests and not ILI.

3 We'll have to look at that in an RIA
4 of which, but the ones that get a pressure test
5 will do what the red line I think pretty much is
6 showing when you do the pressure test. It's just
7 of having the discussion of should we let it go
8 to 1.1?

9 And, again, especially in areas where
10 you've got high consequences and you've got a lot
11 of people in 3 and 4, should we be getting that
12 close when the original design is 2.0 pressure
13 failure ratio and 2.5? That's the issue.

14 MR. DANNER: All right, Andy and then
15 Allen?

16 MR. DRAKE: This is Andy Drake with
17 Enbridge.

18 If the big concern is Class 3s and 4s,
19 I do think this is conservative, but, you know,
20 when we saw the proposal, it was for all classes,
21 1s, 2s, 3s, 4s, we're going to revisit the whole
22 criteria. And, you saw an allergic reaction.

1 If the issue is there's a concern that
2 this is not conservative enough for 3s and 4s,
3 I'm fine with revisiting that with some issue.

4 I think people are misinterpreting
5 this a little bit. I think there is
6 extraordinary conservatism in two levels;
7 certainly the corrosion growth rate and we've now
8 collapsed the re-inspection intervals down, which
9 it helps on both ends.

10 Which, in essence, puts us at 1.5, I
11 would agree with you on that. Yes, 1.5 is a
12 pretty big margin of error, especially given it's
13 queuing up an inspection.

14 And, when I get to the ditch, I have
15 to plug in all the safety factors. Okay? So,
16 it's not like we're losing track of these.

17 But, if there is some concern that 1.5
18 is not enough in here, I'm -- I would be willing
19 to entertain some discussion about 3s and 4s with
20 some FPR rev limiter. Okay, I think that's
21 reasonable.

22 But, when we start plugging in all

1 these miles in MCAs, most of these miles are
2 going to be Class 1s and 2s. Now we're in
3 another place.

4 I think it's -- it doesn't -- there's
5 nothing here that's showing this isn't working in
6 those areas. And, I don't know why we would
7 change that and it's a huge issue,
8 volumetrically, for the amount of response that
9 we're going to make.

10 So, I would be willing to bifurcate
11 that a little bit. If people are really wrapped
12 around the axle about this isn't conservative
13 enough in 3s and 4s, all right, I, technically,
14 don't agree, but if -- to the will of the
15 Committee, if people want to do that, all right,
16 let's entertain some different conservatism for
17 3s and 4s.

18 But, I don't know why we would get
19 away from this, certainly from Class 1s and 2s.
20 It's proving, it's working; it's got double
21 layers of conservatism in it. I see Steve
22 shaking his head yes, so maybe that's some kind

1 of settlement here.

2 MR. DANNER: All right, Alan?

3 MR. MAYBERRY: What you just mentioned
4 -- Andy, what you just mentioned, so you're
5 suggesting further research on it or to maybe
6 develop alternative language to address that
7 conservatism?

8 MR. DANNER: Okay, Steve?

9 MR. NANNEY: Can I just -- and, what
10 we've been looking at in the mileages that we've
11 been looking at on the non-HCAs, the biggest
12 portion of it is Class 3.

13 And, I think what I thought I heard,
14 you know, would something here be for Class 3 and
15 4, a 1.5 or something along that line, I thought
16 I heard you mentioning that and leaving the 1.1
17 for Class 1 and 2? Is that --

18 MR. DRAKE: I'd like to take a break
19 before I agree to that because I don't want to
20 get stoned when I walk out of this room.

21 But, okay, you know, not stoned like
22 in Colorado, I mean --

1 (Laughter.)

2 MR. DRAKE: But, I think
3 directionally, that's -- that makes some sense.
4 I think that may address what Sara's worried
5 about.

6 And, I -- and, we've got a lot of time
7 committed as a Committee, and I'd really applaud
8 the willingness of this group to work through
9 thorny issues.

10 Well, this is a thorny one. And,
11 unfortunately, it's last and everybody's trying
12 to go home. But, if we can bear a few minutes, I
13 think that this would be worthwhile.

14 I will offer this and then we can take
15 a break, because I think this is actually just as
16 important.

17 And, I think when we pass the red face
18 test here, we need to add a bullet that operators
19 should consider tool tolerance in this before
20 they deploy Figure 4, I think that should be a
21 requirement.

22 MR. DANNER: All right, let's take a

1 five to ten minute break, get back as soon as we
2 can after you have consulted with folks.

3 (Whereupon, the above-entitled matter
4 went off the record at 3:27 p.m. and
5 resumed at 3:41 p.m.)

6 MR. DANNER: All right, so Sayler has
7 put some language up there that has been
8 discussed during the break. All right, wait a
9 minute. So we are looking for one more edit.
10 Okay, so who wants to walk us through this? Mark
11 or Andy? Do you want to tell us what you agreed
12 to? All right, Andy.

13 MR. DRAKE: The guest speaker is
14 sitting back down again. This is Andy with
15 Enbridge. I -- I think we have some good
16 thoughts here. One, I do think we need to add
17 the tool tolerance conversation. Let's quit
18 talking around that. Get people to do this.
19 It's consistent, it's appropriate, it's diligent.
20 It helps -- it would also help to narrow down
21 volatility, which is really what you're trying to
22 do. People should have that. It -- that's an

1 expectation we should have.

2 So that -- let's, you know, as we
3 throw the language up there. One thing I think
4 that became clear in the conversations back here
5 was, generally, a comfort with coming up --
6 differentiating to Class 3 and 4 with some FPR
7 response criteria, I thought a very good
8 conservative step that everybody agreed to -- so,
9 I am trying to work from total consensus down to
10 where there's a little bit of angst, just to be
11 transparent -- that moving to response criteria
12 inside HCAs, which is the vast majority, needs to
13 be one year. So there's no -- figure 4 would not
14 apply in the response criteria for HCAs. It's
15 one year. Outside of HCAs is two years.

16 So there's nothing beyond one and two
17 years in Class 3s and 4s for these criteria that
18 we're talking about -- which is a big step. I
19 think there was an initial energy around trying
20 to settle and be all stack hands, and that went
21 to 1.5 because that was a number that came up.
22 And then a lot of people got very anxious about

1 uncertainties with what's happening in their
2 systems. And they've dropped back to 1.39. And
3 I am being as transparent as I can be without
4 putting anybody in harm's way here.

5 So I think there's a lot of -- there's
6 -- there's a little bit of split here about what
7 is the FPR target? There's no split on tool
8 tolerance. There's no split on using one and two
9 -- HCAs and non-HCAs one year and two year as a
10 criteria, which is, as you look at Figure 4,
11 that's a huge step forward. And to Steve's
12 point, you know, based on what people could be
13 doing, 1.39 is at least a 20-percent safety
14 margin on top of what we currently have, and you
15 back-ended their maximum response time to one to
16 two years. So I think that's -- no one is
17 standing up to object, so I am taking that as --
18 that was -- that is the absolute most accurate
19 reflection of the conversation back here I can
20 get between the trade associations, not just
21 INGAA, the -- all the trades.

22 So, I just throw that out there and

1 see how that responds, Steve. I mean, looking at
2 you. I mean, you've had some concerns about this
3 1.39 FPR with tool tolerances and a one- and two-
4 year maximum response time in 3s and 4s. Does
5 that address the concern that you have?

6 MR. DANNER: All right, Steve?

7 MR. NANNEY: You said 1.39, or 1.5?

8 (Pause.)

9 MR. NANNEY: I thought 1.5 is what's
10 up there, that's why I've -- I'm not catching.

11 MR. DRAKE: That was -- that was a
12 first thought. And then as people started
13 talking, I think they got very anxious about not
14 knowing what that meant. And I think the point
15 they felt like was moving the response time frame
16 up to one- and two-years. As you look at figure
17 4, takes a ton of risk off the table. And then
18 you're increasing the FPR from the bar -- the
19 line, basically, from whatever that is on the
20 line at one and two years up to 1.39,
21 immediately. That's a lot of conservatism. And
22 that -- so that's there on -- that's, just like I

1 said, that's -- I am just trying to be very
2 transparent with what the conversation was back
3 here. So that's how they ended up with 1.5 here
4 was there was initial surge of trying to reach a
5 consensus. And then there was a second of, wait
6 a minute, we're -- we're not sure how big a hole
7 we just stepped in. I mean, I am being very
8 honest.

9 MR. DANNER: Steve, do you want to --

10 MR. NANNEY: This is Steve Nanney,
11 PHMSA. Again, I think the 1.5 is -- is a better
12 option, but the Committee can consider what they
13 want and PHMSA will take that back and consider
14 it whether it's 1.39 or 1.5.

15 MR. DANNER: All right, Cheryl?

16 MS. CAMPBELL: Thank you, Mr. Chair.
17 Cheryl Campbell, Xcel Energy. So -- and again,
18 for purposes of clarity for myself, if we put --
19 if we were to put a predicted failure pressure of
20 1.39 but also a one-year response -- and what I
21 am trying to do is convert that into some kind of
22 a risk profile, right? And -- and -- in my mind,

1 right? And I am probably -- I am probably
2 thinking about it incorrectly, but it -- so I am
3 basically saying my predictive failure pressure
4 is 1.39 times MAOP, but I am also going to make
5 sure I get it inside a year in an HCA. Is that -
6 - is what I understood the -- and if I am outside
7 an HCA, if it's still in a class 3 or 4, I will
8 make sure I get it within two years.

9 So, I guess my question would be, I am
10 wondering, off the top of my head -- probably a
11 bad question -- what corrosion growth rate would
12 it take -- might take some math, Andy, but what
13 corrosion growth rate would it take to get from
14 1.39 to 1.1 -- which is the place, Steve, where
15 you're very nervous in that one- to two-year time
16 frame? Does that make sense? Steve is over
17 there shaking his head up and down, right,
18 because we're all interested in keeping it safe,
19 right? And getting to it before we have a
20 failure. So can we convert that into something
21 that helps me think about the risk profile? So
22 is that -- is that the 11 mills a year? Or is

1 that 20 mills a year? Or is it five mills a
2 year? Can somebody -- can somebody tell me that?

3 (Pause.)

4 (Laughter.)

5 MR. DANNER: I think they're working
6 on it.

7 MS. CAMPBELL: Someone is doing the
8 math.

9 MR. DRAKE: It's like throwing a bone
10 to a dog. You've got a bunch of engineers back
11 there, and then -

12 (Laughter.)

13 (Simultaneous speaking.)

14 MS. CAMPBELL: I did see a bunch of
15 them jump up and run to the calculators, yes.

16 MR. DRAKE: This is awesome; I've got
17 something I can actually do. I mean -- yes, we
18 can calculate that. Actually, we can pick 500-
19 well pipe or something and calculate through it.
20 It's pretty easy -- what that means. But I think
21 the -- where you would be on the bell curve of
22 distribution of corrosion growth would be 99.9999

1 -- I mean, you would be way out on the tail end.
2 Because you would be talking -- you would have to
3 be talking somewhere in the 16-plus mills -- 17-
4 18 mills per year range of corrosion to get down
5 that fast -- in one year. You'd have to take --
6 it would probably be much more than that to get
7 off from 1.39 to 1.1 in on to two years means
8 you're --

9 MS. CAMPBELL: And I think --

10 MR. DRAKE: You're losing a lot of
11 millage. I mean a lot.

12 MS. CAMPBELL: Yes, and I just think
13 that knowing that will help the -- A, the non-
14 engineers in the room and B, the non-material
15 science people in the room. You know, help us
16 understand a little bit better about what we're
17 talking about.

18 MR. DRAKE: I can do it; I got to get
19 my calculator out.

20 MR. DANNER: Sara?

21 MS. GOSMAN: Can I ask for that
22 calculation as well to go up to 1.5?

1 MS. CAMPBELL: Oh, you just had a
2 whole bunch more people run back there to the
3 calculator.

4 MS. GOSMAN: I know.

5 (Pause.)

6 MR. McLAREN: Chris McLaren with
7 PHMSA. Just wanted to add a little bit of
8 context around the corrosion growth rate
9 discussion. While 11 mills can certainly be
10 considered a conservative growth rate in many
11 venues, the NACE 0502 provides more conservative
12 growth rates as the NACE, sort of, gold standard
13 of corrosion growth rates of 12 mills per year if
14 there's CP applied in 16 mills per year -- if no
15 CP in a shielded condition, thank you.

16 (Simultaneous speaking.)

17 MR. DRAKE: Yes, unmitigated corrosion
18 growth rate is 16, just to be transparent. But
19 that's -- we're supposed to have CP on our
20 system, so --

21 MR. DANNER: All right, any further
22 discussion here?

1 (No audible response.)

2 MR. DANNER: Apparently not. Other
3 concerns? Other tweaks? Or are we -- Steve?

4 MR. ALLEN: Thank you, Mr. Chair.
5 Steve Allen, IURC. I -- maybe I missed it, but
6 did we hear what the -- okay.

7 (Simultaneous speaking.)

8 MR. ALLEN: Well, I -- I -- so,
9 Cheryl, I think that that's a very, very good
10 observation. And, Mr. McLaren, I think that also
11 adds some parameters to the discussion as far as
12 corrosion rate. You know, of 16, or what was it
13 you said -- is 12 was the gold standard?

14 MR. McLAREN: NACE 0502 provides the
15 standard of 12 mills a year corrosion growth rate
16 when CP is applied. Or 16 mills per year
17 corrosion growth rate when inadequate or
18 shielding CP is -- is there -- not there.

19 MR. ALLEN: Okay, so then if we find
20 out that the -- the mills per year is greater
21 than 16 for this drop from 1.39 to 1.1, that does
22 a lot for me.

1 MR. BRADLEY: Just to -- just to --
2 thank you, Mr. Chair. Ron Bradley, PECO. Just
3 to get clarity, Chris, on the corrosion numbers.
4 Are you talking about bare steel or coated steel
5 cathodically protected -- when you say protected?

6 MR. McLAREN: Cathodically protected
7 coated steel from NACE 0502, the ECDA standard.
8 There are other numbers in ASME B-31-8-S which
9 deal with soil resistivity. But typically if we
10 want to stay within the NACE family of
11 definitions, as we have so far, those are the
12 ones out of 0502.

13 MR. BRADLEY: Appreciate it. I just -
14 - I know we got calculations being done; I just
15 don't want to scare the organization. I mean,
16 when you -- when you -- we've traditionally gone
17 back and looked at pipe -- obviously, there are
18 one-offs that happen and there is shielding. But
19 cathodic protection does a great job -- yes, or
20 induced.

21 MR. DANNER: Are we close? Okay. In
22 the meantime, Steve Allen. Oh, you're going to

1 wait. Okay. Well, while we are waiting, I just
2 remind everybody that our next meeting is going
3 to be June 12th to the 14th. So, for those of
4 you who don't have your calculators out, get your
5 calendars out. Okay, Andy?

6 MR. DRAKE: Andy Drake with Enbridge.
7 While we are idling here, and his computer is
8 sort of smoking, I am going to -- I thought I
9 would throw out here a thought that Sara and I
10 broached the other day. And that was, as the
11 rule comes to a close -- knock on wood -- here at
12 the midnight hour, I think it's appropriate for
13 us to be conscious of our accountability to the
14 public.

15 You know, the city of San Bruno is
16 particularly affected by this and had a huge
17 bearing in this discussion. And I think that it
18 may be appropriate -- I think it's appropriate
19 for some small group of us -- I am very committed
20 to doing this, I think others are. I just offer
21 this to the Committee. May be worthwhile for us
22 to go and meet with the city managers and the

1 folks out in San Bruno and kind of close the loop
2 with them about what have we been doing for oh,
3 so many years? As industry and as committees and
4 as government, did we hear them? Are we
5 responding to them? Are we advancing pipeline
6 safety? Are we addressing their concerns? I
7 think this is a part of our accountability. And
8 I just want to throw that out there for us to
9 think about.

10 MR. MAYBERRY: Actually, I was
11 thinking about that as we, you know, finish up
12 here. You know, that's a milestone for this
13 group, for the agency, for the, you know, hard
14 work that's been done to close the loop on some
15 policy matters. You know, and develop a path
16 forward for, you know, policies that will prevent
17 -- help prevent that type of incident. So, you
18 know, I didn't want -- and I appreciate you
19 mentioning that, Andy. I didn't want to lose
20 sight of the fact that, you know, we -- we made
21 progress here over the last few years. And I
22 think we need to remember, you know, what it's

1 all about. You know, improving pipeline safety.
2 Certainly learning from incidents that have
3 happened, and most notably, you know, the eight
4 fatalities and the victims and their families
5 from San Bruno as we go forward, you know.

6 You know, it weighs heavily on me, I
7 know the rest of us, that -- you know, this is a
8 big deal we've done here. And it's a lot of good
9 work that went into it. And so, you know,
10 unfortunate that there was loss of lives. But it
11 was, you know, out of that we have learned and
12 are developing new, you know, policies for
13 pipeline safety nationwide. So, yes, I would
14 welcome something like that as well.

15 MR. DANNER: Okay, Sara?

16 MS. GOSMAN: So I wish I had thought
17 of this idea. I've got to give Andy credit
18 because that's a great idea and I really -- I
19 think it's a terrific thing to do. I think we --
20 and I would say that I think that we should try
21 to get everybody there. But if we can't do that,
22 then we can't do that. But it seems to me that

1 we as a Committee can be there and responsive to
2 the people who had this incident. And it's a
3 different place than being here in D.C. and I
4 think -- I think we should be able to explain
5 what we've done, and I think we should be proud
6 of a lot of the work that we have done on this
7 rule.

8 MR. DANNER: So I would just like to
9 say -- this is Dave Danner -- that I think it's a
10 great idea, too. In my state, in Bellingham,
11 Washington there was a fatal explosion several
12 years ago. It seems like it's old history, but
13 in my state, it's actually still fresh. So I
14 have to imagine that in San Bruno it's very
15 fresh. So I do think it's a good idea. And we
16 should consider that.

17 MR. DRAKE: Actually, they're doing
18 due diligence. They're actually comparing --
19 that they reached the same conclusion separately,
20 which is good -- that's a good thing.

21 (Pause.)

22 MR. HERETH: This is Mark Hereth with

1 Blacksmith. Can I go ahead?

2 MR. DANNER: Right, you are
3 recognized, sir.

4 MR. HERETH: Thank you. So a couple
5 of us have run this independently. And we've
6 gotten essentially the same number. So to go
7 from 1.5 to 1.1, the growth rate that would be
8 required in one year is 100 mills. So compare
9 that to the 11 mills that we talked about before.
10 So that's a very aggressive corrosion rate. To
11 go from 1.5 to 1.1 in two years, which would be
12 the non-HCA, that would be 50 mills. If we then
13 look at 1.39 to 1.1, that would be 72 mills in
14 the one year, and it would be 36 mills in the two
15 years. So even at 1.39, we're -- in two years,
16 we're three-times -- or, more than three-times
17 that 11 mills per year growth rate.

18 MR. DANNER: And that's for a half-
19 inch wall pipe?

20 MR. HERETH: When I ran it, it was for
21 half-inch wall, yes. I used half-inch wall, 30-
22 inch -- yes. X52 is what I used. Yes.

1 MR. DANNER: All right, thank you.
2 Cheryl?

3 MS. CAMPBELL: Thank you, Mr.
4 Chairman. Cheryl Campbell, Xcel Energy. I --
5 given that information, I would like to propose
6 that we change that -- that predicted failure
7 pressure for Class 3 and 4 to 1.39.

8 MR. DANNER: Okay. Any discussion on
9 that? Sara?

10 MS. GOSMAN: I am just hoping for a
11 response from PHMSA about the data that we've
12 just heard.

13 MR. DANNER: Go ahead, Allen?

14 MR. MAYBERRY: We will consider it.
15 We will consider -- yes. I mean, I've heard the
16 -- the growth rate numbers, and yes, we will take
17 it under advisement. Certainly we will take
18 seriously the recommendation of the Committee and
19 go from there, yes. Sorry.

20 MS. GOSMAN: Could I push a little bit
21 and just -- I mean, does that cause, for example,
22 Steve to change his perspective on the numbers

1 that have been proposed? And if so, why? And if
2 no, why not.

3 MR. NANNEY: Steve Nanney, PHMSA. I
4 am not sure going -- the one -- what I just
5 heard, I don't really know that it makes sense to
6 me one way or the other. The key is, is if
7 you're in a Class 3 or 4 area, is, for that time
8 frame, whether it's growing at five mills, 11
9 mills -- how -- how far below do you want it to
10 go is the point. Because I think -- that's the
11 key point, is do you -- do you want the 1.39 to
12 go down to -- in this case, to 1.25 or 1.1? And
13 I am not sure, what I would want to see, that it
14 answered the question. But -- but the key is, is
15 1.39 fine versus 1.5? And again, just like what
16 Allen said is -- we will take whatever the -- the
17 Committee recommends and look at it and take it
18 under consideration. I would have been more
19 pleased if it had been 1.5.

20 MR. DANNER: Okay, Andy and then
21 Allen?

22 MR. DRAKE: This is Andy Drake with

1 Enbridge. I think -- I can appreciate where we
2 are. I mean, we are all sitting here learning
3 vertically, on the fly. I would just throw out
4 there a reminder that we took a very conservative
5 model and we collapsed it. We accelerated the
6 now assumption of corrosion wildly and we have
7 collapsed the time frame for which we are
8 projecting it to be reacted in to two years. And
9 I think that's -- that's where the confidence
10 really starts to drive up, is we are going to get
11 on these quickly. You've taken tool tolerances
12 out or into consideration. And we've jettied --
13 you know, jettied up the assumptions on safety
14 margin and closed down the time frame. So I
15 think we've got three or four dimensions of value
16 that we're adding in this conversation. I don't
17 -- I just want us to keep, like, looking at it
18 one variable at a time. So I think when you look
19 at them all together, the two-year commitment is
20 a significant deal because that closes down
21 volatility. So is the tool tolerance issue. It
22 closes down the volatility, which is important.

1 MR. DANNER: All right, Allen?

2 MR. ALLEN: The only other thing I
3 would add, I mean it's a positive step. So, you
4 know, sometimes you get what you can. And, you
5 know, but -- you know, it's in the right
6 direction. It's -- you know, there's not too
7 much difference, like Steve was saying. But, you
8 know, we just have to take a look at it and see.

9 MR. DANNER: All right, Sara and then
10 Steve.

11 MS. GOSMAN: So I am wondering if we
12 could as a Committee ask PHMSA to consider
13 revising these two sections within the framework
14 of 1.39 to 1.5 based on information such as the
15 one that we were just given. That is, rather
16 than make -- excuse me -- rather than make the
17 specific recommendation to PHMSA for a particular
18 number, give them -- they've heard our
19 discussion. They've given -- they've -- we've
20 given them some helpful information. Give them a
21 range and let them look at that.

22 MR. DANNER: All right, Steve?

1 MR. NANNEY: I wanted to ask Andy just
2 one thing. You said two years, were you saying
3 that you'd have to repair it in two years? I
4 didn't catch one thing. I just wanted to make
5 sure I didn't misunderstand something.

6 MR. DRAKE: The commitment that we
7 made back here was HCAs would be remediated to
8 respond to within one year, and non-HCAs within
9 two years. So -- and I think that's the value
10 add. I -- you know, I appreciate the -- you
11 know, we send PHMSA back to consider this. I
12 just think this is a very conservative position.
13 And I would like to be -- you know, have that
14 weighted appropriately as they go back. The
15 growth rates we're talking about are
16 astronomical, especially given the fact that we
17 just committed to close the time frame way down,
18 you know, and deal with tool tolerances. And I
19 would like that to be considered as we go back.

20 There's a lot of good faith trying to
21 happen back here, and I am trying to recognize
22 that out loud here. Folks in -- on the operating

1 side, literally don't know how big this
2 commitment is. But they're willing to make it,
3 and that's good. And I appreciate that. And I
4 just -- you know, we talk about trying to meet in
5 the middle of the road on a lot of things. I
6 think this is one of those places it would help
7 people's anxiety drop down if we could -- if
8 there was some due consideration of 1.39. So I
9 am okay with this, I just want to go on record.
10 I really think this is compelling conservatism.

11 MR. DANNER: All right, Steve and then
12 Cheryl.

13 MR. NANNEY: I just wanted to say,
14 it's appreciated and we appreciate the entire
15 Committee taking a look and having the
16 conversation because we think it's a safety item
17 that was worth this -- of getting it on the table
18 and talking about it. And again, thank you.

19 MR. DANNER: All right, Cheryl.

20 MS. CAMPBELL: Thank you, Mr.
21 Chairman. Cheryl Campbell, Xcel Energy. So --
22 and I apologize, Steve, John and Allen if we were

1 not clear about that earlier. But that -- one of
2 the reasons why I think people were saying how
3 conservative this was was that, for HCAs, we were
4 committing, right, in Class 3 and 4 to a one-year
5 and non-HCAs in Class 3 and 4 are two years. So
6 that adds one more level, right, of safety belts
7 and suspenders. I think I now have like three
8 belts and two pairs of suspenders on with this --
9 is what it feels like, Steve, right? But you
10 know, to provide that guidance, right? To give
11 you the tools that you need, right, to help
12 operators -- let me put it this way, help
13 operators understand what their obligation is.
14 But also give people some certainly and some
15 guidelines. And then I think lastly I would ask
16 Mr. Allen if he would comment on this and how he
17 feels about it from the -- from the NAPSR
18 perspective.

19 MR. DANNER: All right, go ahead,
20 Steve.

21 MR. ALLEN: Thank you, Steve Allen,
22 IURC. Without speaking with my fellow NAPSR

1 members, I really can't speak for them, but I can
2 speak for myself in that I do appreciate the
3 education that was received this afternoon.
4 Going from a, you know, potentially a seven-year
5 cycle down to a one- or two-year cycle to rectify
6 an anomaly, I like that. I think that's --
7 that's in the right direction. From an
8 enforcement perspective, and I had mentioned this
9 before. I think, you know, there might be some
10 concern about, you know, perhaps some smaller
11 operator is not having the level of expertise to
12 perhaps understand all this, and maybe even
13 comply with it. So with -- with any other change
14 that comes about in pipeline safety regulations,
15 part of our job as a state regulator is to help
16 educate those operators out there that need help,
17 and I think that whatever -- you know, not just
18 with the conversation from this afternoon, but
19 this entire rulemaking. I think the NAPSR
20 members are going to need to work pretty closely
21 with Zach Barrett's organization to make sure
22 that we are delivering the right message to our

1 in-trust state operators so that they understand
2 what the -- their responsibilities are and we can
3 help them with some change management. So I
4 don't know if that helps you or not, but this is
5 big stuff and we're going to be held accountable
6 for enforcing it. And I think -- I do think that
7 the membership is going to recognize what a
8 Herculean task this is going to be for some of
9 our operators.

10 MR. DANNER: All right, Allen?

11 MR. MAYBERRY: You know, I can
12 certainly appreciate the good faith, you know
13 that you guys huddled up and came up with this.
14 And, you know, to move -- the movement that
15 happened. Related to what's up there now, and I
16 am just trying to -- to just do a check on that -
17 - that -- and I am not sure where you guys are.
18 I mean, I kind of have a feeling where you are.
19 But I would think you might want to add that --
20 that this would be, you know, it would be based
21 on relevant technical information. Either way,
22 you know, that it would have to land on a spot

1 that's based on relevant data, corrosion growth
2 rates and the like, you know. You have a
3 response to that, Andy?

4 MR. DRAKE: I think that's the
5 fundamental underpinning of a lot of these
6 discussions. And I think that's really the value
7 of -- I know this took a while, and some of us
8 has to go catch planes pretty quick, but I think
9 that was the value of letting this churn and go
10 through some models and examples, so we can get
11 some context and tangibility to what's this means
12 in terms of growth rates -- where are we on the
13 standard? Where are we on the S standard? Where
14 are we in these -- in these assumptions that
15 we're making? In that interest, I am willing to
16 make a motion -- and I will leave it as it's
17 typed with the guidance that we've given.

18 MR. DANNER: All right, if there's no
19 further conversation, Andy, why don't you make a
20 motion?

21 MR. DRAKE: I would like to propose a
22 motion that the voting language for repair

1 criteria in paragraph 192.485(c), 192.711,
2 192.713, and 192.933 -- the proposed rule is
3 published in the Federal Register and the Draft
4 Regulatory Evaluation with regard to anomaly
5 repair timing provisions for scheduled corrosion
6 metal loss. Repair conditions are technically
7 feasible, reasonable, cost-effective and
8 practicable if the following changes are made.
9 Incorporate 192.933(c), i.e. ASME B31a-section 7,
10 figure 4 into paragraph 192.713. Operators must
11 consider ILI tool tolerance, account for
12 uncertainty and accuracy on pipeline integrity
13 runs or in-line inspection runs. Remove the PFP
14 standards for Class 1 and 2 from the proposed
15 192.713(d)(3)(iii) and 192.933(d)(2)(iii). For
16 Class 3 and 4, revise the proposed paragraph
17 192.713(d)(3)(iii) and 192.933(d)(2)(iii) to
18 consider a PFP ratio between 1.39 and 1.5 based
19 on the technical discussions, and the
20 conservatism of the discussions of the Committee
21 to date. Scheduled corrosion metal loss, repair
22 conditions must be remediated in one year in HCAs

1 and two years in non-HCAs. And PHMSA will
2 provide appropriate guidance to improve the
3 understanding of and use of ASME B31.8, Section
4 7, figure 4.

5 MS. CAMPBELL: Mr. Chair, Cheryl
6 Campbell, second.

7 MR. DANNER: All right, thank you. Is
8 there any discussion?

9 (No audible response.)

10 MR. DANNER: All right, I just want to
11 say, I really appreciate all of the discussion
12 this afternoon -- all the work people had been
13 doing. My only issue -- and this is why I will
14 probably vote no on this, is just that I think I
15 would like to take this information and just give
16 it to PHMSA for consideration without a
17 presumption that this is the best way to proceed.
18 I would like them to be able to look at this
19 fresh. But again, having said that, I do
20 appreciate this work and thank everybody for a
21 great conversation this afternoon. So with that,
22 I think that we're ready to have a roll call

1 vote.

2 MS. WHETSEL: Okay, Steve Allen?

3 MR. ALLEN: Aye.

4 MS. WHETSEL: Dave Danner?

5 MR. DANNER: Nay.

6 MS. WHETSEL: Diane Burman?

7 MS. BURMAN: Nay.

8 MS. WHETSEL: Sara Longan?

9 DR. LONGAN: Aye.

10 MS. WHETSEL: Cheryl Campbell?

11 MS. CAMPBELL: Aye.

12 MS. WHETSEL: Andy?

13 MR. DRAKE: Aye.

14 MS. WHETSEL: Ron Bradley?

15 MR. BRADLEY: Aye.

16 MS. WHETSEL: Rich Worsinger?

17 MR. WORSINGER: Aye.

18 MS. WHETSEL: Jon Airey?

19 MR. AIREY: Aye.

20 MS. WHETSEL: Mark is not here.

21 Robert Hill?

22 MR. HILL: No.

1 MS. WHETSEL: And Sara Gosman?

2 MS. GOSMAN: Aye.

3 MS. WHETSEL: Okay, we have -- what do
4 we have? Three nays and how many do we have --
5 and eleven.

6 MR. DANNER: All right, and the motion
7 passes. So I think that brings us to the end of
8 meeting 132 so again, we will be meeting again in
9 June, 12th through the 14th. But I am going to
10 turn it over to Allen. He's got a few matters to
11 discuss before we adjourn.

12 MR. MAYBERRY: Okay, thanks Chairman -
13 - Mr. Chairman. Is there anything for the good
14 of the order before we wrap up?

15 MR. ALLEN: To the extent possible,
16 can -- can PHMSA provide the Committee as much
17 information as quickly as it can regarding
18 gathering lines to help us to -- I mean, there's
19 an awful lot there. And there's going to be
20 quite an education to be had by many of us, and
21 we would appreciate -- you know, even if they're
22 just, you know, primers. You know, I just -- I

1 would appreciate any information as quickly as I
2 can on that so I can get up to speed.

3 MR. MAYBERRY: Yes, we will get it.
4 We will definitely help, Steve, in that area. We
5 will do the briefings we've done, you know, be
6 consistent with that. But to the extent you need
7 other information, we can -- we can help.
8 Cheryl?

9 MR. DANNER: All right, Cheryl?

10 MS. CAMPBELL: Yes, I -- I wanted to
11 check -- and I know we've got some folks that
12 need to get out of here for airplanes, but I
13 wanted to see if we just wanted to put on the
14 record some data around this 30-percent SMYS
15 issue that we had talked about earlier in the
16 week? Or if that is a -- if that is -- if that
17 information is something that we wanted another
18 time? I am asking a protocol question.

19 MR. MAYBERRY: I think it relates to
20 the 30-percent issue. I think the Committee had
21 sent us off to -- to, you know, look into that
22 based on cost and benefit whether or not to

1 extend it -- coverage to non -- was it -- well,
2 it's in -- yes, non-HCAs. Class 3 and 4 non-
3 HCAs. So we will -- we had some information I
4 was hoping to present, but we just need to -- we
5 need to do our due diligence just to double check
6 it, you know, before we come back.

7 MS. CAMPBELL: Okay.

8 MR. MAYBERRY: You know, I think we're
9 -- we have a good idea on where -- where that may
10 land. But, you know, we'll just have to -- you
11 know, we will let you know.

12 MS. CAMPBELL: Okay.

13 MR. DANNER: All right, Sara?

14 DR. LONGAN: I will make this very
15 quick because I know people are trying to get out
16 of here. I had a comment about the language that
17 you showed us earlier in the preamble for TV&C.
18 And I promise, I can make this fast. But I was
19 wondering if you could entertain some
20 wordsmithing, and I apologize because I think
21 it's important. Is that a yes? If we can go
22 back to that slide we saw earlier?

1 MR. DANNER: So this is the language
2 that we had up yesterday?

3 DR. LONGAN: It was the language that
4 we had up first thing this morning.

5 MR. DANNER: Oh, okay. The -- so the
6 --

7 MR. MAYBERRY: It was on the -- it had
8 -- it had a reference to TV&C in it.

9 DR. LONGAN: I believe it was the very
10 first thing we spoke of this morning.

11 MR. DANNER: Yes, I think it was the
12 motion -- the first bucket.

13 DR. LONGAN: That's it. Thank you, I
14 want to make two obvious caveats. One, I hold in
15 high value the need for PHMSA to have access to
16 as much information. I'm, too, on a very steep
17 learning curve. I know a little bit more on day
18 three, but this being my first GPAC, I need some
19 more time. Regarding the language that's on this
20 slide and the conversation I heard this morning,
21 which was very helpful, I spent time looking at
22 the slide decks from the past two and previous

1 GPAC meetings.

2 I caught the spirit of what PHMSA has
3 said in the past and described as it relates to
4 TV&C. But being a former state regulator myself,
5 I understand that when this is enforceable or
6 interpreted, even if it is in a preamble,
7 ambiguity is not good. So when I read on the
8 second bullet, document information confirmed by
9 other, I am wondering who is to do that
10 confirmation. And I offer if you would consider
11 something different -- document information
12 informed by other complementary but separate
13 documentation.

14 Some clarity from PHMSA also would be
15 nice because, from our exchange this morning,
16 PHMSA said no, we're really just looking for one
17 documentation. But when we talk about separate
18 documentation, I was confused. And I am sorry; I
19 should have brought this up earlier. But we
20 moved on. And then I want to, just for the
21 record, state that as I understand it -- again,
22 going back to the spirit of the conversation this

1 morning and the slide decks that I have reviewed
2 -- that that spirit, stated by PHMSA, is
3 reflected in the third bullet that says, is
4 finalized as evidenced by a signature. Because I
5 believe the statements that industry has raised
6 about acquisitions, about requiring a signature
7 for someone who maybe has unfortunately passed
8 away -- evidenced by a signature is important and
9 I think, for me, accurately captures the spirit
10 that PHMSA has said they want to work to get as
11 close to TV&C as possible, but maybe not having
12 one signature isn't going to cause the operator a
13 big problem. So please consider those word
14 changes, and again, thank you.

15 MR. DANNER: All right, thank you very
16 much. Yes, that's consistent with some side
17 conversations that I've had today. I mean, the -
18 - the words traceable, verifiable and complete,
19 to me, each have plain language meanings. And so
20 whatever definition they have to come up with has
21 to be consistent with that in my opinion. So,
22 all right, is there anything else to come before

1 the Committee? Allen?

2 MR. MAYBERRY: No, I just appreciate
3 that, you know, suggestion and clarification. So
4 we will take a look at that, thank you, Sara.
5 And then --

6 MR. DANNER: All right. Anything else
7 for the good of the order, Committee Members?

8 MR. MAYBERRY: Well, I just had a -- I
9 wanted to summarize where we are with the -

10 MR. DANNER: Oh, all right.

11 MR. MAYBERRY: Yes. Just, if you
12 would, put the slide back up related to the
13 rulemaking. I just wanted to remind you that we
14 -- as I mentioned, you know, on day one as far as
15 where we are going from here with this rule,
16 which we've -- you know, so far I've moved
17 through the process as one monolith, but it will
18 be split into three. Two of them are up here.
19 We already have what we call regulatory
20 identification numbers. If you go to the DoT
21 website, these are listed. And you can track on
22 that website, you know, the status of these

1 rules. But, you know, these -- these three --
2 first, on the left -- I believe that is the --
3 let's see. Yes, that's the rule number one.
4 That essentially covers, essentially mandates. A
5 little bit beyond mandates, but essentially
6 that's a mandates rule. The second one on the
7 right screen is, you know, repair criteria as you
8 see there -- a variety of other issues that are
9 not so much mandate related, but related to other
10 areas -- improvements to the code. And then the
11 third area, lastly -- and by the way, let me back
12 up one second. We are finished with these two.
13 So, you know, really cliché. Give you guys a
14 hand. How about? Nice work.

15 (Applause.)

16 MR. MAYBERRY: And way to go. You
17 know, like I said earlier, this is a great
18 milestone for policy making. And then lastly, we
19 have the -- and not -- certainly not least, the
20 gathering line, which would be a third
21 rulemaking. We will cover that in the June
22 meeting. So anyway, that's just a reminder of

1 how it's broken up.

2 And just -- you know, I want just to
3 say, you know, on behalf of the secretary, the
4 administrator -- you know, Drue Pearce who is
5 here, Deputy Administrator, thank you.

6 Appreciate your hard work over the last few
7 years. And, you know, again, welcome to our new
8 members. John and Sara, appreciate your
9 involvement. You will -- you will soon come to
10 know that, you know, this is no easy task. This
11 is hard work that is in addition to your day job.
12 So very much appreciate it.

13 And lastly, I wanted to -- this is a
14 little bit of a test. What starts on Sunday?
15 What's -- what does Sunday mean to you? Besides,
16 you know, April 1st is April Fool's Day. Any --
17 not a trick question. And Easter.

18 MR. DANNER: Is it Fix-A-Leak Week?

19 MR. MAYBERRY: I want you to remember
20 that -- and you all know this -- but Safe Digging
21 Month starts April 1st. So, remember -- again,
22 Andy is wearing his 8-1-1 pin. Contact -- thank

1 you -- because there are a variety of ways to
2 contact 8-1-1. But yes, remember to promote,
3 Call Before You Dig. Tweet it. If you would,
4 tweet it out. I would recommend. I would
5 commend you to tweet it at your respective
6 organizations. So, Sara did you have?

7 MS. GOSMAN: Thank you. Sara Gosman.
8 I wonder if PHMSA would be able to share the --
9 where they come out on two for one in terms of
10 breaking up these rules. Because it seems to me
11 that it's -- our jurisdiction is to understand
12 these proposed rules and their cost-effectiveness
13 and reasonableness. And we've now added a layer
14 in which we are removing regulation in order to
15 be able to propose the regulation. And I think
16 that comes within the kind of things that we
17 should consider, or at least be informed of.

18 MR. MAYBERRY: Thank you, Sara. What
19 we can do is have at our next meeting a briefing
20 on -- on that. You know, on the executive orders
21 and how all this fits in. And you know, where
22 we're headed with that -- and probably update the

1 Committee as we go forward as well. That is, you
2 may recall, a department-level -- well, actually,
3 it's a government-wide initiative, but certainly
4 it's being managed at the department level.

5 MR. ALLEN: One other thing, and I
6 don't know when you would want to do it. I had
7 mentioned it, I think, in December and you
8 acknowledged. It was the report that the
9 Transportation Research Board put out last year
10 talking about different regulatory approaches. I
11 mean, I think that would be good to share with
12 the Committee here. So, just to -- not to lose
13 sight of it. I thought it was pretty good --
14 just -- and Ron, you were there? So it was -- it
15 was good stuff.

16 MR. MAYBERRY: All right, we will plan
17 for a breakout on that as well.

18 MR. DANNER: There is nothing else to
19 come before the Committee today. We are
20 adjourned. See you in June.

21 (Whereupon, the above-entitled matter
22 went off the record at 4:33 p.m.)

A		
a.m 1:11 3:2 69:21,22 70:2,3 128:14	actual 27:10 35:13 43:11 106:21 125:19 126:20	187:17
ability 56:7 67:8 71:10 78:2 91:19 92:14 140:17	add 17:5 26:2 27:19 42:4 57:13 63:19 70:21 75:18 100:21 102:15 105:8,9 107:14 134:1 186:2 186:17 207:13 216:18 217:16 225:7 236:3 237:10 241:19	afternoon 240:3,18 244:12,21
able 18:8 79:22 92:8 93:4 98:2,10 101:14 231:4 244:18 255:8 255:15	added 22:20 24:21,22 25:4,10 57:12,20 79:19 129:15 180:3 186:6 202:22 255:13	agencies 7:4
above-entitled 70:1 128:13 165:5 181:12 186:21 217:3 256:21	adding 76:21 78:11 108:10 111:21 206:17 206:20 211:8,11 235:16	agency 229:13
absolute 219:18	addition 142:7 254:11	aggressive 71:12 143:18 144:5,7,8 173:4 194:22 232:10
absolutely 99:12 168:12	additional 41:2 76:22 81:1 142:5 187:6 192:2 203:3	ago 18:11 74:12 77:20 92:20 108:20 231:12
absorbing 105:18	address 9:1 35:16 124:10 174:16 187:3 197:3 199:16 207:14 210:9 215:6 216:4 220:5	agree 15:21 18:3,15 51:22 53:4 54:6 55:5 74:20 76:10 77:5,8,12 81:11 82:16 90:22 116:3 136:13 171:4 191:12 213:11 214:14 215:19
ACAs 154:6	addressed 72:9 105:13 106:14	agreed 217:11 218:8
accelerated 235:5	addressing 229:6	agreement 108:16 179:8
accept 33:2,3	adds 167:4 226:11 239:6	agrees 179:5 180:12
acceptable 15:5	adequate 37:5	ahead 7:16 50:15 66:19 68:9 94:7 128:9 199:4 232:1 233:13 239:19
access 249:15	adequately 35:15 85:14	Airey 1:14 16:13 39:21 39:21 44:18,19 48:20 48:21 61:9,10 81:4,4 81:21 119:18,19 189:19,20 245:18,19
accidents 174:11 175:20	adjourn 246:11	airplanes 247:12
accommodate 59:11	adjourned 256:20	Alan 2:2 3:11,11,12 7:12 12:6 41:8 94:6 97:20 128:19 174:9 215:2
accomplish 95:5,10 110:1,17 111:1 152:6	adjust 110:9 196:12 201:15	aligned 153:16 168:16
accomplishes 95:11 111:11	adjusted 41:1	all-time 29:3
accomplishing 102:14	adjustment 198:10	Allen 1:14 15:20,20 40:21,21 43:21,22 48:2,3 60:13,14 118:22 119:1 146:18 146:19 147:5 148:4 178:16 188:7,14,22 189:1 191:10,11 198:12,13 199:5,10 204:14 209:18 210:4 210:4 212:15 226:4,5 226:8,19 227:22 233:13 234:16,21 236:1,2 238:22 239:16,21,21 241:10 245:2,3 246:10,15 252:1 256:5
account 57:7 68:21 77:19,21 103:17 150:12 203:13,15,17 209:19 243:11	ADMINISTRATION 1:3	algorithm 92:21
accountability 228:13 229:7	administrator 2:2,3 4:8 5:14,16,17 70:7 254:4 254:5	align 153:16 168:16
accountable 102:13 103:1,13 153:1 241:5	admit 15:3 76:9	all-time 29:3
accountant 191:18	adopt 163:4	Allen 1:14 15:20,20 40:21,21 43:21,22 48:2,3 60:13,14 118:22 119:1 146:18 146:19 147:5 148:4 178:16 188:7,14,22 189:1 191:10,11 198:12,13 199:5,10 204:14 209:18 210:4 210:4 212:15 226:4,5 226:8,19 227:22 233:13 234:16,21 236:1,2 238:22 239:16,21,21 241:10 245:2,3 246:10,15 252:1 256:5
accounting 103:18	adopting 29:6,16 182:5	allergic 212:22
accuracy 243:12	advance 139:7	allied 98:6
accurate 83:4 219:18	advancing 229:5	allow 26:22 30:21 31:21 43:3 49:12 53:6 55:13
accurately 87:12 88:2,9 88:13 93:5,7 94:2 251:9	advice 4:16 5:2 16:6 107:8	
achieve 95:14	advise 4:7,7,14	
acknowledge 185:6	advisement 233:17	
acknowledged 256:8	advisory 1:5,10 2:4 3:5 9:8 107:4	
acquired 34:13	affect 59:6 91:19 92:14	
acquisition 16:18		
acquisitions 16:16 251:6		
act 90:13 170:22		
action 21:8 28:3 46:22 82:2 96:18 97:11 98:11 106:17 203:8		
actionable 167:14		
actively 200:10		
		55:16 59:17 68:6 111:4 114:19 122:21 123:13 133:5 allowance 49:10 allowed 34:6 120:18 132:9 allowing 30:7 58:19 112:15 141:13 170:15 170:17,18 171:18 allows 131:8,14 alluding 156:22 alternate 111:7 178:3 alternative 59:11 110:12 120:16 121:14 215:6 alternatives 57:22 amazing 8:7,9 90:10 ambiguity 250:7 amend 179:19 187:5 amended 165:10 180:14 187:21,22 amendment 186:19 amendments 94:6 amount 14:5 79:22 153:3,4 206:2 214:8 AMSE 173:17 analysis 24:9,13 25:13 30:9 31:22 51:6,10 52:2,22 58:20 63:18 103:16 123:5,19 analytical 50:20 57:13 analytical-based 56:1 analyze 30:22 59:18 analyzed 30:17 59:8 Andrew 1:16 44:11 48:14 61:3 Andy 14:18,19 15:21 37:6,7 56:16,17 58:5 70:13,14 76:5,17 78:6 78:7 81:18 82:3,14,15 84:21,22 87:8,10 89:11,22 92:7,16,17 94:13,14 96:16 99:5 104:1 107:11 108:12 108:13 111:20 112:4 112:7 114:7,8 116:2,9 119:12 135:6 140:10 142:18,20 147:21 150:20,21 153:21 155:14,16 161:2,17 161:18 162:2 163:16 163:17 164:22 165:11 171:4 172:9 173:12 178:14 180:16 181:10 182:7 187:2 189:12 191:9 192:12,13 195:3 201:12 202:16 207:12 212:14,16

215:4 217:11,12,14
222:12 228:5,6
229:19 230:17 234:20
234:22 237:1 242:3
242:19 245:12 254:22
Andy's 81:5 90:20
105:11 141:8 154:5
anecdotally 98:8
angst 218:10
anodic 183:18
anomalies 27:15 29:4
30:3,22 35:6 46:12
59:14,18 62:20 63:5
63:15,22 64:3 73:13
84:19 86:4 88:1 95:1
97:1,2,7 98:9 117:6
118:13 122:11,16,22
123:8,8,14 125:12
127:6 130:21 141:1
145:20 146:9 153:17
154:7 166:8 167:6,14
170:4,18 171:5
183:10 185:8 187:11
195:22 197:5,5,19
200:11 205:12
anomaly 12:3 21:8
25:12 29:12,21 32:2,6
32:11 35:9 49:10
63:11 68:13 87:16
98:18 117:20 118:9
120:7 127:7 141:3
143:16 144:6 150:16
178:19,19 180:5,11
183:9,18 194:4 198:4
202:1 206:19 210:6
240:6 243:4
ANPRM 6:10
answer 51:22 52:15,16
74:13 103:21 104:2
158:6 173:9 185:10
192:19 197:14 209:20
answered 92:6 100:8
100:10 234:14
anxiety 238:7
anxious 218:22 220:13
anybody 41:15 99:4
136:21 163:6 172:6
190:10 219:4
anyway 130:10 253:22
anyways 11:16
APGA's 91:13
apologize 101:8,16
185:18 238:22 248:20
Apparently 226:2
applaud 216:7
Applause 253:15
applicability 33:19 36:5
41:9,22 46:7

applicable 68:5 108:22
applied 32:16 118:2
134:3 177:7 204:17
225:14 226:16
applies 26:11,13 42:15
66:17 84:10 102:20
apply 17:16,17 26:18
32:18 42:22 51:2
67:17,21 84:4 101:18
101:20 134:4,6,8,9,9
136:17 164:14 177:8
178:2 193:12 218:14
applying 203:18
Appomattox 174:19
appreciate 7:13 8:4
12:7 14:20 15:11 18:2
18:20 55:5 70:15
103:6 111:8 116:12
151:1 165:21 209:21
209:22 227:13 229:18
235:1 237:10 238:3
238:14 240:2 241:12
244:11,20 246:21
247:1 252:2 254:6,8
254:12
appreciated 238:14
appreciation 191:20
appreciative 110:13
approach 10:4 12:8,9
64:3 66:3 68:3 201:4
approaches 256:10
appropriate 34:4 66:4
69:9 72:11 73:7 104:7
108:17 109:11 112:3
113:14 122:4 126:17
139:10 143:20 144:18
145:7,15 160:7
176:14 182:1 185:9
217:19 228:12,18,18
244:2
appropriately 79:1
89:15 122:22 123:13
141:9 144:3 170:11
171:20 184:5 237:14
approve 111:16
approved 187:18
approximately 122:15
April 254:16,16,21
area 23:6,12 33:6 36:17
36:21 40:11 66:6
67:15,16,21 68:7 76:8
113:15 117:10 120:18
132:7 134:21 149:17
149:18 161:15 175:11
177:14 187:13,15,16
205:2,3 234:7 247:4
253:11
areas 24:2,4,5 30:10

31:12 37:5 49:16
204:22 205:22 206:4
212:9 214:6 253:10
arguing 13:11 104:7
Arlington 1:10,11
arms 112:5
asked 79:19 152:10
176:5 192:15
asking 97:5 140:21
172:5 180:21 185:22
191:4 199:1 247:18
ASME 80:11 86:21
131:7 135:18 143:11
172:12 191:3 227:8
243:9 244:3
ASME's 192:17
aspects 55:9 120:11,13
asserts 122:9
assess 94:2 175:1,20
assessed 171:11
assessing 97:10
168:16
assessment 29:13,22
30:8 35:11 50:18
52:21 55:17 59:18
63:1,13,21 64:5 65:16
73:16 74:22 77:10
92:21 95:4 103:15,20
124:22,22
assessments 51:7,8
Associate 2:2
associated 34:8 121:9
124:13
associations 219:20
assume 47:9 100:4
102:8
assumed 28:7,12 47:4
202:18
assumes 143:8
assuming 143:15 194:9
202:5
assumption 34:5,17
86:14,18 99:16
125:10 235:6
assumptions 33:21
85:20 99:12 158:17
164:13 172:17 190:20
235:13 242:14
assure 32:15 134:2
177:7
astronomical 237:16
attention 97:6
attributes 79:17
audible 176:3 188:3
226:1 244:9
availability 159:18
available 16:21 98:22
208:17

avoid 26:9 42:12 82:4
197:10
aware 8:15 98:1,1
164:10 172:15 173:10
awesome 223:16
awful 191:22 246:19
awkward 172:10
axle 214:12
Aye 43:22 44:2,4,6,8,10
44:12,14,16,19,21
45:1 48:3,5,7,9,11,13
48:15,17,19,21 49:1,3
60:14,16,18,20,22
61:2,4,6,8,10,12,14
119:1,3,5,7,9,11,13
119:15,17,19,21
120:1 189:1,3,5,7,11
189:13,15,17,20
190:2,4 245:3,9,11,13
245:15,17,19 246:2

B

B 90:4 224:14
B-31-8-S 227:8
B30 191:3
B31.8 244:3
B31.8S 131:7 191:14
B31a-section 243:9
B32.8S 192:17 199:7
back 6:10,16 8:17 53:8
56:12 69:18,22 70:5
71:3 81:11,18 84:8,13
96:15 101:10,14
109:1 110:2 115:21
123:7 127:2,17
128:11,16 129:14
131:12 133:7 135:11
137:4 138:16 143:12
146:20,21 151:15
152:9 155:2 160:8
165:1,8,19 181:15
188:10 193:11 196:13
198:14,18 208:21
217:1,14 218:4 219:2
219:19 221:2,13
223:10 225:2 227:17
237:7,11,14,19,21
248:6,22 250:22
252:12 253:11
back-ended 219:15
backdrop 129:3
bad 184:7 222:11
balancing 90:13
ball 165:22
Ballroom 1:10
bar 106:6 220:18
bare 227:4
Barrett's 240:21

barrier 66:6
based 19:20 27:1,5
 38:12 39:7,10,13 43:4
 43:6 57:14 63:21
 74:16 79:15,17 84:1,8
 100:20 106:20 123:4
 127:22 129:4,13,16
 131:3 132:1,21 141:1
 141:3 144:5 154:15
 158:18 162:9 174:5
 178:4,6 184:7 193:9
 193:10,15 194:1,4
 198:3,6 208:17
 219:12 236:14 241:20
 242:1 243:18 247:22
baseline 35:7 166:20
baseline-assessed
 35:3
basic 51:9
basically 33:14 37:1
 97:22 144:16 145:4
 166:10 167:20 193:11
 193:15 194:9,16
 198:2 220:19 222:3
basing 140:20
basis 28:14,16 47:10,13
 52:11 79:4 201:14
 207:22 208:11,14,22
 209:1
batches 16:17
Battelle 143:17 208:4,7
bear 216:12
bearing 228:17
beginning 103:14
 115:16 178:18
behalf 254:3
behavior 73:1 82:21
behaviors 72:15 75:10
 76:19
believe 34:3 35:14 69:5
 111:14 122:18 123:10
 154:9 183:22 208:2
 249:9 251:5 253:2
believing 90:19
bell 160:8 193:18,20
 202:21 223:21
Bellingham 231:10
belongs 77:11
below- 29:6,16
belts 239:6,8
bend 33:3
benefit 6:7 247:22
best 173:8 244:17
better 71:7,7,8 73:10,11
 77:7 87:15 88:2,3,14
 88:15 89:5 124:10
 125:3 138:22 139:1
 147:21 148:2 149:12

149:13,14,14 151:8
 221:11 224:16
beyond 4:12 5:22 15:8
 17:13 84:7 90:14
 154:6 200:8 201:2
 218:16 253:5
bifurcate 214:10
big 6:5 11:7 90:6 100:4
 110:9 111:4 114:9,19
 115:15 139:14 152:2
 152:17 160:6 164:7
 195:11 197:5 212:18
 213:12 218:18 221:6
 230:8 238:1 241:5
 251:13
bigger 14:8 112:9,13
biggest 156:16 215:11
bill 175:3
binary 196:2
bit 40:2 79:4 83:19
 92:22 110:1 137:20
 170:4 188:7 213:5
 214:11 218:10 219:6
 224:16 225:7 233:20
 249:17 253:5 254:14
black 13:3 14:3
Blacksmith 199:15
 207:17 232:1
blanket 159:14
blunt 109:18
Board 256:9
Boardwalk 122:7,7,13
 123:4,19
boils 120:16
bone 223:9
bottom 24:3 122:19
 123:11 166:9 210:16
bottom- 125:2
bottom-side 21:14 24:6
 31:5 60:1
boy 77:6
Bradley 1:15 18:1,1
 44:13,14 48:16,17
 61:5,6 105:16,17
 119:14,15 189:14,15
 227:1,2,13 245:14,15
brand 70:18,20 93:17
break 33:16 36:22
 69:17 70:15 85:15
 128:10 129:1,1
 148:20 165:18 170:17
 191:13 192:22 215:18
 216:15 217:1,8
breakdown 147:7 148:6
 172:19
breakdowns 137:17
breaking 255:10
breakout 197:21 256:17

Brian 208:2
briefing 255:19
briefings 247:5
Brinell 33:10 117:13
bring 8:17 50:3 71:3
 87:19 105:5 182:1
bringing 185:18 205:7
 206:22 207:4 209:8
 209:21
brings 181:20 246:7
broach 180:20
broached 228:10
broader 84:10
broke 185:20
broken 138:8 157:12,19
 254:1
brook 182:16
brother 90:8
brought 92:8 250:19
brow 111:9
Bruno 228:15 229:1
 230:5 231:14
BS31.8 173:18
bucket 45:11 52:16
 53:5,12 62:9 90:15
 120:8 249:12
buckets 33:17 49:7
budget 5:21 6:1,5
build 79:11 91:22
builder 85:17
Building 64:15
built 39:7 86:18 144:1
 204:7 208:20
bulk 125:1
bullet 33:19,22 36:4
 37:12 57:21 62:19
 63:4,11 94:17 100:13
 100:15 101:22 105:9
 107:22 109:20 131:6
 166:15 169:8 185:22
 186:6 216:18 250:8
 251:3
bulletin 9:8
bump 67:9 96:5 110:3
 112:12 114:2 121:10
bunch 171:3 223:10,14
 225:2
burden 167:15
burdensome 157:7
Burman 1:15 44:3,4
 48:6,7 60:17,18 119:4
 119:5 189:4,5 245:6,7
burning 8:1
business 105:19
 106:12 168:10
Byrnes 34:2,3

C.J 156:19
calculate 50:21 223:18
 223:19
calculated 27:1 29:4
 43:4 117:7
calculation 63:4 69:1
 224:22
calculations 27:8 43:9
 184:18 206:19 227:14
calculator 224:19 225:3
calculators 223:15
 228:4
calendars 228:5
calibrated 74:10
call 43:18 45:6 48:1
 74:7,7 95:5,5 118:19
 118:20 178:13 179:11
 188:2,5,19 244:22
 252:19 255:3
called 80:11 181:3
calling 90:2
Campbell 12:5 41:17
 44:9,10 48:12,13 61:1
 61:2 76:4,4 89:9,10
 96:11,12 107:20,21
 119:10,11 140:8,9
 153:12,13 169:15,16
 172:4 173:11 189:10
 189:11 190:12,13
 195:3,9 202:13,14
 209:4 221:16,17
 223:7,14 224:9,12
 225:1 233:3,4 238:20
 238:21 244:5,6
 245:10,11 247:10
 248:7,12
candidness 103:7
candle 8:1
capacity 159:19
captures 251:9
card 99:8 105:15
care 77:7 96:20,22
 97:12 106:15 161:16
careful 102:4 136:12,13
carefully 68:2
Carey 123:17,18 125:20
carries 120:2,3 190:6
case 38:1 124:6 125:13
 168:10 186:4 234:12
case-by-case 52:11
cases 26:6 34:12 35:8
 37:13 38:3 42:9 52:20
 202:7
catch 103:7 237:4
 242:8
catching 220:10
categories 80:18
category 34:11 35:18

C

74:4,5 78:4 89:14,16
90:2,14
catholic 227:19
catholically 227:5,6
caught 53:12 250:2
cause 203:21 233:21
251:12
caused 126:22 137:19
147:8
causes 204:8
causing 137:18 141:6
156:8
caution 16:14,22 89:18
caveats 249:14
certain 10:16 17:9 51:8
67:10 79:21 93:3,6
144:16 206:2
certainly 5:2 6:20 9:7
9:20 10:8 57:1 92:1
104:20 175:11 191:6
213:7 214:19 225:9
230:2 233:17 239:14
241:12 253:19 256:3
certainty 13:22 162:15
cetera 63:13,13
Chad 44:17
Chair 1:11,13 18:2 76:5
105:16 107:21 108:3
141:15 146:18 155:14
179:18 191:11 199:3
202:13 221:16 226:4
227:2 244:5
chairing 3:7
Chairman 3:14 36:16
40:9 45:8 49:12 50:6
61:22 120:9 128:21
133:4 140:9 163:9,13
181:18 198:12 233:4
238:21 246:12,13
challenge 12:21 106:11
106:12
challenged 65:11 107:1
challenges 18:11
chance 124:15
change 16:19 56:20
68:4 79:20 80:1,4
81:22 121:22 124:12
127:12 139:21 140:20
146:16 152:12 164:9
178:7 179:10 181:22
182:2,4 187:7,19
214:7 233:6,22
240:13 241:3
changed 113:1,1
137:19
changes 19:5,12 41:5,6
42:3 46:10 58:18
116:20 122:9 125:2,5

139:10,14 141:9,10
143:5 170:13 177:1
243:8 251:14
changing 97:15 122:18
123:9 127:7
Characterize 184:12
chart 173:17 190:16,18
191:1 199:7 202:17
209:12,12
chasing 106:7
check 3:21 124:4 173:3
181:11 241:16 247:11
248:5
checking 200:12
Cheryl 2:4 12:4 15:21
41:16 43:20 44:9 48:1
48:12 60:12 61:1 76:3
76:4 86:10 89:8,9
91:9 96:10,12 107:18
107:21 118:20 119:10
140:6,9 153:11,12
169:14,15 180:16
188:4,20 189:10
190:11,13 191:21
202:11,14 205:13
209:3 221:15,17
226:9 233:2,4 238:12
238:19,21 244:5
245:10 247:8,9
Cheryl's 14:20 91:22
172:7 208:19
Chief 5:13
Chittick 50:16,16 64:13
64:13
choice 103:2 140:5
choices 88:3 139:2,13
Chris 2:5 19:2,8 36:18
37:9 225:6 227:3
churn 242:9
circulated 5:12
circumferential 23:8
184:18 187:16
citation 108:10 118:2
cite 105:10
city 191:16 228:15,22
CJ 62:15 64:15 126:12
137:21
clarification 52:5 54:10
54:16 121:18 146:22
188:7 252:3
clarified 18:16 80:6,7
clarify 17:6 26:3,11,14
26:17 27:16 33:14
42:5,7,14,17,21 45:5
46:13 51:6 80:8
100:11 113:18 118:2
clarifying 22:18 26:4
195:4

clarity 17:15 64:6 87:6
97:5 124:11 136:8
193:5 221:18 227:3
250:14
classes 113:19 115:17
115:19,22 212:20
classification 35:7
162:9
clear 7:18 12:22 18:14
37:8 45:14 78:9 83:15
136:2 137:3 142:9
170:14,21 171:17
183:1 218:4 239:1
clearly 104:9
cleaving 88:7
cliche 253:13
cliff 196:2
close 75:15 83:7,9
95:16 115:10 159:12
170:19 174:18 211:12
212:12 227:21 228:11
229:1,14 237:17
251:11
close-interval 10:18
closed 235:14
closely 153:16 168:15
240:20
closer 79:8
closes 235:20,22
closing 99:19
coated 227:4,7
code 52:19 54:8 102:18
105:12 108:4 150:3
172:12 173:21 185:7
253:10
code-wording 39:13
codes 101:10
codify 153:22,22
coincidental 138:15
coincides 138:15
cold 11:22
collaboration 8:11
collapsed 213:8 235:5
235:7
colloquial 114:2
colonies 85:21
colony 71:22 72:20
73:9 78:12
Colorado 215:22
combination 87:3
combine 29:1 117:3
combined 87:5
come 4:11 69:18 72:4
75:10 85:13 94:21
123:6 128:11 133:7
135:11 136:16 165:1
174:5 192:20 248:6
251:20,22 254:9

255:9 256:19
comes 6:16 159:8
228:11 240:14 255:16
comfort 218:5
comfortable 37:4 170:5
191:19
coming 4:15 62:10
76:17 139:4 152:9
155:2 165:19 218:5
comma 180:4,5
commend 255:5
commensurate 95:20
commensurately 110:9
comment 14:20 33:14
33:18 34:5 36:10
40:17 49:9 50:14
51:13,21 52:1,6,6
53:4 54:13,20 55:3
56:13,18,21 62:9,14
62:16 66:17 68:12
69:11 74:11 76:2 78:6
79:10,19 81:5,7 88:22
107:17 111:19 113:17
128:22 137:21 178:16
207:14 209:6 239:16
248:16
comment/question
84:9
comments 25:17 32:21
34:1 36:3 38:19 39:8
40:7 54:12 56:14 57:7
58:5 64:15,22 65:3
69:14,15 77:5 81:13
94:4 120:5,7 128:7
129:4,18 146:21
148:16 162:1 165:17
169:4 176:2 185:13
commiserate 86:1
commitment 235:19
237:6 238:2
committed 236:7
228:19 237:17
Committee 1:5,10 2:4
3:6,22 4:6,17 5:3 7:19
8:2,11,13 25:18,20
26:1 32:22 33:1 36:9
36:10 51:14 52:6
54:12 56:13 58:5 69:8
69:14,19 70:10 82:12
94:9 96:13 107:4,9
112:22 113:15 115:11
115:13 116:9 128:9
129:3,19 163:4,10
175:14 190:15 208:9
209:11 214:15 216:7
221:12 228:21 231:1
233:18 234:17 236:12
238:15 243:20 246:16

247:20 252:1,7 256:1
256:12,19
Committee's 129:5
207:2
committees 229:3
committing 239:4
common 11:10,11,14
12:7,8
commonly 67:9
communicate 163:7
communities 89:21
community 90:18
commute 90:9
company 10:12 11:4,5
14:6 35:2
comparable 27:17,20
46:14,16
compare 198:21 232:8
compared 35:4 53:14
comparing 231:18
comparison 199:6
compel 157:18
compelling 164:8
238:10
complementary 250:12
complete 8:21 12:10
13:16 17:12 251:18
completed 64:19
completely 121:14
complex 71:20
complexity 110:14
comply 240:13
component 6:6
comprises 55:18
compromise 113:9
computer 228:7
concept 17:7 105:18,20
concern 13:19 40:4
65:7 81:12 83:20
92:10 105:12 212:18
213:1,17 220:5
240:10
concerned 15:13 77:8
82:5 91:17
concerning 104:17
concerns 40:2 82:13
126:16 165:17 220:2
226:3 229:6
conclude 18:20 151:12
conclusion 174:5
231:19
condition 20:3 22:9,20
23:17 24:22 25:4 30:6
30:21 32:3,7,7,12
34:7 37:19 40:3 64:4
65:22 68:19 95:3
106:3 118:15 225:15
conditions 20:2 21:11

21:12 22:16 23:4 24:1
24:4,12 25:11 26:6
29:7,18 30:5,19 34:6
37:13,15,17 42:9
59:10,14 67:11 77:13
84:17 100:18 117:15
118:1,7,15 130:17
131:1 177:22 243:6
243:22
confidence 72:8 85:17
235:9
confirm 51:4
confirmation 250:10
confirmed 250:8
confused 250:18
congruent 73:12
connect 109:8
conscious 93:10
228:13
consensus 218:9 221:5
consequence 145:10
184:10 200:18
consequences 160:22
161:6,13 212:10
conservatism 69:1 74:1
74:2 143:22 161:21
192:3 204:3 208:19
213:6 214:16,21
215:7 220:21 238:10
243:20
conservative 63:5,16
68:22 69:4 136:5
140:22 142:16 144:4
157:22 160:21 161:14
164:12 166:19 167:1
167:7 190:17 196:9
196:16 197:3 200:13
201:15 203:16 204:10
204:11 208:10,18
209:13 212:19 213:2
214:12 218:8 225:10
225:11 235:4 237:12
239:3
conservatively 34:15
88:8 143:19 144:21
145:14
consider 4:20 11:21
25:20 33:1 55:13
57:13,22 59:10 74:18
75:18 81:19 82:10,13
82:22 83:1 94:11
108:2 111:22 112:22
115:12,15 116:7
117:14,22 118:5
124:3 127:11 159:22
216:19 221:12,13
231:16 233:14,15
236:12 237:11 243:11

243:18 250:10 251:13
255:17
consideration 49:19
69:7 120:15 129:6
234:18 235:12 238:8
244:16
considerations 72:11
73:9 78:12 87:20
considered 67:7 85:14
91:12 92:12 120:14
225:10 237:19
considering 72:1
142:15
consistent 80:20
217:19 247:6 251:16
251:21
consistently 93:5,7
conspiracy 71:9
constantly 201:8
constructive 184:11
consulted 217:2
contact 254:22 255:2
contacts 130:10
context 102:22 135:8
139:5 152:18 225:8
242:11
continue 24:11 120:11
121:8 128:17 132:9
132:12 149:19,22
175:11
continuing 23:4 32:13
50:4 171:6
continuity 167:2
contrary 163:6
contribute 165:12
controls 156:11
controversy 188:9
conversation 15:4 18:3
71:2 86:19 93:14,19
105:18 109:8,9 115:6
135:13,16,20 152:19
158:9 169:7 173:12
182:14 197:12 209:7
209:9,22 217:17
219:19 221:2 235:16
238:16 240:18 242:19
244:21 249:20 250:22
conversations 99:20
136:15 165:4 192:22
218:4 251:17
convert 221:21 222:20
conveyed 130:19
convinced 141:12
Corinne 34:2
corner 107:16
correct 40:9 50:9,10
86:12 101:16 104:16
188:12,13

correcting 108:1
correctly 73:8 103:20
105:3 193:3
corresponding 121:2,6
corrode 117:1,4
corroding 193:16
corrosion/metal 120:6
cost 6:7 66:9 68:17
116:19 176:22 192:6
247:22
cost-effective 42:2 46:9
58:17 243:7
cost-effectiveness
255:12
costing 66:11
counsel 5:13 15:11
count 122:8
counter 57:2
counterproductive
94:19
counting 151:16 156:5
couple 3:20 4:11 12:6
14:15 21:10 53:17
232:4
course 40:13 92:5
110:2 126:3 139:21
cover 3:19 21:10
253:21
coverage 248:1
covered 4:10 26:12
42:15 126:15 133:20
covering 37:3
covers 253:4
CP 149:14 225:14,15,19
226:16,18
crack 21:2 23:16,18
25:11 29:7,8,10,12,19
29:20 30:3 63:11,18
63:22 64:9,17 68:13
71:22,22 98:18 109:4
110:9 111:4 112:10
112:15 114:20 117:15
117:16,17,19 118:4,7
118:9,13 134:6
crack- 25:11
crack-like 21:3 23:16
23:19 31:16 32:20
135:3 177:10,19
cracking 20:8,10 21:14
25:1 28:20,21 29:1,2
29:3 30:11 31:1 53:15
58:22 59:15,19 61:18
62:14,20 69:11,19
70:10 80:14 114:11
116:5,18,22 117:1,3,5
117:5,6 118:6
crackling 85:21
cracks 31:16 65:7,8,10

70:17,19 71:5 76:12
 76:13 80:15 83:2
 91:10 93:2 101:19
 102:1,9 105:1,5
 113:11 115:1 135:3
 135:14,15 136:3
 146:11 177:18 181:9
 185:11,14
crazy 89:19,20
create 11:12 72:16
 93:21 112:18 114:19
 145:9 168:10 184:10
creates 183:7
creating 182:16
credible 9:18,22 10:3
 13:9,9
credit 165:15 230:17
crept 147:20
criteria 196:13
criterion 29:7 32:15
 134:3 177:7
critical 12:19 13:15
 17:10 20:11 21:16,21
 22:6 24:9,14,18 25:2
 30:8,18 31:4,6,8
 50:18 52:10,21 55:10
 55:16 56:2,6 59:9,17
 60:1,2,3 91:14 93:1,6
 98:3,13
cross 66:5 105:9
 151:16 194:5 207:19
 207:20 210:17
crossed 13:1 143:20
crosses 194:7,11,12,18
 211:2,2
crossing 23:7 181:3
 182:16 183:8,10,11
 183:21,22 187:12
crossings 35:19 181:3
 184:4
crude 135:21
crux 164:4 166:16
curious 81:7
current 19:18 28:14,16
 47:11,13 154:10
 159:13 168:1
currently 69:21 138:5
 143:11 219:14
curvature 30:16 59:7
curve 71:6 82:18 160:8
 193:19 196:8,10,11
 200:10,12 202:21
 223:21 249:17
curves 193:10 194:15
 207:22
customers 91:21 92:15
cut 38:22 39:5,6,6
 110:2 112:8,10 116:6

cutoff 64:8 132:11
cutting 110:11
cycle 124:4 240:5,5
cycles 35:1
cycling 53:13

D

d 98:17 103:15 104:15
D.C 231:3
DA 168:14,16
damage-related 54:18
damages 34:13,14,18
Darral 122:6
dash 56:20 58:2,3
 80:11
data 10:8,11 16:17
 84:13 103:15 104:4
 114:22 115:1,9 116:4
 122:14 123:20 124:11
 124:12 125:4,7,10
 126:1,13,17,20,21
 127:17 132:3 136:1
 137:13 139:1,8,12
 144:19 146:8 148:11
 152:14 154:15 155:20
 156:20,21 157:1,17
 158:4 159:6,14
 164:10 167:16 170:9
 186:15 194:1 196:10
 196:19,19 198:7
 208:4,7,17 233:11
 242:1 247:14
date 11:2 26:2 42:4
 243:21
Dave 3:7 44:1 48:4
 50:16 57:19 60:15
 64:13 66:15 68:17
 74:11 119:2 120:10
 189:2 231:9 245:4
David 1:11,13
day 3:4 39:18 40:3 50:4
 53:17 65:1 71:3 76:15
 106:7 228:10 249:17
 252:14 254:11,16
days 28:4 39:17,18 47:1
 99:21 159:7,16
 160:12 166:11 178:8
 187:8 208:6
deal 21:13 73:19 76:20
 80:14 83:7 88:16,17
 88:18 90:22 91:1 95:2
 97:2,22 109:10
 110:10 112:11 121:19
 145:14 151:22 152:1
 152:17 153:5 166:12
 167:1 184:12 227:9
 230:8 235:20 237:18
dealing 9:15,15 10:21

11:9 88:10,10 91:3
 110:13 145:11 184:11
 195:12,17
deals 80:14 110:3
dealt 74:3 85:19 100:5
 145:2
death 11:13
debate 136:18
debating 205:8
debt 49:9,22 50:8,14
December 256:7
decide 8:13 17:9
 139:20 155:3
decided 208:21
decides 175:14
decision 39:13 102:6
 137:2 159:10 209:16
decisions 27:9 43:9
 104:5 204:10
deck 122:9 124:14
decks 249:22 251:1
declare 108:15
deep 30:13 59:2,4
 183:19
defect 23:16,19 31:7
 68:1 152:5 167:10
 194:10,15
defects 21:3 31:17
 32:20 34:11,20 35:10
 35:15,16 60:3 66:19
 108:2 118:4 135:3
 168:16 177:10,19
 183:1
defer 106:20
define 13:9 87:13 136:9
 143:19
defined 147:3
defines 55:17
defining 56:6 96:17
definitely 247:4
definition 33:2,4 111:15
 117:8 157:5 251:20
definitions 21:1 28:19
 33:2 116:21 227:11
degree 65:3
delete 28:21 117:1
 134:17 177:11
deleting 23:11 31:9
deliberate 37:5 82:18
deliberately 164:11
delivering 240:22
Delmont 184:17
delta 142:13 192:1
 207:8
delving 191:13
demarking 111:2
demonstrated 166:19
demonstrates 20:11

21:16,21 22:6 24:9,14
 24:18 25:2
dent 21:14,19,22 22:4
 24:6,8,12,16 25:1
 30:10,12,14,22 31:3,5
 58:15,21 59:1,14,18
 82:8 122:16,20,22
 123:8,12,14
dent-related 30:9 58:20
denting 51:22
dents 20:7,10 21:13,18
 30:17 50:19,21 52:3
 53:10,15,21 59:3,8,22
 123:11 124:2,7,10
 132:4 138:18
department 1:1 256:4
department-level 256:2
Departments 5:12
dependent 29:3
depending 9:14 11:8
 80:3 92:4 148:16
 150:8
deploy 162:17 216:20
deployed 197:20,21
depth 29:8,10,11,19
 65:13 117:16,17,19
 118:7 182:15 183:3
 184:7,9,15,20,22
 185:6
Deputy 2:3 70:6 254:5
described 250:3
design 67:11,14,20
 68:5 74:10,13 75:14
 77:13,13,18,20 79:15
 79:22 95:17,20,21,21
 96:1 109:19 110:5,8
 110:10,14 111:10
 112:1,8,10,14 114:20
 118:12 120:13,17,22
 121:4,12,16,16 122:1
 131:11 135:20 136:7
 151:20 193:11 200:5
 205:2,3 207:21
 212:12
Designated 2:2
designed 67:12,19 96:3
 121:12 151:18 156:7
 156:15 167:5
designs 162:10
desire 122:7
detail 34:10
details 126:8
detecting 65:5
detection 21:4
deteriorating 115:7
determination 17:14
 104:19 207:3
determine 27:9 28:7,12

28:16 35:5 43:10 47:4
47:9
determined 25:13
29:12,21 47:13 52:11
63:12 117:20 118:4,9
122:14
develop 56:9 215:6
229:15
developed 92:22
143:12,13 193:4
developing 82:9 157:22
230:12
development 192:17
developmental 71:6
78:15
device 156:15
devices 137:16 156:6
diagram 158:21
Dial 123:3,3
dialing 96:2
diameter 28:15 47:12
59:1,4 79:16
diameters 59:2,5
Diane 1:15 44:3 48:6
60:17 119:4 189:4
245:6
difference 11:7 88:12
89:6 236:7
differences 84:16 87:2
different 13:20 36:17
36:21 84:1 102:19
124:2 125:22 126:22
146:10 147:11 151:22
151:22 152:1,6
162:22 167:9 173:18
174:6 185:12 193:10
194:3,15 195:12,16
196:8,11 197:4
198:16 214:16 231:3
250:11 256:10
differentiating 218:6
differentiation 112:18
differently 169:13
difficult 130:12
dig 65:22 66:7 69:5
72:22 255:3
digging 90:6 196:6,17
254:20
digs 65:17 66:9,10
192:5 196:17
diligence 231:18 248:5
diligent 217:19
dimension 33:7 117:11
dimensions 235:15
diminishes 114:12
direct 35:11
direct-current 20:16
directed 14:8

direction 4:9 33:8 57:2
82:22 93:16 117:12
170:14 171:17 236:6
240:7
directionally 216:3
Director 2:4
dis-incentivize 78:14
dis-incentivizing 93:20
disagree 81:12 173:22
disappears 130:14
discern 155:19
disconnect 173:14
discounting 73:4
discourage 65:18
discovery 159:9 160:1
166:10 178:7 187:7
discriminate 71:11 93:5
discuss 19:5 69:8
129:6 246:11
discussed 217:8
discussion 4:2 8:19
14:5 15:2 18:19 32:13
40:14 43:17 47:22
49:15 51:15 60:10
62:2 69:19 70:10,13
70:17,20 82:3 98:21
99:11,17 103:14
118:18 120:12 126:14
128:18 129:4,16
139:6 150:13 178:13
178:21 180:15 182:1
182:11 188:8 207:2
212:7 213:19 225:9
225:22 226:11 228:17
233:8 236:19 244:8
244:11
discussions 7:14,15
242:6 243:19,20
dismiss 156:4 185:3
disrupting 90:16
disruptive 90:5
disservice 184:22
distracted 143:6
distribution 105:22
106:19 193:19 223:22
ditch 162:16,22 213:14
document 15:5 17:19
27:8 43:8 80:11
143:13 192:17,20
193:4 250:8,11
documentation 16:2
102:5 104:18 105:5,7
250:13,17,18
documented 18:9
28:10 47:7 118:4
documenting 106:22
documents 135:18
dog 223:10

dogs 174:15
DOI 141:16
doing 3:22 4:3 38:11,11
38:12 39:14 53:1 54:8
63:4 66:9 72:20 73:8
74:17 80:19 81:14
88:20 89:1 103:18
104:13 106:9 111:8
123:22 131:20 138:20
138:21 139:11 141:2
144:12,12 150:14,15
152:13 153:10 161:5
166:6 167:3 171:16
174:17 183:2 184:22
192:1 196:17 205:8
210:15 219:13 223:7
228:20 229:2 231:17
244:13
Donut 50:4
donuts 50:3
dot 7:6 162:8 252:20
double 152:15 214:20
248:5
downstream 91:20
DR 44:6 48:9 60:20
141:15 189:7 245:9
248:14 249:3,9,13
Draft 41:20 46:5 58:13
116:17 176:19 243:3
dramatic 174:20
draw 90:22
drill 126:21
drive 66:9 76:18 122:8
157:6 235:10
driver 166:14 168:10
driving 152:11 155:3
185:11
drop 130:3 171:9
226:21 238:7
dropped 16:20 219:2
Drue 2:3 70:7 254:4
due 122:16 123:8 124:7
231:18 238:8 248:5
dug 132:22 168:1,4
duplication 26:9 42:12

E

E 1:14
ear 107:9,9
earlier 51:5 64:22 68:17
76:7 89:1 96:16
131:19 132:2 137:20
139:11 155:12 185:13
191:13 201:12 205:13
239:1 247:15 248:17
248:22 250:19 253:17
early 49:17 205:10
208:3

ears-up 136:5
earth 72:22
easier 92:1 108:6
easily 112:19
Easter 254:17
easy 223:20 254:10
ECA 20:11 21:15,20
22:5 24:18 25:2 30:17
30:21 31:22 49:10
55:3,9,18 56:5 57:22
58:19 59:8,11 120:6
122:21 223:13
ECDA 227:7
echo 140:10
edge 159:12 170:19
edit 217:9
editorial 109:16
edits 33:4 94:10
educate 240:16
education 240:3 246:20
effect 38:2 125:3
162:11 165:22 210:11
effective 26:2 42:4
116:19 151:9 176:22
192:6
effectively 83:2
eight 201:7,9 230:3
either 11:6,7 30:4 75:13
89:2 92:3,6 106:17
118:14 131:4 206:1
241:21
either/or 78:10 82:17
83:14
electric 20:17
element 9:13 51:6 52:2
eleven 246:5
EMAT 82:8
emergency 90:5,17
92:2
Enbridge 14:19 37:8
56:18 70:15 82:16
87:11 94:14 104:2
108:14 112:8 114:9
123:3,19 142:21
150:22 155:16 161:19
163:18 182:8 192:14
212:17 217:15 228:6
235:1
encounter 57:15
encourage 75:17 108:2
encroach 144:7 152:3
encroaching 115:2
encroachment 72:8
ended 128:22 221:3
ends 6:17 16:7 86:3
213:9
energy 13:10 14:6,7
66:15 76:5 89:10

96:12 107:21 120:10
 139:14,16 140:9
 152:19 153:13 156:18
 157:17,21 166:17
 169:16 185:20 190:13
 202:14 218:19 221:17
 233:4 238:21
enforceable 250:5
enforcement 15:1
 240:8
enforcing 241:6
engineer 21:15
engineering 30:8 50:18
 52:21 55:16 59:17
 73:11 87:21 145:13
 182:22
engineers 223:10
 224:14
ensuring 76:10
entertain 40:18 213:19
 214:16 248:19
entire 5:16 100:12
 195:20 196:22 197:1
 238:14 240:19
entirely 3:9
entirety 102:22
environmental 127:18
EPRG 55:21
equal 20:4 22:10,11,12
 22:13 33:9 117:13
 198:17
equipment 137:15,17
 156:1,4
equivalent 205:4
err 89:17
error 10:1 213:12
ERW 20:16 127:20
 128:2 208:5
especially 7:22 34:21
 78:15 91:16 92:2,12
 152:18 164:17 212:9
 213:12 237:16
essence 144:12 145:17
 167:13 213:10
essentially 98:2,9,16
 101:18 232:6 253:4,4
 253:5
establish 209:1
et 63:13,13
etcetera 82:9
European 55:21
evaluate 81:19 162:5
 167:13 172:13 186:7
 187:9 211:8
evaluated 122:13 138:6
evaluating 31:15 113:4
 118:3 135:2 177:18
 182:22 185:7

evaluation 27:22 31:22
 41:21 46:6,19 58:14
 92:9 116:17 176:20
 206:16 243:4
event 71:18
everybody 3:4 90:8
 101:9 145:16 159:15
 161:3 163:3 165:4
 218:8 228:2 230:21
 244:20
everybody's 160:3
 216:11
everyone's 4:3
evidence 17:11
evidenced 251:4,8
evolution 157:13
evolved 135:20 146:12
evolving 64:20 65:2
 93:18
exact 11:2
exactly 144:20 171:15
 207:19
examine 204:9
example 141:21 170:16
 183:6 190:15 201:6
 208:10 233:21
examples 242:10
excavation 35:13 68:18
exceed 30:18 31:6,7
 59:9,22 60:2,3
exceeded 20:12 21:16
 21:21 22:6 24:10,14
 24:19 25:3
exceeding 131:15
exceeds 20:19 21:4
 28:4 31:4 47:1
exchange 7:20 250:15
excluded 167:20
 178:21
excluding 180:4,11
exclusive 121:21
excuse 54:21 236:16
executive 255:20
exempted 178:16,20
exercise 168:20 191:9
exist 114:20
existing 35:14,22
 135:18
expand 79:4 89:11
 154:11
expanding 164:5
expect 10:20 17:1
expectation 218:1
expectations 77:1
expected 155:4
expects 131:2
expeditious 89:3
expensive 86:6 90:4

experience 64:17
 175:17 190:20
experienced 144:8
expert 91:9
expertise 76:9 240:11
explain 133:3 155:8
 165:13,21 167:18
 181:16 231:4
explaining 129:20
explanation 207:8
explosion 231:11
exposed 102:11,12
 160:10
extend 136:13 161:10
 168:9 248:1
extending 157:5
extends 161:9
extension 159:22
extensive 64:16
extent 246:15 247:6
external 35:11
extraordinary 159:1
 193:20 213:6
extrapolating 151:7
extremely 142:11
eyesight 45:18

F

face 216:17
facilities 205:14
facility 40:4
fact 6:11 54:17 104:21
 111:13 125:11 155:12
 175:10 203:21 205:16
 229:20 237:16
factor 23:2 25:8,15 39:6
 66:8 67:11,14,20,22
 68:6 77:18,20 79:15
 80:1 86:13,16 95:21
 95:21 96:1 112:11
 118:12 120:13 121:12
 121:16,16 122:1,2
 151:20 152:3 159:2
 178:4 200:5 201:20
 203:1,19 205:4
 206:13
factored 150:6
factors 63:14 67:4,18
 68:5 77:14 84:8
 109:19 110:5,8,10,15
 111:10 112:14 114:20
 120:17,22 121:5,9
 131:11 135:20 136:7
 152:16 161:5 162:10
 162:13 174:14 175:9
 178:3 193:11 203:4
 206:14 213:15
facts 135:11,11 136:19
 137:1,4 139:8,18
 152:14
fail 98:13
failed 148:3
fails 203:21
failure 22:8 28:8 29:14
 29:22 43:6 47:5 62:19
 66:22 68:14,21 69:2
 74:7 80:15 117:20
 118:10 130:18,22
 131:9 140:12 141:4
 148:1 149:6 178:1,3
 183:13 187:10 195:7
 203:2 204:2,22 205:5
 210:7 212:13 221:19
 222:3,20 233:6
failures 54:18 98:5
 137:15,17 141:6
 148:5 156:1 203:22
 204:1
fair 65:3 103:3 124:20
 165:18 202:15 203:10
 203:11
fairly 63:15 93:7
faith 237:20 241:12
fall 34:11 92:4
falling 173:9
families 230:4
family 227:10
far 4:3 9:1 15:3 38:10
 38:20 53:10 77:12
 80:9,15 104:3 138:9
 166:7 171:18 226:11
 227:11 234:9 252:14
 252:16
fashion 145:12 164:19
fast 85:19 224:5 248:18
faster 172:16
fatal 231:11
fatalities 230:4
fatigue 55:10 56:3
favorite 12:2
FEA 51:7 57:13,22
 59:12
FEA-based 55:22
feasible 42:1 46:9
 58:16 116:19 176:22
 243:7
feature 66:5 98:12
features 65:12,15 71:11
 76:12,13
fed 91:13
Federal 2:2 41:20 46:5
 58:13 116:16 176:19
 243:3
feedback 8:5,16 16:6
 19:20 134:16
feel 77:10 114:21 155:2

191:19
feeling 241:18
feels 140:20 141:2
 173:13 239:9,17
feet 139:21
fell 125:14
fellow 239:22
felt 220:15
field 118:1
fifth 20:21
Fifty 195:10
fighths 182:21
figure 73:18 74:6 86:22
 95:9 106:5 111:10
 131:7,13 135:14,19
 135:21 139:9 143:2,9
 149:19 151:15 157:11
 157:18 158:12,13
 164:9 166:3,17,18
 167:5 184:21 185:19
 191:3 199:7,19 201:4
 207:22 216:20 218:13
 219:10 220:16 243:10
 244:4
file 159:13
files 16:17
final 5:7 6:2,17,17
 19:20 21:13,19 22:4
 22:19 209:20
finalized 6:21 251:4
find 78:22 93:6 106:9
 130:21 144:15 145:2
 154:8,12 159:1
 196:10 198:7 201:9
 226:19
finder 92:20 107:12
finding 65:10 75:4 93:1
 94:2 138:17 140:14
 147:21 148:2 173:3
finds 81:16
fine 13:13 41:5 102:17
 109:2 116:6 184:5
 186:10 213:3 234:15
finish 19:11 162:3
 229:11
finished 253:12
Finite 51:5 52:2
first 3:21 5:5,6 14:17,18
 20:1 23:6 24:6 33:18
 33:22 36:4,8,11 40:10
 40:11 45:11 70:16
 81:6 91:8 108:15
 133:7 135:13 141:18
 146:2 159:2 196:18
 199:17 220:12 249:4
 249:10,12,18 253:2
fish 14:9
fit 132:16 158:16 159:4

173:19
fits 109:3 180:21
 255:21
five 27:11 39:18 43:12
 132:17 145:5 146:3,5
 202:20 217:1 223:1
 234:8
five-year 126:3
fix 158:17,22 210:9
Fix-A-Leak 254:18
fixes 150:5
flared 15:10
flash 137:20
flash-welded 20:17
 22:22
flat 142:11,12 205:16
flaws 98:9
flexibility 171:1
flood 160:2
fly 56:20 235:3
focus 14:13 107:16,17
 139:13 156:17 175:11
focused 3:9 9:17,17
 185:19
folks 15:1,17 126:15
 140:2 153:7 154:22
 168:4,7,8 217:2 229:1
 237:22 247:11
follow 41:3 78:8 81:21
 102:13 148:4 194:19
following 25:22 26:9
 27:13 28:7,18 30:9
 31:9 33:2 42:3 46:10
 47:4 58:18,20 116:20
 134:18 177:1,11
 243:8
follows 30:21 31:2,21
 33:5 59:16,21 117:9
 130:18 134:1 177:5
 178:1
Fool's 254:16
foot 155:20
force 171:20
forces 77:16 200:10
 201:12
forecasting 64:9
form 16:4,9
former 250:4
forth 188:10
forward 6:12 17:2 18:12
 45:16 93:15 116:11
 154:4,11 164:7
 171:19 209:16 219:11
 229:16 230:5 256:1
found 9:20 35:12,19
 37:20 53:16 76:11,13
 104:19 127:18 172:10
foundation 140:4

four 20:1 31:6 33:16
 49:6 102:19 117:5
 132:1 145:5 193:22
 235:15
fourth 20:15 23:14
 56:20 57:21 58:2
 120:5
FPR 95:5 183:12,13
 184:5,18 185:6 186:7
 186:7 197:9 213:20
 218:6 219:7 220:3,18
FPRs 74:8
fracture 25:12 29:4
 76:8 99:10 101:6
 114:10 117:7
frame 70:16 72:10
 74:20 78:3 123:20
 124:20 126:4 148:17
 196:14 220:15 222:16
 234:8 235:7,14
 237:17
frames 171:21
framework 53:3 55:6,8
 55:14,17 236:13
frankly 71:8 89:20
 90:18 147:13 184:17
 185:17 209:6
fraught 149:11
freak 156:7
frequencies 173:7
frequency 127:20 128:2
 159:4 168:13 172:18
 194:6
frequent 54:19
fresh 231:13,15 244:19
front 70:12 78:22 93:16
 133:16 135:17 148:13
 148:22 165:11 196:1
 199:22 200:1
frowns 4:4
frustrating 86:6
fry 14:9
full 84:7 165:15
fully 81:19 162:11
fun 101:11
functioning 145:8
fundamental 242:5
funny 135:9
further 18:19 43:17
 60:10 69:3,11 118:18
 161:10 180:15 188:1
 209:5 215:5 225:21
 242:19
Furthermore 142:9
future 64:9 108:7
fuzzier 88:6

GALE 2:4 36:16 40:9
 41:7 45:8,11,14 49:12
 50:1,10 51:16 61:22
 62:5,10 181:17
game 7:3
gamesmanship 72:18
gaming 83:18
GAO 155:6
gap 99:19
gaps 121:20
Gary 123:3
gas 1:5,10 53:9,11,14
 53:21 54:2,18 64:17
 71:5 106:21 107:3
 137:6
gate 111:5
gates 162:20
gathering 196:19
 246:18 253:20
gee 76:15
general 23:12 33:19
 36:5 41:9,22 46:7
 101:18 102:7 149:3,8
 174:12 175:5,8
 185:15
generally 218:5
generate 14:5
gentleman 52:1
getting 3:18 13:12 71:7
 80:9 83:6 84:18 85:18
 99:21 100:2 101:15
 102:10,20 112:9
 138:5,7,22 151:8
 152:20 157:1 163:3
 170:8 172:20 205:11
 206:3 212:11 222:19
 238:17
girth 22:1,5 23:8 24:13
 24:17 30:16 59:7
 181:4 184:13,16
 187:17
give 4:15 15:16 38:9
 56:7 78:2 125:18
 129:11,21 136:7
 143:14 149:8 165:3
 166:11 170:14,21
 183:6 230:17 236:18
 236:20 239:10,14
 244:15 253:13
given 38:18 39:3 68:16
 78:15 124:15 213:12
 233:5 236:15,19,20
 237:16 242:17
gives 201:17 202:8
glad 140:3 186:18
globular 87:17 88:6
gold 18:6 225:12
 226:13

G

Gosman 1:16 17:5
44:22 45:1 49:2,3
52:9 54:9 61:13,14
79:3 83:17,17 86:11
98:15,15 100:9,17,22
101:3,8,12 104:12,12
119:22 120:1 154:22
160:17 169:6 176:8
176:10,13 179:18,22
180:6,8 186:10,18
187:5,14 190:3,4
207:7 224:21 225:4
230:16 233:10,20
236:11 246:1,2 255:7
255:7
gotten 134:16 140:13
232:6
gouge 23:11 31:10
134:19 177:12,12
government 229:4
government-wide
256:3
GPAC 3:5 40:17 62:2
249:18 250:1
grade 28:12 47:9 79:17
80:5 206:18,21
graduated 167:9
graph 198:21
graphs 141:3
greater 20:13 21:3,18
21:20 22:1,4 23:7,11
23:12,19 24:7,8,12,17
25:6,13 29:8,10,19
30:12,14,15 31:11,12
32:9,10 33:7,9 59:1,3
59:4 65:8 117:11,13
117:16,18 118:8
134:20,21 156:21
177:13,15 181:1
226:20
greatest 56:8
green 141:21 142:4,14
147:5
Grid 34:3
groove 23:11 31:11
134:20 177:13
grooving 32:20
group 89:22 97:1
110:15 199:15 207:17
216:8 228:19 229:13
grouping 36:8,11 120:5
grow 34:7,20 65:15
93:11 95:2 125:12
131:8 153:17 170:4
185:14 201:21 206:6
206:14
growing 74:3 85:11
132:9,12 149:19,22

172:16 197:6 205:15
234:8
grown 34:18 35:7 202:2
202:5
grows 98:13 143:8
144:2 202:6
growth 35:8 72:1 74:16
74:18 77:3 78:12
136:2 143:16,17,19
144:14 146:13 157:13
158:18 164:13 167:6
167:7 173:4 193:13
193:14 194:5,11
196:1,21 198:3
200:13 201:13 202:8
202:17 203:6,16
204:11 213:7 222:11
222:13 223:22 225:8
225:10,12,13,18
226:15,17 232:7,17
233:16 237:15 242:1
242:12
guard 103:8
guess 16:6 56:4 79:8
83:20 84:12 92:5 94:8
100:9 111:19 114:10
114:15 126:4 133:2
140:19 141:11 147:19
148:5 149:16 153:22
155:13 170:12 222:9
guest 199:12 217:13
guidance 13:7 14:12
15:12,17,22 55:14
170:21 209:17 239:10
242:17 244:2
guide 14:13,22
guidelines 35:15
239:15
guy's 12:11
guys' 111:9

H

H 1:19
hairs 112:17
half 54:1,3 72:22
188:11
half- 193:15 232:18
half-inch 30:13 232:21
232:21
hand 3:10 253:14
handle 73:12
hands 218:20
happen 4:22 5:5,5
18:13 153:7 227:18
237:21
happened 98:5,5
183:16 230:3 241:15
happening 86:3 93:14

107:15 144:3 145:18
162:21 219:1
happens 98:22 104:9
104:10 184:2
happy 12:5 41:17
136:17
hard 6:18 14:2 33:4,6
107:7 112:6 117:9,9
130:13 229:13 254:6
254:11
hardness 33:9 117:12
harm's 219:4
Harvey 159:11
hate 156:12
HAZARDOUS 1:3
HB 117:14
HCA 20:3 22:10,17 23:5
24:2 29:17 30:4,10
32:7 58:21 118:6
131:4 143:12 147:2,6
147:7,17,18 222:5,7
HCAs 24:20 26:14
31:10,21 51:1,3 59:16
122:8,14 124:19
125:1 126:3 133:22
134:18 152:21,21
166:6,6,21 168:5,6,9
177:5,12 205:15
218:12,14,15 219:9
237:7 239:3 243:22
248:3
HDD 183:9
head 191:15 192:8
214:22 222:10,17
headed 255:22
heading 41:1
heads 5:22
hear 39:9 81:17 82:21
98:6 136:20 147:20
149:11 154:2 179:13
226:6 229:4
heard 56:14,15 57:7
129:5,18 131:18
132:1 134:11,19
150:17 163:3,13
169:20 174:6 202:16
215:13,16 233:12,15
234:5 236:18 249:20
hearing 43:19 51:14
52:7 60:11 69:13
118:20 135:8 212:1
heavier 114:12,14
heavily 192:16 230:6
heavy 14:13 114:20
heck 53:13
held 241:5
help 15:16 49:15 57:18
62:1 71:3 75:13

102:10 124:10 126:14
163:22 170:13,14
191:18 192:9 193:4
217:20 224:13,15
229:17 238:6 239:11
239:12 240:15,16
241:3 246:18 247:4,7
helped 13:6
helpful 15:18 18:21
62:17 89:4 164:16
190:14 191:5 236:20
249:21
helping 14:13 86:11
160:18
helps 66:11 143:13
213:9 217:20 222:21
241:4
Herculean 241:8
Hereth 192:15 199:14
199:14 203:11 207:13
207:16,16 231:22,22
232:4,20
hesitant 102:15
HF-ERW 22:21
high 91:16 92:4 93:22
127:20 128:2 212:10
249:15
high-consequence
24:4
high-priority 6:14
high-res 138:16
higher 67:11 115:12
121:12,15 122:1
168:13 197:9
highway 90:7
Hill 1:17 43:15,15 44:20
44:21 46:1,4 47:17
48:22 49:1 61:11,12
118:16,16 119:20,21
178:11,11 179:5
180:12 187:18 190:1
190:2 245:21,22
Hilton 1:10
historic 16:14,22
historically 98:4
history 8:5,14 53:9
137:7,8 231:12
hits 85:6
hitting 11:22 80:12
hold 101:8 249:14
hole 221:6
holes 107:13 167:22
168:4
home 216:12
honest 145:19 221:8
hope 6:19
hoping 233:10 248:4
hostile 198:3

hour 188:11 228:12
HRC 33:9 117:13
huddled 191:12 241:13
huge 139:21 152:21
 197:7 214:7 219:11
 228:16
human 10:1
humongous 78:18
hung 172:21
hurdle 6:2 78:18 85:6
 93:21 136:10
Hurricane 159:11
hurry 66:9
hurt 116:7
HV10 117:14
hydro 208:11,14,22
hydrostatic 211:18

I

i.e 42:16 243:9
idea 4:16 17:6 125:18
 150:19 230:17,18
 231:10,15 248:9
ideas 56:22
identification 252:20
identified 34:20
identify 54:22 199:13
 207:15
idling 228:7
ignores 121:14
ILI 21:4 38:13 132:10
 167:20 212:2 243:11
illustrated 159:12
illustrative 157:3
IM 27:17,20 46:14,16
 155:5
image 107:12
imagine 7:2 231:14
immediate 20:2,2 21:8
 23:17 26:6 29:7 30:4
 30:20 31:3 32:2 34:7
 34:9,18 37:13,15,16
 37:18,20 38:4,11 42:9
 59:13,22 64:4 68:13
 68:16,18 69:4 71:17
 72:5,5,6 77:6,6 78:4
 82:2 83:5,5,6 84:17
 86:17 94:17,20,20
 95:2 96:18 97:13,22
 100:18,20 105:20
 106:1,5,8,8,16 117:15
 117:22 118:14 122:8
 122:12,13,15 123:1,7
 123:14,20 124:7,16
 126:2,5,16 138:11
 141:17
immediate's 39:16
immediately 22:18

38:12 40:2 74:3 96:19
 106:14 132:15 220:21
immediates 131:21
 132:3 141:13 171:10
impact 127:9 145:15
impacted 90:9
impairs 26:15 42:18
implement 14:14
implementation 27:10
 43:11
implementing 50:22
 65:6,19
important 70:16 75:8
 75:20 86:16 87:6 93:2
 99:13 126:19 127:10
 136:20,22 137:1
 139:5,19 141:19
 142:7 209:10 216:16
 235:22 248:21 251:8
impossible 151:11
 155:19 171:22
improve 244:2
improvement 139:15
improvements 253:10
improving 230:1
in- 130:20
in-depth 19:11
in-line 35:4 64:17 127:3
 127:5 243:13
in-the-ditch 132:19
 162:8 178:5
in-trust 241:1
inadequate 226:17
incentive 84:6
incentivize 71:19 73:2
incentivizes 78:20
inch 30:15 193:16
 232:19,22
inches 33:7 59:3,4,6
 65:8 117:11
incidence 127:10
incident 9:21 126:20,21
 127:1,22 137:7,8
 147:3 154:19 155:17
 156:21 174:20 184:17
 229:17 231:2
incidents 53:21 54:1
 126:22 127:2,19
 137:9,9 141:6 142:1,1
 142:6,11 147:1 149:4
 155:4 172:21 230:2
include 11:18 31:15
 102:2 135:1 168:9
 177:17 187:6
included 128:2 209:11
includes 99:1
including 5:17 33:20
 49:10 57:22 120:6

incomplete 12:15
incorporate 56:8 243:9
incorporating 54:17
incorrectly 134:8
 183:17 222:2
increase 137:14 152:22
 159:21 160:21 166:10
 169:3 192:4
increasing 161:21
 220:18
incredible 114:17 145:9
 159:2 167:15
independently 232:5
indicate 15:6 138:19
 139:2 173:5
indicates 172:16
indicating 138:21
indication 23:16 28:22
 30:11 58:21 68:13
 117:2 122:17 124:8
indications 30:22 59:14
 59:19 201:10
individual 10:13 11:5,6
 17:14
induced 227:20
indulge 163:9
indulgence 54:14
industry 55:20 70:21
 72:16 143:8 154:22
 159:14 167:2 229:3
 251:5
industry's 53:4
inform 126:14 139:12
information 12:19
 13:15 34:17 81:2 99:2
 102:2 130:2 141:5
 146:9 175:13 233:5
 236:14,20 241:21
 244:15 246:17 247:1
 247:7,17 248:3
 249:16 250:8,11
informational 130:2
informed 209:15
 250:12 255:17
infusion 138:16
INGAA 62:15 126:12
 219:21
initial 124:22 218:19
 221:4
initiative 256:3
inline 166:12 193:6
inordinately 78:21
input 4:20 7:14,20 9:5
 10:5 107:3,4
insert 32:14 177:6
inside 51:3 74:19
 138:17 160:1 201:14
 218:12 222:5

insight 115:4
insights 145:13
inspect 145:6 194:13
 195:1
inspecting 168:5
 197:20
inspection 29:11 35:4
 117:18 127:4,5
 130:21 158:20 166:13
 166:20 193:6 194:18
 213:13 243:13
inspections 64:17,19
inspectors 16:1
inspirational 146:7
installed 183:16,17
instance 10:6 26:13
 174:14
institute 72:15 75:9
 166:3
instrument 109:18
integrity 81:15 103:20
 143:12 164:5 205:10
 205:16 243:12
intended 121:13 144:21
 152:6 195:15 197:3
 200:17
intense 111:7
intent 38:5 62:22 64:2,8
 104:3,9 112:17 166:2
intention 97:4,5
intentional 63:2
intentions 153:15
interaction 125:22
interchanged 80:3
interest 116:10 242:15
interested 89:12 104:13
 148:6 191:7 192:4
 222:18
interesting 71:12 76:6
 90:12 96:5 137:10,21
 137:22 186:12
interfolds 158:10
internal/external 127:9
interpret 15:1 193:5
interpretation 180:22
interpreted 13:19 15:15
 16:8 250:6
interpreting 13:4 174:4
interstates 89:22
interval 72:9 131:3,5
 158:15,20 174:18
 193:7 200:1 208:8,16
 208:22
intervals 213:8
investigate 172:18
 193:7
investigation 19:22
 162:19 167:9

involve 98:8 174:13
175:8
involved 10:1 174:21
174:22 192:16
involvement 254:9
involves 113:20 115:18
involving 175:5
issue 8:17 9:9 82:4
83:18 84:17 87:1,1
100:3,7 109:14
153:18,20 156:10,11
166:16 174:15,21
175:4 180:20 181:2
181:20 184:15 203:9
212:13 213:1,3 214:7
235:21 244:13 247:15
247:20
issued 9:7
issues 90:7 91:1 99:20
115:6 156:1,5 184:3
216:9 253:8
it'd 200:21
item 133:2 134:17
238:16
items 89:13 96:17
133:20
IURC 15:20 40:21
146:19 191:11 198:13
210:4 226:5 239:22

J

J 1:16 10:9
JAGGER 2:5
jammed 171:3
jetted 235:12,13
Jim 44:18 45:6,6
job 227:19 240:15
254:11
John 2:4 16:12 39:20
40:7 45:5 50:12 81:3
181:16 208:1 238:22
254:8
Johnson 66:15,15
120:9,10
joined 70:6
Jon 39:21 48:20 61:9
81:4 119:18 189:19
245:18
JONATHAN 1:14
judgment 116:3
juice 114:16
jump 78:17 223:15
junction 75:8
June 228:3 246:9
253:21 256:20
jurisdiction 255:11

K

keep 27:8 43:9 96:7
108:7,8,14 109:15
139:17 152:9 155:2
158:2 164:16 171:16
195:22 196:4 235:17
keeping 9:2 10:7 56:4
222:18
keeps 78:22
key 88:18 149:10,16
151:6 234:6,11,14
Kiefner 208:1
Kinder 55:3 68:10
123:18
kinds 90:7
knock 228:11
knowing 148:6 220:14
224:13
knowledge 128:1
145:13
known 28:9 47:6
127:21 144:6

L

L 1:18
lack 100:4
lacking 87:5
land 78:19 241:22
248:10
landed 18:5
language 9:4 40:22
41:3 49:21 50:8,15
55:4,16 56:4 58:9
59:11 62:8 63:1 70:12
76:2 94:4,6 100:11,13
100:22 101:12 104:14
104:14,16,19,22
105:1,13 108:11
116:14 163:5 164:20
165:11 172:1 176:15
187:3,6 198:15,22
204:7 215:6 217:7
218:3 242:22 248:16
249:1,3,19 251:19
large 145:19 201:19
lastly 239:15 253:11,18
254:13
latest 56:8
Laughter 216:1 223:4
223:12
law 12:14
layer 255:13
layers 68:22 69:1
214:21
LDC 13:18 89:22 91:20
LDCs 91:16
lead 32:19 65:16 134:5
177:9
leadership 5:16

leak 107:15
leaks 147:6,8,14,17
148:5
leaning 171:19
learned 64:21 230:11
learning 82:18 230:2
235:2 249:17
leave 5:1 11:16 189:9
242:16
leaves 200:15
leaving 55:13 95:8
101:16 215:16
led 142:2,6
left 19:16 45:16 82:2
128:21 155:15 198:21
253:2
left-hand 206:4
Leis 208:2
length 71:22,22 72:20
73:9 183:4 184:8
lens 83:4 88:2
let's 13:16 43:19 97:1
115:17 116:7 133:4
137:4 139:8,11 153:8
154:3 159:3 164:22
201:7 214:16 216:22
217:17 218:2 253:3
letter 12:14
letters 115:15
letting 125:11 206:14
211:5 242:9
level 10:10 13:8 17:1
31:4 50:19 56:6 73:7
114:17 125:12 155:20
193:10 199:18 239:6
240:11 256:4
levels 20:12 21:16,21
22:6 24:9,14,19 25:3
30:18 31:6,8 52:10
59:9 60:1,2,4 106:21
152:1 194:3,5 195:13
195:16 197:4 213:6
leverage 100:2
life 55:11 56:3
lifting 108:5,5
light 25:17 32:21
141:21
likelihood 85:10
likes 45:16
limit 21:4
limited 176:6
limiter 213:20
limiting 55:15
line 10:10,19 12:18
75:14 90:22 91:14,15
91:18,20 92:13,13
125:21 126:1,6
130:21 131:13,15

141:21 142:4,5,10,14
142:14 147:1,6
156:22 158:20 161:21
173:13 194:7,19,20
197:14,17 201:2
204:16,17 206:5,5
210:15 211:1,8,17
212:5 215:15 220:19
220:20 253:20
lines 53:9,9,11,13,14,21
54:2,18 127:3 151:18
151:18,22 152:6
157:4 161:20 170:8
194:12 204:16 210:16
246:18
lining 75:4
liquid 53:9,12,13
liquids 53:22
list 148:22
listed 252:21
listening 81:1 86:19
103:4 105:17 106:4
107:2,3,10 153:14
192:21
literally 238:1
little 34:16 40:2 73:17
78:1 79:4 83:11,19
85:2 90:14 93:11,12
110:1 130:12 137:20
170:4 183:18 213:5
214:11 218:10 219:6
224:16 225:7 233:20
249:17 253:5 254:14
live 89:21
lives 230:10
load 91:17 159:13,17
160:11
location 16:19 23:2
25:8,15 27:2 39:5
43:5 67:4,13,18 68:4
77:21 120:13 121:8
121:10,13,22 122:3
132:21 178:6
location/design 178:4
locations 121:3 130:22
161:2,4
log 39:11 144:6 162:5
167:13 196:12,22
198:7
logic 182:22
long 4:11 6:13 24:17
36:21 37:18 39:14
41:5 65:8 77:20 78:3
85:13 108:20 127:16
127:19 128:4 133:22
134:4 154:3 177:4,8
183:19 195:21 196:4
long-seam 24:13 31:21

32:17
Longan 1:17 44:5,6
 48:8,9 60:7,19,20
 119:6,7 141:15,16
 189:6,7 245:8,9
 248:14 249:3,9,13
longer 170:4 208:17
look 8:5 11:16 15:8
 38:20 55:7 56:2 57:17
 63:17,20 64:3 71:5,10
 71:16 72:3,19,20
 80:18 81:11 82:11,12
 83:8 88:6,7,12 93:12
 109:1 115:8,21 124:5
 124:16,17 126:20
 127:1 129:12,21
 131:7,10 133:1
 137:13 147:13 148:17
 150:14 151:17 155:17
 155:22 161:1,3,3,11
 167:5 193:18 194:3,8
 198:5 199:19,21
 200:3 201:13 202:1
 204:4,9,16 205:15,18
 210:16,22 211:20
 212:3 219:10 220:16
 232:13 234:17 235:18
 236:8,21 238:15
 244:18 247:21 252:4
looked 53:8 125:6
 127:17 227:17
looking 9:3 10:8,17
 14:21 22:19 38:10
 39:12 51:9 65:4,7
 70:18 71:21,21 80:10
 83:3 84:14 88:2,8
 94:9 98:4 101:3,10
 103:14 113:6 127:11
 142:4,17 145:18
 147:14 161:2 171:16
 191:14 193:13 199:5
 200:11 206:11 210:15
 215:10,11 217:9
 220:1 235:17 249:21
 250:16
looks 98:15 138:9
loop 63:22 229:1,14
lose 229:19 256:12
losing 87:22 213:16
 224:10
loss 20:8,10,13,15,18
 21:14 22:21 23:6 25:5
 30:11 31:1,20 58:22
 59:15,19 101:6 120:6
 122:17,20,21 123:9
 123:12,13 124:8
 127:13,16,19 128:4
 128:18 131:8 132:5

133:22 176:21 177:4
 180:4,10 230:10
 243:6,21
lot 4:22 7:1 11:10 13:10
 13:18,20 14:6 15:2
 33:15 53:13 55:20
 64:21 65:16 70:22
 76:6 81:6,16 86:4
 88:7,20 89:1,3,4 90:1
 90:16 102:10 109:5
 109:10 114:22,22
 121:17 136:4 137:18
 143:1,22 146:1,3,8,10
 147:11 151:2,13
 152:19 156:18 162:4
 163:19,22 164:15
 166:16 167:22 168:4
 168:4,7,7,19 184:17
 185:15 188:8 191:22
 203:19 212:1,10
 216:6 218:22 219:5
 220:21 224:10,11
 226:22 230:8 231:6
 237:20 238:5 242:5
 246:19
loud 237:22
love 107:11
low 34:22 113:12
low-frequency/high-f...
 20:16
low-level 65:4
lower 26:21 40:1 43:3
 197:14,17
lumpy 145:12
lunch 128:10 129:1
lunchtime 181:7

M

machinations 109:6
mad 90:8
maintain 166:3
major 127:9
majority 63:22 64:1
 137:14 218:12
making 64:16 71:7 88:3
 89:13 97:7 102:4
 103:19 137:2 139:9
 139:13 140:5,22
 169:22 170:8 204:10
 210:20 242:15 253:18
manage 151:9
managed 86:4 144:14
 144:17 256:4
management 6:1,4
 81:15 139:12 143:13
 164:6 205:10,17
 241:3
Manager 2:4,5,6

managers 228:22
manages 79:1
mandate 253:9
mandates 253:4,5,6
manner 16:9
MAOP 9:10 12:19 15:3
 15:8 17:14 20:5,20
 21:6 23:1,2,21,21
 25:7,8,14,15 28:14,16
 29:15 30:1,2 32:2,5,5
 32:10,11 47:11,13
 68:15 109:21 110:6
 110:22 113:3 114:5
 115:19 117:21,22
 118:11,12 120:16
 121:14 132:22 150:10
 162:9 178:3,6 183:14
 195:7 210:8 222:4
March 1:8 3:4 25:19
 33:1 152:11
margin 83:11 143:21
 195:11,11 203:1,19
 213:12 219:14 235:14
Mark 192:15 197:22
 199:14 202:15 207:16
 217:10 231:22 245:20
mask 93:4
material 28:13,17 47:9
 47:13 94:18 108:1
 115:2 117:10 118:3
 155:21 156:1 163:19
 193:16
materials 1:3 111:3
 114:14,18 115:5
 137:5
math 222:12 223:8
matter 7:6 8:18 9:12
 54:7 70:1 106:12
 128:13 161:14 165:5
 181:12 186:22 217:3
 256:21
mattered 142:2,6
matters 229:15 246:10
mature 65:2 92:7
matured 92:11
maximum 29:11 117:19
 219:15 220:4
MAYBERRY 2:2 3:13
 8:4 14:10,17 18:14
 94:8 97:21 128:20
 155:14 163:8 174:10
 186:2,14 215:3
 229:10 233:14 241:11
 246:12 247:3,19
 248:8 249:7 252:2,8
 252:11 253:16 254:19
 255:18 256:16
MCA 157:5 158:14

MCAs 152:21 154:6
 157:14 158:11 161:10
 168:10 171:4 214:1
McLAREN 2:5 19:2,8,8
 103:12 225:6,6
 226:10,14 227:6
mean 4:13 8:20 9:12
 13:17 15:11 71:1 75:6
 76:8,11,16 77:1,6,19
 84:5,15 85:16 90:9,20
 93:17 96:14 97:11,17
 97:21 100:6 102:6,16
 103:7 105:19 107:1
 109:2,4 115:3 116:4
 132:22 140:11 146:8
 147:9 148:12 150:1
 150:19 153:8,19
 154:5 156:5 158:15
 160:7,9 161:3 163:20
 165:18 167:21,22
 171:6 173:8 181:9
 184:14 192:5 194:15
 195:6 202:15 215:22
 220:1,2 221:7 223:17
 224:1,11 227:15
 233:15,21 235:2
 236:3 241:18 246:18
 251:17 254:15 256:11
meaning 130:4
meanings 251:19
means 33:6 63:1 79:14
 79:16 113:12 117:9
 149:13 223:20 224:7
 242:11
meant 220:14
measurable 29:11
 117:19
measures 164:12 202:1
 204:8
measuring 162:12,13
mechanical 10:16
 54:17
mechanically 104:8
mechanics 25:12 29:5
 76:8 99:10 101:6
 114:10 117:7
mechanisms 204:6
meet 27:22 30:3 37:18
 46:18 118:14 171:22
 211:16 228:22 238:4
meeting 3:4,8 152:10
 158:10 159:16 228:2
 246:8,8 253:22
 255:19
meetings 8:2 25:19
 134:19 250:1
Member 1:14,14,15,15
 1:16,16,17,17,18,19

45:15
members 7:19 36:10,16
 40:17 49:18 91:13
 240:1,20 252:7 254:8
membership 241:7
memories 192:19
mention 55:9
mentioned 68:17 215:3
 215:4 240:8 252:14
 256:7
mentioning 215:16
 229:19
mess 189:21
message 240:22
met 1:10 26:7 37:14
 38:4 42:10 67:10
metal 20:8,10,13,15,18
 21:14 22:20 23:6 25:5
 30:11,22 31:20 58:22
 59:15,19 101:5
 122:17,20,21 123:9
 123:12,12 124:8
 127:12,16,19 128:4
 128:18 131:8 132:4
 133:22 149:5 176:21
 177:4 180:10 243:6
 243:21
metal-loss 25:1
methods 50:20 55:22
 56:1 59:11 63:18
micro-hardness 33:10
middle 131:13 194:20
 204:16 206:5 238:5
midnight 8:1 228:12
midpoint 202:20
mileage 205:20
mileages 215:10
miles 126:3 147:2,6,7
 147:18,18 157:9,10
 205:20,21 214:1,1
milestone 229:12
 253:18
milk 111:19
mill 10:15
millage 152:22 224:11
millimeters 33:8 117:12
mills 222:22 223:1,1
 224:3,4 225:9,13,14
 226:15,16,20 232:8,9
 232:12,13,14,17
 234:8,9
mils 193:16,22 202:18
mind 95:6 221:22
mini 150:16
minimal 54:4
minimum 28:11 33:7
 47:8 94:15 113:4
 117:10

minor 33:4 34:22 35:9
 39:22 62:16 134:12
minute 45:13 129:11,21
 140:3 217:1,9 221:6
minutes 74:12 136:18
 163:21 216:12
miraculously 138:14
misapplying 81:17
miscellaneous 126:8
misinterpreting 213:4
missed 226:5
missing 13:13 16:17
 129:15
misunderstand 237:5
misunderstandings
 174:3
misunderstood 97:19
 193:1 210:14
mitigate 106:7,10
mitigating 106:16
mixture 111:19 147:11
mod-ing 78:12
model 83:1 124:3,18
 143:18 144:4 173:5
 185:14 193:14 195:20
 196:3,21 203:21
 204:3 235:5
modeling 88:14 99:10
 136:2 184:18 193:14
 196:1
models 63:18 68:22
 85:16,21 172:17
 242:10
moderate 34:22
modes 7:5
modified 179:9
Modifies 47:2
modify 187:4
modifying 28:5
moment 62:13
monitor 106:2
monitored 24:4,11 25:4
 25:11 30:5,19 31:7
 32:12 35:6 59:10 60:2
 113:6 118:15 131:2
 132:16
monitoring 149:14
 203:6
mono-vision 130:11
monolith 252:17
month 10:21 39:17
 254:21
months 6:8 39:17 92:3
 92:4
Morgan 55:3 68:11
 123:18
morning 3:3 34:2 70:7
 70:8 122:6 123:17

249:4,10,20 250:15
 251:1
motion 40:19 41:16,18
 45:2,16,21,22 47:17
 49:4 52:8 58:7 60:9
 61:15 116:11 120:3
 163:21 165:15 169:10
 176:5,7 179:8,19
 180:9,14 186:20
 187:4,6,21,22 188:11
 190:5,9,10 242:16,20
 242:22 246:6 249:12
Mount 7:12 91:8
move 12:2 18:18,22
 24:2 61:18 86:3,17
 88:16 100:7 154:6,11
 208:21 241:14
moved 118:18 145:20
 158:9 250:20 252:16
movement 241:14
moves 5:17 165:22
moving 4:12 7:4 45:7
 93:15 116:10 218:11
 220:15
multiple 105:13
Munendra 55:2 68:10
mutually 121:21

N

NACE 225:11,12 226:14
 227:7,10
name 123:17 189:22
Nanney 2:6 19:1,1 38:8
 38:8 51:20,20 52:13
 52:14,14 57:5,5,11
 79:7,7 81:9,10 82:6
 103:4,9 111:18
 112:21 113:22 114:6
 115:8 129:10,10
 130:7,7 133:10,12,15
 133:19 147:4 148:1
 148:11 181:6 204:14
 210:5,12,12 215:9
 220:7,9 221:10,10
 234:3,3 237:1 238:13
NAPSR 239:17,22
 240:19
narrow 217:20
National 34:3 50:4
nationwide 230:13
natural 157:13
nature 16:15 34:10
 78:15 106:16
Nay 245:5,7
nays 246:4
near 32:16 134:3 177:8
nearby 174:22
necessarily 10:14 14:7

153:22 175:1
necessary 94:19 108:1
 118:3 122:10
need 11:20 15:6 16:2,3
 17:11 34:16 40:13
 41:1 57:12 65:22
 71:20,21 72:1 79:8
 80:19 82:18 83:7,11
 91:11 98:11 107:16
 108:16,19 113:6
 114:13 139:14 142:16
 143:2,3 145:1 146:22
 150:11 151:6 152:15
 153:9 154:7 156:2
 157:4 164:2 168:1
 175:10,16,18,21
 179:3 184:8,21
 191:18 192:9 193:7
 198:9 209:7 216:18
 217:16 229:22 239:11
 240:16,20 247:6,12
 248:4,5 249:15,18
needed 17:13 18:15
 28:7 47:4 51:7,8 53:5
 57:8 91:15,19 98:21
needs 11:10,11,14,14
 15:22 16:21 72:9
 74:10 88:4 94:21
 106:14 121:18 132:13
 136:4 144:14 145:2
 218:12
negatively 92:14
neither 184:19
nervous 222:15
net 173:1,10 174:1
 196:16
new 35:18 64:20 70:11
 70:18,20 72:15 75:9
 76:11,18 93:17 95:12
 122:20 123:12 132:8
 135:16 171:6,12
 205:14 206:15 230:12
 254:7
newly 34:13
nice 120:9 250:15
 253:14
noise 93:10
nominal 59:2,5,6
 193:21
non 248:1
non- 26:13 59:15
 224:13 248:2
non-HCA 20:3 22:17
 23:6 24:2 29:18 30:5
 30:10 31:4 32:8 49:10
 58:21 118:7 131:4
 232:12
non-HCAs 24:21 30:21

31:10,21 42:16 134:1
134:18 166:6 177:5
177:12 178:7 187:7
215:11 219:9 237:8
239:5 244:1 248:2
non-high-consequen...
24:5
non-material 224:14
noon 36:12
Normal 193:18
normally 5:3 67:12
North 1:11
notably 230:3
notch 121:12
note 38:17 125:6
127:14 130:18 167:19
noted 38:16
notice 19:4,17 80:7
notification 27:19
46:15
notifications 33:21
notify 27:21 46:17
noting 207:19
NPRM 6:9 20:7 21:22
22:7 23:14 24:15
25:18 33:3 41:4 192:2
number 10:10,19 12:9
15:6 25:20 52:19
72:11,13 74:8,9,15
74:17,22 100:17,19
115:12 122:11 131:22
160:6,8 161:9 171:9
192:5 198:17 211:13
218:21 232:6 236:18
253:3
numbers 71:12 75:14
84:15 86:2 120:20
125:19 161:7 202:7
211:21 227:3,8
233:16,22 252:20
numerous 175:7

O

O 26:12 27:18 42:15
46:15
O-rings 137:16
object 219:17
obligated 75:2 168:21
172:17 173:2 196:10
198:6
obligates 172:12
obligation 139:7 196:5
239:13
obligations 173:21
obligatory 152:20
observation 226:10
obvious 6:13 7:14
249:14

obviously 5:12 6:5
14:12 175:12 209:18
227:17
occasionally 16:18
occasions 82:7
occur 45:9 127:3
offense 103:10
offer 109:18 124:2
203:12 216:14 228:20
250:10
Office 5:13,18,20,22 6:1
6:4
offices 5:19 16:19
Official 2:3
offshore 53:19
Oklahoma 191:16
old 231:12
OMB 6:16
once 5:15 83:2 96:21
111:13 143:15
one's 20:2
one- 220:3,16 222:15
240:5
one-offs 227:18
one-year 30:4 32:6
118:6 221:20 239:4
one-year/two- 118:14
onerous 69:5
ones 74:19 101:20
201:1 212:4 227:12
ongoing 201:14
onshore 26:18 42:22
open 9:5 50:13 51:14
81:1 128:8 156:9
opening 156:6
operate 67:11,14
operates 121:15 183:12
operating 27:3,6,9,11
28:2 38:21 39:2 43:5
43:7,10,12 46:21
67:20 121:11 122:1
150:8 156:10 237:22
operationalize 107:5
operations 87:21
operator 12:9 38:10
75:18 77:16 84:1
85:13 86:8 104:4
120:22 121:4,19
150:5 173:20 174:17
196:5 204:4,8 240:11
251:12
operators 12:22 27:7
27:21 28:6 31:17
34:15 43:8 46:17 47:3
50:19 56:7 67:8 75:2
76:12,19 81:14 89:20
97:6 122:21 123:13
130:20 131:19 135:4

136:8 141:12 170:7
170:14,17,22 171:17
171:18 173:16 177:19
203:5 211:10 216:18
239:12,13 240:16
241:1,9 243:10
opinion 206:8 251:21
OPP 137:16
opportunity 51:2 54:15
66:10 135:10 202:8
opposed 101:22 108:10
123:8
opt 73:7
optimal 66:3
optimism 71:9
optimize 66:11
option 56:5 163:14
200:15 221:12
options 38:19 39:3,7
202:4
orange 142:10 147:1
order 33:15 122:11
246:14 252:7 255:14
orderly 33:16
orders 255:20
organization 227:15
240:21
organizations 255:6
organize 3:18
original 124:19 198:18
212:12
originally 20:7,21 22:7
198:15 202:16
Osman 62:15,15 63:9
126:12,12
ought 94:10
outside 51:1 78:3
124:21 168:5 218:15
222:6
overpressure 150:7

P

P-PIC 192:15
P-R-O-C-E-E-D-I-N-G-S
3:1
p.m 128:15 165:6,7
181:13,14 187:1,1
217:4,5 256:22
PAC 64:7
page 45:15
pages 176:10,11
pairs 239:8
PALABRICA 2:6
paragraph 98:20
104:22 117:1,8 243:1
243:10,16
paragraphs 58:10
116:14
parameters 226:11
paren 73:17 74:1 94:21
95:7
parens 75:12,22 94:18
110:20
parked 111:14
part 22:19 45:7 58:2
71:2 93:9,18 95:15
96:17 149:20 150:2
155:7,9 169:12,13
190:8 193:2 197:19
207:21 229:7 240:15
particular 84:2 86:15
89:20 101:21 102:6
105:6 124:11,18
125:20,21 126:6
169:13 188:11 236:17
particularly 121:7
127:21 168:17 228:16
pass 11:10 67:22
216:17
passed 251:7
passes 45:2 49:4 61:15
246:7
path 154:4 209:16
229:15
Patrick 123:18
pause 140:1 220:8
223:3 225:5 231:21
paying 97:6
PDCA 139:11
peak 40:3
Pearce 2:3 70:7,8 254:4
PECO 18:1 105:17
227:2
peeking 114:11
people 13:2,20 38:15
50:3 65:19 71:19
72:19 73:4 78:2,14,16
78:20 82:18,22 85:18
89:19 93:20 112:19
125:11 136:10 138:16
152:22 157:6 165:16
165:19 166:12 168:11
170:1,2,5 172:12
173:2 184:4 193:2,5
197:12,20 200:15
206:2 208:5 212:11
213:4 214:11,15
217:18,22 218:22
219:12 220:12 224:15
225:2 231:2 239:2,14
244:12 248:15
people's 173:15 238:7
percent 20:14 21:3,18
21:20 22:1,5 23:7,12
23:13,20 24:7,8,12,17
27:3 29:9,20 30:13,14

- 31:11,13 35:17 39:5
43:5 52:20 59:1,4
65:9,13 113:3 117:17
118:8 122:15 123:7
124:6 125:16,17
126:1,4,7 127:2
131:14,15,22 134:20
134:22 138:1 143:21
148:7,14,19,21 149:1
149:3,7,8 150:9,10,18
157:1 159:19 177:13
177:15 181:1 182:18
183:8,13 194:16,19
195:10,18,19,19,19
197:15,16 199:20
200:4 206:10,11,20
- percentage** 148:12
percentages 150:9
percolate 140:2
perform 127:5
performance 166:20
performing 103:20
period 27:11 43:12
65:16 89:4 91:2
158:15 166:10,21
167:8 178:7 187:7
195:21 200:8
- permanently** 106:17,19
106:20
- permits** 90:6,17
person 14:1
personal 57:8,11
personnel 27:6 43:7
perspective 71:4 196:1
207:14 233:22 239:18
240:8
- PF** 20:4,19 21:5 22:13
22:22 23:20 25:6,13
27:5 29:3 32:1,4,9
47:5 95:6 117:6
243:13,18
- PG&E** 9:20
- PHMSA** 3:5 4:20 5:11
5:17 6:16 19:9,12
26:1,8,20 27:21 28:5
28:18 29:6,16 30:7,20
31:9,19 34:21 38:8
46:18 51:20 52:15
54:5 57:5,21 59:10
64:7 79:3,8,9 81:10
81:10,16 82:10 86:20
92:6 96:13 117:22
122:9,18 123:22
129:11 130:8 131:1
132:3 142:10 149:11
173:17 178:2 185:22
186:6 187:9 204:14
205:7 207:8 209:8,17
- 209:21 210:13 211:4
221:11,13 225:7
233:11 234:3 236:12
236:17 237:11 244:1
244:16 246:16 249:15
250:2,14,16 251:2,10
255:8
- PHMSA's** 19:6,18 23:10
122:20 123:10,12
143:4 174:7 206:21
- phone** 44:17 158:3
phrase 26:15 28:21
42:18 117:2
- physical** 168:15
physically 162:11,13
163:1
- pick** 56:20 57:4 136:6,7
168:18 188:14 195:13
223:18
- picked** 35:10
picking 105:12 184:9
184:19
- picks** 195:15
piece 12:19 13:15 75:7
108:4 137:22 151:7
181:4,5 185:10
- pieces** 100:1
pig 144:15 159:8 168:5
168:13 196:20
- pig-able** 138:2 157:4,7
168:8,11 170:8
- pigged** 138:7 157:2
pin 254:22
- pipe** 9:22 10:2 28:12,15
29:9,20 30:13,15,16
33:6 34:22 47:9,12
59:3,5,6,6 67:19,22
79:13,16 80:4 112:2
113:1,21,22 115:18
117:10,17 118:8,12
121:15 122:2 132:8
132:22 140:12 144:15
149:6 153:3,4 157:9
164:15 171:6,11,13
183:4 197:6 205:22
206:15,18 211:9
223:19 227:17 232:19
- pipeline** 1:3,5,10 2:2
3:5 17:11 103:15
107:3 121:11,21
139:7,15 183:12
187:12 229:5 230:1
230:13 240:14 243:12
- pipelines** 16:17 26:19
35:2 43:1 50:17 64:14
64:18 67:10 76:14
120:16 122:7 178:4
pipes 67:19 127:20,20
- 128:2 152:3 157:6,14
168:5,8,11
- pit** 183:9,19,22
pits 32:16 134:3 177:8
place 4:7 75:13 78:20
87:18 92:18 101:4
104:20 106:6 107:6
107:14 139:16 154:8
154:12 160:13 185:12
214:3 222:14 231:3
- places** 53:6 67:2,5
102:19 105:13 139:14
238:6
- plain** 251:19
plan 66:10 88:20 124:4
124:18 256:16
- plan-ful** 154:17
planes 242:8
plays 99:16
please 46:3 199:13
251:13
- pleased** 4:3 51:1
234:19
- plot** 75:3 95:13
plots 74:17 85:13,18
103:19 172:14 173:3
196:7,7 198:8 204:5
- plug** 213:15
plugged 162:22 193:15
plugging 213:22
- plus** 29:8,10,19 117:16
117:17 118:7 203:1
point 5:10 19:22 39:18
78:8 82:20 83:12
89:11 90:21 91:22
100:13,15 101:22
102:16,17,21 103:1
108:3 132:13,18
136:4 141:8 149:10
149:16,18 150:4
151:2 152:4,8 153:17
153:21 159:7 162:6,7
168:20 169:6,8
186:15 196:15 197:2
197:11,18 203:3
204:15,18 205:7
206:3,21 207:18
208:19 210:5,6,20
211:4,22 219:12
220:14 234:10,11
- pointing** 57:16 108:3
points 10:12 76:6 91:11
126:13 175:10 209:14
209:15
- policies** 7:4 229:16
230:12
- policy** 4:8 5:21 6:6
229:15 253:18
- popping** 107:13
populated 161:15
population 195:21
portion 124:20 215:12
portray 87:13
position 3:18 18:6
98:10 158:1 163:13
172:11 237:12
- positive** 236:3
possible 34:12,14
120:21 121:4 246:15
251:11
- potential** 160:22
potentially 240:4
pounds 206:17
practicable 42:2 46:10
58:17 116:20 136:10
177:1 192:6 243:8
- practical** 12:8 13:8 14:1
14:22 15:12 164:5
165:22
- practicality** 87:1
practice 71:13 73:11,14
75:5
- practices** 51:2
PRCI 55:20
pre-read 137:5
preamble 9:1 11:18
13:6 17:7 18:17 180:3
248:17 250:6
- precise** 114:13 136:2
precisely 88:19
precision 114:17
predict 193:6 194:3
predicted 22:8 28:8
29:14,22 43:6 47:5
62:19 66:21 68:14,21
69:2 74:7 117:20
118:10 130:17 177:22
178:2 187:10 194:21
195:6 203:2 210:7
221:19 233:6
- predicting** 143:16
predictive 222:3
predicts 195:16 198:3
predispose 6:22
preemptive 160:14
preferentially 20:18
22:21 25:5 32:15
128:4 134:2 177:6
- preparation** 7:15
prepared 7:17 41:15
52:8 163:4
present 1:12 2:1 248:4
presentation 36:19
61:20 181:19
presiding 1:11
pressing 72:7 114:14

pressure 10:7,9,16 18:6
18:9,13 26:5,10,22
27:1,4,10,11,16 28:3
28:4,8,8 29:14 30:1
33:20,21 34:22 36:5
37:11,12,21 38:10,14
38:22,22 39:5,6,6
40:2 41:10 42:1,8,12
43:3,4,5,6,10,12 46:8
46:13,21,22 47:5,5
53:13 66:22 68:14
69:2 74:7 79:21 80:15
91:15,18 92:13 113:5
117:21 118:10 130:18
130:22 131:8 178:1,3
183:13 187:10 195:7
203:2 204:22 205:5
210:7 211:14,15,16
211:22 212:1,4,6,12
221:19 222:3 233:7
pressure-test 12:12
pressures 22:8 38:21
62:19 150:8
presumption 244:17
pretty 63:5 75:15 90:10
95:16 112:15,19
138:10 146:12 154:10
170:19 174:20 182:14
205:16 212:5 213:12
223:20 240:20 242:8
256:13
prevail 11:15
prevent 175:20 229:16
229:17
previous 249:22
previously-identified
35:5
primers 246:22
prior 29:13,21 62:22
63:12 64:4 73:16
74:21 77:9 95:3
153:20
prioritize 31:1 59:20
122:22 123:14
priority 156:17
pristine 122:2
proactive 160:14
probably 6:12 9:22
14:11 16:5 35:20
40:18 52:15 64:1 73:6
87:18 88:13 95:15
96:13 148:14,18,18
149:7 153:15 164:1
164:19 170:3 175:4
178:17 222:1,1,10
224:6 244:14 255:22
probe 139:19
problem 16:18 65:10

84:11 85:11 97:16
100:4 104:6 112:13
114:9,12 115:3,21
142:4 152:13 155:10
155:11 183:7 184:11
184:12,16 185:1,4,4
186:8,13 193:2
251:13
problems 71:20 115:4
116:5 164:10
procedure 29:5 117:7
proceed 244:17
process 5:11 6:9,12 7:5
7:8 8:6,7 252:17
processes 154:10
produce 18:8
producers 145:10
productive 86:7 89:2
profile 221:22 222:21
program 2:5,6 66:12
171:14 175:1
progress 139:9 229:21
project 167:6 194:10
projected 194:17
projecting 235:8
promise 248:18
promote 255:2
pronounce 154:1
properties 10:16 28:13
28:17 47:10,14
proposal 20:9 99:1,3
123:10 145:18 166:9
166:11 198:19 212:20
proposals 94:5
propose 19:6 58:6
233:5 242:21 255:15
proposed 19:4,13,15
19:17,19 20:6,7,21
21:13,18 22:3,17
24:15 25:21 28:19
31:14 32:14 33:3
41:19 46:4 58:12
116:16,21 122:19
124:9 127:15 135:1
143:4 167:12 176:18
177:16 182:6 192:2
198:15,22 199:18
234:1 243:2,14,16
255:12
proposing 23:10 38:9
54:5 82:4 160:5
182:11 205:18
proposition 83:15
protected 227:5,5,6
protection 150:7
227:19
protocol 247:18
proud 231:5

proven 50:20 167:1
provide 28:1 34:10
46:20 94:9 167:8
193:5 209:17 239:10
244:2 246:16
provided 55:6
provides 225:11 226:14
providing 7:16 14:11
144:4 170:22
proving 9:18,19 214:20
provisions 33:20 36:5
41:9,21,22 46:6,8
58:15 116:18 159:15
176:20 180:9 243:5
proximity 31:16 135:3
177:18
prudent 73:14 75:5
87:21 159:22 168:6
170:7 185:16
public 25:17 27:5 33:14
34:1 36:7,14 43:7
49:9,17 50:14 51:13
52:5 54:13 56:14 62:2
62:9,13 69:15 79:10
107:2 120:4,7 128:7
128:22 129:19 139:6
139:6 228:14
published 41:19 46:5
58:12 116:16 176:18
243:3
pull 84:7 171:4
pulling 62:5 171:13
punishing 78:21
purpose 74:22
purposes 84:16 221:18
purview 154:12
push 170:3 233:20
pushed 160:11
pushing 171:18
put 4:7,21 36:20 38:14
45:16 49:6,13,17
52:16 53:2,5 54:7
62:8 79:8 100:12
109:22 115:17 139:16
159:6 164:12 166:16
167:17,19 178:17
179:1 180:4 185:20
185:22 200:1,8,22
201:6 217:7 221:18
221:19 239:12 247:13
252:12 256:9
puts 89:2 107:6 199:21
213:10
putting 82:6 83:20
156:18 219:4

Q

QA/QC 129:14

quadrupled 160:9
qualifier 91:8
quarter 30:15
question 15:10 39:22
41:14 52:10,12 75:16
79:12,18 84:12 85:1,2
85:9 91:1 92:6 100:8
100:10 103:21 104:2
140:19 144:10 152:10
158:2 160:19 169:19
170:12 172:5,7,8
173:9 195:4 198:20
199:16 203:5 222:9
222:11 234:14 247:18
254:17
questioned 141:22
questioning 209:7
questions 7:8 41:14
133:5,17 135:6 140:3
141:18 146:21 192:20
198:1 202:10
queuing 213:13
quick 52:9 242:8
248:15
quickly 90:10 235:11
246:17 247:1
quintuple 153:3
quintupled 160:10
quit 217:17
quite 6:10 19:11 65:2
71:8 92:22 111:22
157:7 164:16 246:20
quo 166:1

R

R-string 211:7
raise 111:13
raised 186:19 251:5
ran 232:20
range 121:2 149:9
193:22 224:4 236:21
rapid 34:21
rate 34:21 85:6 93:21
123:7 136:2 143:19
144:9 155:18 167:7
183:13 196:21 200:13
201:15,16 202:17
203:6,16 204:12
213:7 222:11,13
225:8,10,18 226:12
226:15,17 232:7,10
232:17 233:16
rates 72:1 74:16 77:4
136:10 144:5 146:13
158:18 167:10 172:13
173:4 193:21 194:11
194:22 201:13 225:12
225:13 237:15 242:2

242:12
rating 184:5 187:10
ratings 185:6 186:7
ratio 80:15 111:4 131:9
 205:1 212:13 243:18
ration 205:5
rationalizing 158:4
ratios 66:22 67:3 131:1
re- 124:21 145:5 194:17
re-assessed 35:3
re-assessment 124:19
re-inspect 195:2
re-inspection 74:20
 158:14 159:3 194:6
 208:8 213:8
re-vote 158:14
reach 221:4
reached 231:19
reaches 210:6
reacted 235:8
reacting 141:9
reaction 56:14 212:22
read 12:13 38:1 45:13
 45:19 46:1 62:13
 101:2 110:19 117:9
 130:9,13 165:16
 200:7 250:7
readily 16:21
reading 103:9 107:22
 147:15 174:22
readings 65:4
readjusting 203:7
reads 41:4
ready 18:18 40:18
 60:12 118:20 152:20
 179:11,14 188:5,18
 188:21 244:22
real 16:14,22 64:7
 75:16 85:9 93:13
 107:15 130:12,13
 145:12 146:6 184:19
real- 109:16
real-time 94:16
realistic 72:1
realize 113:8,15
realized 204:19 211:9
realizing 38:21 191:17
realm 9:8
reason 17:8 53:7 79:18
 113:2 137:14 149:10
reasonable 42:2 46:9
 58:17 82:1 116:19
 176:22 213:21 243:7
reasonableness 255:13
reasons 89:5 147:11
 239:2
reassess 201:19,20
 202:9

reassessing 171:12
reassessment 131:5
 158:9 193:7
recalibrate 196:22,22
recall 128:21 256:2
received 19:21 25:18
 32:22 175:14 240:3
reciprocal 23:2 25:7,14
 80:2
reciprocals 67:17
 120:19 121:2,6
recognize 143:6 237:21
 241:7
recognized 232:3
recollection 77:20
recommend 115:11
 163:15 181:22 182:4
 255:4
recommendation 73:22
 115:14 163:10 185:5
 233:18 236:17
recommendations
 75:11
recommending 36:22
recommends 234:17
record 9:13,14,18,21,22
 10:3 12:12,15 13:9,16
 18:4,12,15 47:16 70:2
 70:5 82:16 112:7
 128:14,17 165:6,9
 179:20 181:13 186:22
 211:5 217:4 238:9
 247:14 250:21 256:22
record- 9:1 10:6
record-keeping 8:18
 9:12 11:20 12:18 13:8
records 12:10 15:9 16:2
 16:14,22 17:9 27:8
 28:9,10 31:18 43:9
 47:7 98:21,22 99:2,9
 99:14 100:3,5 102:3
 103:2,13 104:17,17
 108:17 118:3 135:4
 177:20
rectifiers 183:17
rectify 240:5
red 56:20 79:19 95:12
 115:15 130:2 131:6
 162:8 204:17 206:5
 211:1,17 212:5
 216:17
redline 96:8
redoing 108:9
reduce 122:11
reduced 27:9,11 43:10
 43:11
reduction 26:22 28:2,4
 28:8 33:21 37:21

38:14 43:3 46:21 47:1
 47:6 91:18 92:13
reductions 26:5,10
 27:17 33:20 36:6
 37:11,12 41:10 42:1,8
 42:12 46:8,14
redundant 35:21
reevaluate 196:12
reevaluating 203:7
refer 26:9 42:11
reference 26:16 31:15
 42:19 51:5 95:22
 104:20 105:10,14
 109:11 110:14 111:14
 126:17 135:1,17
 177:17 201:11 249:8
referenced 104:5
references 68:4 105:4
referencing 108:3,4,18
 108:21
referred 67:9 208:6
refined 23:18 24:16
reflect 41:2 47:16
 174:11 201:16
reflected 125:2 144:3
 251:3
reflection 219:19
regard 116:17 176:20
 180:8,9 186:1 243:4
regarding 21:17 22:7
 41:8 130:17 177:22
 192:2 246:17 249:19
regardless 68:1
regards 33:22 36:4,8,11
 41:21 46:6 49:9,22
 58:15
Register 41:20 46:5
 58:13 116:16 176:19
 243:3
regulation 35:22 92:8
 255:14,15
regulations 240:14
regulator 14:7 240:15
 250:4
regulators 16:8
regulatory 41:20 46:6
 58:13 116:17 176:19
 243:4 252:19 256:10
reiterate 123:4
related 5:21,21 9:9 10:8
 11:20 28:22 67:4
 101:19 127:14,15
 128:3 138:2 140:16
 141:7 148:7,8 150:18
 174:11 175:20 241:15
 252:12 253:9,9
relates 8:18 86:15
 105:1 161:12 247:19

250:3
relating 117:3
releases 137:15
relevance 85:1
relevant 71:13 137:10
 241:21 242:1
reliable 17:12
relief 137:16 148:16
 156:5 206:10
remain 21:9 22:15 23:9
remained 20:14
remaining 169:12
mediate 134:14
 168:22
mediated 131:2 237:7
 243:22
remediating 167:14
remediation 27:22
 46:19 131:9 132:14
 132:20 162:8 178:5
 187:11
remember 41:8 76:14
 80:13 108:19 140:11
 158:10 229:22 254:19
 254:21 255:2
remind 228:2 252:13
reminder 235:4 253:22
Remove 243:13
Removed 35:20 188:9
removing 255:14
repair 3:9,16 12:3 18:22
 19:6,11,13,16,16,19
 21:2 22:3 25:21 26:6
 26:16,18 28:22 29:1,7
 29:17,18 30:9 31:2,5
 31:10,19 35:14 37:13
 38:3 41:8,21 42:9,19
 42:22 46:7 58:9,16,20
 59:20 78:2 98:11
 105:20 116:14,18
 117:2,4,15 118:6
 122:8,14 123:7 127:8
 128:3 130:16 133:21
 134:18 137:6 139:2
 140:18 142:17 149:20
 176:15,21 177:3,11
 177:21 180:4,5,10,11
 182:19 200:14 202:3
 202:9 210:18 237:3
 242:22 243:5,6,21
 253:7
repaired 27:15 35:12
 46:12
repairing 155:12
repairs 26:10 34:9
 42:11 80:19 122:12
 122:16 138:12 140:22
 141:13 150:16 154:18

repeat 102:18
repeating 105:12 108:6
replace 26:14 42:17
 183:21
reply 51:21
report 86:21 155:7
 256:8
reported 65:12
reporting 34:15
represent 161:20
represented 86:16
 126:1
represents 72:7
require 27:7,20 28:6
 29:2 31:22 43:8 46:17
 47:3 52:21 104:3
 117:5 183:20 194:17
required 26:5 27:17
 28:1 36:20 37:12 38:3
 42:8 46:14,19 52:3
 232:8
requirement 35:21 40:1
 63:19 68:12,16
 127:15 216:21
requirements 27:18,19
 27:20 46:15,16,17
 103:16 127:4 128:3
requires 35:13 204:4
requiring 21:8 30:8
 58:19 251:6
research 215:5 256:9
resistivity 227:9
resources 106:9 107:6
 170:10
respect 207:2
respective 255:5
respectively 23:3
respond 51:16 85:4
 87:9 99:5 112:5
 126:18 127:6 151:9
 151:21 152:16 153:1
 153:19 154:7 161:16
 170:10 172:7,11
 173:20 201:18 237:8
responded 96:22
responding 85:22
 89:14 96:4,19 167:3
 184:4 201:16 229:5
responds 220:1
response 37:16,19 64:4
 69:15 70:19 85:17
 86:5 99:6 100:20
 123:1,15,20 124:1,17
 125:8 126:17 127:8
 127:13 128:3 138:4,8
 143:20 144:16 152:20
 154:2 162:19 164:18
 166:7 167:8 176:3

178:19,20 181:16
 188:3 194:15 196:13
 197:1,9 201:5,7 214:8
 218:7,11,14 219:15
 220:4,15 221:20
 226:1 233:11 242:3
 244:9
responses 62:20 124:7
 126:2,6 143:14
responsibilities 241:2
responsive 161:11
 231:1
rest 97:14 230:7
results 38:13 123:21
 124:5 126:8 159:9
 193:6
resumed 70:3 128:15
 165:7 181:14 187:1
 217:5
retain 31:17 135:4
 177:20
retroactive 26:3 42:6
rev 213:20
review 5:18 6:5 19:4
 123:6 127:22 185:22
reviewed 251:1
reviews 57:14 166:13
revise 26:17,21 42:21
 43:2 59:13 117:8
 130:16 133:21 134:22
 177:3,16,21 243:16
revised 19:15,19 20:9
 20:18 21:1,2 124:14
revising 26:8,20 30:20
 31:14,19 236:13
revisions 25:21 27:14
 32:14
revisit 111:16 159:3
 212:21
revisiting 213:3
RFPs 198:16
rhythm 73:14
RIA 212:3
Rich 7:10,11 8:5,16
 44:15 47:19 48:18
 61:7 91:6,7 119:16
 189:16 245:16
RICHARD 1:19
right-hand 67:5
rise 25:2 156:2
riser 20:8,10 21:15
 30:12 58:22
risers 31:1 59:15,20
rising 125:11
risk 78:17 87:2 106:6
 106:11 161:12 220:17
 221:22 222:21
risk-based 160:20

river 181:3 183:7,21,22
road 90:6,7 181:3 184:3
 238:5
Robert 1:17 2:5 43:15
 44:20 45:20 47:17
 48:22 61:11 118:16
 119:20 178:11 190:1
 245:21
Rockwell 33:9 117:13
Rocky 7:11 91:7
role 4:13 46:4
roll 48:1 118:19,20
 178:13 179:11 188:2
 188:5,19 244:22
roll- 43:17
roll-call 43:20 60:11,12
ROLLET 1:16
Ron 17:22 18:1 44:13
 48:16 61:5 105:14,16
 119:14 189:14 227:2
 245:14 256:14
RONALD 1:15
room 170:1 215:20
 224:14,15
rule 5:7,20 6:14,17,17
 11:18 16:7 19:20
 21:14,19 22:4,20
 41:19 58:12 116:16
 159:20 160:1 168:9
 176:18 228:11 231:7
 243:2 252:15 253:3,6
rulemaking 2:4 9:3
 14:12 19:17 205:19
 240:19 252:13 253:21
rules 6:3,5 169:22
 253:1 255:10,12
run 130:20 132:10
 196:12,20 198:7
 223:15 225:2 232:5
running 78:14,17
runs 243:13,13

S

S 242:13
safe 27:1 38:10,20 43:4
 222:18 254:20
safeguards 105:7
safety 1:3 2:2 17:10
 27:5 28:1 43:7 46:20
 84:8 86:13,15 139:7
 139:15 143:21 152:2
 159:2 161:5 162:12
 173:1,10 174:1
 195:10,11 196:16
 201:19 202:22 203:4
 203:19 205:4 206:13
 206:14 213:15 219:13
 229:6 230:1,13
 235:13 238:16 239:6
 240:14
sampling 168:12
San 228:15 229:1 230:5
 231:14
Sara 1:16,17 17:4 44:5
 44:22 48:8 49:2 52:8
 60:19 61:13 79:2
 83:16,17 86:9 98:14
 98:15 104:11,12
 108:16 119:6,22
 140:7 141:14,16
 154:21 160:16 169:5
 171:8 176:5 187:3
 189:6 190:3 207:5
 224:20 228:9 230:15
 233:9 236:9 245:8
 246:1 248:13 252:4
 254:8 255:6,7,18
Sara's 146:21 182:10
 216:4
saw 141:18 174:19
 212:20,22 248:22
saying 37:15 39:9 85:5
 110:4,7 135:15
 138:17 152:15 154:3
 163:14 169:21 185:2
 191:21 222:3 236:7
 237:2 239:2
Sayler 2:6 217:6
says 9:21 13:3 65:22
 81:18 98:18 109:21
 110:20,22 111:6
 131:14 251:3
scale 84:16 87:4
scare 227:15
SCC 20:22
scenarios 11:12
schedule 3:11 7:1
 22:16,20 27:22 37:16
 37:19 46:18 62:20
 85:22 88:11,13 91:3
 92:2 106:2 194:8
scheduled 21:11,12
 22:9 23:4 24:1 34:6
 38:4 63:5 68:19 73:22
 85:8 86:17 88:5 92:1
 95:1 109:21 130:17
 177:22 243:5,21
scheduleds 73:20,21
schedules 26:7 37:14
 38:3 42:10 187:11
scheduling 63:15 69:4
 122:10
science 56:8 224:15
screen 181:19 253:7
scurrying 101:9
seam 20:17 22:2,5

- 24:18 30:17 32:19
59:7 116:22 117:5
127:16,19 128:1,5
133:22 134:4,5,7,13
177:4,8,9
seam- 28:19
seam-cracking 20:22
29:2
seamless 9:22 10:2
seams 20:19 22:22 25:6
second 21:17 24:7
37:11 43:14 47:18,20
60:6,7,9 62:18,18
63:4,10 109:20
118:16 135:10,12
146:2 160:19 178:10
178:11 179:5 180:12
186:19 187:18,22
196:18 221:5 244:6
250:8 253:6,12
seconded 118:18
seconds 43:15
secretary 4:8 5:18,20
6:1 254:3
section 34:4 42:4,5,7
42:11,14,17,19,21
43:2 46:16,19 47:2,10
47:14 63:10 66:18
70:17 81:6 94:22
103:15 104:16 105:3
105:6,10 108:1,20
135:1,2 166:4 177:16
177:17 180:21 182:10
186:1,3 201:11 204:4
244:3
sections 42:13 102:18
104:6 110:11 176:16
236:13
seeing 38:13 39:11
85:15 94:5 115:3
120:8 128:8 131:22
138:22 140:15 156:19
171:11,12 172:21
197:19,21 203:20
204:20 205:14
seen 38:18 157:19
171:9 174:11
segment 13:18
segments 26:12 42:15
138:2
selected 113:7
self-explanatory
190:19
send 237:11
sense 11:10,11,14 12:8
12:8 16:10 18:5 77:14
81:6 84:15 86:2 87:4
87:15 96:14 97:17
127:12 158:19 160:21
162:20 163:4 191:6
191:22 194:19 199:1
216:3 222:16 234:5
sensitivity 87:16
135:22
sent 247:21
sentence 110:19 162:3
separate 58:2 109:14
148:21 169:9,9 179:2
250:12,17
separately 231:19
separation 122:19
123:11
serious 97:10 158:15
seriously 5:3 233:18
serve 91:16,21 92:14
192:19
serviceability 26:15
42:18
set 39:19 74:14 84:5
93:19 105:4,6 106:6
135:7 139:5 150:9
162:18 184:5 185:8
206:10
setting 111:5 141:10
194:7
settle 218:20
settlement 215:1
seven 66:1 132:17
145:5,22 194:5 195:1
204:18,21
seven-year 194:17
199:22 200:8 201:3
204:18 240:4
severity 167:10,10,11
shaking 214:22 222:17
shape 82:20 87:15
shaping 93:22
share 126:13 255:8
256:11
shared 171:8
shares 122:7
sharp 136:1
shielded 225:15
shielding 174:14 175:4
226:18 227:18
ship 93:17 135:17
short 69:17 91:2 171:21
182:14
shorten 158:19 173:6
shorter 172:18
shortly 62:6,10
shoulder 92:3
shove 154:13
show 34:9 53:7 124:6
143:9
show-stopper 11:2
showed 130:20 141:3
248:17
showing 19:16 130:16
137:6 142:5 212:6
214:5
shown 30:17 59:8
shows 8:10 116:4 137:7
144:19 175:18
side 35:4,5 55:21 63:8,9
63:10 67:6 89:17
106:12 114:10 122:19
122:20 123:11,11
124:2,10 125:6
129:19,19 165:4
172:2 176:5 190:9
206:5 238:1 251:16
side/top-side 125:3
sight 229:20 256:13
sign 6:16
signature 12:11 13:13
251:4,6,8,12
signed 5:15
significance 142:14
significant 6:3 20:22,22
28:19,20 72:8 87:3
101:20 116:22,22
137:2 142:10 147:1,2
152:5,11 169:3
235:20
significantly 164:6
similar 40:22 105:1
123:21 178:2
simple 71:19
simplifies 77:22
simply 99:3 115:22
200:14
Simultaneous 223:13
225:16 226:7
single 15:5 18:4 91:14
sir 33:11 50:15 126:11
232:3
sit 192:16
sitting 56:19 217:14
235:2
situation 16:4 57:14
84:4 86:5 151:21
situational 27:5 43:7
six 21:18,20 24:7,8
30:12 52:20 59:1 65:8
145:5
sixth 21:7
sizable 112:15
size 59:3,6 71:10 93:2,5
93:6 98:3,13 99:19
143:16 160:10
sized 144:6
sizes 151:22
sizing 110:4
skyrockets 68:18
slide 24:3,3 34:8 40:13
40:16 47:22 49:6,14
49:17 50:8 51:5,13
52:6 62:16 63:10
122:9 129:12,21
130:1,13 133:4,6,19
137:4 138:12,13
141:17,18 142:8
143:9 144:19 146:20
151:3,3,4,12,16 169:9
181:18 182:2 186:3,3
248:22 249:20,22
251:1 252:12
slides 3:15 7:16 19:10
19:14 20:1 21:10
25:22 34:8 36:21 37:1
40:12 53:2 55:6 62:1
67:3 70:12 124:13
129:3,17 130:9,20
133:7,8,12
sloping 206:6
slotting 134:5
slotting-type 32:19
177:10
small 32:16 71:11
130:12 197:5 228:19
smaller 111:6 146:13
156:22 240:10
smarter 146:7
smoking 228:8
smooth 21:19 30:12
58:22
SMYS 34:22 47:9 80:17
113:9 115:10 183:13
193:10 194:16 197:16
199:20 200:4 247:14
snag 98:2
so-called 121:10
soil 227:9
solution 109:18 196:3
solutions 71:20
solve 185:3,4
solves 186:8
solving 185:1
somebody 53:18 84:6
180:22 223:2,2
soon 217:1 254:9
sooner 170:22
sorry 22:17 35:19 55:2
63:10 96:7 105:15
133:13 147:17 148:4
155:14 176:9 179:12
180:16 187:14 188:6
189:18 233:19 250:18
sort 10:4 14:22 53:16
55:14 62:16 70:22
75:2 78:3 83:14,18

84:4,9,10 86:14 90:10
 94:16 99:18,21
 105:17 110:10 111:2
 111:5 154:13 161:12
 202:20 225:12 228:8
sounding 75:6
speak 70:21 190:10
 240:1,2
speaker 217:13
speaking 98:7 223:13
 225:16 226:7 239:22
Specialist 2:5,6
specific 19:6,13 83:21
 100:10 101:19 104:21
 108:11 236:17
specifically 9:9 10:19
 25:19 32:22 41:7
 105:4
specified 27:16 28:11
 46:13 47:8 113:4
speed 4:1 247:2
spend 13:10
spent 249:21
spin 90:11
spirit 250:2,22 251:2,9
split 219:6,7,8 252:18
splitting 112:16 180:18
spoke 131:19 249:10
spot 33:4,6 117:9,9
 241:22
spread 145:14
spring 92:3
squeeze 114:16
stack 218:20
staff 5:8 7:13,22 61:20
Stafford 1:11
stage 111:5
staged 162:20
standard 18:6 98:17
 101:18 168:22 172:13
 197:9 225:12 226:13
 226:15 227:7 242:13
 242:13
standards 2:4 17:19
 243:14
standing 76:14 219:17
standpoint 77:15 87:22
staring 76:15
start 15:9 69:18 70:13
 71:17 73:4 79:11 90:1
 90:19 93:10 107:13
 125:4 213:22
started 6:9 103:14
 205:9 220:12
starting 130:15 158:16
starts 235:10 254:14,21
state 16:1 63:17 231:10
 231:13 240:15 241:1

250:4,21
stated 34:6 67:3 82:7
 251:2
statement 140:15
statements 251:5
states 13:1 14:14
stats 53:17,20 54:7
status 166:1 252:22
statutorily 4:7
stay 75:17 78:12 150:2
 227:10
staying 158:5 197:13
steel 33:6 117:10 227:4
 227:4,7
steep 249:16
step 5:6 6:15 114:19
 164:7 218:8,18
 219:11 236:3
STEPHEN 1:14
stepped 221:7
Steve 2:6 15:19,20 19:1
 19:5 37:9 38:7,8
 40:20,21 43:21 48:2
 51:16,19,19,20 52:13
 52:14 54:16 56:22
 57:5 60:13 79:6,7
 81:4,9 82:16 83:12
 103:3 111:17 112:17
 112:20 115:3 116:3
 118:22 129:7,10
 130:5,7 133:18 135:6
 140:21 142:19 146:17
 146:19 148:10 151:1
 151:19 154:2 156:22
 169:20 171:8 178:16
 180:22 188:6,22
 191:9,9,11 193:2
 198:11,13 199:4,8
 202:12 204:13,14
 207:18 210:3,4,5,12
 214:21 215:8 220:1,6
 221:9,10 222:14,16
 226:3,5 227:22
 233:22 234:3 236:7
 236:10,22 238:11,22
 239:9,20,21 245:2
 247:4
Steve's 36:18 207:14
 219:11
stoned 215:20,21
stop 136:14,17 153:8
story 141:19,20
STP 80:11
straight 108:8
straightforward 78:1
strain 20:11 21:16,21
 22:6 24:9,14,18 25:2
 30:18 31:4,6,8 50:18

50:21 51:9 52:10
 55:10 56:2,6 59:9
 60:1,2,3
Street 1:11
strength 28:12 47:8
 113:4 211:9
stress 20:8,10 21:15
 25:2 28:20 29:1 30:11
 31:1 58:22 59:15,19
 80:13 116:22 117:4
 152:1 183:4 184:8
 194:3 195:12,16
 197:4
strictly 67:18
strike 26:21 28:18 43:2
 116:21
striking 74:21
strong 209:14
strongly 114:21
structured 23:15
struggling 140:18
study 208:5
stuff 12:13 16:20 33:15
 94:17 95:12,19 96:5,8
 97:13 109:10,16
 143:1 151:4 157:1
 160:10 171:3 178:17
 241:5 256:15
sub-bullet 62:18
subject 122:1
subjected 157:11
subpart 10:9 26:12
 27:18 42:15 46:15
subsequent 19:21
subset 156:21
substance 16:4,9
substantive 16:3
success 93:20
successfully 86:4
sudden 153:6
suddenly 84:18
sufficient 45:18 51:10
 179:22
sufficiently 204:10
suggest 25:20 27:13
 33:1 68:2 111:22
 112:21 113:16 115:13
suggested 26:1 34:21
 66:22 113:19
suggesting 56:5 215:5
suggestion 16:13 81:5
 142:3 252:3
suggestions 36:18
suggests 26:8,20 28:5
 28:18 29:6,16 30:7,20
 31:9,19 82:12
summarize 57:18 252:9
summarized 25:22

36:18
summary 19:12 155:20
Sunday 254:14,15
super 114:13
suppliers 145:10
support 108:10 123:9
 123:22 204:11
supported 208:7
supporting 86:20
supports 102:5 104:18
 167:16
suppose 84:1
supposed 17:20 74:3
 76:16 97:10 173:6
 196:6 225:19
surge 221:4
surprised 161:8
survey 10:18
surveys 174:18
susceptible 127:21
suspenders 239:7,8
sweeping 157:8
switch 96:1 110:7 111:6
switching 109:19
sync 102:20
system 18:10 83:19
 92:5 98:1,10 99:15
 145:11 149:4 159:13
 159:19 168:1 171:13
 175:3 225:20
systems 139:3,12
 149:13 160:20 219:2

T

table 66:20 115:17
 145:16 149:21 155:1
 164:2 191:14 199:6
 203:9 220:17 238:17
tail 193:20 224:1
taken 6:10 73:17 75:12
 75:22 83:8 96:21
 145:19 162:11 235:11
takes 77:18,21 190:19
 201:5,5 220:17
talk 3:17 9:11 66:18
 76:22 95:20 97:18
 108:18 121:8 127:4
 149:20 160:7 170:20
 182:15 238:4 250:17
talked 99:22 100:1,6
 109:1,17 232:9
 247:15
talking 9:6,9 10:6,7,15
 10:18 15:9 63:3 76:7
 78:9,11 85:3 87:11
 92:19 95:1 96:16
 100:13,16 101:6
 104:8 120:20 137:12

- 143:7 146:10 151:19
152:12 160:14 162:4
167:21 169:22 170:16
191:2 205:21,22
217:18 218:18 220:13
224:2,3,17 227:4
237:15 238:18 256:10
- talks** 63:11 198:16
tangibility 242:11
target 219:7
task 241:8 254:10
taught 184:17
team 5:16 209:19
teams 76:20
tearing 75:7
technical 76:19 77:15
159:18 241:21 243:19
technically 42:1 46:9
58:16 116:19 146:12
176:22 214:13 243:6
technology 56:9 64:20
64:21 65:1,6,9,12,19
82:9 92:11 93:8,18
tee 3:11,15 40:12
teleconference 152:10
telephone 1:15
tell 6:19 74:16 103:5
104:3 125:17 130:8
132:4 138:3 217:11
223:2
telling 74:18 193:9
196:7,20
tells 138:3 139:15
141:19 147:10,11
159:17 196:11
temporary 28:2,4 46:21
46:22
ten 3:15 217:1
tent 107:19 109:13
136:21 199:9 207:6
tents 14:16 36:13
122:20
term 52:22
terms 84:14,15 114:2
142:16 242:12 255:9
terribly 15:13 86:6
terrific 230:19
Terry 1:18 44:7 48:10
60:21 119:8 189:8,8
test 10:9,10,15 11:10
18:7,9,13 79:21 113:5
208:13 211:14,15,16
211:18,22 212:4,6
216:18 254:14
testimony 36:8
testing 208:11,14,22
tests 10:7 99:15 212:2
text 4:12,14
- thanks** 3:13 8:16 14:10
41:13 54:9,15 69:9
86:11 105:16 128:20
246:12
thematically 57:2
thicker 111:3 113:10
114:18,18 115:2,5
thickness 21:4 23:20
28:15 29:9,20 31:12
35:17 47:12 79:17
80:5 114:12 117:17
118:9 134:21 177:14
181:2 186:11,12
197:7
things 4:22 8:2 14:4
56:9 66:10 71:18 72:2
72:3,12,21 73:5,10
74:2 75:18,19 77:3
83:11 85:14,15 87:4,5
87:14 90:1,13,15,16
91:4 93:7,11,12
106:10 121:20 129:16
133:1 135:8,21
137:16,16 138:20,21
139:1,10 145:11
149:3,6 150:6,11
151:2,13 155:12,18
156:19 157:8 158:17
162:21 170:15 173:18
174:6 175:6 181:9
182:17 195:18 200:14
201:19 238:5 255:16
thinner 113:11
third 20:13 21:5,22 27:4
61:18 62:9 94:17
166:15 196:19 251:3
253:11,20
third-party 34:14 148:9
thorny 216:9,10
thought 53:8 57:8,11
66:19 80:6 112:2
114:16 134:15 172:2
174:1,8 179:21
215:13,15 218:7
220:9,12 228:8,9
230:16 256:13
thoughtful 91:3 154:17
thoughts 11:19 12:1,6
17:21 57:4 217:16
threat 35:16 86:1
125:22
three 28:13 29:12 36:20
37:1 54:1 92:20
100:17,19 102:19
117:3 123:6 132:1
133:10 145:5 151:18
151:18,21 152:5
161:20 169:8 176:6
- 183:14 193:10 202:20
235:15 239:7 246:4
249:18 252:18 253:1
three-times 232:16,16
threshold 84:3,5 93:3
131:10 143:21 185:8
186:8 200:15
thresholds 187:11
throw 12:5 218:3
219:22 228:9 229:8
235:3
throwing 136:21 223:9
throws 96:6
tick 138:12,14 141:4,4
tied 10:10,19 113:3
tier-ing 161:5
tight 72:10
time-based 143:14
time-dependent 117:6
timeframe 6:7 27:16
46:13
timeout 36:15
times 20:4,20 23:2,21
23:21 25:7,8,14,15
27:4 29:15 30:1 32:1
32:4,5,9,10 43:6
68:15 81:16 85:18
89:21 90:18 109:20
109:21 110:6,22
113:2 115:19 117:21
117:22 118:11,12
183:14 195:7 202:20
210:8 222:4
timing 6:18 80:18 180:5
180:11 205:12 243:5
today 3:8,9,14 5:9
11:17,17 12:3 50:3,22
57:7 63:18 107:2
163:5 166:1 192:1
251:17 256:19
today's 3:11
told 144:13
tolerance 68:21 71:21
72:19 81:13,14,15
82:3 83:1 85:20 118:1
140:16 206:12 211:11
216:19 217:17 219:8
235:21 243:11
tolerances 73:5,9 75:19
77:2 78:10,11 82:19
83:19,21 85:14 87:14
103:17 203:14,15
220:3 235:11 237:18
Tomar 54:15 55:2,2
68:10,10
ton 84:18 220:17
tool 21:4 68:21 71:21
72:19 73:5,8 75:19
- 77:2 78:10,11,15,16
81:13,13,15 82:3,9,17
83:1 87:13 103:17
118:1 130:21 132:10
136:11 140:16,17
159:18 203:13,14,14
206:11 211:11 216:19
217:17 219:7 220:3
235:11,21 237:18
243:11
tools 29:11 65:5 71:4
71:14 82:8 92:9,18,22
94:1 117:19 135:22
136:1 138:16 140:13
149:12 175:19,22
185:14 239:11
top 68:20 69:3 71:17
94:18 96:16 107:22
122:19 123:11 219:14
222:10
top- 124:1
top-side/bottom- 124:9
topic 7:7 9:15 11:19
12:3 40:11 41:12
49:16,18 126:15
128:8
topics 3:20 37:3
topside 20:9 21:17,19
24:8 30:12 31:3 59:1
59:22
total 126:2 133:10
218:9
totally 97:19
touched 132:17
touches 134:13,14
toughness 99:11,15,22
113:12
town 7:3
traceable 8:20 17:12
251:18
track 87:22 109:15
196:4 198:8,9 213:16
252:21
trade 219:20
trades 219:21
traditional 121:16
traditionally 227:16
training 191:17
TransCanada 50:17,19
64:14,16
TransCanada's 52:1
Transfer 66:16 120:10
translates 126:5
transmission 26:19
40:4 43:1 91:10,14,20
105:21 106:18 137:7
140:12 145:11
ransom 136:16

transparent 218:11
 219:3 221:2 225:18
transportation 1:1 2:5
 2:6 7:6 256:9
trap 159:8
trends 34:9,18 127:1
 155:22
trick 254:17
tried 80:17 129:12
tries 157:6
trigger 82:2 182:15
tripping 175:6
true 77:17 140:14 141:5
truly 93:16
trust 116:1,3
truth 103:5
try 8:13 73:13 74:6
 120:9 126:18 157:7
 163:20 166:11 171:20
 230:20
trying 4:12 38:6 41:11
 54:7 56:19 57:3 70:22
 71:18 72:14,16 73:1
 73:17,18,21 74:6,15
 74:16 75:1,9 76:18
 78:19 80:20 82:20,21
 83:4,12,17 86:7,22
 90:21 93:11 95:4,9,9
 95:12,14 96:7,15
 97:12,17,18 98:16
 101:17 103:11 106:5
 107:2,5 108:14 109:7
 109:15 110:14 111:9
 112:8 114:19 124:12
 125:4 130:8 131:6,17
 132:6,18 134:10
 135:21 136:6,7,9
 144:10,22 150:13,18
 151:15 155:3 157:14
 162:18 164:4 169:17
 170:6,9 173:22 184:1
 191:15 194:2 195:5
 195:13,20 197:8
 198:14 211:5 216:11
 217:21 218:9,19
 221:1,4,21 237:20,21
 238:4 241:16 248:15
turbulence 164:1
turn 19:1 33:13 36:9,14
 49:8 69:13 90:3
 128:19 129:7 142:14
 246:10
turned 54:12
turning 56:12
Turpin 1:18 44:7,8
 48:10,11 60:21,22
 119:8,9 189:8,9
TV&C 248:17 249:8

250:4 251:11
TVC 8:20 9:6,12,13,17
 15:3,13 28:10 104:17
 111:14,15
tweak 8:2
tweaking 129:2
tweaks 5:4 129:4 226:3
tweet 255:3,4,5
twist 85:2
two 22:1,4,17 23:10
 24:12,17 26:11 27:4
 29:17 30:14 33:7 37:1
 39:17 40:10,12 53:18
 55:9 59:3,13 62:1
 66:2 110:11 117:11
 120:17 129:11 133:12
 133:12 144:17 145:3
 145:21 146:4 152:17
 153:6 154:1,14 159:3
 159:15 164:18 167:1
 167:15 171:3 176:10
 176:11 182:20 192:18
 193:21 201:22 202:4
 210:16 213:6 218:15
 218:16 219:8,9,16
 220:20 222:8 224:7
 232:11,14,15 235:8
 236:13 237:2,3,9
 239:5,8 244:1 249:14
 249:22 252:18 253:12
 255:9
two- 220:3
two-way 7:20
two-year 30:4 31:5 32:7
 118:7 131:3 136:6
 222:15 235:19 240:5
two-years 220:16
type 57:13,14 82:8
 120:7 125:22 127:21
 128:1 133:1 134:5
 149:3,6 151:20,20
 174:21 229:17
typed 165:18 242:17
types 49:11 98:8 175:6
typically 72:4 120:18
 121:11 201:18 227:9
typing 94:15 108:14

U

Uh-oh 130:13
ultimately 86:13
unacceptable 122:3
unanimous 8:7,10
unanswered 172:8
uncertainties 103:18
 121:20 219:1
uncertainty 203:13
 243:12

unchartered 136:9
undamaged 122:2
undergone 121:22
underlying 86:14
underneath 139:20
underpinning 242:5
understand 57:16
 62:21 86:8,12 97:7,14
 101:15,21 139:19
 144:11 146:15 160:18
 161:4 163:12 169:18
 169:21 170:1 190:16
 191:20 207:3 209:11
 224:16 239:13 240:12
 241:1 250:5,21
 255:11
understanding 17:10
 40:7 82:19 105:2
 167:19 173:15 179:1
 190:20 244:3
understood 185:15
 222:6
unfortunate 230:10
unfortunately 216:11
 251:7
unintended 184:10
 200:17
unity 74:17 75:3 85:12
 85:18 95:13 103:19
 172:14 173:2 196:7,7
 198:8 204:5
unknown 39:4
unmitigated 225:17
unnecessary 145:9
unraveled 139:4
update 255:22
updates 124:8
updating 124:1
uptick 137:8,18 147:14
urgency 73:18
urgency 87:13,16 89:12
urgent 72:6 73:19 85:7
 86:5 87:12 88:4,9,11
 89:13,16 90:2,2,14
urgently 85:5 88:16
 89:1
usage 81:13 92:4
use 28:6,13,16 47:3,10
 47:12 63:19 71:5,7,19
 87:13 91:8 92:10 93:9
 97:8 98:17 111:3
 114:3 139:8,11,12
 145:12 146:14 151:9
 158:13 186:7 187:10
 196:9 204:5,11
 206:17 208:10,22
 244:3
useful 57:20

uses 81:15
usually 35:11
utilize 67:8

V

valid 12:18
valuable 209:8
value 7:13,19 70:21
 92:10 107:14 167:4
 235:15 237:9 242:6,9
 249:15
values 28:7 47:4,6
valves 148:16 206:10
variable 235:18
variables 7:1
variations 15:14
varies 11:8
variety 10:11 98:8
 175:9 253:8 255:1
various 5:19 18:12 39:7
 82:12 91:16
vary 9:14
varying 8:14
vast 64:1 137:13 218:12
VCLF 22:21
vein 10:4
vendor 159:18 160:11
venues 225:11
verbally 180:2
verification 8:20 251:18
verification 75:3
verified 118:2
verify 51:9
verifying 50:1
version 191:14
versus 53:9 68:18 79:5
 84:14 85:21 86:17
 88:20 120:13 161:15
 234:15
vertical 71:6
vertically 235:3
vetting 5:11
Vickers 33:10 117:14
victims 230:4
view 12:7 115:16 163:7
vigilant 175:18
Virginia 1:11 175:3
virtually 110:17
vision's 204:19
voice 17:5 101:16 188:2
volatility 146:14 217:21
 235:21,22
volume 115:6 145:20
 166:12 167:21 168:19
 169:3
volumetrically 214:8
volunteers 45:17
vote 3:18 4:19 40:11

43:18,20 45:9 52:8
60:11,12 118:19,21
130:3 169:11,12
175:14 178:13 179:2
179:11,15 182:10
188:2,2,5 244:14
245:1
voted 4:19 108:19
129:13 181:7 204:7
votes 8:8,10 37:1 40:8
40:10
voting 40:22 41:2 49:14
49:17,21 50:8 58:9
62:1,8 116:13 129:2
129:17 176:15 182:2
186:3 191:19 242:22

W

W 1:13,14,17,17
wait 50:2 145:4,22
196:3 217:8 221:5
228:1
waiting 96:10 111:18
140:18 141:12 144:1
228:1
waiver 159:14
waivers 160:2,12
walk 130:6 200:16
215:20 217:10
walked 190:15
walking 107:5
wall 21:3 23:20 28:15
29:9,20 31:11 35:17
47:12 65:9 79:16 80:4
113:10 114:14 117:17
118:8 134:20 177:13
181:1 182:18 183:9
197:7 232:19,21,21
wanted 3:19 7:21 8:15
8:17 53:2 57:12 83:15
108:9,15 130:3,19
133:3 149:20 163:20
180:20 207:1,7 225:7
237:1,4 238:13
247:10,13,13,17
252:9,13 254:13
wanting 134:12 154:18
wants 70:13 217:10
Ward 122:6,6
warm 129:8
warranting 123:1,14
Washington 231:11
wasn't 103:10 108:20
142:9
watch 74:19
watchful 156:3
watching 94:15 97:13
111:9 201:8

water 136:9,11
wave 112:5
way 4:11,21 5:4 8:13,14
11:7 13:4,10,21 14:8
23:15 39:19 41:4
52:22 67:20 76:10
77:12 81:20 91:9
102:6 105:11 107:6
110:12 111:7 123:22
154:1,9 170:20 174:4
211:6 219:4 224:1
234:6 237:17 239:12
241:21 244:17 253:11
253:16
ways 9:16 255:1
weak 209:14
wearing 254:22
website 148:12 252:21
252:22
WEDNESDAY 1:7
week 76:7 247:16
254:18
weeks 159:15
weigh 96:10
weighs 99:12 230:6
weighted 237:14
welcome 230:14 254:7
weld 22:2,5 23:8 24:13
24:13,17,18 30:16,17
59:7,7 134:13 149:6
187:17
welds 181:4 182:17
184:13,16
well- 14:7
went 53:1,8 70:2 127:16
128:14 129:14 157:21
165:6 181:13 186:22
217:4 218:20 230:9
256:22
weren't 9:17
West 175:3
WHETSEL 2:4 43:21
44:1,3,5,7,9,11,13,15
44:17,20,22 45:2 48:2
48:4,6,8,10,12,14,16
48:18,20,22 49:2,4
54:21 60:13,15,17,19
60:21 61:1,3,5,7,9,11
61:13,15 118:22
119:2,4,6,8,10,12,14
119:16,18,20,22
120:2 179:14 188:18
188:22 189:2,4,6,8,12
189:14,16,18,21
190:3,5 245:2,4,6,8
245:10,12,14,16,18
245:20 246:1,3
whichever 52:22

white 13:3 14:3
wide 157:8 183:19
widespread 187:15
width 183:4 184:8
wildly 235:6
willing 45:20,21 58:6
100:12 170:3 213:18
214:10 238:2 242:15
willingness 216:8
window 124:22 146:13
winner 18:7
winter 91:17
wires 13:1
wish 9:16 230:16
wishes 163:7
wonder 76:15 84:3
255:8
wondering 79:3 86:22
92:11 99:1 155:1
174:2 190:12,14
222:10 236:11 248:19
250:9
wood 228:11
word 32:14 134:2 177:6
251:13
worded 4:18 134:7
wording 38:16 39:10,19
wording-wise 57:4
words 39:16 76:22
95:17 97:9 114:1
131:5 132:10 180:3
251:18
wordsmith 4:12
wordsmithing 248:20
work 7:22 11:17 18:4
55:20 75:21 89:3 92:1
92:2,3 116:8 135:18
141:10 144:21 146:1
146:4 154:10 171:20
173:19 208:1 216:8
218:9 229:14 230:9
231:6 240:20 244:12
244:20 251:10 253:14
254:6,11
worked 16:16
working 3:8 93:9
138:10,20,22 139:3
139:22 143:2 144:20
146:15 152:7,13
163:11 164:14,16
170:7 172:22 214:5
214:20 223:5
world 88:3 155:2
worried 13:12 77:9
156:8 183:3 216:4
worry 112:9
worse 151:8 156:13,14
Worsinger 1:19 7:11,11

44:15,16 47:19,19
48:18,19 61:7,8 91:7
91:7 119:16,17
189:16,17 245:16,17
worth 114:16 238:17
worthwhile 216:13
228:21
wouldn't 11:3,6 80:4
132:15,16 152:2
186:2
wow 152:17
wrap 246:14
wrapped 191:15 192:9
214:11
wrinkle 33:3 111:9
write 4:14 107:10
writing 5:7 11:18
130:12
written 192:18
wrong 158:5
WT 177:13

X

X 198:17
X52 206:18 232:22
Xcel 76:4 89:10 96:12
107:21 140:9 153:13
169:16 190:13 202:14
221:17 233:4 238:21

Y

year 6:20 10:21,22 22:9
22:16 23:5 29:17 54:1
54:4 66:2,5 118:15
146:2 154:2,14 160:6
164:18 171:7,10
193:17,22 194:5
196:18,18,19 200:11
200:11 202:18 211:15
218:13,15 219:9,9
220:4 222:5,22 223:1
223:2 224:4,5 225:13
225:14 226:15,16,20
232:8,14,17 237:8
243:22 256:9
years 4:11 18:11 22:17
23:5 27:12 29:18
43:12 66:1,2 92:20
123:6 132:17,17
144:17 145:3,4,21
146:3,4,5 148:21
152:17 153:6 159:3
167:15 171:3 182:20
201:7,9 202:4 204:18
204:21 207:20,20
208:8,10 210:21
218:15,17 219:16
220:20 222:8 224:7

229:3,21 231:12
 232:11,15,15 235:8
 237:2,3,9 239:5 244:1
 254:7
yesterday 8:19 15:4,10
 19:3 40:22 65:1 92:19
 99:11 100:6 108:19
 109:2,9 111:15
 141:18 181:19 249:2
yield 28:11 47:8 113:4
 203:18

Z

Zach 240:21
zero 41:11 127:18
zone 40:3

0

0.25 59:4
0.4 112:14 206:15
0.5 95:21 112:14 205:4
 206:15
0.5-inch 59:2
0.50 121:5
0.56 121:5
0.60 67:15 68:7 121:1,5
0.67 121:1,5
0.72 67:15,20 68:6 80:1
 80:2 95:21 112:10
 120:19,22
0.8 120:18,22
01 80:12
0502 225:11 226:14
 227:7,12

1

1.1 20:4 27:4 39:6 43:6
 72:4,11 73:7 75:17
 78:10 79:5 81:5 82:1
 82:6 83:10 84:14,19
 85:6,10 86:16 87:7,19
 98:18 99:3 101:22
 117:22 125:7,8,12
 131:9,16 132:10,13
 143:7,8 144:2,9
 149:22 150:6 151:21
 152:3 161:13 201:21
 206:6,7 210:17,17,19
 211:6 212:8 215:16
 222:14 224:7 226:21
 232:7,11,13 234:12
1.2 206:8 210:8,17,17
1.25 20:19 21:5 22:10
 29:14 32:1 64:4 68:15
 72:13,17 73:4 75:21
 78:13 79:5,9 80:9,16
 80:21 82:11 84:14,19
 85:6,11 86:16 87:7

95:3 100:20 101:22
 117:21 120:19 121:3
 199:17,21 211:19
 234:12
1.3 109:20,21 111:3
 211:2
1.39 22:11 23:1,21 25:6
 25:13 30:1 32:4,9
 63:14,21 65:22 74:9
 79:9 80:2,16,22 95:6
 95:8,11 110:4,16
 111:21 113:2 118:11
 120:20 200:3,6
 207:20 208:13 219:2
 219:13 220:3,7,20
 221:14,20 222:4,14
 224:7 226:21 232:13
 232:15 233:7 234:11
 234:15 236:14 238:8
 243:18
1.4 200:7 203:1
1.5 23:21 32:5,10 63:14
 63:21 79:9 110:6,16
 110:22 113:15 114:5
 115:19 118:12 194:18
 194:20,21 195:1,6,7
 204:21 205:1 207:20
 208:13 211:3,14,16
 213:10,11,17 215:15
 218:21 220:7,9 221:3
 221:11,14 224:22
 232:7,11 234:15,19
 236:14 243:18
1.50 30:2 113:8
1.6 201:1
1.67 22:12 113:8 121:3
 200:19,22,22 201:6
1.75 184:6
1.8 201:2
1:00 128:12
1:12 128:15
1:57 164:22 165:6
10 65:13 66:1 131:21
 143:21 149:2 150:9
 150:17 165:1 206:10
 207:19 208:10
10-year 208:21
10,000 147:2,6,6,17,18
 206:17 211:9
10:10 69:22
10:33 70:3
100 113:3 232:8
100-percent 80:17
 113:9 115:10
11 126:1,4 193:16,22
 202:18 222:22 225:9
 232:9,17 234:8
11-percent 121:15

11:49 128:11,14
12 59:3,6 124:21 208:8
 225:13 226:13,15
12-inch 30:13,15
12.5 23:12 31:11 134:20
 177:13
12th 228:3 246:9
132 3:5 246:8
14 126:5 208:8
143 126:2
14th 228:3 246:9
15 65:13 126:5 131:21
 148:21 149:2 150:17
 206:20
16 125:17 225:14,18
 226:12,16,21
16-plus 224:3
167 181:18
17 124:21
17- 224:3
170 124:13
172 137:6 143:10
 151:16
173 34:8
174 34:9 137:5 141:17
 146:20
175 138:13
176 124:14
18 224:4
180 159:7,16 160:3,11
 178:8 187:7
180-day 160:1
191 147:3
192.3 28:21 117:1
192.485 176:16 177:16
192.485(c) 31:14 58:10
 116:15 243:1
192.607 28:13,17 47:10
 47:14
192.710 103:15
192.711 58:10 116:15
 176:16 243:1
192.711(a) 26:4 42:7
192.711(b) 26:8,20
192.711(b)(1) 26:2 42:5
192.712 29:5 31:15
 117:8 118:5 177:17
192.713 26:3,10,13
 27:20 28:1 42:5,11
 46:16,20 58:10
 116:15 176:16 243:2
 243:10
192.713(a) 26:11 42:14
192.713(c) 26:14 42:17
192.713(d) 26:16 28:5
 42:20 47:2
192.713(d)(2) 26:21
192.713(d)(3)(iii)

243:15,17
192.913(d) 26:17 42:21
192.933 58:11 104:16
 105:10 116:15 176:17
 243:2
192.933(c) 243:9
192.933(d) 28:6 47:3
192.933(d)(2)(iii)
 243:15,17
193.713(d)(2) 43:2
1s 212:21 214:2,19
1st 254:16,21

2

2 15:6 22:11 23:3,5,20
 23:22 25:8,15,19 30:2
 32:6,11 45:7 63:11
 67:15,21,21 68:7
 79:14,18,20 109:22
 110:5,16,21 111:21
 112:1,22 113:7,13,19
 114:1,5 115:12,18,19
 115:22 116:5 118:11
 118:13 120:21 200:3
 200:5 205:5 206:15
 211:1,19 215:17
 243:14
2.0 22:13 131:12 132:8
 212:12
2.5 131:11 132:8 205:6
 206:15 212:13
2:24 165:7
2:41 181:13
2:46 181:14
2:50 186:22
2:54 187:1
20 19:10,14 65:13
 148:14 206:20 223:1
20-percent 219:13
200 64:19
2000s 208:3
2002 53:22
2004 191:14
2010 122:14 127:2,17
2011 6:10
2012 123:21
2017 53:22 123:21
 127:17 147:15
2018 1:8
22 63:10
24 129:12 130:1
240 178:8 187:8
25 129:12 133:4,19
26 169:9
28 1:8
28th 3:4
2nd 33:1 152:11
2s 212:21 214:2,19

3

3 3:4 22:12 23:3,22 25:9
 25:15 30:2 32:6,11
 67:15 68:7 79:14
 110:6,7,16,22 112:13
 114:5 115:19 118:13
 121:3 131:11,12
 132:7 149:17 170:18
 183:14 197:6 200:19
 204:17,22 205:2,3,5
 206:1,9 207:19
 208:14 211:3,6,14
 212:11 215:12,14
 218:6 222:7 233:7
 234:7 239:4,5 243:16
 248:2
3,500 126:3
3:27 217:4
3:41 217:5
30 39:17 131:14 149:7
 194:16,19 195:19
 200:20,21
30- 232:21
30-inch 9:21 10:2
30-percent 247:14,20
300,000 205:21
327 33:10 117:14
33 183:12
345 33:10 117:14
35 33:9 117:13 149:8
36 232:14
365 28:4 47:1
3s 212:18,21 213:2,19
 214:13,17 218:17
 220:4

4

4 22:14 23:3,22 25:9,16
 30:2 32:6,11 110:6,8
 110:16 111:1 112:13
 114:5 115:20 118:13
 131:7,11,12,13 132:7
 135:15,19 143:9
 149:17,19 150:9
 151:15 157:11,18
 164:9 166:3,17,18
 167:5 170:18 185:19
 191:3,14 197:6 199:7
 199:19 204:17,22
 205:3,6 206:1,9,10
 207:19 208:14 211:3
 211:6,14 212:11
 215:15 216:20 218:6
 218:13 219:10 220:17
 222:7 233:7 234:7
 239:4,5 243:10,16
 244:4 248:2
4,500 205:20

4:33 256:22
40 197:16
485(c) 135:1
4s 212:18,21 213:2,19
 214:13,17 218:17
 220:4

5

5 126:7
50 21:3 23:7,13,19 29:9
 29:20 31:12 65:9
 117:16 118:8 131:15
 134:22 148:7 177:15
 181:1 182:17 194:19
 195:18,19 197:15
 199:20 200:21 232:12
50-plus 183:8
50,000 139:21 155:20
50.8 33:8 117:11
500- 223:18

6

6 159:19
60 35:16 166:10 200:4
607 108:21 109:4
62,000 206:19

7

7 201:11 204:4 207:20
 211:1 243:9 244:4
70 127:2 138:1 156:22
700 104:5
712 99:9 102:13 108:21
 109:6 135:2
713 101:7 166:4
713(d)(1)(i) 101:4
72 195:18 232:13
74 137:5

8

8-1-1 254:22 255:2
8:30 1:11
8:41 3:2
80 20:14 27:3 39:5 43:5
 147:14
84 124:6 125:16

9

9 148:18 149:1
9:58 69:21 70:2
90 122:15 123:7
933(d)(1)(i) 101:13
950 1:10
99.9999 223:22

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Before: US DOT

Date: 03-28-18

Place: Arlington, VA

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