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Technical Conference

IN THE MATTER OF
THE PETITION FOR INVESTIGATION INTO WASHINGTON GAS
LIGHT COMPANY'S SYSTEM LEAK REDUCTION PRACTICES

Formal Case No. 1178

Moderated by Angela Parsons

Tuesday, March 18, 2025

2:03 p.m.

Public Service Commission of the District of Columbia
1325 G Street, Northwest, Suite 800
Washington, D.C. 20005

Reported by: Samuel Pachon
Job No. CS7228115

1 A P P E A R A N C E S

2 List of Attendees:

3 Angela Parsons, PSC Staff

4 Bryan Henning, PSC Staff

5 John Dodge, WGL

6 Jessica Rogers, WGL

7 Jacob Waller, Manager Codes and Standards, WGL

8 Brian Caldwell, DOEE

9 Kevin Murphy, WGL

10 Katya Botwinick, DOEE

11 Frann Francis, AOBA

12 Bob Ackley, DOEE

13 Nathan Phillips, DOEE

14 Thomas Bartholomew, DOEE

15 Sean MacMullin, WGL

16 Jason Cumberbatch, OPC

17 Aleksandra George Ruiz, OPC

18 Kevin Carey, AOBA

19 Hussain Karim, DOEE

20 Yohannes Mariam, OPC

21 Laurence Daniels, OPC

22 Tim Oberleiton, Sierra Club

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A P P E A R A N C E S (Cont'd)

List of Attendees:

Richard Marsh, WGL

Francois Rongere, WGL

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

2 MS. PARSONS: All right. Good
3 afternoon. I'm Angela Parsons with the commission.
4 Welcome to all the participants in this now fourth
5 technical conference in the matter 1178.

6 We are going to start with about
7 30 minutes or so on ALD procedures in response to the
8 request from last time. And then we're going to move
9 into the next topic, which is going to be on leak
10 identification and categorization.

11 So I just want to remind everyone again
12 of the ground rules. It's okay to ask clarifying
13 questions but try to hold hypotheticals.

14 And because we are using a
15 transcription service, please remember to not speak
16 over each other if you can. It makes it very garbled
17 on the transcript, and to identify yourself before you
18 begin speaking. And that's also for the people online
19 in particular, because we can't see you. Please state
20 your name before you ask a question.

21 We're going to start. Identify
22 everyone in the organization. Can we start with

1 staff? Bryan.

2 MR. HENNING: Sure. My name is Bryan
3 Henning. I'm with the PSC staff.

4 MS. PARSONS: And then Washington Gas.
5 Move around, like --

6 MR. DODGE: Good afternoon. John
7 Dodge, Associate General Counsel and Director of
8 Regulatory Matters for Washington Gas.

9 MS. ROGERS: Good afternoon. Jessica
10 Rogers, Vice President of Regulatory and Climate
11 Strategy for Washington Gas.

12 MR. WALLER: Hello. Jacob Waller,
13 Manager of Codes and Standards, Washington Gas.

14 MR. MURPHY: Kevin Murphy, Vice
15 President of Engineering, Asset Management, and Gas
16 Supply Operations for Washington Gas.

17 MR. CALDWELL: Brian Caldwell, Senior
18 Assistant Attorney General, Office of the Attorney
19 General.

20 MS. BOTWINICK: Katya Botwinick, Energy
21 Policy Analyst with Department of Energy Environment.

22 MS. RUIZ: Aleksandra George Ruiz, the

1 Office of People's Counsel.

2 MS. FRANCIS: Frann Francis, AOBA.

3 MR. CUMBERBATCH: Jason Cumberbatch,
4 General Engineer, OPC.

5 MS. PARSONS: Yes. Actually, could we
6 add anyone online that's from the organizations if
7 you're a panelist, could you also introduce yourself?

8 MR. ACKLEY: Bob Ackley here at Gas
9 Safety Inc.

10 MR. MACMULLIN: -- from Picarro.

11 MS. PARSONS: Okay. So we wanted to
12 talk about ALD at the beginning. There were some
13 questions. So who would like -- would you like to
14 start? Do you have some information or --

15 MS. ROGERS: I guess I turn that over
16 to Bob -- and is Nate on the line, too?

17 MR. ACKLEY: I don't see Nathan. What
18 information are you trying to get from Gas
19 Safety Inc.?

20 MR. CALDWELL: I should add a little
21 bit of background. Gas Safety Inc. is the consultant
22 that DOEE contracted with to perform the fugitive

1 emission studies back in, I believe it was 2023. Well
2 it was submitted in formal case 1130 and 1154. I
3 believe it was in late October, early November 2023.

4 And so Mr. Ackley is with Gas Safety
5 Inc. Nathan Phillips, who assisted him with the
6 study, is also supposed to be on the call, but he may
7 be running late or maybe he'll be on momentarily.

8 MR. PHILLIPS: I'm here.

9 MR. CALDWELL: Oh, okay, great. Nathan
10 Phillips is also on the phone. So those are the two
11 individuals who are primarily responsible for
12 performing the study using ALD, I should mention.

13 MR. PHILLIPS: Happy to answer any
14 questions that the -- anyone has there on the study
15 that Gas Safety Inc. did in -- in 2023. So we --
16 we've already furnished all the information to
17 District DOEE, and I think the -- your office will
18 probably have it as well.

19 MR. CALDWELL: Yeah. Yes, that's
20 correct. We did submit a couple of letters that were
21 authored in response from Mr. Ackley and Mr. Phillips
22 that were in response to issues that were raised

1 previously regarding, like, sensitivity levels and the
2 like.

3 MR. PHILLIPS: Yes. Happy to answer
4 any questions about sensitivity levels. And I guess
5 there's somebody here from Picarro as well. Happy to
6 answer any questions.

7 MS. ROGERS: Hi, Mr. Ackley. My name
8 is Jessica Rogers. I am with Washington Gas. And
9 this is more just an informational question. When you
10 think about the best use of ALD for a system like the
11 one in the District, what do you recommend?

12 MR. ACKLEY: What would Gas Safety Inc.
13 recommend?

14 MS. ROGERS: Yes.

15 MR. ACKLEY: To use that equipment to
16 conduct annual surveys and potentially more if -- if
17 needed, and test every deviation from the baseline.
18 That's what I would do.

19 These -- the idea that the analyzer can
20 tell you the size of the leak or the location of the
21 leak has been really elusive to Picarro and to the
22 other ALD folks using this equipment. I've been using

1 it since 2012, I believe, and done many cities and
2 many surveys.

3 The repeated deviations indicate a
4 leak. Might just be half a part per million, you
5 know, a few ppb's really. But when you get that
6 repeated deviation, we found leaks at foundations a
7 hundred feet away, 200 feet away from the analyzer.

8 So if you really want to have a safety
9 survey and -- and by the way, every one of these
10 deviations were from a car, and we had to go out with
11 traditional gas detecting equipment and find these
12 leaks, you know, with either a flame unit or a
13 portable gas detecting equipment.

14 So all of these leak indications, no
15 matter how small they are, all come from a source that
16 is actually a hundred percent gas, a million parts per
17 million. I mean, do you realize that as well?

18 MS. ROGERS: That makes sense to me.

19 MR. ACKLEY: Yeah. I mean, we get
20 leaks up in meters, meter sets, underground leaks.
21 You know, it could be from another street, leaks
22 you're getting. I've gotten leaks on streets that

1 were actually coming through the woods from another
2 street. It's probably 300 feet away. It sounds
3 crazy, but it's the truth.

4 So we -- we've gotten leaks on top of
5 buildings that were blowing down from -- from rooftop
6 air conditioners. There's all kinds of crazy stuff.
7 This -- this equipment is fantastic. It really is.

8 So it's really up to the personnel
9 that's using the portable equipment to go out and
10 pinpoint these leaks that I've been training people
11 for 40 years to do this kind of thing, to find the
12 leaks with portable equipment which WGL uses, the Old
13 Boston Gas uses, Detroit Energy uses.

14 I mean you're all using the same kind
15 of stuff that picks up gas in a couple of parts per
16 million, and you should all be able to find these
17 leaks. Does that make sense?

18 MS. ROGERS: It does. Is there
19 anything that you think of as like an industry best
20 practice or the, you know, sort of going for the low
21 hanging fruit as we introduce the ALD with our
22 existing leak survey process?

1 MR. ACKLEY: Well you know, it's a
2 great question. The -- the federal regs say you got
3 to do the services periodically and the mains
4 periodically. Some do the three-year on the federal,
5 some do the five, you know, the five-year on the
6 services. Most of them are doing the three-year so
7 they don't have to parse things out.

8 And that was all done with portable
9 walking equipment on the services and flame ionization
10 units or some other technology on the mains. And if
11 you did a good job, you could really find all the
12 leaks on those surveys.

13 ALD has really made the workers and the
14 leak detection people on their toes because these
15 repeated deviations indicate leaks. And that's the
16 real killer on these, is they find a lot of leaks on
17 the first go round, and they should be finding these
18 on the traditional gas leak survey.

19 And I spent the last ten years of my
20 career in leak survey, chasing personnel to make sure
21 their equipment was working, they were actually on the
22 job doing it and finding stuff, that their equipment

1 was working.

2 And that's what we found when we did
3 audits that a lot of the equipment wasn't working. It
4 was poor practices. So -- so all this -- all these
5 leaks really have to be found with traditional
6 equipment. And what the -- what the ALD tells you is
7 that there's a leak there with that repeated deviation
8 from the baseline.

9 So I would suggest for any gas company
10 you bite the bullet on the first go round, get those
11 leaks. You're going to get your grade 1s up by -- up
12 by the houses, and they're not going to be your
13 third-party hits and broken gas lines, you know, from
14 cracks in the -- in the mains.

15 What you're going to get is the -- the
16 rotted-out services of which in the District, WGL
17 doesn't have that many. I think you only have 6,000
18 bare steel services left in the District. So your
19 problem is your steel mains and whatever casts you
20 have left.

21 So yeah. Run that over, get all those
22 leaks, get them on the books. You'll spend a lot less

1 money than chasing super-emitters. Our protocol on
2 super-emitters is the bigger the footprint of the
3 leak, the more the emission. And this is for
4 grade 3s. You're going to put your 1s and 2s on -- on
5 repair anyway.

6 You should not have any super-emitter
7 grade 3 leaks -- I mean grade 1 leaks. They should
8 all be leaks that you've got on your record that, you
9 know, aren't explosion hazards, but you can prioritize
10 the emissions by the size, you know, the estimated
11 volume of the gas coming out.

12 And there are protocols out there with
13 the drive-by, by the analyzer to say, oh, it's
14 emitting so many cubic feet a day. Well it's a guess,
15 it's an educated guess. And I've been working with
16 these. We ran the same protocol, you know, to get a
17 flux rate on that. And Nathan has a little more
18 detail on that.

19 But this is what I would suggest in --
20 on any distribution system. And I've overseen pretty
21 much the entire grid area, Eversource area up in New
22 England for years throughout Connecticut Eversource

1 down through New York.

2 And now on research, I've done cities
3 around the country using this ALD stuff. And you'd be
4 surprised. You look at our study of Cincinnati, Ohio,
5 where they replaced the system with plastic, and we
6 only had about 250 leaks or so on a city with the same
7 size of -- maybe a little bit bigger than -- than the
8 District. And that had -- I can't remember, Nathan.
9 Maybe it was -- it was under 300 leaks in about 1,800
10 miles or so.

11 MR. PHILLIPS: Sounds about right.

12 MS. ROGERS: So just one more question.
13 You mentioned -- I think you used the phrase maybe
14 "repeated." I know I'm not getting the phrase right
15 now, even though you said it a couple of times, and it
16 definitely starts with an R. Essentially, like,
17 repeated hits above baseline. How do you --

18 MR. ACKLEY: Correct.

19 MS. ROGERS: How do we get the repeat
20 process? So is it one pass-through? You drive the
21 system, or you drive the system month over month?
22 Like, in your mind, how do you develop that, and

1 what's the baseline? What's the appropriate baseline
2 to use?

3 MR. ACKLEY: Well the baseline varies
4 during the day. So you kind of, you can actually
5 watch that baseline all day long depending on weather
6 patterns.

7 Really, you can go down the -- down the
8 street that's a quarter of a mile long and go down
9 that street and get a hit, and turn around and come
10 back and you get that -- you let the machine clear --
11 make sure it's cleared out, which it will in a matter
12 of seconds. You go back. You get that hit again.
13 That's your verification right there.

14 You can go over streets -- I can go
15 over streets for hours and not get a hit. They're all
16 plastic or there's no gas. There's no leaks, you
17 know. But you get into these old areas, you get a lot
18 of hits from joints. You get a lot of hits from the
19 corrosion. You get a lot of hits from the meters.

20 I see a lot of pressure down there. I
21 don't know the system as well, but I see the
22 regulators. So this -- they -- there could be a lot

1 of regulators going. There could be, you know -- and
2 we are finding stuff that's coming from inside
3 buildings as well. So I hope that helps.

4 MS. ROGERS: It does. Thank you very
5 much. I don't have any further questions.

6 MR. DODGE: Not a question but -- not a
7 question, but we want to make sure that we give the
8 parties time to pose questions to Mr. MacMullin from
9 Picarro.

10 MR. CALDWELL: Oh, sorry. Does the
11 staff have questions?

12 Mr. Phillips, this is Brian Caldwell
13 with the Office of the Attorney General and
14 representing DOEE. You are familiar with some of the
15 findings that Washington Gas has submitted to the
16 commission when they performed a survey of the area
17 that you all performed in the fugitive emission study.
18 Have you seen those submissions at least --

19 MR. PHILLIPS: Yes. Yeah, yeah. My --
20 you know, I haven't studied it recently, but the big
21 takeaway is I think that the leak count by Washington
22 Gas was quite a bit lower than the leak count that we

1 obtained in our study.

2 MR. CALDWELL: Correct. Yeah. And do
3 you have any sort of explanation for, you know, why
4 there might be, you know, a difference in the number
5 of leaks that you've found versus the number of leaks
6 that Washington Gas found?

7 MR. PHILLIPS: Well I have a
8 speculation. But I do -- I want to start by thanking
9 Washington Gas for providing some crucial initial
10 information after having read the filing that I
11 submitted a few weeks ago. Because it allows us to
12 start eliminating possibilities that could explain the
13 discrepancy between our results.

14 And so one thing that has to be
15 compared among methods is what's the kind of size of
16 the search window in which you average peaks in
17 concentration of methane, because, like, two peaks
18 that are, like, 5 feet apart, for example, are
19 probably related to the same leak and not two
20 different leaks.

21 And so in our study we were clear that
22 we used a 30-meter averaging window, so around a

1 hundred feet. And I think that we heard that the
2 Washington Gas Light study used 25 meters as an
3 averaging window. So that's -- those are
4 approximately the same, and that allows us to put that
5 factor to rest as something that would explain the
6 discrepancy.

7 And so I think what we're left with is
8 in -- in so many words, I think Washington Gas Light's
9 filing says that they were focused on super-emitters
10 and the largest leaks, where we were in our study
11 looking at leaks of all sizes down to, you know, the
12 smaller leaks and, you know, for -- for both
13 greenhouse gas emissions and losses, but also for
14 safety because we know that small leaks are not
15 necessarily safe leaks.

16 So I think, you know, that that is
17 probably the difference is just the threshold at which
18 we are counting what is a deviation or not. And that
19 I think Washington Gas is using a higher threshold for
20 what they -- for their purposes for that study. They
21 made it clear that they're looking mostly for
22 super-emitters, which comes back to the question of

1 why use advanced leak detection for the biggest leaks.

2 In fact, I think advanced leak
3 detection, it's like taking a -- an X-ACTO knife to
4 something that you could use a butcher knife to -- to
5 find out, if -- if that analogy kind of helps.

6 The -- the CRDS technology, as Bob
7 said, is fantastic. It's so sensitive and precise,
8 and it's a bit of overkill to be using it only for the
9 super-emitters where the traditional equipment would
10 do just fine.

11 MR. CALDWELL: I see. So it's really,
12 it sounds like -- it sounds -- it's a question of what
13 it is that you're -- the size of the leak that you're
14 looking for? I mean if you're -- if you're out there
15 trying to find super-emitters, would that necessarily
16 impact your ability to find smaller leaks as well? Or
17 is it just what -- what you're deciding to count as a
18 leak?

19 I guess, is that, like, more of a
20 subjective level rather than like, you know, something
21 that's -- the equipment would indicate?

22 MR. PHILLIPS: Yeah. You know, I'd

1 like to hear Bob's opinion on this, but I -- I think,
2 like, the more traditional flame ionization unit
3 equipment from years' past would do just fine to find
4 the super-emitters. And that the precision and
5 sensitivity of the CRDS technology is way above what's
6 needed if the object of the study is -- is really
7 focused on those largest leaks. Those are not too
8 hard to find. You don't need to have advanced leak
9 detection for leaks that are very big.

10 MR. ACKLEY: We -- we used to -- we
11 used to find them by vegetation by looking at them,
12 believe it or not. But I would be interested in
13 what -- is it Sean from Picarro -- what they're using
14 for their protocol now to indicate what a leak is.

15 And I'll tell you -- I'll strengthen
16 what Nathan -- I -- I've shown him with the leak
17 surveys is the big leaks are the easiest ones to find.
18 It's no problem. You can walk around with pretty much
19 any piece of equipment and find a -- find these big
20 leaks.

21 In Massachusetts, we had, a few years
22 ago, we had over 20,000 outstanding gas leaks that

1 were grade 3s mostly. So I don't know what Washington
2 Gas has for outstanding grade 3s. I think we did see
3 some numbers, but I think a lot of these leaks are
4 non-hazardous for explosion that we've detected on our
5 survey. It's just that there's been a lack of --
6 Picarro is using the same equipment.

7 We -- we are basically using the same
8 sensitivity of having a baseline where we use a zero
9 air and can get zero methane up to about 20 to 30 ppm
10 depending on which equipment you're using. It's an
11 unbelievable detection tool.

12 And then some algorithms have been
13 developed to say, oh, the longer you're getting the
14 leak into the analyzer, the bigger the leak is, which
15 is true. But if you just go over a -- a leaking valve
16 that's really blowing pretty hard, you can mess that
17 up. There's always going to be exceptions to that
18 rule.

19 But what is Picarro and WGL using to
20 say they have a leak? I -- I use a repeated deviation
21 and that's how I showed Picarro to use it with the
22 original chief technology officer Eric Crosson. And

1 he showed me as well.

2 We agreed that it -- just about every
3 deviation is -- is a leak somewhere. Could be a
4 hundred -- I had one 150 feet away on a survey I did
5 in Acton in Massachusetts last year up on a meter set
6 off a road. So it could have been an underground leak
7 and explosion hazard. But it -- it wasn't on that
8 one. So anyway, thank you.

9 MS. ROGERS: Jessica Rogers. I will
10 jump in before Sean provides sort of his thought about
11 the repeated deviation and the settings on the
12 equipment that we've been using. I do want to make a
13 point of clarification here.

14 The company is not currently doing a
15 super-emitter program. When we -- we run the ALD on
16 the DOEE list that we have been been using going ward
17 by ward, we are looking at any leak. And the lack of
18 confirmation of the leaks does seem to be a bit of a
19 problem.

20 So we do the drive. We, I believe,
21 look for the repeated deviation. So we -- and Sean
22 can probably speak to this better than me -- we do

1 multiple passes on the streets. We then check for
2 those places where we see repeated deviation. We go
3 out and ground truth it. And when we are ground
4 truthing these same routes that DOEE ran, we are not
5 getting hits for leaks.

6 And so that's the part to me that is
7 where I would like to see us refine this, use this
8 technology in the most effective way possible,
9 including using our ground truthing process
10 effectively and not sending out our employees to
11 ground truth phantoms, because that's not a good use
12 of their time or the resources of the customers.

13 So to me that's kind of where I -- and
14 I am not a technical person, so I am really enjoying
15 hearing Mr. Phillips' and Mr. Ackley's thoughts on how
16 we can do this better. And again, Sean will provide
17 Picarro's side of the equation. But to me it's honing
18 the technology to effectively ground truth.

19 Okay. Sean, it's your turn.

20 MR. BARTHOLOMEW: Well I was just --

21 MR. MACMULLIN: And -- and --

22 MR. BARTHOLOMEW: Sorry. This is

1 Thomas Bartholomew with DOEE. So that was just a
2 statement, not a -- not a question; right?

3 MR. MACMULLIN: That -- that's correct.
4 You know, Ms. Rogers is not a witness. She is, you
5 know, basically testifying or, you know, giving her a
6 version of, you know, what was performed, you know, in
7 the study. But she was not actually out there, I
8 don't -- do not think out there performing the study
9 herself. Just want to make that statement clear.

10 MR. DODGE: What Washington Gas --
11 Washington Gas understands this to be a technical
12 conference and that everybody is welcome to speak.

13 MS. PARSONS: This isn't a hearing so
14 we --

15 MR. MACMULLIN: I'm just pointing that
16 out.

17 MS. PARSONS: That's fine. Thank you.

18 MR. MACMULLIN: Yep. Since you know
19 anyone is welcome to speak

20 MS. PARSONS: OPC. For point of
21 clarity, it would be important to know if lawyers are
22 claiming to make testimony. So just please clarify

1 that for the record.

2 MS. ROGERS: I'm not a lawyer here on
3 behalf of the company. I am the regulatory person,
4 and since our company person, Mike Upshaw, isn't here
5 but was here previously and testified to this very
6 thing at what I believe the second technical
7 conference, I'm just reminding everybody what he said
8 in that technical conference because Mr. Ackley and
9 Mr. Phillips both asked from Washington Gas's
10 perspective what we are doing and suggested that what
11 we're doing is a super-emitter program.

12 Mr. Upshaw made it very clear that's
13 not what we're doing. And so I just wanted to bring
14 that up. Mike was actually on the signup list but
15 couldn't make it today,

16 MR. CALDWELL: Was that -- he was
17 actually -- that question was actually directed to the
18 Picarro representative, not to --

19 MS. ROGERS: He said both Picarro and
20 Washington Gas, and Picarro's position is not -- Sean
21 is not here to speak to exactly what Washington Gas
22 has been doing with the Picarro data after the run.

1 That is all a Washington Gas effort.

2 The ground truthing is Washington Gas
3 out there with Washington Gas's people and then
4 Washington Gas's follow-up.

5 MS. RUIZ: I'm sorry. That's a -- so
6 I'm a bit confused. So Picarro is not running the ALD
7 testing for Washington Gas?

8 MS. ROGERS: The ALD runs are done with
9 Picarro and Picarro's technology. The ground truthing
10 after is Washington Gas employees.

11 MS. RUIZ: So Washington Gas is ground
12 truthing super-emitter data that's picked up by
13 Picarro?

14 MS. ROGERS: It's not just
15 super-emitter data. It is leak data, deviation,
16 repeated deviation data.

17 MS. RUIZ: But your answer is yes?

18 MS. ROGERS: Yes. We do the leak
19 detection and repair. The ground truthing is a
20 standard practice at Washington Gas, and so that is
21 part of our practice. Advanced leak detection isn't
22 the ground truthing piece, it is the car or other

1 technology that's used to go out in advance of the
2 ground truthing.

3 MS. RUIZ: This is my question and more
4 so a request. So this is extremely confusing for OPC
5 during the last conference. Washington Gas shared
6 that Picarro is the only entity involved that has the
7 capacity to test super-emitters. So if there is some
8 other capacity Washington Gas has, it would be
9 important for the rest of us to be aware.

10 MS. ROGERS: I think we're talking
11 about two different things then.

12 MR. CALDWELL: Could I just ask one
13 question for clarification because the -- the number
14 of leaks that are reported by Washington Gas in those
15 reports that map DOEE study area, are those the number
16 of leaks that the ALD itself is -- is picking up, or
17 are those the number of leaks that have been ground
18 truthed by Washington Gas?

19 MS. ROGERS: It is both. So the study
20 shows the general number of hits from ALD and then
21 shows the ground truth hits. And then the ground
22 truth hits are the number that's compared to the DOEE

1 list, because the DOEE list was essentially the same
2 front-end piece of ALD drive done slightly differently
3 without the follow-up ground truthing piece.

4 MR. CALDWELL: So you're comparing --
5 sorry -- you're comparing the ground truth to DOEE's
6 ALD leaks, sounds like.

7 MS. ROGERS: Well I think we -- subject
8 to check because I haven't looked at one of those in
9 the last couple of weeks -- I believe what we do is
10 confirm to both.

11 MR. HENNING: Just so I make sure that
12 I understand correctly, you keep using the phrase
13 "ground truthing," and I want to make sure that --
14 that I understand correctly what that process is
15 because it sounds, as I understood it to be an awful
16 lot like what Bob described as the follow-up to an ALD
17 pass.

18 So when you say "ground truthing," that
19 is Washington Gas personnel going out with traditional
20 equipment like the flame ionization sensors or
21 handheld equipment to go seek out where there might be
22 indications to actually locate the leak itself, which,

1 as Bob said, might be several hundred feet from where
2 the peak was in that process.

3 So is -- is that what you're talking
4 about, that process that they described where you go
5 seek out and identify the actual leak associated with
6 that peak on the ALD process?

7 MS. ROGERS: Yes. It's exactly like
8 Bob described. So I -- I completely agree with Bob.
9 That's how the process works. You do the ALD run, and
10 then you do that handheld on the ground effort. And
11 both pieces are needed in order to make the ALD
12 effective.

13 MS. PARSONS: So essentially someone --
14 personnel, they're walking the -- the route with the
15 handheld equipment to check it?

16 MS. ROGERS: Yes.

17 MS. PARSONS: I want to make sure OPC
18 understands that's what -- what they're talking about.
19 It's basically a two-step project -- process to get to
20 the leak.

21 MS. RUIZ: I understand that, and
22 that's extremely helpful. It was my understanding

1 from previous conference that that traditional
2 equipment or ability to pick up leaks was not
3 available to Washington Gas for super-emitters.

4 So I guess there is some confusion
5 there, and OPC would love clarity on whether that is
6 the case or not because it's -- it's unclear at this
7 point.

8 MS. PARSONS: That was not my
9 understanding, but -- but you clarify for --

10 MS. ROGERS: Sure. We have the
11 traditional technology, and the traditional walking
12 approach. We continue to do that. We do it pursuant
13 to PHMSA's requirements. And that is a capacity that
14 allows you to find super-emitters.

15 I think that what ALD adds, especially
16 on a small system like the District, but even on
17 bigger systems, like our system in Virginia, because
18 the technology is car mounted, it's so much faster
19 than walking the system. And so you can drive the
20 system, you know.

21 Kevin, correct me if I'm wrong, but
22 isn't it every three years of the walking survey is

1 required, but we could do it so much faster with ALD?

2 MR. MURPHY: The federal regulation
3 is -- is five years for survey but three years for
4 visual inspection for atmospheric corrosion. So we
5 take the lower that means more than mandated leak
6 survey. We -- both activities done at the same time.
7 Its boots on the ground.

8 You're obviously not going to get a
9 atmospheric corrosion survey if you're driving by in a
10 car. But that's our -- our current practice is to use
11 the same type of equipment Mr. Ackley described to do
12 the leak survey on a three-year cycle.

13 MS. BOTWINICK: I have just a question
14 from DOEE; just a couple points of clarification. I
15 think the thing that we established -- I don't
16 remember if it was the second or third leak detection
17 conference -- was that WGL didn't have the equipment
18 to do flow rates, is that right, which is part of
19 identifying super-emitters; is that correct?

20 MR. MURPHY: That -- that is correct.

21 MS. BOTWINICK: Okay.

22 MR. MURPHY: Our equipment won't do a

1 flow rate. And you heard Mr. Ackley describe kind of
2 the inferences that are used to determine a flow rate
3 using the ring-down spectroscopy.

4 MS. BOTWINICK: And then the other
5 point I wanted to clarify what I think Bob and Nate
6 were trying to talk about when they suggested that WGL
7 was just looking for super-emitters, the filing I
8 think that they were referring to was the one that WGL
9 filed on January 30, 2025. This was in the response
10 to the Picarro settings.

11 There's language in there that says
12 methane concentrations greater than 20 ppm above
13 background or high persistence. These are the
14 detections that are prioritized, and there's a lot of
15 other language that just -- that suggests that the ALD
16 surveys are prioritizing these bigger leaks.

17 So it's unclear if the smaller leaks
18 are just not being counted or reported. And I think
19 that's what Bob and Nate were trying to get at. So
20 that language is -- was a bit confusing.

21 MR. BARTHOLOMEW: And Thomas
22 Bartholomew from DOEE. Just as a matter of process,

1 we invited Bob and Nate to come to this conference to
2 answer questions. I don't think it's actually a great
3 use of time. I think one of those -- one of them has
4 to drop off, like, early from this meeting anyways.

5 I don't think it's a good use of time
6 to sort of debate back and forth stuff we've talked
7 about at previous conferences. If folks have
8 questions for them, that's what they're here to
9 answer. They're not getting paid more to do this.
10 Like, they're off their contract.

11 So if we could use the time here to ask
12 them questions about the work they did and the
13 statements that they've made, I think that would be
14 the most helpful use of our time today.

15 MR. HENNING: I -- I don't have a
16 question. But I think think actually that they had a
17 question for Washington Gas and Picarro on what they
18 were using and the setting that they had for the
19 sensitivity that defined a deviation from baseline
20 that was done during the course of their ALD survey so
21 they can establish whether or not that minimum
22 threshold, before you constituted a deviation, might

1 be the cause for why you have discrepancies between
2 the two.

3 I don't want to put words in either of
4 their mouths, but I believe that that was the question
5 that they posed. So if they can confirm that that's
6 the case, then we can pass that question back to both
7 Washington Gas and Picarro.

8 MR. PHILLIPS: Yes. That is a --
9 you've captured it quite well. This is Nathan. Thank
10 you.

11 MS. ROGERS: I'm handing it over to
12 Sean.

13 MR. MACMULLIN: So I can speak a bit to
14 the -- the thresholding and sensitivity. So on the
15 Picarro system, anything that's triggering at a
16 minimum of 35 ppb or 0.035 ppm above a background
17 level is considered as a signal. We do have an
18 algorithm which automatically corrects for
19 fluctuations in the ambient background. So ambient
20 background is about 2 ppm but can fluctuate.

21 And so if there's areas of high
22 background or variable background, the threshold

1 automatically adjusts to that. So we're -- so the
2 system is not triggering on -- on background
3 indications.

4 From there I think it's really mostly a
5 matter of how the signals are prioritized in terms of
6 their -- of their response. So using flow rate as a
7 criteria is something that the Picarro system does
8 using the concentration as a criteria.

9 We talked about the repeatability of
10 detection. I call that signal persistence, but I
11 think that's another -- I -- I agree with -- with
12 Bob's statement that that's an important
13 characteristic, is looking for -- for signals that
14 will detect more than once across multiple passes.

15 And also for the Picarro system is
16 using the simultaneous measurement of the ethane and
17 methane where ethane is a trace gas for -- for natural
18 gas. And so if we see ethane in the signal, we're
19 confident that that's from a natural gas source versus
20 no ethane in the signal would be more likely from a
21 biogenic gas source.

22 So I -- that's -- that's a bit of

1 the -- the different parameters that -- that we think
2 about from the perspective of prioritization of -- of
3 signals. But from a peer detection perspective,
4 it's -- it's a minimum of 35 ppb above that
5 fluctuating background. Thank you.

6 MR. DODGE: Yeah. Thanks a lot.
7 That's really great. That's probably similar to using
8 our modified tower approach, Nathan, about 30, 35 ppb?

9 MR. PHILLIPS: Yes. And also it's --
10 it's reassuring to hear that you are allowing for a
11 moving background value because we do know that it
12 shifts over the course of the day, as Bob said.

13 And in different regions of the city
14 you might have a -- a -- kind of like a moving
15 background. So it's really important to account for
16 that. So it's good to hear that you are accounting
17 for that.

18 One remaining thing that I -- I wonder
19 about is if you're correcting for time lags from the
20 inlet of the -- of your analyzer to the machine. You
21 know, like, is that a matter of a few seconds or a
22 second or -- and how do you correct for that when

1 you're -- when you drive one way down the street and
2 back the other way. You can get a shift in the
3 apparent location of the -- of the spike because of
4 the time that it takes the gas peak to get into the
5 analyzer.

6 So we corrected for that by doing tests
7 and, you know, correcting for that lag. And it helps
8 us to more precisely locate where the deviation is,
9 you know, from multiple passes. Just wondering if
10 that could be another reason for discrepancy. Thanks.

11 MR. MACMULLIN: Yeah. That -- that is
12 part of our installation and calibration procedure is
13 to measure that time delay from the inlet to the
14 analyzer for every installation. And so that's
15 corrected for automatically in the software after the
16 installation and calibration has been done.

17 We usually see that -- that time delay
18 depending on the -- the tubing length of -- in the car
19 between three and four seconds.

20 MR. ACKLEY: Sean, just one last
21 question from me is I tried to solve the mystery with
22 Eric on, you know, getting these flux rates from

1 various locations and how we can get a flux rate when
2 we don't know where the emissions point is, meaning a
3 hundred feet away from the inlet of the analyzer in
4 the car.

5 So this whole idea that these small
6 leaks are not -- these small deviations are not large
7 leaks some distance away or non-hazardous is really
8 incorrect in my opinion. And I don't know how we can
9 prioritize.

10 I would prioritize every deviation from
11 baseline from the leaks that I've seen with slight
12 deviations up on service lines and -- and far away.
13 But I don't know if Picarro has -- has now been able
14 to prioritize that. I -- I don't know if that's true.
15 Is that true, Sean?

16 MR. MACMULLIN: From -- Bob, you're
17 asking from a -- from a flux or a flow rate
18 perspective?

19 MR. ACKLEY: From safety. Actually,
20 from both, from safety and from flux, because it
21 indicated in some writing that, you know, this is
22 prioritizing safety and flux. And I disagree -- I

1 disagree with that. I think that all the deviations
2 should be investigated in what we call odor complaint
3 investigation. You can call it ground truthing.

4 But it's the same as a public odor
5 complaint. Somebody calling in on the phone and
6 saying, "I smell gas" at a certain location. So you
7 would -- our protocol at Gas Safety Inc., since I've
8 been doing this, has been to do 300 feet in every
9 direction from the deviation, you know, from the
10 repeated deviation, try to hone in on it.

11 And luckily now I have a portable
12 backpack as well along with flame ionization units and
13 rovers and all -- all kinds of stuff to find these
14 things. But it's really pretty basic to find the leak
15 after once you get their repeated deviation.

16 But still, you haven't been able to do
17 that; have you?

18 MR. MACMULLIN: Well, we have a -- we
19 have the -- the detection and an object to be
20 investigated, which we call LISA or leak indication
21 search area, which -- which prescribes which
22 particular pipelines based on the multiple detections

1 over multiple passes should be inspected with handheld
2 equipment in order to find the leak. But that
3 protocol has been developed by Picarro and its
4 customers and tested across the industry.

5 In -- in terms of the flow rates,
6 we -- we do have the ability to measure directly the
7 flow rate of each source. It's based on the
8 concentration and the wind. It's about -- sort of the
9 precision of that is about one order of magnitude.

10 So because leaks can come in so many
11 different ranges of sizes across four or five orders
12 of magnitude, it gives that course prioritization. So
13 it's allowing the -- the system to say this is a big
14 leak or this is a small leak. And that's a relatively
15 distant independent quantification.

16 MR. PHILLIPS: If -- I'm sorry to
17 interrupt, but I -- I think I have an idea of what
18 might be going on here, but I didn't mean to cut you
19 off if you were still speaking.

20 MR. MACMULLIN: Go ahead, Nathan. Yep.
21 Sounds right.

22 MR. PHILLIPS: Yeah. So I -- I think

1 maybe I understand what's going on. So with a 35 part
2 per billion lower limit to your -- what you're using
3 as, you know, a deviation, a lower threshold for what
4 counts as a deviation, we're -- we go lower than that.
5 We go to, you know, 10 ppb approximately.

6 And what that means is that, let's say
7 that there's a very flat baseline of 2.00 parts per
8 million. That's the background. That means that your
9 work -- you -- you have to see a 2.035 ppb elevation
10 in order to count.

11 We, when we're doing it, if we see a
12 2.020 or a zero point -- a -- a 2.025 or a zero
13 point -- a 2.030, we will count that if it's repeated
14 and in the same location. And we already know that --
15 and I think Picarro knows this well as well, that the
16 distribution -- the statistical distribution of leaks
17 is a long tail distribution, which means that there's
18 many more small leaks than there are large leaks.

19 It's not a bell-shaped curve. It's a
20 skewed curve. So there are lots of small leaks and I
21 think that 35 ppb threshold that you're using is a
22 threshold that's higher than the one that we're using.

1 And that may -- there may be a lot of those leaks in
2 that in between range.

3 MR. MACMULLIN: It -- it's possible
4 that's the case. Ten ppb is about the noise threshold
5 of the system itself. So within a -- a fluctuating
6 background of -- of about 2 ppm there -- there may be
7 false positives that are generated from using that low
8 of a threshold based on the noise -- noise floor of
9 the analyzer itself.

10 So that's why we -- that's why we pick
11 35 ppb as we go a little more than three sigma above
12 the -- the noise threshold.

13 MR. PHILLIPS: And I can see you're
14 being conservative. I appreciate that with the
15 equipment, but I do want to also qualify that we don't
16 do that unless it shows up as a repeated signal in a
17 very flat background. And so the chances of having a
18 repeated deviation from, you know, a -- a flat
19 background is very low.

20 So we don't just arbitrarily go with a
21 10 ppb. We see if it's a repeated deviation and we
22 are, you know, we are pushing the -- pushing the

1 limits of the technology, which is great technology.
2 But yeah, I -- I think this could be where the
3 discrepancy may lie.

4 MR. HENNING: This is -- this is Bryan
5 Henning with the commission staff.

6 Do you happen to recall -- and -- and
7 it's been a while since I read your report and -- and
8 it was rather detailed, so I want to make sure that
9 I'm remembering correctly and -- and you may have to
10 go back and verify.

11 Do you recall if the background
12 conditions when you did that survey would have
13 supported using that 10 ppb consistently through D.C.,
14 or were there enough variances that you had to use a
15 more conservative approach just to deal with the --
16 the atmosphere conditions of the city itself?

17 MR. PHILLIPS: Well I will -- I'll give
18 you my recollection. Bob can chime in as well. But
19 what we do is that the background itself can vary
20 from, you know, on one -- one day you can go out and
21 it's 2.000 as a background, flat as a pancake. You go
22 out the -- the next day or a different part of the

1 city, and that background could be 2.5000 flat as a
2 pancake.

3 So the background level can shift even
4 though it's very, very flat, but it can shift by way
5 more than, you know, 10 or 35 ppb. But within that
6 period of time that you're doing that survey in that
7 space, if you have a very flat and stable background,
8 you're not seeing the noise that you're just picking
9 out noise. You're seeing a clean deviation from a
10 flat background.

11 And in those cases when you see it on
12 repeated passes, even if you're down to 15 or 20 ppb,
13 you can see it.

14 MR. HENNING: Yeah. I -- I appreciate
15 that. I think my question was, do you happen to
16 recall if when you did your study in the city that it
17 had that nice clean flat background, or was it -- was
18 it subject to a little more variance as you move
19 through it, given that I know that the -- the city and
20 conditions can change pretty significantly?

21 I'm -- I'm less concerned about exactly
22 where that level was, but I just want to make sure

1 whether or not the conditions at the time matched to
2 those that you've identified where you would use that
3 lower sensitivity level since it -- it sounds like you
4 believe that may be the cause of the discrepancy.

5 MR. ACKLEY: Nathan, I can -- I can
6 jump on this here and say that the -- the baseline
7 level throughout the District was really good. This
8 moving of the baseline occurs really in the morning.
9 At night the mixing layer shrinks, and the methane is
10 compressed.

11 And then as the sun comes out, you
12 could get baselines pretty high, 3, 4 ppm at night.
13 And then at sunrise it'll pop up and then it'll come
14 down to a -- a -- close to 2 part per million baseline
15 unless we have an atmospheric pressure change.

16 And you could get really crazy stuff
17 happening on an -- on an atmospheric pressure change
18 with gas coming out of the ground that has been held
19 in. It's kind of like a burping day. Some days we
20 have a lot of gas coming out of the ground and other
21 days you won't.

22 But the -- the equipment and what

1 they've done, as you heard from Sean and you heard
2 from us, we -- we developed a moving baseline with our
3 data, and it works really great.

4 And I will say, according to what you
5 asked your -- your specific question, I'll compare it
6 to Manhattan, which I've done, which had a lot of
7 compromised sewers. So the baseline shifted around
8 from neighborhood to neighborhood depending on how bad
9 the sewer system was. And you could smell the sewage,
10 especially up in the upper west side.

11 I've been up and down every street in
12 the District twice now -- well actually four times.
13 because I -- we did multiple passes, and there weren't
14 areas in the District that were really, you saw that
15 this baseline was corrupted by the sewage system. And
16 that's really one thing that will -- will corrupt it
17 midday as you go into an area and the sewage system
18 will be compromised.

19 So our data, I think, was really good
20 and I stand behind it, and I think it's really -- I
21 don't know what the protocol is for Washington Gas on
22 a public odor complaint at a street address. And

1 that's how I would handle every one of these
2 deviations as you go down the street.

3 So somebody would be dispatched to a
4 location, and they should be checking every direction
5 300 feet. And they would have a map of all the
6 facilities in their truck to do a flame ionization gas
7 detector survey of every pipeline within 300 feet.

8 And typically, if they're still getting
9 a deviation, if they had the analyzer, it -- they --
10 they would be going inside houses because there might
11 be gas inside a house that's coming out a window,
12 which we've had before as well. So there was gas
13 loading up in a basement.

14 So if you're getting that repeated
15 deviation, you should be able to find it. So I -- I
16 look at the equipment and the procedures for the
17 public order complaint investigation is where I see
18 the problem.

19 MS. RUIZ: The commission covered my
20 question.

21 MS. PARSONS: All right. Any other
22 questions or should we go ahead and move on? We'll

1 let the -- the people on -- on virtual step off if
2 they -- if they don't want to attend the rest of it.
3 Thank you for your time.

4 UNIDENTIFIED SPEAKER: Thank you.
5 Appreciate it.

6 MR. CALDWELL: Thank you. For the
7 record, I just want to say that the fugitive emission
8 study was -- it was submitted at the end of 2021. I
9 think I said 2023.

10 MS. PARSONS: Thank you. Yes. I
11 believe was -- wasn't it submitted in 1154, the
12 matter?

13 MR. CALDWELL: Yes. In 1130 as well.

14 MS. PARSONS: Oh, also 1130. Thank
15 you.

16 MR. ACKLEY: I'll stay if there's any
17 other questions and drop off in a bit. Thanks.

18 MS. PARSONS: Thank you. It's almost
19 three o'clock. I know we usually power through. Does
20 anyone want to take a break this afternoon or are you
21 okay to go ahead and start the next step?

22 UNIDENTIFIED SPEAKER: That would be

1 fine, five minutes.

2 MS. PARSONS: Yeah, that's fine. All
3 right. Can we take a five-minute break?

4 UNIDENTIFIED SPEAKER: You want a
5 five-minute break? Thank you.

6 (Off the record.)

7 MS. PARSONS: All right. I think we're
8 ready to get started again.

9 MR. WALLER: Okay. Thank you very
10 much. My name is Jacob Waller. I'm Manager of Codes
11 and Standards at Washington Gas as we went through in
12 the introduction. So I really appreciate Mr. Ackley's
13 final comments there with respect to what do -- what
14 does the gas company do when they are responding to
15 reports of an odor or an initial claim by a leak
16 survey technician.

17 And that brings us to leak grading
18 protocols which, in essence, is the assignment of a
19 level of hazard to a leak indication.

20 I don't know how to advance the slides.

21 MS. PARSONS: Next slide, you'll say.

22 MR. WALLER: Who is advancing? Next

1 slide. Is that -- is that you?

2 MR. HENNING: No. We have our IT
3 support --

4 MR. WALLER: Oh wow. Okay. Great. We
5 have an -- an operations and maintenance manual, which
6 is a set of -- a set of practices, policies, and
7 procedures in response to Title 49 of the Code of
8 Federal Regulations part 192.

9 And within -- within that document we
10 have a section titled "Leak Grading, Repair, and
11 Monitoring Criteria." And this forms the basis for
12 leak assessment policy at Washington Gas.

13 So we have an indication which may be
14 prompted by a -- a drive by from an -- an advanced
15 leak detective vehicle. And in response to an
16 indication or a signal which occurs, you know, during
17 multiple passes -- I believe the phrase was "deviation
18 from baseline" -- we would follow this procedure to
19 assess the level of hazard and assign a grade 1, 2,
20 or 3.

21 This has been on the books for a number
22 of years, but the purpose of this slide was in part

1 just to show that from ten years prior, we've made
2 several revisions, mostly editorial. But we did make
3 a major change to the way we approach grading to align
4 with -- actually it is the New York Codes of Rules and
5 Regulations, which is shown on the next slide.

6 So in 2021, we adopted an approach,
7 like I said, from I think it's Title 16 of the New
8 York Code of Rules and Regulation that -- that demands
9 a -- an assignment of hazard a grade. They're called
10 types in New York, but we call them grades as a
11 function of leak concentration and proximity to a
12 structure as well as the ground cover, which -- which
13 lies above the -- above the leak, should it be a
14 below-ground leak.

15 I would be remiss if I didn't mention
16 that any -- any indication that gets -- that gets
17 inside a house, or any occupied structure would prompt
18 a -- a classification of hazardous.

19 So this is New York's graphic. We took
20 it and modified it, and the result is shown on the
21 next slide.

22 So what you had was more of a profile

1 view in New York. We took the opportunity to, you
2 know, at our own tactic, which is a bird's eye view,
3 which would have you scope out a leak, determine
4 the -- the extent of the leak. That is the -- the
5 spread of area that the leak covers that's bound by a
6 reading of zero -- zero gas. So that -- that would be
7 a spread of -- that would be the -- the migration
8 pattern, as it were.

9 And you have a -- you end up with a
10 collection of concentrations, proximities to
11 structures, and ground covers. So when you mix all
12 those three factors together, you end up with an
13 assignment of grade 1, grade 2, or grade 3, which is
14 in order of most hazardous to non-hazardous, or
15 immediately hazardous to non-hazardous 1, 2, and 3
16 respectively.

17 So for example, if -- if I detect any
18 gas reading within 10 feet of a building wall, the
19 leak grade is 1, and that receives immediate and
20 continuous treatment until resolved.

21 If I am 25 feet from a -- a leak, I'm
22 in the yellow zone that's beyond 20, but within 30, I

1 believe. Sorry, the text is a little bit small. And
2 if I have an unpaved area and I'm 20 percent gas and
3 air as my peak concentration, I receive a leak grade
4 of 3. And this would be, you know, the closest to the
5 building structure.

6 So every leak is going to have kind of
7 a spread, a unique fingerprint, and you know,
8 you're -- you're taking all of these things into
9 consideration.

10 You're also taking into
11 consideration -- into consideration whether or not a
12 leak makes its way into a substructure, like a sewer
13 line, or a storm drain, or a water -- water meter box.
14 And those have their own criteria as well.

15 I -- I would note, as I listened to the
16 ALD talk earlier, it occurred to me that 1 percent gas
17 in air is 10,000 ppm. So you know, when -- when we
18 assign grades to leaks, we're -- we're on those orders
19 of magnitude.

20 We talked about 35 ppb, 0.035 ppm, I
21 believe that's the -- if a ppb is a thousandth of a
22 ppm, we're at a much lower scale than -- than what we

1 deal with when we're -- when we're talking about leak
2 grades.

3 Just -- that just occurred to me, and
4 it -- it impressed upon me that the scale at which ALD
5 is looking at leaks is much finer than what we have
6 historically used for decades.

7 MR. CUMBERBATCH: Question.

8 MR. WALLER: Yes.

9 MR. CUMBERBATCH: So the -- the graph
10 here says it's visually grading for typical single
11 family house. Is this grading -- and I'm seeing, you
12 know, the distances from the -- the structure or the
13 house -- is this the same for leaks, let's say, from a
14 commercial building or from -- in the middle of the
15 street or from a construction site?

16 Just trying to understand if there's
17 a -- a different system based on where the leak is
18 originating from.

19 MR. WALLER: That's a great point. And
20 there was a question that came in with respect to the
21 way the neighborhoods and this -- the landscape, the
22 streetscapes look in -- in Washington, D.C. It's

1 oftentimes different from a single-family home.
2 You'll have more rows of homes or commercial and --
3 and residential, you know, lining -- lining the
4 street.

5 So it's the same anywhere you go.
6 You -- you have a point in space that you've, --
7 you've created. It's -- it's usually a -- a little
8 borehole into the -- the ground. And that -- that
9 spot is X distance away from the nearest building.

10 So it doesn't matter if you're in, you
11 know, Reservoir Road where there are single-family
12 homes, or out here in front of this building. You
13 have a spot. You have a proximity to a -- the -- the
14 nearest building wall that's X feet. You have a gas
15 concentration that's determined by a combustible gas
16 indicator, and you have street cover, which out here I
17 noticed it was paved from sidewalk to sidewalk or
18 building to building.

19 So you have to mix all of those three
20 no matter where you are: commercial, industrial,
21 residential district.

22 MR. CUMBERBATCH: Right. But wouldn't

1 that make a -- wouldn't there be a difference if the
2 leak is from a service line compared to a main line?

3 MR. WALLER: Typically, the leak
4 grading criteria are pipeline type agnostic. So
5 oftentimes what you'll end up with when it's a leak
6 along a service line is a leak that propagates closer
7 to a building wall because the mains are typically out
8 in the street and the service lines travel to the
9 building walls.

10 So -- but that's just a function of the
11 system design. You know, it -- at the end of the day
12 we're looking at points in space, what kind of gas
13 concentrations are we getting, and how close are they
14 to structures.

15 MS. ROGERS: So Jacob, is it right that
16 when we think about leak grading in a, like, heavy
17 urban environment like ours -- high pavement, dense
18 buildings -- you're just going to see more 1 and 2
19 when a leak happens rather than in a rural environment
20 where you might get more 3s?

21 MR. WALLER: Yes. Exactly. If you
22 could go back one prior slide, you'll notice in the

1 location column it says, "Paved area or unpaved area."
2 If I was out in front of this building along G Street
3 Northwest, I'd be in a paved area. And if I just
4 glance from side to side, from comparing paved areas
5 to unpaved areas, you're generally at a higher --
6 meaning lower number, sorry -- grade higher level of
7 hazard.

8 If you see the yellow, it -- it
9 especially sticks out, you know, 2 and 1 versus 3
10 and 2. It gets -- it gets near equivalent when you're
11 far away. That is beyond 30 feet away from a
12 structure. But in -- in general, that's true.

13 MS. RUIZ: A question along the same
14 lines. This is Aleksandra from OPC.

15 In the operations manual, do you
16 consider whether the leak is by power lines, for
17 example, which would change the risk of different
18 kinds of leaks? Is that included?

19 MR. WALLER: Oh, we don't mention power
20 lines. I'm thinking to myself, what would that look
21 like? And if I had a -- a gas line that's nearby a
22 power line, which happens, you know. These -- these

1 utilities are crossing and they're traveling in, you
2 know, in parallel at times. That's not a
3 consideration.

4 I -- I would be remiss if I didn't
5 remind myself right now that the question posed
6 earlier about the type of pipeline does have a
7 qualifier, and we're going to get into that. That is,
8 we have system pressures. We have a transmission
9 system, which is upstream of a distribution system,
10 and certain pipelines that are -- just call them high
11 pressure, immediately receive a higher grade.

12 So beyond this graphic, there's --
13 there is what we call "special considerations," which
14 I'm about to get to. And yeah, proximity to
15 structures, the -- the whole risk is that we're --
16 we're encroaching upon sources of ignition. So I just
17 want to highlight that.

18 MS. RUIZ: That's -- that's very
19 helpful. So do you have a list in the operations
20 manual of the kind of structure that could be in
21 proximity and increase that risk in,
22 specifically, D.C.?

1 MR. WALLER: Let's take a look at the
2 special considerations, which are all listed on
3 subsequent slides and see -- see what -- what kind of
4 circumstances dictate, you know, considerations beyond
5 just this -- this graphic.

6 MR. MURPHY: Jacob probably has it on
7 other slides, but type of -- it's -- if it's an
8 occupied structure, it gets the same treatment.

9 MS. ROGERS: Well and then there's also
10 the, like, confined substructures. So, like, if it's
11 an underground power line in our confined underground
12 space, that would sort of fall into that substructure
13 category, I would guess. I honestly don't know.
14 So --

15 MR. WALLER: It's -- it's possible.
16 This is a great discussion by the way, because you're
17 really getting my wheels churning. Think about an
18 electric duct bank. You have concrete structures.
19 They carry conduits that have electric lines. You
20 said electric line earlier -- somebody did.

21 And if gas were to get in there, you
22 would be in the confined spaces, manholes, valve

1 boxes, other substructures category. And if I -- if I
2 just get 3 percent or greater gas in that structure --
3 trapped in that structure, it -- it's a grade 1 which
4 demands immediate and continuous response.

5 So from that angle, you know, electric
6 lines -- I think, you know, it's probably a little
7 more possible -- probable is the word I'm looking for,
8 that it would be a sewer line or a storm drain.
9 But -- but it's possible to -- to kind of migrate into
10 these duct banks. You just said someone said electric
11 earlier, so to leverage that example.

12 But yeah. Any -- any occupied building
13 receives the same level of treatment, meaning home,
14 school, commercial building. If it -- if it can get
15 in there, we want to know how close the gas is and at
16 what concentration it's -- it's reaching.

17 MR. CALDWELL: Can I ask a quick
18 clarifying question? We have the different colors --
19 red, orange, yellow, green -- and differentiated by
20 paved area and unpaved area. I just want to
21 understand, like, the reason for specifying whether
22 it's paved or unpaved, is that a function of the

1 material that's on top, or is that just an indication
2 if it's paved, it means it's probably closer to a
3 structure?

4 MR. WALLER: Oh, that's a great
5 question. To me, when you're talking about a paved
6 wall to wall atmosphere, like I keep referring to --
7 it's such a great example out in front of this
8 building -- when it's paved, that gas has a harder
9 time of escaping through the soil.

10 So to us it represents -- that's an
11 inherently higher level of hazard because the
12 migration can -- can be extensive before that gas
13 finds the path of least resistance and makes its way
14 up through the soil. That -- that barrier serves to
15 kind of trap the gas and then it can travel in many
16 areas, which, you know, demands a -- a, you know,
17 pretty thorough -- a very thorough leak survey to --
18 to kind of figure out where -- where your perimeter of
19 zeros is, as you kind of deduce the -- the leak spread
20 or profile.

21 MS. ROGERS: Well -- and I think to
22 your point, Jacob, that it's migrating to the place of

1 least resistance to escape. That's when you're
2 looking at, like, substructures and interior spaces.
3 And that's why you need to cover a broader range?

4 MR. WALLER: Right. Substructures
5 especially receive pretty strict rules. If -- if I
6 may, I mean, you're talking about just 3 percent,
7 which is, you know, not tremendously high if -- if the
8 spectrum of percentages is from 0 to 100. And any --
9 any mode by which gas can migrate poses a hazard;
10 substructures, paved areas. This is why we
11 discriminate between paved areas and unpaved areas.

12 MR. HENNING: I just had a question
13 about the weather. Does the -- does changes in the
14 weather, it can cause movements in gas to change as
15 well, right? Are there some leak types or places
16 where the weather change would make a leak more
17 dangerous than it would normally be?

18 MR. WALLER: We are mindful of the
19 weather. And you have to -- yeah, we recognize that,
20 let's say, we had frozen ground. It would mean that
21 the inspection pattern -- when -- when we go, we want
22 to see where the -- where this profile or where this

1 shape that the leak plume underground occupies. We
2 would've to go further. If it's wet, you know, leaks
3 may -- may spread further.

4 So, you know, the -- the approach is
5 the same in dry weather as it is cold or wet weather.
6 You're forming a perimeter of zeros if -- if that
7 makes -- if that makes sense. We call it leak
8 centering.

9 MR. HENNING: Yeah. No, that -- no,
10 that's helpful. So I mean, that's something that when
11 someone's like on site, they're -- they're noting that
12 and they're changing their -- their approach based on
13 the weather, or is that just -- how would -- how does
14 that come to bear?

15 MR. WALLER: Yes. We're talking about
16 leak grading, but there's another section that I
17 didn't highlight. Shame on me. I should have
18 included a slide. It's called "leak investigation."
19 And it shows that a perimeter that you have to achieve
20 before you can, you know, affirmatively say, "I've got
21 the leak surrounded."

22 MR. CUMBERBATCH: Jason from OPC again.

1 So -- so the leak grading, is it essentially the point
2 where the gas escapes, and based on the distance or
3 the parameters around that escape point that's --

4 MR. WALLER: Okay.

5 MR. CUMBERBATCH: -- determines the
6 grade?

7 MR. WALLER: Okay. Great question.
8 What we're doing is we're -- we're finding any
9 substructures that we can find, first off. So you see
10 that little yellow valve box in the street. We're
11 checking there if -- if there's a leak indication at
12 this house along the surface line.

13 But we're also probing the ground
14 with -- with drills or bars and creating what's called
15 a bar hole. And we're measuring the gas concentration
16 within that hole that extends down to our pipeline.
17 It's about an inch and a quarter in diameter, give or
18 take.

19 So we're not waiting for gas to escape.
20 We're -- we're actually piercing the ground so that we
21 can detect gas that's, you know, shifting throughout
22 the soil or flowing from a leak.

1 MR. MURPHY: And the -- the relative
2 distance is judged from the highest concentration
3 detected. That's where you're making the grade
4 assignment?

5 MR. WALLER: Yes. That's a great
6 question. I really appreciate that because if I
7 wasn't clear on that, I -- I apologize. But we have
8 to -- we determine the concentration, not just from
9 standing on the surface and, you know, we have the --
10 they're wands. And that's helpful because they could
11 be inserted into holes into the ground.

12 MS. BOTWINICK: I have a follow-up
13 question. This is Katya Botwinick from DOEE. How are
14 leaks treated if they're coming from above ground? If
15 it's determined that the leak is coming from
16 above-ground infrastructure, how are they treated and
17 graded?

18 MR. WALLER: Right. So above-ground
19 leaks -- if I had a leak at a -- I'm trying to think
20 how I should do this, because they -- they come, yeah,
21 absolutely. They come up in further slides.
22 There's -- there's a -- a big one we should probably

1 knock off, you know, the checklist.

2 If -- if the -- the person that's
3 moving these slides can advance to the -- one slide
4 forward, please. Ah, that's great.

5 Okay. So -- so what about
6 above-ground? I'm going to kind of leap off this. So
7 if you have an above-ground leak, like a leak at a
8 meter set or a riser -- meter sets are very common;
9 you'll see them outside of buildings or inside --
10 they -- they're either hazardous or non-hazardous, one
11 or the other. And -- and if they're hazardous, they
12 get treated the same way as a grade 1 leak.

13 So this shows up in our special
14 considerations, which you're reading a lot. There's a
15 lot of text here. But what -- what this is supposed
16 to do is just show an evolution over time of criteria
17 that have been, you know, listed within the O&M and
18 then we've -- we've refined that the -- the
19 descriptor.

20 MS. RUIZ: While you're explaining,
21 could you please add what constitutes a hazardous leak
22 when it's above ground? So you -- you mentioned it's

1 the same as a grade 1 leak, but could you explain what
2 constitutes hazardous, or how do you get to that
3 point?

4 MR. WALLER: Yeah. Hazardous leaks
5 represent an -- an immediate danger that requires
6 immediate action or continuous action until the
7 condition is no longer hazardous. And that kind of
8 dovetails with the definition of a grade 1 leak. A
9 grade 1 leak is a hazardous leak.

10 And so what does that mean? Well if --
11 if it's audible from above-ground, if I can hear it
12 hissing, it's a -- it's a hazardous leak, which if it
13 results in combustible mixtures around sources of
14 ignition, or could result, i.e., an inside leak, then
15 it's a -- it's a hazardous leak. If it's resulted in
16 a fire or explosion, that's a hazardous leak. If it's
17 an outside leak that's traveling under or into a
18 structure, it's a hazardous leak.

19 So we have these considerations listed
20 here. They show up in the O&M as well too. We're
21 trying to -- I'm matching this graphical, you know,
22 kind of cut and dry with these qualifiers that you

1 need to consider. But in essence, a hazardous leak
2 is -- represents an emergency to us.

3 MS. BOTWINICK: Just one more
4 follow-up. How many of the above-ground leaks would
5 you say are hazardous? If you can, like, it could be
6 a rough guess. I'm just --

7 MR. WALLER: That data is available.
8 Above-ground leaks are -- I would be guessing.

9 MS. ROGERS: We can get that
10 information for you.

11 MR. WALLER: Yeah.

12 MS. ROGERS: I'll save Jacob from
13 guessing.

14 MR. HENNING: This is Bryan Henning
15 with the staff. I -- I noticed the color indicators
16 as you went through on this slide. Does that reflect
17 when the revision was added? So, i.e., the text in
18 the light green was added in that revision? The text
19 in the blue was added in that revision? Same for the
20 text in red?

21 MR. WALLER: Yes. It represents when
22 that text became effective.

1 MR. HENNING: Okay. And then the giant
2 red box, is that because that was updated in the --
3 the '23 revision or just a highlight that all of that
4 analysis was replaced with the -- the graphical
5 approach to it?

6 MR. WALLER: Yeah. First off, we tried
7 our best to summarize ten years' worth of evolution in
8 a slide. So I'm -- I'm really apologetic about all
9 the text here. But that big red box is supposed to
10 draw my attention to the fact that that one statement
11 was -- was an approach and the paradigm shift to the
12 leak grading graphic occurred in -- effective
13 January 1, 2021.

14 So for example, back in 2012, if I were
15 talking to you in 2012, I would've said -- all I
16 would've said is any CGI -- that's combustible gas
17 indicator -- reading 75 percent or greater is a -- is
18 a grade 1. And we've -- we've really, really added
19 layers to that. If that --

20 MR. HENNING: No. That answered
21 perfectly.

22 MR. CUMBERBATCH: I'm sorry. Just one

1 last follow-up question. Just following up on DOEE's
2 question of how many hazardous leaks are above-ground.
3 So in terms of the recording of the leaks, which is
4 done on the LIDAROC database, how do you differentiate
5 between the two tabs of above-ground leaks and
6 underground leaks?

7 Because my understanding is the
8 above-ground leaks are the complaints that are made by
9 either residents or that's -- that's called in or, you
10 know, and the underground leaks are what is determined
11 by the technicians when they come on the site.

12 MS. ROGERS: I think that subject to
13 Kevin and Jacob's correction, as always, you can have
14 a -- a call out, an odor call, for either above or
15 below-ground leak. It's essentially just an
16 indication that somebody smells something.

17 And then we send a crew out and they
18 look for where that leak is coming from, which again,
19 could be underground but found its way out, or from an
20 above-ground source. Is that right, Jacob?

21 MR. WALLER: Yes. When you call in a
22 leak, we're going to do an above-ground and a

1 below-ground assessment. I mean, getting -- when we
2 pinpoint it that -- that will be telltale. But if we
3 can't find it, you know, from -- on a meter set using
4 soap and water or something like that, or a CGI, it
5 will prompt a below-ground investigation.

6 But we, you know, when we get calls,
7 the -- the leaks are -- they come from both spaces.

8 MR. MURPHY: So it's been a minute
9 since I perused through the LIDAROC database process.
10 But there -- there is reporting of odor complaints in
11 LIDAROC. Those are customer calls. It's odor of gas
12 in the air most commonly. And the -- the resources we
13 send, we colloquially refer to them as our
14 above-ground technician. They do maintenance on
15 above-ground assets. They do the meter -- meter work,
16 customer premise work.

17 So as -- as was said, if we get out
18 there, and that -- that first responder does the
19 assessment and determines the leak is below-ground,
20 they'll -- they'll go through the grading process, and
21 if it can be scheduled for repair, a 2 or a 3, it's --
22 it's scheduled for repair, and that's the end of that

1 visit until an underground maintenance crew can deal
2 with it.

3 If they get out there and it's above
4 ground, they make the judgment. Is this hazardous?
5 Do I need to deal with this or get somebody out here
6 who can deal with it? Or is it non-hazardous? Can I
7 schedule it for repair or not even schedule it for
8 repair? Grade 3s can be monitored in the next leak
9 service cycle.

10 So it's a little convoluted in LIDAROC
11 database because of the way the -- the prescriptive
12 way it's defined in -- in the DCMR. It says give us
13 this, and so that we do that. And it does make it a
14 little hard to digest. But whether it's above or
15 below it -- it still goes to a hazard assessment.

16 MR. CUMBERBATCH: Thank you. Thank
17 you.

18 MR. HENNING: I guess the follow-up to
19 that question then is when you are looking through
20 these in LIDAROC, is there an easy way to
21 differentiate whether it was an above- or below-ground
22 leak?

1 MR. MURPHY: I don't know if it's easy
2 and I'm -- I'm guessing it's not. We've had multiple
3 technical conferences around LIDAROC and we -- we
4 really struggled to find a common understanding. I'm
5 always up for another go. And -- and I -- I don't
6 think I can do it by the seat of my pants here without
7 it in front of me. But I -- we -- we recognize that's
8 been a perennial topic of discussion.

9 MS. RUIZ: Well OPC would welcome that
10 for another LIDAROC focused conference. I also
11 have -- oh, go ahead.

12 MR. HENNING: I was just going to say,
13 I -- I actually believe that that is part of this
14 broader 1178 discussion process, is -- is how we might
15 improve that. We were trying to get what we thought
16 might be the easier component, which is how is a grade
17 derived? But I -- I think we will get into that
18 discussion as we go further into this process.

19 MS. PARSONS: That would probably be,
20 like, the next stage we would focus on LIDAROC.

21 MS. RUIZ: I have just one last
22 question about the first slide and the conversation

1 around it. What part of the operations manual, if
2 any, addresses a situation where -- for example, it's
3 Georgetown. There's a row of structures that are
4 entirely surrounded by cement. Does the operation
5 manuals direct or inform how far out you should be
6 testing for underground leaks?

7 MR. WALLER: Yes, yes. Absolutely. So
8 in the leak investigation section of the O&M, which is
9 section 3221 -- this is 3222; it just precedes this --
10 you must -- you must test in a situation like that.

11 It's Georgetown. You said it's -- it's
12 all paved. So you're going to be drilling holes along
13 the -- the main and the service -- the area in
14 question till you form a perimeter of zero readings
15 that you know, where -- where gas is -- is not
16 observed. So you have the -- kind of like a lasso
17 around the -- the leak -- the migration profile.

18 So yes. You would be -- you would be
19 doing that in Georgetown. And that's -- that's
20 defined in not the -- not not the grading, the
21 assessment of hazard, but in the -- the kind of the --
22 the mechanics behind the -- the assessment.

1 I wish I had that graphic right now,
2 but --

3 MS. ROGERS: I was just thinking that
4 would've been a good, like, fancy graphic that we need
5 to invest in.

6 MR. WALLER: Yes.

7 MS. ROGERS: Like, invest in.

8 MR. WALLER: It's not so fancy. But it
9 is effective.

10 Grade 2, so what do I mean exactly when
11 I say grade 2? Because grade 1, those are hazardous
12 and require immediate and continuous response until
13 resolved. But the next slide defines a grade 2 leak.
14 That's non-hazardous at the time of discovery but
15 requires scheduled repair. It used to say
16 "justifies," but just editorially, we -- we felt it
17 better to -- to say "requires."

18 These -- these leaks are cleared within
19 one calendar a year, not to exceed fifteen months and
20 are monitored every six -- six months until cleared or
21 downgraded. That is a -- a possibility.

22 And then once again, we have these

1 special considerations. These happen to -- to meet --
2 meet up pretty closely with the diagram -- the
3 graphical diagram.

4 So you know, if I'm reading one of
5 these currently, and I see the term "CGI," again, I'm
6 going to say a combustible gas indicator reading at
7 top right of less than 10 percent gas in air in a
8 paved area or less than 20 percent gas in air in an
9 unpaved area within 20 feet of a building wall.

10 That's a mouthful. But those are all
11 kind of graphically represented in -- in the figure
12 we -- we showed.

13 MS. RUIZ: I have a question around
14 what you just mentioned. Is there a limit to how
15 often or frequently grade 2 leaks can be downgraded?

16 MR. WALLER: If you were going to
17 downgrade a grade 2 leak, you can only go -- there is
18 a limit. It could only be downgraded as far as a
19 grade 3. So that's -- that is a theoretical
20 possibility.

21 And then you're going to have several
22 opportunities to downgrade a leak. That is one

1 during -- if there's pinpointing activity. So a grade
2 can be assigned by a leak survey technician or a
3 service operations technician as part of a leak survey
4 or a response to an odor call.

5 Then you're going to want to pinpoint
6 the leak and get a sense for, you know, where it's
7 specifically coming from. That's going to be assessed
8 by a below-ground crew, a crew with those tools that I
9 mentioned, bore holes into the ground, especially
10 pavement.

11 When you do that, you can downgrade a
12 leak if the readings you're getting, you know,
13 disagree with the original assessment that was only
14 above-ground. Or if you reassess the leak six months
15 from the original investigation, you have an
16 opportunity to downgrade the leak.

17 But if it remains a grade 2 after one
18 calendar year not to exceed fifteen months, it needs
19 to have been resolved or repaired.

20 MR. CUMBERBATCH: So just to clarify,
21 you have up to 15 months or 12 to 15 months to repair
22 a grade 2 leak?

1 MR. WALLER: Yes.

2 MR. CUMBERBATCH: So I guess that's
3 probably where I think OPC needs some clarification.
4 We were under the impression that grade 2 leaks would
5 be repaired in -- within a six-month period.

6 MR. WALLER: It should be assessed
7 within a six-month period. But unless there's some
8 sort of agreement that I'm not aware of, you know,
9 like an order or something, the -- the O&M follows
10 that they should be monitored at least every six
11 months and then repaired within calendar year, NTE
12 fifteen months.

13 MR. DODGE: Jacob, if I may. John
14 Dodge with Washington Gas. These are not Washington
15 Gas's standards. The -- the derivation of these is
16 federal law; is that correct?

17 MR. WALLER: Almost. The -- the
18 derivation of this is from a federally recognized
19 group, the Gas Piping Technology Committee and their
20 grading criteria that is in the -- they're known as
21 the GPTC, and they have a -- a guide for distribution
22 and transmission and gathering operators. And they

1 outline this timeframe.

2 There is no timeframe in -- in the
3 federal -- federal regulations. There was a proposed
4 timeframe that appeared in a proposed rule that is
5 called the Advanced Leak -- well known as the Advanced
6 Leak Detection Rule, but it is TBD.

7 MR. HENNING: So I actually have -- I
8 have two questions. I'm going to start with the
9 updated PHMSA rulemaking on that.

10 Presuming that what was published as
11 the -- the Notice of Proposed Rulemaking, and then the
12 January 17th publication, presuming that that actually
13 is implemented and passed forward, do you anticipate
14 that there will be any changes to how you go about
15 grading these leaks? I -- I know that there are going
16 to be repair changes in timelines, but do you -- do
17 you anticipate that that will change your grading
18 process for leaks?

19 MR. WALLER: Not repairs, but grading,
20 yes, because we are compelled to understand leak flow
21 rates within ALD, which it's very important to
22 understand that, you know, currently as our technology

1 suite exists, we are not considering flow rate when we
2 assign grade. It's just, as I said, concentration,
3 proximity to structures, ground cover.

4 MR. HENNING: Do you have an estimate
5 for when that's going to be established within the O&M
6 manual?

7 MR. WALLER: I do not. We would've had
8 a timeline should the ALD rule, you know, not been
9 rescinded or withdrawn.

10 MR. HENNING: Right. Published on
11 January 17th is an important component to that, I'm --
12 I'm aware. Then the -- the second question that I
13 have for you is, when we're discussing this
14 downgrading process, do you know when those -- when
15 leaks that are done repaired -- done repaired -- when
16 leaks that are repaired are submitted to your annual
17 PHMSA report and they're categorized as hazardous
18 or -- or other, is that categorization based upon the
19 initial finding and categorization, or is it based
20 upon the grade of the leak at the time at which it is
21 repaired?

22 Which is to say, if you downgrade it,

1 does it go in as a -- a non-hazardous for the purposes
2 of that report, or is it hazardous because that's what
3 it was when you found it?

4 MR. WALLER: I'd like to check. I --

5 MR. MURPHY: It's -- it's classified as
6 what -- how it was categorized at the -- at the time
7 of repair. So you know, if -- if a 1 -- it's very
8 possible that a leak survey technician with limited
9 ability to do an underground migration investigation,
10 gets out there and says, "This is a 1." An
11 underground crew puts down bar holes really
12 understands the true extent of migration and says,
13 "No. Actually it's a 2." We fix it. It's -- it's
14 going to be reported as a nonhazard.

15 MR. HENNING: Okay. Thank you.

16 MS. ROGERS: And I think going back to
17 your question about the tabled, pulled, unclear,
18 unclear status of the federal rulemaking, when we had,
19 in our January 30th report, talked about a
20 super-emitter program, I think where that program is
21 useful using ALD, looking at the emissions or the leak
22 rates, it -- it's the grade 3s; right?

1 Because the grade 3s -- and maybe a
2 little bit of grade 2 -- but the grade 3s in
3 particular, a higher leak rate doesn't necessarily
4 mean that you're getting moved up because you're out
5 in the middle of the street or, you know, for other
6 parts of our service territory, not D.C., it could be
7 in the middle of a field.

8 But that's a place where we see ALD, a
9 super-emitter program using ALD, that would make a
10 difference in the emissions and would really
11 prioritize leaks that otherwise might not get the
12 priority.

13 MR. HENNING: And -- and just to make
14 sure that my intuition is correct and -- and aligns
15 with what it sounded like Bob and -- and Nathan were
16 saying, that's driven by the fact that realistically a
17 grade 1 leak is just not open long enough to emit that
18 much gas regardless of the size, because it has to be
19 repaired or addressed immediately. So it just doesn't
20 have long enough to admit that much gas?

21 MR. MURPHY: I'm not a hundred percent
22 sure I'm -- I'm following you. But you know, if -- if

1 a grade 1 is picked up with an ALD device capable of
2 estimating flow rate, we know when we found it and how
3 much we think it might've been flowing when we found
4 it.

5 When that started flowing, we don't
6 know whether it -- the rates went up and down over
7 time. You -- you can't -- it's not going to be useful
8 for estimating emissions. And a grade 1 if it's going
9 to be worked as a grade 1 is going to be continually
10 worked and likely resolved before the end of a shift.

11 MS. ROGERS: Well and it's also, like,
12 when you think about the diagram and the percentage of
13 gas to air, like, obviously if you have a big leak and
14 in close proximity to a building, that's going to
15 increase the grade.

16 So I do think that that's probably what
17 Bob was thinking about. I mean he's still on the
18 call, so he can certainly opine. But to me I think
19 that when I think about the use of ALD on
20 super-emitters, it really is targeting those things
21 that would be grade 3 but for the size of the leak.

22 MR. WALLER: Absolutely. Yeah. Back

1 to the discussion about grade 1s and repairing right
2 away, it's -- it's funny. You know, the ALD would've
3 had us designate a grade 2 a leak that's emitting
4 10 standard cubic feet per hour or more and grade 3 --
5 repairable grade 3 as between 5 and 10. And then they
6 had a non-repairable grade 3 as less than 5.

7 So that maybe -- maybe the thinking
8 behind the code writers, if I can presume, was that
9 you know, your grade 1s are -- are not going to change
10 as a function of flow rate. They -- the flow rate
11 does -- doesn't appear. You know, you have dangerous
12 situations in proximity to, you know, occupied
13 structures. Fix them right away and hone in on those
14 grade 2s and 3s, which we otherwise wouldn't have had
15 that insight, you know, with respect to flow rate.

16 MS. RUIZ: I have a follow-up question
17 around when the grade is assigned or what -- what
18 point in time it's based off of, the moment of repair
19 versus the moment it's called in. Is that the same
20 case for when you're providing the code in LIDAROC or
21 is it different from the PHMSA reporting?

22 MR. MURPHY: And I don't have LIDAROC

1 in front of me, but you used the word "code." Code is
2 different than grade. Code is a prioritization of
3 the -- in the dispatch office.

4 MS. RUIZ: Oh, that's part of my
5 question. So I'm trying to understand when you said
6 that the grading happens or is reflective of the level
7 of hazard at the moment of repair, is that true for
8 what is being inputted into LIDAROC as well as a PHMSA
9 reporting?

10 MS. ROGERS: Well I think when things
11 are put into LIDAROC, isn't that, like, the callout
12 time? And so it's the call-out, and then once we've
13 got a tech on the ground, they assess the scene and
14 determine whether it's a grade 1.

15 MR. WALLER: Right.

16 MS. ROGERS: And they immediately
17 repair, or it's not a grade 1 and they need additional
18 -- may or may not need additional crews to help
19 establish the grading?

20 MR. MURPHY: I think -- I think what's
21 likely in LIDAROC is, as I -- I explained to Bryan
22 that whatever it's graded at, at the time of repair

1 is -- is what it's going to be reported at. Repaired
2 grade 2. We're out there with a grade 2. We repaired
3 the grade 2. That's reported to the database in the
4 PHMSA.

5 MR. CUMBERBATCH: I think we understand
6 that. But I think the question is the origination
7 date. Because I have the -- the LIDAROC in front of
8 me. I -- I play with it all the time. So there's an
9 origination date and a work completion date for
10 underground leaks.

11 And I think that we're leaning towards
12 understanding at the point of work completed, is that
13 when it's -- the grade is finalized, or is it the
14 origination date?

15 MR. WALLER: We have G1R's, grade 1
16 repairs, G2Rs. So those reported repairs match up
17 with the grade at the time of repair, like you're
18 saying.

19 MR. MURPHY: Yeah. I guess I'm not
20 understanding the question very well.

21 MS. RUIZ: So to add to Jason's
22 question, which I'll just add is a component of the

1 OPC questions that were submitted on September 3rd
2 that Washington Gas has not responded to,
3 15 DCMR Section 3702.12 and 13 specifically talk about
4 the origination date and the grade of leak being
5 necessary components of what's added to LIDAROC.

6 So our questions are trying to
7 understand what -- whether that is happening. Is
8 there grading happening at the point of origination?

9 MR. MURPHY: Yes. You have to
10 originate a grade as soon as you've determined that
11 this is a leak.

12 MS. RUIZ: Okay. That's helpful. Is
13 that being included in LIDAROC?

14 MR. MURPHY: I assume so. But
15 that's -- we should -- we should walk through that.
16 I -- I know we're reporting grades in LIDAROC.

17 MR. WALLER: Yeah. I -- I'm not sure.
18 I don't fill out LIDAROC. But I would be interested
19 to know.

20 MR. CUMBERBATCH: We will look into
21 that in report back.

22 MS. RUIZ: We are also very interested

1 in knowing and having a written response, preferably
2 around whether you do or do not. Thank you.

3 MR. CUMBERBATCH: Of course.

4 MR. WALLER: Finally, related to
5 grade 3s there on the next slide, there was no
6 descriptor beyond -- that's why there's a blank box.
7 Because all -- all that you'll see in the O&M is from
8 that yellowish box with the dashed border.

9 A grade 3 leak is any leak indication
10 that doesn't meet the criteria of grade 1 or 2. And
11 what that means it's non-hazardous at the time of
12 detection and we expect it to remain non-hazardous.

13 And what do we do to -- to maintain
14 that expectation? We monitor and reevaluate either at
15 the next scheduled leak survey or 15 months. And
16 these leaks can be, you know, monitored indefinitely
17 should they meet -- maintain to meet grade 3 leak
18 criteria.

19 MS. RUIZ: Sorry. I do have a question
20 around that. So you just mentioned that grade 3 leaks
21 are not hazardous at the time of detection. So what
22 happens when a grade 2 leak is downgraded to a grade 3

1 leak and it was -- or grade 1 leak was downgraded to a
2 grade 2 leak, and then a grade 3 leak and it was
3 considered hazardous at the time of detection?

4 MR. WALLER: If it's a grade 2 leak
5 that's downgraded to a grade 3 leak, which doesn't
6 happen often, but it -- it's possible, it would enter
7 a monitoring cycle. If it's downgraded it would then
8 be -- be monitored, you know, until either repaired or
9 monitored again.

10 MS. ROGERS: Not to put you on the spot
11 but -- not to put you on the spot, Jacob, but can you
12 give us an example of a time or a reason that a
13 grade 2 might get downgraded to a grade 3?

14 MR. WALLER: Yes. If at the six-month
15 inspection cycle for a grade 2 you cannot get readings
16 that would, you know, kick you into the -- the grade 2
17 zone, you're -- you're getting, you know, 10 percent,
18 you know, 40 feet from a building mall. You're just
19 not generating enough concentration or proximity to a
20 structure that would, you know, meet the grade 2
21 criteria.

22 MR. HENNING: I see -- I think Bob's

1 hand went up. Bob.

2 MR. WALLER: In that case, Bob, did --

3 MR. ACKLEY: Yeah. Thanks. I have --

4 I have a question on your investigation. You keep
5 indicating that you get readings of, you know,
6 10 percent or 30 percent. I'm just assuming that
7 these are in what we would call in the industry bar
8 hole testing or plunger bar holes?

9 MR. WALLER: Yes.

10 MR. ACKLEY: And typically, they're now
11 6 to 10 inches or whatever your Miss Utility or
12 whatever you use in your area. Typically, we do
13 6 inches just to be safe. So is that the only
14 equipment you use to investigate a public odor
15 complaint? Is the plunger bar and the combustible gas
16 indicator, or is it standard to have other equipment
17 available?

18 MR. WALLER: Oh yes. We're going to
19 leverage plunger bar holes, substructures that already
20 exist, you know, valve boxes, sewers, et cetera,
21 and --

22 MR. ACKLEY: Well that's not my

1 question. My question is what other equipment is used
2 in the investigation? Is it just the combustible gas
3 indicator and the Bang [ph] bar, or is there a flame
4 ionization unit? Is there a DP3? I've seen the Heath
5 units. They look like a little barrel. I can't
6 remember the model number. I don't know if you've
7 seen those. Those are pretty good. Bascom-Turner --
8 I was there today -- they've got the rover and ranger.

9 You know, so what -- what do -- what do
10 you -- what does WGL utilize on a public odor
11 complaint?

12 MR. WALLER: Bascom-Turner gas-rangers
13 and rovers.

14 MR. ACKLEY: That's what you're using
15 now?

16 MR. WALLER: Yes.

17 MR. ACKLEY: Yeah?

18 MR. WALLER: Yes.

19 MR. ACKLEY: And what's their
20 capability? Is their capability around 10?

21 MR. WALLER: Oh, I think the -- the
22 rover is -- is good down to, I want to say, 5 ppm.

1 But the Ranger is good down to 50 ppm, if you're
2 talking about sensitivity.

3 MR. ACKLEY: Yeah. Right on -- on just
4 the gas track mode?

5 MR. WALLER: Right.

6 MR. ACKLEY: Yeah. Yeah. Okay. Well
7 thank -- thank you for that information. I really
8 appreciate it. And I'm -- I'm really amazed with
9 your -- your protocols. It's very good, by the way,
10 from an independent here. Thank you very much.

11 MR. WALLER: Thank you. Thank you,
12 Mr. Ackley.

13 MR. MURPHY: I would add that when a
14 grade 1 -- when we're contemplating when a crew leader
15 believes a grade 1 is going to be downgraded, they do
16 actually bring the laser out, the Heath RMLD and just
17 as an extra -- extra layer protection, extra quality
18 control to make sure that we -- that that is a
19 justified decision. So that there is an instance
20 where that extra piece of equipment is brought to bear
21 on -- on leak grading.

22 MR. WALLER: Yes. Downgrading prompts

1 another instrument, the remote methane leak detector.

2 MS. BOTWINICK: I have a question about
3 how grade leak -- grade 3 leaks are recorded because
4 I -- I have never seen LIDAROC. I don't think we've
5 ever had access to it. So I don't -- all of those
6 conversations are going up over my head. I haven't
7 seen it.

8 But I have seen some of the PHMSA
9 reporting and the reporting that the commission does
10 on their website about leaks, and it's just hazardous,
11 non-hazardous. I'm assuming the hazardous is the
12 grade 1 leaks. Is the hazardous just grade 2 or is
13 grade 3 also included in that?

14 I just want -- I'm trying to understand
15 if grade 3 leaks are actually being included in some
16 of those numbers or if they're kind of being, like,
17 left off the table?

18 MR. WALLER: Non-hazardous would be
19 grade 2 plus grade 3.

20 MS. BOTWINICK: Oh, it's all inclusive
21 of grade 2 and 3 leaks?

22 MR. MURPHY: It's important to read the

1 definitions that come with the PHMSA reporting form.
2 They -- they ask that you do not report on hazardous
3 leaks that are repaired by lubrication, adjustment,
4 and tightening.

5 MR. WALLER: Yes.

6 MR. MURPHY: So we -- we follow the
7 instructions on the form. Those -- I think the intent
8 is, I don't want to call them nuisance leaks, but
9 they're very minor leaks that are just snug the
10 fitting and -- and that's it. They ask in their
11 reporting criteria to exclude those.

12 MR. WALLER: And thanks so much, Kevin.
13 That's a qualifier. If you would lubricate, adjust,
14 or tighten the fitting to resolve the leak, it gets
15 thrown out of the report.

16 MR. HENNING: And just to make sure
17 that I have been reading the fine print correctly,
18 it's all of the leaks that are repaired within a given
19 year. So let's say you discover a grade 2 leak on
20 Thanksgiving. Nobody wants to be out there doing that
21 when they can have turkey. So it goes onto the
22 schedule, and it becomes scheduled for repair in

1 February, a wonderful Valentine's Day present for
2 somebody.

3 That leak goes onto the next year. The
4 February report has a other non-hazardous leak that
5 goes into the February report, but in the report for
6 the proceeding year, it gets recorded as one of the
7 known leaks scheduled for repair; is that correct?

8 MR. WALLER: You got that right, yeah.

9 MR. HENNING: And then grade 3 leaks
10 would not appear on the scheduled for repair category
11 because they're not scheduled. They're being
12 monitored. But if you then go back and do your annual
13 inspection and conclude that it must be repaired at
14 the time that it is repaired, it goes on that year.
15 So it -- it may be some extended period of time before
16 it actually goes onto the -- the period.

17 So it may be something that was
18 discovered in 2021 but was stable, minor, and so was
19 left and monitored, and then in '24 it is repaired and
20 removed. That then goes on the '24 repair list;
21 correct?

22 MR. MURPHY: That does sound correct

1 to me.

2 MR. HENNING: Okay. I -- I wanted to
3 make sure I read the small print correctly, and I -- I
4 find that the examples are helpful to make sure that I
5 understand correctly.

6 MS. ROGERS: Well and it's a great
7 point, because it's sort of counterintuitive when you
8 look at, like, leak data. You're thinking that the
9 utility has a lot of leaks but it's actually
10 indicative of robust leak repair programs.

11 So it -- it ends up creating this
12 situation where you could have a utility that has a
13 lot of grade 3 leaks but looks like they have great
14 leak data because they don't do a lot of repairs. So
15 you can get utilities, not Washington Gas certainly,
16 but other utilities can get big backlogs of grade 3
17 leaks that never actually show up and also don't get
18 repaired.

19 MS. RUIZ: I have a follow-up question
20 for you, Jessica. So is that reflective in LIDAROC?

21 MS. ROGERS: I -- I, too, Katya, have
22 not been to LIDAROC so I don't know.

1 MS. RUIZ: It is very important for OPC
2 that Washington Gas disclose what is happening in
3 LIDAROC. It is required by DCMR, and it's very
4 confusing what you just stated around there being a
5 representation of a perpetual amount of repair
6 schedule.

7 I might be misphrasing, but what you
8 just stated isn't consistent with what OPC understands
9 the DCMR requires to be reported as a grade.

10 MS. ROGERS: Oh, and I definitely
11 wasn't saying this as to D.C. I was saying it as to
12 PHMSA data.

13 MS. PARSONS: We're talking about PHMSA
14 rules; right?

15 MS. ROGERS: PHMSA's reporting data is
16 specifically repair focused, and not leak existence
17 focused. So I -- I sincerely don't know. And now I'm
18 going to learn about -- a lot about LIDAROC because it
19 sounds like we're going to have a technical conference
20 on this, and I should probably prepare myself.

21 MS. PARSONS: That we should -- that's
22 what we should work towards, is that having another --

1 UNIDENTIFIED SPEAKER: Yeah.

2 MS. PARSONS: -- conference about
3 LIDAROC. But I do appreciate you all identifying your
4 questions to identify to Washington Gas what you think
5 we need to talk about when we get there.

6 MR. HENNING: I've -- Jacob, I want to
7 make sure you finished your presentation. If I recall
8 correctly, this is the final slide?

9 MR. WALLER: This is it.

10 MR. HENNING: And -- and you finished
11 what you wanted to present, because I had a question
12 that is related to this, but I didn't want to derail
13 this too much.

14 MR. WALLER: Yes.

15 MR. HENNING: Okay. So you had this
16 revision to how the grading process was established in
17 2021. And I -- I happen to notice as you look through
18 the PHMSA reporting on leaks that have been reported
19 in '21, '22, and '23 there is a noticeable change in
20 the pattern of the percentage of hazardous leaks
21 relative to other leaks.

22 Do you believe that is reflective of a

1 change in the leak characteristics of the city, or do
2 you believe that that is a byproduct of this change to
3 how you've done your grading process? Obviously, I
4 can't know for sure, but the timing happens to line up
5 in a way that -- that I -- I'm curious about.

6 MR. WALLER: Yes. We -- we anticipated
7 that this paradigm shift would result in, you know,
8 a -- a change in reporting norms, percentage of grade
9 1, 2, and 3 leaks. And I think that's been reflected
10 in the data, but hopefully now we have a kind of a new
11 baseline, as it were.

12 MR. CALDWELL: Can I ask a quick,
13 quick, quick question. When you detect that there's a
14 leak in using ALD, and ALD now is able -- capable of
15 measuring the flow rates, do you record the flow rate
16 along with the, you know, the -- the other information
17 that you may be taking down to, you know, report when
18 the leak is reported or active?

19 MR. WALLER: I've seen the data output
20 from ALD runs, and I've seen the flow rate, you know,
21 determination. That data does exist from the ALD
22 runs. But when it makes its way into these systems of

1 record that we're talking about, you know, for
2 reporting to PHMSA or D.C. or Maryland or Virginia,
3 that flow rate data does not make its way into those
4 systems of record. Stops at the ALD.

5 MR. CALDWELL: Right. Yeah. I -- I
6 understand. But I guess what I'm trying to get at is,
7 is it possible, like, say for, like, a grade 2 leak
8 where it's not repaired right away, but you know, or
9 grade 3 that's monitored, to be able to calculate the
10 amount of emissions that are coming out of the -- the
11 leak over time?

12 MR. WALLER: If we have ALD data, that
13 gives us a snapshot of the flow rate, normally in
14 standard cubic feet per hour. We could understand,
15 you know, the ongoing leak flow, you know, volume
16 that's -- that's building at least since the time of
17 detection. There's a -- there's, of course, the --
18 the origin of that leak is not exactly known.

19 MR. MURPHY: I -- I think if you have a
20 flow rate and you have a time, you can do
21 multiplication. You get a number. I -- I don't know
22 that the -- the ALD data represents a -- a full

1 capture of every bit of methane that's ascribed to --
2 to a leak.

3 Again, this is, you think about that
4 complex environment. You got all that pavement.
5 It's -- it's coming out of cracks here and cracks
6 there. ALD has given you in a -- what did we talk
7 about, a 30-foot buffer, you know, multiple matching
8 peaks and you -- and -- and a flow rate is determined.

9 So I -- I don't -- I don't think it's
10 really precise to just take -- take that number, do
11 the multiplication on time, and call it a emission.

12 MR. WALLER: Yeah. The resolution is
13 not very fine. I think someone earlier during the ALD
14 discussion talked about order of magnitude expectation
15 that, you know, if you had a 10 SCFH leak, is it 1?
16 Is it 100? Kind of gets you in that -- in a -- in a
17 large ballpark of sorts.

18 MR. CALDWELL: Okay. Yeah. Because I
19 was curious, like, if that's, you know -- you know,
20 ALD's potential could be used towards, you know, maybe
21 calculating a local, like, greenhouse gas emissions
22 standard or at least reported or known or something

1 along those lines.

2 MR. HENNING: And I see that, Bob,
3 you've still got your hand up. I don't know if that's
4 from the earlier or now, but I -- I wanted to check in
5 and make sure. I'm going to assume it's from earlier.

6 Then the -- the last question that I
7 had actually dovetails off of the -- the question from
8 D.C. gov. Again, I've spent a lot of time reading
9 these, and there's a lot of fine print and a lot of
10 specificity in -- in these reports.

11 I noticed that there -- that Washington
12 Gas draws a distinction between ALD indications and
13 leaks whereby I -- I noticed that in a great many of
14 your reports, you -- you make a point to say that
15 there are ALD indications, but you won't call it a
16 leak until it's been found and validated.

17 Is that consistent with how you've done
18 these other reports and how things are -- are tracked
19 to go through? And am I understanding that
20 distinction correctly? That -- that you don't refer
21 to it as a leak until it's actually been found and
22 validated by the -- the grading process to go through

1 and do this and until then you categorize it as an
2 indication, which is a separate number on these
3 reports and a separate process for how it's gone
4 through?

5 MR. MURPHY: Yeah. And that's
6 accurate. So indication, I think that's actually
7 Picarro's term. You heard him refer to a LISA, leak
8 indication.

9 UNIDENTIFIED SPEAKER: Sorry. I can't
10 hear you.

11 MR. MURPHY: I -- I think indication is
12 actually Picarro's term. You hear them refer to
13 LISAs, which is leak indication and then --

14 UNIDENTIFIED SPEAKER: Search area.

15 MR. MURPHY: Search area. On our work
16 management system, their leak conditions or
17 conditions -- maintenance conditions is what we call
18 them -- because again, if you've got kind of grade 2
19 indications, you may have multiple grade 2 indications
20 on a street, and we may create a maintenance condition
21 in two different spots on a street that are actually
22 the same leak.

1 So it's a little -- a bit of a slippery
2 slope to conflate indications or maintenance
3 conditions with leaks and -- and so once it's a
4 repaired leak, we label it as such.

5 MS. ROGERS: Yeah. I guess the way I
6 would add to that is, you know, you could imagine a
7 scenario where multiple neighbors call out for the
8 same leak. It's not a leak until we find it. And
9 that's true whether you're using ALD or, you know,
10 responding to a call-out or just out there with the
11 monitors.

12 MS. RUIZ: So I know we're going to get
13 to LIDAROC in more detail. I do still think this is
14 highly relevant because y'all, as you know, must
15 comply with the D.C. code. So LIDAROC does talk about
16 a five-day window period from the moment a leak is
17 called in, and when it's graded in LIDAROC.

18 So this distinction that you're talking
19 about between an ALD indication versus a leak, are
20 there -- are there ALD indication call-ins that are
21 not being included in LIDAROC?

22 MS. ROGERS: Well I can -- I can guess

1 at that.

2 MR. DODGE: Can you just -- I couldn't
3 hear that at the end. You got a little soft. If you
4 could just repeat the question, please. Sorry.

5 MS. RUIZ: Are there ALD indication
6 call-ins or leaks -- I don't know if y'all classify it
7 as a call-in -- that are not being included in LIDAROC
8 within those first five days?

9 MS. ROGERS: So I'm going to go out on
10 a limb here, and I will follow up if I am incorrect.
11 But because the ALD in its current use as a pilot, we
12 have, like, a structured program where we run the ALD.
13 Then we take the data and map it and then we have to
14 send people out.

15 And so only once those people are sent
16 out do I think that that gets marked as a leak and
17 should be included in LIDAROC. But because there is
18 this data aggregation period where we have to map. We
19 do multiple runs, as they described, so that you're,
20 like, not getting background noise. That process
21 takes a little time, and we also have to, like, send a
22 bunch of people out.

1 And so my understanding is that we
2 drive for, like, a month period and then do the
3 follow-up, or it's, like, over a month period,
4 something where there's a couple of weeks involving
5 the car and then a couple of weeks involving the
6 people on the ground.

7 MR. MURPHY: We can definitely look
8 into it. I suspect you're right, Jessica. But what I
9 think I know about LIDAROC is they've started to
10 automate the reporting.

11 And so if -- if that -- if I'm right --
12 I think I'm right -- when the order to dispatch a
13 technician is created, that's probably going to
14 trigger something needs to go into LIDAROC. I'm --
15 I'm going out on an odor investigation, and it's just
16 coming out of the computer. I think is what's going
17 on. So --

18 MS. ROGERS: Oh, that makes sense.

19 MR. MURPHY: I doubt -- I -- I doubt
20 the LISA, the birth of a LISA is creating an entry in
21 LIDAROC at all.

22 MR. HENNING: Can -- can you look into

1 that and -- and provide feedback with us on how
2 ALD-initiated investigations get reported into
3 LIDAROC?

4 MS. ROGERS: Yep. We can do that.

5 MS. RUIZ: And can we have that in
6 written response please?

7 MS. ROGERS: Yep.

8 MR. MURPHY: We'll share it with
9 everyone.

10 MS. RUIZ: Sorry. I think this is
11 included in the question, but just in case it isn't,
12 could we also have a written response in what
13 Mr. Kevin Murphy just talked about, which is what
14 triggers the data to be inputted into LIDAROC, whether
15 it is -- what point it is inputted into LIDAROC from
16 the moment it's called in?

17 MS. ROGERS: So for all of the leaks or
18 just the ALD ones?

19 MS. RUIZ: If you could distinguish
20 between what happens in both scenarios, that would be
21 helpful.

22 MS. ROGERS: Sure.

1 MS. PARSONS: All right. So do we want
2 to go ahead and talk about next conference on LIDAROC?
3 Sounds like -- I also feel like we need to point out
4 that we had asked for a joint final statement at the
5 end of each topic. And so maybe if you'd rather
6 figure out how you want to do that first before you
7 move on to the next one?

8 MR. DODGE: Just to make sure I
9 understand it, going back in time or just for
10 technical?

11 MS. PARSONS: Back to the first topic
12 on best methods of leak detection, which we just
13 finished up today with talking about ALD. We had
14 suggested that -- or we would think that -- that maybe
15 OPC or DOEE would like to take the lead on -- on
16 drafting that statement.

17 Obviously, you know, you can have
18 consensus and non-consensus points that would include
19 your summaries of your positions and recommendations
20 to the commission.

21 MR. CALDWELL: Are you -- this -- so
22 this is on the topic of ALD?

1 MS. PARSONS: It would be on best
2 methods of leak detection. So it includes LAUF and
3 the -- the first -- the basically the first three
4 technical conferences, and just the beginning of this
5 one as well, unless we think ALD should be included in
6 the second one. But we -- we talked mostly about it
7 in the first --

8 MR. HENNING: Yeah.

9 MS. PARSONS: -- topic. So I think
10 it's better to be grouped there.

11 MR. HENNING: As -- as I understood
12 the -- the way that this had been done, while it did
13 take us four meetings to get there, we -- we have
14 covered one topic, which was the first topic, which
15 was methods of leak detection.

16 MS. PARSONS: Right.

17 MR. HENNING: The last part of the
18 discussion was the first part of today's meeting on
19 the different set points and components of how to do
20 that type of ALD survey and the discrepancy between
21 Washington Gas's and the one conducted and
22 commissioned by DOEE.

1 So we have now finished our first
2 topic, which means that we're looking for the joint
3 report on that.

4 MS. PARSONS: That's best practices,
5 recommendations on those -- those topics. And what
6 kind of timeframe do you think that you need for that?
7 And is it important? I think we'd probably like to
8 get it before we do the next technical conference;
9 right?

10 But it's, you know, if you want to file
11 comments for the next conference, obviously, we're
12 going to build all that time in for you so you're not
13 doing everything at the same time, you know. You've
14 got a little more time.

15 MS. RUIZ: You know, your first
16 question was in regards to a joint report, but a
17 follow-up question with what you just mentioned. So
18 OPC is still waiting for responses that we filed on
19 September 3rd concerning this topic that we just
20 discussed from Washington Gas. It's been months.

21 MS. PARSONS: Okay.

22 MS. RUIZ: We really do need clarity on

1 when those answers will be filed, or we'll have to
2 take further action.

3 MS. PARSONS: Okay. So is it useful
4 to -- does your filing stand on its own, or do you
5 want to do an updated filing? What -- what --

6 MS. RUIZ: It would be good to start
7 with just -- it can stand on its own and have any --

8 MS. PARSONS: Okay.

9 MS. RUIZ: -- response from Washington
10 Gas and then take it from there.

11 MS. PARSONS: All right. So Jessica,
12 can you look into their September filing and
13 outstanding questions?

14 MS. ROGERS: Yes. Sorry. I thought
15 that we were going to sort of do them before each
16 topic, and then things got a little sideways. So yes,
17 we will get them to you. I mean, depending on the
18 timing of other things, I don't want to raise the fact
19 that there's, like, four rounds of testimony and three
20 climate filings due in the next two months. And I
21 think that up impacts a lot of us, so --

22 MS. PARSONS: Agreed. I know it's a

1 lot of these same people that are working on the -- on
2 all these different --

3 MS. ROGERS: We're all having this fun
4 adventure together. So --

5 MS. PARSONS: And we may have more
6 flexibility in this case than -- than some of the
7 other cases. So we understand that.

8 MS. ROGERS: But saying that, I would
9 think -- what's today? -- we could aim for say April,
10 maybe, like, April 22nd?

11 MS. PARSONS: You are talking for what?

12 MS. ROGERS: The answers to OPC's
13 questions on leak grading, because Jacob is going to
14 write all the answers.

15 MS. PARSONS: Do parties want to file
16 additional comments, or you -- or for the next --

17 MR. CALDWELL: I know that one of the
18 things that we -- DOEE asked for in the -- that motion
19 that we filed was to file one, like, sort of
20 consolidated set of comments at the end of the
21 technical conferences.

22 MS. PARSONS: Yes. And we -- and we're

1 okay to do that, but we also wanted to do them by
2 topic as well before we got too far away from them.

3 MR. CALDWELL: Okay.

4 MS. PARSONS: So --

5 MR. CALDWELL: All right. That -- I
6 just wanted to make sure that that was in -- in
7 addition to.

8 MS. PARSONS: Yeah. I -- I'd agree
9 that I think that makes sense -- at the end because
10 there could be some overlap as you -- as you pointed
11 out.

12 MS. RUIZ: It would be helpful if OPC
13 could see a response to our comments before, like, the
14 reasonable amount of time before we continue to talk
15 about LIDAROC and the -- the grading criteria.

16 MS. PARSONS: Okay.

17 MS. RUIZ: We have been already waiting
18 for months, so I understand --

19 MS. PARSONS: Yeah.

20 MS. RUIZ: -- there are other matters.
21 But I think April -- I think it was -- 19th was --

22 MS. ROGERS: The 22nd.

1 MS. RUIZ: 22nd is extremely far out.

2 MS. PARSONS: Yeah. It's about a -- a
3 month. Can you do it shorter for the answers only?

4 MR. DODGE: I need to look at my
5 calendar for just a second. If we could pause, and
6 I'll do that.

7 MS. ROGERS: You have all the filing --
8 my calendar in Outlook is not working right now, so
9 it's not very helpful. We do best efforts by the 15th
10 then? That's a week earlier because I mean rate case
11 rebuttal testimony is due seven days from today.
12 So --

13 MR. DODGE: I -- I do have another
14 filing on the 15th, but it's of a personal nature. So
15 I don't think I should count that. And it's at the
16 federal level.

17 MR. HENNING: I -- I recognize that's
18 still about a month out, but it -- it sounds like
19 that's when the proposed date would be. Is -- is that
20 going to cause consternation?

21 MS. RUIZ: Would it work to parcel out
22 the questions? I just want to acknowledge that some

1 of these questions we've discussed part of the answers
2 today. And I assumed that Washington Gas would know
3 the responses in preparation for at least this
4 meeting.

5 So before we have our next meeting,
6 there is -- I mean you could look at even just, like,
7 the first series of questions that focus on, for
8 example, what requires immediate repair, the kind of
9 leaks, the kind of grading we were discussing some
10 today.

11 So if it works to parcel them out, it
12 would be helpful if we could get a response for those
13 kinds of questions earlier, and OPC would understand
14 if you would need more time to fully address all
15 the --

16 MS. PARSONS: Okay. Good question.
17 Could you do it on a rolling basis? Is that possible?

18 MS. ROGERS: We're happy to do it on a
19 rolling basis.

20 MS. PARSONS: Okay.

21 MS. ROGERS: And get you things, you
22 know, starting in the next, like -- well not before

1 rate case testimony is due but, like, I think by the
2 end of next week we could probably get you a few of
3 them, and we'll get them all answered before -- on or
4 before the 15th.

5 MS. RUIZ: That works.

6 MS. ROGERS: I hope you weren't
7 planning on taking a vacation or anything --

8 MR. HENNING: No.

9 MS. PARSONS: You're talking about June
10 then for next conference?

11 MR. HENNING: Well so if -- if all of
12 the questions are being answered by Washington Gas no
13 later than the 15th, when does DOEE think they'll be
14 able to circulate the -- at least a draft of the --
15 the summary on this first topic?

16 MS. PARSONS: DOEE or OPC, you all can
17 work that out.

18 MR. CALDWELL: We should decide.

19 MS. PARSONS: Or else we didn't
20 specify.

21 MR. CALDWELL: This is going to be like
22 a -- this is a joint report; right?

1 MS. PARSONS: Yes.

2 MR. CALDWELL: With the company as
3 well?

4 MS. PARSONS: Then the company as well,
5 yes. We assume that you, the parties, would prefer to
6 do the first draft because you had brought this
7 petition. So --

8 MS. RUIZ: Is it possible to get back
9 to the commission --

10 MS. PARSONS: Yes.

11 MR. CALDWELL: I think we discussed
12 what's feasible with all the various cases going on
13 right now.

14 MS. PARSONS: That's right. Right.
15 April, May, and June is probably pretty busy. All
16 right. Would you like to set a date for the next
17 conference then? Or would you also like to regroup?
18 I mean we can do this over email, of course.

19 MS. RUIZ: I think OPC would prefer the
20 regroup, especially we're -- we're looking forward to
21 some of the responses that will probably be impacted
22 by the amount of questions Washington Gas can respond.

1 MS. PARSONS: That's no problem. Okay.
2 So what we'll do is that once -- you have at least by
3 the 15th, but if -- if it happens earlier then great.
4 I'll reach out to all of you, and we'll talk about
5 dates for the next one.

6 And let me know if you think that you
7 want to do another file -- file another round of
8 comments before we get to LIDAROC or if you just on a
9 more informal basis just identify your questions.
10 There will be no weigh-in. We'll give you all dates
11 for your presentation, et cetera.

12 MS. RUIZ: Great.

13 MS. ROGERS: Thank you.

14 MS. PARSONS: That's good. I think
15 that's an end; right?

16 UNIDENTIFIED SPEAKER: Second.

17 MS. PARSONS: Second. Yeah, exactly.
18 I don't even know what time it is.

19 UNIDENTIFIED SPEAKER: Thank you.

20 MS. PARSONS: Thank you all.

21 UNIDENTIFIED SPEAKER: Thank you.

22 UNIDENTIFIED SPEAKER: Thank you.

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(Whereupon, at 4:21 p.m., the
proceeding was concluded.)

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CERTIFICATE

I, SAMUEL PACHON, the officer before whom the foregoing proceedings were taken, do hereby certify that any witness(es) in the foregoing proceedings, prior to testifying, were duly sworn; that the proceedings were recorded by me and thereafter reduced to typewriting by a qualified transcriptionist; that said digital audio recording of said proceedings are a true and accurate record to the best of my knowledge, skills, and ability; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this was taken; and, further, that I am not a relative or employee of any counsel or attorney employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.



SAMUEL PACHON

Notary Public in and for the
State of District of Columbia

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