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STATE OF IOWA
DEPARTMENT OF COMMERCE
BEFORE THE IOWA UTILITIES BOARD

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IN RE: :
SUMMIT CARBON SOLUTIONS, : Docket No.
LLC : HLP-2021-001
----- X



TRANSCRIPT OF HEARING

VOLUME 7

PUBLIC TRANSCRIPT

Cardiff Event Center at
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3232 First Avenue South
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Tuesday, September 5, 2023

Met, pursuant to order, at 10:01 a.m.

BEFORE: THE IOWA UTILITIES BOARD

ERIK M. HELLAND, Board Chair (Presiding)
JOSHUA J. BYRNES, Board Member
SARAH MARTZ, Board Member

(Pages 1559 to 1865)

MELISSA A. BURNS - CERTIFIED SHORTHAND REPORTER

1 **APPEARANCES:**

2 **For Summit Carbon Solutions, LLC:**

3 **BRET A. DUBLINSKE, ESQ.**
4 **BRANT M. LEONARD, ESQ.**
5 **Fredrikson & Byron, PA**
6 **111 East Grand Avenue**
7 **Suite 301**
8 **Des Moines, IA 50309**

9 **For Office of Consumer Advocate:**

10 **JOHN S. LONG, ESQ.**
11 **Office of Consumer Advocate**
12 **1375 East Court Avenue**
13 **Des Moines, IA 50319**

14 **For Iowa Farm Bureau Federation:**

15 **CHRISTINA GRUENHAGEN, ESQ.**
16 **DAVID S. MEYERS, ESQ.**
17 **Wickham and Geadelmann, PLLC**
18 **5400 University Avenue**
19 **West Des Moines, IA 50266**

20 **For Shelby, Kossuth, Emmet, Dickinson, Franklin,**
21 **Woodbury, and Wright Counties (the Counties):**

22 **TIMOTHY J. WHIPPLE, ESQ.**
23 **Ahlers & Cooney, PC**
24 **100 Court Avenue**
25 **Suite 600**
26 **Des Moines, IA 50309**

27 **For Sierra Club Iowa Chapter:**

28 **WALLACE L. TAYLOR, ESQ.**
29 **Law Offices of Wallace L. Taylor**
30 **4403 First Avenue SE**
31 **Suite 402**
32 **Cedar Rapids, IA 52402**

1 **APPEARANCES (Continued):**

2 **For Jorde Landowners:**

3 **BRIAN E. JORDE, ESQ.**
4 **Domina Law Group, PC, LLO**
5 **2425 South 144th Street**
6 **Omaha, NE 68144**

7 **For Murray Landowners:**

8 **JOHN M. MURRAY, ESQ.**
9 **Murray & Murray, PLC**
10 **530 Erie Street**
11 **Storm Lake, IA 50588**

12 **For LSCP, LLC; PLCP, LLLP; Green Plains, Inc.; Golden**
13 **Grain Energy, LLC; Corn, LP; Homeland Energy**
14 **Solutions, LLC; Quad County Corn Processors**
15 **Cooperative; Plymouth Energy, LLC; and Siouxland**
16 **Energy Cooperative (the Corn Processors):**

17 **MARK A. SCHULTHEIS, ESQ.**
18 **Schultheis White, PLC**
19 **3116 Ingersoll Avenue**
20 **Des Moines, IA 50312**

21 **For Iowans for a Growing Agricultural Economy:**

22 **ALAN R. OSTERGREN, ESQ.**
23 **Alan R. Ostergren, PC**
24 **500 East Court Avenue**
25 **Suite 420**
26 **Des Moines, IA 50309**

27 **For Republican Legislative Intervenors for Justice:**

28 **ANNA K. RYON, ESQ.**
29 **Law Office of Anna K. Ryon**
30 **3106 Ingersoll Avenue**
31 **Des Moines, IA 50312**

32

33

34

35

1 **APPEARANCES (Continued):**

2 **For Iowa Utilities Board:**

3 **HUNTER FORS, ESQ.**
4 **Iowa Utilities Board**
5 **1375 East Court Avenue**
6 **Des Moines, IA 50319**

7 **For Kohles Family Farms, LLC:**

8 **JEAN KOHLES**
9 **Pro Se**

10 **For Hayek Family Farms:**

11 **CHRISTINE HAYEK**
12 **Pro Se**

13

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1 that Summit has, or would propose to have, with
2 ethanol plants or perhaps other industries. And we
3 will, of course, ask some of the witnesses about
4 those, and I just want to clarify how we're going to
5 deal with that.

6 In the Dakota Access case, what the Board
7 did was when those issues would come up, the Board
8 would clear the room of everyone except the attorneys
9 who had signed the non-disclosure agreements and then
10 we would take that evidence in a closed session.

11 So that's what I would suggest we do here.

12 BOARD CHAIR HELLAND: Thank you,
13 Mr. Taylor. I just wanted to double-check here.

14 For the first matter, thank you for your
15 comments. Depending on how the Board rules, you will
16 have the ability, if it is necessary, to recall the
17 witness to address any questions you may have
18 depending on the outcome of our ruling.

19 On the second matter, that is how we intend
20 to handle confidential session. We'll go over details
21 as we get closer to it, but I appreciate you bringing
22 up previous precedents and that is how we intend to
23 handle it. So thank you.

24 Mr. Whipple.

25 MR. WHIPPLE: Before we get started, I'd

1 also like to clear up one matter on the record. You
2 had asked at the beginning of the hearing if the
3 parties stipulated to the testimony that was prefiled.
4 And, as we're now about to begin calling witnesses who
5 have prefiled testimony, we would request that we take
6 that issue up again and ensure that all of that is
7 accepted in the record, including the deposition
8 testimony that was taken.

9 BOARD CHAIR HELLAND: Thank you.

10 Mr. Dublinske.

11 MR. DUBLINSKE: Just a response to
12 Mr. Whipple. I agree that that is an outstanding
13 issue. My understanding -- and certainly, if the
14 Chair understands differently, that's what matters,
15 but my understanding is we were going to take that up
16 on a witness-by-witness basis. And we intend, as we
17 call our witnesses, to move to admit their testimony
18 and exhibits before we tender them for cross and
19 anticipate that those issues will be taken up at that
20 time.

21 BOARD CHAIR HELLAND: Unless there's strong
22 opposition from someone, I believe that is how we
23 intend to handle it as we go. Witness by witness.

24 Mr. Taylor.

25 MR. TAYLOR: So just to clarify, regarding

1 the depositions, when a witness is presented for
2 cross-examination, would that be our time then to
3 offer the deposition testimony into evidence?

4 MR. DUBLINSKE: Your Honor, if it helps,
5 Summit has no objection to the deposition being made a
6 hearing exhibit or being in evidence.

7 BOARD CHAIR HELLAND: Well, look at that.
8 We're already getting along. Perfect. There we go.
9 Thank you. Yes.

10 Anyone else? I see Ms. Gruenhagen
11 reaching. Maybe, maybe not? Nope?

12 All right. Unless there's anything else we
13 will proceed with Summit's first witness.

14 MR. LEONARD: Thank you, Your Honor. We'll
15 call James Powell to the stand.

16 BOARD CHAIR HELLAND: Mr. Powell.

17 MR. POWELL: Good morning.

18 BOARD CHAIR HELLAND: Good morning. Have
19 they got you situated?

20 MR. POWELL: Yes.

21 BOARD CHAIR HELLAND: Please raise your
22 right hand.

23

24

25

1 JAMES POWELL,
2 called as a witness by Summit Carbon Solutions, LLC,
3 being first duly sworn by Board Chair Helland, was
4 examined and testified as follows:

5 BOARD CHAIR HELLAND: Mr. Dublinske.
6 Or Mr. Leonard. Sorry.

7 MR. LEONARD: Thank you, Your Honor.

8 DIRECT EXAMINATION

9 BY MR. LEONARD:

10 Q. Good morning, Mr. Powell.

11 A. Good morning.

12 Q. Are you the same James Powell who caused to
13 be filed direct and rebuttal prefiled testimony in
14 this matter?

15 A. Yes.

16 Q. If I asked you those same questions today,
17 would your answers be substantially the same?

18 A. Yes.

19 Q. Do you have any corrections or
20 modifications to make to your prefiled testimony at
21 this time?

22 A. No.

23 MR. LEONARD: Your Honor, before tendering
24 him for cross, I'd like to move admission of James
25 Powell's direct testimony and rebuttal testimony filed

1 on May 25 and August 21, 2023, respectively.

2 BOARD CHAIR HELLAND: Thank you.

3 Is there opposition? Or comment?

4 MR. JORDE: Opposition, yes. First of all,
5 completely object to rebuttal. That's not appropriate
6 until the witness has testified in response to what
7 Mr. Powell wants to rebut. So you can't offer
8 rebuttal of something that hasn't yet occurred. So
9 that doesn't come in.

10 In terms of his direct testimony,
11 everything starting on -- let's see, page 3 -- the
12 question on line 11, page 3, to the end, I object to
13 hearsay, hearsay within hearsay, lack of foundation,
14 and relevance.

15 BOARD CHAIR HELLAND: John, did you want to
16 comment on that or did you have a separate objection?

17 MR. LONG: We don't object, but I would
18 just ask that in light of the timing with the rebuttal
19 testimony, and discovery related to it, that when
20 OCA's witnesses come up, that the Board give us
21 latitude to do some additional questions to respond to
22 things in the rebuttal.

23 BOARD CHAIR HELLAND: Thank you.

24 Mr. Leonard.

25 MR. LEONARD: Thank you, Your Honor. First

1 of all, when it comes to the rebuttal testimony,
2 that's not rebutting live testimony that hasn't
3 happened yet. That's responding to testimony that was
4 prefiled. That's how the Board does it. That's how
5 the Board has always done it.

6 The procedural order in this matter set a
7 deadline for rebuttal testimony. We do not have an
8 objection, as Mr. Long suggests, to them having some
9 latitude to ask questions about that rebuttal
10 testimony given its timing.

11 Second of all, with respect to the
12 particular issue that Mr. Jorde pointed out and
13 objected on hearsay and foundation grounds, I think
14 it's well established that in agency proceedings in
15 Iowa, including before the Board, that hearsay is not
16 an adequate objection, that evidentiary standards are
17 relaxed, and we, therefore, urge the Board to admit
18 the written testimony, both the direct and the
19 rebuttal.

20 MR. JORDE: So I need to respond to that.
21 On the rebuttal, again, until a witness shows up as is
22 tendered, their testimony doesn't come in. Just like
23 Mr. Powell here.

24 So, again, you can't rebut something that
25 has not occurred, is not in evidence, is not part of

1 the official record. The rebuttal cannot come in at
2 this time.

3 BOARD CHAIR HELLAND: Thank you.

4 Mr. Long, did you have additional comment?

5 Okay. Thank you.

6 Any other comments?

7 (No response.)

8 BOARD CHAIR HELLAND: Okay. Thank you.

9 Mr. Jorde, your objection is noted but
10 overruled. Both direct and rebuttal testimony will be
11 admitted.

12 Mr. Dublinske.

13 Or Mr. Leonard. Sorry.

14 MR. LEONARD: Thank you, Your Honor. We
15 now tender the witness for cross.

16 BOARD CHAIR HELLAND: Rather than go down
17 the list, I think we'll just go ahead and proceed as
18 we have with the placards flipped on their side. So I
19 see Mr. Jorde was first. And so we will start with
20 Mr. Jorde.

21 MR. JORDE: Great. Thank you.

22 CROSS-EXAMINATION

23 BY MR. JORDE:

24 Q. Sir, who is Summit Carbon Solutions, LLC?
25 Who are its owners?

1 A. Its owners are private investors.

2 Q. And who are they?

3 A. There are several hundred -- to my
4 knowledge, several hundred private investors. So I'm
5 not aware of all of those individuals.

6 Q. Who would know who the owners are?

7 A. Again, sir, it's not me.

8 Q. Well, is anyone going to testify so that we
9 have evidence on who actually is behind this proposed
10 project?

11 A. Not to my knowledge.

12 Q. And so then you would agree that it's
13 impossible for the IUB to approve this application if
14 they don't even know who the applicant is; correct?

15 A. I would not agree.

16 Q. In terms of the South Korean entity that
17 owns 10 percent, you're aware that they are an
18 investor; is that correct?

19 A. I am aware.

20 Q. And you're aware one of their subsidiaries
21 was fined nearly \$50 million by the U.S. government
22 for fraud? Are you aware of that?

23 A. I'm not aware of the details.

24 Q. Do you personally have any ownership in the
25 applicant or any entity that has ownership interest in

1 the applicant?

2 A. I have equity in the business.

3 Q. And, in terms of equity, would it be true
4 that the entire management team of Summit Carbon
5 Solutions has equity in the business?

6 A. I'm not aware of the compensation packages
7 for other members of the management team.

8 Q. Well, without getting into the specifics,
9 you're aware, are you not, that other members of the
10 management team have equity regardless of how little
11 or how much; correct?

12 A. I'm not going to make an assumption. I'm
13 not aware of their individual compensation packages.

14 Q. So I would need to ask that question
15 individually to all the Summit witnesses that testify
16 then?

17 A. Sounds prudent to me.

18 Q. In terms of the South Korean entity, what
19 other direct or indirect foreign ownership; that is,
20 outside of the United States, entities or persons,
21 have any ownership in Summit Carbon Solutions, LLC?

22 A. I'm not aware of any.

23 Q. And, again, is your testimony the same?
24 That no one is going to be presented to this Board to
25 testify as to the ownership structure in any foreign

1 investment?

2 A. Not that I'm aware of.

3 Q. And is there a particular reason why Summit
4 is concealing the identity of who is behind the
5 entity?

6 MR. LEONARD: Object to form. The question
7 assumes facts not in evidence.

8 BOARD CHAIR HELLAND: Thank you.

9 Mr. Jorde.

10 MR. JORDE: Well, they're not in evidence
11 because he's refusing to tell us. And so that's the
12 basis of the question.

13 BY MR. JORDE:

14 Q. Why are you not sharing this information?

15 A. Well, again, Mr. Jorde, I'm not aware of
16 every investor in Summit Carbon.

17 BOARD CHAIR HELLAND: Hold on, Mr. Powell.

18 Mr. Leonard, did you have a response?

19 MR. LEONARD: Just to the form of the
20 question. His assumption that somebody is concealing
21 something just because one witness doesn't know the
22 identities of all the investors in the company. It's
23 an improper question.

24 BOARD CHAIR HELLAND: Thank you.

25 The objection is sustained. Please reword

1 your question or move on, Mr. Jorde.

2 MR. JORDE: Certainly.

3 BY MR. JORDE:

4 Q. So do you know why Summit has chosen to not
5 disclose that information? In terms of who are the
6 owners.

7 A. That's a private investment. I'm not --
8 I'm not part of that decision-making process.

9 Q. And this project, of course, the purpose of
10 the project, is to generate profits for Summit Carbon
11 Solutions, LLC; correct?

12 A. Well, like most businesses, the objective
13 is to generate a profit, correct.

14 Q. And, as between an analysis of whether or
15 not this Board should allow Summit Carbon Solutions to
16 generate a profit or target the properties of Iowans,
17 you would agree that, on balance, the interests of
18 Iowans should win out over your profits; right?

19 A. I don't understand the question.

20 Q. Well, if we're doing a balancing analysis
21 as between your proposed project, which is, as you
22 just admitted, for the profit of applicant, you would
23 agree that, in effect, the tie should go to the runner
24 here which would be the Iowans that are opposed to
25 this project.

1 A. Well, I think the benefits are more than
2 just Summit Carbon. The benefits are to the ethanol
3 plants, their workers, and the farmers who supply corn
4 to those ethanol plants. It's the profitability of
5 the ethanol plants that's at play here as well as
6 their contribution to the economies in their counties,
7 in their communities.

8 Q. Are you going to call a single witness that
9 did a cost-benefit analysis of the net alleged
10 benefits in regards to the costs to the landowners who
11 do not want the project or is your evidence only
12 focused on the alleged good of the project?

13 A. I don't understand the question.

14 Q. So what is it you're asking this Board to
15 do? Are you not asking this Board to grant your
16 application which would then allow applicant to profit
17 and then, based on your last answer, 13 or so ethanol
18 companies to profit? That's what you're asking for?

19 A. Well, again, we're asking the Board to
20 approve the project so we can help those ethanol
21 plants, and all those directly and indirectly affected
22 by those ethanol plants, remain profitable.

23 Q. And do you think it's under the purview of
24 this Board to pick winners and losers and put the
25 interest of a handful of ethanol plants above those of

1 regular citizens?

2 MR. LEONARD: Objection.

3 BOARD CHAIR HELLAND: State your objection.

4 MR. LEONARD: Calls for a legal conclusion
5 as to the Board's purview.

6 BOARD CHAIR HELLAND: Mr. Jorde.

7 MR. JORDE: Well, okay, I'll restate it.

8 BOARD CHAIR HELLAND: Thank you.

9 BY MR. JORDE:

10 Q. Are you asking this Board to pick winners
11 and losers and pick you and a handful of ethanol
12 companies over the interests of those opposed to the
13 project?

14 A. I'm not dictating what the Board does or
15 does not do.

16 Q. You would believe it would be responsible
17 to consider first the existing landowners and people
18 and farmers opposed to the project prior to
19 considering your entity, a newly formed entity, and
20 its interests; correct?

21 A. Well, Mr. Jorde, we've reached agreement
22 with 73 percent of the landowners in this state. So
23 we fully expect that we can reach agreement with the
24 remaining landowners that will be affected.

25 Q. And you would agree that there's no such

1 thing as a voluntary easement when the threat of
2 eminent domain is hanging over a landowner's head;
3 correct?

4 A. Mr. Jorde, we've been negotiating with Iowa
5 landowners for almost two years. And we have not had,
6 and still do not have, the right of eminent domain.

7 Q. Well, isn't it true in your initial letter
8 that you mailed out to landowners you mentioned the
9 right or the pathway to eminent domain and you did
10 that in intent to scare them into signing easements.

11 A. It's my recollection that the IUB process
12 is prescriptive as to what has to be included in those
13 notifications to landowners.

14 Q. Why did you sue Iowa landowners for survey
15 access just to dismiss those cases?

16 A. We have to have access to properties to
17 survey. And the process within Iowa allows us to do
18 that with ten-day notification.

19 Q. And so the question was why did you sue
20 Iowa landowners stating that you needed immediate
21 access to their property just to later dismiss those
22 lawsuits?

23 A. I don't recall the rationale.

24 Q. Who makes the decisions at Summit Carbon
25 Solutions, LLC?

1 A. Regarding what?

2 Q. Well, are you the top guy, so to speak?
3 The buck stops with you? Or is that Lee Blank or who
4 makes the strategic decisions?

5 A. Well, Mr. Blank is the CEO, but, when it
6 comes to the design, construction, and operation of
7 the pipeline, I'm the decision-maker.

8 Q. What role does Bruce Rastetter have in
9 Summit Carbon Solutions, LLC?

10 A. He's an investor and board member.

11 Q. And is it true he was the original promoter
12 of the project?

13 A. Well, Summit Ag, they developed the concept
14 for the project.

15 Q. And Summit Ag being one of Mr. Rastetter's
16 entities?

17 A. I'm not familiar with Mr. Rastetter's
18 portfolio, but, yes, he is the CEO of Summit Ag.

19 Q. And was it Summit Ag's concept -- was
20 Summit Carbon Solutions, LLC, something that was borne
21 out of Summit Ag?

22 A. Yes.

23 Q. And why is it that Mr. Rastetter isn't here
24 to testify and defend the supposed value of this
25 project?

1 A. Well, I think he entrusts his management
2 team to defend the value of the project.

3 Q. And so, by that answer, would you agree
4 that you essentially work for him when you reference
5 "his management team"?

6 A. No, I work for the board of directors.
7 Which he is one member of.

8 Q. Who are the rest of the directors?

9 A. There's members from Tiger Infrastructure,
10 from TPG, from SK, and from Continental Resources. As
11 well as Summit Ag.

12 Q. And Continental Resources, that's owned by
13 Harold Hamm; is that correct?

14 A. I believe that is a correct statement.
15 They just took that company back private.

16 Q. And Mr. Hamm has substantial interests in
17 North Dakota, does he not?

18 A. Yes, he does.

19 Q. And then TPG and Tiger. Those are
20 investment funds or hedge funds that have many foreign
21 investors; is that correct?

22 A. I'm not familiar with the makeup of their
23 investors.

24 Q. What about the assets of Summit Carbon
25 Solutions, LLC. Does it have assets or are the owners

1 owners on standby for equity to be called in terms of
2 when it needs to raise capital to fund its business?

3 A. Well, we have assets that have been
4 manufactured over the last two years. And we do have
5 equity that's available.

6 Q. Well, is it true the only asset of Summit
7 Carbon Solutions would be the easements it holds?

8 A. That's not true.

9 Q. What are the other assets?

10 A. We have various pieces of equipment that
11 has been manufactured or produced.

12 Q. And, by that statement, do you mean the
13 carbon capture equipment that you would intend to
14 place at the site of any CO2 emitter that's in
15 partnership with you?

16 A. That is part of it.

17 Q. All right. What else? What other physical
18 assets, in terms of the equipment, does Summit own?

19 A. We have components that will be installed
20 in the pipeline system as well.

21 Q. That Summit has already purchased?

22 A. Correct.

23 Q. Were any of those manufactured in the state
24 of Iowa?

25 A. Not that I'm aware of.

1 Q. Has Summit filed tax returns?

2 A. Again, I'm not the tax expert, Mr. Jorde.
3 We do have a tax professional as part of the
4 management team.

5 Q. Who is that person?

6 A. That is Joel -- his last name escapes me.
7 We can provide that.

8 Q. And Summit is a Delaware entity; correct?
9 Incorporated in the state of Delaware?

10 A. That's my understanding.

11 Q. Now, your particular role, you said you're
12 responsible for technical development. Does that have
13 anything to do with initial route consideration and
14 selection?

15 A. It does.

16 Q. And it's true that in designing the initial
17 route, that that was done based on what's known as a
18 desktop analysis?

19 A. I think that's a loose description.

20 Q. Well, it's true that the initial route that
21 you submitted in this docket was done before
22 conclusion of all surveys on the land that you're
23 targeting in this case; correct?

24 A. Mr. Jorde, you have to have a preliminary
25 route before you can determine where you want to

1 survey. That is correct.

2 Q. And, as your statement is, in your direct
3 statement at least, that typically the initial route
4 is the most direct from point to point; is that
5 correct?

6 A. Typically, with pipelines, it is A to B.
7 However, the program that we use, the GIS-based
8 program, that literally has hundreds of features. All
9 publicly available information and some confidential
10 information. And so we used that to develop the
11 preliminary route.

12 Q. And who is the provider of that software or
13 that program? That GIS program you mentioned.

14 A. The program is called Pivvot. And it's
15 owned by a company called Terracon.

16 Q. And it's true that Summit initially
17 consulted with Terracon, and Terracon used its
18 software and came up with the initial route; is that
19 right?

20 A. It was a collaborative effort, yes.

21 Q. And it's true that when that process was
22 occurring, neither Terracon nor Summit had future land
23 use maps or master plans of the various counties or
24 communities which it intends to locate its hazardous
25 pipeline through.

1 A. That is not true.

2 Q. Give me the name of the person who had any
3 future land use map or master plan of any community
4 that was utilized prior to selecting the initial
5 route?

6 A. Again, if a county or municipality had a
7 development plan that was available, and typically on
8 line, then that was incorporated.

9 Q. And who would be the person -- unless, sir,
10 did you personally do that work?

11 A. I did not.

12 Q. Who would be the person that could back up
13 that statement?

14 A. Kent Strasser is the primary contact at
15 Pivvot, but Erik Schovanec, who is part of the Summit
16 organization, may be able to answer that question.

17 Q. And is that because Mr. Schovanec had more
18 detailed interactions relative to the foundational
19 basis for the initial route than yourself?

20 A. That's fair.

21 Q. Is it true that you did not -- "you" being
22 Summit did not utilize dispersion modeling or CO2
23 dispersion analysis or plume modeling prior to coming
24 up with your initial route?

25 A. That is correct, because dispersion

1 modeling is not used for routing purposes.

2 Q. Well, it certainly could be, it's just that
3 Summit chose not to use it for routing purposes.

4 A. No, that's not what -- that's not the value
5 of dispersion modeling. So I disagree.

6 Q. Okay. Well, do you think a community might
7 find value in knowing how hazardous and dangerous a
8 potential leak or rupture would be to them and would
9 want to know how far they are located from your
10 proposed route?

11 A. Well, Mr. Jorde, you and I have talked
12 about this before. So you know that PHMSA requires
13 any operator, and obviously Summit, to perform
14 dispersion modeling to determine what impact your
15 route, or your pipeline operation, may have on a
16 high-consequence area. And so that's what we've done.

17 We take that dispersion modeling, we take
18 the outputs, and we put them in a risk assessment.
19 That determines the probability of potential severity
20 of any impact.

21 And, in Iowa, of the 686 miles of pipeline
22 proposed, there are 1.13 miles of direct impact to
23 high-consequence areas. In a worst case release
24 scenario. That's .002 percent if my math is correct.

25 Q. And do you know what county or are those

1 1.3 miles in multiple counties?

2 A. I'd have to refresh, look at the model
3 output.

4 Q. So then let's break down your prior answer.

5 So, first of all, you talked about PHMSA.
6 And you're aware that PHMSA sets minimum standards;
7 correct?

8 A. They set standards and incorporate, by
9 reference, other standards such as ABI.

10 Q. But Summit isn't prevented from doing
11 better than minimum federal standards, are they?

12 A. No, and we have done -- we have exceeded
13 those standards in many, many areas, including
14 dispersion modeling.

15 Q. Well, no one would know that because, to
16 date, you've refused to produce that modeling in Iowa,
17 haven't you.

18 A. Well, as PHMSA recommends, that the output
19 of that model, and the risk assessment, should be
20 protected and not provided to the public.

21 Q. Well, isn't it true on August 31st you
22 produced that information, dispersion modeling, in the
23 South Dakota PUC docket?

24 A. We did in confidence, yes.

25 Q. So you would, therefore, agree that you

1 would produce it in confidence to this Board today.

2 A. If the Board would like to see that output
3 in confidence, absolutely.

4 Q. Okay. Well, so it wasn't good enough for
5 the Iowans that have been asking for it in discovery
6 and had to take depositions and were rebuffed and had
7 to go to court, that wasn't enough for you to think it
8 might be reasonable to release the dispersion
9 modeling?

10 A. Again, Mr. Jorde, the federal government
11 thinks it's a bad idea to release that. And, if
12 you're going to build a home, you may be able to do it
13 without a blueprint, but you could probably do a
14 better job with a blueprint.

15 So PHMSA and the federal government don't
16 think it's a good idea to release that information.
17 And someone with criminal intent could use it to
18 impact public safety.

19 Q. All right. So you didn't say it, but
20 you're relying on this theory that, "My goodness, if
21 we release the dispersion modeling, some terrorist
22 could get their hands on it and we'd all be unsafe."

23 Is that the gist of your response?

24 A. Well, it's not a theory.

25 Q. And so we can take from that, that these

1 pipelines are so dangerous they are a threat to
2 national security and you would agree they have no
3 place in the state of Iowa.

4 A. No, I just said they could potentially be a
5 threat to public safety.

6 Q. Do you think terrorists are so inept that
7 they aren't able to determine where this proposed
8 pipeline would be located based on the detailed aerial
9 maps you've already produced in this docket?

10 A. Well, the resolution of those maps, it
11 would be difficult. General area perhaps. But,
12 again, Mr. Jorde, why should we make it easy for
13 somebody with criminal intent.

14 Q. Well, let me ask you this, sir: Have you
15 been on the phone with the Pentagon recently about
16 your route?

17 A. No, I missed that call apparently.

18 Q. Well, I think everyone did, because it
19 didn't happen. Because this terrorist idea is
20 complete nonsense; correct?

21 A. Nobody mentioned terrorists, Mr. Jorde.

22 MR. LEONARD: Objection.

23 BOARD CHAIR HELLAND: State your objection.

24 MR. LEONARD: I'm going to object to the
25 form of the question.

1 BOARD CHAIR HELLAND: Mr. Jorde, go ahead
2 and reword and move on.

3 MR. JORDE: Certainly.

4 BY MR. JORDE:

5 Q. The fact of the matter is this concept of
6 these being dangerous to some type of attack is just
7 subterfuge to get around the fact that these are
8 incredibly dangerous pipelines and you don't want the
9 public to know; correct?

10 MR. LEONARD: Objection.

11 BOARD CHAIR HELLAND: State your objection.

12 MR. LEONARD: Same objection. It's
13 argumentative.

14 BOARD CHAIR HELLAND: Sustained.

15 Mr. Jorde, please proceed.

16 BY MR. JORDE:

17 Q. So South Dakota deserves better than Iowa;
18 right? Because you haven't produced the dispersion
19 modeling in Iowa.

20 Right?

21 A. I didn't say that at all.

22 Q. Well, the South Dakota PUC didn't ask you
23 for it. They didn't have to ask you for it. You
24 produced it in response to what happened in the
25 Navigator docket up there; correct?

1 A. That's not true. The staff from the South
2 Dakota PUC requested that information, not only the
3 model output but the risk assessment, months ago. As
4 you're aware.

5 Q. And you just got it to them on the 31st of
6 August; right?

7 A. No. Again, they've had -- you're
8 conflating issues. There's a difference between maps
9 with buffer zones and the model and the risk
10 assessment.

11 Q. I completely agree. There's three
12 different things. And you've produced all of those
13 things in South Dakota and none of those things in
14 Iowa; correct?

15 A. To this point, yes.

16 Q. So won't you just do the right thing and
17 agree to produce that today so the public here doesn't
18 have to be in the dark?

19 MR. LEONARD: Objection.

20 BOARD CHAIR HELLAND: State your objection.

21 MR. LEONARD: It hasn't been produced to
22 the public in South Dakota for the reasons that
23 Mr. Powell has been testifying about. It has been
24 produced to the PUC.

25 BOARD CHAIR HELLAND: Thank you.

1 Mr. Jorde, do you have a reply.

2 MR. JORDE: Well, the point is this body
3 that's charged with making an incredibly important
4 decision does not have information they've voluntarily
5 given another state. So what are we left to take from
6 that but for Iowa deserves less than South Dakota.
7 And I just want him to be on the record right now and
8 just say you will release it.

9 You have the power. You know you have the
10 power to do that, Mr. Powell.

11 MR. LEONARD: If I could respond.

12 BOARD CHAIR HELLAND: Go ahead.

13 MR. LEONARD: Obviously, the dispersion
14 analysis is something that's before the Board on
15 appeal on a motion to compel. It hasn't been ruled
16 upon yet.

17 If we're going to get into details of that,
18 we would wait for the Board's ruling. I think I
19 understood the Chair's admonition this morning about
20 that.

21 In any event, if Mr. Jorde has a question
22 he'd like to ask Mr. Powell as opposed to telling us
23 what his point is, I'd be happy to have him ask a
24 question.

25 BOARD CHAIR HELLAND: Mr. Jorde and

1 Mr. Leonard, the objection is sustained.

2 Mr. Jorde, the motion to compel is being
3 ruled on, and we will hopefully have an answer
4 shortly. Please contain your questions to facts, not
5 speculation.

6 MR. JORDE: Okay. Well, again, I'm not
7 speculating. I'm talking exactly what has been done
8 in other states.

9 BY MR. JORDE:

10 Q. So, sir, you're relying on then the Board
11 to hopefully bail you out and say this information
12 isn't something that should be produced to all of the
13 folks here; is that correct?

14 A. Well, Mr. Jorde, in my experience, which is
15 extensive in this country building pipelines, I've
16 never released a release or dispersant model in any
17 service. And so this would be a first in this
18 proceeding and North Dakota and South Dakota.

19 But, again, if the Board requests that
20 information in confidence, yes, we will provide it.

21 Q. Well, you would agree that it would be
22 impossible to make a determination on public
23 convenience and necessity if the full risk modeling
24 that's available to you that you have in your
25 possession, and your lawyers, is not made available to

1 this Board.

2 A. I would disagree.

3 Q. So Summit's position is that the people of
4 Iowa, the people being unwillingly targeted for this
5 hazardous pipeline, they don't need to understand the
6 risk, they don't need to see the risk mapped out as
7 has been done in South Dakota, and that's not
8 information you believe they need.

9 A. Mr. Jorde, I'm saying that there is a
10 federal agency whose responsibility is to provide
11 oversight and assurance for pipelines such as this.
12 And so PHMSA doesn't even require the model. They may
13 or may not ask for the output, they may or may not ask
14 for the risk assessment.

15 Q. And the reason PHMSA doesn't require the
16 model is because PHMSA doesn't site CO2 pipelines;
17 correct?

18 A. Well, they are accountable for safety of
19 regulated pipelines.

20 Q. Sure. Safety in terms of construction,
21 operation standards, size of pipe, uniformity to
22 interstate pipelines, but not for safety in terms of
23 what does a state and locality, what they are
24 potentially interested in in terms of making county
25 and statewide decisions.

1 Would you agree with that?

2 MR. LEONARD: Objection. Calls for a legal
3 conclusion.

4 BOARD CHAIR HELLAND: Mr. Jorde.

5 MR. JORDE: I don't see any legal
6 conclusion there.

7 BOARD CHAIR HELLAND: Sustained.

8 Please reword or move on.

9 MR. JORDE: Okay. Well, I'll reword.

10 BY MR. JORDE:

11 Q. You would agree that siting of CO2
12 pipelines is left exclusively to the state. And, in
13 this case, the IUB.

14 Correct?

15 MR. LEONARD: Same objection.

16 BY MR. JORDE:

17 Q. Okay. Then what's the point of the
18 application -- I mean, what are you asking for in the
19 application? I'll go the real slow route here. Let's
20 go back to the application.

21 What are you asking for?

22 A. We're asking for the Iowa Utilities Board
23 to grant us a permit to construct a pipeline.

24 Q. In a specific location that you have
25 produced maps before this Board, which is called a

1 route, which you need easements for; correct?

2 A. Correct.

3 Q. So you're asking this Board to give you
4 siting authority so you can locate your hazardous
5 pipeline in Iowa; correct?

6 A. Correct.

7 Q. And that's because the federal government
8 doesn't have jurisdiction over siting, routing, or
9 locating hazardous pipelines; correct?

10 MR. LEONARD: Same objection. It asks
11 about the jurisdiction of the federal government with
12 respect to pipelines.

13 BOARD CHAIR HELLAND: The witness may
14 answer if he knows.

15 But we need to limit our questions to
16 facts, not speculation or legal conclusions. But the
17 witness may answer if he knows.

18 A. Can you repeat the question, please?

19 BY MR. JORDE:

20 Q. Yes. And the reason you're here is because
21 you have to ask the State for guidance, for approval
22 to site, because neither PHMSA nor the federal
23 government has siting authority over CO2 pipelines;
24 correct?

25 A. PHMSA has guidelines around siting with

1 respect to setbacks, et cetera, but it's my
2 understanding that the siting authority is with the
3 Iowa Utilities Board.

4 Q. All right. See? Thank you. So the IUB is
5 here to site the pipeline. And now we're going back
6 to where we started, and you would agree that an
7 entity in charge of siting a pipeline, that it would
8 be reasonable, before siting a hazardous pipeline, to
9 have the risk modeling to consider. That would simply
10 be reasonable.

11 Can you agree with that part?

12 A. Well, I can't speculate as to what the
13 Board does or does not want or what they think they
14 need or don't need. What I can tell you is PHMSA is
15 accountable and provides oversight of dispersant
16 modeling and risk assessment and overall operational
17 safety of a pipeline, including this pipeline.

18 Q. Okay. And I'll agree with operational
19 safety. But, sir, we're talking about steps way
20 before operation. We're talking about answering the
21 question where is, if anywhere, an intelligent
22 location in the various counties you're targeting in
23 Iowa to locate a pipeline.

24 And you would agree that it would be
25 reasonable, when determining if your proposal is

1 rational, to have the full risk analysis prior to
2 making that decision.

3 A. Well, Mr. Jorde, you can't de-couple the
4 safety that's designed into the pipeline from the
5 operational safety. So it has to be designed with
6 inherent safety and constructed accordingly, and then
7 it's likely that you can operate the pipeline safely.

8 Q. Well, you're familiar with the concept of
9 avoid, minimize, and mitigate; correct?

10 A. Not really.

11 Q. Okay. Well, when you are thinking of
12 developing a route for a hazardous pipeline, the first
13 thing that you should do is see what HCAs or other
14 sensitive areas can be avoided. And, if you
15 determine, as the pipeline operator, they can't be
16 avoided, then you try to minimize impact. Which
17 sounded like where you were going with the integrity
18 of the pipeline itself. And then, if you can't
19 minimize, you try to mitigate.

20 Is that concept generally familiar to you?

21 A. Well, I guess you've made that one up, but
22 your logic makes sense. And that's why I mentioned
23 earlier we have direct impact on 1.13 miles of HCAs in
24 the state of Iowa. Which is extremely low. Most
25 pipeline systems, depending on where they're

1 constructed, have as many as 40 to 60 percent.

2 Q. And that might sound good relative to HCAs,
3 high-consequence areas, until we determine that the
4 federal government only identifies four categories of
5 HCAs. And they only update them every ten years when
6 a new census comes out.

7 Correct?

8 A. And those are pretty critical areas.
9 Highly populated areas, other populated areas,
10 eco-sensitive areas, and navigable waterways. You're
11 correct. But those highly populated and other
12 populated areas, pretty critical.

13 Q. And the federal HCAs don't take into
14 account actually on the ground what's happening in
15 terms of expansion, in terms of new businesses, in
16 terms of rural residential housing or development.
17 The HCAs don't take into account any of that, do they.

18 A. No. But we do. If that information is
19 available, we try to avoid economic development.

20 Q. And that's what Mr. Schovanec is going to
21 tell us about; is that right?

22 A. Mr. Schovanec.

23 Q. Schovanec. He can tell us about that?

24 A. Yes.

25 Q. So you admit that you didn't have any

1 dispersion analysis prior to your initial route, you
2 state that you affect 1.3 miles of HCAs, and what have
3 you done to reroute around those particular areas?

4 A. Well, I didn't admit we didn't have a
5 dispersant analysis. What I said is you can't model
6 dispersion if you don't have a route. So you can't
7 put the cart in front of the horse.

8 Q. Well, that's not at all true --

9 A. That is true.

10 Q. Okay. Well, let's talk about that.

11 Pretend we don't have a route, but I know I have a
12 pipeline that's going to transport CO2 at 2,183 psig,
13 we're going to have 20-mile intervals, it's a 24-inch
14 pipe, I can calculate the volumes, I can calculate a
15 guillotine rupture, I can calculate the release rate
16 pounds per second, I can calculate the release
17 direction, I can do all these things, and I can
18 determine, in a worst-case scenario using wind speed
19 and terrain, how far a plume would travel regardless
20 of whether it's Iowa or South Dakota or anywhere else.

21 Correct?

22 A. Well, if you want to be relatively
23 inaccurate, I think the preferred option is to route
24 around where you know those sensitive areas are to the
25 extent possible.

1 Q. Okay. And to the extent possible is
2 actually something a hundred percent in your control
3 as the applicant; correct?

4 A. No.

5 Q. Okay. Someone is forcing you to choose the
6 route that's before this Board.

7 A. Well, in Iowa -- well, one, the process
8 with the IUB is we have to establish a notice
9 corridor. And it is up to us to establish that. But,
10 in Iowa, we've rerouted the pipeline, from initial
11 concept to today, 1,500 times. And many of those were
12 due to survey results. Avoiding cultural features,
13 environmental or biological features, or landowner
14 preference.

15 And so that's why we update our model on a
16 regular basis to make sure that we're accounting for
17 the most current and accurate information.

18 Q. And you would agree of those claimed 1,500
19 reroutes, those would be what are known as micro
20 reroutes or small, slight modifications typically on
21 the parcel that you are already targeting; correct?

22 A. Typically. Correct.

23 Q. And the notice corridor -- well, I guess I
24 should ask this. Are you asking the IUB for an exact
25 route which is indicated in the most recent aerial

1 maps that you've uploaded for the route or are you
2 asking for the ability to route within the routing
3 corridor or something else?

4 A. We're asking for the route, as presented,
5 with the ability to relocate the pipeline within the
6 permanent easement.

7 Q. Okay. So I want to make sure we're clear.
8 Are you stating that it's your belief, if this project
9 were approved, you would be getting approval of an
10 exact route and only have the ability to move the pipe
11 within the 50-foot permanent right-of-way that you
12 seek?

13 A. That's my understanding. Unless the Board
14 gives us latitude to work with a landowner.

15 Q. Okay. And that's kind of what I'm trying
16 to figure out here. What you think is being
17 potentially approved or disapproved.

18 So do you believe that Summit has the
19 ability to move the potential route anywhere within a
20 given Exhibit H parcel?

21 A. No.

22 Q. But, reading through testimony, it's at
23 least your point of view that you're willing to work
24 with landowners who would present preferences or
25 potential reroutes of what you have requested at this

1 stage; right?

2 A. Again, if we were given that latitude by
3 the Board, and we had no constraints from a survey
4 perspective, yes, we would be willing to work with
5 individual landowners.

6 Q. Is it true that Summit has not presented
7 the local first responders, EMS, and persons in the
8 various counties you seek to locate the hazardous
9 pipeline, you have not presented them with any
10 dispersion or risk analysis; correct?

11 A. Although we've met with every emergency
12 management person in all 29 counties, it is very
13 premature to discuss or present them any information
14 at this point. However, we will present that and
15 tactical response documents and perform drills with
16 them, desktop drills, before the pipeline is placed in
17 operation.

18 Q. And you would agree there's no good reason
19 to not share the risk analysis and information with
20 those entities and first responders at this time;
21 correct?

22 A. No, there is good reason.

23 Q. Okay. Tell me.

24 A. It's two years before we're potentially in
25 operation, Mr. Jorde. And a lot of these voluntary

1 fire departments have high turnover. And so, as we
2 get closer to construct, and while we're in
3 construction, then we'll begin that process in
4 earnest. Which is best management practice.

5 Q. So do you see any value or do you see no
6 value in the concept that you would want to give all
7 potentially interested and affected parties the very
8 best information you have at this time?

9 A. I think with -- you give them information
10 that is relevant and that is necessary to provide at
11 this time.

12 Q. And "necessary" is something solely
13 determined by Summit Carbon Solutions, LLC; correct?

14 A. As long as we're compliant with PHMSA
15 regulations around public awareness, emergency
16 response, reparation, and any state requirements, yes.

17 Q. You're aware, though, that PHMSA only
18 requires an emergency response plan for the operator
19 and that there's no PHMSA oversight as to whether
20 counties or first responders want their own emergency
21 response plan; correct?

22 A. And I am also aware that first responders
23 typically go by the Response Guidebook. Or the Orange
24 Book. That's their basis. And we'll work with them
25 to go above and beyond PHMSA, once again, and provide

1 tactical documents -- tactical response plans along
2 the entirety of the pipeline in Iowa.

3 And those plans will be specific to the
4 location that that first responder, fire department,
5 et cetera, have jurisdiction over, and they will have
6 a very good understanding of what a response may look
7 like.

8 Q. And, in terms of getting them comfortable
9 and for any planning or budgeting purposes for
10 equipment, such as self-contained breathing apparatus
11 or electric vehicles or things that first responders
12 might deem necessary, you would agree, in the spirit
13 of going above and beyond PHMSA, that you should
14 immediately release your dispersion analysis to all
15 first responders in Iowa.

16 A. I would not agree.

17 Q. Do you think the first responders are
18 incapable of appreciating the risk that they would
19 understand if you were to provide your risk and
20 dispersion modeling to them?

21 A. No.

22 Q. So, given they can understand it and given
23 that it's clearly important, again I ask you on behalf
24 of Summit if you would agree to release that
25 information to county first responders today?

1 A. No, what I would say there's an orderly
2 process and development. And so there has been those
3 preliminary conversations with all these first
4 responding groups, first responder groups, and we've
5 actually solicited equipment needs that they may have.

6 So, as this project matures, and as we
7 hopefully get approved for construction and begin
8 construction, then that process will be pushed more
9 robustly.

10 Q. But they can only make decisions upon
11 equipment and needs that they perceive based upon the
12 best information they have. And, if you're refusing
13 to provide them with the best information, then they
14 obviously can't tell you what their needs are, can
15 they?

16 A. Mr. Jorde, I didn't say we're refusing. I
17 said that, in time, we will provide the information,
18 and that will be in plenty of time to provide any
19 additional resources they may need. And we'll support
20 them with additional resources they may need.

21 Q. And, if Summit has its way, "in time" means
22 after we've got approval, now we'll go ahead and show
23 you how dangerous this is; right?

24 A. Again, we'll provide information when the
25 planning begins more earnestly.

1 Q. And you would agree that because planning
2 hasn't begun in earnest, that this application should
3 be denied because you're simply not ready to move
4 forward as you should be; correct?

5 A. Not at all.

6 MR. JORDE: Are we able to pull up exhibits
7 from the docket? And, if so, should I direct that at
8 somebody? Could we please try to pull up 506 that was
9 uploaded this morning.

10 BOARD CHAIR HELLAND: We've got it.
11 They're pulling it up. It's just a rather large file.
12 So we'll get it up.

13 MR. JORDE: In the meantime, I would move
14 for admission -- well, I have uploaded as Exhibit 551
15 Mr. Powell's deposition. I understand there's no
16 objection to that being offered. So I would offer
17 Mr. Powell's deposition as evidence at this time.

18 MR. LEONARD: That's correct. There's no
19 objection to the admission of the deposition
20 transcript.

21 BOARD CHAIR HELLAND: Okay. There we go.
22 Mr. Powell's deposition will be admitted.
23 And I believe we have our exhibit up now.

24 MR. JORDE: Thank you so much. And maybe
25 if you could just maybe hit the plus once. There you

1 go. And then scroll down if you wouldn't mind.

2 BY MR. JORDE:

3 Q. Sir, what I'm showing you here is a
4 publicly available document of Navigator CO2 Pipeline
5 Company that they recently produced in South Dakota.

6 And you would agree with me, sir, that
7 having the ability to see something like this where
8 the purple is showing the potential consequence area
9 of a hazard Level 2 consequence, that that would be
10 important for the public to have in mind, and even
11 those landowners when negotiating with you, to
12 understand the risk that your project presents.

13 A. I would agree that that's important
14 information for first responders to have.

15 Q. And what about the people that -- not just
16 the ones that are going to come from 20 miles away,
17 but the people that live right there. Is it important
18 for them to have?

19 A. Again, you're not defining what this
20 actually depicts.

21 Q. Well, I'd be happy to go through that, but
22 my question is you would agree not just is dispersion
23 and risk analysis and visualization, like an overlay
24 we're looking at here, it's not only important for
25 first responders, but it's important for the

1 residents, the business owners, within the hazard
2 area; correct?

3 A. I would say what's important to the
4 individuals in these areas is the risk assessment
5 that's done and the actions that are taken to mitigate
6 that risk and the probability of an occurrence and the
7 severity of the impact if an occurrence should happen.
8 Which is extremely low.

9 Q. Okay. So I get it. You want to -- I mean,
10 I guess your pitch is that you, Summit, will
11 construct, or your contractors will construct, a
12 pipeline, and it's going to be so safe that we don't
13 really need to worry about this type of thing.

14 Is that what you're saying?

15 A. I didn't say that at all. We worry about
16 it. And that's why we're going above and beyond PHMSA
17 minimum requirements, as you phrased it, in many, many
18 areas, including our dispersant model.

19 So what you don't see on this buffer, which
20 I believe is 40,000 parts per million concentration,
21 is overland flow.

22 So what Summit has done is to the
23 terrain-aided overland flow -- and PHMSA requires
24 dispersant modeling and terrain-aided flow analysis
25 for high-consequence areas, which I've stated before

1 is a very small percentage of Iowa, we've done that
2 over the full extent of the pipeline in Iowa.

3 And so the integrity management program,
4 which, again, PHMSA requires is specific to HCAs, will
5 apply for the full extent of the pipeline.

6 So all those things will make, I believe,
7 this pipeline one of the safest ever constructed.

8 Q. And based on that overland flow and
9 analysis you've done, do you believe the analysis you
10 have is more precise than a model that did not use
11 overland flow or 2D analysis?

12 A. Yes.

13 Q. And, therefore, you are confident that the
14 analysis you have done is more accurate. And,
15 therefore, another reason why it should be shared with
16 the public.

17 Correct?

18 A. I agree it is more accurate. As your
19 expert witness in South Dakota has attested to. But I
20 do not believe that it should be shared. As I said
21 before, it should be protected.

22 Q. So what we're looking at here is modeling
23 an 8-inch pipeline. And, in Iowa, are you ranging
24 from 6- to 24-inch or is it from 8- to 24-inch?

25 A. 6.

1 Q. So you go from 6- to 24-inch. Do you
2 happen to know the proposed miles within Iowa of each
3 diameter of pipe?

4 A. I do not. Mr. Schovanec can provide that
5 detail.

6 Q. All right. So you're going up -- or
7 proposing to go up to 24-inch in diameter. And I'm
8 sure you're aware, sir, that this is showing an 8-inch
9 lateral on the proposed Navigator system in South
10 Dakota, and they calculated a distance of 1,855 foot
11 as a buffer from the center line going in both
12 directions.

13 Do you understand that to be what this
14 exhibit shows?

15 A. I can't read that from here, but if that's
16 what you say.

17 Q. Let's just assume that's true. Because, if
18 you want and care to zoom in, that number is in there.
19 But let's just assume for purposes of my question
20 that -- I don't know if you call them a competitor,
21 but another proposed CO2 pipeline company has said
22 that risk goes out, on an 8-inch pipeline under
23 certain conditions, at least 1,855 foot.

24 And so my question is, when looking at the
25 volume and the amount of CO2 that could be released in

1 an unintended event, that to get from 8 to 24 you
2 don't just multiply by three.

3 Is that fair?

4 A. I'd say that's fair.

5 Q. And, in fact, by virtue of the physics and
6 the chemistry and how the molecules are compressed,
7 that the volume in a 20-mile 24-inch pipe from the
8 volume in a 20-mile segment of an 8-inch pipe is
9 greater than three times.

10 Is that true?

11 A. I'll take your word for it, Mr. Jorde.

12 Q. Well, I'm not the engineer. I'm just
13 repeating things I've learned. But if, from your
14 engineering background, you disagree, please tell me.

15 A. I don't disagree.

16 Q. And so, therefore, would you agree that if
17 the depiction we're looking at on the screen has a
18 1,855 foot buffer for an 8-inch pipeline, we know that
19 the buffer for a 24-inch pipeline would be -- should
20 be greater than three times or 5,565 feet; correct?

21 A. That is not correct.

22 Q. Would you agree that a reasonable buffer
23 for a 24-inch pipeline would be 3,000 feet from the
24 center line of the pipe?

25 A. Mr. Jorde, I'm not going to speculate. And

1 you're using a Navigator model as your standard. I
2 can't speak to the accuracy of this model. And you're
3 talking about 20-mile valve spacing. I'm assuming
4 that's a could-affect area. So the valves would
5 probably -- if I'm looking at milepost numbers
6 correctly, it would be spaced closer than that.

7 But, in any event, I can't speculate as to
8 what the situation may or may not be in any area when
9 we're talking about speculating about flow rate and
10 pressure and location.

11 Q. And it would be much better to not
12 speculate than to just tell us what your numbers show;
13 correct?

14 A. I know we've been there several times this
15 morning, Mr. Jorde, but I have all day.

16 Q. I have all week.

17 A. If the Board requests that information in
18 confidence, we're happy to provide it.

19 Q. All right. Well, I guess we'll see.

20 So maybe I can potentially leave this
21 topic, just to be clear, you, sir, on behalf as the --
22 what's your title? You're the chief operating
23 officer?

24 A. Correct.

25 Q. As the COO of Summit, applicant, you are

1 not willing to release your data that would inform us
2 if, in fact, the risks of a 24-inch pipeline are
3 3,000 feet, 4,000 feet, 5,000 feet. You're not going
4 to voluntarily do that today, are you.

5 A. Again, I agree with PHMSA and federal
6 courts that this information should be protected. And
7 we do have our dispersant modeling expert and our risk
8 assessment expert that are slated for witnesses in
9 this proceeding. So there will be an opportunity to
10 talk to subject matter experts in both areas.

11 Q. But I'm not asking for a subject matter
12 expert. I'm asking for the buck stops here, the chief
13 operating officer, to just say, "Yes, we are going to
14 release this." Otherwise I'm going to have the same
15 dance with Mr. Godfrey and others.

16 A. It's not Mr. Godfrey I'm speaking of.
17 However, I've said it multiple times this morning. I
18 do not think we should release it publicly.

19 Q. Are you talking about Mr. Louque?

20 A. Mr. Louque.

21 Q. Louque. And he's with Audubon Field
22 Solutions?

23 A. Yes.

24 Q. And so he would be -- let's just say,
25 hypothetically, before he testifies the IUB says,

1 "Yes, you have to release it," then Mr. Louque would
2 be the person that would be able to walk us through
3 how they went about the calculations, the inputs, the
4 outputs, and all those things.

5 A. Correct.

6 Q. All right. Now, I've looked through your
7 testimony here, and it says that you're going to be
8 able to give an overview of the purpose of the
9 project. And I'm just curious in a sentence or as
10 succinct as you can on behalf of Summit, what do you
11 believe the purpose of this proposed hazardous
12 pipeline in Iowa is?

13 A. The purpose is to help the ethanol plant
14 partners that we have contracted with to capture their
15 CO2 before it is emitted, transport it to North
16 Dakota, and sequester it subsurface. Which will allow
17 them to significantly reduce their carbon intensity
18 which will then give them access to low-carbon fuel
19 markets and hopefully sustain the livelihood of their
20 businesses and the demand for corn in the communities
21 in which they operate.

22 Q. Okay. So is a more direct way of saying
23 that is you believe the purpose is to save the ethanol
24 industry in Iowa?

25 A. I didn't use the word "save." I said it's

1 to allow them the flexibility to sell in other
2 markets, especially low-carbon markets, that are more
3 profitable.

4 MR. JORDE: And I'm going to pick up on
5 that, but, before I do, I don't want to forget to
6 offer LO 506 that we were just looking at.

7 BOARD CHAIR HELLAND: Are there any
8 objections?

9 MR. LEONARD: No objection from Summit.

10 MR. JORDE: Oh. And I probably need to add
11 to that.

12 BY MR. JORDE:

13 Q. Mr. Powell, were you aware that
14 Exhibit 506, which, again, was part of the Public
15 Utility Commission Navigator South Dakota docket,
16 that, despite what it says, it does not show a
17 worst-case analysis? Are you aware of any of that
18 discussion that was held in South Dakota?

19 A. No.

20 Q. So then let's go back -- thank you for
21 that. Let's go back to your last answer, which was
22 the purpose of the project, and kind of break that
23 down.

24 So --

25 BOARD CHAIR HELLAND: Mr. Jorde?

1 MR. JORDE: Yes.

2 BOARD CHAIR HELLAND: Are you done with
3 your question so we can admit that?

4 MR. JORDE: Good idea.

5 BOARD CHAIR HELLAND: Thank you. The Board
6 will admit the exhibit as Jorde Landowners Hearing
7 Exhibit 506.

8 MR. JORDE: Thank you.

9 BOARD CHAIR HELLAND: Thank you. Go ahead.

10 BY MR. JORDE:

11 Q. So back to Summit's stated purpose of the
12 project. You mentioned North Dakota. And it's true
13 that, in North Dakota, the North Dakota PSC in a vote
14 of 3-0 unanimously decided to deny Summit's North
15 Dakota pipeline application.

16 Correct?

17 A. Correct.

18 Q. And, on August 31st, Oliver County denied
19 Summit's request for two injection wells.

20 Correct?

21 A. That's my understanding.

22 Q. And you would agree that it's not
23 reasonable for this state and the folks here and all
24 of us to be put through your application when you have
25 no -- "you" being Summit, have no place to go and have

1 not a sufficient amount of storage capacity in North
2 Dakota; correct?

3 A. Disagree.

4 Q. In terms of accessing low-carbon markets,
5 or related to the low-carbon fuel standard, you're
6 referencing there California and Canada predominantly;
7 is that right?

8 A. Yes.

9 Q. And so your pitch here why -- the purpose
10 of this project is so that a handful of Iowa ethanol
11 companies can end up potentially trucking or
12 transporting via rail Iowa ethanol to California.

13 A. If that's their preference.

14 Q. So you, of course, would say that pipelines
15 are the safest and most efficient transportation, but
16 do you understand in order to access the markets,
17 which is the basis of the purpose of your project,
18 that the product, this alleged low-carbon ethanol,
19 would have to be trucked or otherwise transported not
20 on pipeline to California and Canada?

21 A. It's being trucked somewhere now,
22 Mr. Jorde.

23 Q. Correct. So we don't need your pipeline,
24 do we. Because what you propose to happen with the
25 ethanol, it's already being delivered places; correct?

1 A. Well, I think that the amount of trucks it
2 would take to transport 18 million tons of CO2 would
3 be unmanageable.

4 Q. Well, as of right now, according to your
5 testimony, you're looking to transport 9.5 million
6 metric tons per annum; correct?

7 A. Correct.

8 Q. So do you think that it's in the public
9 convenience and necessity of the citizens of Iowa to
10 essentially take one for the team so that Californians
11 can have a few years of low-carbon ethanol?

12 A. I don't know what you mean by the term
13 "take one for the team," but I will say that we think
14 this project will -- we're confident this project will
15 help the ethanol plants in Iowa that we have
16 contracted with to compete in the low-carbon fuel
17 markets.

18 Q. And you would agree that the economic gain
19 or economic benefit of your contracted ethanol plants
20 is not sufficient to justify an approval of this
21 project by this Board; correct?

22 A. I would not. I mean, look at Dakota Access
23 or other pipelines that transport a commodity from,
24 let's say, North Dakota to the Gulf Coast. We have
25 contracts with 12 businesses in this state that

1 contribute to their local economies and employ people
2 locally and contribute to the state GDP in a much
3 bigger way than a pipeline that just transports
4 product across the state.

5 Q. How many people are employed by the
6 27 percent of Exhibit H landowners that you have not
7 obtained easements for?

8 A. I have no idea.

9 Q. What is the gross domestic product in terms
10 of output that the 27 percent of the families and
11 their farming operations contribute to the Iowa
12 economy?

13 A. I'm not sure.

14 Q. And, in fact, no analysis has been done of
15 that. And, therefore, you, as applicant, can't make
16 the case that this project has any net benefits
17 whatsoever, can you.

18 A. I don't agree.

19 Q. You don't agree just because you don't like
20 it or you don't agree because you have some scientific
21 facts or numbers to support your disagreement?

22 A. Well, you're making the -- you're
23 speculating that we can't reach agreement with the
24 remaining landowners.

25 Q. Well, if you're saying reach an agreement

1 means if you don't sign it, we'll take it from you in
2 court and make you run up a bunch of legal fees, then
3 maybe you can. But I'm talking about an actual
4 voluntary exchange. And you would agree that you've
5 had very few actual voluntarily signed easements;
6 correct?

7 A. No, I would disagree.

8 Q. And part of your theory on the ethanol
9 plants that you're partnering with and the benefit is
10 that you believe, if your project goes through and CO2
11 is somehow captured and shipped up somewhere to North
12 Dakota, that then the ethanol plants might be able to
13 make more money selling and shipping their ethanol
14 into California.

15 Is that the gist of it?

16 A. Well, I think if they are more profitable,
17 "they" being the ethanol plants, and then they have
18 the ability to expand and then their demand for corn
19 increases -- if I remember correctly, the demand for
20 corn in Iowa currently is about 1.6 billion bushels.
21 Which produces about four and a half billion gallons
22 of ethanol. So, as that increases, the demand
23 increases.

24 And it's my understanding also that in
25 reducing these plants' CI score, that that's about

1 2 cents a point below 50. And so that extrapolates
2 into higher prices for corn.

3 Q. Are you relying on the gentleman from
4 Ernst & Young to back that up or do you have an
5 economist that's going to try to substantiate what you
6 just laid out?

7 A. Well, Ernst & Young will substantiate the
8 work we've done around the economic impact. Or the
9 purported economic impact. But I think our ethanol
10 partners can substantiate the value to them and to
11 potential farmers that sell their corn to the ethanol
12 plants.

13 Q. And one of the links you try to make, sir,
14 is that if there's more demand for corn, then the corn
15 prices will go up. And, if corn prices go up, then
16 that will underlie or support or help land prices in
17 Iowa increase.

18 Do you stand by those statements?

19 A. Well, again, I think that commodity prices
20 hopefully will stay reasonably stable. And, at least
21 what I've learned in the last couple years, that land
22 prices in Iowa have went up substantially in the last
23 few years.

24 And so as long as the ethanol market stays
25 robust and the corn demand stays high, I would think

1 that would contribute to sustaining high land prices
2 in Iowa.

3 Q. And can you think of any other market
4 factors that play into the price, and the fluctuating
5 price, of a commodity such as corn other than ethanol
6 demand?

7 A. There are others, I'm sure. I'm not an
8 expert in the ag economy, but the demand for corn, I
9 would think, would be a contributing factor, a
10 significant factor.

11 Q. And do you think if an ethanol plant is
12 having to pay more for corn, its principal input, that
13 that's going to have a drag or a benefit on its bottom
14 line?

15 A. Well, it depends on the back end of that
16 equation, Mr. Jorde. So, if they're securing higher
17 pricing in low-carbon fuel markets, I would think that
18 would benefit their bottom line.

19 Q. Of the 13 ethanol partners that Summit
20 claims to have in Iowa, how many of those are
21 corporate owned or how many of those are locally owned
22 co-ops?

23 A. Well, I think the project we have in front
24 of the commission is for 12 plants.

25 Q. Okay.

1 A. And Mr. Pirolli, our chief commercial
2 officer, would be much better versed in how those
3 plants are organized, what their ownership structure
4 is, et cetera.

5 Q. Would you agree that the price of corn, and
6 an increasing price of corn, is materially detrimental
7 to Summit's business?

8 A. No.

9 Q. So you would disagree with the risks
10 outlined in Summit's private placement memorandum
11 where it says increasing corn prices could adversely
12 affect the results of operations and profitability of
13 the operating company?

14 A. It could.

15 Q. And "could" is the key word because all of
16 this is pure speculation in terms of land prices
17 staying up, if corn price is "this," if California and
18 Canada "that." Your entire premise of your
19 application is based on speculation; correct?

20 A. Well, I would say it's not speculation that
21 currently CO2 is being emitted into the atmosphere.
22 So pulling that CO2 off of the ethanol plant's
23 fermentation process and capturing it and transporting
24 it to North Dakota before it reaches the atmosphere,
25 that's currently happening. So, no, I don't think

1 it's speculation.

2 Q. That begs the question then let's leave the
3 alleged benefit to maybe a handful of ethanol
4 companies in Iowa. Is one of your also -- I guess the
5 pitch here, one of the purposes of the project, is to
6 help with global warming and climate change?

7 A. Summit doesn't take a position on climate
8 change. Our primary drivers are to help the ethanol
9 plants reduce their carbon intensity and help them be
10 competitive in low-carbon fuel markets. Which, in
11 turn, as you just said, drives demand for corn and
12 keeps land values high. And the fact that those
13 emissions are being removed from the process before
14 they're being emitted into the atmosphere.

15 And so, peak capacity, if you have
16 18 million tons of greenhouse gas emissions that
17 aren't emitted, that's probably a benefit.

18 Q. And so I need to pin you down, sir. Are
19 you or are you not proposing to this Board that an
20 environmental benefit is one of the reasons you think
21 they should approve this project? That you're somehow
22 affecting for the better climate change or global
23 warming on this planet.

24 A. As I just stated, there is an environmental
25 benefit.

1 Q. Okay. And are you wanting this Board in
2 their decision-making process to include that in one
3 of the factors that they consider? That you believe
4 your project will produce an environmental benefit.

5 A. I'm not going to recommend what the Board
6 does or does not consider. As I said, there is an
7 environmental benefit, in my opinion, of removing
8 those greenhouse gases from the process before they're
9 emitted into the atmosphere.

10 Q. So let's talk about that. You would agree
11 that the IRS for being able to receive the 45Q tax
12 credits only requires proof that CO2 is sequestered
13 for a period of three years.

14 A. I am not familiar with that.

15 Q. Are you aware if the 45Q tax credits have
16 any tether or any requirement or prerequisite that CO2
17 must be permanently captured and permanently
18 sequestered?

19 A. Yes.

20 Q. And it's true that the IRS does not have a
21 requirement that the CO2 be forever captured in order
22 for Summit to apply for and receive 45Q tax credits.

23 A. I am not aware of that. Again, Mr. Pirolli
24 would have a much deeper understanding of that than
25 myself.

1 Q. So you would agree that if in North
2 Dakota -- and Harold Hamm, who has various oil and gas
3 interests and one of your major investors, that in
4 North Dakota if someday in the future this CO2 is, in
5 fact, used for EOR, enhanced oil recovery, which North
6 Dakota has said they are desperate for CO2 to do that,
7 you would agree that then any alleged environmental
8 benefit you're asking this Board to consider would be
9 destroyed and, therefore, they should not consider
10 that.

11 A. I would disagree. Because I know there are
12 stringent requirements from the North Dakota
13 Industrial Commission and the federal government
14 around how the CO2 that is injected subsurface is
15 measured and the volume and size of the subsurface
16 plume. And that's why we'll have monitoring devices
17 at the surface and subsurface.

18 And so we'll have to maintain that
19 information, it's my understanding, for the life of
20 the project.

21 Q. That you'll have to maintain information or
22 it's your understanding that you actually have to
23 prove that every metric ton of Iowa-captured CO2 is
24 still somewhere underground in North Dakota forever?

25 A. Prove. And not a well-known fact,

1 Mr. Jorde, to use CO2 for enhanced oil recovery, the
2 oxygen content has to be very low.

3 The oxygen content generally in this CO2
4 stream will be significantly larger. And so to
5 actually use it for enhanced oil recovery would
6 require a liquefaction facility that would be the
7 largest in the world.

8 So it's not feasible or practical at this
9 time.

10 Q. Can we take a look --

11 MR. JORDE: And, by the way, I'm just going
12 to keep going unless you cut me off for a break. So
13 I'll just leave that up to you. Keep going? Okay.

14 If we could please pull up Exhibit 571.

15 Thank you. If you wouldn't mind maybe
16 minimizing that somewhat so we might be able to see
17 the very top there for a second.

18 BY MR. JORDE:

19 Q. Sir, are you aware of this article coming
20 out or these statements made by the North Dakota State
21 Department of Mineral Resources in very close, within
22 days of time of when the PSC, North Dakota PSC,
23 rejected the Summit application?

24 A. I am not.

25 Q. Do you think it's a coincidence that within

1 days of the PUC, which we can take by the date of the
2 article -- pardon me, the PSC rejecting the Summit
3 application that the North Dakota Department of
4 Mineral Resources warns "more CO2 is needed to sustain
5 oil production long term"? Do you think there's any
6 connection with those things?

7 A. I do not.

8 Q. And is it true in your North Dakota
9 application that you don't specifically say you will
10 never use the CO2 and you don't specifically commit to
11 absolutely only sequestering the CO2 you intend to
12 transport into North Dakota?

13 A. Incorrect. I mean, Mr. Jorde, we're a
14 common carrier. So the ethanol plants that we've
15 currently contracted with intend for us to transport
16 that CO2 to North Dakota and sequester it. Which will
17 benefit them as we've previously discussed this
18 morning.

19 If another carrier decided to use -- or ask
20 us to transport CO2 for another purpose, like enhanced
21 oil recovery, then that's a possibility. But it would
22 be a segregated stream of CO2.

23 Q. Okay. Let's just go with that. If it's a
24 possibility that on the pipeline system that you are
25 asking for approval here in an application that says

1 you'll never do anything other than permanently
2 sequester CO2, if it's a possibility that, in fact,
3 you will use it for EOR, then this Board cannot rely
4 on any of your alleged environmental benefits;
5 correct?

6 A. Mr. Jorde, as we've said many times this
7 morning, the ethanol plants, the 12 that we're
8 currently contracted with, intend for us to transport
9 the CO2 that's captured and sequester it. That
10 benefits their ability to compete in the low-carbon
11 fuel markets.

12 Q. Well, the fact of the matter -- sorry.

13 A. And that's the scope of the project we have
14 before the Board.

15 Q. The fact of the matter is that Summit is
16 going to own the CO2 that it intends to transport on
17 its pipeline. So you have no customers and you have
18 no shipper because you are your own shipper; correct?

19 A. We are committing to transporting the CO2
20 that we do take possession of at the capture facility
21 to North Dakota and sequester it.

22 Q. All right. So you would agree that Summit,
23 under the model in Iowa, is going to construct and own
24 the carbon capture equipment that attaches to the
25 ethanol plant and then attaches up to the proposed

1 pipeline; correct?

2 A. Correct.

3 Q. And then Summit will take title of the CO2
4 at the title transfer point, which is the point where
5 the pipeline, the transportation pipeline, meets the
6 carbon capture equipment.

7 MR. LEONARD: Objection.

8 BOARD CHAIR HELLAND: State your objection.

9 MR. LEONARD: I'll object to the extent it
10 calls for a legal conclusion as to where Summit takes
11 title.

12 BOARD CHAIR HELLAND: Mr. Jorde.

13 MR. JORDE: It's a factual question of
14 where they take title. And the COO would certainly
15 know what the business model is.

16 BOARD CHAIR HELLAND: The witness can
17 answer the question if you'd like.

18 A. Well, we actually take custody of the CO2
19 at the scrubber that comes off of the fermentation
20 process at the ethanol plant. Mr. Pirolli can talk
21 about the commercial aspects of the CO2.

22 BY MR. JORDE:

23 Q. Okay. So your answer is that Summit does
24 take title -- are you saying take title or are you
25 saying take custody? Are you differentiating between

1 the concept of the title transfer point and the
2 concept of taking custody?

3 A. I'm differentiating. Because I have not
4 seen the agreements, the offtake agreements, between
5 the plants and our commercial team. But I do know we
6 take custody at that point and that it's in our care
7 to compress it, dehydrate it, inject it into the
8 pipeline, and transport it to North Dakota for
9 injection subsurface.

10 Q. And you would agree that if Summit, in
11 fact, takes title, not just custody but takes title to
12 the CO2 molecules at the moment it enters its
13 pipeline, that it is not a common carrier.

14 MR. LEONARD: Objection.

15 BOARD CHAIR HELLAND: State your objection.

16 MR. LEONARD: Calls for a legal conclusion.

17 BOARD CHAIR HELLAND: Mr. Jorde.

18 MR. JORDE: He said he was a common carrier
19 and I'm trying to figure out what he meant by that.

20 BOARD CHAIR HELLAND: You can answer if you
21 know.

22 A. We're a common carrier because we have --
23 if someone can meet our quality specs and has a means
24 to get the product onto the pipeline and has a
25 location to get it off of the pipeline and we have

1 capacity and we're maintaining 10 percent of the
2 capacity of the pipeline for other shippers, then I
3 believe we're a common carrier.

4 BY MR. JORDE:

5 Q. Well, okay, you have that belief, but, if
6 we really started to dig into that, would you agree
7 Mr. Pirolli is the more appropriate witness or are you
8 willing to field questions on everything you just said
9 there?

10 A. Mr. Pirolli is our chief commercial
11 officer. I think he's better suited to ask those
12 questions.

13 Q. Okay.

14 MR. JORDE: So I guess I should offer
15 Exhibit 571.

16 MR. LEONARD: No objections.

17 BOARD CHAIR HELLAND: No objections?
18 (No response.)

19 BOARD CHAIR HELLAND: Hearing no
20 objections, the exhibit will be admitted as Jorde
21 Landowners Hearing Exhibit 571.

22 MR. JORDE: Thank you. And I would also
23 offer 570. Which is the North Dakota PSC decision
24 denying Summit's application.

25 BOARD CHAIR HELLAND: Are there objections?

1 MR. LEONARD: Just a moment. I'm trying to
2 take a look at it.

3 No objection.

4 BOARD CHAIR HELLAND: Seeing no
5 objections -- I believe we already took judicial
6 notice, but, in an abundance of caution, we will admit
7 Jorde Landowners Hearing Exhibit 570.

8 MR. JORDE: I appreciate that. And now at
9 least we have a copy as opposed to judicial notice. I
10 didn't know if it would be in the record. But I
11 appreciate that clarification.

12 BY MR. JORDE:

13 Q. Sir, on page 4 of your direct testimony,
14 you state that your intention is "to plan, construct,
15 and operate a world-class project which meets the
16 needs of the shippers."

17 And, again, you are the shipper. Because
18 you take ownership of the CO2 molecules.

19 Correct?

20 A. When I say "meets the needs of the
21 shippers," the intent in that comment is our
22 customers. And, in this case, currently that's the
23 ethanol providers, but could be others in the future.

24 Q. Well, but they're not customers because
25 they're not paying you for transport. In fact,

1 they're just giving you the CO2, you become the owner,
2 and then you ship it for yourself; correct?

3 MR. LEONARD: Objection.

4 BOARD CHAIR HELLAND: State your objection.

5 MR. LEONARD: Same objection as previously.

6 That it calls for a legal conclusion. Also, to the
7 extent this gets to the terms of the offtake
8 agreements, it's more appropriate for closed session.

9 BOARD CHAIR HELLAND: Thank you.

10 Mr. Jorde.

11 MR. JORDE: Well, I guess I'll ask

12 Mr. Powell this.

13 BY MR. JORDE:

14 Q. In terms of the offtake agreement, sir, and
15 getting into those, would Mr. Pirolli be better suited
16 than yourself for that discussion?

17 A. He would.

18 Q. So I'll hold that and we'll wait for
19 Mr. Pirolli on that.

20 Again, we talked about the 9.5 million
21 metric tons per annum. And your statement is that
22 when you look proposed project-wide, that is the
23 committed volume that you believe you have presently?

24 A. That is the committed volume we have
25 presently. And about 3.3 of that is associated with

1 the 12 Iowa ethanol plants.

2 Q. 3.3 million metric tons?

3 A. Correct.

4 Q. Does the 9.5 million, and based on how
5 you'll calculate the tax credits, 45Q tax credits,
6 does that put you at a break-even annually? Does that
7 make the project viable? That volume?

8 A. Again, I think that's a question better
9 suited for Mr. Pirolli.

10 Q. You claim that CO2 is in a supercritical
11 state. And you understand that supercritical is a
12 different physical state that's not liquid? Do you
13 understand that?

14 A. Well, I understand that supercritical has
15 both liquid and gas properties.

16 Q. So you would agree supercritical, by the
17 very fact that we have a term "supercritical," is
18 different than substance or molecules in the liquid
19 phase.

20 A. Again, I think it includes -- well, I know
21 it does. It includes both gas and -- it's a fluid
22 that includes both gas and liquid properties.

23 And there will be times on this project in
24 the operation of this pipeline when the liquid or the
25 CO2 in this pipeline may drop below the supercritical

1 temperature threshold and it will become a liquid.

2 And, as PHMSA dictates in a pipeline
3 system, if that occurs anywhere along the pipeline,
4 then it applies to the entire pipeline.

5 Q. Where specifically on your proposed route
6 would that occur?

7 A. Again, you're asking me to speculate about
8 the operation. Time of year, discharge temperature,
9 specific plants, et cetera.

10 Q. Well, I'm not asking you to speculate on
11 the operation. You're the operational officer. I'm
12 asking you to comment and defend the statement you
13 just made that, according to you, the CO2 will be in a
14 liquid phase at certain places. I just want to know
15 where and when is that going to happen?

16 A. I said it may be in liquid state at certain
17 times of the operation.

18 Q. All right. So it may not be in liquid
19 state at certain times; correct?

20 A. And that's why it says supercritical or
21 dense phase.

22 Q. But dense phase is just industry jargon.
23 That's not a scientific term; correct?

24 A. I disagree.

25 Q. But, in any event, supercritical defines a

1 type of matter, or a state of matter, that is
2 different from a liquid or a gas; correct?

3 MR. LEONARD: Objection.

4 BOARD CHAIR HELLAND: State your objection.

5 MR. LEONARD: I'm going to object to the
6 extent it calls for a legal conclusion under Iowa law.

7 MR. JORDE: This witness is talking all
8 about the different phases of matter. I think he can
9 answer the question.

10 BOARD CHAIR HELLAND: You may answer if you
11 know.

12 A. Could you restate, please, Mr. Jorde?

13 BY MR. JORDE:

14 Q. Yes, just simply, sir, and we can move on,
15 so "supercritical" defines a particular phase of
16 matter that is different than a gaseous phase or a
17 liquid phase; correct?

18 A. I will just say it is a fluid that has both
19 liquid and gas properties.

20 Q. And a fluid isn't a state of matter. Fluid
21 is a description of a substance; correct?

22 A. Again, it is a fluid that has gas and
23 liquid properties.

24 Q. So it's neither one or the other, but,
25 according to you, supercritical has gas and liquid

1 properties, is that it?

2 A. Well, I disagree with your
3 characterization. As I said, it has liquid and gas
4 properties.

5 Q. But it's different; correct? I mean, we
6 have a separate word to describe it because it's not
7 the same; right? "Supercritical" and "liquid" are not
8 the same. Can we agree on that?

9 A. They are not identical.

10 Q. Okay. All right. And neither is
11 "supercritical" and "gas." They're not the same.
12 They're not identical.

13 Correct?

14 A. Correct.

15 Q. Okay. Now, you're aware of California and
16 your low-carbon fuel standard, that they're phasing
17 out internal combustion engines in about ten years?
18 You're aware of that?

19 A. Well, I believe that's the stated
20 objective. Considering the volume of electric
21 vehicles, or the quantity of electrical vehicles in
22 this country, and even on the West Coast, that's
23 probably a challenge.

24 Q. Well, wouldn't you agree that it would be
25 better for us all just to get electric vehicles and

1 skip this whole pipeline thing. Because that would
2 really be the way to help the environment, wouldn't
3 it?

4 A. I disagree.

5 Q. And in terms of -- you said -- I think you
6 said if the Board approves, and all the other states
7 approve, it would take you at least two years to
8 become operational; is that correct?

9 A. Potentially. It depends on when we receive
10 those approvals and the construction window and
11 whether we have to construct through one winter or two
12 winter seasons.

13 Q. And so let's just say -- just for
14 argument's sake, we'll pick two years. California is
15 moving off internal -- the ICE standard in ten years.
16 That gives you about an eight-year runway. And you
17 would agree that it's certainly not in the public
18 convenience and necessity of Iowa to potentially have
19 a handful of Iowa ethanol plants maybe make a bit of
20 premium for eight years in California.

21 A. Well, I wouldn't agree with that statement.
22 What I would agree with is that globally, and in this
23 country, there's a push to decarbonize. There are
24 many states, including Iowa it's my understanding,
25 that are looking at low-carbon fuel standards.

1 And, again, Mr. Pirolli can speak to this
2 in more detail, but it's my understanding that it's
3 our thought process that many other states in this
4 country will adopt low-carbon fuel standards and
5 expand the market for these ethanol facilities.

6 And then, secondly, there are European
7 markets for low-carbon fuels as well.

8 So I do not agree that the demand will
9 diminish because California may or may not adopt a
10 suite of electric vehicles.

11 Q. So everything you just said is basically --
12 it's speculation, it's hope and maybe and one day and
13 Europe and maybe other states, but you don't have any
14 hard evidence and you're not expecting this Board to
15 rely upon the potential of Iowa somehow selling
16 low-carbon fuel to Europe as a reason to approve your
17 project, are you?

18 A. Well, we do know what the demand is today
19 for low-carbon fuel markets. And, if you're talking
20 about a hope, I would think it's a hope of California
21 to have all electric vehicles by 2035.

22 Q. Is that a hope just as the low-carbon fuel
23 standard being around is a hope? I mean, they're both
24 laws, aren't they?

25 A. Well, I do know that there's a demand on

1 the West Coast and Canada now that's adequate to
2 service the ethanol plants that we're contracted with.

3 Q. So it would be a lot better, wouldn't it,
4 just to try to build an ethanol pipeline rather than a
5 CO2 pipeline just to help these plants get to market
6 quicker safer, would you agree?

7 A. Well, you've got to lower their carbon
8 intensity to make their product viable for low-carbon
9 fuel markets.

10 Q. And you would agree that if your pipeline
11 is not approved and not constructed, that these same
12 farmers are going to be able to take their grain to
13 the same ethanol plants and all the rest of us not in
14 California are going to keep using ethanol and
15 everyone will be fine.

16 Right?

17 A. Well, not according to the Iowa Renewable
18 Fuels Association who indicated that if CCS isn't
19 implemented, that the demand could reduce by as much
20 as 75 percent and have an economic impact on this
21 state of potentially \$10 billion and on farmers of a
22 billion dollars.

23 Q. Are you referring to the study that
24 Mr. Rastetter asked be done to promote this project?

25 A. I'm not familiar with what Mr. Rastetter

1 did or did not request. I just know the study that
2 was produced. I'm referencing the study that was
3 produced by the Iowa Renewable Fuels Association.

4 Q. Do you think they're a particularly neutral
5 party in this debate we're having?

6 A. I can't speak to that, but I would hope
7 they would be.

8 Q. You don't think their members have any
9 potential desire for approval of this project? You
10 wouldn't count them as on your team, so to speak?

11 A. Again, I don't know what their stated
12 charter is, but, just from their name, "Renewable
13 Fuels," I'm assuming they would support a project like
14 this.

15 Q. All right. So, in terms of, again, the
16 purpose, we've said global warming, although Summit
17 doesn't take a position on that, we've said access to
18 California/Canada low carbon markets, and then you
19 believe flowing from that access is higher corn prices
20 here locally and then maybe that helps land prices.

21 Is there any other alleged purpose of the
22 project?

23 A. I think those are the primary objectives.

24 Q. And you would agree that it's not the
25 purview of this Board to consider derivative or

1 derivative on derivative objectives or potential
2 benefits such as if California low carbon, if
3 increased corn basis, if increased land values. They
4 don't go that far out when looking at this project for
5 approval, do they?

6 MR. LEONARD: Objection.

7 BOARD CHAIR HELLAND: State your objection.

8 MR. LEONARD: Calls for a legal conclusion
9 as to the jurisdiction and purview of the Board.

10 BOARD CHAIR HELLAND: Sustained.

11 Mr. Jorde, can you reword, please.

12 MR. JORDE: Yes.

13 BY MR. JORDE:

14 Q. Do you think -- you know, you talk a lot
15 about ethanol. A lot about ethanol. Is this the
16 ethanol board? I mean, who cares. What do you think
17 ethanol has to do with whether or not a hazardous
18 pipeline should or should not be approved in the state
19 of Iowa?

20 A. I don't understand your question,
21 Mr. Jorde.

22 Q. Well, I don't understand why we're talking
23 about ethanol. I mean, can't this project -- I mean,
24 if this was a good project, couldn't it stand on its
25 own and we wouldn't have to go if then, if then, if

1 then and all this speculation? It would just have a
2 core purpose that we could agree is good. Wouldn't
3 that make more sense?

4 A. Well, Mr. Jorde, you apparently are the
5 only one that doesn't understand that. And, as I've
6 said, there's a robust market not only on the West
7 Coast and California but Washington and Canada, and
8 the current demand is there for the ethanol plants
9 that we're contracted with. And that demand, as you
10 said, will be there for at least another ten-plus
11 years. That assumes that no other demand appears.

12 And then, secondly, this project will
13 definitely, scientifically, confirm that it will
14 reduce the carbon intensity of these ethanol plants
15 significantly so then they can compete in these
16 low-carbon fuel markets and gain higher value for
17 their product.

18 Q. No, I understand that's the pitch here, but
19 in terms of the balancing and the decision-making
20 process, wouldn't you agree that it's not fair, it's
21 not equitable, it's not publicly convenient, and it's
22 certainly not necessary for you to get to that end to
23 demand forever easements across Iowans' land; correct?

24 A. No.

25 Q. So Summit believes it can justify forever

1 easements, the risk that you won't disclose, because
2 it's obviously so bad and so scary, you can justify
3 all those things in the name of 12 ethanol companies'
4 profits; correct?

5 A. As I've said many times already this
6 morning, Mr. Jorde, it's not just those ethanol
7 plants' profits. It's the people they employ directly
8 and the indirect effects in those communities as well
9 as the folks that sell their feed product.

10 Q. And, if Summit was actually concerned about
11 the effects on communities, you'd release your risk
12 and dispersion data; right?

13 A. Disagree. And we are absolutely concerned
14 about a risk. And that's why we're going above and
15 beyond PHMSA requirements in many, many areas to
16 minimize the risk. And we've got an expert that will
17 testify in this proceeding that can speak in more
18 detail to that quantitative risk assessment.

19 Q. And to, again, test that stated concern, is
20 there a single person in the state of Iowa not
21 associated with Summit that has seen your risk
22 analysis? Yes or no.

23 A. Well, as -- in the state of Iowa?

24 Q. Yeah.

25 A. No.

1 Q. Now, you talk on page 5 that the project
2 is, quote, intended to provide, quote, expanded
3 opportunities for ethanol in low-carbon fuel markets,
4 end quote.

5 And, again, these are all ideas, maybe it
6 happens, maybe it doesn't, but you can't point to
7 anything concrete that you can solidly say will
8 happen, will occur; right? This is all kind of
9 betting on the come in this project, isn't it?

10 A. Mr. Jorde, no matter how many times you
11 state that, it's incorrect. There is a market for
12 low-carbon fuels that exists today.

13 Q. Well, that wasn't my question. We can
14 stipulate a market exists. But whether a single
15 farmer or a single ethanol plant in Iowa actually
16 benefits from the fact California has a market, you
17 can't state that with certainty, can you.

18 A. Well, I can state with certainty that if
19 they don't reduce their carbon intensity in some
20 fashion, and this is by far the most significant
21 opportunity to do that, that they cannot compete.

22 Q. Well, that's not true. If we all just
23 stayed as we are right now, the status quo would
24 maintain and there would be no competition; right?
25 We'd just say no pipelines, we're all the same, and

1 we'd just carry on as we have for a hundred years;
2 right?

3 A. Well, as I stated earlier, Mr. Jorde,
4 there's a push for decarbonization. And so it's my
5 understanding in meeting with these ethanol partners
6 that they have a desire to be on the forefront of that
7 push so they can ensure their competitiveness for
8 their shareholders and their customers.

9 Q. And, again, I don't think I pinned you down
10 on the makeup of the ethanol plants. Forgive me. But
11 do you know which ones of your partners are corporate
12 owned? Like a POET, like a Valero. Versus actual
13 farmer owned? Do you know the breakdown of that?

14 A. You asked that earlier. Mr. Pirolli would
15 be the better person to answer that question.

16 Q. Thank you. Now, in terms of the alleged
17 economic benefits you discuss on page 6, do you
18 believe Ernst & Young verified your economic analysis
19 or your tax numbers in their report?

20 A. I believe they verified it initially. And
21 now that we have a tax professional onboard, and as
22 the project changes, or evolves I should say, they
23 continue to validate.

24 Q. And that tax professional is the gentleman
25 you couldn't remember his last name and he's not

1 testifying; correct?

2 A. He is not, but Ernst & Young will testify,
3 it's my understanding.

4 Q. And your calculation of 30 million a year
5 in ongoing property taxes. Do you think the fact,
6 regardless of what the number is, that you are going
7 to follow the law and pay tax is a benefit? Or isn't
8 that something you just are supposed to do?

9 A. You're supposed to do.

10 Q. Now, you do talk about how the route for
11 the pipeline was selected. And you and I talked a
12 little bit about that. And it says here "including
13 desktop analysis."

14 Now, you wanted to talk that down, but it's
15 right out of your own report; right? That desktop
16 analysis was what you utilized?

17 A. Correct.

18 Q. Now, the aboveground facilities, pump
19 stations, have you determined how many there are going
20 to be, or would be, if this were approved?

21 A. We have.

22 Q. All right. And do you care to share that
23 number?

24 A. Overall project -- and Mr. Schovanec can
25 confirm. Overall project, I believe it's seven in the

1 initial scope, which would include this 9.5 million
2 tons, and 16 to accommodate the 18 million tons. That
3 changes somewhat periodically depending on the
4 hydraulics analysis and the route changes, but I think
5 that's current. But Mr. Schovanec can confirm.

6 Q. And do you know or would Mr. Schovanec be
7 best to answer how far apart in the specific locations
8 of the pump stations?

9 A. Mr. Schovanec can confirm.

10 Q. Would that be the same for main line valve
11 placement and intervals?

12 A. Well, I can tell you that in Iowa there are
13 approximately a hundred main line valves. And, as I'm
14 sure you know, we're the first major -- or large-scale
15 project that will comply with PHMSA's rule on valve
16 spacing. So the max spacing for main line valves will
17 be 20 miles.

18 Q. Before I forget, are you familiar with the
19 Bakken Energy Great Plains Synfuels plant in North
20 Dakota?

21 A. Generally.

22 Q. And it's true that that plant would be able
23 to liquify the CO2 such that it could be used for
24 enhanced oil recovery; correct?

25 A. I'm not sure.

1 Q. Is that something Mr. Hamm is working on?

2 A. Again, I'm not sure. Continental Resources
3 is a very large company. I'm not sure what their
4 priorities are.

5 MR. JORDE: If we could take a look -- and
6 I see it's up there. If we could go to the top of
7 page 8 of Mr. Powell's testimony, please.

8 BY MR. JORDE:

9 Q. Okay. So this is carrying over from the
10 main line valve discussion. And then it says there at
11 the top, the middle of the first sentence there, "take
12 into consideration the location of pump stations; CO2
13 dispersion modeling; and high-consequence areas."

14 So, again, you're testifying here that you
15 want this Board, do you not, to accept the fact that
16 you, Summit, considered dispersion modeling for the
17 placement of your valves, but you're not sharing that
18 information; right?

19 A. We did. And, as I stated earlier, if the
20 Board requests that that information is provided,
21 we'll comply.

22 Q. Let's talk about corrosion a little bit.
23 You talk about the pipeline grade material will vary,
24 and this is on the top of page 9 of your testimony,
25 from API 5L X-52 up to X-70.

1 Now, sir, are you familiar with the type of
2 pipe that was used by Denbury in their pipeline that
3 ruptured in Satartia?

4 A. Only as captured in the PHMSA investigation
5 report.

6 Q. And are you aware that you're stating
7 you're going to use a similar type grade and
8 specification of pipe as Denbury?

9 A. If I remember correctly, I thought their --
10 theirs was an X-80 pipe versus an X-70.

11 Q. Is it your position X-70 is superior?

12 A. Well, there is a difference in grade
13 between X-70 and X-80 obviously. But I will add that
14 we have completed a Fracture Control Plan. And PHMSA
15 has reviewed and accepted that plan.

16 Q. Okay. And do you have any of the analysis
17 of the Fracture Control Plan, or the basis that led
18 you to the plan, or do you have a copy of the plan
19 that you're going to submit in evidence in these
20 proceedings?

21 A. I have no problem submitting that plan in
22 these proceedings.

23 Q. Okay. So then can I get your agreement
24 that you will, in fact, direct your counsel to produce
25 that to the rest of counsel here?

1 MR. LEONARD: Objection.

2 BOARD CHAIR HELLAND: State your objection.

3 MR. LEONARD: This plan goes to the PHMSA
4 preemption argument that's before the Board with
5 respect to the dispersion analysis. We maintain that
6 it's preempted by PHMSA regulation and not appropriate
7 for consideration and not appropriate for
8 dissemination to the general public.

9 BOARD CHAIR HELLAND: Thank you.
10 Sustained.

11 Go ahead, Mr. Jorde.

12 BY MR. JORDE:

13 Q. So, even though you have no problem,
14 apparently your lawyer has a problem with that.

15 Did you get that?

16 A. Well, I'm not a lawyer, Mr. Jorde, so I'll
17 defer to the best judgment of my attorneys.

18 Q. All right. So we're not going to then be
19 able to evaluate the worthiness of the projects on the
20 scientific and engineering basis. We're going to be
21 left with the lack of evidence based on the legal
22 objections.

23 Is that fair?

24 A. Well, I guess, again, you don't trust PHMSA
25 as the body with oversight for safety in operation of

1 the pipeline to validate or confirm whether the work
2 that we've done, the technical work product we've
3 generated, is adequate or not.

4 Q. Well -- okay. Does Summit, I guess, then,
5 therefore, trust PHMSA and believe they're an
6 organization that should be relied on? Is that what
7 you're trying to say?

8 A. I think from a technical oversight
9 perspective and from an organization that has
10 generated minimum standards, yes.

11 Q. And because PHMSA is an entity we should
12 rely upon, this Board should clearly hold off any
13 decision in this case until they're done with their
14 rulemaking related specifically to CO2 pipelines
15 motivated primarily by the Satartia rupture; correct?

16 A. Not at all. As you know, the Satartia
17 incident, as unfortunate as it was, was really a
18 violation by Denbury of requirements that are already
19 mandated by PHMSA in their current regulations.

20 So PHMSA has ongoing rulemaking changes --
21 or considers rulemaking changes on an ongoing basis.
22 So, yes, it's my understanding that they are looking
23 at potential changes on public awareness and emergency
24 response.

25 But, if PHMSA were concerned about our

1 project, or any of the other projects currently under
2 development or the 5,300 miles of CO2 pipeline that's
3 currently in operation in this country, they could
4 take other steps to address that.

5 Q. Well, are you in an active role of advising
6 PHMSA on the steps they should take?

7 A. I am not.

8 Q. You're aware that PHMSA held two days of
9 meetings in this very state on this very topic and are
10 actively engaged in looking at changes to its
11 standards and rules regulating and governing CO2
12 pipelines?

13 A. I know they are evaluating their standards.
14 As I said before, they are doing it on a continual
15 basis. And those, it's my understanding, are more
16 specific as does CO2 -- is it segregated in its own
17 standard or does it remain in the liquid standard or
18 the gas standard.

19 But, in any event, if PHMSA were to change
20 their standards or requirements and make those
21 retroactive, we would comply.

22 Q. Well, are you or is there someone better
23 that you're going to call to testify on your behalf to
24 get into what actually is grandfathered and what isn't
25 under Part 195 in the PHMSA regulations? Are you

1 familiar with that or should we save that for someone
2 else?

3 A. I'm generally familiar with it.

4 Q. So, if you're generally familiar with it,
5 you are aware that certain elements are grandfathered.
6 And that unless PHMSA were to change its many decades
7 of regulations, that there would be nothing to do in
8 terms of retrofitting the pipeline. Because the
9 pipeline would already be constructed prior to the new
10 guidance coming out.

11 Correct?

12 A. Correct, but PHMSA requires us to maintain
13 our risk assessment. And so any change in standard
14 would potentially impact our quantitative risk
15 assessment. And so then it's on the owner and it's
16 under the oversight of PHMSA to make sure that that
17 risk profile has not changed.

18 Q. Are you aware, sir, that the grandfather
19 clause, so to speak, at 49 USC 60104(b) exempts out
20 design, installation, construction, initial
21 inspection, initial testing standards? That we don't
22 get to go back and re-look at that if you don't wait
23 for PHMSA to update their guidelines? Are you aware
24 of that?

25 A. I don't have it memorized, but I'll take

1 your word for it.

2 Q. And then, before I forget, on that fraction
3 propagation, are you aware that it's a single line and
4 it's Part 195.111, Fracture Propagation, and it
5 states, quote, a carbon dioxide pipeline system must
6 be designed to mitigate the effects of fracture
7 propagation, end quote? Do you understand that's the
8 total sum and substance of PHMSA's regulations on
9 fracture propagation?

10 A. I do, but, in their oversight role, that's
11 why we've had technical meetings with their technical
12 experts and our metallurgist, our consultants, and
13 reviewed our fracture control plan in detail. And
14 they had to be satisfied with the efforts we're making
15 around material selection and construction.

16 Q. But, again, all of that is what your
17 counsel won't let be released; correct?

18 MR. LEONARD: Objection.

19 BOARD CHAIR HELLAND: State your objection.

20 MR. LEONARD: Argumentative.

21 MR. JORDE: It's a fact.

22 BOARD CHAIR HELLAND: Mr. Jorde, can you go
23 ahead and restate that, and then I have a quick
24 question for you.

25 MR. JORDE: Absolutely.

1 BY MR. JORDE:

2 Q. Sir, what's so difficult, and I'll just say
3 frustrating, is you get up here you say all these
4 things, but yet we don't have the documents to
5 question you on it. And when I asked you, to your
6 credit, you said you'd release it, but then your
7 counsel says, "Whoa, whoa, whoa. No, we're not."

8 So how can this Board, how can the public,
9 how can we have any idea if what you're saying is true
10 when you're not giving us the foundational documents
11 to back up what you're saying?

12 MR. LEONARD: Same objection. It also goes
13 to the PHMSA preemption issue.

14 BOARD CHAIR HELLAND: Okay. Thank you.

15 MR. JORDE: How does it go to the PHMSA
16 preemption issue? I mean, he's been talking about
17 PHMSA all morning. What are we talking about?

18 BOARD CHAIR HELLAND: If you know, you can
19 answer. Otherwise it is time to move on.

20 A. I prefer to move on.

21 BOARD CHAIR HELLAND: Mr. Jorde, I
22 apologize. We need to make a decision on lunch. And
23 I don't want to disrupt your line of questioning. So
24 we can take a break now? Break in a little bit?

25 MR. JORDE: This is a perfectly good time

1 to break.

2 BOARD CHAIR HELLAND: Okay. Thank you.

3 We will recess and go off the record until
4 1:15. So we will return back here at 1:15.

5 Mr. Powell, you will still be under oath
6 when we return. So we'll remind you. But you are
7 excused for now and then you will return.

8 We will see everybody at 1:15.

9 (Recess taken at 12:05 p.m.)

10 (Hearing resumed at 1:16 p.m.)

11 BOARD CHAIR HELLAND: Okay. Good
12 afternoon. It is 1:16 p.m. We will go back on the
13 record.

14 Mr. Powell, I would remind you you're still
15 under oath.

16 And, Mr. Jorde, I believe you still had
17 questions.

18 MR. JORDE: I do. Thank you very much.

19 BY MR. JORDE:

20 Q. Mr. Powell, we left off on page 9 of your
21 direct testimony. And I've got some questions about
22 corrosion. You talk about protecting against
23 corrosion. And tell us why it's important
24 specifically on CO2 pipelines to protect against
25 corrosion, please.

1 A. Well, in my opinion, there's no difference
2 between a CO2 pipeline and another liquid pipeline as
3 long as you dehydrate the CO2 stream before it's
4 injected into the pipeline. Which we will do at the
5 capture facility.

6 Q. And, in terms of dehydration, you're
7 referring to specific equipment that will perform that
8 function; is that right?

9 A. Correct.

10 Q. Now, in terms of water, it's true that
11 Summit has been applying, at least in South Dakota,
12 maybe in Iowa, for water permits. Water that it needs
13 to cool the CO2 down to 120 degrees prior to it
14 entering into the pipeline.

15 Is that correct?

16 A. Yes. So, as you increase the pressure on
17 the CO2 to reach the dense phase, that product heats
18 up. And so we'll have a cooling system that
19 circulates through that compression cycle that keeps
20 the product cooler. And then we'll dehydrate that in
21 the later stages of compression. We'll pull the water
22 out of the stream in the later stages of compression.

23 Q. And have you applied in Iowa for any such
24 water permits? Water usage permits?

25 A. Yes. So we're working with -- we'll need

1 the water supply at every plant. So we're working
2 with individual plants. In the case of Homeland
3 Energy in Iowa, we had to apply for a permit to drill
4 our own water well, if I remember correctly. And so
5 all that's -- in Iowa anyway, that process is managed
6 by the state's office of natural resources. The
7 state's Department of Natural Resources.

8 Q. And, in terms of the usage amount in Iowa,
9 do you have to get approval for a certain number of
10 millions of gallons per year? Or how does it work in
11 your understanding?

12 A. Again, generally my understanding is we
13 have to stipulate to the agency what our water
14 consumption need will be. And then they approve or
15 they don't approve.

16 Q. And is it true that you've been requesting
17 consumption north of 20 million gallons per year at
18 each facility?

19 A. It depends on the production volume at each
20 facility. They'll range from 20 gallons a minute to
21 120 gallons a minute.

22 Q. And would you agree, with this new
23 potential draw on water resources, that that could
24 negatively impact surrounding water users who depend
25 on that water for either industry or personally?

1 A. Well, again, the process is managed by the
2 state Department of Natural Resources. So they should
3 have a general understanding -- actually, a good
4 understanding of what the water availability is, what
5 the water consumption or water needs are, and what
6 that long-term viability of water sources are.

7 So we depend on the Department of Natural
8 Resources in Iowa and other states to confirm whether
9 that water is available to us.

10 Q. Are you aware if there is a draw on the
11 available water resources if anything about your
12 permits that you receive in Iowa develops or lays out
13 a hierarchy? For instance, residential users would
14 have first priority and you would be lower on the
15 totem pole. Or what's your understanding about that?

16 A. I don't have an understanding. It is my
17 understanding that our permit request for a Homeland
18 Energy site has been approved, but then we'll abide by
19 whatever the conditions are that's imposed on us by
20 the Department of Natural Resources. But I'm not
21 familiar with what those may or may not be.

22 Q. If a condition was that in dry years you
23 would not be able to have the amount of water you have
24 stated you need, would you agree you would have to
25 shut down or significantly reduce your flow of CO2

1 into the pipeline?

2 A. Well, you were concerned about speculation
3 earlier and projection, but there are other sources of
4 water. So, in the case of Homeland, our permit
5 request was to drill a well on-site. But there are
6 other sources of water. And we'd have to make a
7 business decision with the plant.

8 Q. You were asked a question here on page 9 of
9 13 has Summit applied, or does Summit intend to apply,
10 for any waivers from PHMSA, and the answer is no.
11 But, of course, you could change your intention or you
12 could apply for waivers at any time if you saw fit;
13 correct?

14 A. I assume so. The intent is still no.

15 Q. But you understand -- I mean, there's
16 little value in what, as you sit here today, you
17 intend. I mean, I didn't intend to get in an accident
18 here, but it could have happened. And your intention
19 doesn't prove or lock you in to any long-term supply
20 answer.

21 Do you understand that?

22 A. Well, that's true, but the Board, I think,
23 has the ability to impose whatever conditions on our
24 permit, if we were to receive one, that they choose is
25 of value. So I'll leave it at their discretion what

1 conditions they want to place on a permit.

2 Q. Relative to your real time transient model
3 leak detection system, what's the sensitivity of that
4 leak detection? At what level can it no longer sense
5 or detect leaks?

6 A. Well, the set points have not been
7 finalized, but they are going to be very small. Just
8 for everyone's understanding, so the real time
9 transient model is where we have the actual operation
10 of the pipeline, and in parallel we have a simulated
11 operation, hydraulic operation, of the pipeline, so we
12 can sense-check the real time operation with the
13 simulated operation.

14 And, if we see a variance -- and that may
15 vary on pipeline segment based on flow rate. If we
16 see a pressure variance, then the control center can
17 take action up to shutting in that line segment.

18 But we will also have upstream and
19 downstream pressure indicators around all block
20 valves, and that pressure threshold, or pressure
21 variance threshold, will be set -- that tolerance will
22 be very tight. So if those pressure indicators detect
23 a variation in pressure above that set point, they
24 will automatically close a valve.

25 Q. Okay. But, in terms of the sensitivity or

1 the threshold of what could be escaping before it
2 triggers valve closure, that level hasn't been set
3 yet?

4 A. That has been set, but not finalized.
5 Happy to provide that when that's actually final. I
6 will say we did complete the surge analysis, which is
7 part of that, and under no circumstance will a surge
8 pressure exceed our maximum operating pressure outside
9 of normal operating boundaries. So that plays into
10 what those set points would be. How quickly we close
11 those valves.

12 Q. Is your surge analysis, is that something
13 that you've made an exhibit or made public in these
14 proceedings?

15 A. No.

16 Q. Is it something that you agree to release
17 during these proceedings?

18 MR. LEONARD: Objection.

19 BOARD CHAIR HELLAND: State your objection.

20 MR. LEONARD: This is documented. It goes
21 to PHMSA compliance. So just restating the objection
22 as to preemption on our PHMSA argument.

23 BOARD CHAIR HELLAND: The Board will rule
24 on this issue. So sustained.

25 Please proceed.

1 BY MR. JORDE:

2 Q. So, regardless of what you choose for
3 sensitivity, there will still be a level of leak
4 detection that is undetectable where a slow leak could
5 be occurring in the system; correct?

6 A. To use your word, theoretically. However,
7 remember our leak detection system is not the only
8 means to determine if there's a leak. If you've got a
9 pinhole leak, if you've got a flange leak, a very
10 small leak -- you know, we'll do aerial surveillance
11 every two weeks. And so that could detect it.

12 We'll also periodically walk the line. Not
13 every foot of the line, but walk high-consequence
14 areas and inspect. And so, if you see any type of
15 frost buildup, then that's another indication where
16 you may have a leak.

17 Q. Well, you're not testifying, are you, that
18 aerial surveillance is sufficient to determine whether
19 there's pinhole leaks, are you?

20 A. I did not. I said it's not the only -- the
21 pressure deviation is not the only means of sensing a
22 leak.

23 Q. Well, but your testimony says, quote, in
24 the case of sudden changes in operating pressure,
25 alarms will sound.

1 And so they don't detect gradual changes in
2 pressure, do they.

3 A. Correct. Depending on how you define
4 gradual.

5 Q. Well, you didn't define sudden, but I'm
6 assuming sudden and gradual are two different things;
7 is that right?

8 A. If you have -- in my experience, if you
9 have any type of significant release or a breach, such
10 as a third party striking the pipeline, that will be a
11 sudden release that will also trip your pressure
12 threshold indicators.

13 Q. Well, wouldn't that depend on the severity
14 of the strike?

15 Correct?

16 A. Yes.

17 Q. And are you aware or have you talked with
18 anyone at the state of Iowa relative to how many
19 third-party pipeline strikes on the linear pipeline
20 structure in Iowa happen on a monthly or annual basis?

21 A. Well, I do know that -- I have not. I
22 mean, that's information that would be contained in
23 the 811 system by and large. There are 47,000-plus
24 miles of pipeline in this state, and third-party line
25 strikes are the most common damage to a pipeline.

1 Q. About the emergency response plan, I think
2 we established you have not shared that with local
3 responders, but you state here that you will
4 coordinate with local emergency responders and
5 authorities. And when do you intend to coordinate
6 with them?

7 A. Well, I spoke about that this morning. So,
8 once we have permits in hand, and once we have
9 right-of-way secured, then our emergency management
10 team will sit down with local first responders and
11 emergency management professionals and begin those
12 conversations.

13 And we're required to do a desktop review
14 or drill prior to placing the pipeline in operation.
15 And, thereafter, we're required to repeat that
16 annually. And we've agreed in certain instances, when
17 requested, that we would actually do that more
18 frequently. And the requests we feel to this point
19 have been every six months. And that's due to
20 primarily volunteer fire departments where, I guess,
21 there's a higher turnover in a certain area.

22 MR. JORDE: Can we pull up, please, 569.
23 LO 569.

24 BY MR. JORDE:

25 Q. In your testimony, sir, on page 13 of 13

1 direct testimony, you were asked the question "Will
2 signage be installed to alert the public to the
3 location of the pipeline." You say yes.

4 Now --

5 MR. JORDE: Oh. Where did it go. Sorry.
6 Thank you.

7 BY MR. JORDE:

8 Q. Is it something like we've got here on the
9 screen, Exhibit 569, or what's your intention?

10 A. There are certain requirements. So we'll
11 have to put the commodity, we'll have to put a contact
12 number and other information, so that if somebody
13 actually has a concern, that they know how to contact
14 us, the operating company.

15 Q. So the phone number that will be on there
16 will be a direct dial to Summit; is that correct?

17 A. Yes.

18 Q. And then does Summit have first responders
19 of its own stationed throughout Iowa to respond or do
20 you rely exclusively on local and volunteer first
21 responders for that reaction to a reported event?

22 A. No, our field personnel, those that are
23 actually located in the field, will be trained on
24 emergency response.

25 Q. And will they be equipped with

1 self-contained breathing apparatuses?

2 A. They will be equipped with the equipment
3 necessary to respond to a release in that specific
4 area.

5 Q. Well, that's kind of vague. Is another way
6 of saying that you haven't determined what type of
7 equipment you will supply those people with?

8 A. No, that's not. That's inaccurate. But it
9 depends on where you are along the pipeline system and
10 what the extent of a release could be whether or not
11 you would need self-contained breathing apparatus.

12 Q. Well, you, in your rebuttal, talk quite a
13 bit about the PHMSA incident report in Satartia. And
14 you would agree there that the modeling Denbury had
15 contracted to be done was insufficient to identify the
16 risks.

17 So are you relying on the modeling you've
18 done to determine which areas you believe are of
19 significant risks and those that aren't?

20 A. We are, but, as I pointed out this morning,
21 there are many differences. One being that we're
22 actually incorporating 2D terrain-aided modeling. So
23 not only will we identify how much product could be
24 released, but also the physical pathways for that
25 product to travel to what would be a high-consequence

1 area.

2 And then also we're using CANARY as our
3 modeling software. Which we feel is the best software
4 available for a jet-type release. So we feel that
5 it's the most accurate software available.

6 And CANARY is actually sense-checked or
7 calibrated against real atmospheric releases, test
8 releases, versus PHAST and some of the other models
9 that are calibrated using releases that are contained
10 in a testing environment indoors.

11 These tests were conducted outdoors
12 simulating what we think is more likely to be a real
13 time release event.

14 Q. And, back to the signage here, you'll have
15 a phone number, and that will reach someone in Iowa or
16 somewhere else if someone calls the number?

17 A. It will reach someone at our control
18 center. Which will be manned continuously.

19 Q. And then what would the response time be
20 from anyone at the control center to get to the
21 location where the release or rupture is?

22 A. Well, someone at the control center will
23 not be responding unless that release is near Ames,
24 Iowa, but they will actually be the ones taking action
25 to shut in the system if they need to. And then the

1 operations personnel, their response times depend on
2 where they are and where the release is.

3 Q. You had -- well, let me ask you this:
4 You're obviously not going to be placing any type of
5 warning signs in the middle of fields. So these would
6 be on the extreme boundaries of a property who has the
7 proposed pipeline passing through; is that right?

8 A. The requirement is line of sight, but, to
9 your point, yeah, they will be on all fence
10 boundaries, roadsides. It is difficult in this part
11 of the country when you have crops as tall as corn.
12 And we don't want to put an obstruction in the middle
13 of a field. So they'll typically be on fence lines
14 and roadside.

15 Q. And then if a farmer, or someone in the
16 field, believes there is an incident, they would have
17 to get out of their combine, for instance, and then
18 pick a direction to run, to run towards the sign, and
19 then call the number. That's kind of how the process
20 would work?

21 A. No, as I mentioned this morning, we are
22 preparing tactical response plans, and those will be
23 shared -- if they're interested, those will be shared
24 with the landowners. And then annually we will
25 provide public awareness information.

1 So every landowner, whether the pipeline
2 crosses that person or they're just in the adjacent
3 area, they will get information provided in the mail,
4 or other means if they prefer, that will make sure
5 that they have all the updated information. Contact
6 numbers, et cetera.

7 MR. JORDE: I'll offer Exhibit 569.

8 BOARD CHAIR HELLAND: Are there objections?

9 MR. LEONARD: No objection.

10 BOARD CHAIR HELLAND: All right. As there
11 are no objections, the Board will admit the exhibit as
12 Jorde Landowners Hearing Exhibit 569.

13 MR. JORDE: Thank you. Can we pull up 568,
14 please.

15 BY MR. JORDE:

16 Q. Now, sir, you talked previously about risk
17 and probability and those kind of things. And, based
18 on your review in preparation to testify here today,
19 would you agree that exposure to CO2 at and between
20 30,000 parts per million to 50,000 parts per million
21 could lead to serious health risks?

22 A. Well, that's what your scale says. I do
23 agree that NIOSH indicates that 40,000 parts per
24 million is the immediate danger to life and health.

25 Q. And the 40,000 parts per million, is that

1 the level that you utilized in your dispersion
2 modeling and risk analysis that you've done?

3 A. That's one. We use 15,000, 40,000, and
4 80,000. And, as you probably know, at 40,000 parts
5 per million, generally the guidance is that someone
6 would have 15 minutes before they may start feeling
7 any effects from a CO2 exposure. But we use 15,000
8 parts per million, which -- and that's indoors, not in
9 an atmospheric outdoor environment. At 15,000 parts
10 per million, someone would have eight hours. But
11 we're using that broader boundary to identify our
12 could-affect areas and HCAs. So that's a more
13 conservative approach.

14 Q. And, when we're talking about that kind of
15 fictitious someone, it doesn't take into account
16 sensitivities in terms of respiratory disease or
17 preexisting conditions. This assumes a healthy
18 person.

19 Is that correct?

20 A. Well, I think, from the definition of
21 NIOSH, it's, I think, general -- generally or general
22 health. I don't remember verbatim.

23 Q. What about the effects on livestock. Do
24 you have any analysis on the effects of livestock
25 given we're in Iowa and agriculture and livestock is a

1 big part of the economy?

2 A. Yeah, I don't.

3 Q. And you said you tested out at -- or at
4 least modeled out at 80,000, eight zero thousand, and
5 would you agree that between 70,000 to 100,000 parts
6 per million exposure that that can go between nausea,
7 unconsciousness, and acute toxicity and death within
8 five minutes?

9 A. I think that -- well, I would suggest that
10 we have another witness that's an expert in this area,
11 but I will say that these -- this scale is, again at
12 least the one I'm familiar with, is specific to indoor
13 environments and worker exposure.

14 So we're using the more conservative
15 measurements or thresholds. But, if we have a
16 release, it will be in an outdoor, open air
17 environment where typically the event lasts minutes.

18 Q. And any type of overlay risk modeling using
19 the potential dispersion distance that you have placed
20 on any maps in South Dakota, did you use the 40,000
21 parts per million as your threshold?

22 A. We did. And I think it's important,
23 Mr. Jorde, to point out that these thresholds -- CO2
24 is mildly toxic and a simple asphyxiant like natural
25 gas. The big difference is it's not ignitable. So

1 the exposure limits are similar, but it's not
2 ignitable.

3 Q. It's not ignitable, but it's colorless,
4 odorless, heavier than air, and would tend to sink to
5 the level of where people are standing or sleeping; is
6 that correct?

7 A. Well, I would challenge where they're
8 sleeping, but it can be heavier than air depending on
9 the environmental conditions or atmospheric
10 conditions. Just like natural gas is heavier than air
11 if it's got propane or heavier constituents in the
12 stream.

13 Q. And, by bringing up natural gas now twice,
14 are you trying to suggest here today that basically we
15 shouldn't be any more concerned about CO2 risk than we
16 are about natural gas?

17 A. I would suggest you'd be less concerned
18 because it's not ignitable.

19 Q. Does natural gas, in terms of a release
20 event, tend to be able to travel a half mile or a mile
21 from the release source?

22 A. You're asking me to speculate, but it
23 depends on how many heavies are in the stream of
24 natural gas, it depends on environmental conditions.
25 I've witnessed propane releases where it stays close

1 to the ground and travels a good distance.

2 Q. And you would agree, based on that
3 statement, that there are many factors that can
4 contribute to, for instance, a CO2 plume and where it
5 moves and at what concentration; correct?

6 A. I would. And we've modeled all those
7 sensitivities.

8 Q. Well, would you agree that the lower the
9 wind speed, generally the higher the concentration of
10 the plume because it's not being dispersed?

11 A. The lower the wind speed and the higher the
12 humidity and the cooler the temperature.

13 Q. Did you do any modeling at wind speeds less
14 than four miles an hour?

15 A. Yes.

16 Q. All right. Did you do any modeling of wind
17 speeds at 40,000 parts per million at zero miles an
18 hour?

19 A. Again, I'm not going to get into specifics
20 of the modeling. Again, we've talked about whether we
21 would provide that to the Board.

22 I will say that we have modeled all
23 sensitivities around all atmospheric conditions. And
24 we've modeled the 2D terrain-aided flow, and we've
25 done it for the entirety of the pipeline, just not

1 high-consequence areas which is required by the
2 regulation.

3 Q. And when you say "for the entirety of the
4 pipeline," you would agree that a high-consequence
5 area, which is a term of art, a federally defined
6 term, is one thing, but the individual family that may
7 not be in a high-consequence area per the federal
8 government, it's still pretty important to them, would
9 you agree, to be able to know the risks they're
10 confronted?

11 A. Well, that's what I just said, Mr. Jorde.
12 That's why we modeled it for the entirety of the
13 pipeline.

14 And I'm glad you brought up the risk.
15 Because, as Mr. Muhlbauer can testify later in this
16 proceeding, we've got a very robust quantitative risk
17 analysis that takes into consideration all the
18 potential release conditions, not only for a
19 guillotine failure, which is the regulatory
20 requirement, but also what we think is a more common
21 event, which would be a third-party strike or
22 third-party damage. Or we're calling it a mechanical
23 failure. And so we've looked at all that.

24 Then you looked at design considerations,
25 our integrity management program, and all those are

1 inputs into the risk assessment. And then you can
2 determine what the probability of a release, either in
3 a high-consequence area or outside of one, might be.

4 Q. And, unless all of that is produced and we
5 call you back up to talk through it, the Board really
6 has nothing to rely upon in terms of evidence, do
7 they.

8 A. Other than PHMSA will -- typically does
9 review that. They never -- in my experience, have
10 never asked for a model, but they review the inputs
11 and the outputs and they review the risk assessment
12 and make sure that those seem like they fit together.
13 And then they determine whether they think that you've
14 adequately not only identified the risk but mitigated
15 the risk.

16 And I think they've done a pretty good job
17 because the reliability of pipelines in this country
18 is very, very good.

19 Q. But nothing PHMSA does, based on your
20 answer you just gave, has anything to do with siting
21 or locating the proposed hazardous pipeline; correct?

22 A. As I said this morning, Mr. Jorde, the
23 dispersant model is not used for siting. It's used
24 for determining risk in high-consequence areas.

25 MR. JORDE: I'll offer Exhibit 568.

1 BOARD CHAIR HELLAND: Are there objections?

2 MR. LEONARD: We'll object. Lack of
3 foundation. There hasn't been any testimony presented
4 as to what this document is or where it came from.

5 BOARD CHAIR HELLAND: Thank you.
6 Do you want to reply?

7 MR. JORDE: Sure. He just verified the
8 consequences shown based on the parts per million on
9 this exhibit. So he verified that it's true and
10 accurate insofar as the consequences associated with
11 the exposure levels.

12 BOARD CHAIR HELLAND: Okay. Thank you.
13 The Board will admit Jorde Landowner
14 Hearing Exhibit 568 and give it the weight due.

15 MR. JORDE: Thank you.

16 All right. Can we pull up, please,
17 Exhibit 557. LO 557.

18 Thank you. Appreciate that.

19 BY MR. JORDE:

20 Q. Sir, right now we're looking at a map right
21 off of your website. And I believe it's current as of
22 a couple weeks ago.

23 What I'd like to ask you about is on the --
24 kind of western Iowa there near Sac County, do you see
25 where the proposed pipeline drops due south and goes

1 through several counties, including Shelby and
2 Pottawattamie all the way down to Fremont? Do you see
3 that?

4 A. Yes.

5 Q. Do you have any idea of the length in miles
6 of that segment from the yellow star at the top to
7 that yellow star near Fremont and Page County?

8 A. I don't remember off the top of my head,
9 but no.

10 Q. Would you agree it's well over a hundred
11 miles?

12 A. Again, I don't know, but that sounds
13 reasonably accurate.

14 Q. And you would agree that just kind of right
15 out of the gate we should kind of lop off that entire
16 proposed route south of that area near Sac County
17 given that you would only potentially be servicing a
18 single ethanol plant in the southwestern corner of
19 Iowa; correct?

20 A. Well, Mr. Jorde, Mr. Pirolli would be
21 better suited to correct me here, but I believe there
22 are 42 ethanol plants in the state. And so just
23 because there's not an ethanol plant shown on this map
24 doesn't mean there's not one in the vicinity. I can
25 think of at least two that I'm aware of that we still

1 hope will sign on with our project.

2 Q. And, again, I think "hope" is the keyword.
3 This application and your request is really founded
4 more on hope and what the potential may possibly be as
5 opposed to what actually is right now; correct?

6 A. "Hope" is not applicable to Green Plains,
7 which is in Fremont. But I will say it doesn't matter
8 if there are any additional plants on this line
9 segment or not. It doesn't change what we've done
10 with respect to engineering and design, what we'll do
11 in construction, what we've done in modeling and risk
12 identification and risk assessment.

13 So whether there's three plants connected
14 to this pipeline segment or one doesn't change the
15 calculus.

16 Q. But, in terms of the Board's calculus in
17 evaluating public convenience and necessity, you would
18 agree that it's certainly not publicly convenient and
19 necessary for the over 100 miles of landowners who are
20 unfortunately located between those two points we've
21 discussed to be subjected to forever perpetual
22 easements simply for the benefit of that Fremont
23 plant; right?

24 A. Well, I think that's a stronger argument
25 than an oil pipeline that traverses the state and is

1 not connected to any businesses in this state and the
2 landowners that that impacted.

3 Q. Well, would you agree that the landowner,
4 it should ultimately be their choice whether they want
5 to accept certain risks or certain pipelines as
6 opposed to others or do you want to remove that choice
7 from the landowner?

8 A. Mr. Jorde, we don't establish the process
9 in the state of Iowa. We're following the process
10 that the Iowa Utility Board has in place.

11 MR. JORDE: I would offer 557, please.

12 BOARD CHAIR HELLAND: Are there objections?

13 (No response.)

14 BOARD CHAIR HELLAND: Seeing none, the
15 Board will admit Jorde Landowner Hearing Exhibit 557.

16 MR. JORDE: Thank you.

17 BY MR. JORDE:

18 Q. You talk about some insurance. You would
19 agree that \$35 million in general liability insurance
20 is insufficient to cover the entire duration of
21 operations should your application be approved; right?

22 A. No.

23 Q. Is that an aggregate policy or is that a
24 per occurrence? How does that policy work?

25 A. So, as we finalize -- as we hopefully

1 receive our permits and begin construction and
2 operation, and prior to going into operation, then
3 we'll work to finalize the structure of our liability
4 insurance and have more clarity.

5 But, as you know, 479B requires \$250,000.
6 We've proved that we have a surety bond in that
7 amount, and we've always agreed that we'll have a
8 minimum liability policy of 35 million.

9 Q. And you don't offer any insurance coverage
10 for any damages that would occur to landowners'
11 property outside the 50-foot permit right-of-way, do
12 you.

13 A. Any damages that are attributable to the
14 operation or maintenance of our pipeline we will
15 cover.

16 Q. And "attributable" being the keyword after
17 hiring lawyers and fighting back and forth and trying
18 to defend themselves and then maybe a judge or a jury
19 determines "attributable." Is that how that works?

20 A. Well, I think generally they would be very
21 clear-cut. If we had -- if somebody struck the
22 pipeline and we had a release or we had to get in,
23 even without a release, and repair the pipeline, then
24 I think that's very clear-cut that we would compensate
25 the landowner for any damages and inconvenience.

1 Q. And Mr. Rorie will be the individual to
2 speak more specifically to the easement and its terms;
3 is that correct?

4 A. That is correct.

5 Q. And he is going to testify; correct?

6 A. That's correct.

7 Q. You go on to talk in your rebuttal
8 testimony, page 3, you talk about Satartia and draw, I
9 guess, some points here.

10 MR. JORDE: I would offer Exhibit 565 which
11 is the failure investigation report, PHMSA's, related
12 to Satartia.

13 MR. LEONARD: No objections.

14 BOARD CHAIR HELLAND: Hearing no
15 objections -- was that 565?

16 MR. JORDE: Yes.

17 BOARD CHAIR HELLAND: The Board will admit
18 Jorde Landowners Hearing Exhibit 565.

19 MR. JORDE: Thank you.

20 BY MR. JORDE:

21 Q. And, again, sir, as you cite on page 3 of
22 your rebuttal testimony towards the bottom, that PHMSA
23 at least found that Denbury -- on the Satartia
24 incident, their dispersion model underestimated the
25 potential affected area; correct?

1 A. Correct.

2 Q. Now, you mentioned that you've utilized
3 CANARY. Is that, again, Mr. Louque that would be best
4 suited to talk about CANARY?

5 A. Who?

6 Q. Mr. Louque.

7 A. Oh. Mr. Louque?

8 Q. Mr. Louque.

9 Have you completed phase two or all phases
10 of your geohazard surveys and analysis in Iowa?

11 A. Only phase one in Iowa.

12 Q. And -- okay. So, because you haven't
13 completed phase two geohazards, this Board is without
14 the requisite information to fully understand and
15 appreciate the potential risks your current selected
16 route may have in Iowa; correct?

17 A. No.

18 Q. Do you think this Board does not need to
19 know the details of your phase two geohazard surveys
20 to make a decision?

21 A. Well, I would assume that it would depend
22 on what the phase one analysis produced. And
23 Mr. Schovanec can talk in detail to that.

24 But, in phase one, if you identify areas
25 such as landslides or other potential geohazard areas,

1 then you would go evaluate in the field in phase two.
2 And then you would coordinate, if required, with the
3 state geological office. Or geology office.

4 Q. And when you, if you were to construct your
5 proposed hazardous pipeline, would confront rocky
6 areas, is it true you maintain the right to bury it at
7 a lower depth than the five or six foot proposed?

8 A. No.

9 Q. Do you think even in rocky terrain, or
10 difficult terrain, that you still, based on the
11 language in your easement, are required to go to a
12 depth of five feet or more?

13 MR. LEONARD: Objection.

14 BOARD CHAIR HELLAND: State your objection.

15 MR. LEONARD: Misstates the terms of the
16 easement. I think it's been testified to that it's a
17 four-foot minimum depth.

18 BOARD CHAIR HELLAND: Thank you.

19 Mr. Jorde.

20 BY MR. JORDE:

21 Q. Okay. I'll just change that out to four
22 foot. Are you saying that Summit has no wiggle room
23 in the proposed easement to bury the pipeline at a
24 level to the surface of less than four feet if it, in
25 its sole capacity, determines the area to be rocky or

1 otherwise difficult to locate a pipeline?

2 A. Yes, and we've already done the analysis on
3 where we'll find or encounter rock and where we won't,
4 and we have no concerns that there'll be areas that we
5 can't trench or excavate through.

6 Q. Why is it that in Iowa you are proposing a
7 four-foot minimum depth but in South Dakota you're
8 proposing a six-foot minimum depth?

9 A. We're not blanketly proposing a six-foot
10 minimum depth in South Dakota. As we've stated all
11 along, and as we've met with many landowners in Iowa
12 and had these conversations, is that PHMSA requires a
13 minimum depth of three feet. We selected four feet as
14 our minimum depth because 90 percent of the land we
15 cross is in agricultural use.

16 And so if a landowner, because of tile or
17 other concerns, would like the pipeline deeper, then
18 we've agreed to go as deep as six foot top of pipe.

19 Q. Is it true that you want to maintain a
20 minimum of 12 inches or one foot separation from
21 existing linear infrastructure that you might come
22 into contact with should your pipeline be approved
23 here?

24 A. Well, 12 inches is the standard, but we're
25 trying to maintain 24 inches where possible.

1 Q. And would that mean going below a tile
2 line? Say if a tile line was at five foot, that would
3 require you to go to seven foot? Or could you do
4 three foot and be above the existing tile line?

5 A. No. We will not bury it shallower than
6 three foot top of pipe.

7 Q. So -- I'm sorry. Go ahead.

8 A. I said three foot. Four foot top of pipe.

9 Q. Okay. So, if you come in contact with, for
10 instance, a tile line that's at four and a half feet,
11 you wouldn't be able to maintain 12-inch, certainly
12 not 24-inch, by being above and be within the four
13 foot, so you would automatically go below in that
14 instance; correct?

15 A. Yes.

16 Q. Now, you state on page 6 of your rebuttal,
17 6 out of 6 here, that "Summit has every reason to
18 believe the North Dakota PSC will grant a permit based
19 on the petition for reconsideration."

20 What do you base that on?

21 A. Well, you read the order, Mr. Jorde, so you
22 know they were very specific in what they felt were
23 the technical deficiencies. And you were in those
24 proceedings. So you know, for instance, geohazard
25 analysis was done, even phase two level analysis was

1 done, but that wasn't provided in time for
2 cross-examination apparently. And so we've already
3 corrected those deficiencies and made sure all that is
4 in the record.

5 And what wasn't said in that order, but we
6 believe to be true, was they generally didn't like the
7 route on the north side of Bismarck. So, even though
8 the route, where it was, there was no -- the city of
9 Bismarck was not even a could-affect HCA, we moved the
10 route.

11 Q. Well, okay, but that last statement that
12 Bismarck wasn't even a could-affect HCA, no one knows
13 that because, again, in North Dakota you refused to
14 produce your dispersion modeling; is that correct?

15 A. That's not true. That dispersant output
16 was produced in confidentiality which was determined
17 and agreed by the PSC.

18 Q. And so you would agree it would be
19 reasonable for this Board, like North Dakota PSC, to
20 not just have blinders on for HCAs but deny this
21 permit based upon location of your proposed route near
22 communities, or growing communities, that may not be
23 technically HCAs; correct?

24 A. No. And, as we discussed this morning,
25 we've taken into account any readily available

1 information whether that's on their website, whether
2 that's -- we've had over 2,000 communications with
3 county officials involved in permitting in some
4 capacity. County engineers, boards of supervisors,
5 planning and zoning folks, et cetera. And over 400 of
6 those have been presentations in person.

7 So we've had a lot of opportunity, as have
8 they, to provide information to us to make sure that
9 we're taking into account, where we can, their planned
10 economic development.

11 Q. The last question on your rebuttal talks
12 about the EOR. Which we touched on earlier. Enhanced
13 oil recovery. And your answer here says "Summit does
14 not intend to ship CO2 for use in EOR." Again, the
15 "intend" word. And you realize that doesn't prevent
16 you from changing your mind tomorrow; correct?

17 A. Mr. Jorde, in North Dakota our
18 sequestration site is at least 70 miles from the
19 Williston area. Which is an oil and gas production
20 area. There are no minerals in the area where we plan
21 to sequester, which is why we've been able to acquire
22 over 90 percent of that pore space, and while we're
23 confident the NDIC will give us a permit to inject, a
24 Class VI permit.

25 So to utilize EOR in North Dakota -- or CO2

1 for EOR in North Dakota, we'd have to construct a new
2 pipeline north and west.

3 Q. Approximately 70 miles you said?

4 A. If I remember correctly.

5 Q. So that doesn't seem real tricky given
6 you're proposing a 2,000-mile pipeline right now, does
7 it?

8 A. Well, again, it's not up to us, it's what
9 our shippers and the sources of the CO2 want to do
10 with their product.

11 And, in this case, the 12 partners that we
12 have in Iowa want us to sequester that CO2 permanently
13 so they can reduce their carbon intensity and become
14 and gain access to low-carbon fuel markets.

15 Q. Well, right, and you go on to say "At
16 present, all parties intending to on Summit's pipeline
17 system intend to permanently sequester the CO2 being
18 shipped."

19 But, just to be clear, that could change at
20 any moment; right?

21 A. As I said before, Mr. Jorde, if we're a
22 common carrier system, if somebody has the ability to
23 get CO2 onto our pipeline system and has the ability
24 to get it off of the system and they meet our quality
25 specs and we have capacity, then that would be

1 considered.

2 Q. And, in terms of this allegation of being a
3 common carrier, is it Mr. Pirolli is better able to
4 deal with those factors; is that right?

5 A. Yes.

6 MR. JORDE: I'll offer Exhibit 578, which
7 is Summit's discovery responses to landowners Data
8 Requests No. 52 through 59.

9 MR. LEONARD: No objection.

10 BOARD CHAIR HELLAND: Seeing no objection,
11 the Board will admit Jorde Landowner Hearing
12 Exhibit 578.

13 MR. JORDE: All right. And I'm almost
14 done.

15 BY MR. JORDE:

16 Q. Sir, throughout this process we obtained
17 records produced from a public records request between
18 the governor's office here in Iowa, Ms. Reynolds,
19 Governor Reynolds, and Mr. Rastetter and persons
20 interested with and supportive of Summit.

21 Did you have a chance to review any of
22 those records?

23 A. I did not.

24 Q. And you would agree that there is a certain
25 cloud over these proceedings related to the

1 relationship of Mr. Rastetter with the Reynolds
2 administration, Mr. Branstad, and others, such that
3 many folks believe they're not getting a fair shake or
4 a fair proceeding.

5 Are you aware of that sentiment?

6 MR. LEONARD: Objection.

7 BOARD CHAIR HELLAND: State your objection.

8 MR. LEONARD: Calls for speculation.

9 Assumes facts not in evidence.

10 BOARD CHAIR HELLAND: Thank you.

11 Mr. Jorde, go ahead and reword or move on.

12 BY MR. JORDE:

13 Q. I'm not asking you to think about any other
14 evidence. I'm just asking you, as the COO of this
15 project and here as the first witness for applicant,
16 if you're aware of that thought process out there,
17 from people you're trying to obtain easements from and
18 others, that the relationship between Summit and the
19 state government is something to be concerned about
20 and worrisome for those wanting to have a fair say in
21 these proceedings.

22 MR. LEONARD: Objection.

23 BOARD CHAIR HELLAND: State your objection.

24 MR. LEONARD: Same objection. Calls for
25 speculation as to whether he's aware of others'

1 thought processes.

2 BOARD CHAIR HELLAND: You can answer if
3 you'd like.

4 A. I would just say, Mr. Jorde, we're almost
5 two years into this process, and so I think that the
6 Iowa Utility Board has done a very good job of
7 gathering information. I think the proceeding up to
8 this point -- I've seen no impartiality. I mean, for
9 the last two weeks, I think, landowners, and they
10 deserved it, had the right to spend as much time as
11 they thought they needed to to talk about the nuances
12 of their property and the value of their property and
13 why they didn't want a pipeline or why they were not
14 in agreement with Summit at this point.

15 So, at this point, regardless of what's
16 said in the media or what others may say, I've seen no
17 evidence that we're receiving special treatment from
18 the Iowa Utility Board.

19 BY MR. JORDE:

20 Q. Well, what about on day one when you and
21 your counsel were able to enter in secretly through
22 the back door and everyone else had to wait in
23 100-degree long lines to be wanded down by your
24 security forces?

25 MR. LEONARD: Objection.

1 BOARD CHAIR HELLAND: State your objection.

2 MR. LEONARD: Argumentative. Assumes facts
3 not evidence.

4 BOARD CHAIR HELLAND: Sustained. Let's
5 move on.

6 MR. JORDE: Well, I will get the facts in
7 evidence.

8 BY MR. JORDE:

9 Q. True or false. On day one of these
10 proceedings, you, Mr. Jimmy Powell, and your counsel
11 were allowed to enter in through the back door of this
12 very building, which is just to your left, while
13 everyone else had to wait in 100-degree weather
14 outside in lines to get security-checked and wanded by
15 your security force. True or false?

16 A. That's false. So we came in that door
17 (indicating). So it's not to my left. So, if that's
18 the back door, that's the door.

19 And they're not my security force. They're
20 OverWatch who are employed by us in another capacity,
21 but the Iowa Utility Board dictated what type of
22 security they wanted at this venue, and they are
23 coordinating with the security folks themselves.

24 Q. Okay. So it just so happens that your
25 private security forces that accompany you to North

1 Dakota, for instance, that are standing with surveying
2 crews in South Dakota, and are here today, it's just a
3 coincidence that your security force is the force that
4 is providing security at these proceedings?

5 A. That was the IUB's choice. And I wouldn't
6 discredit the gentlemen in the back that are with the
7 sheriff's department and maybe the local police.
8 Because they've been here every day as well.

9 Q. I think they're doing a fine job. So you
10 did not, in fact, go through the security line the
11 first day of these proceedings, did you.

12 A. I did not.

13 MR. JORDE: I'll just go ahead and offer
14 Exhibit 572 to show bias and admissions against
15 interest.

16 BOARD CHAIR HELLAND: Are there objections?

17 MR. DUBLINSKE: We need a moment. Because
18 it's not been pulled up or not been asked about.

19 BOARD CHAIR HELLAND: We'll pull that up.

20 Our staff does have the file located. They
21 are pulling it up. It is just a large file.

22 MR. LEONARD: I do have an objection, Your
23 Honor.

24 BOARD CHAIR HELLAND: I'm sorry. Did you
25 say you do or you don't?

1 MR. LEONARD: I do. Lack of foundation for
2 this document. This witness specifically was asked if
3 he reviewed any of these and said no. There's no
4 basis for foundation here.

5 MR. JORDE: Well, I don't need to establish
6 foundation through this witness.

7 BY MR. JORDE:

8 Q. I mean, sir, do you dispute that
9 Mr. Rastetter sent emails --

10 BOARD CHAIR HELLAND: Mr. Jorde, we're just
11 going to go ahead and refine it to his rebuttal -- to
12 his objection.

13 MR. JORDE: Okay. I thought that's what I
14 was doing.

15 BOARD CHAIR HELLAND: Sorry. I thought you
16 were launching into questioning the witness. So I
17 apologize. Go ahead and proceed.

18 MR. JORDE: It may have been both. Yeah.
19 So he doesn't have to have foundation for this exhibit
20 to get in. Like the warning sign. He didn't create
21 that. That's not a relevant objection to this
22 exhibit.

23 BOARD CHAIR HELLAND: The evidence will be
24 admitted as Jorde Landowner Hearing Exhibit 572 and be
25 given the weight due.

1 MR. JORDE: Thank you.

2 Just give me one moment, please.

3 BY MR. JORDE:

4 Q. Are you, sir, familiar with Project Tundra.
5 Does that ring a bell to you at all?

6 A. It does.

7 Q. And does Summit have any role or interest
8 in that project at all?

9 A. We have a partnership with Minnkota Energy
10 to develop their sequestration sites. Which are
11 Tundra East and Tundra West.

12 Q. And would you agree that that project is a
13 step in the wrong direction and carries large risks
14 for investors and its co-op members?

15 A. No, I wouldn't.

16 MR. JORDE: I would offer Exhibit 574.

17 BOARD CHAIR HELLAND: Any objection?

18 MR. LEONARD: Just a moment. I'm pulling
19 it up.

20 We'll object to lack of foundation as well
21 as asking this witness to verify the accuracy of this
22 document that he hasn't read that also doesn't appear
23 to have anything to do with the project before this
24 Board.

25 MR. JORDE: Well, he said his company is a

1 part of this project. So he's very familiar with the
2 project. There's no mystery there.

3 THE WITNESS: We're not familiar --

4 BOARD CHAIR HELLAND: Hold on. Real quick.

5 The Board will admit Jorde Landowners
6 Hearing Exhibit 574 and give it the weight due.

7 MR. JORDE: Thank you.

8 Then, lastly, I would ask to be received
9 into evidence the Audubon Field Solutions Summit
10 Carbon Solutions Dispersion Analysis Midwest Carbon
11 Express dated August 31, 2023.

12 MR. LEONARD: Is there an exhibit number?

13 MR. JORDE: No, because you won't give it
14 to us, but I have to offer the exhibit to make the
15 record.

16 MR. LEONARD: Without seeing the document,
17 our objection is based on PHMSA preemption, the
18 currently pending appeal before the Board on a motion
19 to compel, which I understand the Board will be ruling
20 on at some point.

21 BOARD CHAIR HELLAND: Right now we'll have
22 to deny it. We don't have anything to admit.

23 MR. JORDE: That's fine. I can perhaps
24 upload this. Here's my problem -- and this is posed
25 as a question. They've designated it as confidential.

1 There was in the Board order to make offers of proof.
2 I'd like to offer it, but you're right, I haven't
3 uploaded it because they say it's confidential. And I
4 don't want to be in breach of confidentiality by the
5 mere uploading it even if I do confidential.

6 So I guess I'm looking for some guidance.
7 Is a party authorized to upload the exhibit with a
8 confidential designation and then make an offer? If
9 so, then I will do that at some point.

10 (Brief pause.)

11 BOARD CHAIR HELLAND: Okay. If you have
12 them, you may distribute them to Summit's attorneys to
13 determine whether or not we need to go into
14 confidential session to admit them.

15 I'll also remind you that we have
16 instructions on how to upload confidential documents
17 and encourage you to check those out again.

18 MR. JORDE: Yep. And I don't intend to
19 have to kick everyone out. And I am familiar that
20 there is a method to do it. I just wanted to be sure
21 that the very act of me attempting to upload them in a
22 confidential fashion isn't going to get objections
23 from counsel, I guess. That's more what I'm looking
24 for. And then I will follow that procedure.

25 So I want some type of an assurance on that

1 before I do it.

2 MR. LEONARD: We do not have an objection
3 to having them filed confidential. I still don't know
4 what they are. Is this something that was produced in
5 another state pursuant to a confidentiality order in
6 that other state?

7 MR. JORDE: Exactly. Which is why I
8 haven't done anything with it.

9 MR. LEONARD: Until I have a look at that
10 confidential agreement or order, I don't know what its
11 restrictions are.

12 MR. JORDE: Well, again, it's your client's
13 document. So none of that matters if you just allow
14 it to be uploaded. That's my point here.

15 BOARD CHAIR HELLAND: Hold on.

16 Mr. Long.

17 MR. LONG: If the document is related to
18 the subject matter of the order that we're presumably
19 going to get soon from the Board, perhaps we could
20 just -- the Board mentioned that if those materials
21 are required to be provided and discovery witnesses
22 could be recalled, I would suggest that we could deal
23 with the materials in any necessary confidential
24 session then.

25 BOARD CHAIR HELLAND: That would be my

1 preference.

2 MR. JORDE: Okay. So, just to make sure
3 I'm clear, I will then not be uploading them. We're
4 basically waiting for the Board's decision with the
5 understanding we could recall Mr. Powell or whomever
6 has the foundational knowledge of that exhibit. I
7 just want to make sure we're all on the same page.

8 BOARD CHAIR HELLAND: That will be an
9 opportunity, yes.

10 MR. JORDE: All right. Very good. Then
11 that concludes my questioning.

12 Thank you, sir.

13 BOARD CHAIR HELLAND: Thank you.

14 Mr. Long, I believe you are next.

15 MR. LONG: Thank you.

16 CROSS-EXAMINATION

17 BY MR. LONG:

18 Q. Good afternoon, Mr. Powell.

19 A. Good afternoon, Mr. Long.

20 Q. So I want to follow up and clarify a couple
21 of things that you were discussing with Mr. Jorde.

22 Earlier you were discussing -- well, I'll
23 do this more systematically.

24 Is it a fair restatement of your testimony
25 earlier today that you consider the most probable

1 cause of a release of gas from the line to be a
2 third-party line strike like an excavator?

3 A. Correct.

4 Q. Thank you. You were discussing this
5 earlier with Mr. Jorde, but I want to follow up to get
6 some precision.

7 You stated in a discussion with Mr. Jorde
8 that Summit would pay for damages resulting from -- I
9 can't remember the -- attributable to operation of the
10 pipeline. And I want to follow up on what damages you
11 meant would be included in that statement.

12 If there were a third-party line strike,
13 and let's assume that the excavator is a hundred
14 percent at fault, and let's use the word "bystanders"
15 by which I mean not necessarily landowners but
16 somebody close enough or with property, like
17 livestock, close enough to have been harmed, would
18 Summit pay those damages resulting from the release of
19 gas even if it was caused by a third-party excavator?

20 A. Yes.

21 Q. Okay. Thank you.

22 MR. LONG: I'd now like to introduce my
23 hearing exhibit. I provided it electronically
24 earlier -- oh, there it is.

25 BOARD CHAIR HELLAND: Are there objections?

1 MR. LONG: For Mr. Dublinske and
2 Mr. Leonard's reference, this is the response I just
3 received to OCA Data Request 77.

4 MR. LEONARD: No objection.

5 BOARD CHAIR HELLAND: It will be admitted
6 as OCA Hearing Exhibit 1.

7 MR. LONG: Thank you.

8 BY MR. LONG:

9 Q. Mr. Powell, I believe you just received a
10 copy. This is a response, that you listed yourself as
11 the author of, to a data request sent by OCA.

12 Do you recognize this document as that?

13 A. Yes.

14 Q. Thank you. Following up on what we just
15 discussed, you said that Summit would pay for damages
16 to bystanders even if the release was caused by a
17 third party.

18 If you look at part B of your answer, am I
19 correct in interpreting this that Summit is saying
20 even though it would pay those damages to bystanders
21 its liability insurance wouldn't be available? Is
22 that correct?

23 A. That was not the intent.

24 Q. Well, in your response to part A, is it
25 fair to say that you're telling us that Summit doesn't

1 really know the terms of what insurance it will have
2 because it's going to have to negotiate it after
3 construction?

4 A. Exactly. And that's why I say we cannot
5 confirm exclusions of limits of liability. I mean,
6 just generally, Mr. Long, my philosophy, and the
7 philosophy of our management team, is that if there's
8 an incident associated with the pipeline and, in your
9 scenario, it's due to a third party, then we assume
10 the liability with that and we keep the landowner
11 whole. And then, if we have to deal with a third
12 party and our own insurance carrier, we will do that.

13 So, if that's not the way you interpreted
14 this, then I apologize, but that's our intent.

15 Q. All right. And I want to clarify again.
16 Because it's an important point to our office. You
17 said you would keep the landowner whole, but what if
18 the injured party were not a landowner but someone
19 adjacent to the line or even just a passerby?

20 A. Again, we're obligated -- it's our pipeline
21 we're operating. So we're obligated to remove the
22 liability from at least the landowner in this case,
23 and then if -- someone that's not associated with the
24 landowner you're saying? That's on the property?

25 Q. Well, I mean, will you accept that if there

1 were a release of gas, you wouldn't have to be on a
2 property that's on the route to be affected and
3 potentially injured? I mean, you could be at an
4 adjacent property.

5 Is that reasonable?

6 A. Correct. Not highly likely with a
7 third-party line strike, as we've modeled it, but
8 let's say it could happen. So, again, we're -- and I
9 assume -- I don't assume. I confirm that we're liable
10 for any damage that is the result of operating our
11 pipeline. Whether that damage is caused by a third
12 party or by our own operation.

13 Q. Okay. Thank you. And, as you've told us,
14 Summit will not know the terms of its insurance until
15 later in the process.

16 Would Summit be willing to accept a
17 requirement that it submit whatever insurance it
18 obtains for approval by the Board?

19 A. I think I can speak for our management team
20 and say yes.

21 Q. Thank you. The last thing I'm going to ask
22 about, I don't have an exhibit, but do you recall in
23 your direct testimony that you stated the purpose of
24 your testimony was to explain why the company's
25 proposal satisfies the requirements of Iowa Code 479B

1 and to describe the benefits of the proposed line?

2 A. Yes.

3 Q. Now, these questions are going to relate a
4 little bit to a discussion you had earlier with
5 Mr. Jorde.

6 Would you agree that the benefits Summit
7 claims for the line cannot be delivered if Summit is
8 unable to deliver the CO2 to a sequestration site and
9 to sequester it?

10 A. I would agree.

11 MR. LONG: That's all my questions. Thank
12 you.

13 BOARD CHAIR HELLAND: Thank you.

14 Ms. Gruenhagen. I believe you're next.

15 MS. GRUENHAGEN: Thank you Your Honor.

16 CROSS-EXAMINATION

17 BY MS. GRUENHAGEN:

18 Q. Good afternoon.

19 A. Good afternoon.

20 Q. I'm Chris Gruenhagen. I think we've met
21 previously. I just want to quickly do a follow-up on
22 something you were talking to Mr. Jorde about before
23 lunch.

24 You were discussing Mr. Pirolli's rebuttal
25 Exhibit 1, the Iowa Renewable Fuels Association paper

1 that was submitted.

2 Do you remember that conversation?

3 A. I do.

4 Q. In that conversation, you mentioned that
5 that paper showed there was a reduction in demand of
6 75 percent. Didn't that paper lay out four different
7 scenarios that could be taking place and that the
8 75 percent was the worst-case scenario presented in
9 the paper?

10 A. That's true.

11 Q. Okay. Thank you. I want to visit with you
12 a little bit about some statements that you've made
13 during informational meetings. And we'll just kind of
14 stay at a high level here. But, at the informational
15 meetings recently held in Floyd and Mitchell County,
16 you stated that Summit would pay landowners for any
17 crop damages sustained because of the pipeline.

18 Is that correct?

19 A. Yes.

20 Q. Does it matter when that crop yield loss
21 damage occurs?

22 A. No.

23 Q. So, after three years, if a farmer informs
24 Summit that they had crop yield reductions in the
25 easement area, Summit would still pay for those crop

1 damages accordingly?

2 A. Yes.

3 MS. GRUENHAGEN: I have a hearing exhibit.

4 I believe I did email this electronically as well.

5 BY MS. GRUENHAGEN:

6 Q. And, since you have a copy, could you go
7 ahead and read paragraph (f) in Summit's response?

8 A. "Generally" --

9 Q. You can read it to yourself. Sorry. While
10 it's being handed out.

11 Does that paragraph (f) in Summit's data
12 request response reflect how Summit is going to allow
13 proof for that crop yield loss?

14 A. Yes.

15 Q. Is there anything else that would need to
16 be provided by a farmer who was experiencing crop
17 yield loss in the easement area?

18 A. Again, I'm not a farmer, Ms. Gruenhagen,
19 but any kind of verification that there's a yield
20 deficiency would be sufficient.

21 Q. And I know this was last fall, but did you
22 see this data request response before it was provided?

23 A. I apologize. We see so many data requests
24 that I can't keep track of them.

25 Q. Okay. But paragraph (f) does reflect

1 Summit's commitment on paying for crop damages?

2 A. Yes. I mean, we spent a lot of time on
3 this. I mean, obviously, we work for an agricultural
4 company who is very cognizant of this. And so, just
5 for context, the way we arrived at that is, you know,
6 we based it on the spot study that ISU did and the
7 yield deficiencies that certain landowners experienced
8 from Dakota Access.

9 And so we extrapolated that over what we
10 thought would be six or seven years, but have also
11 said that after three years, or in perpetuity if
12 there's a deficiency, we'll take care of it.

13 Q. Thank you. Looking at paragraph (e), has
14 Summit determined the process and who the contact
15 person might be for claiming crop yield loss damages?

16 A. We have not. Mr. Rorie will be involved in
17 that. He will testify later in the proceeding.

18 Q. Thank you. At the information meetings in
19 Floyd and Mitchell County, you also stated that Summit
20 would pay landowners for damages to tile drainage
21 systems that were sustained because of the pipeline.

22 Do you recall that discussion?

23 A. Yes.

24 Q. And is that an accurate summary of what you
25 said?

1 A. It is. So, obviously, during construction
2 we'll repair -- cover temporary and permanent repairs.
3 And anytime after the pipeline is placed in operation,
4 during the life of the operation, if there's damage
5 attributable to the construction, we'll cover it.

6 Q. Thank you. And, even if that drainage tile
7 damage wasn't discovered until more than five years
8 after the pipeline was installed, will Summit still
9 pay for the damages then?

10 A. Yes.

11 Q. Alternatively, would Summit also offer to
12 fix the tile drainage system?

13 A. Yes. Or to pay their contractor of choice
14 to repair.

15 Q. Appreciate that. Thank you. Will Summit
16 also fix or pay for any damages the pipeline causes to
17 terraces?

18 A. Yes.

19 Q. And is that going to be a lifetime
20 obligation for Summit?

21 A. Yes.

22 Q. A similar question regarding conservation
23 structures. Will Summit fix or pay for any damages
24 the pipeline causes to conservation structures?

25 A. Yes, in the terms of their agreement around

1 those.

2 Q. Pardon me?

3 A. Depending on their agreement. You're
4 talking about like resource conservation areas?

5 Q. No, conservation structures. So it would
6 be like grass waterways, terraces --

7 A. Oh. Yes. Sorry.

8 Q. That's okay.

9 A. Yes.

10 Q. I appreciate you asking for clarification
11 so that we're on the same page.

12 Is this a commitment that Summit is making
13 for the life of the pipeline?

14 A. Yes.

15 Q. You've been sitting in front of me here
16 most of the days the past couple weeks listening to
17 the non-intervening landowner testimony; is that
18 correct?

19 A. Yes.

20 Q. You heard some landowners state that they
21 do have some contracts with federal agencies as a
22 result of being enrolled in the Conservation Reserve
23 Program; is that correct?

24 A. Yes.

25 Q. Do you recall that?

1 MS. GRUENHAGEN: I have another hearing
2 exhibit here.

3 BY MS. GRUENHAGEN:

4 Q. I just have three, so...

5 A. That's okay. Mr. Long got some time back.

6 Q. And so, while we're waiting for the
7 handout, if you want to review paragraphs (c) and (e).

8 MS. GRUENHAGEN: Your Honor, while that's
9 being handed out, can I offer into evidence IFBF
10 Hearing Exhibit 1?

11 BOARD CHAIR HELLAND: Are there any
12 objections?

13 MR. LEONARD: No objection.

14 BOARD CHAIR HELLAND: Hearing none, the
15 Board will admit Iowa Farm Bureau Federation Hearing
16 Exhibit 1.

17 MS. GRUENHAGEN: Thank you, Your Honor.

18 BY MS. GRUENHAGEN:

19 Q. So have you had a chance to read through
20 paragraph (c)?

21 A. I did. And I apologize, but I'm going to
22 have to defer the responses to these to Mr. Rorie.
23 He's much better versed in how we're going to
24 accomplish this.

25 Q. On both? As well as the -- (e) as well?

1 A. Yes. I can tell you we'll keep the
2 landowner whole, but he can tell you the specifics and
3 mechanics around how we're going to do that.

4 Q. So I'll just ask you, I guess, more of a
5 general statement.

6 So when you say "make the landowner whole,"
7 what do you mean by that?

8 A. Well, if they have an obligation that we
9 interrupt with construction -- or installation of the
10 pipeline, then we have to fulfill that obligation.
11 Generally. So if that's contractually, if it's
12 expense -- whatever that might be. Restoration.
13 Whatever that might be.

14 Mr. Rorie will -- he will be able to go
15 into much more detail on how we'll do that.

16 Q. But, at a high level, if someone was out of
17 compliance with the federal farm programs or their
18 federal contracts, Summit would make them whole?

19 A. As long as that non-compliance was directly
20 attributable to the pipeline, yes.

21 Q. Fair enough. Thank you. And I'd also
22 ask -- my next hearing exhibit as well deals kind of
23 in this area. So would you prefer that be directed
24 toward Mr. Rorie as well?

25 A. I would. He'll give a much better answer

1 and a more complete answer than I would.

2 Q. I just have one additional line of
3 questions as well dealing with negotiating easements.
4 And I'm looking at a high level, not looking at the
5 terms of the easement here.

6 If the permit is granted, will Summit
7 continue to negotiate easement terms and compensation
8 with the landowners prior to filing for eminent
9 domain?

10 A. Yes.

11 Q. If the pipeline permit is granted, is
12 Summit willing to offer, at a minimum, the same terms
13 and conditions that has already been offered to those
14 landowners?

15 A. Generally, yes. I hesitate, because
16 routing may have changed with the Exhibit H filing.
17 And so we couldn't deviate from that unless the Board
18 gave us some discretion or flexibility there. But, as
19 far as compensation, within reason, yes.

20 Q. So is Summit willing to purchase those
21 voluntary easements for the same compensation as what
22 Summit offered to the landowner prior to the start of
23 this hearing?

24 A. Yes, qualifying what you just said. "The
25 start of the hearing." Because some negotiations have

1 been ongoing for a year. And it goes up and goes down
2 and goes -- so, yeah, specific to the last offer, yes.

3 Q. And, if Summit was not given an opportunity
4 to extend an offer to a landowner, will Summit agree
5 to offer the formula price that was explained at the
6 informational meetings as the lowest price that they
7 would pay to the landowner?

8 A. Yes.

9 Q. Can you explain the formula price?

10 A. Mr. Rorie would be better suited to. He
11 gets offended when I try to walk through terms and
12 conditions and easement numbers.

13 MS. GRUENHAGEN: Very good. I can do that.
14 That's all the questions I have. Thank
15 you.

16 BOARD CHAIR HELLAND: Okay. Thank you.
17 I believe Mr. Whipple is next.

18 MR. WHIPPLE: Thank you, Your Honor.

19 CROSS-EXAMINATION

20 BY MR. WHIPPLE:

21 Q. Mr. Powell, I don't know if you can see my
22 counties (indicating). I've got seven of them.

23 A. I know your counties very well,
24 Mr. Whipple.

25 Q. Thank you, Mr. Powell. I want to return to

1 the subject of the North Dakota permit.

2 Will construction proceed in Iowa if the
3 North Dakota Utilities Commission doesn't approve a
4 permit?

5 A. No.

6 Q. So will Summit accept the condition
7 requiring approval in North Dakota and South Dakota
8 for phase one of the project?

9 A. Yes. With the understanding of how we
10 define "phase one." But what we call phase one, yes.

11 Phase one is --

12 Q. I'll accept your definition of phase one.

13 A. Phase one is the main line through South
14 Dakota to North Dakota to the sequestration site so we
15 have a vehicle to transport CO2 from the 12 plants in
16 Iowa to the sequestration site in North Dakota.

17 Q. Thank you.

18 A. And of course we wouldn't -- we wouldn't
19 construct that main line if we didn't think we could
20 construct the laterals as well.

21 Q. Which is why you're willing to accept the
22 condition in Iowa.

23 A. Correct.

24 Q. Thank you. Will construction proceed in
25 Iowa if Oliver County doesn't approve a permit for an

1 injection well?

2 A. Although I think that's unlikely, we also
3 have injection opportunities or a sequestering site in
4 Mercer County. So I would say if we don't have the
5 ability to sequester in Mercer or Oliver Counties or
6 Tundra East or West, if we don't have access to any
7 injection sites in North Dakota, I would accept that
8 condition.

9 Q. So it would be -- it could be generally
10 stated such a condition requiring approval of all
11 necessary local permits as well?

12 A. Yes.

13 Q. In your direct testimony, you stated that
14 more than 50 percent of Iowa's corn crop is used for
15 ethanol production.

16 What is the source of that statistic?

17 A. I mean, I can't quote it off the top of my
18 head. It's just various statistics. The most recent
19 I read was 57 percent. So I'm -- again, I'm not a
20 farmer, so I'm typically looking for agricultural
21 stats and updates. But I don't have a specific
22 source.

23 Q. What I'm interested in probing for a minute
24 with you is not just ethanol generally but ethanol at
25 the 12 or 13 Summit partners specifically.

1 What percentage of all the ethanol produced
2 in Iowa is produced at those 12 or 13 plants?

3 A. Mr. Whipple, Mr. Pirolli will be much
4 better versed in it than I am, but, I mean, if there
5 are 42 plants, and I'm not sure that's the correct
6 number, and we're contracted with 12 in this petition
7 that we're discussing today, it would obviously be a
8 fraction of the total volume.

9 Q. Which is what I was driving at with my next
10 question. You would agree that it's proportional to
11 the proportion of ethanol produced at your ethanol
12 partners.

13 A. Yes, you know, and understanding that a
14 plant is not a plant. So our Homeland Energy plant is
15 one of the larger plants in our current contracted
16 portfolio. So there are plants ranging from
17 50 million to 200 million gallons per year production.
18 But, generally, I think I would agree.

19 Q. Sure. I want to ask a question about the
20 45Q tax credits.

21 And, not to turn you into a tax lawyer
22 here, but you're generally familiar with them;
23 correct?

24 A. Generally.

25 Q. Isn't it true that they require

1 construction to begin before 2026?

2 A. I believe that's correct.

3 Q. And isn't it true that they can be claimed
4 for 12 years?

5 A. I believe that's the current duration, yes.

6 Q. So what I'm wondering is why does Summit
7 need permanent perpetual easements?

8 A. Well, we anticipate the life of the
9 pipeline to extend well beyond 12 years, Mr. Whipple.

10 And there are provisions in 479B that if we
11 ceased operation of the pipeline, deactivated the
12 pipeline or took the pipeline out of service, then
13 after five years that easement reverts back to the
14 landowner.

15 Q. Sure, but what I'm wondering about is
16 you're making the case for public convenience and
17 necessity based on the benefits to the ethanol plants.
18 Which is connected to the sequestration and which is
19 driven by the federal credits.

20 So is there public convenience and
21 necessity when the tax credits go away?

22 A. Well, I would say that if the tax credits
23 were to go away, and I being a taxpayer like you are,
24 I don't know too many government programs that go
25 away, but let's say this one does, you know, we fully

1 intend to be profitable after we generate enough
2 income to pay for our cost of borrowing for
3 construction. And the tax credits will not be our
4 only source of income.

5 So we fully anticipate being a viable
6 business if the tax credits were to go away in 12
7 years.

8 Q. But, in both your testimony and in
9 Mr. Pirolli's, you're making the case for the benefits
10 to the state of Iowa based on economic benefits and
11 environmental benefits which are closely connected to
12 lowering carbon intensity. Which are, again, closely
13 connected to the tax credits.

14 Wouldn't it make sense to time the
15 easements to the tax credits?

16 A. Well, we're making the connection to the
17 low-carbon fuel markets. And that's reducing the
18 plants' carbon intensity by reducing the CO2 from
19 their -- capturing the CO2 from their process with or
20 without a tax credit.

21 Q. So you do not agree that the easements
22 should be linked to the tax credit duration.

23 A. I do not.

24 Q. I want to move on and talk a little bit
25 more about emergency response.

1 I want to follow up on something that
2 Mr. Long asked you about. The third-party strikes.
3 Given that there are frequent excavation in the road
4 rights-of-way, shouldn't there be additional measures
5 at road crossings to mitigate releases from strikes?

6 A. Yes.

7 Q. Do you have an opinion on what those
8 additional measures should be?

9 A. Well, it's multifaceted, but primarily it's
10 depth of cover. So that's why we'll bore, or drill,
11 all road crossings, and it will be at a depth much
12 greater than the minimum four foot for the other
13 aspects or parts of the pipeline.

14 Q. And so you would be amenable to additional
15 county terms and conditions on road crossings?

16 A. Well, we currently are. I mean, as long as
17 they're reasonable and practical and within typical
18 industry standard and practice. I mean, if the
19 requirement is -- and I'm throwing out a number, is
20 eight foot top of pipe, and that's pretty common, and
21 depending on the risk and the type of roadway,
22 obviously we're okay with that. But, if they want us
23 to put it 30 feet deep and there's no driver for that,
24 then I'd want to have a discussion.

25 Q. But, just generally speaking, that would be

1 something you would be willing to explore with county
2 engineers?

3 A. Absolutely. And we have been. With most.

4 Q. I'm not advocating for 30 feet, by the way.

5 A. I appreciate it. And I also don't advocate
6 for casing either because it introduces risk. It
7 doesn't help.

8 Q. I'd also like to go back to something you
9 were talking about with Mr. Jorde.

10 He asked you about dispersion modeling a
11 number of times, but at one point you said something
12 to the effect that one of the reasons for not
13 releasing the dispersion modeling was about safety and
14 protecting the pipeline from people with criminal
15 intent.

16 Do you recall that part of your
17 back-and-forth with Mr. Jorde?

18 A. There was a lot of back-and-forth. I do
19 recall that -- and these really aren't my words, it's
20 PHMSA, that that type of information should be
21 protected. And there's a FOIA -- we came to a
22 FOIA exemption regarding that type of information so
23 that -- again, like I said, we don't provide a
24 blueprint.

25 And I do have experience with that, too, by

1 the way, of individuals trying to sabotage pipeline
2 and pipeline facility assets.

3 Q. But they wouldn't have been county
4 officials, would they?

5 A. No. I hope not. I don't remember, but I
6 hope not.

7 Q. A joke, but only a little.

8 Do you view county officials the same way
9 as the general public in terms of sharing with them
10 the dispersion model?

11 A. I would rather not share a dispersion model
12 itself with anybody. Because PHMSA doesn't even ask
13 for the dispersion model. As far as the output,
14 general conversations, yes, I have to consult with the
15 management team and the attorneys and there's a lot of
16 other issues in play here, but I'm always happy to
17 have a general conversation about the risk. And how
18 deep we dive into that risk will be determined here
19 fairly soon, I guess.

20 Q. But isn't it true that PHMSA regulations
21 require Summit to provide information to local
22 emergency officials?

23 A. They do.

24 Q. Do you have to inform local officials about
25 your ability to respond to an emergency?

1 A. Yes.

2 Q. And doesn't that include dispersion
3 modeling?

4 A. That will include the output.

5 Q. But your position is -- go ahead. Sorry.

6 A. No, obviously, that would include the
7 output. Just for an instance, most emergency
8 responders, to my knowledge -- Rod Dillon will testify
9 later in this proceeding, and he's an emergency
10 response professional and former firefighter. They
11 will use either the weather-related dispersant model
12 that they generate very quickly that's loosely
13 accurate. It depends on where it is or what the
14 situation is. Or they'll use their guidebook. The
15 Emergency Response Guidebook. For instance, for CO₂,
16 it's 330 feet. So they would automatically establish
17 a boundary of 330 feet as the critical area.

18 We'll share more information with them and
19 say in this area that worst-case scenario could be
20 this, mechanical damage, third-party line strike,
21 could be why, and here's how we should work together
22 to establish a perimeter and establish a response
23 plan.

24 Q. But, just to recall the maps that Mr. Jorde
25 was showing earlier about Navigator and about the

1 hazard zone, wouldn't you have to share essentially
2 something like that in each county with those county
3 officials about the assets in that county?

4 A. We would have to share, yes, what they
5 should expect for the extent of the atmospheric gas
6 release, is there any overland flow of vapor, and what
7 the concentrations, or expected concentrations, could
8 be in those areas. And then they would use that as a
9 basis to formulate the plan.

10 Whether or not it's the map as you saw up
11 there, we'll have to determine. But it will be enough
12 information as I've done throughout my career.

13 Whether it's natural gas, refined products, or crude
14 oil or propane or ethane propane, you go through the
15 same exercise with your local officials and first
16 responders to make sure that they understand the risk
17 and then they, and you, have the resources to address
18 any type of release scenario.

19 Q. Have you notified any city officials in any
20 affected city that they're an HCA or an OPA?

21 A. I have not personally. As I mentioned
22 before, I know we've had literally hundreds of
23 interactions. So I can't tell you if that's the case.
24 I have no issue doing that.

25 We talked about our direct impact is 1.13

1 miles, and that's about -- that's a handful of
2 locations. And all but two are at ethanol plants. In
3 close proximity to. Those other two locations, we'd
4 be happy to talk to those officials about it.

5 Q. And, I'm sorry, I should have said the
6 corporate "you." Not necessarily you personally. But
7 somebody who is willing to notify the officials in the
8 cities that are HCAs or OPAs.

9 A. Yes. Again, subject to all this legal
10 discussion. I don't want to overstep my bounds here,
11 but yes.

12 Q. And are you willing to share the same
13 information with the county officials in that county?

14 A. Yes. Within my legal constraints. If
15 there are any.

16 Q. Would that include information about where
17 the critical valleys are?

18 A. Yeah, I mean, we've -- as I mentioned,
19 we've done the overland flow analysis, and quite
20 frankly it's -- without getting too deep into this,
21 it's very difficult to force the dispersed material to
22 reach a could-affect area.

23 Q. But isn't it true that there have been a
24 number of counties that have asked for that
25 information and have been asking for it for a year?

1 A. They've been asking -- it's my
2 understanding -- again, I'm involved on an occasion,
3 but not with many of the counties directly.

4 They're asking for the dispersant model.
5 And, if you want the dispersant model, that's --
6 that's something we're not willing to do. It's
7 something you can generate on your own, as Mr. Jorde
8 has had his expert witness do that with readily
9 available material, but, as far as the output, that's
10 a different ask. And I'm not aware that that's been
11 asked. It may have been. I'm just not aware of it.

12 And it's also important to know the context
13 of those discussions.

14 Q. Well, I go back to --

15 A. Because there were preemption issues
16 ongoing. And so -- you're well aware of those. And
17 so I'm always deferring to legal counsel and what we
18 can or cannot discuss or share.

19 Q. I'll put it to you this way: Would you be
20 surprised to learn that the counties would like that
21 information sooner rather than later?

22 A. And you're talking about your seven
23 counties.

24 Q. Well, I only represent seven, but I haven't
25 yet met a county that wouldn't like to know how to be

1 prepared.

2 A. Oh, I agree with that. About being
3 prepared. I'll just take your word for it and say,
4 no, I wouldn't be surprised.

5 Q. It wasn't a trick question. I mean,
6 ultimately, what we're going to struggle with is what
7 you mentioned earlier about the specifics are
8 important. Wind speed and location and the
9 assumptions that you make.

10 And you say, and I think it's not
11 incorrect, that the counties have some of those tools
12 available to them to try to replicate that
13 information. But they need to know actually what your
14 response is going to be, don't they?

15 A. They do. And so, without coming off as
16 being flippant, Mr. Whipple, we're taking this in a
17 step, a phase process.

18 We've introduced the project to these
19 county officials. We've introduced it to the fire
20 chiefs and the emergency management professionals. We
21 have to get a permit to construct.

22 And then from the time we get a permit to
23 construct to actually when we finish construction and
24 go into operation is going to be at least 18 months.
25 Depending, again, on when we receive the permit and

1 when we can begin construction.

2 And so we will ramp up that activity and
3 make sure that before we place the project in
4 operation, and PHMSA will require that we've satisfied
5 our emergency response and emergency preparedness
6 obligation, that we've had those detailed
7 conversations with first responders in each county,
8 that we understand what their resource constraints
9 are, that we've augmented those to the extent
10 practical.

11 Am I going to buy electric fire trucks?
12 No. Am I going to provide them with CO2 test
13 apparatus and am I going to provide them with -- you
14 know, are there other things that we're thinking
15 through now. Like, you know, electric UTVs. I mean,
16 our team is thinking through that, and they'll
17 collaborate with the first responders and what they
18 may or may not want.

19 But we have committed to anything that they
20 need that makes sense that would be necessary for a
21 CO2 response, worst-case scenario, we will provide.
22 And we will do it in a timely fashion. So it's not
23 last minute the day before we turn the valve on --
24 open the valve to start moving product so they feel
25 that they're trained and they're comfortable.

1 Because it doesn't do us any good to put a
2 pipeline in operation and in the unlikely event we had
3 a release, and it happened early into the life of the
4 pipeline and they're not prepared, that doesn't help
5 us either.

6 So we want to make sure we go about that in
7 the right way. It's just an iterative process that
8 we've begun, and we'll develop it more and proceed
9 more earnestly over the next year.

10 Q. So you say in your rebuttal testimony at
11 page 4, line 18, that "Summit has undertaken a more
12 robust dispersion analysis than Denbury."

13 How can counties know, how can the Board
14 know, whether it is more robust if they can't compare?

15 A. Well, again, PHMSA has the obligation to
16 ensure that they feel that what we've done is
17 adequate. But I've already committed to the fact --
18 and, if the Board compels us to turn it over, we will.
19 Just like we have in South Dakota and North Dakota.
20 They've got the same obligation per that question.

21 Is that we've already performed the
22 overland flow component, which Denbury didn't do, and,
23 in this case, we are performing the geohazard
24 analysis, which is best practice, that Denbury didn't
25 do. And we'll incorporate it in our integrity

1 management plan which will be for the entirety of the
2 pipeline, not just in the HCAs.

3 So we're doing things that I think are
4 prudent for an operator that Denbury didn't do. And
5 some of those -- not all, but some of those will be
6 verified by PHMSA. So that's our integrity management
7 plan, our emergency response plan, our emergency
8 preparedness plan, all those things.

9 Q. I just have one more question on this
10 topic. And I just want your opinion on it. But
11 suppose the pipeline is built, it's already
12 constructed, and you have provided the dispersion
13 modeling and analysis to a county. Shared it with
14 them, trained them, ready to go.

15 Would it be inappropriate for county
16 officials to use their zoning ordinances to prevent
17 new development based on the dispersion model.

18 MR. LEONARD: Objection.

19 BOARD CHAIR HELLAND: State your objection.

20 MR. LEONARD: I object to the extent it
21 calls for a legal conclusion.

22 BOARD CHAIR HELLAND: Mr. Whipple.

23 MR. WHIPPLE: I don't believe it's asking
24 for a legal conclusion. I believe it's asking whether
25 he thinks county officials should consider that

1 information in their decision-making process from a
2 pipeline safety standpoint.

3 BOARD CHAIR HELLAND: You may answer if you
4 know.

5 A. Well, I would just suggest that it may be
6 prudent for planning and zoning officials to consider
7 a host of things, including that. But, as I'm sure
8 you know -- let's take Charles City Iowa, for
9 instance.

10 So where we're planning to route the
11 pipeline is in an economic development area where
12 there are two natural gas lines existing. And it
13 hasn't impeded that development. So, in that case,
14 we're in an existing infrastructure corridor.

15 But if it were there or somewhere else, and
16 you can see all across this country, in Iowa, 47,000
17 miles of pipeline in Iowa, there's economic
18 development in and around pipelines on a regular
19 basis.

20 But I don't think it's -- I do think it
21 will be prudent for them to consider that. It's a
22 factor like many other factors.

23 BY MR. WHIPPLE:

24 Q. But they need to have it first, don't they.

25 A. Well, again, we can share information, but

1 do they have the release plan for the natural gas --
2 let's talk about Charles City. Do they have the
3 release plan or the dispersant analysis or the blast
4 radius information for the two natural gas pipelines
5 that run through that economic development area? My
6 guess is they don't.

7 Q. Yeah, and I haven't discussed it with them.

8 A. So how do the planning and zoning
9 officials, how do they think through that process with
10 natural gas pipelines compared to a CO pipeline.
11 Which, in my opinion, is much less risky, because it's
12 an asphyxiant just like natural gas, but it's
13 non-ignitable.

14 So they've got to reconcile themselves how
15 one -- they've got to compare the risk profile of one
16 versus the other and if they've considered both
17 properly.

18 Q. And I'll just suggest perhaps they should
19 do it for both, but, in either case, they would need
20 the information, wouldn't you agree?

21 A. They would need some level of information,
22 correct.

23 Q. And I'm glad you brought up Charles City.
24 I want to go back to that issue as the last kind of
25 set of questions I have for you. But we went over the

1 fact that you believe one of the reasons that North
2 Dakota denied the permit was the proximity to the city
3 of Bismarck; correct?

4 A. (Moving head up and down.)

5 Q. That's a yes; correct?

6 A. Yes. Sorry.

7 Q. Just for the court reporter. How close was
8 the proposed route to Bismarck?

9 A. It was further away than the pipeline is
10 from Charles City. It's a much bigger area with a
11 much broader economic development footprint.

12 Q. Do you know approximately how far?

13 A. Not off the top of my head.

14 Q. More than a mile?

15 A. Yes.

16 Q. More than two miles?

17 A. Again, it's further than Charles City.

18 Q. Well, in Charles City, goes into city
19 limits, I believe, isn't that correct?

20 A. Again, it parallels two natural gas
21 pipelines. And I believe, other than the Charles City
22 economic development group, every easement is signed
23 along that route. So the landowners -- and I think
24 this is an important factor. The landowners, through
25 their discussions with us and their own research, have

1 felt that they had enough information to make a
2 reasonable decision without the threat of eminent
3 domain.

4 MR. JORDE: Well, objection. Objection.

5 BOARD CHAIR HELLAND: State your objection.

6 MR. JORDE: Lack of foundation as to what
7 other landowners allegedly thought or how they felt.

8 BOARD CHAIR HELLAND: Mr. Whipple?

9 MR. WHIPPLE: I have no response to
10 Mr. Jorde's objection other than I was simply going to
11 confirm with this witness that his response was a yes
12 to my question. Which is that it goes into city
13 limits in Charles City.

14 THE WITNESS: Yes, it parallels those two
15 natural gas pipelines.

16 MR. WHIPPLE: Since he nodded his head --

17 THE WITNESS: I said yes. I said, yes,
18 that it parallels two natural gas pipelines.

19 BOARD CHAIR HELLAND: Okay. I think we can
20 move on.

21 MR. WHIPPLE: Thank you, Mr. Chair.

22 BY MR. WHIPPLE:

23 Q. Do you know how close the proposed pipeline
24 comes to the city of Earling?

25 A. I do not.

1 Q. Would you be surprised it was less than a
2 half a mile?

3 A. I do know the city of Earling is not a
4 high-consequence or could-affect area. To my
5 recollection.

6 Q. Do you think the people of Earling care
7 whether they're an HCA?

8 A. Again, that's important.

9 Q. Would you be surprised to know that the
10 city of Earling submitted an objection in these
11 proceedings and asked that the pipeline route be
12 moved?

13 A. What was the question?

14 Q. Would you be surprised to learn that
15 Earling also would like the route moved?

16 A. Okay.

17 Q. You're not surprised?

18 A. I don't know what to think of that. I
19 haven't seen the objection.

20 Q. The city council sent a letter in to the
21 Board and it's the direct exhibit of Mr. Willingham,
22 one of the Counties' witnesses.

23 But would you accept if I suggested it was
24 less than a half a mile? And that they would like to
25 see it be farther away.

1 A. I guess that's an accurate statement. I
2 don't know.

3 Q. And so I guess what I'm wondering is, if
4 you're willing to move it for Bismarck, why not
5 Earling?

6 A. Well, as I've said many times in our
7 conversation with Mr. Jorde this morning, siting is an
8 exercise in identifying risk and being able to
9 mitigate that risk.

10 Q. But I'm really asking you about development
11 and about priorities at the local level. And, at that
12 level, does it matter that they're a high-consequence
13 area. They'd like to develop east of Earling. What
14 makes Earling different than Bismarck? Other than
15 size.

16 A. Well, I'm just saying, at this late stage
17 in the project, it's very difficult to move the
18 pipeline.

19 Q. But not impossible.

20 A. It's very difficult to move the pipeline
21 within this application. And I don't intend to amend
22 this application.

23 Q. But you're moving it in North Dakota.

24 A. Well, we had some incentive to move it in
25 North Dakota. Again, that had nothing to do with

1 safety, it had nothing to do with risk in our opinion.
2 Or economic development. The pipeline was already
3 outside of the economic development area.

4 Q. And that brings us back to Charles City
5 just for a moment. But that economic development
6 project, that part of the community, would like you to
7 move it for economic development reasons.

8 What makes them different than Bismarck?

9 A. Well, I think they'd like to sell us the
10 property.

11 Q. Well, they were here to testify and that
12 isn't what they said.

13 A. Well, he placed a value on the property, if
14 I remember correctly. But, again, it depends on the
15 context of these conversations.

16 So Floyd County, for instance -- I mean,
17 our team has met with Floyd County, as you know, well
18 before you were even engaged with Floyd County. And
19 it was -- the board of supervisors in Floyd County
20 weren't always receptive to working with my team. And
21 so we proceeded with what we thought was the most
22 prudent route through that area.

23 Q. Does it matter to Summit if a community
24 welcomes natural gas but not carbon? Will you respect
25 that community's wishes about what risks should be in

1 the community for whatever those reasons are?

2 A. Well, I mean, I have to respect -- I try to
3 respect everyone's wishes within reason.

4 Q. And yet you'd still like to be in the
5 industrial park in Charles City; correct?

6 A. Again, Mr. Whipple, if we had this
7 conversation a year and a half ago, we may have had an
8 option. At this point, we don't.

9 MR. WHIPPLE: That's all I have for now,
10 Your Honor.

11 BOARD CHAIR HELLAND: Thank you.

12 Mr. Taylor, you are next, but before we get
13 to you, I think we're going to a take quick break if
14 that's okay.

15 So we will be back shortly before 3:30 if
16 that's okay. So we will go off the record until about
17 3:27, 3:30.

18 (Recess taken at 3:11 p.m.)

19 (Hearing resumed at 3:31 p.m.)

20 BOARD CHAIR HELLAND: Okay. It is 3:31.
21 If everyone wants to proceed to their seats, we will
22 go ahead and go back on the record.

23 Mr. Powell, a quick reminder, you are still
24 under oath.

25 Mr. Taylor, I believe the witness is yours.

1 MR. TAYLOR: Thank you.

2 CROSS-EXAMINATION

3 BY MR. TAYLOR:

4 Q. Do you recall your deposition being taken
5 back on June 23rd of this year?

6 A. I recall the deposition. I'm not sure of
7 the date. So I'll take your word for the date.

8 Q. You'll take my word for it?

9 A. Just for the date, Mr. Taylor.

10 Q. I asked you when you began working for
11 Summit, and you said June 1st of 2021.

12 Is that correct?

13 A. Yes.

14 Q. And I asked you what the status of the
15 project was at that time and you said it was a
16 conceptual project and that there had been a
17 feasibility study.

18 Do you recall that?

19 A. Yes.

20 Q. And you said that the feasibility study was
21 done by Wood Company?

22 Is that correct?

23 A. Wood Group.

24 Q. Wood Group. All companies are "groups"
25 now, aren't they.

1 A. Yeah, I think Wood has -- they've
2 consolidated multiple companies over the last few
3 years, and they keep changing their name and the look
4 of their name. Lowercase, upper case.

5 Q. In any event, after that deposition, I
6 asked in a data request for the report that Wood
7 provided from that feasibility study, and Summit
8 responded that there wasn't a report from Wood.

9 So I need to ask you what information did
10 Wood provide Summit as a result of that feasibility
11 study?

12 A. Yes, Mr. Taylor, they provided a
13 feasibility study. It was very high level. I thought
14 we had retained a copy. We had not. We contacted
15 Wood. They couldn't seem to find a copy.

16 But, essentially, they generated a very
17 loose route, and when I say "loose," it was traversing
18 through barns and properties and those types of
19 things, and a very high-level cost estimate and a very
20 high-level schedule.

21 So I did use the word -- or the phrase
22 "feasibility study," but it was much more high level
23 than that.

24 Q. So what was the purpose of it?

25 A. To validate to Summit Ag, at the time, a

1 general order of magnitude for cost and schedule and
2 constructability so that Summit Ag could continue to
3 develop the project.

4 And that's when they brought on the
5 management team, including myself, to refine that work
6 product, do a lot more work, put a lot more effort
7 into it, and determine if there was a viable economic
8 project.

9 Q. So when did Summit Ag first take a look at
10 this idea? Do you know?

11 A. I do not know, but my recollection it was
12 sometime in 2020.

13 Q. Then, in response to a question from
14 Mr. Jorde, you said that Terracon had done some work
15 to lay out an initial route.

16 Exactly what did they do? In making that
17 investigation.

18 A. Pivvot is the tool. And Pivvot, in my
19 opinion, is the best routing tool in the industry at
20 this time. And so they have all publicly available
21 information, some proprietary information, such as
22 eco-sensitive information from PHMSA, et cetera, and
23 then they have routing information that's much more
24 specific than just Rextag of existing pipelines.

25 And so they can run multiple iterations of

1 a pipeline route from one point to another, and they
2 can take into consideration those preferably avoidable
3 areas like federal grassland easements and those types
4 of things.

5 And so it's a good first pass at a route.

6 Q. Did they provide a report?

7 A. They did. So, every iteration of the
8 route, there is a report that's essentially "x" number
9 of crossings, "x" number of any kind of feature.

10 Q. And do you recall when they did that?

11 A. I'm the one that brought Terracon, or
12 Pivvot, into the project. That would have been third
13 quarter of 2021 for the initial route.

14 Q. So is Pivvot a company or is it the method
15 or program or model, whatever you want to call it,
16 that Terracon used?

17 A. The program and the company were synonymous
18 at one point. So a group of individuals developed the
19 program and it was called Pivvot, and then they
20 subsequently sold that product to Terracon.

21 Q. I see. Okay.

22 A. I believe that's the lineage.

23 Q. You said that the dispersion modeling is
24 not for route selection but simply to satisfy the
25 PHMSA requirement for HCAs.

1 But don't you think that the results of the
2 dispersion modeling would help the Board here decide
3 whether or not the pipeline is being routed in the
4 right place to protect landowners and others and
5 protect property?

6 A. Mr. Taylor, I'd like to rephrase what you
7 just said. I didn't say that it was simply to
8 identify the HCAs. I said that the dispersion
9 modeling is a tool to identify risk. And then we have
10 to take the design considerations, construction and
11 operation considerations or activities that we plan,
12 and mitigate the risk.

13 And so the dispersant model -- if we, in
14 using that, identify that the risk can't be mitigated
15 to the satisfaction of PHMSA or the IUB, et cetera,
16 then we have to -- we consider other alternatives.

17 Q. So, if the dispersion modeling results
18 persuade the IUB that they don't like that route, they
19 can change it; correct? Or they can force you to
20 change it just like North Dakota did; correct?

21 A. Well, I'm not going to project what the IUB
22 can and can't do. I will say this: As you know,
23 there are 230,000 miles of hazardous liquid pipelines
24 in this country. There are 47,000 miles of pipeline
25 in this state. Many of those run right through

1 cities. Major cities. And so they can coexist.

2 And, as we've said before, pipelines have
3 an extremely high reliability record and an extremely
4 good safety record. So pipelines can coexist with
5 urban areas, metropolitan areas, populated areas.

6 It comes down to how you identify and how
7 you manage risk. And that's where the dispersant
8 model is valuable.

9 Q. Remind me. Did Dakota Access go through
10 any cities?

11 A. Well, I can't remember exactly where the
12 343 miles were routed through this state. I'm sure
13 they skirted close to, if not through. But I do know,
14 in South Dakota, they're a heck of a lot closer to
15 Sioux Falls in some areas than the Summit pipeline.

16 And I will remind you that's a large
17 diameter crude line and, in my opinion, introduces a
18 lot more risk than this CO2 pipeline.

19 Q. Well, it may be that an oil pipeline would
20 have a leak or a rupture and the oil would spill out
21 and flow, but oil is not an asphyxiant, is it?

22 A. But it's flammable.

23 Q. It's not toxic, is it. Unless you drink
24 it, I suppose. But, I mean, just exposure.

25 A. Well, it's a different risk profile, but it

1 is a high-risk profile if in the unlikely event you
2 have a release and you have an ignition source.

3 Q. And natural gas is not a hazardous liquid,
4 is it.

5 A. No, not natural gas in gas form. But it is
6 a simple asphyxiant.

7 Q. Have you seen any dispersion modelings for
8 natural gas leaks or ruptures?

9 A. I have been involved in natural gas
10 projects and other -- natural gas liquid and other
11 liquid projects, crude and refined products projects,
12 where we've done EFRD and release modeling. Again, to
13 identify the risk.

14 But I have never shared those models. Even
15 with first responders, Mr. Taylor, you don't have to
16 show them the detailed output. What first responders,
17 in my experience -- and Mr. Dillon can speak to this
18 better than I can, but, in my experience, what they
19 want to know is where is my containment area. Is it
20 330 feet like the response book says for CO2 or is it
21 something less or something more, what could be the
22 potential impact in certain scenarios, and what kind
23 of equipment and resources would I need to respond to
24 that.

25 Q. But nearby residents or property owners

1 would want to know how far that CO2 is going to
2 disperse, wouldn't they?

3 A. And that's part of the -- that could be
4 part of a public awareness campaign is, as you say, if
5 there were a release, you take this action. And
6 that's part of a reverse 911. There are means of
7 notifying residents or potentially affected parties.

8 Q. But people can't know that unless they know
9 the dispersion modeling results, can they?

10 A. Mr. Taylor, I keep coming back to the same
11 thing. There are 47,000 miles of pipeline in this
12 state, and I would think it's probably a
13 high-probability guess on my part that none of the
14 impacted residences in and around those pipelines have
15 ever seen a dispersant model. Or a release model. Or
16 an emergency flow restriction device analysis.

17 Q. Well, maybe they didn't know enough to ask
18 at that time.

19 A. Well, or maybe it was -- maybe it was used
20 for the intended purpose. Is to identify the risk.
21 And then you've got regulatory bodies like PHMSA, like
22 the IUB, like other agencies, and you've got your
23 first responders and your emergency planners that help
24 manage that risk. And the operators of course.

25 Q. You told Mr. Jorde that PHMSA either

1 recommends or prohibits the release of the dispersion
2 modeling results.

3 Can you cite me to the PHMSA rule or
4 whatever you're referring to?

5 A. We can provide that. I can't cite that for
6 you.

7 Q. Is it a rule or do you know?

8 A. Again, we can provide information that I'm
9 using to formulate that response.

10 Q. You talked about claiming that PHMSA has a
11 50-foot setback rule. Isn't it correct that that rule
12 is a standard for the depth of ditches and not a
13 setback?

14 A. Well, that setback is coupled to a
15 three-foot depth of cover.

16 Q. Well, basically what it says is that if the
17 pipeline is closer than 50 feet from a structure, that
18 the ditch has to be deeper; correct?

19 A. Well, it doesn't say that, but it does say,
20 if I remember correctly, that if the pipeline is
21 buried deeper, that you potentially waive that setback
22 requirement.

23 Q. Well, I suppose that's another way of
24 looking at it, but it's the same thing. That if the
25 pipeline is closer than 50 feet, the ditch has to be a

1 certain depth; correct?

2 A. It has to be deeper than three feet.

3 Q. Yeah. But PHMSA isn't saying that the
4 pipeline has to be 50 feet away from a structure.

5 A. Correct. At least that's the way I
6 interpret it.

7 Q. And that's right.

8 You said that the purported benefit of this
9 pipeline is that there would be higher land prices and
10 higher corn prices because of the benefit to the
11 ethanol industry.

12 Was that a fair statement of what you said?

13 A. Well, what I hope I said was that by
14 helping the ethanol plants remain viable, expanding
15 their markets, that we could sustain the price of corn
16 and hopefully sustain land values. And, if they're
17 able to expand and drive up the demand for corn, that
18 may increase prices. It may not. It may increase
19 land values. It may not.

20 But I know if -- well, I don't know, but
21 based on history if the commodity price significantly
22 reduces -- I mean, most value in this state is tied to
23 the corn suitability rating. Or most ag land. So
24 you've got to have a market for that corn.

25 Q. Well, if there are higher land prices for

1 farmland, doesn't that make it harder for young
2 farmers to get started?

3 A. I can't speak to that, Mr. Taylor.

4 Q. And, if there are higher corn prices, isn't
5 that a disadvantage to livestock producers who buy
6 that corn to feed their animals?

7 A. I don't know. I can't speak to that.
8 You're talking about dry distiller grains?

9 Q. So one person's benefit could be another
10 person's detriment; correct?

11 A. Potentially. They may be one and the same.
12 They may be a farmer who is also a rancher.

13 Q. You said there might be other industries
14 besides ethanol that would use your pipeline.

15 What other industries can you think of?

16 A. Well, there's pre-combustion and
17 post-combustion. So fertilizer plants. If you're
18 talking post-combustion, it could be gas plants, other
19 industrial processes.

20 Q. Well, it's true, isn't it, that the
21 advantage you have right now with the ethanol plants
22 is you're just getting the CO2 from the fermentation
23 process, which is essentially pure CO2; correct?

24 A. It's a nearly pure CO2 with constituents
25 like oxygen and nitrogen. But it's nearly pure. So

1 it's more cost-effective to capture that CO2 than it
2 would be from a coal-fired power plant.

3 Q. So, if there's some other industry that
4 wants to put the CO2 on your pipeline, it would take
5 some extra equipment, extra expense, whatever, to
6 bring that CO2 to a condition that it could be put on
7 your pipeline; correct?

8 A. Yeah, assuming that's an industry other
9 than an ethanol plant. That's fair.

10 Q. I'll ask Mr. Pirolli about this, but, for
11 over two years now, all you've gotten for customers
12 are 13 ethanol plants; correct?

13 A. In the state of Iowa.

14 Q. Right. Well --

15 A. I've asked him the same question,
16 Mr. Taylor.

17 Q. But, even in the other states -- there may
18 be one fertilizer plant, I think, but otherwise it's
19 all ethanol plants in the other states, too, isn't it?

20 A. Well, I mean -- we have other plants. In
21 South Dakota and Minnesota. But, again, there's
22 multiple projects in play. So some ethanol plants, I
23 think, are on the sideline trying to decide which --
24 who is going to have the first move or advantage.

25 So there's a lot of opportunity out there,

1 hopefully we're successful in gaining some more, but
2 we have the capacity now and the throughput now to
3 justify this project.

4 Q. But, after two years or more, you still
5 don't have those signed; correct?

6 A. We have all the current plants signed under
7 contract, yes.

8 Q. Right. But the other ones you were talking
9 about.

10 A. I'm more respectful of Mr. Pirolli,
11 Mr. Taylor. Again, we've got enough capacity now to
12 justify the project.

13 I will say, Mr. Taylor, sorry to interrupt
14 your train of thought, with the footprint that we have
15 configured in this state, we could add -- essentially
16 double the number of plants with minimal impact. So
17 the pipeline mileage would be less than we're
18 currently asking for to be permitted in this
19 application. So it would be beneficial to those
20 plants and to, I think, the contribution to the state.

21 Q. But, if you add together the 13 plants you
22 have, the plants that Navigator has signed up in Iowa,
23 and the two plants that Wolf has signed up, there
24 aren't very many ethanol plants left beyond that, are
25 there. In Iowa.

1 A. There are others that I'm aware of.
2 Mr. Pirolli would have to give you the exact number.
3 But, as you said, there are other industries. So
4 there are other post-combustion opportunities. It may
5 be more costly on the front end, but that's an
6 arrangement between Summit and that business or that
7 industry to make that work.

8 Q. But that certainly is an extra expense and
9 extra challenge that those other plants would have
10 that the ethanol plants don't have; correct?

11 A. The cost of development could potentially
12 be higher, yes.

13 Q. In fact, the ethanol plants are just taking
14 the CO2 from the fermentation process, they aren't
15 taking the CO2 from their gas-fired energy system, are
16 they.

17 A. You're saying that they have combined heat
18 and power turbines?

19 Q. Well, let me ask it a different way. Aside
20 from the fermentation process, the ethanol plants get
21 their power for their boilers and their other
22 machinery that they operate in the ethanol process by
23 burning natural gas; correct?

24 A. I'm not sure if they all do. I know some
25 do.

1 Q. Well, I think Mr. Broghammer said they all
2 use gas. So I'll take his word for it.

3 A. Mr. Pirolli has a much deeper understanding
4 of the ethanol plants as he worked for an ethanol
5 plant or corporation before.

6 Q. But assume that the general energy system
7 in an ethanol plant is fired by gas. You're not
8 getting CO2 from any of that part of the process, are
9 you.

10 A. We are not at this time. And that's a
11 fraction of the CO2 that's generated in the
12 fermentation process. But that's a correct statement.

13 Q. But there are ways, are there not, for the
14 ethanol plants to qualify for low-carbon fuel
15 standards without CCS? Without the carbon capture and
16 storage.

17 A. Not really. I mean, Mr. Pirolli can speak
18 to this in more detail, but if you look at -- and
19 we've looked at this. If you look at installing a
20 solar farm or wind turbines to power the ethanol
21 facilities and the capture facilities, that may have a
22 three to five point reduction in their CI. By
23 capturing the CO2 emissions off the front end of that
24 process, that's a 25 to 30 point reduction in CI.

25 So CCS is far and away the most significant

1 way for an ethanol plant -- Mr. Broghammer and others
2 can speak to it better than I can, but it's by far and
3 away the best option.

4 Q. I will ask Mr. Broghammer. In fact, I did
5 in his deposition.

6 A. Hopefully he said the same thing.

7 Q. If it were not for the 45Q and 45Z tax
8 credits, would Summit even be doing this project?

9 A. Well, as I mentioned earlier, they won't be
10 the only revenue stream for this project. But it is a
11 contributor. Absolutely.

12 Q. Well, the question was would Summit be
13 doing this project without those tax credits?

14 A. You'll have to discuss economics with
15 Mr. Pirolli. I mean, I generally understand the
16 economics, but I can't tell you if it's feasible
17 without those or not.

18 Q. I guess I would have thought the chief
19 operating officer would know that much at least.

20 A. Well, I do know that they're available.
21 And, if they're available, and we can take advantage
22 of that, that will contribute to our economics.

23 Q. You told Mr. Jorde, I believe, when he was
24 asking you about the geohazard review that you did, or
25 that Summit did, that there was a phase one and phase

1 two. I wasn't quite sure what those two phases are.

2 A. Phase one is a desktop where you evaluate
3 what geohazards are present. And those are either
4 what's available from geological services or what
5 we've discovered in our surveys.

6 And then, if we think that the risk
7 warrants -- if we, in consultation with our
8 consultants, think that the risk warrants a phase
9 two -- so phase one is essentially a desktop analysis.
10 Phase two is a field-level analysis.

11 And so, if the phase one risk -- and the
12 risk being the proximity of the geohazard to the
13 pipeline. Has that geohazard moved in the last 10,
14 20, 30, 40 years, those kinds of things, then, if it's
15 warranted, then we complete a phase two analysis.

16 And typically -- and I can't remember off
17 the top of my head in Iowa. Mr. Schovanec could
18 probably address. Typically that information is
19 shared with, you know, state geological officials.

20 Q. And is there a report from that geohazard
21 review?

22 A. There is a report. I can't tell you off
23 the top of my head if I've seen a report for the phase
24 one that's done in Iowa. But there either is or will
25 be a report.

1 Q. Isn't that something the Board should have?

2 A. I have no issue with providing that report.

3 Q. So when will that be produced?

4 A. Mr. Taylor, Mr. Schovanec will have to tell
5 you if that report is available. Or when it will be
6 available.

7 Q. Mr. Whipple asked you about the pipeline
8 being close to or inside city limits. As I looked at
9 Exhibit B, which is the detailed maps that were filed
10 with Summit's application, it looked to me like the
11 pipeline crosses into the city limits of New Hampton,
12 near the south boundary of Charles City, close to the
13 city limits of Rockford, close to the city limits of
14 Gillett Grove, crosses into the city limits of
15 Goldfield, it's near the Eagle Grove city limits, it's
16 close to the Dana city limits, it crosses into the
17 Nevada city limits, it touches city limits of
18 Superior, it touches city limits of Earling, it
19 crosses into city limits of Shenandoah, and close to
20 the city limits of Merrill.

21 Do all those sound correct?

22 A. Well, I don't have those memorized, but I
23 can tell you everywhere that we're connecting to an
24 ethanol plant is typically in or near city limits.

25 Q. And would you agree that many, if not most,

1 of those cities probably have plans for expansion and
2 development beyond the current city limits?

3 A. Again, we covered that this morning,
4 Mr. Taylor, but I'll repeat that we've worked with all
5 of these municipalities to the extent possible to
6 identify where they had economic development plans.

7 I'm not confirming that we've got those
8 plans from every single one of those that you
9 mentioned, but where we had that information, then we
10 took that into consideration.

11 And, again, with the routing, as I
12 mentioned before, there are many, many, many features
13 and/or avoidance areas and/or constraints. And so
14 navigating into an ethanol plant that is often in one
15 of these areas, we took the most practical route with
16 the least interference or restrictions to get into the
17 plant.

18 Q. So it's more important to get the pipe to
19 the ethanol plant than it is to try to protect the
20 people in those cities?

21 A. No, that's not what I said. I said we are
22 trying to find the best route into a plant to avoid as
23 many areas as possible that may be restrictive,
24 including the type you just mentioned.

25 However, the business model is to capture

1 ethanol -- or CO2, I'm sorry, from the ethanol plants.
2 So we have to connect to those plants.

3 Q. So, even with what you're saying, it seems
4 to me it's more important to connect to the ethanol
5 plants than it is to avoid those cities and the risks
6 that those cities are concerned about.

7 MR. LEONARD: Objection. Asked and
8 answered.

9 MR. TAYLOR: I'll move on.

10 BOARD CHAIR HELLAND: Thanks, Mr. Taylor.

11 BY MR. TAYLOR:

12 Q. I think you said in response to Mr. Whipple
13 that the city of Earling -- that Summit didn't know
14 until fairly recently that that was a problem. But
15 wasn't that issue raised at the informational meeting
16 back in October of 2021 in Harlan?

17 A. I never said anything about it not being a
18 problem. I just said that our team has expended a lot
19 of effort, whether that was satisfactory or not, to
20 try to make sure that we understood economic
21 development plans from these communities.

22 Q. But do you agree that the concern about
23 being close to the city of Earling was brought up at
24 the informational meeting in October of 2021?

25 A. Mr. Taylor, we conducted 30 informational

1 meetings in September and October of '21. So I can't
2 remember that particular detail, no.

3 Q. I'm looking at your educational and
4 professional background. It looks like you've worked
5 in the pipeline industry for a few years.

6 A. Yeah, pipeline, midstream, upstream. Yes.

7 Q. And how many of those were oil pipelines?

8 A. I mean, my whole career has been in the
9 energy business. So it's oil, gas, refined products,
10 ethanol in Brazil, and now CO2. Natural gas.

11 Q. What I'm getting at is that for oil
12 pipelines, how is the oil delivered to the oil
13 pipeline from the well, so to speak.

14 A. From a gathering line. Or occasionally
15 there's truck off-loading locations. Preference is a
16 gathering line. A pipeline. In my experience.

17 Q. Well, if there were a spot shipper, so to
18 speak -- maybe I'm using the wrong term, but somebody
19 who just wants on a very short term or infrequently to
20 ship oil on the pipeline, the main pipeline, how does
21 that oil get to that main pipeline?

22 A. You're talking about crude oil, not CO2.

23 Q. Right. Crude oil.

24 A. Again, if it's -- I mean, it's a
25 multifaceted scenario. Right? So, if it's a producer

1 that's got a near-term need, then -- I worked for
2 Kinder Morgan. Ran their projects in engineering and
3 then ran their operation.

4 So, if you come to me and said, "I've got
5 'x' number of barrels for six months," I would suggest
6 you put up the capital to put in the infrastructure to
7 connect to the pipeline, and, if we had the capacity
8 and you can meet the tariff requirements, you can ship
9 on the pipeline.

10 Q. What if it's just like a month-to-month
11 thing?

12 A. Again, that's a business decision.

13 Q. But oftentimes it would be transported by
14 truck? Or maybe even rail?

15 A. Yeah, I mean, you probably remember that
16 there was a lot of rail shipments out of North Dakota
17 in 2013, '14. And, you know, the preference was
18 pipeline. And that's why Dakota Access was built.
19 For one reason. And I built a pipeline out of North
20 Dakota into Wyoming to move that product on pipeline
21 versus rail.

22 Q. I'm talking about just the way the spot
23 shipper would get the oil to the main pipeline.
24 That's what I mean.

25 A. That's one method.

1 Q. I think you told Mr. Jorde that capturing
2 the carbon dioxide would require some machinery and
3 equipment at the ethanol plant to capture that carbon
4 dioxide?

5 A. Correct.

6 Q. Just kind of give us a brief description of
7 what that equipment is like.

8 A. So we'll receive the CO2 at near
9 atmospheric pressure. So we'll put it through a
10 package that's called a blower skid. It increases the
11 pressure to inject into the suction side of the
12 compression train. So you have the blower skid. Then
13 you have the compression skid. Which is a series of
14 compressors that increase the pressure. And, with
15 that, the temperature increases as well.

16 And then in the latter stages of those --
17 so you'll need multi-stage compression. All on one
18 large skid. And we'll have a dehydration unit that
19 pulls the water off of that train in the latter stages
20 of decompression. So you'll have three big package
21 units. And then, on the back side, we'll have a
22 discharge pump that discharges the dense phase CO2
23 into the pipeline.

24 Q. If I read Mr. Phillips' Ernst & Young
25 report correctly, that capture equipment for each

1 ethanol plant would cost several million dollars.

2 Does that sound right?

3 A. That's correct.

4 Q. And I think he said 23 million.

5 Does that sound right?

6 A. Well, the capital cost for the capture
7 facilities -- you know, depending on the size of the
8 facilities and if it's a one-compressor,
9 two-compressor, or three-compressor train, one blower
10 skid or two, it could range from that fifteen to
11 twenty-five million dollar capital investment.

12 Q. And is one advantage of your business plan,
13 at least with the ethanol plants, is that Summit bears
14 that expense?

15 A. I mean, again, I'm not familiar with all
16 the commercial terms of the offtake agreements, but,
17 from a capital outlay perspective, I would think it
18 would be beneficial for the ethanol plant that they do
19 not have to finance the installation of the capture
20 equipment.

21 MR. TAYLOR: That's all the questions I
22 have. Thank you.

23 BOARD CHAIR HELLAND: Thank you.

24 Ms. Ryon.

25 MS. RYON: Thank you.

1 CROSS-EXAMINATION

2 BY MS. RYON:

3 Q. Good afternoon, Mr. Powell.

4 A. Good afternoon.

5 Q. I want to start with going through your
6 prefiled testimony and asking some more specificity
7 and clarity about some of the things that you wrote
8 there.

9 And I'm going to start on page 5. The very
10 first line you say "demand for the project is high."

11 Can you tell me how you measure demand?

12 A. With, at least in my opinion, that it's
13 measured by the amount of volume we have contracted.

14 Q. So you've measured demand after
15 establishing the project.

16 A. Well, the 32 plants, the initial 32 plants,
17 Summit Ag had an agreement with those plants before
18 they formed the management team.

19 Q. Do you know how early Summit Ag had
20 agreements with those plants?

21 A. And I think that's a true statement. I
22 know they had -- had those discussions. I think they
23 had agreements in place. Mr. Pirolli can confirm.

24 No, I do not.

25 Q. On page 6 in the second line, you mention

1 additional rural jobs.

2 What specifically will be the additional
3 rural jobs?

4 A. Well, it's the jobs associated with the
5 capture facilities and the pipeline. So direct hires.
6 And then indirect hires. So service providers,
7 technicians. Commodity type. Oil, grease, gaskets.
8 Those kinds of things.

9 Q. How many of those types of jobs will there
10 be?

11 A. The direct jobs in Iowa, if I remember
12 correctly, are in the 45 to 50 range. Indirect are
13 typically three times. So I believe it was in the 170
14 range. And then there's another category. But, in my
15 OpEx budget, I'm just accounted for what we think will
16 be our buildup of direct hires and our service
17 providers.

18 Q. Can you tell me how many of those will be
19 specifically rural jobs?

20 A. Most of those will be rural jobs.

21 Q. And, just for clarity, can you tell me what
22 the distinction is between direct and indirect?

23 A. Direct would be a Summit employee.
24 Indirect would be a third-party contractor or service
25 provider.

1 Q. And you would presumably contract with
2 companies that are already in existence.

3 A. If they're available, yes.

4 Q. On page 7 of your direct testimony, you
5 mention a backup operations control center. At that
6 point in time, you didn't have a location for it.

7 Has there been a location determined for
8 that yet?

9 A. No.

10 Q. Do you know when that will be determined?

11 A. Probably when we've secured our permits.
12 As we go into construction. Because it takes time to
13 make sure that we've got infrastructure in place,
14 et cetera.

15 Q. Do you know if it will be in Iowa or will
16 it be in one of the other states?

17 A. To be determined, but it will not be in
18 this -- in the Des Moines or Ames area. Because
19 that's where the primary control center will be. So,
20 if there were a catastrophic event, hopefully not, in
21 that area, then we would not want to jeopardize both
22 control centers. So it could be in Sioux City, it
23 could be in Sioux Falls, it could be in Bismarck.
24 Somewhere else along the system.

25 Q. Then you also say that the project is being

1 designed to transport supercritical or dense phase
2 carbon dioxide.

3 Will it be in the supercritical phase for
4 the entire time that it's in the pipeline?

5 A. As I mentioned to Mr. Jorde this morning,
6 there could be occasion where the product falls below
7 the critical temperature, the threshold, and then it
8 would fall back into a liquid phase versus a dense
9 phase.

10 Q. Are you able to predict at what points on
11 the pipeline that will happen?

12 A. We have done a temperature study. And so
13 evaluated -- or made assumptions around what the
14 temperature will be at discharge and how quickly that
15 will dissipate in the pipeline. It depends on ground
16 temperature, et cetera. And then where that could
17 happen and at what pressures that could happen.

18 Q. So, if it depends on ground temperature,
19 does that mean that it's -- you know, in Iowa, there's
20 a pretty big difference in ground temperature between
21 summer and winter. So will the phase of the carbon
22 dioxide be different in different seasons?

23 A. No, it doesn't -- the ground temperature
24 doesn't have that big of an impact. It's really just
25 how quickly the CO2 stabilizes as it leaves the

1 discharge point in the capture facility, and is it one
2 mile, two miles, or three miles down the pipeline
3 before it stabilizes to a normal temperature.

4 Q. By "normal temperature," what do you mean
5 by "normal"?

6 A. Mr. Schovanec is probably better suited to
7 tell you this, but it's probably in that 60- to
8 70-degree range. It may be higher. He's better
9 suited to tell you the details. He's the real
10 engineer.

11 Q. I'll ask him then.

12 So you also mention that, in addition to
13 remote control operations, there will be local
14 automated control.

15 Where will local automated control be?

16 A. So there will be automated control -- local
17 control at the capture facilities, and there will
18 actually be hands-off auto -- the valves will be
19 actuated, main line valves, and so there will be local
20 control at the valve. So someone on-site could cycle
21 the valve manually -- when I say "manually," not with
22 a hand wheel, but with a switch on-site. So it's not
23 totally reliant on somebody sitting in the control
24 center.

25 Q. You also say that operations personnel will

1 be located in close proximity to those facilities.

2 What do you mean by "close proximity"?

3 A. Well, in the capture facilities, they will
4 be. And then along the pipeline -- I mean, we haven't
5 confirmed where we'll have operations offices, if you
6 will, and maintenance workshops. To be determined.
7 But we'll have people that live along the pipeline.

8 So they're not all going to be dispatched
9 out of Sioux City to come -- to span a hundred miles
10 back east. So we'll have, hopefully, people that live
11 along the pipeline route that don't have to report to
12 the office every day that can perform activities,
13 whether it's damage prevention or other activities,
14 along the pipeline.

15 Q. You said "hopefully." So that means you're
16 not certain?

17 A. Well, we've got to find those people and
18 train those people up. So we're confident we can find
19 them. From tech schools and other industries. But
20 we've got to start that process.

21 We have to have those personnel. So
22 whether we have to import them or we find them
23 locally.

24 Q. Do you have any sort of guideline or ideal
25 for a certain number of miles in between people who

1 are stationed along the route?

2 A. No. It's -- I mean, I've operated pipeline
3 systems where it's 75 to 100 miles between where
4 someone may be stationed. It really depends on the
5 activities that are ongoing, if there's a capture
6 facility, if there's a pump station, if there's a
7 launcher/receiver, those types of activities.

8 Q. And, along those lines, you mentioned that
9 there will be personnel trained in maintenance and
10 emergency response procedures.

11 Will these be different personnel than the
12 ones we were just discussing?

13 A. Our operations folks will all be trained in
14 emergency response. Some will be trained in
15 maintenance activities and some will not.

16 Q. And I asked how far apart they were going
17 to be, but I didn't ask how many, in general, are you
18 looking to have in Iowa?

19 A. Along the pipeline route now, we're
20 projecting about 220, but we've got -- we'll bring on
21 our operations supervisors as soon as we get permitted
22 and start construction. And then they'll build up
23 their own organization.

24 Q. And if there were some sort of emergency,
25 those would be the people who would sort of respond

1 initially?

2 A. The Summit employees, first responders in
3 the communities, in the area, and then we'll have
4 to -- Mr. Dillon will have to determine or make a
5 recommendation around -- OSRO is a bad acronym,
6 because it's oil spill response, but those third-party
7 emergency response-type folks. To see if we need
8 those to augment the other resources available.

9 Q. I know earlier today you mentioned that you
10 had talked with pretty much every emergency response
11 team along the pipeline route.

12 Have you talked with any local hospitals to
13 see what kinds of needs they might have?

14 A. I'm not sure if Mr. Dillon has. He'll
15 testify later in this proceeding.

16 Q. I'll ask him.

17 You also discuss a little bit about the
18 incident in Satartia. And you pointed out that one of
19 the reasons that PHMSA found for that incident was
20 soil instability.

21 Do you recall what kind of soil that
22 pipeline was buried in?

23 A. I don't, but, living in that part of the
24 world, I'm assuming it was probably high clay index.

25 Q. Would you be surprised to know that it was

1 loess soil?

2 A. What kind of soil? Excuse me?

3 Q. Loess. L-o-e-s-s.

4 A. I know that a proper geohazard analysis
5 wasn't performed.

6 Q. Do you know what the topography was?

7 A. I do. I've been there.

8 Q. Could you describe it?

9 A. Yeah, so it's a decline -- the town of
10 Satartia is very small. In fact, I would say there's
11 probably 12 to 15 houses there, and it borders, I
12 believe, it's the Yazoo River. The pipeline is uphill
13 maybe 100, 150 feet, and it's to the north of where
14 the town of Satartia sits. So there's a roadway and
15 then it sloughs off and goes downhill, and that's
16 where the failure occurred.

17 Q. Do you know if there are any loess hills in
18 Iowa?

19 A. I mean, when you get into western Iowa, the
20 topography changes for sure. And that's why the
21 geohazard analysis is important.

22 Q. Given that that was the kind of topography
23 where the Satartia incident occurred, is that the kind
24 of area where you would do a phase two analysis?

25 A. Again, it depends on if you identify the

1 hazard. And, if you do, you do a phase two. It
2 doesn't -- not only do you have to do the appropriate
3 level of analysis, you have to make sure that that's
4 in your risk assessment and you have to make sure that
5 that's in your integrity management program and you
6 have to make sure that that's in your operating and
7 maintenance procedures.

8 For instance, in my experience, in that
9 part of the world where you have significant rainfall
10 events in a very short period of time, anytime you
11 have an event like that you immediately dispatch
12 people, either aerial surveillance or on foot or in a
13 vehicle, to look at these high-risk areas and make
14 sure that you still have the integrity after the event
15 that you had before the event. And that wasn't done.

16 Q. I have additional questions about your
17 public awareness program. You said that you will
18 incorporate all could-affect HCAs into the public
19 awareness program.

20 So, before I get into the specifics of
21 that, we've heard a lot about high-consequence areas
22 today. Could you define that? I'm not sure I ever
23 heard a good explanation of what exactly that is.

24 A. Well, as PHMSA defines a high-consequence
25 area, it's either a high-populated area, which is

1 50,000 people or more with a density of 1,000 people
2 per square mile, or it's an other populated area,
3 which could be a lower population and less density, or
4 less dense, and then it's navigable waterways and then
5 it's eco-sensitive areas.

6 Q. So, when it comes to people, it's based
7 entirely on population, not on use.

8 A. Not on what? I'm sorry?

9 Q. Use.

10 A. I think that's correct. From PHMSA's
11 definition.

12 Q. So if, for example, there were an
13 educational facility with a large campus near the
14 pipeline, it wouldn't have a great population so it
15 wouldn't be a high-consequence area.

16 A. It may be an other-populated area.

17 Q. May be.

18 A. Again, it depends on how many people may be
19 in that facility. But just because PHMSA doesn't
20 classify it as a high-consequence area doesn't mean
21 that an operator doesn't take that into account for
22 their risk assessment.

23 Q. Do you take those things into consideration
24 for determining the route?

25 A. We try to, yes.

1 Q. So, going back to your public awareness
2 program, you said you incorporate all could-affect
3 HCAs. What is a could-affect HCA?

4 A. Well, they're one and the same. The
5 difference is a direct effect is where the pipeline
6 traverses that area. A could-affect is where the
7 pipeline is in the vicinity but doesn't physically
8 cross it.

9 And so what we did on the dispersant
10 modeling was looked at tracer scenarios. So anywhere
11 that the pipeline was within I believe it was two
12 miles of a could-affect, not the HCA but a
13 could-affect, that's when we looked at the
14 terrain-aided or overland flow.

15 And then also, in the could-affect areas,
16 we -- the boundaries -- we established the boundaries
17 of the could affects as a concentration of
18 15,000 parts per million, versus conservative, versus
19 the 40,000 parts per million that Mr. Jorde showed on
20 the buffer areas of the Navigator map.

21 So the could-affect area extended out
22 broader than I would argue it normally would. And
23 then we went two miles beyond that and did further
24 evaluation.

25 Q. So it says you're incorporating all

1 could-affect HCAs in the public awareness program.

2 A. If I said that, I misspoke, because the
3 public awareness program will affect every landowner
4 whether the pipeline crosses their property or they're
5 in the vicinity of the pipeline. So, if you're in the
6 area of the pipeline, you will be part of the public
7 awareness program.

8 Q. And "in the area," do you look at a certain
9 sort of radius around it? Or within a certain
10 distance? How do you define that?

11 A. There's some discretion there. Mr. Dillon
12 can probably tell you what he's planning to do when he
13 testifies. But, generally, you want to take a wide
14 swath. So anybody that could potentially be impacted
15 from road closures, any type of business interruption,
16 direct affects obviously if the pipeline is crossing
17 their property, you want to incorporate those. I
18 think it's prudent to incorporate those people and
19 those businesses into your public awareness plan.

20 Q. Now, I want to follow up on some of the
21 questions you were asked earlier today. And I've
22 tried to keep these somewhat organized. So I'm going
23 to try not to repeat myself. I apologize if I do.

24 Earlier today you said you'd reached
25 agreement with 73 percent of the landowners.

1 Is that right?

2 A. Yes.

3 Q. Just for clarification, is that 73 percent
4 of total landowners, total miles, or total parcels?

5 A. It's generally within 1 percent. We keep
6 metrics on number of tracts or parcels, mileage, and
7 number of landowners.

8 Mr. Rorie can tell you exactly, but 73
9 percent -- I always look at mileage. It's actually
10 about 73 1/2 percent. That's mileage. So tracts and
11 landowners will be within a percent of that typically.

12 Q. There was also some discussion about water
13 usage and some water well permits for this process.

14 Are those permits being obtained by Summit
15 Carbon Solutions, LLC?

16 A. No, they're being obtained by the capture
17 entity. So Summit Capture, I probably have got the
18 name wrong, LLC. But it's the capture facility. We
19 have the capture, the pipeline, and the sequestration.
20 The capture facility, or the capture entity or
21 business, will secure those permits.

22 Q. What's the corporate relationship? Is the
23 capture facility -- is Summit Carbon Solutions a
24 parent company of the capture facilities or how is
25 that relationship structured?

1 A. Yes. I believe that's correct.

2 Q. Are the capture facilities also LLCs?

3 A. Not that I'm aware of. Mr. Pirolli can
4 confirm the structure.

5 Q. I'll ask him about it. You also recently
6 mentioned the total number of hazardous liquid
7 pipelines in the U.S. And it sounded like a few
8 hundred thousand.

9 Is that right?

10 A. I believe it's about 230,000.

11 Q. How many of those miles are carbon dioxide
12 pipelines?

13 A. About 5,300. In about 11 states.
14 Primarily Wyoming, Texas, New Mexico.

15 Q. I want to follow up a little bit more on
16 your discussion of some of the emergency response
17 issues.

18 You said a couple of different times that
19 volunteer fire departments tend to have a high
20 turnover. What's your source for that information?

21 A. The fire chiefs themselves. I didn't
22 realize until I -- Rod meets -- Mr. Dillon meets with
23 all these officials. But I've met with several across
24 the footprint, and that's usually one of the first
25 things that they mention is, "How often will you

1 provide training, and will you do ad hoc training,
2 because we have a high turnover."

3 I always thought that volunteer firemen
4 were there because that's what they like to do, not
5 what they're getting paid to do, and so there wasn't a
6 turnover. But apparently there is a high turnover.

7 Now, I don't know if that's consistent
8 across the state of Iowa in every area, but I have
9 heard that many times.

10 Q. You also talked about providing tactical
11 response information to landowners in addition to
12 emergency response agencies.

13 What would be specific recommendations to
14 landowners?

15 A. Well, Rod will work -- Rod and his team
16 will work with the emergency response professionals
17 and the first responders. They'll develop response
18 plans depending on the type of release or incident
19 they're responding to, and then they will make the
20 landowner aware of what that might look like.

21 So a for instance -- and Mr. Dillon will
22 have to speak in more detail, but if, for instance, we
23 had a release, you're half a mile from the pipeline,
24 and so the risk is "x" and you shelter in place. And
25 we'll have a reverse 911 for information, and this is

1 how you'll be contacted by a first responder if you
2 will be, et cetera. Those kind of things. So, if an
3 event does happen, then a landowner has some idea of
4 what to expect.

5 Q. Is sheltering in place a common
6 recommendation?

7 A. Yes, to my understanding it is. And we
8 have some folks that can testify to that in more
9 detail later in the week. But, yes, it is.

10 Q. Does sheltering in place help someone who
11 is, say, working in the field?

12 A. Well, again, it depends on where they are
13 and with respect to proximity to an incident, what the
14 atmospheric conditions are, et cetera.

15 I mean, we modeled worst case. So we
16 modeled no crops in the field, no trees, worst-case
17 environmental conditions as I discussed with Mr. Jorde
18 this morning.

19 So you have to take into account any
20 situation.

21 Q. What would your advice be to someone who
22 was out working in the field and didn't have any way
23 to get to a building because all they had was
24 combustion engines for transportation?

25 A. In what scenario?

1 Q. A farmer.

2 A. But in what scenario are you talking about?
3 What advice would I provide for what scenario.

4 Q. Any scenario. Any rupture.

5 A. Well, what I would tell you is that
6 likelihood or the probability of a release is going to
7 be extremely low. And if you see -- if you hear --
8 it's like any product. Whether it's CO2 or something
9 else.

10 Any other commodity, if you hear a noise or
11 see a cloud, and in CO2 release you will see a vapor
12 cloud, then, yes, you go in the other direction, not
13 in the direction toward the incident.

14 Q. What about other facilities. Schools or
15 nursing homes. Will those facilities get some sort of
16 tactical response information?

17 A. Any business or landowner or homeowner
18 that's in the proximity in that -- once Rod and the
19 first responders determine what those responses look
20 like and what the perimeter boundaries look like, if
21 they're in those areas, they will be notified and
22 communicated to.

23 Q. And I've heard you mentioned a couple of
24 times reverse 911. Could you explain to me how that
25 works?

1 A. Well, it's my understanding that some
2 municipalities, I don't think all, have a reverse 911
3 number so you can call and get information.

4 Mr. Dillon can explain how it works in detail. I'm
5 not intimately familiar with it.

6 Q. Do you have any idea of how many
7 communities along the pipeline route have reverse 911
8 systems?

9 A. I do not, but that's the information that
10 Rod will gather working with these first responder
11 groups over the next six to twelve months.

12 Q. So he hasn't gathered that information yet.

13 A. I think he has a conceptual idea, but I
14 don't know if he's spoken to every one. But he'll be
15 available to ask that question.

16 Q. With respect to the ethanol plants, I
17 noticed you refer to the ethanol plants as your
18 "partners." Do the ethanol plants have an ownership
19 interest in Summit?

20 A. I'd defer that question to Mr. Pirolli.

21 Q. You don't know if they have an ownership
22 interest.

23 A. Well, they don't have an ownership -- let
24 me say I'm not sure if any of the ethanol plants or
25 their shareholders have invested in Summit.

1 As I told Mr. Jorde this morning, I don't
2 know all the 400-plus investors in Summit Carbon
3 Solutions. So some of those folks who either are
4 shareholders at the ethanol plant or employees of the
5 ethanol plant may be investors, but I don't know that.
6 So I can't confirm.

7 Q. But ethanol plants who are on your route,
8 they are not considered -- they don't have an
9 ownership interest. If they have an ownership
10 interest, they would have had to pursue it some other
11 way.

12 A. I don't know if they have direct investment
13 or not, but Mr. Pirolli can answer that question.

14 Q. Will the ethanol plants share in the 45Q
15 tax credits?

16 A. Again, you're getting into the terms of the
17 offtake agreements, and that's not my area of
18 expertise. Mr. Pirolli can answer that question.

19 Q. Well, the 45Q tax credits will be a large
20 source of revenue for Summit; correct?

21 A. That's fair.

22 Q. And shouldn't you know, as COO, if part of
23 that large portion of revenue is going to be shared
24 with somebody else?

25 A. I've heard that a couple times today from

1 Mr. Jorde. My responsibility is design, construction,
2 and operation of the facility. I'm not the finance
3 guy and I'm not the commercial guy.

4 So they tell me that -- I tell them how
5 much it's going to cost, and they tell me that we can
6 finance that and we have an economic model that's
7 viable with that type of capital expenditure and that
8 type of operating cost. But, no, I don't have the
9 details of that.

10 Q. Who is responsible for the big picture
11 economic scenario?

12 A. Well, that's Mr. Pirolli and that's our
13 chief financial officer, which at this time is Jon
14 Probst, and that's Lee Blank, the CEO.

15 Q. Are either of them testifying?

16 A. Mr. Pirolli is.

17 Q. He's the CFO?

18 A. He's the chief commercial officer. CCO.
19 Jon Probst is the finance guy, he is the CFO, and Lee
20 is the CEO.

21 Q. But neither of those last two individuals
22 are testifying.

23 A. They are not.

24 Q. You may need to have me ask this to someone
25 else. With respect to the 45Q tax credits, has Summit

1 used any tax equity financing?

2 A. We haven't used any tax equity financing.

3 But -- I know the finance team has evaluated that, but
4 I can't tell you the specifics.

5 Q. You've mentioned several times that Summit
6 has other sources of revenue. What are those sources
7 of revenue?

8 A. I hate to keep doing this, but --
9 Mr. Pirolli can confirm, but there's tax credits -- I
10 mean, there's carbon credits and selling carbon
11 credits. And Mr. Pirolli can -- he can share the
12 details around those and other opportunities.

13 I don't want him building my pipeline so he
14 doesn't want me in his commercial business.

15 Q. And you said that the ethanol plants will
16 have the flexibility to sell into lower carbon
17 markets. And I think at some point you mentioned
18 potential international markets.

19 Could you elaborate a little bit on that?

20 A. Well, I just -- again, I'm not the
21 commercial person, but, you know, there are obviously
22 other markets outside of the West Coast and Canada
23 that potentially a low-carbon fuel supplier could sell
24 into. Now, is it economically viable for them? I
25 can't tell you that. I just know the markets from,

1 what I understand, are expanding.

2 Q. So you weren't speaking of any specific
3 markets.

4 A. No.

5 Q. Again, you said it allows the flexibility
6 for the ethanol plants to sell into low-carbon fuel
7 markets. But there's no guarantee that they will.

8 A. That's a choice for the ethanol provider.

9 Q. When it came to choosing the route for the
10 pipeline, did Summit consult with any other pipeline
11 companies to see if there could be any coordination to
12 avoid overlapping pipelines?

13 A. You mean existing pipelines or planned
14 pipelines?

15 Q. Either.

16 A. Well, you always have some communication
17 with existing pipelines because you've got to
18 understand what crossing agreements, crossing
19 requirements, et cetera, are. But, as far as
20 Navigator or Wolf or others, no.

21 Q. Did Summit consult with any regional or
22 national organizations to discuss how Summit's project
23 would fit into a national carbon dioxide
24 infrastructure?

25 A. No. I personally did not. I know we've

1 had some conversations with the Department of Energy.
2 And I know PHMSA obviously has a connection to the
3 Department of Energy and how CCS infrastructure may
4 build out in the future. But I have not been part of
5 those conversations if they have taken place.

6 Q. Would there be another witness testifying
7 who I could ask that question to?

8 A. The only one that I'm aware of that's
9 testifying may be Jim, but I'm not sure if he was
10 party to those conversations. If there were any of
11 those conversations.

12 Q. Is there someone who isn't testifying who
13 would have been part of those conversations?

14 A. Not that I'm aware of.

15 Q. There's been a lot of talk about what the
16 intent of the pipeline is. And the intent is for the
17 carbon dioxide to be sequestered.

18 Is that a requirement in the contract with
19 the ethanol plants?

20 MR. LEONARD: Objection.

21 BOARD CHAIR HELLAND: State your objection.

22 MR. LEONARD: Questions regarding the
23 content of the offtake agreements, those have been
24 held by the ALJ to be confidential subject to
25 attorney's eyes only. If the question is going to be

1 asked, it needs to be in closed session, and it needs
2 to be in front of those who have signed that
3 attorney's eyes only confidentiality order.

4 MS. RYON: I'll rephrase.

5 BOARD CHAIR HELLAND: Thank you.

6 BY MS. RYON:

7 Q. Is the intent for what happens to the
8 carbon dioxide the type of provision that would be
9 addressed in the offtake agreement?

10 A. I can't answer that. I'm not intimately
11 familiar with the offtake agreements.

12 Q. Then how do you know what the intent is of
13 the ethanol plants?

14 A. How do I know what the intent of the
15 ethanol plants is?

16 Q. Yes.

17 A. Well, the intent, for me, is that we're
18 going to capture a certain volume of CO2 that's been
19 projected from their operations personnel, and we're
20 going to put it in the pipeline and transport it and
21 sequester it in North Dakota. So that's my only
22 insight into the intent.

23 Q. Earlier when you were talking to Mr. Jorde
24 you said that it's your understanding that Summit is
25 incorporated in Delaware.

1 Do you know for sure?

2 A. We are.

3 Q. Do you know what additional states Summit
4 has registered with the Secretary of State in?

5 A. I do not.

6 Q. You indicated that a number of states,
7 including Iowa, are looking at low-carbon fuel
8 standards.

9 What's your source for saying that about
10 Iowa?

11 A. It's just what I read and hear from our
12 management team. So it's Colorado and it's Iowa and
13 it's New Mexico and it's Texas. So I don't know what
14 the timelines are for those. Minnesota.

15 Q. But you can't identify a specific source
16 with respect to Iowa.

17 A. No.

18 Q. Now, there was some discussion about the
19 potential for enhanced oil recovery. Which is
20 fracking; correct?

21 A. Yes.

22 Q. And, if I recall correctly, you said that
23 the oxygen level in the carbon dioxide is not correct
24 for use in fracking?

25 A. Correct.

1 Q. And that it would require construction of
2 a -- I think you called it a liquefaction facility?

3 A. Correct.

4 Q. What all would be entailed in building a
5 liquefaction facility?

6 A. Well, it would be serial number one. So I
7 really wouldn't want to be the first to build a
8 liquefaction facility of the size and scale it would
9 take to reduce the oxygen content of 18 million tons
10 of CO2.

11 And it's really irrelevant because, as
12 we've said many times today, the CO2 that will be
13 captured from these ethanol facilities in Iowa will be
14 sequestered permanently in North Dakota.

15 Q. You just said you don't have any source for
16 knowing that that's the intent of the ethanol plants.

17 A. Well, I know whatever CO2 is transported
18 from the ethanol plants will be sequestered in North
19 Dakota. Because we don't have a means nor is there a
20 plan to provide a means to transport that CO2 to an
21 area where it can be used for enhanced oil recovery.
22 There's no permit application in place that would
23 allow that to happen.

24 Q. Would Summit be willing to accept a
25 condition on the permit that the carbon dioxide could

1 only be transported for the purpose of permanent
2 sequestration?

3 A. From the existing 12 facilities that we
4 currently have under contract?

5 Q. Sure.

6 A. Again, I'd have to consult with our legal
7 team and the management team, but we would entertain
8 that.

9 Q. So, when you were talking about your
10 professional experience, you mentioned that you had
11 experience working with ethanol in Brazil.

12 Can you tell me when that was?

13 A. That was 2009 time frame. I worked with
14 BP, and we had a project -- actually had a sugarcane
15 ethanol project that was going in the wrong direction,
16 and they sent me to Brazil for six months to get it on
17 the right track.

18 Q. Was that low-carbon ethanol?

19 A. No, that was -- that was just ethanol.

20 Q. Where -- I know that's been a little while,
21 but, as far as ethanol in Brazil, where is that
22 ethanol sold?

23 A. At that time, that ethanol was sold in the
24 United States.

25 Q. And I have one last question. I think it

1 was Mr. Jorde was asking you a little bit about the
2 security company, OverWatch, and just one question
3 about that.

4 Do you know, is OverWatch's contract for
5 providing security services here, is that held by
6 Summit or the IUB?

7 A. Well, since it's my understanding that
8 Summit is responsible for all expenses incurred for
9 all these proceedings, including security, it's
10 secured by Summit.

11 Q. So does that mean that Summit holds the
12 contract with OverWatch?

13 A. We have a contract in place with OverWatch,
14 and we amended that contract to include the resources
15 that were requested by the Utility Board for this
16 venue.

17 MS. RYON: That's all my questions. Thank
18 you.

19 BOARD CHAIR HELLAND: Thank you. I
20 think -- is it Mr. Murray? Go ahead.

21 CROSS-EXAMINATION

22 BY MR. MURRAY:

23 Q. Very good. I am fine moving my chair if
24 that makes it easier, but if not we can go like this.
25 Okay?

1 Good afternoon, Mr. Powell.

2 A. Good afternoon.

3 Q. I have a couple of landowners I represent.

4 The good news is a lot of my questions have been

5 eliminated, but I still have a few.

6 Okay?

7 A. Okay.

8 Q. I couldn't help but notice that the IUB
9 recently filed an order granting the Sierra Club's
10 second motion to compel concerning the dispersion
11 modeling documents and data.

12 Are you aware of that?

13 MR. LEONARD: Objection.

14 BOARD CHAIR HELLAND: State your objection.

15 MR. LEONARD: I don't know how it's
16 possible that the witness that's been on the stand
17 would be aware of the Board's order that was published
18 a few minutes ago.

19 A. I'm not aware.

20 BY MR. MURRAY:

21 Q. Mr. Powell, I'm going to represent to you
22 an email was sent out at 4:25 granting that. Of
23 course limiting it to attorney eyes only of course.

24 My question to you is, is it Summit's
25 intention to appeal that ruling to the district court

1 or does Summit intend on disclosing that dispersion
2 modeling?

3 MR. LEONARD: Objection, Your Honor. It
4 invades attorney-client privilege. Obviously, we
5 haven't had an opportunity to consult with our client
6 about that yet.

7 BOARD CHAIR HELLAND: Thank you.

8 Mr. Murray, do you have a response or can
9 we move on?

10 MR. MURRAY: We can move on.

11 BY MR. MURRAY:

12 Q. I think Mr. Long asked this question of
13 you. Something about the nature of your company
14 organization. But in there -- I think you said
15 something to the extent of "we are liable for damage
16 to our pipeline." I think you were trying to give
17 some assurance to Mr. Long that Summit is going to
18 pick up any sort of liability for pipeline rupture.

19 You would agree generally with that
20 testimony you gave?

21 A. Yes.

22 Q. Now, you don't mean yourself personally, do
23 you?

24 A. No, I do not.

25 Q. Summit is a limited liability company, is

1 it not?

2 A. It is.

3 Q. The owners are known as members, aren't
4 they. An owner of an LLC is a member, isn't it.

5 A. That's my understanding.

6 Q. Did you say you're an owner?

7 A. I have equity in the business, yes.

8 Q. So that means you're a member; right?

9 A. Yes, but, again, as we discussed earlier,
10 we will have insurance.

11 Q. No, I just wanted to make sure I understand
12 this. Because I own, like, stock in a company. I buy
13 stocks in publicly traded companies. And so I
14 understand, as a shareholder, I don't have any
15 liability if that corporation gets sued; right? You
16 would agree with that general statement; right?

17 A. I think that's correct.

18 Q. So, similarly then, you can be assured that
19 there's no liability against you if a claim should
20 come against Summit; correct?

21 MR. LEONARD: Objection. Calls for a legal
22 conclusion.

23 BOARD CHAIR HELLAND: Mr. Murray.

24 MR. MURRAY: I think he's just testified as
25 to liability and his knowledge of that. He certainly

1 does have knowledge of the liability and limited
2 liability of this corporation. As a COO, I certainly
3 would think you would.

4 BOARD CHAIR HELLAND: Mr. Powell, if you
5 know the answer to that, you're welcome to answer.
6 Otherwise we can move on.

7 A. Could you repeat the question, sir?

8 BY MR. MURRAY:

9 Q. I'll restate it. We can be assured that
10 there's no liability as to a claim against Summit with
11 respect to yourself. You don't have any liability on
12 that claim, do you.

13 A. I don't think I do, no.

14 Q. And Mr. Rastetter is in a similar situation
15 as well. He does not have that liability either, does
16 he.

17 MR. LEONARD: Same objection. Calls for a
18 legal conclusion.

19 MR. MURRAY: I'll withdraw it.

20 BOARD CHAIR HELLAND: Thank you.

21 BY MR. MURRAY:

22 Q. Can I purchase an interest in Summit?

23 A. Not at this time. You could have, but that
24 equity raise is complete.

25 Q. Is this company a publicly traded company?

1 A. No. As you just stated, it's not.

2 Q. In the future, the public will not be
3 informed as to the assets held and the debts owing by
4 this LLC, isn't that right?

5 A. Well, the reporting requirements for a
6 private company are different than a publicly traded
7 company.

8 Q. So, by your answer, I can assume that your
9 answer is yes to that question. It will not be
10 publicly disclosed. These issues of assets and
11 liabilities of the company.

12 Correct?

13 A. Generally, that's correct.

14 Q. So I'd like to turn to what I think you
15 just referenced in one of your answers about insurance
16 coverage. Okay? With respect to the -- I believe the
17 \$35 million of insurance company {sic}, is it my
18 understanding that Summit is going to provide such
19 coverage?

20 A. Yes.

21 Q. And would you agree that providing this
22 coverage is a precondition to any permit that would be
23 granted by the IUB?

24 A. Yes.

25 Q. Did you testify earlier that one type of

1 coverage that will be available is coverage for loss
2 of life and personal injury?

3 A. I did not testify to that.

4 Q. Would it be included then? As far as the
5 loss of life and personal injury.

6 A. I'm not the insurance expert. So we can
7 provide that information on what we think that
8 coverage would look like, but I do not have those
9 answers.

10 Q. Okay. Maybe I misunderstood your answers
11 to Ms. Gruenhagen earlier when she asked you some
12 similar questions about -- or maybe it was
13 Mr. Whipple. As to loss of life or personal injury.

14 Do you remember him asking you these
15 questions?

16 A. Yeah, I remember Mr. Whipple talking about
17 livestock and whatever in the vicinity of a pipeline
18 release.

19 Q. So, as you sit here today, you cannot tell
20 this Board that someone who happens to be caught in a
21 pipeline rupture and happens to die from asphyxiation,
22 whether your company's insurance coverage will cover
23 that claim, can you.

24 MR. LEONARD: Objection, Your Honor. Calls
25 for speculation. The witness has already testified

1 that these insurance policies are not in existence at
2 this time.

3 BOARD CHAIR HELLAND: Thank you.

4 Mr. Murray.

5 MR. MURRAY: I believe that earlier
6 testimony established that this witness has provided a
7 data request to the OCA proclaiming a \$35 million
8 policy. I'm just asking about that.

9 MR. LEONARD: And what the data request
10 response says is \$35 million in coverage. The witness
11 did testify in response to Mr. Long's question that
12 those insurance policies are not yet secured.

13 BOARD CHAIR HELLAND: Mr. Powell, if you
14 have knowledge of the policy and would like to testify
15 and comment, please do so.

16 Otherwise, Mr. Murray, please proceed.

17 A. Again, I don't have knowledge of specifics
18 in the policy yet because that hasn't been finalized.

19 BY MR. MURRAY:

20 Q. Would you agree that the risk of a pipeline
21 rupture with CO2 is a risk to loss of life?

22 A. Well, I think a risk of a rupture of any
23 pipeline there is -- there is a risk of loss of life,
24 but I would argue that the probability is extremely,
25 extremely low.

1 Q. So just like you hope that there are
2 certain ethanol plants that come onto your line, I
3 guess you hope that you have insurance coverage; is
4 that right?

5 A. No, I think you're obviously misstating the
6 point. The point is that the reliability of pipelines
7 is very, very high, and I don't believe you've had any
8 deaths from the 47,000 miles of pipeline in Iowa to
9 this point. And that's obviously very good. And I
10 testified earlier that we will have insurance coverage
11 that's adequate to support the risk of operating the
12 pipeline in this state.

13 Q. With respect to the duration of the
14 pipeline permit you are seeking, I would imagine it's
15 for the maximum period of 25 years?

16 A. Correct.

17 Q. So, considering the time value of money,
18 would you agree with me that if you had \$100 today, it
19 grows over time?

20 Is that a fair estimation?

21 A. It depends on how you invest it. It sounds
22 like you're a stock investor. If you do a good job
23 investing, it may grow.

24 Q. I'm terrible at it.

25 A. Well, then you know it doesn't always grow;

1 right?

2 Q. But, if you did put it in, say, a CD today,
3 you could lock in, I think, 5 percent?

4 A. 5 percent.

5 Q. So let's use 5 percent. Do you have any
6 idea what that would grow to in a guaranteed rate of
7 return over, say, ten years?

8 A. You're talking about what would grow?

9 Q. \$100.

10 A. No, I can't do the math in my head.

11 Q. It was hard for me. I had to get my
12 calculator out. I'll suggest to you it was over \$160.

13 Okay?

14 A. Okay.

15 Q. Would you agree with me that it's fair to
16 say that for 15 years at 5 percent that money would
17 grow to over \$200; right?

18 A. Okay.

19 Q. Okay. So you'll have to trust a lawyer on
20 math here for just a second, I know that's hard, but
21 it would double in money over those 15 years; right?

22 A. I'm trusting your math.

23 Q. Thank you. So \$35 million today is not the
24 same as \$35 million in 15 years; correct?

25 A. Correct. That's assuming. Assuming the

1 economy is sound and the value of the dollar is sound,
2 et cetera. But, as you know, you don't -- at least in
3 my experience, we don't enter into an insurance policy
4 today that's good for 35 years. That's probably
5 renewable every year or every other year. Just like
6 your risk profile is evaluated by that insurance
7 carrier along that same timeline, and that cost of
8 that premium and the value of that insurance may
9 change.

10 Q. That's the problem with fixing a rate,
11 isn't it. We don't know.

12 But there is the inflation rate, isn't
13 there; right?

14 A. Especially today.

15 Q. Well, so then if we were to suggest to
16 Summit that it could increase its liability insurance
17 coverage every five years based on the inflation rate,
18 would you agree to that?

19 A. No, what I said earlier was that once we
20 finalize -- we obtain permits, finalize the
21 construction plan and finalize the total cost and risk
22 assessment, then we'll work with an insurance company
23 to ensure the amount of insurance coverage that we
24 think is adequate to support the risk. And the IUB
25 can place whatever conditions they think is

1 appropriate.

2 Q. I think my question was would Summit agree
3 to this.

4 A. I'm not going to agree to anything like
5 that without consultation with our management team.

6 Q. In your direct testimony, you've testified
7 to the impact of the proposed pipeline on agriculture.

8 Would you concede obviously that the taking
9 of land by eminent domain is an impact on the
10 agricultural use by landowners?

11 A. Well, it may be a -- it may be a yield
12 deficiency impact, but, again, a landowner that
13 currently has that property in agricultural use can
14 continue that use after the pipeline is installed.

15 Q. So are you saying that there is no impact
16 on a landowner as to the use of this pipeline?

17 A. Well, the landowner won't be using the
18 pipeline, I hope. But, as far as using the land after
19 the construction is completed and the property or the
20 right-of-way has been reclaimed, then the landowner
21 can take it back to its initial use.

22 So if that's planting -- if it's in
23 agricultural use and it's corn and soybeans, it's
24 pasture grass, whatever their preferred use is.

25 Q. This hearing began on August 22nd, 2023, I

1 believe.

2 Do you agree with the Iowa Farm Bureau
3 witness, I believe his name is Mr. Johnson, who
4 testifies that there are 187.41 miles that Summit has
5 not secured land rights as of August 22nd?

6 A. That's close.

7 Q. So, to be clear, your, this Summit
8 pipeline, a private for-profit company, is seeking the
9 power of eminent domain over these 187 miles of land;
10 correct?

11 A. Well, there's time between now and when the
12 IUB makes a decision. So we've secured over 500 miles
13 of right-of-way, which is one and a half times the
14 amount of right-of-way that Energy Transfer had to
15 secure. So we still have a ways to go, but we still
16 have time to negotiate with those landowners.

17 Q. And I believe that we've talked about this
18 earlier today, but I believe you had affirmed that
19 this 187 miles would be --

20 A. It's actually 183.

21 Q. 183.

22 A. You're the math guy.

23 Q. Thank you. Appreciate that. So we're
24 talking about a percentage of over 20 percent that's
25 not signed up; right?

1 A. Correct.

2 Q. I think you said in testimony earlier that
3 90 percent of that land is farmland?

4 A. Across the footprint.

5 BOARD CHAIR HELLAND: Mr. Powell, I know
6 we're in kind of an awkward situation. Can you just
7 make sure you're speaking into the mic. Go ahead and
8 look at Mr. Murray. That's no problem.

9 A. But I believe that's generally the case
10 across the footprint.

11 BY MR. MURRAY:

12 Q. Now, did Summit oppose the legislation that
13 came before the Iowa House earlier this year that
14 required a 90 percent threshold before a hearing could
15 commence?

16 A. I believe that's correct.

17 Q. Is that because Summit knows it had little
18 chance of reaching that threshold?

19 A. No, it's because Summit felt the rules of
20 the game were changing. So, when we applied for our
21 permit, that requirement was not in place. So, after
22 we applied for our permit with the IUB and began this
23 project and began securing right-of-way, to change the
24 rules in the game at a later time we felt was not
25 appropriate.

1 Q. If land rights are taken, would you agree
2 that those land rights should be limited strictly to
3 the use that is necessary in order to facilitate the
4 permit?

5 A. And you're speaking to specifically the
6 installation and operation of the pipeline?

7 Q. And the construction and the ingress/egress
8 that you seek.

9 A. I would agree.

10 Q. Now, we'll step through this rather slowly
11 here just to walk through these different easements
12 you have, but, generally speaking, Summit seeks a
13 permanent pipeline easement; correct?

14 A. Yes.

15 Q. And that's generally a 50-foot wide
16 easement in most cases, if I understand right?

17 A. Correct.

18 Q. And, also, there is the temporary
19 construction easement areas as well; correct?

20 A. Correct.

21 Q. And then there's also this ingress/egress
22 easement that is sought by Summit; correct?

23 A. In some cases, yes.

24 Q. I see that the eminent domain rights within
25 Summit's Exhibit H forms include a professional

1 surveying map that defines the permanent easement and
2 the temporary construction easement areas.

3 Would you agree with that?

4 A. Generally, yes.

5 Q. There is also a description of what is
6 known as "the property," which is the landowner's
7 parcel. Which includes the permanent easement and
8 temporary construction easement areas.

9 Correct?

10 A. From what I recall, yes.

11 Q. So, as I understand it, if we're talking
12 about the property which is outside of the permanent
13 easement and outside of the temporary construction
14 easement, that area would simply be an area that is
15 only for unimpeded ingress/egress that is sought by
16 the company; correct? That's the only use that you're
17 looking for is ingress/egress over the remainder of
18 the property; right?

19 A. Yes. Without looking at a specific plat,
20 yes.

21 Q. So I'll refer to that as the remainder of
22 the property.

23 Okay?

24 A. Okay.

25 Q. So I'll just represent to you that a sample

1 Exhibit H includes language that limits the use of the
2 remainder to be in the event of an emergency over such
3 other portions of property.

4 Would you agree with that characterization
5 of Exhibit H?

6 A. Again, without looking at the specific
7 Exhibit H, generally I would agree with that.

8 Q. Well, that word "emergency" is pretty
9 important.

10 Could you define emergency?

11 A. Well, emergency would be -- I would hope to
12 be a rare occurrence. So it wouldn't be normal
13 maintenance, normal access. If we had a release or an
14 incident and we had to access the property, that would
15 be defined as an emergency.

16 Q. I see. Would there be any other
17 definitions of emergency besides a release?

18 A. It would have to be an incident that was
19 specific to the pipeline. The pipeline was damaged in
20 some way. Or it could be if we ran an internal
21 inspection tool and the tool discovered some damage
22 that wasn't identified during construction. A dent, a
23 gouge. In that case, that wouldn't necessarily
24 constitute an emergency, but we'd have to access the
25 property.

1 And, unless it's emergency, which would be
2 almost exclusively in response to an incident, then we
3 would try to coordinate with the landowner on when we
4 could get in and do some investigation.

5 Q. Thank you. So an incident, as you
6 reference it, is a release.

7 A. Or unless we knew someone was digging
8 around the pipeline and struck the pipeline but we
9 didn't have a release, that would constitute an
10 emergency for me to get in and assess the damage. But
11 it would not be normal, routine maintenance or
12 operation of the pipeline.

13 Q. So let's say the property in question for
14 this example is a square 40-acre parcel with a road on
15 the south side.

16 Okay?

17 A. Okay.

18 Q. And I'm just going to suggest to you that,
19 in farmland, there's a farm access lane to these
20 parcels. So let's put a farm lane on the southeast
21 corner of this parcel.

22 Okay?

23 A. Okay.

24 Q. Let's also suggest to you that in this
25 parcel we have a pipeline that's located on the north

1 side and runs east/west. On the far north side of the
2 parcel.

3 A. Okay.

4 Q. I'm going to suggest to you that this
5 parcel is a quarter mile by a quarter mile. And I'm
6 going to suggest to you that's what a square 40 is.

7 Okay?

8 A. Okay.

9 Q. So, if you have an emergency, you're going
10 to want to come on that southeast corner farm lane.

11 Do I have that right?

12 A. Well, it depends on what access is
13 available on the north side of the 40. Is it adjacent
14 to a county road. Is there another access into it.

15 Q. I'll explain further. My example is you
16 have the road on the south side of this 40. Okay?
17 There is no road on any other side.

18 A. Okay. That makes it more clear.

19 Q. Thank you. So, if we have an emergency to
20 that pipeline that's a quarter of a mile to the north
21 roughly, I would suggest to you that you're going to
22 use that farm lane in the southeast corner and proceed
23 north, wouldn't you?

24 A. In that hypothetical, that makes sense.

25 Q. Now, in this situation, let's just say that

1 this farmer that has this parcel that has this
2 ingress/egress easement on the entire 40 acres, let's
3 say he wants to subdivide that parcel and he wants to
4 create an acreage that's five or ten acres.

5 That's the pretty typical size of an
6 acreage. You would agree with that, wouldn't you?

7 A. I have no idea. I'll take your word it
8 for.

9 Q. They are. So let's say he puts it in the
10 southwest corner of that 40-acre parcel.

11 All right?

12 A. And the access was on the southeast corner
13 you said?

14 Q. Yes.

15 A. I'm just trying to keep track.

16 Q. Yes. You're doing a good job. So what
17 would be the necessity to having an ingress/egress
18 over that acreage?

19 A. What do you mean? "The necessity."

20 Q. Well, what's the use of having any
21 ingress/egress over that southwest ten acres. You
22 don't need it, do you.

23 A. I mean, simply put, we need a way to access
24 the permanent right-of-way in an emergency situation.
25 Whatever the easiest, least intrusive way to get there

1 is what we need. Whether that's on the southeast
2 corner, across someone else's property if that's
3 available, whatever that is.

4 Q. The Exhibit Hs that you filed with the
5 Board do not attempt to define any sort of
6 limitations. It just takes carte blanche
7 ingress/egress over the entire parcel, the entire
8 property.

9 Wouldn't you agree?

10 A. Again, you're speaking in hypotheticals.
11 There are a lot of Exhibit Hs. And so, based on your
12 scenario, it sounds like the southeast corner would be
13 the easiest point to access the property.

14 Q. Not just the easiest, but the only real
15 necessary ingress/egress that you need; correct?

16 A. Again, in your hypothetical.

17 Q. You would agree then. In the hypothetical.
18 Yes?

19 A. In your hypothetical. Without seeing
20 anything other than what you've described, road on the
21 south side, no road on the north side, a five- to
22 ten-acre tract being developed on the southwest
23 corner, and the access road on the southeast corner.

24 Q. It sounds to me like you agree with me
25 then?

1 A. Again, in your hypothetical.

2 Q. Thank you.

3 You've answered some of these questions
4 earlier, but is Summit going to continue to negotiate
5 to secure land rights in the future?

6 A. Yeah, we're negotiating as we speak.

7 Q. And I think you testified earlier that your
8 goal is to sign 100 percent of all landowners;
9 correct?

10 A. Yes.

11 Q. Do you acknowledge that seeking the power
12 of eminent domain constitutes a threat to landowners'
13 rights?

14 A. I mean, that was brought up several times
15 this morning. We're following the IUB process. So
16 we're continuing to negotiate with landowners like we
17 have for the last year and a half in Iowa. Regardless
18 of whether they received an Exhibit H or not, that
19 hasn't changed the conversation.

20 Q. Will Summit, or its land agents, use the
21 fact that this hearing has started as leverage against
22 landowners who have not yet signed up?

23 A. No. And, unlike we've heard previously in
24 some testimony, our land agents are prohibited from
25 threatening eminent domain at any time. And, if that

1 happens, then they're terminated. And Mr. Rorie can
2 confirm that when he testifies later this week.

3 Q. You've testified to this next question I
4 have. I'm going to ask it in a different way just to
5 make sure I understand.

6 As relates to negotiations focused on
7 compensation, and for purposes of this question it is
8 compensation on an easement that has no other terms
9 that have altered, will Summit reduce its compensation
10 being offered to landowners in the future or will it
11 continue to increase or remain at that level?

12 A. Well, I think what I testified to earlier,
13 maybe with Mr. Whipple, was that we would continue to
14 discuss the most recent offer that a landowner had
15 received.

16 Q. So, if no other terms are changing other
17 than the discussion on compensation, is there a
18 possibility that Summit is going to reduce its offer
19 and compensation in the future?

20 A. That's not something we're currently
21 planning.

22 Q. It is a possibility it could happen though.

23 A. Well, again, I'm not going to predict
24 what's going to happen in three months, but currently
25 we are actively negotiating with every landowner that

1 has not signed an easement and that compensation
2 conversation is ongoing. No one -- to my knowledge,
3 the conversation hasn't been, "You will accept this
4 or" something else.

5 Q. So if a right-of-way agent states that he
6 has heard that Summit is going to go south on its
7 compensation offers, you're saying that that
8 right-of-way agent is going to be terminated.

9 A. No, I didn't say that. I said if a
10 right-of-way agent threatens the use of eminent
11 domain, that that right-of-way agent will be
12 terminated.

13 Q. So if a right-of-way agent were to say that
14 Summit is planning on going south on compensation, or
15 implies it, that's fair play in your game?

16 A. Well, again, Mr. Rorie can speak better
17 about his strategy, but generally, in Iowa, Summit has
18 offered some extraordinary premiums. And those were
19 for landowners that worked with us early and they were
20 rewarded with those premiums.

21 So will we continue to pay at those
22 premiums? No, we've adjusted those all throughout the
23 process.

24 But, as I stated earlier, if we're having a
25 conversation with a landowner today and we're talking

1 about a certain compensation, we'll continue to talk
2 about that level of compensation. We haven't
3 threatened them with reducing it to my knowledge.

4 Q. As it relates to landowner communications,
5 will Summit promptly respond to those landowners
6 seeking to negotiate?

7 A. We typically always do. It's usually the
8 other way around. Having a landowner -- many are
9 busy, especially if they're farmers -- promptly
10 responding to the agent.

11 Q. So my question was will Summit promptly
12 respond?

13 A. Yes.

14 Q. When you acknowledge that Summit will
15 promptly respond, what do you characterize as a prompt
16 response?

17 A. I think that's a reasonable time from a
18 couple of days.

19 Q. A couple of days? Okay. On routing, as I
20 understand your testimony earlier today, you
21 testified, I think it was to Mr. Whipple perhaps --
22 you might correct me if I'm wrong on this, but I think
23 you said "I don't intend on amending the application
24 as it relates to route."

25 Did I hear you right?

1 A. That's correct.

2 Q. Doesn't the statute require Summit's
3 petition to discuss the availability of alternate
4 routes?

5 MR. LEONARD: Objection. Calls for a legal
6 conclusion.

7 BOARD CHAIR HELLAND: Mr. Murray, do you
8 want to rephrase your question? Or reword.

9 BY MR. MURRAY:

10 Q. Is it your testimony today that there are
11 no alternate routes that you are putting before the
12 Board?

13 A. That's correct.

14 Q. So I'm trying to understand the testimony
15 you had with Ms. Gruenhagen earlier. I think you
16 testified something to the extent that if a landowner
17 is negotiating with Summit, perhaps Summit will be
18 willing to change that route in the future? Is that
19 right?

20 A. No, what I said was if the Board provides
21 flexibility to get outside of the route that we've
22 represented in the Exhibit Hs, then we could
23 potentially do that, but now I'm bound by what's
24 presented in the Exhibit Hs.

25 Q. So, as I understand it, you're expecting

1 landowners to prove up an alternative route to the IUB
2 in order for you to then consider that alternative
3 route.

4 Do I have that right?

5 A. What I would suggest to you is that in many
6 cases we've been having conversations with landowners
7 that would talk with us for well over a year. And, as
8 I mentioned this morning, we've made over 1,500 route
9 adjustments. And, as Mr. Jorde characterized them,
10 micro adjustments. Many of those are due to landowner
11 preference.

12 So landowners, including those that have
13 received Exhibit Hs, have had a lot of time to work
14 with Summit to locate the pipeline on their property
15 to accommodate their needs and use.

16 Q. So, if I understand this correct then, it's
17 Summit's view that it's not allowing for alternative
18 routes, it's not petitioning for alternative routes at
19 this time, and it's not doing so because the
20 landowners that are left are out of luck.

21 MR. LEONARD: Objection, Your Honor.

22 BOARD CHAIR HELLAND: State your objection.

23 MR. LEONARD: Misstates the testimony.
24 Mischaracterizes the requirements of the statute.
25 Alternative routes are discussed in the testimony.

1 BOARD CHAIR HELLAND: Mr. Murray, do you
2 want to reword your question?

3 MR. MURRAY: I'm just trying to understand
4 this witness's testimony as it relates to alternative
5 routes.

6 BY MR. MURRAY:

7 Q. Are you saying then that the landowner has
8 the duty to prove the alternate route rather than
9 Summit?

10 MR. LEONARD: Objection. Asked and
11 answered.

12 BOARD CHAIR HELLAND: Mr. Murray, it might
13 be time to move on to a different question.

14 BY MR. MURRAY:

15 Q. If there were different routes published by
16 Summit in a previously recorded Exhibit H but then an
17 amended Exhibit H were changing that route, that can
18 happen; right? In the past I'm saying. That has
19 happened.

20 A. I don't --

21 MR. LEONARD: I'll object to form. What's
22 the question?

23 MR. MURRAY: I'll reword.

24 BY MR. MURRAY:

25 Q. In a given parcel, Summit has amended its

1 routes and amended its Exhibit H definition of that
2 particular route on that particular parcel. That's
3 happened, hasn't it?

4 A. That may have happened.

5 Q. So then the prior route could be considered
6 an alternate route, wouldn't you agree?

7 A. Well, what I would agree is that the route
8 as illustrated on the Exhibit Hs that are current is
9 the route.

10 Q. But, if Summit has done a survey of a prior
11 route and filed that survey, that would be an
12 alternate route, wouldn't it?

13 MR. LEONARD: I'll object to the extent it
14 calls for a legal conclusion as to alternative routes
15 required by the statute.

16 BOARD CHAIR HELLAND: Mr. Murray, do you
17 have a response?

18 MR. MURRAY: I'll withdraw the question. I
19 have nothing further.

20 BOARD CHAIR HELLAND: Okay. Thank you.
21 Ms. Kohles. I believe you have some
22 questions.

23 MS. KOHLES: I do.

24

25

1 CROSS-EXAMINATION

2 BY MS. KOHLES:

3 Q. Hello, Mr. Powell. Can you hear me?

4 A. Yes, ma'am.

5 Q. Okay. I have a question for you. I'm Jean
6 Kohles, Kohles Family Farms, LLC. I'm glad the
7 gentleman did answer {sic} a lot of my questions I was
8 concerned about relating to insurance, et cetera.

9 I want you to know that I can't get
10 insurance as a landowner. So I hope you have better
11 luck.

12 Also, I want to know -- you're very proud
13 of the 73 percent of people who voluntarily, you say,
14 signed the easement agreements. I'm wanting to know
15 did your land agents provide the landowners any hazard
16 or risk analysis on the critical CO2 pipeline before
17 they signed these easements?

18 A. Well, it depends on the landowner, but I
19 myself have had many conversations, and I know our
20 staff has and agents have, in addition to construction
21 professionals, drain tile professionals. And so
22 trying to make sure that we answer all the questions
23 that a landowner has.

24 And then I trust that a landowner is
25 comfortable and feels informed enough to make that

1 decision.

2 Q. Well, I asked several times over the course
3 of a year and a half, and I didn't get an answer and I
4 had multiple land agents. Also, my tenants and other
5 landowners that have signed the easement in the county
6 are very concerned with what's coming out in this
7 hearing and what they've learned over the last six
8 months. They've had signer remorse.

9 MR. LEONARD: Your Honor, I'm going to
10 object to the form of the question for purposes of our
11 record.

12 BOARD CHAIR HELLAND: Thank you.

13 MS. KOHLES: Excuse me? What was that
14 again?

15 BOARD CHAIR HELLAND: Go ahead and restate
16 that.

17 MR. LEONARD: I'm objecting to the form of
18 the question for purposes of our record. I don't
19 believe a question was actually asked. A statement
20 was made.

21 BY MS. KOHLES:

22 Q. Mr. Powell, do you think all landowners who
23 signed early their easement agreements were aware of
24 the critical state of the CO2 pipeline?

25 A. I can't speak to every single landowner,

1 but my assumption is they felt well enough informed to
2 feel comfortable signing a legal document.

3 Q. Or were they not informed adequately to
4 make an informed decision?

5 A. Ma'am, I can't determine for landowners how
6 much information they feel is necessary for them to
7 make the decision. I can tell you that we're
8 available now for every landowner, whether they've
9 signed an easement or not, to have a conversation
10 around risk.

11 Q. When I discussed several times the
12 possibility of a route change, I was informed, no,
13 that's the only safe way, there is no negotiation.
14 And I had the same response over a year and a half.

15 A. Well, I'm sorry to hear that. That's a
16 unique response. Because, as I've said, we've changed
17 the route many, many, many times to accommodate a
18 landowner's preference.

19 Q. Why wouldn't they listen or present my
20 concerns to your company or to the responsible party?

21 A. I can't answer that, ma'am.

22 Q. Also, concerning -- I'm letting you know
23 how some of your land agents acted to me specifically.
24 And I was -- how can I say this. I was -- they pretty
25 much told me that I would need -- that this was as

1 good as it was going to be on an easement agreement.
2 It was completely underpriced for the value of my
3 land. They also said I needed to sign now or they
4 would file eminent domain.

5 On July 7, 2023, my mani, my farm manager,
6 said absolutely not. On July 17th, they mailed me the
7 eminent domain notification.

8 So, in that case when they said, "If you
9 don't sign, we'll apply for eminent domain on your
10 property," they did.

11 What do you say to that?

12 A. Well, what I would encourage you to do is
13 when Mr. Rorie testifies, you ask him who that agent
14 was. And he can confirm what happened there. And, if
15 that agent threatened you with eminent domain, they'll
16 be terminated.

17 As far as Exhibit Hs, we have to follow the
18 IUB process. Which means we have to file those
19 Exhibit Hs by a certain time frame. And so that was
20 following the process. It was unrelated to what may
21 or may not have happened between yourself or your
22 tenant and the agent.

23 MS. KOHLES: Well, there was more than one
24 agent. I think there were four different agents over
25 that time frame. And they basically did the same

1 thing.

2 No further questions.

3 BOARD CHAIR HELLAND: Seeing no more
4 questions from the parties, we are going to go to
5 Board questions, but we'll take a five-minute break
6 and be right back here. So we're going to go off the
7 record for five minutes and be right back at 5:35.

8 (Recess taken at 5:30 p.m.)

9 (Hearing resumed at 5:36 p.m.)

10 BOARD CHAIR HELLAND: It's 5:36 p.m. We
11 will go back on the record. I believe the Board has
12 some questions.

13 I will turn it over to Board Member Byrnes.

14 BOARD MEMBER BYRNES: I'll let folks grab
15 their seat and we'll get started with Board questions.

16 Well, Mr. Powell, I think I could almost
17 say good evening now. So a series of different
18 questions here.

19 And I think one of the things I think has
20 been advantageous is I did get to listen to landowners
21 the last two weeks and heard a lot of different
22 questions that were posed from them. I've taken pages
23 and pages upon notes of things that I feel need to be
24 asked on the things I heard over the last couple
25 weeks, and so some of these questions are going to

1 stem from things that initiated some ideas there and
2 then a series of questions also just based on your
3 testimony.

4 So, getting started here, the first thing,
5 I've kind of thought about a lot of this in terms of
6 themes. And one of the big themes is safety.

7 So you have a lot of years of experience in
8 the pipeline industry; correct?

9 THE WITNESS: Yes.

10 BOARD MEMBER BYRNES: And so, based on
11 those experiences, this pipeline project in terms of
12 safety compared to other pipeline projects you've
13 done, is there any stark contrast? Have technologies
14 advanced? Through your knowledge and your
15 experiences, what can you say about the safety of this
16 pipeline?

17 THE WITNESS: I think technologies have
18 advanced. And most prominently in manufacture of
19 materials and the raw materials available for
20 manufacture of line pipe, for instance. It's the
21 QA/QC process in the pipe mills, et cetera.

22 Another unique thing to this project is,
23 even though it's a large-scale project, it's the area.
24 So, yes, there are populated areas in these five
25 states and in Iowa, but compared to a lot of the

1 pipeline construction that takes place in the Gulf
2 Coast, the populated areas aren't quite as prevalent.
3 So making -- routing of the pipeline is challenging
4 but not as challenging from a safety perspective.

5 There are aspects in routing in this part
6 of the world when it comes to cultural features,
7 et cetera, that make it more challenging, but not from
8 a safety perspective.

9 So I think the materials, construction
10 techniques, types of equipment, and the things that
11 we're doing to go above and beyond, like 100 percent
12 x-ray, like looking at the dispersant analysis across
13 the whole footprint, like employing the integrity
14 management plan across the whole footprint, like
15 employing lessons learned from not only the Satartia
16 incident but other incidents.

17 And, also, it's the fact that in this
18 pipeline, we will be the first to employ PHMSA's
19 guidance on a reduced distance between block valves.

20 So I think when you couple the materials,
21 which we're sourcing largely in the United States when
22 available, and the QA/QC techniques, the contractors
23 we're employing, and the areas that we're going above
24 and beyond in safety and design, construction, and
25 ultimately operation I think make this one of the

1 safest pipelines that I've been involved with.

2 BOARD MEMBER BYRNES: So, just as you had
3 stated earlier, probably about 30 public information
4 meetings took place for this project. I think I did
5 20-plus of those being the oldest Board member here
6 now.

7 I know one of the things that was
8 discussed, and we've heard it in the last two weeks
9 is, "Well, I heard it at those public information
10 meetings."

11 And I believe the response at the time,
12 when odorant was talked about, is that there is
13 research or experimenting going on right now of how to
14 make some sort of an odorant work with carbon dioxide.

15 Has that progressed?

16 THE WITNESS: We have -- we have done what
17 I think is exhaustive analysis. And what we've come
18 down to, or what it's come down to, is if you use a
19 mercaptan like is used in natural gas -- and I've
20 heard it said many, many, many times that natural gas
21 pipelines are odorized. They're only odorized in
22 residential service. Transmission lines are rarely,
23 in my experience, odorized.

24 But, in CO2, you're introducing a flammable
25 component in mercaptan, or an odorant like mercaptan,

1 into what's a non-flammable stream of product. And so
2 it's the risk of then introducing that into the
3 stream. And then there's a corrosivity risk as well.

4 So we've got a chemical engineering
5 consultant, process engineering consultant, that's
6 been working with us from day one. They've been
7 involved in most of the CO2 projects in this country
8 over the last several years going all the way back to
9 ADM Decatur. And they've done some extensive
10 analysis, and we think the risk associated with
11 corrosion and introducing that flammable component
12 makes us not want to odorize the CO2.

13 BOARD MEMBER BYRNES: And I believe the
14 last name of the individual that was here in the last
15 two weeks, Frideres, I believe, was the last name,
16 they made a comment that -- going around safety, or
17 sticking with safety, a warning system, a text
18 messaging system to landowners, an alarm system if you
19 will. You know, what is available or what could be
20 used to alert or message landowners with a potential
21 leak issue?

22 THE WITNESS: Yeah, I hate to punt on this
23 one. I will tell you that Mr. Dillon is working with
24 first responders and other pipeline operators to see
25 what is the breadth of available sources, what we

1 think may be effective.

2 The challenge is in some places in Iowa,
3 some places in South Dakota and the other states, not
4 everyone has a smartphone, et cetera.

5 So it's trying to figure out what one area
6 or one action, or multiple actions, would be most
7 beneficial and allow us to communicate with the
8 broadest group of people along the pipeline route.

9 So we're working on that. I don't have
10 that definitive answer as we sit here today.

11 BOARD MEMBER BYRNES: And, sticking with
12 safety, I think a lot of questions I had about
13 training, working with the local first responders and
14 whatnot, I think you answered some of the questions on
15 purchase of equipment and training supplies and
16 whatnot. And I know from running a gas system myself,
17 I know that we had to do annual training with our
18 local first responders. But that was for a
19 residential gas system. A natural gas system.

20 Does PHMSA require you to do, or will they
21 require you to do, annual training with first
22 responders with a CO2 pipeline?

23 THE WITNESS: Yes, that's my understanding.
24 And, as I stated earlier, if more frequent training is
25 requested, we'll try to accommodate that.

1 BOARD MEMBER BYRNES: And there were some
2 questions about the pressures in the last couple weeks
3 that's going through this pipeline. There was a
4 statement -- and you might not be the right person.
5 It's -- I guess I would consider it an engineering
6 statement about 1 liter and then it equals 80 liters
7 when it hits atmosphere.

8 Does that change occur?

9 THE WITNESS: Mr. Louque, will be -- he's
10 the chemical engineer or the dispersant expert, but I
11 will tell you that when CO2 is introduced in the
12 atmosphere, then there is an expansion of that CO2 as
13 it vaporizes. As far as the volume of that expansion,
14 I can't tell you, Board Member Byrnes, but Mr. Louque
15 could, I'm sure.

16 BOARD MEMBER BYRNES: And I believe
17 Mr. Fehr had some comments or some questions on the
18 pressure of this pipe and what's in it.

19 So what is the minimum pressure that you
20 need to have in this pipe to maintain its status and
21 then what is the maximum that that pipe can withstand?

22 THE WITNESS: So the maximum allowable
23 operating pressure, I believe, is 2,183. The maximum
24 operating pressure that's set now is, I believe, is
25 2,150. And Mr. Schovanec can confirm.

1 The minimum operating pressure to keep the
2 CO2 in supercritical state is about 1,050, depending
3 on the temperature, but I believe our minimum set
4 point is about 1,300 pounds.

5 So it will discharge from an ethanol plant
6 at, say, 2,150, and of course the pressure will
7 dissipate as it travels down the pipeline. And, when
8 it gets to the suction side of the first pump station,
9 then it will be in that 1,300 range. And then it will
10 be pressured back up through the pump station.

11 Mr. Schovanec can confirm, but I believe
12 that's generally correct.

13 BOARD MEMBER BYRNES: Another item
14 obviously deals with soil compaction, tile repairs,
15 wet conditions. I think we've addressed quite a bit
16 of that today.

17 I guess the one thing we maybe didn't hear
18 much from, on wet conditions, when is it a go or no go
19 day when it comes to wet conditions? And there was
20 some debate over the last two weeks what is a wet
21 condition.

22 THE WITNESS: In my mind, a wet condition
23 is a situation where the equipment being used for
24 whatever stage of the pipeline construction we're in
25 will do -- "irreparable" is probably a severe term,

1 but it will do unnecessary damage to the area.

2 Now, we'll have -- in most of the areas in
3 Iowa, we'll have mats, we'll have timber mats in
4 place, and that will kind of mitigate the risk
5 associated with that.

6 But it doesn't make sense -- and I know it
7 happens. It doesn't make sense for us when we're
8 constructing, or our contractors, to work in weather
9 or in conditions that compound the situation and make
10 it more work in the end to finish the project and
11 reclaim the property correctly.

12 And then there's the compaction issue. We
13 know, as we're traversing this right-of-way with
14 equipment and pipe, et cetera, that we're going to
15 compact it. And I know that the IUB has specific
16 requirements on how we de-compact before we reclaim,
17 or as we reclaim, but we don't want to compound that
18 and make that more difficult. And that's where the
19 county inspectors come into play.

20 So obviously we'll work with them and
21 collaborate with them before we begin construction to
22 make sure we have perfect alignment, or as near
23 perfect alignment as possible, around where is that
24 line and when it doesn't make sense to work. And the
25 contractor will be part of that conversation too.

1 But I don't want to be in a situation where
2 we cause more work, unnecessary work, and that we make
3 it more difficult to reclaim the property. I can't
4 tell you if that's twelve inches of mud or that's six
5 inches of mud. It may be different depending on how
6 much topsoil is there, et cetera.

7 BOARD MEMBER BYRNES: I believe it was
8 Mr. Utesch had concerns with constant crossing of
9 heavy equipment.

10 And our farm equipment has gotten rather
11 large. I honestly don't know how we can get any
12 bigger than what we currently have today. But we have
13 really large farm equipment.

14 I mean, these -- and I think the concern
15 was the constant crossing over this pipeline with that
16 heavy equipment. How do you mitigate that pressure
17 from on top to that pipe below?

18 THE WITNESS: Yeah, I mean, we do, you
19 know, API 1111 calculations on what the max load would
20 be, the live load, which is the traveling back and
21 forth, versus a dead load where it's stationary.

22 And with the material we're using; the
23 grade of material, the wall thickness material and the
24 compaction activity that will take place over that
25 pipeline, the risk of equipment damaging the pipeline,

1 unless there's some extraordinary weather event and it
2 sinks four foot on top of the pipeline, is very
3 remote.

4 So we've taken that into consideration.

5 BOARD MEMBER BYRNES: We've heard a lot of
6 conversations around a private for-profit doing this
7 project. You have a lot of years of experience in the
8 pipeline business. What would you say is your
9 percentage of projects you're doing with shareholders
10 versus -- I mean, pretty much our only other option is
11 a municipal project. In your history, what have you
12 seen? I'm curious.

13 THE WITNESS: I mean, every project that
14 I've been involved with, either with a publicly traded
15 company or a private company, is for profit. So we've
16 never -- I've never been involved in the execution of
17 a project that wasn't intended to generate a profit
18 for the entity whether it was public or private.

19 So I don't really quite understand the
20 distinction sometimes.

21 BOARD MEMBER BYRNES: Have you done
22 municipal projects --

23 THE WITNESS: I have not.

24 BOARD MEMBER BYRNES: And just one last
25 question from what I've taken as notes the last two

1 weeks.

2 Have you ever heard of CapCO2? That was
3 something that came up quite a bit. Do you have any
4 knowledge of CapCO2?

5 THE WITNESS: I don't.

6 BOARD MEMBER BYRNES: Now we're going to
7 get into some of your testimony.

8 On page 4, line 12 through 14 of your
9 direct testimony -- we'll give staff a second to pull
10 this up.

11 So, in lines 12 through 14 of your direct,
12 you state that the pipeline system will be capable of
13 shipping 18 million metric tons per year.

14 Do you know the portion of that that's in
15 Iowa?

16 THE WITNESS: I can't -- every time you
17 bring this up -- anyone brings that up I can't get
18 past that typo in line 14, but I'll try this last
19 time.

20 Right now we have roughly 9 1/2 million
21 tons under contract. And, of that 9 1/2 million, 3.28
22 is the production anticipated from the 12 plants in
23 Iowa.

24 And of the 18 million tons we anticipate,
25 if we receive the growth to 18 million tons, that that

1 will largely come from Iowa and South Dakota.

2 The opportunity in Nebraska and North
3 Dakota is much, much less than in Iowa and South
4 Dakota. Predominantly Iowa.

5 BOARD MEMBER BYRNES: So, if we go to
6 page 7 of your direct testimony, one of the things you
7 brought up was the need of four pump stations in Iowa.

8 So has Summit obtained all necessary land
9 rights for those or is it requesting the right of
10 eminent domain over any of those areas?

11 THE WITNESS: Right now, even the pump
12 stations -- because not all four will be in this first
13 phase of the project. I believe two. Mr. Schovanec
14 can confirm what would be needed to be able to ship
15 18 million tons.

16 But I know Micah Rorie and his team are
17 working to secure sites for all pump stations,
18 currently planned and future, and Mr. Rorie can tell
19 you exactly how many of those have been secured and
20 how many have not. It's a large percentage that have
21 been secured.

22 BOARD MEMBER BYRNES: So he'll have that
23 information.

24 THE WITNESS: Mr. Rorie would. Yes, sir.

25 BOARD MEMBER BYRNES: Do you know

1 approximately -- like what are we talking for a
2 footprint on these sites? Is there an acre amount
3 typically?

4 THE WITNESS: The pump stations are, I want
5 to say, four to five acres. So they're larger. And
6 they're not -- for Energy Transfer standards, they're
7 not large pump stations, but it's usually two to three
8 pumps, they're enclosed in a structure, aboveground
9 piping, launcher, receiver, meters. It's a fairly
10 simple station.

11 BOARD MEMBER BYRNES: So I'm assuming they
12 need some sort of an access? A driveway?

13 THE WITNESS: Correct.

14 BOARD MEMBER BYRNES: Are they typically
15 built close to a road? Is that where you try to keep
16 them?

17 THE WITNESS: Close to a road and close to
18 available power. But, if not, yes, we'll have to
19 negotiate with the landowner for the access to that
20 pump station.

21 BOARD MEMBER BYRNES: Well, let's stick
22 with power. So you'll have to purchase electricity
23 from local providers.

24 Do you anticipate on generating any of your
25 own energy out of that? Solar or anything renewable

1 at those pump stations?

2 THE WITNESS: At this time, we are not. We
3 are looking at that, but because of the timing -- we
4 always want to have a primary feed of available power
5 from a power provider. But, as a secondary feed, we
6 are looking, especially at the pump stations, at
7 solar.

8 BOARD MEMBER BYRNES: And I believe
9 Mr. Bents from OCA, he had a Direct Exhibit 1. I
10 don't know if you're aware of this. We'll get it
11 pulled up. So Bents Direct Exhibit 1, OCA Data
12 Response 86. It states that Summit Carbon will pay
13 for the necessary electric upgrades.

14 Do you know how many of these upgrades will
15 need to happen?

16 THE WITNESS: It varies. And Mr. Schovanec
17 will be able to add a lot more detail than I can,
18 Board Member Byrnes, but it's very few cases where we
19 have to -- and I think actually Shenandoah may be one.
20 Where we have to contract with our own provider to
21 build a substation. Typically we can upgrade existing
22 infrastructure. And that's usually the existing
23 substation, not new power coming into the substation.

24 BOARD MEMBER BYRNES: Will there need to be
25 any new electric transmission lines constructed to

1 meet these needs?

2 THE WITNESS: Not that I'm aware of at the
3 capture facilities. There may be an electrical drop
4 to a main line valve off the power line at the road,
5 but not new infrastructure other than at the capture
6 facilities. And I think that is very few, but
7 Mr. Schovanec will be able to tell you exactly.

8 BOARD MEMBER BYRNES: And have you begun
9 any conversations yet with these electric utilities
10 about this potential need?

11 THE WITNESS: Oh, yes. Over a year ago.
12 So we've been working with all of them. And, in fact,
13 in some cases, we've even paid for the upfront
14 engineering cost for them to identify what upgrades
15 are needed, procure long lead equipment, et cetera,
16 because not all utilities work at the pace that we
17 like them to work. That's not meant to be a
18 disparaging comment.

19 So we wanted to start that process very
20 early so we can make sure that that power was there
21 when we were ready to energize the system.

22 BOARD MEMBER BYRNES: On pages 7 and 8 of
23 your direct testimony, you discuss main line valves.
24 Or, for the record, we'll refer to them as MLVs.

25 Has Summit Carbon obtained all necessary

1 land rights for MLVs or is it requesting the right of
2 eminent domain for any of those areas?

3 THE WITNESS: It's my understanding we have
4 not requested the right of eminent domain, but
5 Mr. Rorie can -- he can tell you definitively. And I
6 know we, like the pump stations, have been securing
7 those sites for quite some time. And it's my
8 understanding we have a large percentage of those
9 sites secured, but Mr. Rorie can tell you exactly.

10 BOARD MEMBER BYRNES: So we've talked a
11 little bit about the route, and how a route could be
12 changed, and we know that if the Board were to issue
13 an order on this or a permit, it could have changes to
14 the route.

15 How would any potential changes that were
16 asked for impact these MLVs?

17 THE WITNESS: The only way that it would
18 impact them is if we were outside of the 20-mile
19 spacing. Or, if it's an HCA, if we were outside even
20 a tighter spacing. Then we may have to install
21 another valve to make sure we were compliant with
22 PHMSA.

23 And, if it were a significant reroute,
24 which I'm hoping it wouldn't be, that may affect the
25 location of our pump stations. So we may actually

1 have to secure an alternative site for a pump station.

2 But I think that would only occur in the
3 case of a significant reroute. Not minor reroutes or
4 micro reroutes.

5 BOARD MEMBER BYRNES: Just out of
6 curiosity, what would this MLV facility look like
7 physically? If you're describing to me and for the
8 record what that looks like.

9 THE WITNESS: Yeah, I think here we've got
10 a 50-foot by 50-foot fenced-in area. The pipe comes
11 aboveground, it has a valve that's supported, goes
12 back belowground, pressure indication devices on
13 either side. It's fenced, it has some type of
14 communication, whether that's satellite, et cetera, in
15 that location, and that's it. It's a fairly simple
16 aboveground facility.

17 BOARD MEMBER BYRNES: On page 8 of your
18 direct testimony, you discuss launcher and receiver
19 for smart pigs. And we know that smart pigs are kind
20 of the inspection device that you can put inside the
21 pipe.

22 So these launching and receiving areas, do
23 they require any sort of a special footprint that the
24 Board should be aware of?

25 THE WITNESS: I'm assuming in my testimony

1 I had the footprint, but it would be similar to a main
2 line valve. And you typically like to have the
3 launcher/receiver in close proximity to a road. Now,
4 it's aware the spec break happens where the pipe
5 diameter happens so you have access. And it will
6 require power for that. Because the launcher/receiver
7 also has valves for automation. But it's a fairly
8 simple structure as well.

9 BOARD MEMBER BYRNES: Can you locate them
10 in the same location as the MLV or not? And, if
11 not --

12 THE WITNESS: It can be. It can be.

13 BOARD MEMBER BYRNES: So do you have -- I
14 think you said the majority of your locations you've
15 tried to secure for the MLVs.

16 Have you also done the same for the
17 launcher/receiver sites?

18 THE WITNESS: The answer is yes. And
19 typically the launcher/receiver will be at the
20 beginning or the end of the line. So that main line
21 valve at the front end of that launcher/receiver will
22 constitute an MLV. And then that spacing begins to
23 get to the next subsequent main line valve.

24 BOARD MEMBER BYRNES: So can they --
25 technically could they be starting at the ethanol

1 site?

2 THE WITNESS: Yes. We will have a launcher
3 at the ethanol site. At each ethanol site. And then
4 it's at every diameter change after that.

5 BOARD MEMBER BYRNES: On page 8, line 22
6 through 23, of your direct testimony, you discuss .72
7 design factor.

8 I am not an engineer. So could you please
9 explain that design factor for me, please.

10 THE WITNESS: That's prescribed by PHMSA.
11 And it's 72 percent of the specified minimum yield
12 strength of the pipe material. And that's standard
13 for liquid pipeline.

14 Where that will change is at road
15 crossings. So road bores, river crossings for
16 directional drills, will have heavier wall pipe. And
17 so that design factor might be a .6 or something that
18 constitutes a heavier wall or a thicker material. And
19 that's just for added protection from an integrity
20 perspective.

21 BOARD MEMBER BYRNES: So what you're saying
22 is, in certain locations, you will go above and beyond
23 the .72?

24 THE WITNESS: Yes, that's correct. Same
25 thing with coating. So, if you're at a river

1 crossing, we'll put the fusion bond epoxy -- which
2 will be on the entire pipeline. But then, on top of
3 that -- we'll put an abrasion-resistant coating on top
4 of that. So it will have a double layer of
5 protection.

6 And that's because when you're locating a
7 pipeline 20 or 30 feet below the river bottom or below
8 a road -- eight to ten feet, or whatever the depth is,
9 below a road crossing, we don't want to interrupt and
10 have to replace those at some point or do maintenance
11 on those.

12 And so we always, from an integrity
13 perspective, put in a heavier grade material and extra
14 coating, et cetera.

15 BOARD MEMBER BYRNES: One of the things
16 discussed is the operations control center. And, for
17 the record, we'll refer to it as the OCC. We love to
18 have acronyms in the utility industry.

19 So the OCC. Can you give me a description
20 of what this OCC will look like? And I believe I've
21 heard throughout public information meetings'
22 testimony it's going to be located in Ames.

23 What's this facility going to look like?
24 What's its makeup?

25 THE WITNESS: The current plan is to have

1 it in our current office building. It's a two-story
2 office building. It will be downstairs. It has the
3 broadband capability, et cetera, to accommodate this.
4 And it will look much like where you're sitting now.

5 So it will be a series of consoles with
6 screens, and these controllers will actually have
7 schematics of the pipeline system that's their area of
8 responsibility. They'll have access to the capture
9 facilities, and, at the end of the line, the
10 sequestration.

11 So they can see what -- if a pump is turned
12 on and off, if a valve is open or closed, they can see
13 what the pressure or the flow rate or the temperature
14 is. And that's real time, ongoing, all the time. And
15 then that will be manned continually.

16 And then currently we have a simulator
17 that's just been completed in our office now. So the
18 SCADA platform is designed.

19 And so, as we get permitted and begin
20 construction, we'll onboard these control center
21 personnel well in advance of going into operation, and
22 we'll use the simulator that's been designed to train
23 these personnel.

24 BOARD MEMBER BYRNES: And so what kind of
25 actions can be taken from there? Can we shut off

1 valves? Open valves?

2 THE WITNESS: Yes, they have access
3 throughout the system. So they can start and stop
4 pumps, they can close and open valves, they can shut
5 down a pipeline segment or the entire pipeline
6 segment.

7 And there'll be operating procedures. So
8 they have -- you know, it's very prescriptive about,
9 when an alarm sounds, what are the actions taken up
10 to -- each of these controllers will have the
11 discretion to take the ultimate action, which I think
12 is shutting in the system.

13 BOARD MEMBER BYRNES: So, as we've
14 discussed throughout the day, third-party incidents
15 where somebody doesn't do a One Call, somebody hits
16 something, they strike utility infrastructure.

17 You know, I think a lot of us in here
18 probably have thought the same thing. Technology is
19 great as long as it's working. And I know there's
20 going to be a lot of technology as part of this
21 project.

22 What happens with a fiber line getting cut
23 and you lose communications? Like what is the
24 redundancy plan?

25 THE WITNESS: Well, the good news is we're

1 not using fiber.

2 And I will say, just to follow up on the
3 last question, forgive me, we do have a gentleman who
4 will be the supervisor of the control center named
5 Martin Velco who actually has operated CO2 pipelines
6 for Occidental Petroleum. So has a lot of experience
7 in managing control centers but obviously direct
8 experience with CO2 pipeline.

9 But to your point about third-party damage,
10 that's when -- you know, we rely on the 811 system,
11 but we also have secondary reliability measures like
12 aerial surveillance, like people that are in
13 operations that are traveling up and down the pipeline
14 on a daily basis depending on what their task is for
15 that day or what their inspection requirements are.
16 And then we'll have the sensors up and down the
17 pipeline. So pressure and flow.

18 So any indication from any of those means
19 that there's a problem with the pipeline, that's when
20 we deploy somebody to investigate.

21 BOARD MEMBER BYRNES: So, if not fiber,
22 then what is the communication tool for information?

23 THE WITNESS: So it's these pressure and
24 temperature and flow indicators along the length of
25 the pipeline. Not buried in the ditch.

1 We've looked at fiber. And, in my
2 experience, fiber is not used very often. I know
3 Navigator has talked about fiber -- the problem with
4 fiber is two things. One is you're coming back --
5 when you install it, you can't install it under river
6 crossings, et cetera, so you have breaks in your
7 connectivity.

8 And, secondly, it's tuning it. So we've
9 got people on our staff that have direct experience
10 with fiber. And it's very difficult to get it tuned,
11 and so you get a lot of false alarms.

12 And there's a west Texas system
13 Mr. Schovanec and some other folks in our automation
14 control group have direct experience with where it
15 didn't alarm and they had a release. They had an
16 incident. An NGL incident. And so it's not foolproof
17 by any means.

18 And, in my opinion, the worst part about
19 fiber or the biggest challenge is you're coming back
20 and you're disrupting the farmland again. Because you
21 install the pipeline, you install the conduit, and
22 then you come back at pull points and you pull the
23 fiber in.

24 So, after the pipeline is done and the
25 property is reclaimed, you're coming back and pulling

1 the fiber and tying it all in. So you're essentially
2 coming back twice to the construction site.

3 So it's the temperature and flow and
4 temperature indication along the pipeline at each of
5 those pump stations, valve stations, and
6 launcher/receivers.

7 BOARD MEMBER BYRNES: So it's a receiver
8 system. So you have a tower, I'm assuming? The
9 communications, I guess, is what I'm getting at.

10 THE WITNESS: Yeah. The primary is
11 satellite.

12 BOARD MEMBER BYRNES: On page 10, lines 12
13 to 13 of your direct testimony, you describe a real
14 time transient model. Could you please further
15 describe what this is and how it will work and what
16 inputs and instrumentation is it based on.

17 THE WITNESS: Yeah. So the SCADA system
18 will be used to provide direct feedback in the
19 operating pipeline. But we've also developed, and is
20 being developed, a hydraulic model that simulates the
21 operation of the pipeline under whatever condition may
22 be prevalent. So a discharge pressure from a certain
23 facility, flow rate projected from that facility. And
24 they run in parallel.

25 So you essentially have a test, if you

1 will, or a default case and the current operating
2 case. So you compare those two.

3 So, in the simulated model, it may say your
4 operating pressure should be at 1,350 pounds and your
5 flow rate should be 2 million tons an hour or
6 whatever -- I mean, I'm making that up.

7 If the operating -- if the actual operation
8 of the pipeline -- if the controller sees something
9 that significantly deviates from that, then he should
10 investigate and see why that is. Because this model,
11 the hydraulic model, will have been trued up and
12 tested and we consider it to be very accurate.

13 So, if what we're seeing in real-life
14 operation deviates from that, then we can assume we
15 may have a problem.

16 BOARD MEMBER BYRNES: So the audible alarms
17 are at the OCC; correct?

18 THE WITNESS: Yes.

19 BOARD MEMBER BYRNES: Any sort of audible
20 alarms that are out in the field?

21 THE WITNESS: There may be at the pump
22 stations. Not at -- not along at main line valves,
23 et cetera.

24 BOARD MEMBER BYRNES: On page 11 of your
25 testimony, you state that the operations personnel

1 will be located in close proximity to remote operated
2 facilities noting they could respond locally if remote
3 communications fail.

4 So -- and I know that, in my prior life, my
5 technicians had a response time that they had to
6 adhere to in order to get to a natural gas leak.

7 What is your response time and what's the
8 expectation? And maybe define proximity, close
9 proximity, a little bit deeper.

10 THE WITNESS: Yeah, I think -- I hate to
11 punt on this. Response time will be developed over
12 the next several months as we have those
13 communications with the first responders. What are
14 the location for the first responders to the proximity
15 to the pipeline, where we think the greatest risk may
16 be. And, if it's a volunteer fire department, for
17 instance, versus one that's on call all the time, that
18 may play into it.

19 And then we'll use that as one indicator on
20 where we put our people. So where we locate them up
21 and down the line.

22 I can't tell you in this ten seconds, Board
23 Member Byrnes, whether a response time is going to be
24 15 minutes or 30 minutes or whatever. That will be
25 determined.

1 BOARD MEMBER BYRNES: Is that determined by
2 you or is that determined by PHMSA?

3 THE WITNESS: Well, in my experience, it's
4 determined by us but in collaboration with the first
5 responders.

6 BOARD MEMBER BYRNES: So there's -- and I'm
7 trying to learn on this CO2 stuff. I know what I had
8 to do on my end.

9 So you don't have any required response
10 time then that PHMSA sets out.

11 THE WITNESS: Not that I'm aware of, but
12 I'll research that. Not that I'm aware of.
13 Mr. Dillon can tell you definitively, but I'm not
14 aware of it.

15 BOARD MEMBER BYRNES: On page 11 of your
16 testimony, line 16, you mentioned automatic closing of
17 sectionalizing block valves if an anomaly is detected
18 that could indicate a major issue.

19 So does this automatic closure require the
20 communication system between the pipeline and the OCC
21 to be functional or can it also work if communications
22 were down?

23 THE WITNESS: It can work when
24 communications are down with the OCC. Because there
25 will be a pressure indicator upstream and downstream

1 and that valve will close automatically.

2 Mr. Schovanec can -- if you want to know,
3 Mr. Schovanec can explain exactly how that occurs, but
4 I know that can be done locally and not from the
5 control center.

6 BOARD MEMBER BYRNES: And I know at the
7 control center you're kind of -- you're blindly,
8 somewhat trusting, what you're seeing is actually
9 happening. So it says a valve closed. You assume it
10 closed. How do you know? Like what is the fail-safe?

11 Do you send a technician out? Are they
12 going to physically take a look at this? I mean,
13 what -- again, technology is great when it works.

14 THE WITNESS: Yeah, I think if a situation
15 is critical enough where we're going to shut a valve,
16 or a valve shuts, we're definitely going to send
17 personnel out to investigate.

18 But then, in the control center, depending
19 on the operating condition of the line, there should
20 be some indication. So, if a valve shuts, then flow
21 will stop. So you'll see a flow indication. Pressure
22 may build.

23 So there should be some indication in the
24 control center. Some indicators. But we will
25 definitely -- if it's serious where they shut a valve,

1 or if a valve shuts automatically, that will dispatch
2 personnel to investigate.

3 BOARD MEMBER BYRNES: So I'm assuming this
4 is going to be similar to what I've experienced, but
5 could you explain, you know, public education. What's
6 the outreach of this project? What's required of you
7 to educate the public?

8 Is this a onetime thing where you educate
9 in the beginning and no education again? Is this an
10 annual thing? An ongoing thing?

11 How does this public education outreach
12 look for Summit Carbon?

13 THE WITNESS: It's ongoing and it will be
14 annual. And it will be in various forms. One will
15 be -- we'll send a mailer. So you'll get information
16 in the mail that says there's an 8-inch pipeline, it's
17 in carbon dioxide service, it's in your area. It's
18 crossing your property or it's in this area.

19 It may have some information about what
20 to -- if you notice "x," if you notice a vapor cloud
21 or if you hear a noise, then call this number. And it
22 will have contact information to the control center.

23 And then, aside from that, many times
24 Mr. Dillon -- and I've been involved in some. Where
25 you'll have community events, whether it's --

1 obviously with the first responders, but if it's local
2 businesses or schools where they just want to learn
3 about CO2, where they want to learn about pipeline
4 operations, about what we do, or any risk associated
5 with it, then those can be conducted as well.

6 But they're not scheduled annually like the
7 public awareness update would be to those affected.
8 Or potentially affected.

9 BOARD MEMBER BYRNES: So we talked a little
10 bit early in our conversation about calling 811.
11 Doing a One Call.

12 What is the expectation for landowners if
13 they have this pipeline going through? Is it just
14 scratching the surface? Is it taking out and -- you
15 know, if they have a chisel plow out and they're doing
16 fieldwork they need to do an 811? They're digging
17 postholes, they're planting a tree.

18 When do they need to be making these phone
19 calls around your pipeline?

20 THE WITNESS: So we'll give them an
21 as-built. Every landowner. So you'll know across
22 your field it's exactly four foot deep. Or exactly
23 five foot deep, et cetera.

24 And so what we'll ask is if you're digging
25 within two feet of the pipeline laterally, we'd like

1 you to notify us. So if you're putting a posthole in
2 and you know -- well, if you're digging anywhere on
3 that 50-foot easement and you're uncomfortable, please
4 call us, we'll come out and locate the pipeline.

5 That's what we prefer to do.

6 So, even if you're putting in a post for a
7 fence and you plan on being four foot on either side
8 of the center line of the pipe, please call us. We'll
9 send somebody out at our expense, we'll locate the
10 pipeline, and we'll say, "Here's where it is," we'll
11 mark it, and you'll know exactly where it is.

12 If you're going through your normal farming
13 activities and you're plowing or you're disking, or
14 whatever you're doing above the pipeline, as long as
15 you're comfortable that if you know it's four foot
16 depth of cover, that you're going 18 inches or
17 24 inches, that works for us. But, if you're
18 uncomfortable, then we would expect you to call us.

19 If you want to call 811, that's up to you.
20 But, as you know, 811 gets -- depending on the area
21 that it's in can field a lot of different
22 notifications.

23 But I would just suggest, and we'll put
24 this in our public information, that if you're
25 concerned at any point about where the pipeline is and

1 the activity in and around it, please call it.

2 The other thing, Board Member Byrnes, is
3 over time our operations personnel will get to know
4 landowners and hopefully establish a relationship.
5 And so they need to feel comfortable that, "I know
6 Dave Smith is the guy that's typically in my area. I
7 can call Dave and say, 'Here's what I want to do. Can
8 you swing by or can you give me some guidance or can
9 you have somebody locate the line.'" Those types of
10 things.

11 BOARD MEMBER BYRNES: I think the last
12 question that I have, on page 4 of your rebuttal
13 testimony, you noted that Summit has taken actions to
14 comply with PHMSA's June 2, 2022, advisory bulletin.

15 Can you describe some of those actions that
16 you've taken due to that bulletin?

17 THE WITNESS: And this is in response to
18 the Satartia incident?

19 BOARD MEMBER BYRNES: I believe so. Let's
20 see. I've got page 4, rebuttal testimony. I guess I
21 didn't write down the line. Yeah, it would be.

22 THE WITNESS: Yeah, it's just -- obviously,
23 we read the investigative report, and one of those
24 actions is to make sure that we understand where the
25 high-consequence areas are, the could affects, the

1 HPOs, and the OPOs, and that we've incorporated 2D or
2 overland flow in our dispersant modeling.

3 We will obviously make sure that geohazard
4 analysis, et cetera, is completed and that any and all
5 that will be represented in our quantitative risk
6 assessment. And then whatever appropriate actions we
7 need to from an integrity management standpoint will
8 be incorporated and in our operating and maintenance
9 procedures.

10 So -- I mean, obviously, with Denbury and
11 Satartia, they missed on the front end with not
12 identifying the geohazard and the risk associated with
13 it, but they missed on the back end in the response,
14 public awareness, and emergency response.

15 So, essentially, if they would have
16 followed PHMSA guidelines, maybe that event could have
17 been avoided, but that was a significant weather
18 event. And those do happen. And so it's
19 understanding where that risk is and then responding
20 as soon as practical to any type of event like that to
21 make sure that your pipeline still has the integrity
22 that's intended.

23 BOARD MEMBER BYRNES: So I forgot I do have
24 one other little note here.

25 I heard this multiple times the last two

1 weeks on different landowners that have railroad
2 tracks next to them. And one of the things, and it
3 does seem to be a trend, does that railroad track need
4 to be approached at a 90-degree angle.

5 That seems to be -- on all the KMZ maps and
6 all the things I've researched, it seems like you guys
7 do cross at a 90-degree angle.

8 Is that a requirement of the railroad
9 company? Is that something you're trying to
10 accomplish as a company? Or is that just something
11 unusual that's trending?

12 THE WITNESS: Well, I will say that I think
13 we cross 41 rail lines in Iowa, and I think we've --
14 we've applied for all 41 permits, and I think we've
15 received 14.

16 And railroads kind of dictate the terms. I
17 don't know if all 41 require us to cross at a 90, but
18 generally that's my experience. And they're very
19 cognizant of their angle of repose.

20 And so -- and they're very specific around
21 the depth of cover that they want you to cross under
22 the -- you know, what depth they want you to cross
23 under their rail line.

24 And so Mr. Schovanec can tell you
25 definitively, but my assumption is it's a requirement

1 from the railroads to cross at a 90.

2 Just like most DOT permits would prefer you
3 cross at a 90. Sometimes they'll let you cross at an
4 angle, but typically county roads want you to cross at
5 a 90.

6 BOARD MEMBER BYRNES: Thank you. That's
7 all the questions I have. I don't know if Board
8 Member Martz --

9 BOARD MEMBER MARTZ: Just a couple
10 clarifications.

11 Mr. Powell, you mentioned the
12 communications method from the pipeline to the OCC.
13 That was satellite you said?

14 THE WITNESS: Yeah, as a primary.

15 BOARD MEMBER MARTZ: Do you know what the
16 reliability of that communications network would be?

17 THE WITNESS: I don't. I know there's
18 redundant -- I can get that information for you.

19 BOARD MEMBER MARTZ: And then Board Member
20 Byrnes touched on the response time. And you said
21 there wasn't a defined response time.

22 So my understanding with Satartia is that
23 the valve around that incident was remotely closed,
24 but later it was found that it did not actually fully
25 close.

1 So wouldn't it be important to have a
2 defined response time in the event of a rupture?

3 THE WITNESS: Oh, absolutely. What I meant
4 to say is that we haven't established what that is at
5 this point. So we're working on that. And Mr. Dillon
6 can comment further on it when he testifies.

7 But, yes, I think there definitely needs to
8 be a response time. And that response time may vary
9 depending on where we are along the pipeline route,
10 what's in proximity, what's the potential impact of a
11 release. It may vary. It may not be 15 minutes
12 across the entire footprint. But it will clearly be
13 defined before we go into operation. It just hasn't
14 been defined as we sit here today.

15 BOARD MEMBER MARTZ: Thank you.

16 No further questions.

17 BOARD CHAIR HELLAND: Okay. Thank you. We
18 will turn the witness back over to Summit for
19 redirect. Following Summit, the other parties will
20 have an opportunity to ask clarification questions as
21 it relates to redirect only.

22 MR. LEONARD: No redirect questions, Your
23 Honor.

24 BOARD CHAIR HELLAND: Boy, that made that
25 easy. Thank you. Appreciate it.

1 Okay. Mr. Powell, you're not excused, but
2 you may step down. You may be called back. In fact,
3 I think it's probably safe to say you will be called
4 back. But, for this evening, you're done.

5 MR. JORDE: I just have to place an
6 objection on the record. If we're not allowed to ask
7 questions following the Board's questions, I would
8 object to not being able to follow up on those
9 questions.

10 BOARD CHAIR HELLAND: Okay. Thanks.

11 Okay. With that, we will recess until
12 8 a.m. in the morning. We'll look forward to seeing
13 you bright and early. Thank you.

14 (Hearing recessed at 6:24 p.m.,
15 September 5, 2023.)

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C E R T I F I C A T E

I, the undersigned, a Certified Shorthand Reporter of the State of Iowa, do hereby certify that I acted as the official court reporter at the proceedings in the above-entitled matter at the time and place indicated; that I took in shorthand all of the proceedings had at the said time and place and that said shorthand notes were reduced to typewriting under my direction and supervision, and that the foregoing typewritten pages are a full and complete transcript of the shorthand notes so taken.

Dated this 22nd day of September, 2023.



CERTIFIED SHORTHAND REPORTER
Melissa A. Burns, Iowa CSR #527

IN RE: SUMMIT CARBON SOLUTIONS
IUB HEARING 09/05/2023

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