## In the Matter Of:

In Re: DEU - Request to Construct LNG Facility

## **HEARING (NON CONFIDENTIAL), DOCKET NO. 19-057-13**

September 26, 2019

Job Number: 547818B

## BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

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IN THE MATTER OF:

Docket No. 19-057-13

REQUEST OF DEU FOR

APPROVAL OF A VOLUNTARY

RESOURCE DECISION TO

CONSTRUCT A LIQUIFIED

NATURAL GAS FACILITY

DOCKET NO. 19-057-13

HEARING

WITH CONFIDENTIAL

TESTIMONY REDACTED

September 26, 2019 9:01 a.m.

LOCATION:
PUBLIC SERVICE COMMISSION
160 East 300 South, Room 451
Salt Lake City, Utah 84111

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Job No. 547818B

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1	Page 5 September 26, 2019 9:01 a.m.
2	PROCEEDINGS
3	COMMISSIONER LEVAR: Okay. Good morning.
4	We're here for a Public Service Commission hearing in
5	Docket No. 19-57-13, Request of Dominion Energy Utah for
6	Approval of a Voluntary Resource Decision to Construct a
7	Liquified Natural Gas Facility.
8	And if anyone forgets that this is a Public
9	Service Commission, we have a new sign behind our heads.
10	It's a very subtle sign. But if you're here for the
11	psychologist licensing board, you're in the wrong room
12	right now.
13	Why don't we start with appearance for the
14	utility?
15	MS. NELSON-CLARK: Thank you. My name is
16	Jenniffer Nelson-Clark, I'm counsel for Dominion Energy
17	Utah. I have with me Cameron Sabin, who is also counsel
18	for Dominion Energy.
19	We also have with us Kelly Mendenhall, who
20	is one of the witnesses who's offered prefiled testimony
21	and will be available for cross today. And behind me we
22	have William Schwarzenbach, Tina Faust, Bruce Paskett,
23	Mike Gill, and Mike Platt. And you'll recognize those
24	names as witnesses who have also filed prefiled
25	testimony.

Page 6 1 COMMISSIONER LEVAR: Thank you. 2. Mr. Jetter? 3 MR. JETTER: Good morning. I'm Justin 4 Jetter with the Utah Attorney's General Office and next to me at counsel table is Patricia Schmid, also with the 5 Utah Attorney General's Office. And we are both here 6 today representing the Utah Division of Public 7 Utilities. 8 9 The division intends to call two witnesses at this hearing, Allen Neale and Douglas Wheelwright, 10 11 and they are both in the hearing room today. 12 COMMISSIONER LEVAR: Thank you. 13 MR. SNARR: Yes. My name is Steven W. 14 I'm an assistant attorney general here representing the Office of Consumer Services. With me 15 here at the table is Alex Ware, who will be presenting 16 17 testimony today. Thank you. 18 COMMISSIONER LEVAR: Thank you. 19 MR. RUSSELL: Phillip Russell representing 2.0 both the Utah Association of Energy Users and Magnum 21 Energy Midstream Holdings. With me in the courtroom --22 in the gallery is Mr. Dave Schultz, a witness on behalf 23 of Magnum. I believe the witness on behalf of UAE, Mr. Bieber, is listening in on the live stream, to the 24 25 extent that he can today.

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Page 7
 1
                  COMMISSIONER LEVAR:
                                       Okay.
                                              Thank you.
 2
    other preliminary matters before we move forward?
 3
                  MS. NELSON-CLARK: There is one.
                                                     Tn
    preparing our summaries -- our witness summaries, we
 4
    discovered that we need to disclose some confidential
 5
    information in those conversations, so we will be moving
 6
    to close the hearing. We've had conversations with
 7
    Mr. Russell, and the solution we think is best is that
 9
    any party who is precluded from viewing or hearing the
    confidential information will be asked to leave, but we
10
11
    will agree that Mr. Russell can stay and all of that
12
    information could be provided or heard on an Attorneys'
13
    Eyes Only basis.
14
                  COMMISSIONER LEVAR:
                                       Okav.
                                              So the intent
    is to deal with that motion as the issues arise?
15
16
                  MS. NELSON-CLARK: Yeah.
17
                  COMMISSIONER LEVAR: So we'll have motions
    to close portions of the hearing at some point?
18
19
                  MS. NELSON-CLARK:
                                     I believe so.
                                                    T do have
2.0
    a concern that there will be some cross that will call
21
    for the disclosure of such information, and we'll
22
    interject at that time. I will tell you that our first
23
    witness has a summary that is largely highly
24
    confidential, so...
25
                                       Well, we'll deal with
                  COMMISSIONER LEVAR:
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Page 8 those witness as we come to them. As the issue arises 1 2 in cross-examination, I think the three of us are going to have to rely on the attorneys in the room to help us 3 make sure we don't move forward without taking an appropriate pause and dealing with the motion --5 6 MS. NELSON-CLARK: Thank you. COMMISSIONER LEVAR: -- when it's 7 8 appropriate. 9 MS. NELSON-CLARK: Thank you. 10 COMMISSIONER LEVAR: Any other preliminary 11 matters? 12 (No audible response.) 13 COMMISSIONER LEVAR: Okay. Then, Ms. 14 Clark? 15 MS. NELSON-CLARK: So the Company would call Kelly B. Mendenhall as its first witness. And 16 17 Mr. Mendenhall's summary is highly confidential, so the Company would move, under Commission Rule R746-1-703, 18 for closing -- closing the hearing. 19 2.0 And the basis for that is Mr. Mendenhall 21 would be discussing the particulars of one of the bids 22 that was received during the course of his summary. 23 COMMISSIONER LEVAR: Okay. Does any party have any objection to the motion? 24 25 MR. JETTER: No objection.

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Page 9
 1
                  MS. SCHMID: Just a question, though.
 2
    does this also mean that streaming would be
 3
    discontinued?
 4
                  MS. NELSON-CLARK: Yes.
                  COMMISSIONER LEVAR: Okay. Mr. Snarr?
 5
 6
                  MR. SNARR: No objection.
                  COMMISSIONER LEVAR: Mr. Russell?
 7
 8
                  (No audible response.)
 9
                  COMMISSIONER LEVAR: Mr. Clark, any
10
    questions on the motion?
11
                  COMMISSIONER CLARK:
                                       No, no questions.
12
                  COMMISSIONER LEVAR: Or objection to
13
    granting it?
14
                  COMMISSIONER CLARK: No questions.
15
                  COMMISSIONER WHITE: No questions. Thank
16
   you.
17
                  COMMISSIONER LEVAR: Any objection to
18
    granting the motion?
19
                  COMMISSIONER CLARK:
                                       No.
2.0
                  COMMISSIONER WHITE:
                                       No.
21
                  COMMISSIONER LEVAR:
                                       The motion is granted,
22
    so I think we're going to have to rely on the people in
    the room to know who should or shouldn't be in the room.
23
24
    If there is any disagreement on that, please indicate to
    me, and we'll wait until we've resolved that before we
25
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Page 10
    stop the streaming, so we'll continue streaming at this
 1
 2
    point.
 3
                  MS. NELSON-CLARK: So I see two faces I
    don't recognize.
                  (Individuals leave the room.)
 5
 6
                  COMMISSIONER LEVAR: Do we have any
    remaining issues with individuals in the room?
 7
                  MS. NELSON-CLARK: No, I think we recognize
 8
 9
    everyone else.
10
                  COMMISSIONER LEVAR: Okay. Then at this
11
    point I'll ask the streaming to discontinue. I am
12
    muting the hearing loop system, because that can
13
    sometimes be picked up in the hallway, and I'm going to
    turn the microphone volume down pretty low. If we have
14
    any trouble with you, the court reporter, receiving
15
    everything, we can deal with that but, hopefully, having
16
17
    the microphones low for this portion of the hearing
    won't be too much of a problem.
18
19
                  (Confidential testimony begins.)
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                  COMMISSIONER LEVAR: Okay. We will start
 7
    the streaming. Do we need to inform participants who
   have left the room?
 8
                  The division, if you'd like -- whichever
 9
    one of you is doing the cross-examination.
10
11
                        CROSS-EXAMINATION
12
    BY MR. JETTER:
13
         Q. Good morning, Mr. Mendenhall.
14
         Α.
             Good morning.
             I have just a few brief questions that are
15
         Q.
    probably more directed to questions about which of your
16
    witnesses I should be asking these questions to.
17
18
         Α.
             Okay. I can answer those.
19
         Q.
             So first one. In the event of a supply
20
    shortfall where you are going to run short of gas
21
    supply, whether a Design Day or otherwise, who would be
22
    the best witness to discuss the decision-making process
23
    of if and when you would physically disconnect a
    transportation -- firm transportation customer whose
24
    supply was not available?
25
```

- 1 A. Yeah, that would be Ms. Faust or
- 2 Mr. Schwarzenbach.
- 3 O. Okay. And who would be the best witness to ask
- 4 about decisions to install transportation pipelines to
- 5 remote communities of Green River or Kanab and Wendover?
- 6 A. That would probably be Mr. Platt or Mr. Gill.
- 7 MR. JETTER: Okay. I don't have any
- 8 questions about your testimony, so those are my
- 9 questions. Thank you.
- 10 THE WITNESS: Thank you.
- 11 COMMISSIONER LEVAR: Thank you. Mr. Snarr?
- 12 Cross
- 13 BY MR. SNARR:
- 14 Q. Yes. Good morning, Mr. Mendenhall. How are
- 15 you?
- 16 A. Good morning.
- 17 Q. I have just a few questions.
- 18 You and Mr. Lawton, on behalf of the Office
- 19 of Consumer Services, both provided testimony concerning
- 20 certain accounting requirements as it relates to lease
- 21 payments associated with the use of significant capital
- 22 assets and questions about imputed debt; isn't that
- 23 correct?
- 24 A. That's correct.
- 25 Q. You indicated that the Financial Accounting

- 1 Standards Board Accounting Requirement ASC 842 requires
- 2 the net present value of lease payments to be booked as
- 3 a liability, just like certain credit rating agencies
- 4 were already treating those lease payments; isn't that
- 5 correct?
- 6 A. That's correct.
- 7 Q. At lines 14 through 17 of your rebuttal
- 8 testimony, you quote Mr. Lawton, indicating -- I'll let
- 9 you get to that, if you want.
- 10 A. Thank you. 14 through 17?
- 11 Q. Yes.
- 12 A. Yes.
- 13 Q. You quote Mr. Lawton, indicating the reason
- 14 rating agencies have imputed debt for evaluating
- 15 financials and borrowing strength is that leases and
- 16 lease-type transactions create fixed-debt-like financial
- 17 obligations. These debt-like obligations are
- 18 substitutes for capital investments and should be
- 19 reflected in the financial metric calculations. Is that
- 20 correct?
- 21 A. Yes.
- Q. All right. In response to the office's
- 23 discovery request No. 214, you've indicated that -- I'm
- 24 not sure you need to pull it up. But if you do, we can
- 25 certainly take the time.

- 1 You've indicated that if imputed debt were
- 2 necessary, would -- it would not have an impact on the
- 3 capital structure calculations for regulatory or GAAP
- 4 purposes, but it would have an impact on credit metrics;
- 5 isn't that correct?
- 6 A. Yeah. So I believe Mr. Lawton refers to that
- 7 in his testimony, doesn't he? So I would like to see
- 8 the entire data request response, because I think you
- 9 might be --
- 10 Q. I think it's your response to No. 214.
- 11 A. Yeah, I'm trying to remember where that is. I
- 12 think it's in Mr. Lawton's direct testimony. I think he
- 13 pulled it in. So let me just find it real quick and
- 14 then I'll answer your question.
- 15 Q. All right.
- A. You said OCS 214; is that right?
- 17 Q. That's right.
- 18 A. Yes. So I'm there. If we go to Mr. Lawton's
- 19 testimony, lines 144 through 150, he has the complete
- 20 answer.
- 21 Q. Well --
- 22 A. So you're correct. I did say it would not have
- 23 an impact on capital structure calculations for
- 24 regulatory or GAAP purposes, but it would have an impact
- 25 on credit metrics.

Page 24 And then down at the last sentence of the 1 2 data request response, I say, "This would have an impact on cash flows in the form of lower interest costs and 3 higher revenue requirements due to increased equity levels." 5 Q. Now, isn't it true that the credit metrics and 6 the things you just mentioned are used by credit rating 7 agencies but they're reflective of several different 8 considerations that relate to the financial health and 9 well-being of the utility? Isn't that right? 10 11 The credit metrics, yeah, they're used for Α. 12 multiple reasons. Is that the question? 13 They rely on a number of different factors that relate to the financial health and well-being; is that 14 15 right? 16 A. Yes, that's correct. In fact, in Mr. Lawton's testimony -- his surrebuttal testimony, he includes a 17 table that shows multiple metrics that are used, 18 19 although I will point out that he left one very important metric out of that table. But you're correct, 20 21 credit rating agencies look at multiple factors. 22 MR. SNARR: All right. Thank you. That's 23 all I have. 24 THE WITNESS: Yes. 25 COMMISSIONER LEVAR: Thank you.

Page 25 Mr. Russell, do you want to make a motion 1 before you start your cross-examination or do you want to do some and then make the motion? 3 MR. RUSSELL: We'll start, and I'll let you 4 5 know when we're going to get into the highly confidential information. 6 7 CROSS-EXAMINATION BY MR. RUSSELL: Good morning, Mr. Mendenhall. 9 Good morning. 10 Α. I'm going to ask you to start at line 463 of 11 Q. 12 your direct testimony. It's on page 18, at the bottom. 13 Okay. 463, you said? Α. 14 Ο. Correct. Okay, I'm there. 15 Α. In this line you state, "When considering the 16 Q. total costs of all the options, the DEU-owned LNG 17 18 Facility is the lowest-reasonable-cost option. Based on 19 my calculations, it is about \$1 million per year less than the next lowest option." 20 21 Right? 22 Α. Correct. 23 Q. When you say the \$1 million figure, that's an annual revenue requirement figure, right? 25 Right. Α.

- 1 Q. Okay. So the company's determination that its
- 2 proposed LNG facility is the lowest reasonable cost is
- 3 based on a comparison of the annual revenue requirement
- 4 numbers that you have calculated for each of the
- 5 proposals; is that right?
- 6 A. That's right. The annual impact to customers,
- 7 correct.
- Q. Okay. At the beginning of your -- well, before
- 9 I get there, there is a lengthy section of your
- 10 testimony which you kind of lay out how you got to those
- 11 annual revenue requirements numbers, right?
- 12 A. Right.
- 13 Q. And that kind of corresponds with an exhibit in
- 14 your testimony. I think it's Exhibit 1.07.
- 15 A. That's correct.
- 16 Q. Okay. I'm going to walk through some of that,
- 17 and some of that is going to require us to get into the
- 18 highly confidential information. But before I get
- 19 there, I want to ask you a question about the beginning
- 20 of this sentence that we just read, "When considering
- 21 the total costs of all of the options."
- In conducting your revenue requirement
- 23 analysis, the company added some costs to some of the
- 24 bids, right?
- 25 A. Right.

HEARING (NON CONFIDENTIAL), DOCKET NO. 19-057-13 - 09/26/2019 Page 27 1 And can you tell me why you did that? Q. 2. Α. Well -- so I'd have -- I can walk you through, maybe, all the costs. Maybe that's the best thing to 3 4 do. So we had the -- we started with the 5 6 contract costs. So that was the original bid from the customer -- or not -- from the bidder, and then we added 7 8 to that reinforcement costs. And every project had some 9 sort of reinforcement costs to get to the optimal 10 delivery location. 11 And then we had an imputed-debt cost, and 12 the reason why in my testimony I -- and that was only on 13 one of the bidders that I made an imputed-debt cost, but that was due to the fact that -- from an accounting and 14

15 from a credit agency standpoint. As I mentioned in my

16 summary, if the company builds a facility and has

17 basically complete control of it but they're paying a

18 lease payment to somebody else, credit agencies look at

19 that as basically the same thing as if they owned it.

20 So we made an adjustment to take that into effect and

21 the impact on capital structure that that would have.

22 And then there was a creditworthiness

23 adjustment that we made based on -- we gave all of the

24 bids to our internal credit group and they looked at the

25 numbers and, based on their assessment, determined that

- 1 none of the bidders could -- and I'm not sure if I can
- 2 -- we might be going into confidential stuff now.
- 3 MS. NELSON-CLARK: If there is a way for
- 4 you to answer the question fully without calling on the
- 5 confidential --
- 6 THE WITNESS: I would say based on feedback
- 7 from our credit group, we may have made adjustments on
- 8 some of the bidders to mitigate those concerns. And I
- 9 quess I'll just leave it at that.
- 10 Q. (BY MR. RUSSELL) Fair enough. Let's go ahead
- 11 and have you turn to line 163. It's on page 7 of your
- 12 direct testimony. And this is the section in which you
- 13 sort of lay out all of that which we were just talking
- 14 about, the analysis relating to your annual revenue
- 15 requirement calculations associated with each proposal
- 16 rate --
- 17 A. Right.
- 18 Q. -- including costs of each proposal and then
- 19 costs that the company added to each of those proposals,
- 20 right?
- 21 A. Correct.
- Q. Okay. I want to walk through your analysis.
- 23 I'm going to focus on the Magnum options --
- 24 A. Sure.
- Q. -- naturally.

- 1 A. Yeah.
- Q. But before we get there, I want to identify
- 3 what those Magnum options are. I don't think that we
- 4 have determined that these are highly confidential. I
- 5 think my client is fine doing it this way. The company
- 6 has marked them as confidential, but I think that was in
- 7 deference to my client. So I think we can identify
- 8 these without closing the hearing. And then when we get
- 9 into the specifics of your analysis, I think we then
- 10 will need to close the hearing.
- 11 A. Okay. Sure.
- 12 Q. So let's talk about what the Magnum options
- 13 were. There was -- there were -- the response is found
- 14 in -- I think it's Exhibit -- their response to the RFP
- 15 is your Exhibit 1.04, right? And I don't -- don't
- 16 intend to walk through that extensively, I just want to
- 17 identify it for the record.
- 18 A. Yeah. Let me just check that. These are big
- 19 exhibits, so...
- Q. They are.
- 21 A. I apologize it's taking me a while here. So
- 22 I'm almost to 1.04. Yes, 1.04 is Magnum's proposed bid.
- 23 Q. Okay. And Magnum submitted two bids, but there
- 24 were sort of multiple options, the way that the company
- 25 sort of analyzed them as three separate bids, right?

- 1 A. Right.
- Q. Okay. And so let's talk about what's referred
- 3 to in your testimony as Magnum Option 1?
- 4 A. Okay.
- 5 Q. And under Magnum Option 1, Magnum would incur
- 6 the cost to build -- well, I guess I should say with
- 7 each of the Magnum options, Magnum proposed that an
- 8 extension would be built linking its hub in Goshen to a
- 9 point in Bluffdale, right?
- 10 A. That's Option 1?
- 11 Q. Well, I think that's true with each of the
- 12 options, right, that there would be this extension that
- 13 would be built?
- 14 A. Yeah, that's kind of the base -- well, for two
- 15 of the options, that's kind of the base option, and then
- 16 I guess you could say there's maybe some add-ons or
- 17 whatever.
- 18 Q. Sure. And then with Option 1, Magnum would
- 19 incur the costs to build that extension from Bluff --
- 20 excuse me, from Goshen to Bluffdale, right?
- 21 A. Let me just verify that.
- 22 Q. Sure.
- 23 A. I'm just going to flip to my exhibit real quick
- 24 just to make sure. So we're talking about Option 1,
- 25 right?

- 1 Q. Correct.
- A. So you said -- say that again, I'm sorry.
- 3 Q. So I think it's the case that with each of the
- 4 Magnum options and extension there -- the proposal was
- 5 that an extension would be built from the Goshen hub to
- 6 a point in Bluffdale, correct?
- 7 A. Yeah, that's right.
- 8 Q. And then Magnum Option 1 was that Magnum would
- 9 incur the cost to build that extension?
- 10 A. I think they would -- I think they would
- 11 contribute a certain amount to build that extension or
- 12 build part of it. I'd have to go back and review it.
- 13 Q. Okay. And I believe the Magnum Option 2 is
- 14 that the company would incur the cost to build that
- 15 extension from Goshen to Bluffdale, right?
- 16 A. I think so. And then I think there may have
- 17 also been a sharing of costs of the station -- in our
- 18 M&R station.
- 19 Q. And then do you recall what the distinction
- 20 between Option 2 and Option 3 were?
- 21 A. I thought Option 3 was ownership. The company
- 22 would, I guess, own a cavern, if I'm recalling
- 23 correctly. And I think -- I think Magnum would still
- 24 own and control the line, but the actual ownership of
- 25 the storage would go to the company, if I recall

- 1 correctly.
- MR. RUSSELL: Sure. Just sort of to
- 3 short-circuit some of this for the Commissioners' sakes,
- 4 each of these options is described in Mr. Mendenhall's
- 5 Exhibit 1.04. It is Magnum's response to the RFP.
- 6 They're also laid out in some detail in Mr. Schultz's
- 7 direct testimony. I just kind of want to get a
- 8 foundation for the discussion here.
- 9 Q. (BY MR. RUSSELL) With respect to Magnum Option
- 10 1, there were actually sort of two kind of iterations of
- 11 that option, right? One was delivery to Bluffdale and
- 12 then a second iteration of that Magnum Option 1, so kind
- 13 of 1A and 1B, would have an extension from Bluffdale to
- 14 get the gas that would be delivered to the 471 pressure
- 15 zone, correct?
- 16 A. I believe there were two -- yeah, two options
- 17 on Option 1. I believe we took the one that was the
- 18 most financially beneficial to Magnum, and that's the
- 19 one we included, if my memory recalls.
- MR. RUSSELL: At this point, I think we're
- 21 going to start getting into the numbers in order to
- 22 identify these, so I'm going to have to get into some
- 23 confidential information. It's -- it is my client's
- 24 confidential information, so I'll ask that we close the
- 25 hearing.

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Page 33
 1
                  COMMISSIONER LEVAR:
                                       Okay. Does any party
 2
    object to closing the hearing?
 3
                  MR. JETTER: No objection.
 4
                  MR. SNARR:
                              No objection.
 5
                  COMMISSIONER LEVAR: I'm not seeing any
 6
    objection from anyone.
                  Mr. Clark, any questions?
 7
 8
                  COMMISSIONER CLARK:
                                       No.
 9
                  COMMISSIONER LEVAR: Mr White?
10
                  COMMISSIONER WHITE: No questions.
11
                  COMMISSIONER LEVAR: Okay. Implicit with
12
    this and our previous -- I'll just say for purposes of
13
    the entire hearing, implicit with any action to close
    the hearing is a commission finding that it is in the
14
    public interest to do so. And so we're basing that on
15
16
    the lack of opposition and the reason that was
17
    presented.
                  So at this point we'll close the hearing.
18
19
    Once again, we'll stop the streaming. We'll take a
    moment to make sure that everyone is comfortable with
2.0
21
    who is and isn't in the room. And I'll make the same
22
    adjustments to the sound system. If I could just get
23
    some indication when everyone in the room feels like
24
    we're ready to move forward.
25
                  MR. RUSSELL: I think we're good.
                                                      I will
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Page 34
    note that Mr. Schultz has stayed in the room.
                                                    I think
    it's appropriate for him to do so. There will be times
 3
    when he has to leave the room when we're talking about
    confidential information from entities other than
    Magnum, but these are not surprise numbers to him, he's
 5
 6
    seen them, so...
 7
                  COMMISSIONER LEVAR: Okay.
 8
                  MR. RUSSELL: I don't think anyone has
 9
    objection to Magnum's own folks seeing Magnum's numbers.
10
                  (Confidential testimony begins.)
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22	COMMISSIONER LEVAR: Do you want go ahead
23	with redirect?
24	MS. NELSON-CLARK: Thank you.
25	REDIRECT EXAMINATION

- 1 BY MS. NELSON-CLARK:
- Q. Mr. Mendenhall, I want to take us back for a
- 3 minute to some of the questions Mr. Snarr asked you. Do
- 4 you recall him asking you questions about the credit
- 5 agency metrics --
- 6 A. Yes.
- 7 Q. -- that were referenced both by you and
- 8 Mr. Lawton?
- 9 A. Yes.
- 10 MS. NELSON-CLARK: May I approach the
- 11 Commission and the witness?
- 12 COMMISSIONER LEVAR: Yes. I think we give
- 13 copies to the court reporter and to the...
- MS. NELSON-CLARK: Absolutely. Yes, sir.
- 15 Q. (BY MS. NELSON-CLARK) Mr. Mendenhall, I've put
- 16 in front of you a document that has been marked DEU
- 17 Hearing Exhibit 1.01H.
- 18 Could you please identify for me and
- 19 explain what that is?
- 20 A. Sure. This is the Moody's Financial Risk
- 21 Indicative ratios. This is found in a -- if you give me
- 22 a moment, I can tell you the document it's found in.
- 23 It's in Moody's Regulated Electric and Gas Utilities
- 24 Rating Methodology issued June 23rd, 2017. It's the
- 25 same table that's cited by Mr. Lawton on page -- I don't

- 1 know what page this is -- on line 48 of his surrebuttal
- 2 testimony.
- 3 Q. And is it a true and correct copy of the
- 4 document you've just described?
- 5 A. Yes.
- 6 MS. NELSON-CLARK: The company would move
- 7 to admit DEU Hearing Exhibit 1.01H.
- 8 COMMISSIONER LEVAR: If any party objects
- 9 to that, please indicate to me.
- 10 I'm not seeing any, so the motion is
- 11 granted.
- MS. NELSON-CLARK: Thank you.
- 13 Q. (BY MS. NELSON-CLARK) Mr. Mendenhall, can you
- 14 please describe for the Commission the contents of this
- 15 document and how it relates to the discussion that you
- 16 and Mr. Lawton have both had and that you referenced
- 17 during cross-examination about these risk indicators?
- 18 A. Sure. So in my testimony I talk about the cash
- 19 flow from operation's preworking capital divided by debt
- 20 metric. And if you look on this document, this Moody's
- 21 Investors Service document, you can see that that would
- 22 be -- that is the second of the four metrics that are
- 23 shown here.
- 24 So you can see it says, CFO pre-WC divided
- 25 by debt. And if you go over to the next column, you can

- 1 see that Moody's weights this factor at 15 percent. So
- 2 of these four factors, it weighs them higher than all of
- 3 the other factors. And that's basically the factor that
- 4 I focused in on my testimony when I talked about the
- 5 potential for the company to receive a downgrade.
- 6 And if you look over -- if you go -- if you
- 7 stay on that line, CFO pre-WC debt, and go to the line
- 8 that says "Low Business Risk Grid" and you go over to
- 9 the A rating, you can see that the A rating metric falls
- 10 between 19 to 27 percent. And then when you move to
- 11 Baa, that's 11 to 19 percent.
- So how these are different is you can see
- 13 that was the metric that I was using, that's the metric
- 14 that's the most highly weighted. And Mr. Lawton has
- 15 re-created this table in his testimony, but he's left
- 16 that metric out. So if you look on his table, you can
- 17 see CFO divided by debt. So I'm looking at his table
- 18 now, the second column, that corresponds to the third
- 19 row in the hearing document. This is CFO pre-WC less
- 20 dividends divided by debt.
- 21 Q. Mr. Mendenhall, I apologize for interrupting,
- 22 but could you identify for the record and the Commission
- 23 where in Mr. Lawton's testimony you're referencing?
- A. Yeah, sorry. I'm on line 48 in -- Table 1,
- 25 line 48 in Mr. Lawton's testimony. I apologize.

1	Page 58 COMMISSIONER LEVAR: Is that surrebuttal?
2	THE WITNESS: Surrebuttal.
3	Q. (BY MS. NELSON-CLARK) Please continue.
4	A. Okay.
5	Q. So you can see the second column it says, CFO
6	divided by debt. That corresponds to the third line on
7	the hearing document where Aaa is 34 percent, Aa is 23
8	to 34, A is 15 to 23.
9	Then you can see the next column over that
10	says CFO divided by interest. That is that
11	corresponds to the first row in the hearing document,
12	which is weighted at a 7.5 percent weighting, greater
13	than 8, 6 to 8, 4.5 to 6, and 3 to 4.5.
14	Then you can see the last column in the
15	table is debt to capital. That's the fourth row in the
16	document, which is weighted at seven-and-a-half percent.
17	If you go down to the Low Business Risk Grid, you see
18	that corresponds, 29 percent, 29 to 40, 40 to 50.
19	So the only reason I even bring this up is
20	Mr. Lawton, in his testimony, he focuses on this third
21	line that is weighted at 10 percent. And if you if
22	you compare the CFO pre-WC divided by debt with the CFO
23	pre-WC, less dividends divided by debt, the A rating
24	range is much lower for that than the than the CFO
25	pre-WC to debt, which is the metric I was using.

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                  So I just point that out to make sure that
 2
    the Commission has all of the information, has the table
    at it was created by Moody's, so that the record is
 3
 4
    complete.
 5
                  MS. NELSON-CLARK: I don't have any
 6
    additional cross questions -- or redirect. Excuse me.
 7
                  COMMISSIONER LEVAR: Mr. Jetter or
    Ms. Schmid, do you have any questions about the
 9
    redirect?
10
                  MR. JETTER: No questions. Thank you.
11
                  COMMISSIONER LEVAR: Mr. Snarr?
12
                  MR. SNARR: No questions.
                  COMMISSIONER LEVAR: Mr. Russell?
13
14
                  MR. RUSSELL: No questions. Thank you.
15
                  COMMISSIONER LEVAR: Commissioner White, do
16
    you have any questions for Mr. Mendenhall?
17
                  MR. WHITE: Yes, one question, and maybe
18
    this is a potential question about direction to another
19
    witness, but just following up on that line of cross
    from -- previously on -- I think -- I'm going to be very
2.0
21
    careful about indicating it, but this is the option cost
22
    comparison. But there was some discussion around how
23
    the change would have potentially affected revenue
24
    requirements.
25
                                Right.
                  THE WITNESS:
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Page 60
 1
                  COMMISSIONER WHITE:
                                       Is that something that
 2
    another witness may be able to address at some point or
    is that --
 3
 4
                  THE WITNESS: I can probably address it,
 5
    so...
 6
                  MR. WHITE: And I'll leave it up to the
    attorneys to indicate whether this is going to implicate
 7
    a confidential...
 8
 9
                  THE WITNESS: Maybe I can answer it in a
10
    nonconfidential way. So it would -- that particular
11
    option that we were discussing, the total overall
12
    revenue requirement would be reduced. And it would be
13
    reduced to a level where it might be nearer or lower
14
    than the option that is proposed by the company on a
15
    quantitative basis. But I would probably have to look
16
    at it in a little more detail. And I quess I would say
    they would be very close still, I think.
17
                  MR. WHITE: Let me just ask you this:
18
                                                          It's
    a little bit hard to read between the lines in the
19
20
    cross, but what's the best way, I guess -- is this a
21
    communication issue or how would you characterize
22
    this -- I guess, the gap in understanding here? Is
23
    this -- maybe this is a potential question for one of
24
    the other witnesses, but I'm just trying to wrap my head
    around what this -- how we got to this point where there
25
```

- 1 is maybe a different number based upon what appears to
- 2 be a miscommunication or wasn't, I guess, what's
- 3 maybe -- I'm just giving you an opportunity to
- 4 characterize that.
- 5 THE WITNESS: Yeah. Well, I tried to look
- 6 at the bid objectively. And I'm a numbers guy, and so
- 7 when I look at -- the nice thing about being an
- 8 accountant is usually the numbers are what they are.
- 9 And so the way I read that contract and I think the way
- 10 Mr. Gill read it is reflected in my testimony and my
- 11 analysis.
- 12 And, you know, I submitted this on
- 13 April 30th, and today is the first day that, to my
- 14 knowledge, anyone has said anything about it or
- 15 questioned it. And so I guess we could have talked
- 16 about this in other rounds of testimony, if other
- 17 parties had felt there was an issue. So maybe there is
- 18 communication issues between the parties. I don't know.
- 19 MR. WHITE: Okay. That's all the questions
- 20 I have.
- 21 COMMISSIONER LEVAR: Commissioner Clark?
- 22 COMMISSIONER CLARK: Yes, just a couple of
- 23 other questions on this same subject, I think.
- We're talking about a difference of
- 25 assumption, or at least a potential difference regarding

1	Page 62 who bears some element of the reinforcement costs; is
2	that right.
3	THE WITNESS: Right.
4	COMMISSIONER WHITE: And these are costs
5	that you didn't see reflected in a particular bid?
6	THE WITNESS: Correct.
7	COMMISSIONER WHITE: And so there as I
8	understood your testimony, there was an assumption
9	you or the company made an assumption that costs not
10	reflected in the bid would be borne by DEU?
11	THE WITNESS: Correct.
12	COMMISSIONER WHITE: And what I what I
13	would also like to understand is: Is there any is
14	there anything you can identify in the either the
15	company's evaluation of the bid or the bid itself that
16	would support that assumption?
17	THE WITNESS: Yes. So maybe it might
18	take me a moment, so bear with me.
19	COMMISSIONER WHITE: Sure.
20	THE WITNESS: But we reviewed some
21	information and Mr. Russell and I did earlier, and I
22	didn't base my assumption on that, you know, one
23	paragraph that he shared with me. So let me if you
24	can give me a moment just to look through Exhibit 1.04,
25	I'll try and find

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Page 63
 1
                  COMMISSIONER WHITE:
                                       Right. And I recall
 2
    your testimony about the paragraph that we looked at
    specifically, so I'm really looking --
 3
 4
                  THE WITNESS:
                                Right.
                  COMMISSIONER WHITE: -- for what underlies
 5
 6
    that.
 7
                  THE WITNESS: So I'm going to look for it
    and if I can't find it, I may rely on another witness to
    share that, in the interest of time, because I don't
    want to sit up here all day trying to find something.
10
11
                  COMMISSIONER WHITE: I'm sure the janitors
12
    are cleaning the restroom right now. It might be a good
13
    time for a break.
14
                  THE WITNESS: Okay. Actually, I think I
15
    found it, but we may need to go to confidential for me
16
    to --
17
                                       I'd request --
                  COMMISSIONER WHITE:
18
                  THE WITNESS: -- or we can take a break,
19
    whatever you want to do.
20
                  COMMISSIONER CLARK: I'd request that we go
21
    into confidential mode, if it's all right with -- if
22
    there isn't an objection.
23
                  COMMISSIONER LEVAR: Maybe we should at
    least identify what page of the exhibit we're talking
24
    about before we address the motion.
25
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Page 64
 1
                  THE WITNESS:
                                I'm sorry. I'm looking at
 2
   page 23.
 3
                  COMMISSIONER LEVAR: Of 1.04?
 4
                  THE WITNESS: Of 1.04.
                  COMMISSIONER LEVAR: So 23 of 286?
 5
 6
                  THE WITNESS: Yes.
 7
                  COMMISSIONER LEVAR: Let me just ask:
    any party have an objection to closing the hearing while
    he answers this question?
                  I'm not seeing any objection.
10
11
                  So we will we make a finding that it is in
12
    the interest of the public to close the hearing to the
    public while Mr. Mendenhall answers this question. And
13
    we'll ask the streaming to discontinue and I will make
14
15
    the adjustments to the audio and in terms of personnel
    in the room.
16
17
                  MS. NELSON-CLARK: I don't see any one here
    who shouldn't be.
18
19
                  (Confidential testimony begins.)
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Page 66 1 COMMISSIONER LEVAR: We will restart the 2 streaming and reopen the hearing to the public. I don't have any further questions, Mr. Mendenhall. So thank 3 you for your testimony. 5 MS. NELSON-CLARK: Thank you. And why 6 don't we go ahead and take a break and reconvene at, by that clock, 10:35 with the next witness? 7 8 (A recess was taken.) COMMISSIONER LEVAR: Okay. We'll be back 9 10 on the record. Ms. Clark? 11 MS. NELSON-CLARK: Thank you. The company 12 calls Tina Faust. 13 COMMISSIONER LEVAR: Ms. Faust, do you 14 swear to tell the truth? 15 MS. FAUST: I do. 16 COMMISSIONER LEVAR: Thank you. 17 TINA FAUST, 18 called as a witness by and on behalf of Dominion Energy 19 Utah, having been first duly sworn, was examined and 2.0 testified as follows: 21 DIRECT EXAMINATION 22 BY MS. NELSON-CLARK: 23 Ms. Faust, will you please state your name and business address for the record? 24 25 A. Tina Faust, 333 South State, Salt Lake City,

- 1 Utah.
- 2 Q. And what position do you hold with the company?
- A. Director of gas supply and commercial support.
- Q. Ms. Faust, did you file testimony -- prefile
- 5 direct testimony in this docket that was marked DEU
- 6 Exhibit 2.0, with accompanying Exhibits DEU 2.1 through
- 7 2.15?
- 8 A. Yes.
- 9 Q. And were those documents prepared by you under
- 10 your direction, or are they copies of the documents they
- 11 purport to be?
- 12 A. Yes.
- 13 Q. And did you also file prefiled rebuttal
- 14 testimony marked as DEU Exhibit 2.0R?
- 15 A. Yes.
- 16 Q. And was that prepared by you or under your
- 17 direction?
- 18 A. Yes.
- 19 Q. And do you adopt the contents of those
- 20 documents as your testimony today?
- 21 A. Yes.
- MS. NELSON-CLARK: The company would move
- 23 to admit DEU Exhibit 2.0, with all of the accompanying
- 24 exhibits marked 2.01 through 2.5, and DEU's rebuttal
- 25 testimony that is marked as DEU Exhibit 2.0R.

Page 68 1 COMMISSIONER LEVAR: If anyone objects to 2 that motion, please indicate to me. 3 And I'm not seeing any objection, so the 4 motion is granted. 5 MS. NELSON-CLARK: Thank you. 6 0. (BY MS. NELSON-CLARK) Ms. Faust, could you please summarize the testimony you've offered in this 7 docket? 8 Yes. Providing safe, reliable service for the 9 Α. natural gas customers of Dominion Energy in Utah is my 10 11 job and a responsibility I take very seriously. 12 The company has experienced supply 13 shortfalls even on days that were not extremely cold. In 2011, I witnessed other LDCs in the western United 14 States lose natural gas service to more than 40,000 15 16 customers due to cold weather, coupled with third-party equipment outages. 17 18 In the last heating season alone, I 19 witnessed multiple LDCs experience supply shortfalls. Fortis BC struggled with supply shortfalls when the 20 21 Enbridge pipeline ruptured, and XL and Consumers Energy 22 experienced customer outages due to the 2019 polar 23 vortex. 24 DEU currently receives 100 percent of its 25 gas supply from off-system sources and depends entirely

- 1 upon third parties along the supply chain to obtain that
- 2 gas supply. This includes well production facilities,
- 3 many miles of gathering system piping, processing
- 4 facilities, storage facilities, compression facilities,
- 5 hundreds of miles of cross-country transmission
- 6 pipelines and city gate stations.
- 7 In order to manage this process, DEU must
- 8 adhere to a daily nomination cycle schedule. During
- 9 periods of high demand, the Company's ability to replace
- 10 the supply shortfalls is limited, not only by the
- 11 nomination deadlines but also because space is fully
- 12 utilized from the storage facilities as well as on the
- 13 upstream interstate pipelines.
- 14 The vast majority of DEU's gas supply is
- 15 produced and processed in the remote areas of Wyoming,
- 16 where temperatures are much colder than the urban gas
- 17 demand centers where our customers reside. When
- 18 supplies freeze off or processing facilities are
- 19 impacted by cold weather, this gas is not able to reach
- 20 our customers as planned.
- In addition, events like earthquakes,
- 22 landslides, fires, equipment failures and other
- 23 unpredictable and uncontrollable events can also impact
- 24 the company's ability to obtain the gas necessary for
- 25 its customers.

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                  Force Majeure provisions in the third-party
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    transportation and storage service contracts place the
    risk of these events and the resulting supply shortfalls
 3
    onto DEU and its customers. The company conducted a
    comprehensive analysis of these risks and the details of
 5
    that analysis can be found in Exhibit 2.04 of my
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 7
    testimony.
                  Loss of service to DEU customers not only
 8
 9
    could create a very serious safety issue in our climate
    that depends on natural gas for heating homes and
10
11
    businesses during cold winter days and nights, it also
12
    could result in a very costly inconvenience for
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    customers and the regional economy. The potential for
    these supply shortfalls illustrates the need to find a
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    long-term supply reliability solution for our customers.
15
                  Some parties in this proceeding seem to
16
17
    question whether supply shortfalls will occur that will
    threaten the safety of our customers. I would like to
18
    appoint -- I would like to point to a time in
19
2.0
    December 1990 through January 1991 when there were
21
    several very serious weather-related shortfalls that
22
    lasted many days. DEU was able to maintain service to
23
    its customers at the time by using several mechanisms
    that no longer exist. At the time, the gas supply
24
25
    purchase functions were performed by the upstream
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- 1 pipeline, Mountain Fuel Resources.
- 2 Prior to mandatory, quote, unbundling under
- 3 Order 636, the upstream pipeline also had flexibility in
- 4 how storage was utilized, how all gas supply was
- 5 delivered, including diverting interruptible
- 6 transportation customers' gas to DEU.
- 7 This is not how gas supply is handled
- 8 today. Instead, DEU is responsible, operating under
- 9 many more formalized constraints. Simply put, if a
- 10 weather event similar to the one in 1990 to '91 were to
- 11 occur today, customers would lose -- could lose service,
- 12 if additional resources are not brought on line.
- In addition, it is very important to note
- 14 that DEU's system and its Design Day demand have grown
- 15 significantly over the past three decades and is
- 16 projected to continue to grow.
- 17 Also, DEU cannot depend on interrupting
- 18 transportation customers to help replace supply
- 19 shortfalls for its firm sales customers, as many of the
- 20 same risks that could impact DEU supplies would also
- 21 likely impact the supply being delivered for its
- 22 transportation customers.
- 23 My experience with supply shortfalls, even
- 24 during moderately cold temperatures, causes me great
- 25 concern. As such, considering the potential for the

- 1 catastrophic outages that could occur at Design Day
- 2 temperatures makes me unwilling to risk not recommending
- 3 a long-term supply solution. In Docket 18-057-03 the
- 4 Commission stated, "A prudent utility should plan for
- 5 such a low-risk but high-consequence event."
- 6 Many other LDCs use on-system LNG for
- 7 supply reliability. In fact, after experiencing a
- 8 significant supply shortfall of its own, Southwest Gas
- 9 has completed an on-system LNG facility for the
- 10 exclusive purpose of maintaining reliability to their
- 11 customers.
- 12 Fortis, BC used existing on-system LNG
- 13 facilities in 2018 for the supply shortfalls experienced
- 14 during the Enbridge outage I mentioned earlier and they
- 15 avoided customer outages. Like Fortis, BC, DEU wants to
- 16 be prepared in advance and, therefore, seeks to
- 17 proactively have a reliability solution before the
- 18 company experiences a potentially catastrophic loss of
- 19 service to its customers.
- 20 Only on-system LNG provides the surety of
- 21 supply that is needed. It provides the flexibility,
- 22 supply independence, and diversity that customers need
- 23 when other resources are unreliable.
- 24 The company recommends and is seeking
- 25 approval from the Utah Commission for an LNG facility to

- 1 be built in the middle of the DEU demand center for the
- 2 purpose of providing the supply reliability needed by
- 3 Dominion Energy Utah. That's it.
- 4 MS. NELSON-CLARK: Ms. Faust is available
- 5 for cross-examination and also Commission questions.
- 6 COMMISSIONER LEVAR: Thank you. Mr. Jetter
- 7 or Ms. Schmid?
- 8 MR. JETTER: I do have a few questions.
- 9 CROSS-EXAMINATION
- 10 BY MR. JETTER:
- 11 Q. Good morning.
- 12 A. Good morning.
- 13 Q. In reading your testimony, I'd like to clarify
- 14 something, just to start. And this was looking at
- 15 Exhibit 2.04, which was the risk analysis that was
- 16 attached to your -- I believe your direct testimony.
- 17 A. 2.04. Yes.
- 18 Q. And, specifically -- I'm not going to point to,
- 19 I guess, the specific sentence, but what I'm looking at
- 20 is on page 2. It describes the 3 degrees Farenheit
- 21 daily mean temperature. And is that accurate, that
- 22 that's what you would consider a Design Day temperature?
- 23 A. So I believe what we consider for Design Day is
- 24 a minus 5 at the Salt Lake airport -- minus 5 degrees.
- Q. That's minus 5 daily mean?

- 1 A. Yes.
- Q. Okay. And so maybe describe for me -- the
- 3 3-degree Farenheit mean, if that's reached, is that a
- 4 situation where every time you would expect to have
- 5 customers lose service?
- 6 A. So Mike Platt might be a better one to
- 7 specifically answer it, but I'll try. I think this was
- 8 specifically talking about the probability that we were
- 9 looking at it happening and the fact that, if it was at
- 10 or below a 3-degree Farenheit mean, it would happen once
- 11 every 16 years, based on the data from 1980 to 2019. So
- 12 it's a little bit of -- not necessarily apples to apples
- 13 I think, of what you're asking.
- 14 Q. Okay. So are you saying that, on the 3-degree
- 15 mean day, once every 16 years you would expect to lose
- 16 service to some customers? Is that accurate?
- 17 A. Potentially, yes.
- 18 Q. Okay. But every time you reach a 3-degree mean
- 19 day, you wouldn't expect to lose customers' service?
- 20 A. I'm just reading this again. Let's see. I
- 21 think the point was there are other conditions and other
- 22 disruptions that could happen even at a higher
- 23 temperature than that. But with the current gas supply
- 24 plan, with the way we've got the aguifers held in
- 25 reserve, I think that's the point where we could plan to

- 1 exceed -- it says, "The company modeled the mean
- 2 temperature where it could meet demand without using
- 3 aquifer capacity, because we're holding that in
- 4 reserve." And that mean temperature is 3 degrees
- 5 Farenheit.
- 6 Q. And in previous events where you've had
- 7 temperatures in that range or lower, you have relied on
- 8 those aquifers, is that right --
- 9 A. Yes.
- 10 Q. -- to supply?
- 11 A. Our total demand was lower in those years, but
- 12 yes.
- 13 Q. Okay. And so those aren't always off line at
- 14 that temperature?
- 15 A. It just depends on the situation and the
- 16 problems that we're having.
- 17 Q. Thank you. That's really the only question I
- 18 have regarding that document.
- 19 And I'd like to ask you a little bit about
- 20 treatment of transportation customers. Mr. Mendenhall
- 21 said that you might be the correct witness to answer
- 22 these.
- 23 Do you have any process in place where you
- 24 would, in fact, go out and turn the valve off to
- 25 disconnect a transportation firm service customer whose

## 1 supply did not arrive?

- 2 A. I think the process would be just exactly what
- 3 you said. I think if there was an issue -- and we can
- 4 kind of walk through what I would foresee happening.
- 5 As you probably know, we have a new tariff
- 6 provision to deal with situations where customers --
- 7 transportation customers are burning more, potentially,
- 8 than they're bringing to the system. And it's called
- 9 hold burn, to schedule quantities. It's happened within
- 10 the last year. And we're anticipating using that on a
- 11 more conservative basis, as opposed to a last-minute
- 12 basis, so when we see cold weather coming, we are
- 13 anticipating having that on line.
- So assuming an event was such that, you
- 15 know, weather was expected to be cold, those customers
- 16 would be on that kind of restriction, and then we have
- 17 the ability to monitor them on a real-time basis. So we
- 18 would be able to see if those customers are not holding
- 19 burn, and then I think the procedure, as you call it,
- 20 would be we would turn those customers off.
- 21 O. Okay. And who would make that decision within
- 22 your organization to -- let me make a hypothetical.
- 23 Let's say it's a hospital, and it's, you know, a mean
- 24 temperature of a zero-degree day. Would you anticipate
- 25 someone in your organization giving the go-ahead to go

## 1 out and shut the hospital off?

- 2 A. I assume somebody in the organization would
- 3 decide whether to do it or not do it. I'm thinking it
- 4 would be a decision between operations and gas supply
- 5 and potentially upper management.
- 6 Q. Okay. And, in your experience, do you think
- 7 that that's likely to occur, to turn off a
- 8 transportation service to a hospital, for example?
- 9 A. We haven't done it in the past. We haven't had
- 10 a situation to date that would, I think, call for that.
- 11 Q. Okay. And do you think that some of those
- 12 transportation service customers are effectively
- 13 benefiting from the -- would effectively benefit in the
- 14 future from the ability to make up shortfalls by use of
- 15 the LNG facility?
- 16 A. I don't anticipate that that's -- that they
- 17 would benefit from it, because I feel like we're going
- 18 to be monitoring it very closely and have them on
- 19 restrictions. And it would be potentially financially
- 20 harmful for them to be using it because they'll achieve
- 21 those penalties.
- If those penalties are not enough, then I
- 23 think that's a topic for a different docket. But we
- 24 feel like that that would be sufficient currently to
- 25 disincentivize them from using it during times when

- 1 they, you know, don't have gas supply.
- Q. So let me ask you a little bit about the
- 3 penalties and their disincentive value. Would you agree
- 4 with me that the probability of a shortfall that occurs
- 5 that you would need to rely on the LNG to remain -- to
- 6 continue service to customers is a low-probability event
- 7 that happens quite infrequently?
- 8 A. To use the LNG facility? Is that your
- 9 question?
- 10 Q. To use the LNG for system reliability.
- 11 A. It might be a low probability, but a very high
- 12 consequence.
- 13 Q. And so the suggestion, then, would be that for
- 14 -- the sales customers would pay for that risk
- 15 mitigation over the life of the facility?
- 16 A. Meaning they would contribute to paying for it
- 17 or that they would pay for penalties?
- 18 Q. Yes, that they would be paying for it on,
- 19 essentially, an overtime basis, rather than on a penalty
- 20 basis for sales customers.
- 21 A. So it wasn't designed nor is it anticipated to
- 22 be used by transportation customers.
- 23 Q. Okay. Has the company covered transportation
- 24 customers' gas shortfall in the past?
- 25 A. It has.

- 1 Q. And can you say with any level of certainty
- 2 that you would, in fact, go disconnect the sensitive
- 3 transportation customers, universities, schools,
- 4 hospitals?
- 5 A. The intent is that we would take action to
- 6 prevent industrial and transportation customers from
- 7 using the gas that's, you know, reserved for our sales
- 8 customers who paid for it.
- 9 Q. So you would, in fact, take those -- even a
- 10 hospital off line?
- 11 A. It hasn't happened, but I think the intent is
- 12 that they're not to use -- they're not to use it. We
- 13 also have other interruptions for, as you know,
- 14 hospitals that are not transportation customers, and
- 15 then it's a different level of emergency. But customers
- 16 that choose to be transportation customers take on
- 17 another level of risk, so...
- 18 Q. And so to the extent that the transportation
- 19 customer does rely on the LNG plant, do you agree that
- 20 the penalty should be consistent with the similar value
- 21 per decatherm that sales customers have paid up -- maybe
- 22 up until that point or something in that relation?
- 23 A. I think that would be a topic for another
- 24 docket. If, you know, the penalties, for whatever
- 25 reason, aren't correct for the transportation customers,

- 1 it should be addressed in another docket so it is, you
- 2 know, decided by the parties what the appropriate
- 3 penalty would be.
- 4 Q. And do you think the company would support a
- 5 penalty that might be significantly higher if it reached
- 6 a point where it was a thousand dollars a decatherm?
- 7 A. I can't speak to that specifically right now.
- 8 We haven't evaluated it, but I think that they would
- 9 support anything the parties agree to be the correct
- 10 incentive so the facility is used for the purpose it was
- 11 designed.
- 12 Q. In your experience, is your gas supply more
- 13 reliable than most of your transportation customers?
- 14 A. It's hard to do an apples-to-apples comparison
- 15 of that. I know we have penalties for our gas supply
- 16 contracts as well, and we buy a lot of our gas on firm
- 17 basis and move it on firm transportation. And my
- 18 experience in knowing, basically, having to confirm the
- 19 other party's gas supplies, that that isn't the case.
- 20 But I hate to broad brush. You know, maybe
- 21 some of the transportation customers have different
- 22 arrangements. I do know -- I've witnessed on these cold
- 23 days that a lot -- a portion of their gas supply has not
- 24 shown up.
- Q. In those instances, did the company provide gas

## 1 to those customers?

- 2 A. It totally depended on the situation.
- 3 So I guess something I should clarify is
- 4 that we talk in these -- in this docket about cold
- 5 weather a lot, but every day some gas doesn't show up.
- 6 And so yesterday or July 4th or whenever, you know,
- 7 somebody might have a shortage of their supply to their
- 8 transportation customers. And, yes, we provide the gas
- 9 and that goes into an imbalance. It happens all the
- 10 time.
- 11 So when we talk about specifics, the very
- 12 day that we need the gas, we're not willing or able to
- 13 provide the gas for them, it's a different story than
- 14 kind of business as usual. But, yes, we have imbalances
- 15 every day.
- 16 Q. And do you have appropriate staff that would be
- 17 able to shut off all of the transportation customers if
- 18 -- or all of those that had a supply shortfall on a
- 19 Design Day where you had other interruptions?
- 20 A. I -- I picture that it wouldn't be gas
- 21 supply -- the gas supply department doing it, it would
- 22 be the operations department doing it. And we would
- 23 have a coordinated effort, because they're in the field,
- 24 and whoever could go to -- get there first, they would
- 25 be the ones to implement that.

- 1 O. And changing gears just a little bit here. Who
- 2 would be the person -- would you be involved in making
- 3 the decision to extend a gas line to places like Green
- 4 River or Wendover or Kanab?
- 5 A. Would I personally be?
- Q. Yes. Who would be making those decisions?
- 7 A. Well, currently, it's, I think -- the rural
- 8 expansion, is that what you're referring to?
- 9 O. Yes.
- 10 A. Currently, that falls under the key accounts
- 11 group and under the customer group that I oversee. But
- 12 it also is in concert with engineering, of course, and
- 13 other parties in the company.
- 14 O. Okay. Are you intending to build those lines
- 15 in the next 20 years?
- 16 A. All of them or any one specific?
- 17 Q. Any of those three.
- 18 A. Which were the three you mentioned again?
- 19 Q. Kanab, Green River, or Wendover. And if the
- 20 answer to that is confidential, we can --
- 21 MS. NELSON-CLARK: Well, I quess I would
- 22 object to the degree that I think it may call for
- 23 speculation. I'm not sure that the witness, sitting
- 24 here today, knows what we're going to do for the next
- 25 20 years.

- 1 Q. (BY MR. JETTER) Maybe I'll rephrase the
- 2 question.
- Is it currently in the plan to do that, to
- 4 expand or install those lines?
- 5 A. There is nothing in the current plan for those
- 6 three lines. I think we're evaluating it, because we're
- 7 concerned about rural expansion in general. We're
- 8 evaluating and seeking interest from parties, if, you
- 9 know, they're wanting natural gas into their systems.
- 10 But I don't know -- as far as a five-year plan or
- 11 something, I don't think it's formally in the plan.
- 12 It's being evaluated.
- 13 MR. JETTER: Okay. Those are all of the
- 14 questions I have. Thank you.
- THE WITNESS: Um-hmm.
- 16 COMMISSIONER LEVAR: Thank you. Mr. Snarr?
- 17 MR. SNARR: Yes. Thank you.
- 18 CROSS-EXAMINATION
- 19 BY MR. SNARR:
- Q. Ms. Faust, I have a number of questions
- 21 relating to Exhibit 204, if you have that handy.
- 22 A. T do.
- 23 Q. And, perhaps, the first thing I'd like to do is
- 24 just to look at that page 2 once more to seek just some
- 25 clarifications on what you just talked about.

- 1 A. Okay.
- 2 COMMISSIONER LEVAR: And I think your
- 3 microphone is not picking you up. Sorry.
- 4 MR. SNARR: Okay. I'll move it right here.
- 5 Thank you.
- 6 Q. (BY MR. SNARR) You indicate there that the
- 7 likely temperature of a 3-degree mean or lower would
- 8 occur about every 16 years, right? In the middle of the
- 9 page there.
- 10 A. Yes, except -- okay. Yes.
- 11 Q. And so the 1-in-16 year kind of probability or
- 12 discussion here is really talking about how often you're
- 13 going to get to that low degree or lower; is that right?
- 14 A. That's the probability that was performed, yes.
- 15 Q. And on the top of the page, I think you
- 16 indicate that within the gas storage agreements or
- 17 available -- the gas that is stored, you access some of
- 18 those gas supplies at the peak of providing service but
- 19 you hold others off in reserve until it gets real cold,
- 20 that same 3-degree or lower kind of marker, and that's
- 21 when you bring in those other aquifer storage supplies;
- 22 is that right?
- 23 A. Not always. That's the current gas supply
- 24 plan. And that's what was used for the assumptions, I
- 25 think, of this probability.

- 1 O. Okay. So this is really reflecting a gas
- 2 supply plan to appropriately manage the gas supplies
- 3 when you have to deal with cold weather situations and
- 4 not run out of gas, right?
- 5 A. Yes.
- 6 Q. Okay. And that gas supply plan involves
- 7 supplies that you have contracted for and you
- 8 have -- and it's consistent with your peak day demand
- 9 requirements; is that right?
- 10 A. That's right.
- 11 Q. And included within that gas supply plan and
- 12 the contracts you have is a little extra cushion to
- 13 provide some security above and beyond what you are
- 14 projecting as a specific peak day need; is that right?
- 15 A. I believe our current peak day assumes all of
- 16 our gas supply shows up, so there would be no cushion.
- 17 Q. Okay. But the supplies you're talking about
- 18 here are all contracted for and under that -- they're
- 19 part of your gas supply stack; is that right?
- 20 A. The aquifers in Clay Basin, yes.
- 21 O. Okay. Now I'd like to zero in on some of the
- 22 other information that you've provided in that exhibit.
- 23 You've identified various different causes of supply
- 24 shortfalls. I think it's your Section 3.
- 25 A. Yes.

- 1 Q. And I'd like to spend a few minutes on
- 2 different portions of that, if we might. First, let's
- 3 talk about Cold-Weather Events. You talk about well
- 4 freeze-offs there.
- 5 Using historical data, has the company
- 6 identified the probability or possible frequency of a
- 7 well freeze-off event occurring?
- 8 A. I don't know that we've identified the
- 9 probability, but we've experienced them when it gets
- 10 below a certain degree. Typically, we've noticed, when
- 11 it's about a 10-degree mean in Salt Lake City, it's
- 12 obviously a lot colder than that where the wells are,
- 13 and we start noticing issues with facilities at that
- 14 point.
- 15 Q. But you haven't determined a specific kind of
- 16 probability or risk factor assessment on freeze-offs?
- 17 A. No.
- 18 Q. Okay. Isn't it true that the company-owned gas
- 19 supply production comes from at least 34 different
- 20 fields in the Green River and Uinta basins?
- 21 A. Yes.
- 22 Q. And isn't it true that gas purchased by the
- 23 company comes from many more producing fields and basins
- 24 that are connected, either directly or indirectly, with
- 25 the DEU gas supplies that are coming into the Wasatch

- 1 Front?
- 2 A. Yes.
- 3 Q. And shifting now -- we've talked about the
- 4 probability of a freeze-off. Has the company identified
- 5 the magnitude or consequence of a typical gas supply
- 6 disruption that might be associated with a well
- 7 freeze-off?
- 8 A. I'm not sure there is a typical situation, but
- 9 it has not been identified.
- 10 Q. Is it true -- or possible that a freeze-off of
- 11 a particular well might be totally ameliorated by a
- 12 producer or supplier of natural gas finding other gas
- 13 supplies upstream of the company's city gates and still
- 14 providing gas to meet the company's nomination on a
- 15 given day?
- 16 A. It depends on, I guess, the supplier and also
- 17 if the nomination schedule allows it.
- 18 Q. Okay. To what extent was this possibility?
- 19 You know, well freeze-offs might be resolved with other
- 20 supplies. To what extent was that included in the risk
- 21 analysis and the probabilities and consequences that the
- 22 company undertook to analyze as it relates to the gas
- 23 supply reliability issues you have identified here?
- 24 A. I don't believe it's of the type of information
- 25 that you could rely on or collect to do a probability

- 1 analysis. I do know that in the experiences we saw with
- 2 other parties that have had issues, specifically
- 3 Southwest Gas and others, they were not able to solve
- 4 the problem by getting supplies from anywhere else.
- 5 Q. Do you have any idea how often in a given year
- 6 or what your experience has been at DEU, as to how often
- 7 these freeze-offs occur?
- 8 A. It is totally weather dependent. And, again,
- 9 it's just my experience that I've noticed when it's
- 10 around a 10-degree mean or I'm seeing a forecast of
- 11 10-degree mean, I start noticing issues with gas supply
- 12 and start expecting issues with gas supply.
- 13 Q. Does it occur -- in a typical year, do we get
- 14 down that low so that we have three or four freeze-offs
- 15 or 20 or 30?
- 16 A. Certain years, when it gets cold, a lot more
- 17 than other years. Some years are warm and it doesn't
- 18 happen as much.
- 19 O. Okay. You've also discussed instances where
- 20 processing plants have been shut down, it might be
- 21 weather related or otherwise; isn't that correct?
- 22 A. That's true.
- Q. And isn't it true that the company's gas
- 24 supplies, either company owned or purchased from others,
- 25 rely on a significant number of different processing

- 1 plants?
- A. A few big processing plants, yes.
- 3 Q. Okay. And based on historic data, has the
- 4 company identified the probability or possible frequency
- 5 of possible processing plant shutdowns?
- 6 A. Have not. But, again, when it's gotten cold,
- 7 we've noticed more issues with the processing plants as
- 8 well. I think that was also described in the FERC --
- 9 the investigation that the FERC did.
- 10 O. You also presented data related to this
- 11 assessment of supply -- possible supply disruptions that
- 12 recount the past -- a period of eight years of recent
- 13 occurrences; is that right?
- 14 A. I believe so. Is that the 2011 to --
- 15 Q. Yes.
- 16 A. Um-hmm, yes.
- 17 Q. I might be bouncing back and forth between that
- 18 and this other one.
- 19 A. Okay. I'm with you.
- Q. But, in that document, that assessment is
- 21 basically what you call disruptions that may have
- 22 occurred in the past eight years; is that right?
- A. Which document again?
- Q. Let me get the number so we have it clear on
- 25 the record here. It's your Exhibit No. 2.05.

- 1 A. Oh, yes.
- Q. And I believe that you provided supporting
- 3 analysis of these events.
- 4 Would you accept, subject to check, that in
- 5 this document you demonstrated there was approximately
- 6 93 different incidents of gas supply disruption over
- 7 this eight-year period?
- 8 A. Yes.
- 9 Q. And those disruptions came from a number of
- 10 different issues or problems; is that right?
- 11 A. That's correct. And this is probably a subset
- 12 of, yeah, information, but yes.
- 13 Q. All right. And you have some correlations on
- 14 this Exhibit 2.05 as it relates to mean temperatures; is
- 15 that right?
- 16 A. Yes.
- 17 Q. And is it fair to say that the possible gas
- 18 supply disruptions happen any time during the year, as
- 19 opposed to concentrated in one particular point?
- 20 A. They happen for different reasons throughout
- 21 the year.
- Q. All right. Now let's go back to some of
- 23 those -- let's move back to Exhibit 2.04.
- 24 When you've had an experience with a plant
- 25 shutdown, what's been the magnitude of that disruption?

- 1 A. I think what we've noticed, at least during
- 2 certain times in 2018, the Blacks Fork plant shutdown,
- 3 and it was a reduction of 25,000.
- 4 Q. Okay. And in response to that shutdown, what
- 5 happened -- or what did the company do?
- A. Let's see. I think we were competing with
- 7 other entities to buy supplies in Truday (ph).
- Q. And when the day was come and gone, were you
- 9 able to get supplies to come across the city gates such
- 10 that no customers on the retail side were ever cut off?
- 11 A. We were. We were lucky. We think -- if it had
- 12 been colder or if it would have lasted longer, I think
- 13 there was concern that it wouldn't have happened that
- 14 way.
- 15 Q. Now, to what extent has the company included a
- 16 possibility of a plant shutdown in terms of probability
- 17 and consequences in the studies and analyses that it has
- 18 undertaken related to your current gas supply
- 19 reliability issues?
- 20 A. We don't believe it's a controllable enough
- 21 event or predictable enough event to do a probability on
- 22 that.
- 23 O. All right. You've also discussed landslides
- 24 and flooding as possible events that could affect gas
- 25 supply; isn't that correct?

- 1 A. That is.
- 2 Q. You specifically have identified a landslide
- 3 area that the DEQ pipeline has been watching. You
- 4 indicated that the lines are being monitored by strain
- 5 gauges; is that correct?
- 6 A. Yes.
- 7 Q. Isn't it true that pipelines regularly inspect
- 8 the rights-of-way through which their pipelines pass and
- 9 try to become aware of possible threats and do things
- 10 like putting strain gauges on areas of land movement or
- 11 possible flooding?
- 12 A. Yes.
- 13 Q. And with those monitoring procedures in place,
- 14 what impact does that have upon an actual disruption
- 15 occurring?
- 16 A. Monitoring, if it's something that happens
- 17 slowly, I think would give you some benefit. But I
- 18 believe it was in August, there was an unexpected
- 19 landslide in Little Cottonwood Canyon that took out our
- 20 line. And I don't think things like that -- the whole
- 21 point of the risk is that it's unpredictable. Can't
- 22 have monitoring on every line that could possibly have
- 23 an issue.
- Q. But where you do have monitoring, you have a
- 25 chance to take corrective action to avoid the complete

- 1 blowout of that line; isn't that right?
- 2 A. If you know in advance. Landslides don't react
- 3 in a predictable way, so I think things can still
- 4 happen, even with monitoring.
- 5 Q. But some pipelines would then remove the
- 6 threatened -- the earth from the threatened area or
- 7 otherwise install a line in a different way to avoid
- 8 that landslide area, if they know that it's going to be
- 9 a problem; isn't that right?
- 10 A. If they have the time to do it and they see
- 11 that it's a big enough concern, I assume they do.
- 12 Q. Isn't it true that pipelines often run parallel
- 13 lines within their rights-of-way as another measure to
- 14 ensure that service will be continued while -- either
- 15 during maintenance or, perhaps, a disruptive event that
- 16 would affect one line?
- 17 A. They do, but, unfortunately, if you look at the
- 18 Kern landslide, they had two lines running through that
- 19 and they had to take the pressure down on the one that
- 20 wasn't damaged, I believe, to make it safe.
- 21 And if you look at the Enbridge rupture
- 22 that happened last October, they had a parallel line and
- 23 they had to take both lines down for safety precautions.
- 24 So it doesn't always provide a mitigation of the issue.
- Q. In the Kern event, were they able to avoid an

- 1 outright cessation of service?
- 2 A. I don't recall exactly. I know Dominion Energy
- 3 Questar Pipeline had a line there as well that they took
- 4 out of service, and can't speak to the Kern. I know
- 5 they had both of them reduce pressure. And it was not
- 6 in the wintertime, so...
- 7 Q. And when you took that line out, the DEQ line,
- 8 service continued to the Wasatch Front, didn't it?
- 9 A. The gas was fed through other city gates.
- 10 Q. Okay. Right.
- 11 A. I think there were some customers that -- or I
- 12 know there were some customers that were not able to get
- 13 gas service during that time period, though.
- 14 Q. Isn't it true that the company's Wasatch Front
- 15 is served by five city gates connected to the DEQP
- 16 system and two or soon-to-be three city gates connected
- 17 to Kern River?
- 18 A. Yes.
- 19 Q. Isn't it also true the company plans to
- 20 interconnect its Wasatch Front distribution facilities
- 21 with a high-pressure trunk line that would extend from
- 22 Hyrum on the north to Payson on the south?
- 23 A. Eventually, yes.
- Q. And what is the name of that line, or what is
- 25 the plan on that line?

- 1 A. The plan? I'm probably not the best person to
- 2 speak to that, but I think it's quite a while in the
- 3 future.
- 4 Q. All right. Now, the company has done some
- 5 studies related to city gate redundancy and supply
- 6 diversity and how that can assure a continuation of gas
- 7 supply; isn't that right?
- 8 A. Yes.
- 9 Q. And has the company run studies that include
- 10 the plan for a high-pressure trunk line that we just
- 11 talked about?
- 12 A. I believe that's probably a better question for
- 13 Mr. Platt.
- 14 Q. All right. Now, going to that other exhibit,
- 15 No. 2.05. And I just want to touch it in summary and...
- 16 Is it true that for the events listed there
- 17 that, ultimately, gas supply was maintained and that
- 18 there were no cuts to retail customers?
- 19 A. Yes.
- 20 Q. Now, I don't believe your initial application
- 21 contained similar information related to the Kern River
- 22 interconnection, and I believe that's been supplied
- 23 later through discovery. Let me ask you just some
- 24 summary questions. And if it gets too deep, I can pull
- 25 out some exhibits and let you look at it, but I don't

- 1 think we're going to go that deep.
- 2 A. Okay.
- 3 Q. With respect to the Kern River
- 4 interconnections, hasn't your experience been similar,
- 5 that there have been instances of gas supply maybe not
- 6 showing up or needing to be addressed as a problem?
- 7 A. To date, and I feel fortunate that -- it hasn't
- 8 occurred on a Design Day, yes.
- 9 Q. But in each of those instances related to Kern
- 10 River, were those -- I believe those instances -- and
- 11 you can check if I'm right or wrong -- there was a
- 12 significant number of cuts that were resolved through
- 13 contract balancing. Isn't that correct?
- 14 A. Subject to check, I believe so.
- 15 Q. And a number of other cuts were resolved by
- 16 nominations coming in through later cycles during the
- 17 day; is that right?
- 18 A. Yes. Again, later cycles in the day means the
- 19 gas wasn't there necessarily when you needed it, but it
- 20 was made up for before the day was over and the load
- 21 didn't cause a problem with that.
- Q. Okay. And so no retail customers lost service
- 23 as a result of those issues that occurred on Kern River?
- 24 A. That's correct.
- Q. Okay. I'd like to discuss just a few of the

- 1 other specific risks that you've identified in your
- 2 Exhibit 2.04. Let's go to that exhibit for a minute.
- 3 We've talked about cold weather, we've talked about
- 4 landslides. Let's talk about earthquakes.
- We never know when they're going to occur,
- 6 right?
- 7 A. No, but we spend a lot of money preparing for
- 8 them.
- 9 Q. We never know if it's going to be the big one,
- 10 right?
- 11 A. We don't.
- 12 Q. And we never know, even if we had an LNG
- 13 facility, whether that would provide an answer to solve
- 14 all the problems that the earthquake might cause; is
- 15 that correct?
- 16 A. We don't know that an LNG facility would solve
- 17 all the problems that we could look at, that's correct.
- 18 Q. All right. Let's talk about human error.
- 19 You've identified that as a conceivable gas supply risk.
- 20 You've provided some information to document that,
- 21 instances where human error has been an issue.
- 22 A. Yes.
- Q. One of those that you provide there relates to
- 24 Northwest Pipeline, or Williams, and a blocked valve
- 25 related to the service to Monticello, Utah; is that

- 1 right?
- 2 A. Yes.
- 3 Q. And we never know where human error might creep
- 4 in and cause us a problem; is that right?
- 5 A. That's correct.
- 6 Q. But in this particular instance, I think the
- 7 company has previously indicated the LNG facility that
- 8 is contemplated or proposed wouldn't have solved or
- 9 resolved those issues at that Monticello location. Is
- 10 that right?
- 11 A. Yes. It can't solve everything that could
- 12 happen.
- 13 Q. Right. And you also identify Upstream Facility
- 14 Design Inadequacies and Maintenance. You have a
- 15 supporting instance there that relates to the Coalville
- 16 event; is that right?
- 17 A. Right. Both of these instances were provided
- 18 as evidence as to how things can occur. And depending
- 19 on where they occur, the LNG facility could help.
- 20 Q. Yeah. In that instance in Coalville, the LNG
- 21 wouldn't have helped this situation; is that right?
- 22 A. No, just a sign of mechanical failure.
- 23 Q. Cyber-Attacks. As it relates to how cyber
- 24 attacks might affect gas supply, would I be correct in
- 25 suggesting that the more diversity of gas supplies that

- 1 we have, we can use that diversity as a hedge against
- 2 the possible implications or consequences of a cyber
- 3 attack?
- 4 A. I agree.
- 5 Q. All right. And Third-Party Damage is another
- 6 thing that I know that you have to cope with. When we
- 7 have third-party damages, aren't those usually kind of
- 8 geographic specific as to a point of interaction between
- 9 a third party and your pipeline or something?
- 10 A. You mean it only happens in certain geographic
- 11 areas or...
- 12 Q. Well, no. I mean, when it happens, you know
- 13 where it happened and it's pinpointed and there's one
- 14 location where it happened.
- 15 A. Typically, but we have a lot of them in
- 16 different areas, yes.
- 17 Q. Typically, a bulldozer isn't going to cause two
- 18 different ruptures to a pipeline, it only causes one,
- 19 and you have to deal with the one it causes?
- 20 A. Unless there's multiple lines involved, yes.
- 21 Q. Yeah. And, again, would a diverse set of gas
- 22 supplies help hedge against the serious consequences of
- 23 that kind of disruption?
- 24 A. Yes.
- Q. All right. And I'm not sure we're going to

- 1 deal with Force Majeure Events, but, again, diversity of
- 2 supply can help hedge against those, right?
- 3 A. Potentially, yes.
- 4 Q. All right. I'd like to now turn your attention
- 5 to the AGA survey. That's your Exhibit No. 2.06.
- I do understand it's been provided with a
- 7 cloak of confidentiality. I'd like to assure you that
- 8 I'm not going to ask for company names. I'm going to
- 9 try to deal with my questions on a global basis, so I
- 10 don't think we have to close the hearing. If I'm wrong
- 11 about that, you can signal me?
- 12 A. Does that mean I can use the redacted copy?
- 13 Because, otherwise, I've got one at my seat, if I need
- 14 the nonredacted copy.
- 15 Q. Let's go down the road and let's see whether or
- 16 not you need more detail.
- 17 A. Okay.
- 18 Q. I'm not sure I can answer that question.
- 19 MS. NELSON-CLARK: May I approach the
- 20 witness? I can direct her to where she can find an
- 21 unredacted copy.
- 22 COMMISSIONER LEVAR: Yes.
- MS. NELSON-CLARK: Thank you.
- 24 Q. (BY MR. SNARR) Initially, I'm going to deal
- 25 with the -- kind of recap the number recap of the

- 1 information that you got from other companies. Do you
- 2 have that?
- 3 A. Repeat the question. I have it now.
- Q. Let me ask the question now. Isn't it true
- 5 that in response to that survey, 92 percent, or 46 out
- 6 of 50, of the responding LDCs indicated they had not
- 7 experienced any supply disruptions in the past ten
- 8 years? Isn't that right?
- 9 A. Yes.
- 10 Q. Okay. And that really kind of coincides with
- 11 the company's experiences as we've previously discussed
- 12 in some detail and looked at the Kern River and DEQP
- 13 experiences that we just got through talking about;
- 14 isn't that right?
- 15 A. Yes.
- 16 Q. Okay. Isn't it also true, in the response to
- 17 the AGA survey, that 77 percent, or 34 out of 44, of the
- 18 responding LDCs indicated that they had secured
- 19 alternate upstream transportation contracts, such as
- 20 enhanced transportation or no-notice service to respond
- 21 to reliability issues? Isn't that correct?
- 22 A. Yes, but I think "select all that apply" comes
- 23 into play, because I think they maybe had more than one.
- 24 Q. Certainly. Same company may have more than one
- 25 of these different resources to respond; is that right?

- 1 A. Right, including LNG facilities, yeah.
- 2 Q. Now, the company has an existing contract for
- 3 no-notice service with the EQP; isn't that right?
- 4 A. Correct.
- 5 Q. The responses to the AGA survey also show that
- 6 70 percent, or 31 out of 44, responding LDCs indicated
- 7 that they rely upon short-term gas supply or peaking
- 8 contracts to provide deliveries to their city gates in
- 9 order to respond to reliability issues; isn't that
- 10 correct?
- 11 A. Yes.
- 12 Q. Now, in a discovery request submitted by the
- 13 office, and that's Discovery Request 301, we asked,
- 14 "What short-term gas supply contracts has DEU entered
- 15 into for the purpose of maintaining gas supply
- 16 reliability that could be accessed on a peak Design
- 17 Day?"
- 18 And the company's response was, "DEU has
- 19 currently not entered into any gas supply contracts
- 20 specifically intended for gas supply." Isn't that
- 21 correct?
- A. For gas supply?
- Q. Excuse me. Gas reliability -- supply
- 24 reliability. I read it wrong.
- 25 A. So I think the peaking contracts that we have

- 1 and the short-term contracts that we have are to meet
- 2 the peak -- design peak demand. But if any of those
- 3 were to fail, it kind of goes back to your earlier
- 4 question. We don't have contracts in place for a buffer
- 5 or for over a hundred percent.
- 6 Q. All right.
- 7 A. I'm not sure if that's what the AGA survey
- 8 addressed or not.
- 9 Q. Could you read the question that was -- that
- 10 we've just -- could you read the AGA question and maybe
- 11 we can consider what they were -- what the AGA question
- 12 was seeking?
- 13 A. "If yes," is that where we are? Is that the
- 14 question?
- 15 Q. Yes. Let me just turn to it.
- 16 A. "... identify facilities/third-party services
- 17 used to maintain system reliability. Select all that
- 18 apply."
- 19 O. Yes.
- 20 A. "Short-term Supply Contracts Delivered to
- 21 Citygate."
- So, typically, we don't buy a lot of our
- 23 gas at the city gate.
- Q. All right.
- 25 A. We buy it upstream and transport it.

- 1 Q. Okay. The AGA survey also shows that a
- 2 significant majority of the LDCs who are responding also
- 3 rely upon upstream storage facilities to manage their
- 4 gas supply disruptions; isn't that correct?
- 5 A. Yes.
- 6 Q. And Dominion has six different upstream storage
- 7 facilities, I believe that's been identified in your
- 8 application; is that right?
- 9 A. I believe so.
- 10 Q. Is it fair to say that none of those contracts
- 11 have been earmarked to deal specifically with
- 12 reliability issues in excess of your peak Design Day?
- 13 A. That's correct.
- MR. SNARR: All right. Let me have just a
- 15 minute, please.
- 16 That would conclude my questions.
- 17 COMMISSIONER LEVAR: Thank you.
- 18 Mr. Russell?
- 19 MR. RUSSELL: Thank you, Mr. Chairman.
- 20 CROSS-EXAMINATION
- 21 BY MR. RUSSELL:
- Q. Mr. Faust, I'd like to gain a better
- 23 understanding of how an upstream supply disruption would
- 24 affect the system itself. The -- you just mentioned
- 25 that you buy gas upstream and transport it. Are there

- 1 particular gate stations that the gas is transported to
- 2 when you do it that way?
- 3 A. It depends on the pipeline, but yes.
- Q. Okay. Yeah. So there are -- there are --
- 5 there's more than one upstream pipeline owned by more
- 6 than one company that you get gas from, right?
- 7 A. Typically, yes.
- Q. So among those is Dominion Energy Questar
- 9 Pipeline and Kern River Gas, correct?
- 10 A. Yes, and Williams.
- 11 Q. And Williams. So when you're buying gas
- 12 upstream from Dominion Energy Questar Pipeline, where is
- 13 that gas delivered to? And I know the question is a lot
- 14 easier than the answer, and I'm prepared to have you
- 15 give a more complicated answer.
- 16 A. That's okay. So we have multiple city gates,
- 17 because throughout the states of Utah and Wyoming,
- 18 there's deliveries that get made to those city gates.
- 19 Q. Is the focus on any particular city gate, or
- 20 when you buy it does it just go to whichever city gate
- 21 is attached to the Dominion Energy Questar Pipeline
- 22 system?
- 23 A. It's very specific. Based on FERC regulations,
- 24 we have transportation that's not as simple as maybe it
- 25 sounds. It needs to be -- we have transportation from

- 1 point A to B on a firm basis, and we do our best to
- 2 nominate on a firm basis for our customers every day.
- 3 And so there's times when, for example,
- 4 Payson has a certain load and we forecast that and
- 5 St. George has another load. And usually, St. George is
- 6 warmer than Payson, but there's times when it's colder
- 7 than normal for St. George and they're using a lot more
- 8 gas. Then we have to route gas from a point -- a
- 9 receipt point that we have to that delivery point to
- 10 make sure the gas actually flows there, because the
- 11 pipeline can't just do it like in the old days and let
- 12 it flow where it needs to go.
- 13 Q. Okay. I think -- I have a couple of
- 14 cross-examination exhibits that might help us with this
- 15 discussion. At least I hope so.
- 16 A. Okay.
- 17 Q. I'm going to pass those out. And I'll
- 18 apologize in advance. I didn't premark these. I wasn't
- 19 sure if I was going to need them.
- 20 A. Thank you.
- 21 MR. RUSSELL: May I approach?
- 22 COMMISSIONER LEVAR: Thanks.
- Q. (BY MR. RUSSELL) Okay. Let's quickly talk
- 24 about what these are, and then we'll -- I think these
- 25 will allow us to speak in maybe a little bit more detail

- 1 than we've been able to thus far.
- 2 Let's focus first on the one that says on
- 3 the front Dominion Energy Questar Pipeline 2019 Customer
- 4 Meeting.
- 5 Do you have that one?
- 6 A. I do.
- 7 Q. And I'll just -- here is what this is. I found
- 8 this on the Dominion Energy website. It's a longer
- 9 presentation than what is included here. I only wanted
- 10 to talk about the map that is on the back of this page
- 11 -- or the second page. And for our purposes, I'll mark
- 12 this as Magnum Cross Exhibit 1.
- 13 And do you recognize this map on the second
- 14 page?
- 15 A. Yes.
- 16 Q. Can you tell me what it is?
- 17 A. A system map for Dominion Energy Questar
- 18 Pipeline.
- 19 Q. Does that show points along the Dominion Energy
- 20 system used to serve customers along the Wasatch Front
- 21 and elsewhere?
- 22 A. Some of them.
- 23 Q. Sure. The ones that interconnect with the
- 24 Dominion Energy Questar Pipeline system?
- 25 A. Right, but there's many more points along the

- 1 way.
- Q. So what does this not show us?
- A. All the other map points. These are the
- 4 interconnects, as you stated. So there's hundreds of --
- 5 they call them map points, meter allocation points where
- 6 gas flows from other gathering lines or from wells that
- 7 are near into the system.
- Q. Okay. So it's not a comprehensive list, but it
- 9 does provide us some detail on where the gas comes from,
- 10 if the gas is coming upstream from Dominion Energy
- 11 Questar Pipeline, right?
- 12 A. Right.
- 13 Q. Fair enough. And then let's turn to the other
- 14 map. And this is a map that I pulled off the Kern River
- 15 Gas transmission website.
- 16 Do you recognize it?
- 17 A. I do.
- 18 Q. And can you describe what it is?
- 19 A. Various insets and also the main point-to-point
- 20 pipeline of Kern River.
- 21 O. Okay. I'm looking at the section along the
- 22 Wasatch Front that identifies a number of -- I'm going
- 23 to use the term receipt points, but I don't know if
- 24 that's an accurate term.
- 25 A. That's correct, a receipt point into our

- 1 system.
- Q. Okay. And does that identify receipt points
- 3 that -- from which Dominion Energy could receive gas
- 4 from Kern River?
- 5 A. Yes. It's a little deceiving, because some are
- 6 very small, but yes.
- 7 O. And then I'm going to label this as Magnum
- 8 Cross Exhibit 2. Then I'll turn to the other one that I
- 9 handed you, which is a -- it's a technical conference
- 10 presentation from June 19th of 2018.
- 11 Do you recognize that?
- 12 A. I do.
- 13 Q. Did you have any input in creating this
- 14 document?
- 15 A. Part of it, I think.
- 16 Q. And remind me, did you attend that technical
- 17 conference?
- 18 A. I believe I did.
- 19 Q. I believe I did, too. Let's identify this as
- 20 Cross Exhibit 3. And I'm only going to ask you about
- 21 one page of the technical conference presentation and it
- 22 is the page labeled 9. If you could turn to that now.
- Do you have that?
- 24 A. I do.
- 25 Q. Okay. I want to look first at the third bullet

- 1 here, which says that "DEU has historically purchased
- 2 gas supply delivered to the following stations," and
- 3 then it identifies some stations.
- 4 Can you identify for me, like, where these
- 5 stations are?
- 6 A. On the map?
- Q. Sure.
- 8 A. Sure. Hunter Park, if you start on the right
- 9 side of the Kern River Map, it's three down.
- 10 O. Three down from the text that kind of starts at
- 11 the top of --
- 12 A. It starts "Redwood" on the map.
- 13 O. Yeah.
- 14 A. Do you see that there?
- 15 Q. Yeah. Thank you.
- 16 A. And then Riverton is six down. Then Wecco
- 17 central -- sorry, I'm skipping around to stay on the
- 18 same map. But Wecco is third up from the bottom, if
- 19 you're still in Utah, 2.4010. Central is 2.4009, but
- 20 Kern combines them for nomination purposes. They're
- 21 both very small.
- 22 Q. Okay. So Hunter Park, Riverton, and then Wecco
- 23 and Central are receipt points for gas obtained from
- 24 Kern River Gas, correct?
- 25 A. Right. There's more than that as well. I

- 1 think -- go ahead.
- Q. Okay. Well, I guess I'm trying to understand
- 3 what -- the significance of this statement that this is
- 4 historically purchased gas supply delivered to the
- 5 following stations.
- 6 What does that mean?
- 7 A. It goes back a little bit to a conversation I
- 8 was having with Mr. Snarr. If you focus on gate station
- 9 purchases, it's something that doesn't happen, that we
- 10 don't do that much because we have our own
- 11 transportation. So we nominate, typically, with Wexpro
- 12 from the well, gather it through the transportation
- 13 lines or we buy it on transportation lines and transport
- 14 it to the gate station on our own behalf.
- This is a discussion of when we're buying
- 16 gas delivered. So someone else would deliver the gas to
- 17 us, and we would -- it would be an all-in bundled price.
- 18 How much they charge us for the transportation, that's
- 19 unknown, it's a combined price. But other LDCs
- 20 potentially buy more supplies -- more of their portfolio
- 21 already delivered and don't hold the transportation.
- 22 In our case, these are the few that were
- 23 listed of where we've purchased gas supplies in the
- 24 past, but it is not where we get most of our gas supply.
- 25 Q. Okay. I think I understand that. So this list

- 1 of gate stations is where you have purchased gas
- 2 historically. When you purchase gas at a gate station,
- 3 this is where you do it?
- 4 A. Yeah, the operative word is "delivered."
- Q. Okay.
- 6 A. Purchased, delivered. So instead of going to
- 7 the grocery store and bringing it home yourself, you're
- 8 paying the grocery store to deliver it to you, and you
- 9 buy it at your house versus at the grocery store. Does
- 10 that make sense?
- 11 Q. Yeah. Okay. I think I understand now.
- But, typically -- as I understand it, what
- 13 you're saying is that you typically acquire the gas --
- 14 or purchase the gas upstream and then deliver it through
- 15 the various systems to your system. And I guess what
- 16 I'm trying to understand is how a disruption in upstream
- 17 supply affects deliveries to the system and whether
- 18 those are -- so if there is a -- well, before we move
- 19 off that, just for the sake of completeness, we
- 20 identified Hunter Park, Riverton and Wecco Central.
- 21 Payson, I think you said earlier, is a gate station on
- 22 the DEQP system, right?
- A. Right.
- 24 O. And where is Foothill?
- 25 A. Rock Springs, Wyoming.

- 1 Q. And what upstream system is that one on?
- 2 A. I believe Dominion Energy Questar Pipeline.
- Q. Okay. All right. So let's maybe set these
- 4 aside. That helps me a little bit. I don't know if it
- 5 helps anybody else, but it helped me, so thank you.
- 6 So let's talk a little bit about, you know,
- 7 in the instance of a supply disruption on the Kern River
- 8 side of things.
- 9 A. Okay.
- 10 Q. How does that affect the receipt points or the
- 11 pressures at the receipt points through which Dominion
- 12 takes gas from Kern River?
- 13 A. So if you look at, for example, Southern Utah,
- 14 Wecco Central, if there was a disruption upstream, then
- 15 our Southern Utah deliveries would struggle. And
- 16 transportation customers off of that point, if there
- 17 wasn't pressure there, they would not get the gas that
- 18 they need.
- 19 Q. So why would it just be the Southern Utah ones?
- 20 If there is a disruption upstream, would it affect all
- 21 of the receipt points or only certain ones?
- 22 A. So maybe a better example would be just --
- 23 maybe I should start with describing Kern River.
- 24 Upstream of Wecco can be fed by Goshen or
- 25 by Opal or by Muddy Creek. So if you look at the points

- 1 upstream, there's a lot of gas that comes into Kern
- 2 River on the north end. And the advantage we have in
- 3 Salt Lake is that if there's a disruption, we can get
- 4 gas off of Goshen, going north. We can feed it in
- 5 different directions. That's different than Dominion
- 6 Energy Questar Pipeline.
- 7 But if there's a disruption upstream, it's
- 8 hard to get more gas to that point unless it's going
- 9 by -- or there's still gas going that direction.
- 10 Typically, it's going to California, but there are ways
- 11 through displacement that the gas can be potentially
- 12 rerouted.
- 13 Q. Sure. The question I'm trying to get to is:
- 14 When there is an upstream disruption, does it affect
- 15 each of the receipt points equally, or does it burden
- 16 certain receipt points more than others?
- 17 A. It depends how big the outage is. When Opal
- 18 goes out, there's Opal gas molecules that technically
- 19 make it all the way to California, depending on the day.
- 20 So it could affect all of them or, on different days,
- 21 different places upstream could affect different receipt
- 22 points differently.
- 23 Q. And why would it affect different receipt
- 24 points differently?
- 25 A. Because of the proximity of where the gas is

- 1 located.
- Q. So it might affect some of the farther-away
- 3 receipt points? Depending on where the disruption is,
- 4 it might affect some of the more distant receipt points
- 5 more than some of the ones that are closer?
- 6 A. Depending on the situation.
- 7 Q. Okay. Is it possible to affect only a single
- 8 receipt point if you've experienced a supply disruption?
- 9 A. I'm a little confused about the question,
- 10 because it might only be one receipt point that matters
- 11 to a certain supplier. We have multiple, but other
- 12 suppliers might only have one receipt point so,
- 13 obviously, a disruption to that receipt point would be
- 14 catastrophic for them.
- In California -- I guess I can't speak to
- 16 that, but if the gas doesn't make it, obviously there's
- 17 going to be problems for the parties who don't get the
- 18 gas they're expecting.
- 19 Am I missing your question?
- Q. Well, no, I'm sure you're answering the
- 21 question correctly. I don't know that I'm asking it the
- 22 right way.
- There has been some analysis about the
- 24 volume necessary to respond to particular supply
- 25 disruptions, and I'm trying to understand how a supply

- 1 disruption would affect the system if there is some sort
- 2 of upstream supply disruption.
- 3 And I gather that the company has
- 4 determined that there is a requirement to provide supply
- 5 reliability of 150 decatherms. And what I'm trying to
- 6 understand is if, in the event of a supply disruption
- 7 upstream on, you know, the Dominion Energy Questar
- 8 Pipeline or the Kern River gas transmission pipeline,
- 9 how that supply disruption will affect the system and
- 10 how the proposed supply reliability solution will
- 11 respond to those -- to those impacts on the Dominion
- 12 Energy system.
- Does that make sense?
- 14 A. I think so.
- 15 Q. So with that in mind, if there is a -- I mean,
- 16 we spoke earlier -- or you spoke earlier about the -- I
- 17 think it was Blacks Fork processing plant that went
- 18 down.
- 19 Do you have an understanding of how that
- 20 affected supplies to the Dominion Energy distribution
- 21 system?
- 22 A. Yes. I believe they were reduced by the amount
- 23 that the plant couldn't produce.
- 24 O. And where did that reduction occur?
- 25 A. On the Dominion Energy Questar Pipeline.

- 1 Q. Was it distributed throughout the -- oh, on the
- 2 Dominion Energy Questar Pipeline. Okay. Go ahead.
- 3 A. Right.
- 4 Q. And was that shortfall distributed evenly among
- 5 the places where Dominion Energy Questar Pipeline
- 6 intersects with the Dominion Energy distribution system
- 7 or was it targeted at a particular point; do you know?
- 8 A. Well, I think actually the plant went down a
- 9 lot more than that. That was our share of it. And so,
- 10 like I tried to describe earlier, we had a nomination
- 11 from point A to point A. Point A was Blacks Fork, point
- 12 B was a city gate -- or multiple city gates based on
- 13 what our transportation contract allows.
- And so those nominations were cut to zero,
- 15 and we had to change, potentially, you know, a storage
- 16 facility or make another nomination to make up for that
- 17 at that delivery point.
- 18 Q. And do you know, just off the top of your head,
- 19 your sort of normal operating transportation agreements
- 20 with Dominion Energy Questar Pipeline and Kern River
- 21 where your contract allows -- where the point B is on --
- 22 point A to point B, do you know where those point Bs
- 23 are?
- A. It's a complicated scenario, because there's so
- 25 many of them, and so it's handled almost, like, through

- 1 computer optimization.
- Q. Okay. But the contracts, I gather, allow you
- 3 to identify the amounts that would go to each of those
- 4 point Bs, right?
- 5 A. It will only allow you to nominate up to the
- 6 contract quantity, yes.
- 7 O. And even in the event of a shortfall, you're
- 8 getting -- well, what happens in the event of a
- 9 shortfall if you're not getting all of what you asked
- 10 for? How does it -- how do you distribute among those
- 11 point Bs on the distribution system?
- 12 A. That point B would be cut by the amount that
- 13 point A was cut. So there's a bunch of point As going
- 14 to every point B on this particular situation.
- The particular point B it was nominated to
- 16 would be cut by 25,000 in this example. And what I'm
- 17 recalling happened, because it wasn't a peak day, there
- 18 was room in Clay Basin, or the aquifer, and a no-notice
- 19 situation made up for that difference. No-notice is
- 20 like a cycle-five correction for things that don't show
- 21 up.
- 22 Q. Sure. And so is it -- are each of the points
- 23 at which the company receives gas on the distribution
- 24 system from wherever that supply disruption is, are they
- 25 reduced proportionately or equally? How does the

- 1 company -- I mean, I get that you've got other ways you
- 2 can get the gas there, but...
- 3 A. The upstream pipeline cuts the delivery to
- 4 where it was nominated.
- 5 Q. But if there's more than one place where it
- 6 might go -- is there ever a situation where there's more
- 7 than one place it might go on the Dominion system?
- 8 A. Yes, but that would be two nominations.
- 9 Q. Okay. So if there are -- if there is a
- 10 situation when there's two -- or more than one
- 11 nomination, how is the gas shortfall distributed amongst
- 12 the places on the distribution system?
- 13 A. If it's not cut all the way, then it would be
- 14 prorated.
- 15 Q. All right. Understood.
- 16 Let's shift gears a little bit and help me
- 17 understand exactly what the company means when it talks
- 18 about a shortfall.
- 19 A. Gas supply that is purchased or nominated to
- 20 the system is expected at a certain amount and a lesser
- 21 amount shows up, either through a nomination cut or some
- 22 sort of mechanical failure or -- you know, which usually
- 23 results in a nomination reduction.
- Q. And what we're talking about when we talk about
- 25 shortfall is the delta between what you nominated and

- 1 what you received?
- 2 A. Um-hmm.
- Q. And given the discussion that we've just had,
- 4 help me understand what the company -- this 150,000
- 5 decatherm-per-day number is kind of thrown around. Help
- 6 me understand what the company is trying to respond to.
- 7 What is the -- when the company has
- 8 determined that there is a likelihood or, you know, some
- 9 risk of a shortfall of 150,000 decatherms, tell me where
- 10 that -- how that 150,000 decatherms would affect the
- 11 system, if there were such a shortfall.
- 12 A. Depending on the day, 150,000 is a little bit
- 13 more than we've seen historically and, with expected
- 14 growth, we thought that that was a good volume. I don't
- 15 think it's anticipated that it would be taken equally
- 16 all day in a situation like this. And it's hard to
- 17 predict. I guess that's what we would like to have, is
- 18 something that's flexible and could come on for an hour,
- 19 if there was a problem.
- But 150,000, I think, has been discussed by
- 21 multiple witnesses, as far as it met our anticipated
- 22 needs and it was a common tank size that would hold the
- 23 amount -- the 1.2 BCF that would be able to be vaporized
- 24 with the common facilities -- or "common" is the wrong
- 25 word, but typical facilities that wouldn't be a special

- 1 order and it would fulfill our anticipated needs.
- 2 It would not be anticipated to be able to
- 3 solve every problem under every circumstance, but if
- 4 there was a shortfall at a gate station, typically that
- 5 would fall within that volume, 150,000. And the
- 6 duration of what we've seen in the past typically we
- 7 thought would be the right volume and duration.
- 8 Q. Okay. I'm going to go back to the Blacks Fork
- 9 processing plant shutdown. I think the number you gave
- 10 was a shortfall of 25,000 decatherms.
- Do you know where on the company's
- 12 distribution system that was experienced?
- 13 A. Where the shortfall -- where it was supposed to
- 14 be delivered?
- 15 Q. Yeah.
- 16 A. I do not.
- 17 Q. In your testimony, do -- I'm sorry, I'll go
- 18 back.
- 19 Do you know whether it was a single point
- 20 on the distribution system or multiple points on the
- 21 distribution system?
- 22 A. I don't recall.
- Q. Okay. In your testimony you also talk about
- 24 some other times in recent history when the company has
- 25 experienced supply shortfalls. I think January of 2017

- 1 was one of them.
- 2 A. Um-hmm.
- 3 Q. Can you remind me what the cause of that
- 4 shortfall was?
- 5 A. I'm trying to recall. I think it was multiple
- 6 well issues, upstream processing plant issues for --
- 7 that we were having sources come from a lot of different
- 8 areas. And, also, the load was relatively -- I mean, it
- 9 wasn't a peak Demand Day, but it caused more issues just
- 10 because of cold weather and we saw additional gas
- 11 supplies freezing off as the day went on.
- 12 And, again, as I recall, the issue from the
- 13 morning got worse. And as the situation is getting
- 14 worse and we're losing pressure, people are telling us,
- 15 It's in the next cycle, we've got the gas supply for
- 16 you. And each supply cycle, it ended up the gas not
- 17 showing up and the weather getting colder with the
- 18 forecast.
- 19 Q. Okay. Do you know where on the company's
- 20 distribution system the shortfall was experienced?
- 21 A. I did at the time, but I don't recall at this
- 22 moment.
- Q. Yeah, that's fine. Do you know what the
- 24 magnitude of that shortfall was?
- 25 A. I don't recall exactly.

Page 123 1 Okay. 0. 2. I do recall it was a wake-up call, though. Α. Either in your testimony or one of your 3 Q. exhibits, I can't recall which, you also reference a December 5, 2013, shortfall. 5 6 Do you know what caused that one? 7 I'm trying to remember. As I recall, it was Α. similar, cold weather, processing plants having issues. 9 Do you know what the volume of that shortfall 10 was? 11 I don't recall. Α. 12 Do you know where that shortfall was 13 experienced on the distribution system? Where it was nominated to? 14 Α. Yeah. 15 Q. 16 Α. No. 17 Okay. Q. 18 I assume the city gates in the Wasatch Front, Α. 19 but... 20 And why do you say that? Q. 21 Because that's where the majority of our gas is Α. 22 nominated. 23 Q. Okay. And when the company experiences these shortfalls -- and if it's different for each one, you 24

can kind of separate them out -- how does the company

25

- 1 respond when there's wellhead freeze-offs in the
- 2 processing areas in Wyoming, for instance, and you've
- 3 been informed that you're going to receive a shortfall?
- 4 How does the company respond to maintain system
- 5 pressures?
- 6 A. Typically, the first response, if it's a
- 7 business day, is to try to go out and buy short-term
- 8 supplies on the spot market.
- 9 Q. Okay. That's one of the tools that's available
- 10 to you?
- 11 A. If people are in the office and available and
- 12 there's gas available, that's usually where we start,
- 13 early in the morning when we realize there's an issue.
- 14 Obviously, if it happens in the middle of the day or on
- 15 a holiday or a weekend, those options aren't as
- 16 available.
- 17 Q. Okay. And if you're not able to do that,
- 18 you're not able to do enough of that to address the
- 19 problem, what is the next solution?
- 20 A. I think you check to see if storage is fully
- 21 utilized. It just depends on how serious it is and how
- 22 cold it really is at the time.
- 23 If it becomes an issue where customers are
- 24 not going to get their gas, then we look at interrupting
- 25 transportation customers. And we've done that. Back

- 1 then, we didn't have all the tools, we didn't have the
- 2 hold burn. So going forward, it would probably be a
- 3 little bit different, I would anticipate, just as far as
- 4 imbalance restrictions, but...
- 5 Q. Sure. And then I noticed in your testimony
- 6 you've referenced the aquifers a couple of times, and it
- 7 seems as though those are the solution of last resort.
- 8 Is that accurate?
- 9 A. Currently.
- 10 Q. And why is that?
- 11 A. Because it's something that can be relied upon
- 12 on basically a no-notice basis. And we're the only
- 13 parties in that facility, so we don't have to worry
- 14 about the allocation issues, it's already been
- 15 allocated. And also, currently, it's -- at least part
- 16 of it is combined -- it's part of the peak-hour service
- 17 that we have.
- 18 Again, that's not necessarily going to be
- 19 the case long-term, but that's currently how we're
- 20 operating it.
- 21 O. Okay. And when there is some sort of upstream
- 22 supply disruption, how quickly does the company get
- 23 notice that there might be some shortfalls?
- A. We typically watch the system. If we rely on
- 25 the notice, it's way too late, because pipelines have to

- 1 notify all the shippers at the same time. So we're
- 2 looking at the places where we have gas coming in in the
- 3 processing plants and we notice if they're not producing
- 4 like they should be. And so we're kind of on watch
- 5 ahead of time for those kinds of things, as you would
- 6 hope most shippers would be.
- 7 Q. Okay. And then if you, in your monitoring of
- 8 the system, notice that you're not getting the supplies
- 9 that you -- that you've nominated, what's the next step?
- 10 Do you call up and say, What's going on, or do you start
- 11 going out in the market and getting purchases or what is
- 12 the next step?
- 13 A. Both. All of the above.
- Q. Okay. And how quickly do you do that?
- 15 A. As soon as we're aware of an issue. We're
- 16 pretty proactive to those kinds of things. We -- our
- 17 priority is not to have any customers lose service.
- 18 Q. Sure. And when you -- by being proactive, how
- 19 quickly can you address a supply shortfall of -- I know
- 20 we know that the Blacks Fork one was 25,000. How
- 21 quickly were you able to act to address that shortfall?
- 22 A. I don't recall the timing of that exactly, but
- 23 just hypothetically, it depends on when you find out
- 24 about it. And if the nomination deadline has just
- 25 passed, then you can't do anything about it until the

- 1 next deadline, and then you have to wait to see if that
- 2 gas is actually confirmed. And sometimes it's eight or
- 3 12 hours before the gas supply actually gets to you. It
- 4 all is dependent on when you -- what time of day it is
- 5 when you realize an issue.
- Q. Yeah. And I think there's been some testimony,
- 7 I don't know who -- sorry -- about the benefits of
- 8 having a supply reliability solution that is not subject
- 9 to those scheduling requirements, right?
- 10 A. That's correct.
- 11 Q. Is that the reason that you don't want to have
- 12 to wait?
- 13 A. Yes. It's instantaneous, basically.
- 14 Q. Just a couple more questions. We talked about
- 15 sort of where along the distribution system there
- 16 might -- you know, if there's an upstream supply
- 17 disruption, we might experience shortfalls along the
- 18 distribution system.
- 19 What is -- to your knowledge, what is the
- 20 largest supply shortfall in a single gate station that
- 21 the company has experienced?
- 22 A. I don't recall.
- Q. Okay. As we've talked about this 150,000
- 24 decatherm shortfall, is it possible to experience a
- 25 150,000 decatherm shortfall at a single gate station?

- 1 A. Yes. I believe we have city gate stations that
- 2 are larger than that, flow more gas than that.
- 3 Q. That might be the case, but given where the gas
- 4 comes from upstream and then it goes to more than one
- 5 gate station, I guess I'm struggling to understand how a
- 6 single gate station would experience the 150,000
- 7 decatherm shortfall.
- 8 A. Because we have a BCF along the Wasatch Front,
- 9 and so some of those gate stations are large and some of
- 10 the gas supplies can go to more than one. A lot of them
- 11 follow the same trunk line -- or main line from the
- 12 Questar pipeline until you get closer to the city and
- 13 then they split to serve different city gates. So it's
- 14 just not all one coming through one city gate station to
- 15 Salt Lake.
- 16 Q. And if one gate station is experiencing a
- 17 shortfall of 150,000, isn't it likely that there are
- 18 other gate stations that are also experiencing a
- 19 shortfall of some sort?
- 20 A. Not necessarily.
- 21 Q. And why not?
- 22 A. Because some are located more closely to one
- 23 gate station -- feed one gate station more exclusively
- 24 than the others, and you can't necessarily -- you can't
- 25 move the gas backwards on other pipelines to get it to a

- 1 different location, because that's where it's flowing
- 2 to. Or the disruption could be just upstream of the
- 3 gate station and you're not able to reroute the gas to
- 4 where it needs to be.
- 5 Each one is so different and feeds --
- 6 obviously, Northern Utah has less of a population, at
- 7 least currently, than Salt Lake. We have a couple that
- 8 feed Salt Lake that one could take, up to its maximum
- 9 capability, more gas, but it couldn't necessarily take
- 10 all of the shortfall of the other one. That's why we
- 11 have so many flowing to Salt Lake City currently.
- 12 Q. Okay. And then looking at this, it looks as
- 13 though that the sort of gate station furthest from the
- 14 load center, at least the one in Utah, is the Hyrum gate
- 15 that is going north; is that right?
- 16 A. Yes.
- 17 Q. Okay. Do you know what the largest shortfall
- 18 the company's experienced at the Hyrum gate is?
- 19 A. I do not.
- 20 Q. Do you know what the current capacity of the
- 21 Hyrum gate is?
- 22 A. I do not, but there's some engineers coming up
- 23 that will be able to answer that question.
- O. We can ask them. But what I can't ask them is
- 25 -- well, maybe I can. But what I think you're probably

- 1 more positioned to answer is: In the event of a
- 2 shortfall at Hyrum, would there also be shortfalls at
- 3 other gate stations along that distribution system, or
- 4 would it -- is it possible for it to experience -- it be
- 5 the only gate station experiencing that shortfall?
- 6 A. It is possible.
- 7 Q. And I know you don't know the capacity, but is
- 8 it possible for the Hyrum gate station to experience a
- 9 150,000 decatherm shortfall?
- 10 A. I don't believe it's quite that big, but
- 11 potentially.
- 12 Q. Yeah. I don't think it is currently, but I
- 13 think there may be some --
- 14 A. Expansion on the way, yeah.
- 15 Q. Right. Okay. And if the Hyrum gate were to
- 16 experience a 150,000 decatherm shortfall, would there be
- 17 shortfalls that are experienced elsewhere on the system
- 18 as well?
- 19 A. If you look at the map, it might be the easiest
- 20 way to explain it.
- Q. That's why I brought it out.
- 22 A. So you see Whitney Canyon just to the right?
- 23 Q. Yeah.
- A. So Whitney Canyon might be directed to Hyrum
- 25 gate. If something happens at Whitney Canyon or

- 1 anything along that line between Whitney Canyon and
- 2 Hyrum, there's no way that it can be solved. You know,
- 3 that gas can't necessarily be redirected.
- 4 But we also have a lot of communication,
- 5 for lack of a better word, between -- if you look at
- 6 Payson gate, down below, this doesn't have our system on
- 7 it. That's kind of the disadvantage of it.
- Q. I looked for a map that had your system, trust
- 9 me.
- 10 A. So if you draw the line between, you know, the
- 11 Payson and Little Mountain, as you know, we have gas
- 12 service during that -- during those places or between
- 13 Payson and Salt Lake City, maybe, even though that's not
- 14 a gate station. And you can have some communication
- 15 between them and feed the gas north and south, if that
- 16 makes sense. They call it a null point.
- 17 So sometimes the gas would be fed south
- 18 towards Payson, and sometimes the gas would be fed north
- 19 from Payson, and where it -- where the two meet moves,
- 20 depending on load. I'm not an engineer, so I probably
- 21 don't have the description exactly right. But there is
- 22 a way to help some of them out to a certain point, but
- 23 there are also situations where some gas supply can't
- 24 be -- it, you know, is a one-to-one relationship because
- 25 of transportation and other reasons.

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 1
                  MR. RUSSELL: Okay. Fair enough.
                                                      Thank
 2
   you very much. I appreciate that.
 3
                  THE WITNESS: No problem.
 4
                  COMMISSIONER LEVAR: Why don't we take a
 5
    break at this point and move to redirect after a break?
 6
    So why don't we return by that clock at 1:15?
                  We'll be in recess.
 7
 8
                  (A lunch recess was taken.)
 9
                  (Reporter Rashell Garcia begins,)
                  COMMISSIONER LEVAR: Okay. We're back on
10
    the record. Ms. Faust, you're still under oath. At
11
    this point, we'll go to any redirect.
12
13
                      REDIRECT EXAMINATION
14
    BY MS. NELSON-CLARK:
             Ms. Faust, I want to take you back to some of
15
    the questions you received from Mr. Snarr. And he was
16
    referring to an exhibit in your testimony.
17
                                                 Do you
18
    recall him asking you about the probability of a
19
    landslide or freeze-off or a plant freeze-off? Do you
    remember that?
20
21
         Α.
             Yes.
22
         Q.
             And in doing that analysis, I wanted to
23
    clarify, these are not hypothetical events, these are
24
    events that have actually occurred; isn't that right?
25
         Α.
             That's correct.
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Page 133 1 Q. And they occurred but perhaps not on a design 2 peak day. Is that also correct? 3 A. Yes. Q. Are you comfortable -- as the person responsible for gas supply at Dominion Energy, are you 5 comfortable continuing moving forward in the future 6 7 relying on the hope that it does not occur -- that those events don't occur on a Design Day? 9 Α. I am not. Q. I don't have anything else. 10 11 COMMISSIONER LEVAR: Thank you. 12 questions about the redirect, Mr. Jetter, or Ms. Schmid? 13 MR. JETTER: I have no questions. 14 COMMISSIONER WHITE: No questions. 15 COMMISSIONER LEVAR: Mr. Snarr? 16 CROSS-EXAMINATION BY MR. SNARR: 17 18 0. I have one. With response to the question you 19 just answered, have you -- has the company determined a risk probability that they can assign to the possibility 20 21 of those shortfalls occurring that we talked about on 22 the Design Day? 23 Α. They have not. 24 0. Thank you. 25 COMMISSIONER LEVAR: Mr. Russell?

- Page 134 1 MR. RUSSELL: Thank you, Mr. Chairman. No
  - 2 questions.
  - 3 COMMISSIONER LEVAR: Okay. Commissioner
  - 4 Clark?
  - 5 COMMISSIONER CLARK: Regarding the
  - 6 probability that Mr. Snarr just addressed, why wouldn't
  - 7 the company evaluate these risks from a probabilistic
  - 8 perspective?
  - 9 A. My opinion is it's not -- they're not able to
- 10 be predicted and therefore there's not a probability
- 11 that can be assessed. There's too many other factors
- 12 that are not controllable that go into them.
- 13 Q. And regarding the industry practice in this
- 14 area, do you have any awareness of that? Do you have a
- 15 basis for informing us as to whether or not that kind of
- 16 analysis is routinely done in the industry generally or
- 17 not?
- 18 A. I'm not aware of that kind of analysis being
- 19 done.
- 20 Q. I just have a question about the operational
- 21 aspects of preventing transportation customers from
- 22 receiving gas when it's most precious. So just -- let's
- 23 just assume that the LNG plant exists and that there is
- 24 an imminent condition that the company perceives that
- 25 will result in every therm, every molecule being

- 1 necessary to serve the sales customers.
- 2 And that -- so, operationally, what would
- 3 be required to assure that transportation customers
- 4 couldn't take the gas even if they were willing to
- 5 accept the penalties for doing so? Because your desire
- 6 to assure that supply for sales customers under these
- 7 conditions that I am hypothesizing would make it
- 8 advisable to make the physical -- provide the physical
- 9 assurance that it would be available. How would you do
- 10 that?
- 11 A. They'd physically turn the gas off at the tap
- 12 between our system and the customer's system meter.
- 13 Q. And that would involve action at roughly how
- 14 many locations? And is the process just turning a
- 15 wrench and we're done or is there anything more to it
- 16 than that?
- 17 A. That's my understanding, that there's a turning
- 18 of the wrench. As far as multiple locations, I wouldn't
- 19 anticipate multiple transportation customers using the
- 20 gas. And so we have a way of monitoring their usage on
- 21 a real time basis. And we can target the one or two
- 22 that might be using it and deploy operation personnel to
- 23 those facilities. And we have enough operational
- 24 personnel, I don't think that would be an issue.
- 25 Q. Thank you.

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1	Page 136 COMMISSIONER LEVAR: Mr. White?
2	COMMISSIONER WHITE: I have no questions.
3	Thanks.
4	MR. LEVAR: I just have one. And I know
5	everybody loves hypothetical questions. I think this is
6	mostly hypothetical but not entirely. Could you
7	identify one or a few locations on the system where an
8	outage caused by something similar to what caused the
9	Monticello and Coalville outages could occur that could
10	also be served by the proposed sorry, proposed LNG
11	facility in central Utah?
12	A. Sure. So if there were issues at the gate
13	any of the current gate stations that we have,
14	especially specifically Little Mountain, which feeds
15	over to Emigration Canyon, if there was an issue
16	upstream of that, we would be able to bring on an LNG
17	facility and immediately fill that need. And that's the
18	same with all the other city gates and also Kern River
19	city gates. If there were issues there, we could
20	supplement it.
21	COMMISSIONER LEVAR: So that the types of
22	errors that led to the outages in Monticello and
23	Coalville could occur at any of those gates also?
24	A. Yes, potentially.
25	COMMISSIONER LEVAR: And how many customers
ı	

- 1 at those locations would be affected?
- 2 A. As far as Little Mountain or --
- MR. LEVAR: Yes, for an example.
- 4 A. So, depending on the day, you know, and how
- 5 much load there is, different amounts of customers are
- 6 served from there, but we would assume that the gas
- 7 could be rerouted from other nearby -- Sunset and other
- 8 -- Payson and other locations like we talked about
- 9 earlier. So any shortfall that could be put right into
- 10 the heart of the demand center from the LNG facility
- 11 could offset, whether it was a mechanical failure or a
- 12 locking -- a freezing of a meter or anything like that
- 13 that could happen. They have since changed the
- 14 Coalville meters, you're probably aware, and it's not
- 15 exactly the same mechanics as the large city gate
- 16 stations. But any mechanical failure or upstream
- 17 disruption of any kind, including freeze-offs, or it
- 18 could be a physical malfunction upstream, that LNG
- 19 facility would be able to supplement shortages from any
- 20 of the city gates.
- 21 COMMISSIONER LEVAR: Thank you. That's all
- 22 I have. Thank you for your testimony today.
- 23 We'll go back to the utility for your next
- 24 witness.
- MR. SABIN: Thank you. DEU calls Bruce

Page 138 Paskett as its next witness. 1 2 COMMISSIONER LEVAR: Mr. Paskett, do you swear to tell the truth? 3 4 A. I do. BRUCE L. PASKETT, 5 6 called as a witness, having been first duly sworn, was examined and testified as follows: 7 8 MR. LEVAR: Thank you. 9 MR. Paskett: Thank you. DIRECT EXAMINATION 10 11 BY MR. SABIN: 12 Q. Mr. Paskett, could you please state your full name for the record? 14 A. My name is Bruce L. Paskett. (Briefly off the record.) 15 Q. Mr. Paskett, have you submitted testimony in 16 this matter? 17 A. I did submit testimony, direct testimony, in 18 19 this matter. 20 Q. And it's -- I have that testimony marked as 21 Exhibit 6.0, DEU Exhibit 6.0, with one exhibit attached to that which is marked as Exhibit 6.01. Do you have 23 those documents there with you? A. I have Exhibit 6.0 in front of me. 24 25 Q. Okay. Did you prepare that testimony?

Page 139 I did. 1 Α. 2 Do you have any corrections to that testimony? Q. I do not. 3 Α. 4 Do you adopt that testimony today here as you 5 are appearing as a witness? 6 Α. I do. Okay. We move to admit Exhibits -- oh, I quess 7 0. I should ask, Exhibit 6.01, which is attached to Exhibit 6.0, did you also prepare that? A. I did. 10 And do you have any corrections to Exhibit 11 Q. 12 6.01? 13 I do not. Α. Q. DEU moves to admit Exhibits 6.0 and 6.01. 14 15 COMMISSIONER LEVAR: If anyone objects to 16 that motion, please indicate. I'm not seeing any objection, so the motion is granted. 17

- 18 Q. Mr. Paskett, have you prepared a summary of
- 19 your testimony you've submitted in this matter?
- 20 A. Yes, I have.
- Q. Would you please provide that to the
- 22 commission?
- 23 A. Thank you. Good afternoon, Mr. Chair and
- 24 members of the commission. My name is Bruce Paskett.
- 25 I'd like to begin my summary testimony by providing a

Page 140 brief overview of my background and experience. 1 I am a 2 registered professional engineer in the State of Oregon with over 36 years of experience in the natural gas 3 4 industry. I was employed for 31 years at Northwest Natural Gas with headquarters in Portland, Oregon. 5 Northwest Natural is a local distribution 6 company or LDC about the same size as Dominion Energy 7 Northwest Natural's facilities include 8 Utah. transmission and distribution pipeline systems and also 9 10 on-system underground storage in two LNG plants. 11 During my tenure with Northwest Natural, I 12 held a number of different management positions 13 including manager of engineering, manager of corporate security, chief engineer, manager of code compliance, 14 15 and principal compliance engineer. At various times I had the direct responsibility or was involved in the 16 17 design, construction, operations, maintenance, integrity management and regulatory compliance activities for 18 Northwest Natural's transmission and distribution 19 20 systems. 21 In addition, I was involved with supporting 22 the company's underground storage facility and two 23 on-system LNG plants where Northwest Natural liquefied and vaporized LNG. 24 25 I was involved as a member of the company's

- 1 emergency operations committee that responded to various
- 2 natural gas emergencies, including extreme weather
- 3 events and upstream supply disruptions due to issues
- 4 such as catastrophic pipeline failures.
- 5 While at Northwest Natural, I also had the
- 6 opportunity for significant involvement in natural gas
- 7 professional associations, regulatory workshops,
- 8 including NARUC workshops and conferences and federal
- 9 and state pipeline safety regulatory compliance and rule
- 10 making initiatives.
- I have also participated in American Gas
- 12 Association, or AGA, operations committees for nearly 36
- 13 years. AGA represents the 200 largest LDCs in the
- 14 nation, such as Dominion Energy Utah. In addition, from
- 15 2009 to 2013, I was a loaned executive to the AGA during
- 16 the time period following a significant number of
- 17 serious pipeline incidents, including the San Bruno
- 18 tragedy.
- 19 During my tenure as a loaned executive, I
- 20 supported AGA in the 2011 Congressional Pipeline Safety
- 21 Reauthorization and numerous PHMSA pipeline and safety
- 22 rule makings.
- 23 In 2014, I joined Structural Integrity
- 24 Associates, Inc. as chief regulatory engineer. In my
- 25 current practice, I provide engineering consulting for

- 1 LDCs across the nation regarding regulatory compliance
- 2 and best practices on a broad range of natural gas
- 3 design, construction, operations, maintenance and
- 4 integrity management matters.
- 5 Based on my 36 years of industry
- 6 experience, my participation in AGA operations
- 7 committees, my tenure as an AGA loaned executive, and my
- 8 practice with Structural Integrity Associates, I've
- 9 acquired extensive knowledge and experience related to
- 10 natural gas LDCs across the nation.
- I've been retained by DEU to provide an
- 12 expert review of assessment of the reliability needs for
- 13 the DEU system and the company's evaluation of available
- 14 supply reliability options.
- In this capacity, I assessed the issues
- 16 driving the company's desire for supply reliability
- 17 solutions and the resources that could be added to the
- 18 company's gas supply portfolio to improve the safety and
- 19 reliability of service to sales customers during cold
- 20 weather and Design Day conditions.
- 21 Historically and recently, DEU has
- 22 experienced disruptions of contracted gas supplies
- 23 during cold weather events when temperatures were warmer
- 24 than the Design Day. Since a hundred percent of DEU's
- 25 gas supply portfolio comes from off-system sources which

- 1 are outside the company's piping system, the supply
- 2 shortfalls occur due to events that are outside the
- 3 company's control.
- 4 Based on the frequency and nature of these
- 5 supply disruptions, DEU is justifiably concerned that it
- 6 will be unable to provide safe and reliable service to
- 7 sales customers during winter and cold weather
- 8 conditions.
- 9 In addition to DEU's experience with supply
- 10 shortfalls, the company also examined industry operating
- 11 experience from other system operators as required by
- 12 code regarding instances of loss of reliability of
- 13 service during winter cold weather operating conditions.
- In Ms. Faust's direct testimony, which is
- 15 DEU Exhibit 2.0, she discusses the February 2011 cold
- 16 weather event that resulted in the interruption of
- 17 service to more than 40,000 customers in New Mexico and
- 18 Arizona due to "widespread wellhead, gathering system
- 19 and processing plant freeze-offs and hampered repair and
- 20 restoration efforts."
- I also address this event in my testimony.
- 22 In response to this event, Southwest Gas Corporation
- 23 examined their gas supply portfolio and exclusive
- 24 reliance on a hundred percent off-system supplies and
- 25 obtained pre-approval from the Arizona commission to

- 1 construct an on-system LNG storage facility, and is
- 2 currently constructing that facility which is scheduled
- 3 for completion in 2019.
- In addition, in our respective testimonies,
- 5 Ms. Faust and I also discuss a very recent example of
- 6 loss of supply reliability during winter cold weather
- 7 conditions.
- In October 2018, the 36-inch transmission
- 9 pipeline that serves Fortis, BC ruptured north of Prince
- 10 George, British Columbia. The 36-inch transmission
- 11 pipeline and a parallel 30-inch transmission pipeline
- 12 had to be shut down, severely limiting the supply of
- 13 natural gas to the Fortis, BC territory. Fortis, BC was
- 14 able to avoid a catastrophic customer service outage in
- 15 part by utilizing gas supplies from the two on-system
- 16 Fortis, BC LNG plants.
- 17 Based on DEU's historical experience and on
- 18 significant recent events in Mexico, Arizona and British
- 19 Columbia, it's abundantly clear that interruptions of
- 20 off-system gas supplies during cold weather are not
- 21 hypothetical events and that the consequences can be
- 22 significant.
- In addition, based on my personal
- 24 experience with Northwest Natural Gas, supply
- 25 disruptions are a very real and serious threat to LDCs.

- 1 From February 1989 to December 2003, Northwest Natural
- 2 experienced significant interruptions of gas supplies
- 3 from the interstate pipeline system on at least seven
- 4 different occasions.
- 5 In DEU's case it has concluded that the
- 6 types of upstream events it has experienced, if
- 7 replicated during colder weather conditions, have the
- 8 potential to cause significant gas supply problems and
- 9 result in a significant loss of service.
- The company's unchallenged system network
- 11 modeling shows that a supply disruption to a demand
- 12 center could result in a loss of service of up to
- 13 650,000 residential, commercial and industrial sales
- 14 customers that rely on natural gas for heating and other
- 15 needs. This interruption of service could result in
- 16 serious threats to life, safety and substantial property
- 17 damage.
- 18 Based on my discussions with DEU personnel
- 19 and my review of company information, the company is
- 20 serious about providing safe and reliable service to its
- 21 customers and is driven by its legislative mandate to
- 22 provide safe and reliable gas service.
- 23 To identify the most prudent and cost
- 24 effective alternative for adding additional resources to
- 25 maintain system supply, reliability and pressure support

- 1 during cold weather conditions and other emergency
- 2 events, DEU issued a request for proposal, or RFP, to
- 3 outside parties on January 2nd, 2019 seeking proposals
- 4 for supply reliability resource to meet specified
- 5 performance requirements detailed in the RFP.
- 6 The company utilizes standard RFP processes
- 7 to solicit proposals from all known parties that might
- 8 be able to provide resources, including gas suppliers,
- 9 storage providers, and upstream pipelines.
- 10 The RFP produced six options in addition to
- 11 the option of a DEU owned and operated on-system LNG
- 12 facility. The company conducted a comprehensive supply
- 13 reliability evaluation, which is DEU Exhibit 3.03, to
- 14 identify an additional supply source to maintain system
- 15 safety, reliability and adequate system pressures during
- 16 periods of supply disruption. In the supply reliability
- 17 evaluation, the company summarized the analysis
- 18 conducted for the options generated by the RFP.
- In addition, in the supply reliability
- 20 evaluation and in the supply reliability risk analysis,
- 21 which is DEU Exhibit 2.04, the company identified a
- 22 range of known risks and threats to reliable delivery of
- 23 contracted off-system gas supplies to the DEU
- 24 distribution system.
- 25 These threats and risks include well

- 1 freeze-offs, processing plant and compressor station
- 2 shutdowns, landslides, washouts, flooding, earthquakes,
- 3 human error, third-party excavation damage and cyber
- 4 attacks.
- 5 In addition, there are other threats
- 6 contained in industry consensus documents that are
- 7 relevant to the integrity of pipelines that deliver
- 8 contracted off-system gas to the DEU system. These
- 9 threats include internal corrosion, external corrosion,
- 10 stress corrosion cracking, and manufacturing and
- 11 construction defects.
- 12 I've reviewed the company's supply
- 13 reliability resource RFP, supply reliability evaluation,
- 14 and supply reliability risk analysis in detail. Based
- 15 on my extensive experience in the natural gas industry
- 16 for over 36 years, it's my opinion that, one, the
- 17 process engaged in by the company to assess it's
- 18 reliability needs has been conducted in a reasonable
- 19 manner.
- DEU has considered not only company
- 21 experience with off-system supply shortfalls but has
- 22 also considered and evaluated industrywide experience
- 23 consistent with my expectations for a prudent LDC. DEU
- 24 has confirmed the need for an additional supply
- 25 resource.

Page 148 Two, the supply reliability evaluation and 1 2. supply reliability risk analysis are comprehensive and were competently performed. The supply reliability 3 4 evaluation and supply reliability risk analysis appropriately identify a range of legitimate risks and 5 threats through the reliable delivery of off-system gas 6 supplies to the DEU system. 7 Three, based on recent disruptions of 8 9 contracted off-system gas supplies during cold water events that were much warmer than Design Day 10 temperatures, it would be imprudent for the company to 11 12 fail to secure an additional gas resource that's highly 13 reliable in cold weather conditions. Four, the RFP process to identify the most 14 15 prudent and cost effective alternative for adding 16 additional supply resources was performed in a 17 reasonable and competent manner. Five, the supply reliability evaluation 18 objectively evaluates the options identified in the RFP 19 20 along with the option of a company owned LNG facility 21 for the need identified by the company. 22 Six, an on-system DEU owned LNG facility 23 provides the highest reliability of any identified 24 option and significant advantages as compared to any of

25

the other options.

Page 149 1 Seven, given that the company already 2 relies 100 percent on off-system supply sources that are subject to numerous supply risks, it is my opinion that 3 4 the company's decision to add an on-system supply reliability solution is not only prudent but the 5 appropriate decision. 6 Supply diversity is of critical paramount 7 consideration when dealing with the question of supply 8 9 reliability. 10 Finally there are significant advantages to 11 having an on-system LNG storage facility from a system 12 reliability perspective. During my 31 years employed at 13 Northwest Natural, I was deeply involved in the operations of the company, including emergency 14 15 operations. Northwest Natural's off-system gas 16 supplies, like the company's, are delivered through an 17 off-system pipeline. As I detailed in my direct testimony, there 18 were at least seven occasions from February 1989 to 19 20 December 2003 when the interstate transmission pipeline 21 that provides natural gas transportation service to 22 Northwest Natural service territory experienced severe 23 operational issues or catastrophic pipeline failures 24 that resulted in extreme flow restrictions, operational 25 flow orders, restricting the delivery of contracted gas

- 1 to Northwest Natural's service territory.
- 2 Many of these failures occurred during
- 3 wintertime operating conditions. Northwest Natural's
- 4 ability to draw gas from the company's on-system storage
- 5 prevented the interruption of service to thousands or
- 6 tens of thousands of customers. On-system LNG storage
- 7 provides significant system reliability benefits that no
- 8 other available option can match.
- 9 In summary, I've reviewed the DEU supply
- 10 reliability resource RFP, supply reliability evaluation,
- 11 and supply reliability risk analysis. In my expert
- 12 opinion, the company has conducted a thorough and
- 13 competent RFP process and competent evaluation of the
- 14 options identified in the RFP, along with the option of
- 15 a company owned LNG facility of the need identified by
- 16 the company to improve the reliability of supply during
- 17 cold water operating conditions.
- 18 Of the options identified through the RFP
- 19 process and the DEU owned LNG facility option, I agree
- 20 that the on-system DEU LNG facility clearly provides the
- 21 most beneficial option to improve DEU's supply
- 22 reliability during cold weather operating conditions.
- That concludes my summary of testimony.
- 24 Thank you.
- MR. SABIN: Thank you, Mr. Paskett.

- 1 Mr. Paskett is now available for cross-examination.
- 2 COMMISSIONER LEVAR: Thank you. Anything
- 3 from the division?
- 4 CROSS-EXAMINATION
- 5 BY MR. JETTER:
- 6 Q. I do have a few brief questions. Good
- 7 afternoon.
- 8 A. Good afternoon.
- 9 Q. I suppose I'll start out with, you discussed a
- 10 loss of service to customers in New Mexico and Arizona
- 11 in 2011, and that Southwest Gas Company had received
- 12 approval to install a liquid natural gas facility south
- 13 of Tucson, I believe is the location of that. Is that
- 14 correct?
- 15 A. I'm not sure of the exact location, but I
- 16 discussed the rest of it, correct.
- 17 Q. Okay. And did you investigate what New Mexico
- 18 Gas Company did as a response?
- 19 A. I did not.
- 20 Q. Okay. You're not -- I guess I won't ask any
- 21 further questions about that if you're not aware.
- 22 In your review -- changing gears here a
- 23 little bit -- of the supply reliability study from the
- 24 company, did you review any probabilistic analysis of
- 25 any of those types of risks?

- 1 A. I don't believe that there was a probabilistic
- 2 analysis that was performed. In my opinion, it is very,
- 3 very difficult, if not impossible, to do a probabilistic
- 4 analysis.
- Just for the record, PHMSA defines risk as
- 6 probability times consequences. And so in some cases,
- 7 it may be the probability is low but these are high
- 8 consequence events. So I would categorize these as very
- 9 high risk types of events.
- 10 Q. And so if you don't know the probability, is it
- 11 fair to say then you can't meaningfully calculate the
- 12 risk?
- 13 A. I don't think you can establish a numerical
- 14 number for the risk. I think what you do is look around
- 15 the industry and look at the industry experience, which
- 16 is what DEU has done, and draw your conclusions from
- 17 that, which is, those kinds of interruptions are
- 18 happening everywhere around the system.
- 19 And so it's very difficult, yes, to have an
- 20 absolute number to it, but you take actions based on the
- 21 threats that are identified, which is what's required by
- 22 federal code.
- Q. And so how do you know that it was an
- 24 appropriate decision to choose 150,000 decatherms as
- 25 opposed to 300 or 500?

1	Page 153 A. I think that that is a question that should be
2	asked of another witness. That was not my input.
3	Q. Okay. Thank you. I have no further questions.
4	COMMISSIONER LEVAR: Thank you. Mr. Snarr?
5	MR. SNARR: I have no questions.
6	COMMISSIONER LEVAR: Mr. Russell?
7	MR. RUSSELL: No questions. Thank you.
8	COMMISSIONER LEVAR: Mr. Sabin, any
9	redirect?
10	MR. SABIN: None. Thank you.
11	COMMISSIONER LEVAR: Commissioner White?
12	COMMISSIONER WHITE: I'm just curious, any
13	of the other LDCs that were evaluated in kind of
14	comparing the costing, has there ever been a driver
15	associated with the difference in topography or weather?
16	Is that ever a part of this? I'm just asking that
17	because obviously Northwest Natural has a different, you
18	know, climate, topography, etcetera. Is that ever a
19	consideration in the need for such a facility?
20	A. Good question. I think it's on a case by case
21	basis, Commissioner. I do know that there are other
22	LDCs that are building. We already mentioned Southwest
23	Gas. Puget Sound Energy are in the process of
24	developing an LNG plant in Washington as we speak for
25	the same purposes, which is supply reliability.

Page 154 So I think climate and supply resources, 1 2 there's a lot of factors that go into that decision and equation. Was that responsive? 3 4 COMMISSIONER WHITE: I'm fine. That's all 5 the questions I have. 6 Α. Okay. 7 COMMISSIONER LEVAR: Mr. Clark? 8 COMMISSIONER CLARK: Mr. Paskett, you 9 addressed the RFP and your examination of it. And the point is made in testimony that Kern River did not bid 10 and did not offer a solution to the -- I'll call it the 11 12 problem that the RFP was seeking a solution for. 13 Just from your industry experience, would 14 you have expected Kern River to provide a bid in this --15 in the context of the RFP parameters? Let's start with 16 that question and then I've got a couple of follow-up. 17 Okay. Thank you for your question, Α. Commissioner. In my opinion, the RFP casts a very wide 18 19 net, so I'm certain that Kern River was aware of it. 20 am not surprised that they did not submit a bid because 21 I don't believe that they were able to meet the criteria 22 that was established in the RFP. 23 So I'm not at all surprised because they're 24 an interstate pipeline operator. And the time frame of 25 this kind of a resource was very quick. And I don't

- 1 believe -- again, I'm not surprised that Kern River
- 2 didn't bid.
- 3 COMMISSIONER CLARK: So you referred to the
- 4 criteria. And maybe time frame is one. Are there any
- 5 other criteria that -- I'll just offer one. The
- 6 delivery point, for example, is that a constraint that
- 7 would have made it maybe difficult, maybe impossible for
- 8 Kern River to participate?
- 9 A. Well, I would -- that's an excellent question.
- 10 I would be speculating as to why they didn't submit a
- 11 bid, Commissioner.
- 12 COMMISSIONER CLARK: And I wouldn't -- I
- 13 wouldn't want you to speculate as to their reasoning,
- 14 but just from your experience, what would you do if
- 15 you're an interstate pipeline and you're addressing
- 16 this RFP? What criteria would have made it most
- 17 challenging for you to participate? And is the point of
- 18 delivery part of that equation or are there ways that
- 19 that particular requirement could have been addressed
- 20 commercially or some other way?
- 21 A. My personal opinion is that there probably
- 22 isn't an effective way for an interstate pipeline like
- 23 Kern River to have met all of the conditions because, as
- 24 the time frame and their supply resources are located,
- 25 as in testimony, hundreds of miles away from DEU's

- 1 service, plus there's the nomination cycle. So there
- 2 is a lot of fundamental restrictions that would -- if
- 3 I'm Kern River, I wouldn't think I could meet the
- 4 criteria.
- 5 COMMISSIONER CLARK: Thanks for that
- 6 elaboration. I appreciate it. So that concludes my
- 7 questions.
- 8 COMMISSIONER LEVAR: I don't have any
- 9 questions. Thank you for your testimony today.
- 10 A. Thank you very much.
- MS. NELSON-CLARK: The company calls
- 12 William Schwarzenbach.
- 13 COMMISSIONER LEVAR: Mr. Schwarzenbach, do
- 14 you swear to tell the truth?
- MR. SCHWARZENBACH: Yes, I do.
- 16 COMMISSIONER LEVAR: Thank you.
- 17 WILLIAM F. SCHWARZENBACH,
- 18 called as a witness, having been first duly sworn, was
- 19 examined and testified as follows:
- 20 DIRECT EXAMINATION
- 21 BY MS. NELSON-CLARK: :
- 22 Q. Could you please state your full name and
- 23 business address for the record.
- A. Yes. My name is William Frederick
- 25 Schwarzenbach, the third. My business address is 333

- 1 State Street, Salt Lake City, Utah.
- Q. And what position do you hold with the company,
- 3 Mr. Schwarzenbach?
- 4 A. I am the manager of gas supply for Dominion
- 5 Energy Utah.
- Q. Did you file direct testimony in this docket,
- 7 which is DEU Exhibit 3.0 with three attached exhibits,
- 8 No. DEU 3.01 through 3.03?
- 9 A. Yes, I did.
- 10 Q. And were those documents prepared by you or
- 11 under your direction?
- 12 A. Yes, they were.
- 13 Q. And do you adopt the contents of those
- 14 documents as your testimony today?
- 15 A. Yes, I do.
- 16 Q. Did you also file rebuttal testimony marked as
- 17 DEU Exhibit 3.0R?
- 18 A. Yes, I did.
- 19 Q. And do you also adopt that document as your
- 20 testimony today?
- 21 A. I do.
- 22 Q. The company moves to admit Mr. Schwarzenbach's
- 23 pre filed direct testimony, DEU Exhibit 3.0 and the
- 24 accompanying Exhibits 3.01 through 3.03, as well as his
- 25 rebuttal testimony marked as DEU Exhibit 3.0R.

Page 158 1 COMMISSIONER LEVAR: If anyone objects to 2 that motion, please indicate to me. I'm not seeing any objections, so the motion is granted. 3 Thank you. Mr. Schwarzenbach, will you please 4 5 summarize your testimony? 6 Α. Yes. Thank you. Last year in Docket No. 18-057-03 and after extensive analysis, the company 7 proposed to build a DEU owned LNG facility as a resource 8 to provide supply reliability for DEU's customers and 9 mitigate supply shortfalls and avoid loss of service. 10 11 In its order in that docket the commission 12 concluded, "We cannot now properly evaluate the 13 reasonableness of the LNG facility as a means of improving supply reliability because we do not have 14 15 adequate assurance other more cost effective positions are not available." 16 17 In my testimony, I describe the process used to identify all available resources and the 18 evaluation completed to determine the most cost 19 20 effective and reliable options to provide supply 21 reliability for DEU customers. 22 To provide adequate assurance that all 23 reasonable and cost effective potential options to provide supply reliability for DEU customers have been 24 25 considered, the company issued a well advertised public

- 1 solicitation for proposals to identify any potential
- 2 resource that may be available.
- 3 DEU prepared a detailed request for
- 4 proposal, or RFP, that explained in detail the purpose
- 5 and scope of the RFP, identified the requirements of a
- 6 qualifying proposal, provided DEU contact information,
- 7 identified key dates, outlined supply resource
- 8 requirements, explained the criteria that would be used
- 9 for evaluation, described the required proposal content,
- 10 requested the information on the ability to extend DEU's
- 11 service to remote locations or other factors determined
- 12 to be relevant, described the process by which DEU could
- 13 revise the RFP, explained confidentiality commitments,
- 14 provided disclaimers, explained DEU commitments to equal
- 15 opportunity employment and affirmative action, noted the
- 16 private proposal opening process, and noticed a plan
- 17 respondent conference.
- This RFP was reviewed by both the Office of
- 19 Consumer Services and the Division of Public Utilities
- 20 before it was issued and feedback provided was
- 21 incorporated into the final RFP.
- The RFP was published in Plats Gas Daily,
- 23 an industry publication normally read daily by most
- 24 participants in the natural gas market. DEU also
- 25 directly sent the RFP to all known gas suppliers in the

- 1 local market and the upstream pipeline providers,
- 2 including Kern River Gas Transmission and Dominion
- 3 Energy Questar Pipeline.
- 4 No other potential providers have been
- 5 identified that did not receive the RFP. In response to
- 6 this RFP, DEU received proposals from three respondents.
- 7 Magnum Energy Midstream provided three different options
- 8 in its proposal. Prometheus Energy provided two
- 9 different options in its proposal. United Energy
- 10 Partners provided one option in its proposal. DEU also
- 11 considered the potential DEU owned LNG facility in its
- 12 evaluation of options.
- 13 DEU's evaluation process was intended to
- 14 identify a supply reliability option that, taking into
- 15 account all relevant factors, will allow DEU to provide
- 16 safe and reliable service to its customers at the lowest
- 17 reasonable cost.
- 18 A 26 page summary of this evaluation is
- 19 included with my pre file direct testimony at DEU Highly
- 20 Confidential Exhibit 3.03. The company considered a
- 21 number of price and non price factors in evaluating all
- 22 of the options, including the following: One, whether
- 23 the proposal satisfied the operational and in-service
- 24 requirements contained in the RFP, including the ability
- 25 to deliver supply on an as-needed basis.

Page 161 1 Two, total annual customer cost of the 2 Three, the long and short-term impacts of the proposal. proposal, including any operational considerations. 3 Four, technical, operational and financial viability of the proposal. Five, the impact of the proposed delivery 5 6 location on DEU system, including any resulting costs or benefits. Six --7 (Briefly off the record.) 8 9 COMMISSIONER LEVAR: Sorry, Mr. 10 Schwarzenbach, I think the streaming is not picking you Is your microphone on? 11 up. 12 A. Yes, it is. 13 COMMISSIONER LEVAR: The green light is 14 on? 15 Is that what -- the streaming, he's not 16 being picked up on the streaming. 17 UNIDENTIFIED: We can't hear very well. 18 COMMISSIONER LEVAR: Sorry to interrupt 19 your summary. 20 A. Can you hear me now? Should I start over? 21 COMMISSIONER LEVAR: Well, so apparently 22 whoever is participating by listening to the streaming 23 does not have your summary, any of your summary. 24 Α. I'd be happy --25 COMMISSIONER LEVAR: I'll leave that to

- 1 you and your attorneys whether you repeat your summary
- 2 for purposes of the stream. We have it in the
- 3 transcript.
- 4 COMMISSIONER CLARK: We could hear it.
- 5 COMMISSIONER LEVAR: We could hear it in
- 6 the room, yes.
- 7 A. All right.
- 8 MR. SABIN: If you really want to --
- 9 A. I can do either way. Okay. Let me see where
- 10 I was. I think I was six -- or, actually, let me go to
- 11 five. The impact of the proposed delivery location on
- 12 DEU's system, including any resulting costs or
- 13 benefits.
- 14 Reliability of the proposal, including but
- 15 not limited to, any operational reliability benefits and
- 16 design redundancy. Seven, the risks addressed and/or
- 17 presented by the proposal. Eight, the financial impact
- 18 on DEU, if any, other than the total annual cost to
- 19 customers. Nine, other identified benefits or risks
- 20 associated with the proposal. And, ten, other factors
- 21 that were determined to be relevant, including
- 22 additional benefits such as providing peak hour services
- 23 or providing gas services to remote communities.
- 24 Based on the analysis of each option
- 25 available and an evaluation of risks, benefits and costs

- 1 of each option, the DEU owned LNG facility is the lowest
- 2 reasonable cost and most reliable option to offset
- 3 anticipated supply shortfalls.
- 4 It is a supply reliability resource located
- 5 on the DEU system which reduces risks associated with
- 6 supply issues such as well freeze-offs and plant shut-
- 7 downs and also reduces risks associated with
- 8 transporting the gas, such as earthquakes, landslides
- 9 and third-party damage.
- 10 The company recommends that the commission
- 11 find that construction and operation of an on-system DEU
- 12 owned LNG facility is just and reasonable and in the
- 13 public interest and approve the company's application in
- 14 this matter.
- 15 MS. NELSON-CLARK: Mr. Schwarzenbach is
- 16 available for cross-examination and commission
- 17 questions.
- 18 COMMISSIONER LEVAR: Thank you. Mr. Jetter
- 19 or Ms. Schmid, do you have any questions?
- 20 MR. JETTER: I have a few brief questions.
- 21 CROSS-EXAMINATION
- 22 BY MR. JETTER:
- 23 Q. Good afternoon.
- 24 A. Good afternoon.
- 25 Q. Were you involved in the RFP communications

- 1 back and forth between Dominion Energy and the Magnum
- 2 Energy Partners, called Magnum?
- A. I was slightly involved, but the reality is we
- 4 went -- since we did this as a standard RFP process, we
- 5 went through our contracting department and had all
- 6 correspondence go through them. We did hear about some
- 7 of the questions. So, depending on which particular
- 8 question and correspondence you're referring to, I may
- 9 or may not have been involved.
- 10 O. Okay. What I'd like to know a little bit more
- 11 about is the costs that were discussed earlier. I'm
- 12 going to stay out of confidential territory here and
- 13 just ask, do you know if those costs for the facility
- 14 upgrades for the bidders' projects that may have been
- 15 connected at a point that was other than where desired
- 16 by Dominion, those costs for the upgrades, were those
- 17 calculated by Dominion and then given to the bidders?
- 18 Or do you know if the bidders were left to calculate
- 19 those upgrade costs themselves?
- 20 A. We did not give those estimates to the bidders
- 21 because the estimates were really dependent on what the
- 22 bid said, so where the bid was going to deliver the gas.
- 23 So it was really dependent on each particular bid.
- 24 And the reality is, the best person to ask
- 25 is probably Mike Gill on how all that was developed. I

- 1 was not responsible for developing those costs.
- 2 In terms of the one we talked about
- 3 earlier, I did review the bid that was proposed and felt
- 4 it was fairly clear as to what was included in the bid
- 5 and what was not.
- 6 Q. Okay. That's the only question I have. Thank
- 7 you.
- 8 COMMISSIONER LEVAR: Thank you. Mr. Snarr,
- 9 do you have any questions?
- 10 MR. SNARR: Yes, I have a few questions.
- 11 Thank you.
- 12 CROSS-EXAMINATION
- 13 BY MR. SNARR:
- 14 Q. In your rebuttal testimony at lines 18 through
- 15 21, you attempt to make distinctions between long-term
- 16 and short-term solutions the DEU used for reliability
- 17 means. Will you look at that?
- 18 A. Can you repeat which line numbers?
- 19 Q. 18 through 21.
- 20 A. Okay. And what was your question regarding
- 21 that?
- 22 Q. You seem to make distinctions between long-term
- 23 and short-term solutions to the identified DEU
- 24 reliability means; is that right?
- 25 A. Yes.

- 1 O. And considering the various reliability issues
- 2 that were identified by witness Faust, I'd like you to
- 3 consider some of the following questions: Does a well
- 4 freeze-off require a short-term or a long-term
- 5 solution?
- 6 A. It's not a matter of whether it requires a
- 7 short-term or long-term solution, it's a matter of which
- 8 solutions are available. Unfortunately, a long-term
- 9 solution isn't available to put into action today.
- 10 So, yes, we are considering things on a
- 11 short-term basis based on what is available for us to
- 12 react to that today, whereas, any of the solutions that
- 13 were provided in response to our RFPs, which are more
- 14 long-term solutions, would not be available for us to
- 15 use today. So we were forced to consider more stopgap
- 16 type measures as well as what we want to do long-term.
- 17 Q. And in using some of those short-term stopgap
- 18 measures, you were successful in ensuring that gas
- 19 supply would reach your retail customers in every
- 20 distressed situation; isn't that right?
- 21 A. I do not feel confident in saying that we would
- 22 be able to do that during a Design Day. We have done it
- 23 to this point but we have not seen a Design Day.
- 24 Q. Now, we've talked about risk being probability
- 25 times the consequences. Have you also heard the past is

- 1 prolonged or we can learn something from history?
- 2 A. Yes. But I've also noted that in terms of --
- 3 historical actuals are not necessarily a representation
- 4 for what will happen exactly in the future.
- 5 Q. All right. Let's talk about plant shutdowns.
- 6 There's various different kinds of plants that are
- 7 connected to the upstream pipelines and facilities that
- 8 serve DEU; is that right?
- 9 A. Yes, I'm aware.
- 10 Q. And some of those plants process the gas to --
- 11 dehydrate the gas, right?
- 12 A. Yes, some of them.
- 13 Q. And some of them take out the sour gas
- 14 component, which can be very serious, right?
- 15 A. Yes.
- 16 Q. And aren't there also plants that merely strip
- 17 out the higher value ethanes?
- 18 A. Yes.
- 19 Q. Now, in that last circumstance, if we have a
- 20 plant shutdown of that type of a processing plant, what
- 21 might be a short-term solution for the availability of
- 22 that gas supply?
- 23 A. Well, I could speculate, but I'm not the plant
- 24 manager as to what they would do with that. I mean
- 25 one -- if all they are doing is stripping out the

- 1 ethane, there is the possibility that they could
- 2 continue to deliver the gas with a higher BTU content,
- 3 but it depends on what caused the shutdown.
- 4 If it's a complete power failure at the
- 5 facility, it doesn't matter what they were trying to do.
- 6 If the facility can't run, they may not be able to
- 7 continue to run gas through it, whether it's at a higher
- 8 BTU content or at a lower BTU content with the ethane
- 9 stripped out.
- 10 O. All right. Isn't it true that Dominion's
- 11 evidence in this case only considers the proposed LNG
- 12 facility as a possible solution to respond to many
- 13 supply reliability issues without a presentation or
- 14 comparison of other solutions that might also address
- 15 those specific reliability issues?
- 16 A. No, I don't agree with that at all. I think
- 17 we've done a complete evaluation of every option that
- 18 is available. We went through in the prior docket, the
- 19 18-057-03 docket, we went through and evaluated all
- 20 potential hypothetical type options that we could think
- 21 of. And then, this past year, we put out an RFP to
- 22 solicit from anybody who might have another option for
- 23 them to present that option to us.
- 24 And we received a number of them and we
- 25 considered all of those evaluated. So at this point, I

- 1 feel confident in saying, we've looked at every
- 2 potential option we could think of and every potential
- 3 option of others in the industry that might have the
- 4 opportunity to provide us with something, we've looked
- 5 at everything that they could provide as well.
- 6 So, I'm not sure what potential solutions
- 7 you're talking about that somebody might have out there
- 8 that they didn't present to us.
- 9 O. We can address those.
- 10 A. Okay.
- 11 Q. At line 27 of your rebuttal testimony you
- 12 presume that DEQP pipeline capacity associated with
- 13 the delivery of clay basin storage gas would be
- 14 constrained on a Dominion Energy Utah Design Day; is
- 15 that correct?
- 16 A. Yes.
- 17 Q. Now, have you sought DEQ capacity for any
- 18 additional clay basin service to confirm with them
- 19 whether their capacity is similarly constrained?
- 20 A. Their pipeline capacity, I don't have to
- 21 actually consult with them. Their available capacity is
- 22 posted on their website. You can look to see how much
- 23 available capacity they have. And they do not -- and I
- 24 haven't looked today, but they do not currently have, to
- 25 my knowledge, any available pipeline capacity that goes

- 1 through the Wasatch Front.
- 2 So, in order to have available capacity on
- 3 a peak day, we would have to contract for that. And
- 4 right now, based on what's available on their pipeline,
- 5 they don't have that capacity to contract to our
- 6 system.
- 7 O. You also reviewed Kern River for the same kinds
- 8 of questions about additional capacity availability?
- 9 A. Kern River does have long-term capacity
- 10 available. They are fully sold out on a short-term
- 11 basis. So, looking right now, they do not have
- 12 capacity available. Again, I have not checked it today
- 13 so I would have to -- I would have to -- subject to
- 14 check.
- But the problem with Kern River is they do
- 16 not have direct access to storage. So, in order for us
- 17 to get additional storage and provide that on Kern
- 18 River, you would have to go through another pipeline
- 19 such as Dominion Energy Questar Pipeline anyway.
- 20 So, contracting for additional supply to
- 21 reach the -- or additional capacity on Kern River to
- 22 reach that storage isn't necessarily all that's going to
- 23 be involved.
- 24 Q. Did those circumstances you've just described
- 25 give you any pause when you approached Kern River for

## 1 your peaking contract service the last couple of years?

- 2 A. It does not because the peaking contract, they
- 3 work through their -- they use line pack to provide that
- 4 service. And they've been able to provide that service
- 5 to us. It is a much different animal than what we're
- 6 talking about here.
- 7 And, yeah, I have no doubt they have a FERC
- 8 approved rate for that service and they're able to
- 9 provide it. If they did not have a FERC approved rate,
- 10 which they do not for any type of -- no notice service
- 11 or anything like that, then I would question that
- 12 service as well. But they do have a FERC approved
- 13 rate.
- 14 And, again, I'd like to reiterate that Kern
- 15 River had every opportunity to respond to our RFP with
- 16 some type of solution. And they chose not to do so.
- 17 They had -- they not only received directly from me the
- 18 RFP, they participated in the bidders' conference.
- 19 They were there and able to ask any questions they
- 20 wanted.
- 21 And in reference to some of the other
- 22 proposals that were actually sent in, I had to speak
- 23 directly with Kern River and ask them some questions
- 24 about which services they were able to provide and not.
- 25 So they were well aware of our proposal. They're well

- 1 aware of our need. And yet they have not chosen to
- 2 respond to any type of proposal. So I didn't feel it
- 3 was upon me to create a proposal for them that they
- 4 didn't even feel like they could provide.
- 5 O. Let's talk a little bit further about Kern
- 6 River. Do you have an understanding of what the -- if
- 7 there is such a thing as a Design Day on Kern River,
- 8 when that might occur during the yearlong season?
- 9 A. You know, again, I don't do the planning work
- 10 for Kern River. I don't believe from a pipeline
- 11 standpoint they have what's considered a Design Day.
- 12 Their system is designed to meet their contractual
- 13 requirements.
- So they have contracts from each of their
- 15 customers or their shippers and their pipeline is
- 16 designed to meet all of those contracts. I don't think
- 17 it's the same as our system where we have a Design Day
- 18 which is weather dependent. Their design conditions are
- 19 contract dependent.
- 20 Q. All right. You indicated that there was
- 21 long-term capacity available on Kern River, or did I
- 22 misunderstand you?
- 23 A. Well, the capacity on their pipeline the last
- 24 time I checked was fully contracted and most of those
- 25 were short-term contracts -- or some of those were

- 1 short-term contracts, which leads me to believe that
- 2 they could have long-term capacity available if you were
- 3 to contract long-term.
- 4 Q. Now, with respect to Kern River, there's two
- 5 gate stations that have been identified and discussed,
- 6 one Hunter Park and one a little further south than
- 7 that. What are those gate stations?
- 8 A. Hunter Park and Riverton.
- 9 Q. With respect to Hunter Park, is that near the
- 10 optimal -- the triangle of optimal deliveries into your
- 11 system that you identified in your RFP?
- 12 A. Yes, it's somewhat close.
- 13 Q. Okay. And there's also been mention in some of
- 14 the testimony that there is an additional new gate
- 15 station that you're planning to access -- to put in
- 16 place with Kern River. Where will that new city gate
- 17 station be located?
- 18 A. That is going to be called the Rose Park gate
- 19 station. I think Mike Platt would probably be able to
- 20 talk more specifically about its location and any design
- 21 criteria you would be interested in on that particular
- 22 gate station.
- Q. And would that gate station be one that would
- 24 fall within that triangle of optimal delivery location
- 25 that's identified in your RFP?

- 1 A. Again, I believe Mike Platt is probably the
- 2 better person to speak to on that. I do know -- I
- 3 believe that gate station will deliver into the 475
- 4 pound -- or 471 pound system. But that's subject to
- 5 check. And I think Mike Platt is probably the correct
- 6 witness to testify on that.
- 7 Q. Are you familiar with park and loan services
- 8 that are provided by pipelines?
- 9 A. Yes, I am.
- 10 Q. Do you have any park and loan contracts with
- 11 any of the pipelines that serve DEU?
- 12 A. Right now I do not, but we have done a number
- 13 of contracts. In fact, we did park on a contract with
- 14 Dominion Energy Questar Pipeline recently in which we'll
- 15 be getting that gas back sometime before the end of the
- 16 year. So we are, I guess, involved in a contract right
- 17 now for park and loan.
- 18 Q. Isn't it true that pipelines can offer separate
- 19 services called park and loan which allow for customers
- 20 to bank some of their gas supplies that are delivered
- 21 into that pipeline for deliveries that might occur in
- 22 later years?
- A. Yes, that's usually a more seasonal type
- 24 situation where you put gas into the storage in the
- 25 summertime and pull it out in the winter. It's

- 1 generally how a park and loan would work.
- Q. You would expect your Design Day to occur in
- 3 the winter on the DEU system, right?
- 4 A. Yes.
- 5 Q. And isn't it true that when those park and loan
- 6 situations are offered by pipelines, that they basically
- 7 deliver that service as a result of a significant line
- 8 pack that they have on their system as opposed to
- 9 storage?
- 10 A. I believe most of the park and loans that we've
- 11 been a part of have been due to storage. And I think
- 12 it's also important to note that those park and loans
- 13 often do not necessarily come with firm capacity to
- 14 withdraw that. And even if they do come with firm
- 15 withdrawal capacity, they do not have any associated
- 16 pipeline capacity to deliver into the city gate.
- 17 And so, again, as I described before, even
- 18 if you're able to get it out of the storage, unless you
- 19 contract for the transportation capacity to go with it,
- 20 you're not going to be able to get that gas when the
- 21 system is -- when their system is constrained on what
- 22 would be our peak dates.
- 23 So even if you can pull that park and loan
- 24 out of the storage facility, you're not going to be able
- 25 to deliver it without firm capacity.

- 1 O. Are you aware that Kern River provides a park
- 2 and loan service?
- 3 A. Yes, I am.
- 4 Q. And are you aware that DEQP also provides a
- 5 park and loan system?
- 6 A. Obviously, yes, I am.
- 7 Q. And are you also aware that the Ruby Pipeline
- 8 has such a park and loan service?
- 9 A. I am.
- 10 O. Isn't it true that none of the studies or
- 11 analyses developed by DEU in connection with this
- 12 proceeding considered park and loan services as a
- 13 potential alternative to serving the gas supply
- 14 reliability issues that were identified by witness
- 15 Faust?
- 16 A. Again, as I described earlier, we looked at all
- 17 potential solutions a year ago when we looked at this
- 18 docket. And we considered those. We also considered
- 19 the fact that any of those park and loans still need
- 20 delivery options. And we did our RFP and none of them
- 21 proposed those park and loan solutions as a potential
- 22 option for us.
- 23 If the pipeline itself considered that a
- 24 viable solution, I would have assumed that the pipeline
- 25 would then have proposed that as a solution to us. If

- 1 their goal is to sell those services, if they felt those
- 2 services met our needs, they would have proposed them as
- 3 a potential solution for us and responded to the bid.
- 4 They did not.
- 5 Q. And it might have been possible for someone to
- 6 read and review your RFP and decide there was an
- 7 invitation to get involved with the ownership and
- 8 operation of an LNG facility in Magna, Utah if they were
- 9 interested in that particular kind of business and, if
- 10 not, bow out?
- 11 A. I don't understand your question because the
- 12 RFP was not --
- 13 Q. I'll withdraw the question.
- 14 A. -- to participate in --
- 15 Q. I'll withdraw the question.
- 16 A. What's that?
- 17 Q. I'll withdraw the question.
- 18 A. Okay. Thank you.
- 19 Q. Isn't it true that you're planning to add a
- 20 volume associated with the current Kern River peaking
- 21 contract?
- 22 A. Are you talking about the Kern River firm
- 23 peaking service?
- 24 O. Yes.
- 25 A. Are we considering adding a volume? We have to

- 1 reevaluate all of our firm peaking contracts, and we're
- 2 going to do that after the order is issued in response
- 3 to this, because we want to see how this may impact us.
- 4 So, to say we have any specific plans on those, I think
- 5 would be premature at this point.
- 6 Q. Is there an obligation to raise the volumes on
- 7 your current contract coincidental with the installment
- 8 of that new Rose Park interconnection?
- 9 A. The contract is what it is. It's not changing.
- 10 The volume on the contract, if that's what you're
- 11 referring to, does increase for this particular year,
- 12 yes.
- 13 Q. And you're comfortable that Kern River will be
- 14 able to provide that additional volume level under the
- 15 contract you have?
- 16 A. I am. Again, it is a FERC approved rate. And
- 17 they are contractually obligated to do so.
- 18 Q. I have no other questions.
- 19 COMMISSIONER LEVAR: Thank you. Mr.
- 20 Russell?
- 21 MR. RUSSELL: Thank you, Mr. Chairman.
- 22 CROSS-EXAMINATION
- 23 BY MR. RUSSELL:
- Q. Mr. Schwarzenbach, my understanding is that if
- 25 the commission were to approve the company's request to

- 1 build an LNG plant, the company would then go out with
- 2 another RFP for an EPC contract; is that right?
- 3 A. Yes.
- 4 Q. And would you be involved in that?
- 5 A. I'm not sure at this point if I would or would
- 6 not. At that point, it's more of an engineering
- 7 analysis. It's more of just a strictly engineering
- 8 decision. So I think engineering would really be the
- 9 one responsible for determining that.
- 10 Q. Okay. I asked the question because I'm a
- 11 little curious what happens with the costs associated.
- 12 You've got costs associated with the proposed LNG
- 13 facility here. If there's a separate RFP, do the costs
- 14 change? Or are you not the right person to talk to
- 15 about that?
- 16 A. I'm not the right person to talk to about
- 17 that.
- 18 Q. Okay. Fair enough. Do you know who would be?
- 19 A. I think it would probably be either Mr.
- 20 Mendenhall or Mr. Gill.
- 21 O. Okay. What involvement did you have in putting
- 22 the RFP itself together here?
- 23 A. I worked as part of a team that developed the
- 24 criteria and also evaluated the responses.
- Q. The RFP is found in your Exhibit 3.02, right?

- 1 A. Yes.
- Q. Okay. Can you turn to that?
- 3 A. Okay.
- 4 Q. Is it your contention that the RFP identifies
- 5 the company supplier liability needs?
- 6 A. It states our design requirements for the
- 7 potential resource that would meet those supplier
- 8 reliability needs. I think the needs are outlined in
- 9 general in here, and I think they're outlined even in
- 10 more detail in Ms. Faust's testimony.
- 11 Q. Well, sure. But the bidders didn't have the
- 12 benefit of Ms. Faust's testimony in this docket at the
- 13 time they submitted the bids, right?
- 14 A. True. They -- the purpose of the RFP was to
- 15 outline in general our needs and offer the design
- 16 requirements to meet that need.
- 17 Q. Okay. And, in general, those needs are
- 18 identified I guess on page 2, Section B, correct? Of
- 19 the RFP? It may go past page 2. It's Section B,
- 20 correct?
- 21 A. Section B. Those are the requirements for the
- 22 resource, yes. We outlined the need and why we need
- 23 such a facility on page 1 in the purpose and scope.
- 24 Q. Okay. Thank you. You have read, I imagine, or
- 25 at least are aware of Mr. Platt's testimony in this

- 1 docket, correct?
- 2 A. Yes.
- Q. Okay. And I have some questions for Mr. Platt.
- 4 I won't ask you his questions. But my understanding is
- 5 that Mr. Platt performed some modeling against each of
- 6 the proposals with the RFP. Is that your understanding
- 7 as well?
- 8 A. Yes, it is.
- 9 Q. Okay. And do you understand that in that
- 10 modeling, the model was caused to assume a 150,000
- 11 decatherm shortfall at each gate station?
- 12 A. Not all coincidentally.
- 13 Q. Right.
- 14 A. But, yes, separately.
- 15 Q. Not all at the same time?
- 16 A. Correct.
- 17 Q. It's a different issue. Is -- but when you say
- 18 sequentially, one at a time?
- 19 A. Yes. Yes, individually.
- Q. Right. I think we're saying the same thing,
- 21 just in different ways.
- 22 Is -- were the bidders informed that that's
- 23 how their projects would be evaluated? Is that anywhere
- 24 in the RFP?
- 25 A. I don't know if it specifically states that in

- 1 the RFP or -- I don't think it does. I think what's
- 2 stated in the RFP is the fact that there are -- we need
- 3 a hundred and fifty thousand decatherms a day and that
- 4 we state the delivery location, the optimal delivery
- 5 location. And we do state that if it's delivered
- 6 somewhere outside that optimal delivery location, that
- 7 reinforcements may be required to make it apples to
- 8 apples to what is in that delivery location.
- 9 And the purpose there and why it's stated
- 10 that way is so that we can meet the same situations
- 11 regardless of which location they happen in. We want to
- 12 be able for this -- whatever resource it is must be able
- 13 to meet all of the same needs. So we wanted to create
- 14 an apples to apples assessment.
- 15 Q. Thank you for that. I'm curious though how the
- 16 bidders are supposed to know what the challenge is that
- 17 they're supposed to meet if that challenge is presented
- 18 sometime after the RFPs are submitted, meaning, if
- 19 you're going to conduct an evaluation of each proposal
- 20 after the bids are submitted, why not explain to the
- 21 bidders beforehand that that's what you're going to
- 22 do?
- 23 A. I think it is explained in the fact that -- of
- 24 where they're required to deliver the supply. So that
- 25 delivery location is the key to meeting all of those

- 1 needs. If the supply is delivered in that location, it
- 2 does meet all those needs. So I don't think we needed
- 3 to identify every particular model that was going to be
- 4 run to do that.
- 5 We've identified where the gas needed to be
- 6 delivered. And that satisfies a number of different
- 7 criterion just by being in that optimal delivery zone,
- 8 which is where we needed it to be.
- 9 O. Let's look at the -- I think it's the last
- 10 sentence of Section 2 in that Part D of the RFP. And it
- 11 states, "For proposals with delivery outside of these
- 12 locations," -- and just for everybody's sake, these
- 13 locations is the optimal delivery locations. "For
- 14 proposals with delivery outside of these locations,
- 15 additional costs for DEU system reinforcements may be
- 16 needed to achieve equivalent distribution impact and
- 17 will be considered in the overall proposal evaluation."
- 18 The question I'm trying to get at is, how
- 19 is a bidder supposed to know whether additional
- 20 reinforcements will be needed to achieve equivalent
- 21 distribution system impact if they don't know what
- 22 models you're going to throw in it afterwards?
- 23 A. I think the key is that it states that
- 24 additional costs if you're outside that area are going
- 25 to be needed for reinforcements. I mean, it does say

- 1 may be needed to achieve equivalent distribution. There
- 2 is the possibility that somebody could have delivered it
- 3 somewhere else and somehow it didn't need
- 4 reinforcements. But the reality is it specifically
- 5 outlines that if you're outside of that area, that
- 6 system reinforcements are going to be needed.
- 7 Q. And in your mind, what is meant by equivalent
- 8 distribution system impact?
- 9 A. That would be system pressures and the ability
- 10 to make up for shortfalls regardless of where they
- 11 occur.
- 12 Q. Okay. Bear with me for just a second if you
- 13 would.
- 14 Are you the witness that's best able to
- 15 explain how we ended up with the criteria for a hundred
- 16 fifty thousand decatherms?
- 17 A. Probably not. I can speak to some part of
- 18 that, though. And the part that I can speak to is the
- 19 historical shortfalls that we have witnessed. We have
- 20 seen -- I believe the highest was 139,000 decatherms of
- 21 supply shortfall on one particular day.
- So we did develop that somewhat based on
- 23 that. And I believe Mr. Gill can talk to that more
- 24 specifically in terms of what else went into that
- 25 requirement. But from our standpoint, from a gas supply

- 1 standpoint, that hundred and fifty encompasses all the
- 2 needs to kind of cover everything that we have seen.
- 3 Q. In the hundred and thirty-nine thousand
- 4 decatherm shortfall you just referenced, do you recall
- 5 what event precipitated that or when it was?
- 6 A. Subject to check, I believe that was the
- 7 January 6th, 2017 event.
- 8 Q. And do you know where that 139,000 decatherm
- 9 shortfall was experienced on the system?
- 10 A. I know it was subject to a number of different
- 11 cuts in different locations on the system. So, it was
- 12 spread out. However, an important note on that, maybe
- 13 an asterisk on that hundred and thirty-nine thousand, is
- 14 what doesn't show up in that number is the fact that
- 15 that morning, we also received notice that there was a
- 16 power failure at the Opal plant.
- 17 That would have led to -- or could have led
- 18 to a supply shortfall of an even greater amount because
- 19 we had a good deal of gas, over a hundred thousand
- 20 decatherms of gas on Kern River from the Opal plant.
- 21 Had that -- had that event persisted, Kern
- 22 River would have cut that gas. Fortunately for us, that
- 23 day, Kern River did not cut the gas and therefore it did
- 24 not show up in the hundred and thirty-nine thousand.
- 25 However, if that power outage would have

- 1 lasted a little bit longer, Kern's line pack was getting
- 2 very low and they would not have been able to hold that
- 3 -- keep everybody whole with that supply any longer than
- 4 they did.
- 5 So, had it gotten colder or had the power
- 6 not come back on, is basically the key, they would have
- 7 had to have done that cut. And if they did, we would
- 8 have had easily over a hundred thousand cut that was
- 9 coming from Opal directly to our Hunter Park station.
- 10 So that was part of the fear on that day as
- 11 well is that that power outage would persist. Kern
- 12 River would make the cut. And the information we knew
- 13 at the time in the morning was all signs were showing
- 14 that that was going to happen and that Kern River was
- 15 going to make the cut.
- 16 Fortunately, the power came back on before
- 17 the next cycle had to be confirmed and they were able to
- 18 bring it back on. But, otherwise, we would have seen a
- 19 point failure type situation of more than a hundred
- 20 thousand decatherms at one particular gate station.
- 21 Q. Okay. Thank you for that. Do you know what
- 22 the largest shortfall in any single gate station was
- 23 from that January 6, 2017 event?
- A. I do not know that offhand, no.
- 25 Q. Okay. The question I had started with was

- 1 where the hundred and fifty thousand decatherms comes
- 2 from. There's a statement in several of the company's
- 3 witness' testimonies that states that the vaporization
- 4 capacity of the company proposed LNG facility was
- 5 determined by the company's gas supply and system
- 6 planning, the analysis department, as discussed in the
- 7 pre file direct testimony of William S. Schwarzenbach.
- 8 That I think comes from Mr. Gill's testimony. Did you
- 9 just provide me what your --
- 10 A. Yes. So the basis there, again, was to cover
- 11 the historic shortfalls that we had seen.
- 12 Q. Okay. And then the next sentence says
- 13 something to the effect, the system planning analyzed
- 14 how much gas could be taken into the company system.
- 15 And is that somebody else's analysis or is that you?
- 16 A. That's my plan. So basically what it comes
- 17 down to is you've got to -- we looked at what we could
- 18 do historically. Then we did some system modeling,
- 19 looked at how the system would handle gas coming into it
- 20 at what -- you know, what was the most we could bring in
- 21 at a single point or multiple points.
- 22 And then we also considered the
- 23 engineering side of it to look at different types of
- 24 facilities and what they could provide. So there was
- 25 more than just one person who came up with that

- 1 number.
- Q. Yes, there's -- I understand that there's more
- 3 that goes into it. I'm just trying to figure out who
- 4 did what. So that's very helpful. Thank you.
- 5 And I think that was all I have for you.
- 6 Thank you.
- 7 COMMISSIONER LEVAR: Thank you. Any
- 8 redirect?
- 9 MS. NELSON-CLARK: Yes. Just a few.
- 10 REDIRECT EXAMINATION
- 11 BY MS. NELSON-CLARK:
- 12 Q. Mr. Schwarzenbach, can I have you turn to your
- 13 Exhibit 3.02? And that is a copy of the supply
- 14 reliability resource request for proposal that Dominion
- 15 Energy issued.
- 16 A. I have it it in front of me.
- 17 Q. Do you have it in front of you? Mr. Russell
- 18 was questioning you about how a bidder might know that
- 19 costs would be added in order to achieve the same system
- 20 benefit. And I'm wondering if you can read for me
- 21 footnote No. 2 on the bottom of page 2. I know that you
- 22 pointed to paragraph D2 to say that some proposals may
- 23 need additional reinforcements and accompanying costs.
- 24 Can you read the footnote as well?
- 25 A. Yes. "DEU will consider options that provide

- 1 supply at a lower pressure; however, additional costs
- 2 for DEU system reinforcements may be needed to achieve
- 3 equivalent distribution system impact and will be
- 4 considered in the overall proposal evaluation."
- Q. May I approach the witness?
- 6 COMMISSIONER LEVAR: Yes.
- 7 Q. Mr. Schwarzenbach, I'm going to provide to you
- 8 what has been marked in this proceeding as Magnum
- 9 Exhibit 1.3. It was attached to Mr. Lawton's testimony.
- 10 I'm going to ask you if you recognize it and if you can
- 11 tell me what it is.
- 12 A. Yes, I do recognize it. It is questions that
- 13 were sent to him by Magnum and responses provided by
- 14 DEU.
- 15 Q. And were those responses, questions and
- 16 responses, made widely available to all bidders?
- 17 A. Yes. Through the RFP process, we made sure
- 18 that any questions that came in were answered and then
- 19 provided on a website that everybody could review.
- 20 Q. Okay. I'd like you to turn in that document to
- 21 questions No. 8 and 11. And if you would, please, read
- 22 the question and answer for each.
- 23 A. Yes. Question No. 8, "If a project that is bid
- 24 into this RFP response proposes delivery at Bluffdale,
- 25 please explain what additional costs to facilities DEU

- 1 would consider or factor in to determine equivalent
- 2 distribution system impacts."
- The answer provided by DEU, "Depending on
- 4 delivery location, pressure and volume, the company
- 5 would have to upgrade or replace portions of its high
- 6 pressure feeder line system to allow for delivery into
- 7 the 471 pound psig and MAOP zone. This would include
- 8 the construction of several high pressure regulator
- 9 stations to separate this upgraded feeder line from the
- 10 354 psig zone. The costs associated with these
- 11 improvements would be included in DEU's analysis of the
- 12 total cost of the option."
- 13 Question 11, "If an RFP response proposes
- 14 delivery to Hunter Park, please explain what additional
- 15 cost facilities DEU would consider or factor in to
- 16 determine equivalent distribution system impacts."
- The answer provided by DEU, "The company
- 18 would have to upgrade or replace portions of its high
- 19 pressure feeder line system to allow for delivery into
- 20 the 471 psig and MAOP zone. This would include the
- 21 construction of several high-pressure regulator stations
- 22 to separate this upgraded feeder line from the 354 psig
- 23 zone. The costs associated with these improvements
- 24 would be included in DEU's analysis of the total cost of
- 25 the option."

- 1 Q. And then finally, Mr. Schwarzenbach, I would
- 2 like to turn your attention back to your Exhibit 3.02,
- 3 the RFP, and ask you to review for us, read or
- 4 summarize, whichever you're most comfortable with, the
- 5 subparagraph E again -- or the paragraph in Section E
- 6 Evaluation Criteria and Factors, and, for reference,
- 7 it's on page 3 of the RFP.
- 8 A. Yes, I see it. I can read the whole thing.
- 9 "Evaluation Criteria and Factors. DEU's evaluation
- 10 process is intended to identify a supply reliability
- 11 option that, taking into account all relevant factors,
- 12 will allow DEU to provide safe, reliable, and cost-
- 13 effective service to its customers, and maximize
- 14 customer benefits. The criteria and factors that will
- 15 be used to evaluate all proposals as well as a potential
- 16 DEU owned on-system facility LNG facility will include
- 17 the following price and non price factors:
- 18 "Whether the proposal will satisfy the
- 19 operational or in-service" -- "...and in-service
- 20 requirements set forth above.
- 21 "Total annual customer cost of the
- 22 proposal.
- 23 "The long and short-term impacts of the
- 24 proposal, including any operational considerations.
- 25 "Technical, operational and financial

Page 192 viability of the proposal. 1 2 "The impact of the proposed delivery location on DEU's system, including any resulting costs 3 or benefits. "Reliability of the proposal, including but 5 6 not limited to any operational reliability benefits and design redundancy. 7 "The risks addressed and/or presented by 8 9 the proposal. 10 "The financial impact on DEU, if any, other than the costs included in subparagraph B above. 11 "Other benefits or risks associated with 12 13 the proposal. 14 "Other factors that may be determined to be 15 relevant." 16 Q. I don't have any further questions. 17 COMMISSIONER LEVAR: Thank you. Does the 18 division have any questions about the redirect? 19 MR. JETTER: No questions. Thank you. 2.0 COMMISSIONER LEVAR: Mr. Snarr? 21 MR. SNARR: No questions. 22 COMMISSIONER LEVAR: Mr. Russell? 23 MR. RUSSELL: No questions. 24 COMMISSIONER LEVAR: I have maybe just one or two. You said you were involved with soliciting 25

- 1 input from the division of the office prior to issuance
- 2 of the RFP?
- A. I don't know how much I particularly was in
- 4 that process but I know that, as a whole, we did send it
- 5 to both the office and the division and ask for their
- 6 input and their feedback and we incorporated that
- 7 feedback.
- 8 COMMISSIONER LEVAR: Do you know who was
- 9 more heavily involved in that?
- 10 A. I think Mr. Mendenhall was probably most
- 11 involved in going back and forth with them.
- 12 COMMISSIONER LEVAR: Okay. Thank you. I
- 13 don't have any other questions. Commissioner White?
- 14 COMMISSIONER WHITE: No questions. Thank
- 15 you.
- 16 COMMISSIONER LEVAR: Commissioner Clark?
- 17 COMMISSIONER CLARK: You were here for the
- 18 conversation with Mr. Mendenhall about option -- Magnum
- 19 Option 1B this morning, correct?
- 20 A. Yes, I was.
- 21 COMMISSIONER CLARK: And when we're talking
- 22 about reinforcements here -- and by here, I mean the RFP
- 23 document 3.02 is the exhibit number, page 2 -- this is
- 24 the page I'm on when I refer to reinforcements. Are
- 25 these the kinds of reinforcements that Mr. Mendenhall

- 1 was mentioning and as he discussed his assumption about
- 2 what costs Magnum was willing to bear, or is it a
- 3 different type of --
- A. No, these were the type of reinforcements we
- 5 were talking about. And I actually believe that the
- 6 footnote involved in their response makes it quite clear
- 7 that they knew which reinforcements we were talking
- 8 about as well and that they provided the costs that they
- 9 were willing to pay for those reinforcements.
- 10 If they considered that to be open-ended
- 11 where they were just going to pay whatever those costs
- 12 were, I think they would have either stated that, A; or,
- 13 B, not made a particular -- I mean they had two
- 14 different -- 1A and 1B which specifically called out in
- 15 1B that they were going to pay for a certain number of
- 16 -- or cost number for reinforcements.
- 17 You don't do that and provide that specific
- 18 number if you're going to just have it open-ended and
- 19 say, we're going to pay for whatever the reinforcements
- 20 are.
- 21 COMMISSIONER CLARK: When they provided
- 22 option one, the -- or, yeah, that optional proposal,
- 23 would they have been aware at that time of DEU's view of
- 24 what the total reenforcement costs would be for that
- 25 particular proposal or would they have become aware of

- 1 that after? And if after, when and how would they have
- 2 become aware?
- 3 A. I'm not sure on when they became aware. But I
- 4 believe they became fully aware of our costs after they
- 5 submitted that.
- 6 COMMISSIONER CLARK: Do you know about when
- 7 that would have been?
- 8 A. I do not. I think Mr. Gill probably could
- 9 speak to that.
- 10 COMMISSIONER CLARK: Thank you.
- 11 COMMISSIONER LEVAR: Thank you, Mr.
- 12 Platt -- I'm sorry, Mr. Schwarzenbach, before your
- 13 testimony, could I ask for one or two follow-up
- 14 questions to Mr. Mendenhall?
- MR. MENDENHALL: Sure.
- 16 COMMISSIONER LEVAR: And these will be
- 17 brief. And you can just stay at the table. And you're
- 18 still sworn in.
- 19 And I'll preface this with, I don't want
- 20 you to give any answers that talk about what feedback
- 21 you received from the division or the office --
- MR. MENDENHALL: Right.
- 23 COMMISSIONER LEVAR: -- but if you were
- 24 involved in soliciting feedback from them, what did that
- 25 entail?

Page 196 1 MR. MENDENHALL: Yes, so -- I'm going off 2 my memory so I'll tell you what I know for sure and then what I'm a little fuzzy on. So, we developed the 3 RFP and then we sent it to both the office and division. And I know we had at least one meeting -- we might have 5 had a couple but I know one for sure -- where we 6 basically sat down and read through the RFP and they 7 8 discussed potential changes or concerns that they had. 9 And then we went back. We incorporated a lot of that feedback, sent out another version. And 10 11 then I know there were a couple back and forths via 12 email, you know, some fine tuning. I know the division 13 sent it to Mr. Neale for review and he had some feedback 14 and we incorporated some of that feedback. 15 And then we at that point sent out kind of what we believed to be the final version and let them 16 17 know, this is what we were planning on rolling with. Т believe it was the beginning of January. And so that 18 19 was kind of how the process happened. 20 COMMISSIONER LEVAR: Okay. Thank you. And 21 then just one follow-up question. And, again, I'll give 22 the same clarification. I don't want you to say what 23 the feedback was but did these drafts that were being discussed contain the delivery location that was in the 24 25 final RFP?

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 1
                  MR. MENDENHALL: Yes, I believe it did,
 2
   yes.
 3
                  COMMISSIONER LEVAR:
                                       Thank you for letting
   me do that follow-up. Commissioners Clark or White, any
    other follow-up?
 5
 6
                  COMMISSIONER CLARK: No.
 7
                  COMMISSIONER WHITE:
                                       No.
 8
                  COMMISSIONER LEVAR:
                                       Thank you.
 9
                  MR. SABIN: Mr. Chairman, we have just one
10
    issue to raise. One of the experts needs to travel, I
    think, home today. Is that right? Ms. Beck talked to
11
12
    us yesterday and said --
                  UNIDENTIFIED: I think it's tomorrow.
13
14
                  MR. SABIN: Is it tomorrow? Okay.
15
                  MR. SNARR: Early tomorrow will work.
16
                  MR. SABIN: We just wanted to make sure the
    witness was able to catch whatever travel
17
18
    arrangements...
19
                  COMMISSIONER LEVAR: Okay. But we're okay
    continuing --
20
21
                  MR. SABIN: Yes.
22
                  COMMISSIONER LEVAR: Why don't we take a
23
    break at this point. Why don't we take about ten
    minutes and then reconvene.
25
                  (A ten minute recess was commenced.)
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Page 198 1 COMMISSIONER LEVAR: Okay, we're back on 2 the record. And we'll go to Dominion Energy Utah's next witness. 3 4 MR. SABIN: Dominion Energy Utah calls Mike 5 Platt. COMMISSIONER LEVAR: Mr. Platt, do you 6 swear to tell truth? MR. PLATT: I do. 8 9 COMMISSIONER LEVAR: Thank you. 10 MICHAEL L. PLATT, called as a witness, having been first duly sworn, was 11 12 examined and testified as follows: 13 DIRECT EXAMINATION BY MR. SABIN: 14 15 Q. Mr. Platt, could you state your full name for 16 the record, please? A. Michael Loren Platt. 17 I don't think it's picking you up there. 18 Q. A. Michael Loren Platt. 19 20 There we go. Would you please state what your Q. 21 position is with the company? 22 I am the manager of the engineering systems. 23 0. And in that capacity, what is your 24 responsibility? 25 A. My responsibility is to plan the system from an

- 1 engineering and systems standpoint. I also manage the
- 2 research and development group, the records --
- 3 engineering records management group and the GIS group.
- 4 Q. Thank you. In this proceeding you filed both
- 5 direct rebuttal and surrebuttal testimony, correct?
- 6 A. Correct.
- 7 Q. And I have those as Exhibits 4.0 with -- well,
- 8 Exhibit 4.0 through 4.01 and -- let me try this again.
- 9 Your direct testimony is Exhibit 4.0, is that correct?
- 10 A. Correct.
- 11 Q. And attached to that testimony are Exhibits
- 12 4.01 through 4.04, correct?
- 13 A. Correct.
- 14 Q. And then I have for your rebuttal testimony
- 15 Exhibit 4.0R, correct?
- 16 A. Correct.
- 17 Q. And as an attached exhibit to that document,
- 18 which is -- excuse me. And then you have 4.0SR is your
- 19 surrebuttal testimony, correct?
- 20 A. Correct.
- Q. Do you have any changes to any of that
- 22 testimony?
- 23 A. I do not.
- Q. Do you adopt that testimony today as if you
- 25 were giving it here today?

- 1 A. I do.
- 2 Q. Have you prepared a summary for the commission
- 3 of your direct rebuttal and surrebuttal testimonies?
- 4 A. I have.
- 5 Q. Will you please provide that now?
- 6 A. Yes. Thank you. The purpose of my testimony
- 7 is to establish the risk of shortfalls to ensure the
- 8 options considered meet the customer's needs and to
- 9 communicate how the proposed LNG facility performs from
- 10 a gas network analysis standpoint.
- 11 I've conducted significant analysis
- 12 concerning the consequence and probability, in other
- 13 words, the risk, of shortfalls. If the company has a
- 14 shortfall on a cold enough date, it will lose service to
- 15 customers without a supply reliability resource.
- If a shortfall of a hundred and fifty
- 17 thousand decatherms occurs on a Design Day or colder,
- 18 650,000 customers, or as many as 650,000 customers, will
- 19 lose service. In this scenario, Kem C. Gardner
- 20 Institute determined an economic impact to gross state
- 21 product of \$2.4 billion dollars.
- 22 Costs of such an event extends beyond gross
- 23 state product to include health impact, safety risk,
- 24 property damage, and potential customer product damage.
- 25 Without a supplier reliability resource, shortfalls at

- 1 that temperatures less than or equal to three degrees
- 2 mean cannot be replaced and may result in a loss of
- 3 service. Cold temperatures and the pressure of liquids
- 4 in the gas stream result in freeze-offs and supply
- 5 shortfalls that predictably occur under certain
- 6 circumstances.
- 7 Other risks that potentially result in
- 8 shortfalls include but are not limited to landslides,
- 9 flooding, earthquakes, human error, upstream facility
- 10 design inadequacies and maintenance, cyber attacks and
- 11 third-party damage.
- 12 The risk of the shortfall scenario I
- 13 mentioned earlier caused by a freeze-off on a Design Day
- 14 is approximately equal to \$125 million of annual risk in
- 15 known costs alone, which is much higher than the risk of
- 16 an earthquake occurring at extremely cold temperatures.
- 17 This amount is also much higher than the cost of any of
- 18 the options.
- The annual risk increases to \$141,500,000
- 20 if the calculation includes the entire temperature range
- 21 of three degrees mean and colder. Potential shortfalls
- 22 due to causes other than temperature only increase the
- 23 total amount of risk of lacking a supply reliability
- 24 resource.
- Therefore, continuing to analyze every

- 1 potential scenario will not yield additional benefit and
- 2 is not reasonable. In order to ensure that options met
- 3 the customers' needs, I modeled all proposals in a
- 4 projected 2023 Design Day model with supply shortfalls
- 5 at each gate station feeding the Wasatch Front.
- 6 Proposals that deliver outside the optimal
- 7 delivery location are not capable of mitigating
- 8 shortfalls at each gate station without reenforcements.
- 9 No other witness disputes this fact.
- 10 Reinforcements added to base proposals only
- 11 include additions that are required to meet customers'
- 12 needs. The optimal delivery location was identified due
- 13 to the fact that it is the only area that a supplier
- 14 reliability resource can be located that would mitigate
- 15 shortfall scenarios at every gate station feeding the
- 16 Wasatch Front.
- 17 Through the same system analysis performed
- 18 on all options, I determined that the company owned
- 19 on-system storage in the form of an LNG facility will
- 20 prevent loss of service in shortfall scenarios up to a
- 21 hundred fifty thousand decatherms a day, including on a
- 22 peak day.
- 23 A DEU owned LNG facility could provide an
- 24 additional 25,000 decatherms of peak hour service, and
- 25 the proposed LNG facility will completely mitigate many

- 1 scenarios and partially mitigate more impactful
- 2 scenarios, however, the LNG facility is not nor should
- 3 be sized to eliminate all risk from shortfall scenarios,
- 4 only those that are most probable. This concludes my
- 5 summary.
- 6 Q. (By Mr. Sabin) Thank you, Mr. Platt. There
- 7 have been a number of questions today about what
- 8 probabilities the company has analyzed and what
- 9 probabilities the company has not calculated in a
- 10 mathematical way. Could you summarize for the
- 11 commission what probability analysis you did conduct?
- 12 A. So, if you refer back to the supply liability
- 13 risk document that is attached to Tina Faust's
- 14 testimony, it talks about the temperatures at which we
- 15 no longer have supply resources to call upon. And that
- 16 is at three degrees mean and colder, which has a
- 17 probability of occurring once every 16 years.
- Now there's some question of whether or not
- 19 there will be freeze-offs at these temperatures. And I
- 20 find it interesting because if we were talking about
- 21 water in a glass freezing, it is certain. There are
- 22 temperatures and conditions that will result in
- 23 freeze-offs. There are liquids in our gas stream in the
- 24 wells that we rely on. And those occur predictably at
- 25 cold temperatures because they are following the same

- 1 time phenomenon as a glass of water freezing.
- We had a technical conference. And it was
- 3 presented that hydrates form at certain temperatures and
- 4 certain liquid contents. And a chart was shown. It is
- 5 predictable. We have a history of that.
- 6 There is a probability that an earthquake
- 7 will occur. And from the AGRC website, they have posted
- 8 on their website that a 6.5 magnitude earthquake or
- 9 greater will occur once every 200 years. I included
- 10 that in my rebuttal testimony and I used that to
- 11 calculate a risk of known proportion.
- 12 So, the fact that some people have brought
- 13 up the lack of a probabilistic analysis, I disagree
- 14 with. It's in my written testimony.
- 15 As for why we didn't continue to calculate
- 16 the probability of things like third-party dig-ins on
- 17 our high pressure lines, well, we have dig-ins and
- 18 third-party damage every single day.
- Now, the consequence of those dig-ins
- 20 depends greatly upon where it is located, which is much
- 21 harder to predict. So, determining a meaningful
- 22 consequence for that scenario doesn't -- it doesn't
- 23 change the outcome that the risks that we know are
- 24 enough to justify investing in this resource.
- Q. So, Mr. Snarr was asking Ms. Faust about why

- 1 you did or didn't run statistical analyses or
- 2 probability analyses on things like plant shutdowns.
- 3 How would you respond to Mr. Snarr's questioning on that
- 4 front?
- 5 A. As far as power outages?
- 6 Q. Yes. Why didn't you need to run statistical
- 7 analyses or -- why not do that?
- 8 A. They are such improbable events. They can be
- 9 high consequence, but almost impossible given the
- 10 dataset to determine what the probability of those shut-
- 11 downs would be.
- 12 Q. And why would that be? What do you mean when
- 13 you say that the dataset -- these are my words -- don't
- 14 yield the information that would help you run a
- 15 probability analysis?
- 16 A. Well I'm not aware of any public data where all
- 17 plant shutdowns are located that one could go in and
- 18 determine based on that and the frequency what the
- 19 probability would be.
- 20 Q. Okay. So, is it fair to say that for the
- 21 issues or the concerns the company has raised in its
- 22 risk analysis where you did have dataset or the ability
- 23 to run probability analysis, that you did that?
- A. Yes. That is fair to say.
- 25 Q. Okay. You just mentioned -- just a couple more

- 1 things. You just mentioned in your statement, your
- 2 summary -- again, these are my words, not yours -- that
- 3 the annual risk you calculated from using these
- 4 probability analyses exceeds the cost of all of the
- 5 supply reliability options. Would you explain what you
- 6 mean by that?
- 7 A. What I mean by that is if you take the
- 8 consequence of \$2.4 billion to gross state product, plus
- 9 an additional perhaps a hundred million for us to
- 10 relight those customers over 51 days, that cost
- 11 multiplied by the annual probability, once in 20 years
- 12 or five percent, results in a hundred and twenty-five
- 13 million.
- 14 O. On an annual basis?
- 15 A. On an annual basis. So if you continue down
- 16 that line, the probability of temperatures between
- 17 negative five degrees mean -- and I can't remember where
- 18 I broke it off -- negative two, and multiply that by the
- 19 probable consequence of that scenario and continue down
- 20 until you get to three degrees mean, you sum that up and
- 21 that's \$141,500,000 dollars of annual risk.
- 22 Q. Just one more question. Some of the questions
- 23 that have been asked today that I think probably you're
- 24 going to get here in just a minute, in the community, we
- 25 plan for safety or emergency problems that might come

- 1 up. That happens at the government level. It happens
- 2 at city levels. It happens in utilities. Have you
- 3 participated in any groups or organizations that have
- 4 discussed this very kind of planning that you do?
- 5 A. Actually, I have. Just about every year, I
- 6 meet for the Great Shakeout of Utah. This summer I met
- 7 with FEMA and the State of Utah and we discussed how
- 8 energy companies might respond to a 7.0 magnitude
- 9 earthquake.
- 10 Q. Okay, thank you. Mr. Platt is now available
- 11 for cross-examination.
- 12 COMMISSIONER LEVAR: I don't think we got
- 13 his testimony entered.
- MR. SABIN: Oh, excuse me. You're right.
- 15 Let's do that right now. Thank you. DEU moves to admit
- 16 Exhibits 4.0, 4.01 through 4.04, 4.0R and 4.0SR into the
- 17 record.
- 18 COMMISSIONER LEVAR: If there's any
- 19 objection to the motion, indicate to me. I'm not seeing
- 20 any objection so the motion is granted.
- MR. SABIN: Thank you.
- 22 COMMISSIONER LEVAR: Mr. Jetter or
- 23 Ms. Schmid?
- 24 CROSS-EXAMINATION
- 25 BY MR. JETTER:

- 1 Q. Good afternoon.
- 2 A. Good afternoon.
- Q. I'd like to I guess discuss your risk
- 4 calculation a little bit. And the first thing I'd like
- 5 to ask you about is you've referenced a study that was
- 6 done on the cost of a potential service outage. Did
- 7 that study include the cost of outage to transportation
- 8 customers?
- 9 A. That was the cost to everyone in the State of
- 10 Utah, everybody in our service territory.
- 11 Q. Okay. And that assumes that the loss would
- 12 apply equally to transportation customers? Do you know
- 13 if that's the case?
- 14 A. I think that we could review that study. It's
- 15 attached to my testimony. I'm not sure that -- I think
- 16 that what you're getting at is a cost of impact of
- 17 failure. And that would be the damage done by not
- 18 having supply reliability. And that would affect
- 19 everyone in the state, everybody that's served by
- 20 Dominion Energy Utah.
- 21 Q. And that would also affect the transportation
- 22 service customers?
- 23 A. If there's somebody, then everybody I think
- 24 includes that, yes.
- Q. And so wouldn't it be reasonable to apportion a

- 1 portion of the cost of a service failure to those
- 2 customers, those transportation customers who are not
- 3 apparently participating in the facility?
- 4 A. I don't necessarily agree with that, but just
- 5 let me tell you that who pays for it is not the focus of
- 6 my testimony. It's not the focus of my analysis. It's
- 7 not something that -- if transportation customers pay
- 8 for it or not, it does not affect the results or the
- 9 opinions that are included in my testimony.
- 10 Q. But you didn't plan for this facility for the
- 11 transportation customer --
- 12 A. This facility has not been planned to replace
- 13 any transportation customers' demand.
- 14 Q. Even though they might contribute to the outage
- 15 that might result?
- 16 (Witness nods head.)
- 17 Q. I'd like to direct you now to lines 16
- 18 through -- well, start at line 17 of your rebuttal
- 19 testimony.
- 20 A. Sorry, I have to search through the rain forest
- 21 of trees that... Line 17, you said?
- Q. Yes, that is correct. And what I'm looking at
- 23 here -- and you tell me if I read this correctly. You
- 24 say that the probability of such an event occurring on a
- 25 Design Day is five percent annually. Such an event,

- 1 what did you mean by such an event?
- 2 A. Well, I think that the question is that -- has
- 3 Dominion Energy performed an appropriate risk analysis?
- 4 And I think that such an event at peak day occurs five
- 5 percent annually. And on a peak day, temperatures will
- 6 be cold enough for freeze-offs to occur.
- 7 O. And are you confident that there's a hundred
- 8 percent correlation between a peak day and an event -- a
- 9 consistency of a hundred percent -- consistency between
- 10 peak day and freeze-offs of such a level that they
- 11 couldn't be covered by available market purchases?
- 12 A. I am confident that freeze-offs are temperature
- 13 dependent and the freeze-offs that we have experienced
- 14 at warmer temperatures are around 150,000. So it would
- 15 be at least 150,000, yes.
- 16 Q. So when I look at the data that you've
- 17 provided, and you're probably familiar with all of the
- 18 outages from 2011 through 2019, would you accept,
- 19 subject to check, that the hundred and thirty-nine
- 20 thousand decatherm outage, for example, on December
- 21 30th, 2014 occurred on a day when the mean temperature
- 22 was 23 degrees?
- 23 A. I would agree that the mean temperature of that
- 24 day in the Salt Lake valley, subject to check, was maybe
- 25 23. But I would also submit to you that if you review

- 1 the history and the temperatures the day prior and the
- 2 day prior to that and the morning temperatures when that
- 3 shortfall occurred, that you might find something
- 4 different in Wyoming.
- 5 Q. And -- well, as I look at this, the day after
- 6 that was actually quite a bit colder. It was 12
- 7 degrees, which is equal to the coldest day in the
- 8 dataset provided. And on that day, there was only a
- 9 cut of 24,000 decatherms. Is that consistent with a
- 10 hundred percent correlation between temperature and
- 11 freeze-off?
- 12 A. Well, there's a hundred percent correlation but
- 13 there's also mitigation measures. So if they've
- 14 experienced freeze-offs, then many producers' wells will
- 15 be implementing mitigation as high as possible because
- 16 they want to sell their product.
- 17 Q. And would you expect that in the normal course
- 18 of business on a Design Day also?
- 19 A. I would expect that in the normal course of
- 20 business on any day. If freeze-offs occurred prior,
- 21 they should have all of their mitigation in effect. But
- 22 if we've already experienced a loss of service, what
- 23 does it matter?
- 24 Q. Well, in the history of the company, have you
- 25 ever experienced a loss of service in the Salt Lake

## 1 valley as a result of a freeze-off?

- 2 A. In the history of the company, in recent
- 3 history, we have not. And we have not also experienced
- 4 temperatures of three degrees mean or colder in recent
- 5 history.
- 6 Q. Okay. And it certainly hasn't happened in the
- 7 last 30 years; is that correct?
- 8 A. I think that if we go -- the further we go
- 9 back, the more tools gas supply had to utilize. And
- 10 there is an event in Ms. Faust's testimony where many
- 11 things that we could not do, could not call upon today,
- 12 would have resulted in a loss of service to customers.
- So I don't think that that's a fair
- 14 representation of the company's history or the tools
- 15 that we've had to use.
- 16 Q. But you would say that you've never
- 17 experienced -- well, let me ask you this: Has the
- 18 company in any of the data provided in any of your test
- 19 data from the company suggested that the company has
- 20 ever experienced a Design Day?
- 21 A. In the data that we provided in any hearing,
- 22 yes, we have experienced Design Days.
- Q. Okay. And you didn't lose service?
- 24 A. I don't know if you realize this, but I wasn't
- 25 around for all of those Design Days.

- 1 Q. But wouldn't that suggest then that an
- 2 occurrence of a Design Day is not consistent every time
- 3 with an occurrence of an outage for customers?
- 4 A. I don't think that you're understanding where
- 5 I'm going with the tools that we use to have. There
- 6 used to be a great amount of flexibility and cooperation
- 7 between upstream pipelines and distribution companies
- 8 that's no longer there. So, I just don't think that
- 9 that's a fair representation.
- 10 Q. But it is a fair representation, isn't it, that
- 11 you've managed every outage that has occurred in the
- 12 last 30 years?
- 13 A. In recent history, yes.
- 14 Q. But your testimony assumes that that won't be
- 15 the case on a Design Day?
- 16 (Witness nods head.)
- 17 Q. So you're confident this winter, if we have a
- 18 Design Day, that the system will lose 650,000 customers?
- 19 A. If we have a Design Day this winter without a
- 20 supply reliability resource, I'm going to be sad. I'm
- 21 going to be very sad. And I will expect to lose service
- 22 to a certain number of customers despite measures that
- 23 are taken.
- 24 Q. And do you know what available short-term gas
- 25 supplies will be on the pipelines at that time or

## 1 available to be --

- 2 A. I don't work in gas supply so this isn't really
- 3 a fair question. But I know that if we have a
- 4 shortfall, we have to work within the native cycle to
- 5 replace that gas supply. So if it's available or not --
- Q. Isn't it your testimony that that gas supply
- 7 will not be available?
- 8 A. Well, if we want to talk about transportation
- 9 capacity and what -- let's talk about something that I
- 10 can speak to. On a peak day --
- 11 Q. I want you to answer my question.
- 12 A. I'm answering your question. On a peak day,
- 13 our transportation capacity will be completely full. We
- 14 will -- the upstream pipelines that we depend on, if
- 15 they have a shortfall, there's going to be no place
- 16 where we can replace that. So, no, it won't be
- 17 available. And if it's available, there won't be
- 18 transportation available.
- 19 Q. And so you've had available capacity; is that
- 20 correct?
- 21 A. Warmer temperatures.
- 22 Q. But you're confident that it won't be
- 23 available.
- 24 A. I'm confident.
- Q. And how do you -- what is your basis for that?

- 1 A. Because I know what the gate stations that we
- 2 have on our system will be flowing through the joint
- 3 operations agreement analysis that we perform annually.
- 4 I know what's available to our system and our
- 5 customers.
- 6 0. And so --
- 7 MR. SABIN: I'm sorry, could you move that
- 8 microphone a little closer to you? I think we're losing
- 9 your end. Sorry.
- 10 A. No, I'm sorry. Thank you.
- 11 Q. And so you're testifying that if you have a
- 12 shortage of supply from one of your sources, that the
- 13 transmission capacity that otherwise would be used for
- 14 that particular gas supply that you're now short will
- 15 not be available?
- 16 A. I don't think it will.
- 17 Q. And you're not putting the gas on the line that
- 18 otherwise would have been there; is that correct?
- 19 A. I'm sorry, I don't understand how you can put
- 20 gas on a line when there's a shortfall. I think you
- 21 missed your opportunity with the gas supply folks,
- 22 because I'm very confident in what happens to the gas
- 23 once it comes into our gate stations, but what happens
- 24 upstream, that's a different story.
- I know that on a Design Day, our gate

- 1 stations are flowing at full capacity.
- Q. And I think your testimony is that a shortfall
- 3 in supply, not a transmission, will occur on a Design
- 4 Day?
- 5 (Witness nods head.)
- 6 Q. But you don't know if that supply could be
- 7 replaced?
- 8 A. I'm telling you that a better person to ask
- 9 would be either Schwarzenbach or Faust.
- 10 Q. Let me ask you a hypothetical. If that supply
- 11 could be replaced at the same level as the freeze-off
- 12 that occurred on a cold day, would you then expect that
- 13 the DEU could retain service to all customers?
- 14 A. So in that -- the hypothetical scenario where a
- 15 supply freeze-off occurs and is immediately,
- 16 instantaneously replaced at the same point to the same
- 17 delivery, will things continue to run? Yes. Is that
- 18 realistic? No. Because there's no gas supply that
- 19 responds that quickly from the same point.
- 20 Q. Is it accurate that a nomination in delivery at
- 21 the next cycle would retain sufficient pressure on the
- 22 interstate pipelines to deliver --
- 23 A. So, I need a NAESB chart in front of me, and I
- 24 know one has been presented more than once. But so what
- 25 you're telling me is, or what you're asking me is if at

- 1 eight a.m., there's a shortfall that is then replaced at
- 2 one p.m., will the pressures on the transmission
- 3 pipeline change between those two times? I don't know.
- 4 I can tell you that if we have a shortfall and we do not
- 5 have gas flowing at eight a.m., we would lose service to
- 6 customers within minutes, less than an hour.
- 7 The reason why 30 minutes is in the RFP is
- 8 because we'll need it as fast as possible. So whatever
- 9 happens on the transportation pipeline is irrelevant.
- 10 Q. Isn't the pressure at the gate station
- 11 relevant?
- 12 A. The pressure at the gate station is relevant
- 13 but also the volume coming through the gate is relevant.
- 14 And there's pressure upstream and pressure downstream.
- 15 So if you don't have gas flowing through the gate, your
- 16 pressure downstream is going to rapidly decrease.
- 17 Q. And so -- I think it was discussed earlier a
- 18 little bit -- but a notification from Opal that your
- 19 delivery was not available at eight but was replaced in
- 20 the next cycle, would you expect that to cause customer
- 21 outage?
- 22 A. Yes.
- 23 Q. In between those two periods?
- 24 A. I would expect that.
- Q. Okay. And you would allow a transportation

## 1 customer to do that if --

- 2 A. To continue flowing if they were on a hold to
- 3 schedule burn between eight and one? No, I don't think
- 4 that we would do that. But, again, I don't work in gas
- 5 supply so you would have to ask Mr. Schwarzenbach about
- 6 what he would do exactly. But, from the way I
- 7 understand it, if gas supply is not showing up, then
- 8 they are to curtail.
- 9 Q. Okay. Let me ask you another hypothetical
- 10 question here. If freeze-offs are not directly one to
- 11 one correlated with Design Days, then the calculation of
- 12 the risk would change, would it not? That would be a
- 13 compound --
- 14 A. If water doesn't freeze at 32 degrees, then you
- 15 won't have an ice cube. I think that we can talk about
- 16 hypotheticals where the laws of physics don't apply but
- 17 it would be meaningless to speculate.
- 18 Q. Are you a gas well expert?
- 19 A. Am I a gas well expert?
- 20 Q. Yes.
- 21 A. I am an engineer.
- 22 Q. Are you familiar with mitigation efforts for
- 23 freeze-offs?
- 24 A. I'm familiar enough to know that they occur.
- Q. Okay. And if hypothetically it were the case

- 1 that, for example, Texas gas wells at the same
- 2 temperatures would experience significantly greater
- 3 freeze-offs, such as the one that happened in the
- 4 southwest leading to those outages, as compared to the
- 5 pocket fields, which are much colder, would that
- 6 surprise you?
- 7 A. No. I think that it's all data dependent,
- 8 right? It would be dependent on how much fluid liquid
- 9 is in their gas stream. I mean there are a number of
- 10 factors.
- 11 Q. So maybe 31 degrees at one wellhead has a
- 12 different effect than 31 degrees at another wellhead?
- 13 A. That's a fact.
- Q. And is it also a fact that there are mitigation
- 15 options at wellheads such as injecting, I believe it's
- 16 alcohol, into the system to prevent freeze-offs?
- 17 A. There are mitigation efforts that producers can
- 18 choose to do.
- 19 Q. And so wouldn't that suggest that the cold
- 20 temperature is not always related to the same effect at
- 21 every well?
- 22 A. It depends on the producer, right? So if
- 23 historically we've experienced freeze-offs to a certain
- 24 extent, then we know that, to a certain extent, those
- 25 producers aren't taking mitigative actions until they

- 1 experience freeze-offs.
- 2 Q. And is it possible that they do remedial
- 3 efforts after those freeze-offs?
- 4 A. The remedial efforts, as I understand it, is to
- 5 depressurize the wellhead, which takes time.
- 6 Q. And could they change the wellheads and add
- 7 insulation, heating coils, those types of things?
- 8 A. They can do any number of things but it's not
- 9 in my control nor the company's control to force them to
- 10 do those things.
- 11 Q. But you're still confident that a hundred
- 12 percent of the time, a Design Day will result in a
- 13 shortfall?
- 14 A. I am confident of that based on our gas supply
- 15 and our history.
- 16 Q. Okay, let me ask you some questions about your
- 17 interaction with some of the bidders. Did you
- 18 participate in the calculation of the reinforcement
- 19 costs?
- 20 A. I did not participate in the calculation of the
- 21 costs, no, I did not. I did run the analysis on the
- 22 system to determine what reinforcements were required.
- Q. And when did you do that relative to the
- 24 bidding process?
- 25 A. Well, it's hard to determine what

- 1 reinforcements are required until you know what the
- 2 options are. So, after the proposals were in.
- 3 Q. Okay. And so for the bidders, they would have
- 4 had to basically take a guess at what those costs would
- 5 be?
- A. I don't think that the company requested the
- 7 bidders to take a guess. I think that the company
- 8 stated that options that didn't provide the same results
- 9 or were not located in the optimal delivery location may
- 10 have costs added.
- 11 Q. And how would a bidder know whether it was in
- 12 their best interest to interconnect somewhere else or
- 13 build out some type of an interconnection to the --
- 14 A. So let me understand the question properly. If
- 15 I'm a bidder and I'm responding to an RFP that
- 16 identifies a location and states that costs may be added
- 17 if you're not in this location, how would I know that
- 18 that location would be the location that I should
- 19 deliver into?
- 20 Q. How would you know what the cost would be from
- 21 an alternative location if that was also allowed in the
- 22 bid?
- 23 A. Since I have never bid on an RFP, I wouldn't
- 24 know how to know that.
- 25 Q. And there wouldn't be any way for the bidders

## 1 to know that either, would there?

- 2 A. I have no idea. Now, I can tell you that if I
- 3 had a proposal, which this is another hypothetical -- I
- 4 know you like hypotheticals -- if I were a bidder and I
- 5 were given a location, I would do the engineering and
- 6 estimate how much it would cost to get to that location
- 7 and determine for myself what I think it would cost and
- 8 whether or not I as a bidder should build that or leave
- 9 it up to someone else.
- 10 Q. Do you know if the company made that available
- 11 to any of the bidders, the design criteria for the
- 12 reinforcements, so that they could get an estimate of
- 13 those costs?
- 14 A. I'm sorry, I don't understand the question.
- 15 Q. You did -- I guess your testimony was that you
- 16 didn't provide the bidders with any design for the
- 17 reinforcements that would be necessary prior to the bids
- 18 being finalized.
- 19 A. I think if you want to talk about design
- 20 engineering, you need to direct your question to
- 21 Mr. Gill.
- Q. Okay. I don't think I have any further
- 23 questions. Thank you.
- 24 COMMISSIONER LEVAR: Thank you. Mr. Snarr?
- MR. SNARR: Yes. Thank you.

- 1 CROSS-EXAMINATION
- 2 BY MR. SNARR:
- Q. Mr. Platt, just a few questions related to
- 4 risk. You indicate on lines 16 and 17 that risk by
- 5 definition is the probability of occurrence multiplied
- 6 by the consequence of that occurrence. Have I quoted
- 7 you correctly?
- 8 A. You have.
- 9 Q. Thank you. At lines 22 and 23 of your
- 10 testimony, you indicate that your risk assessments were
- 11 focused on peak day design scenarios; is that correct?
- 12 A. Let me flip to where you're at.
- 13 Q. Sure.
- 14 A. This is in my rebuttal testimony?
- 15 Q. Yes, in your rebuttal testimony. And I
- 16 reference lines 22 and 23.
- 17 A. That is correct.
- 18 Q. Thank you. Now, I recognize that your tenure
- 19 with Dominion may be more short-term in terms of the
- 20 tenure you have compared to others who have come in.
- 21 I'm going to ask a question that might go beyond your
- 22 history anyway.
- What is -- to your knowledge or
- 24 information, what has been the company's history in
- 25 actually experiencing a peak Design Day condition?

- 1 A. Well, I think that the probability is more
- 2 relevant than the actual occurrences.
- Q. Okay. Well I'm asking about the history just
- 4 to build into the probabilities.
- 5 A. Well, as you said, my tenure doesn't extend
- 6 back to 1929, so I don't recall all of the times that
- 7 we've had a peak day.
- Q. And yet you come up with an assessment of a
- 9 five percent annual chance of a peak Design Day
- 10 occurring; is that right?
- 11 A. The probability of a Design Day is five
- 12 percent.
- 13 Q. And what information did you use to establish
- 14 that five percent in your mind of setting up a
- 15 probability?
- 16 A. Historical temperatures. And, actually, if you
- 17 want to get into it, the regulatory department
- 18 determines that probability and the temperature.
- 19 Q. So, it's based on temperature and other
- 20 conditions, is it not?
- 21 A. It is based on temperature and other
- 22 conditions.
- Q. All right. And yet there's another place in
- 24 your testimony -- I believe it's on page 4 -- you talk
- 25 about the probability of events occurring not at Design

- 1 Day conditions but at the three percent degree or lower;
- 2 is that correct?
- 3 A. Three degrees Fahrenheit, you mean? Or lower?
- 4 O. Yes.
- 5 A. Yes, I talk about that.
- 6 Q. And that's a different expected probability; is
- 7 that right?
- 8 A. It is. And I base that off of a different
- 9 sample of data as well. I think I state that that's
- 10 from 1980.
- 11 Q. So you're looking at historic data to come up
- 12 with that answer?
- 13 A. Correct.
- 14 Q. And exhibits that were provided by the company
- 15 in this application do recount for us a significant
- 16 amount of history related to certain gas supply
- 17 disruptions for a period of 2011 to 2017, if my memory
- 18 is correct. Is that right?
- 19 A. I believe you are correct.
- Q. And I believe, subject to your check, that
- 21 there were 93 threatened supply cuts over that period of
- 22 years on the DEQP connections; is that right?
- 23 A. Subject to check, I believe so.
- 24 O. And as it turns out with the -- I don't believe
- 25 there was any correlation with any of those outage -- or

- 1 those disruptions with a Design Day, but, as it turns
- 2 out, none of those resulted in an outright cut to retail
- 3 service to customers; is that correct?
- 4 A. That is correct. And it's also correct that
- 5 none of those occurred at three degrees mean or colder.
- 6 Q. Okay. Now if we were to look at a probability
- 7 of circumstances based upon that exhibit, which shows
- 8 supply disruption, there would be 2,922 days there, and
- 9 we might expect a threatened gas supply disruption on
- 10 about 93. Could we establish some form of a probability
- 11 using that historic data?
- 12 A. One could but I'm not sure it would be
- 13 meaningful because the cuts shown on that actually
- 14 include many potential reasons, but --
- 15 Q. And isn't one reason it might not be meaningful
- 16 is, even if we established some kind of ratio between 93
- 17 and 2,922, when you multiply it against the consequence,
- 18 we might come up with zero risk because there was no
- 19 consequence because there was no literal cut to retail
- 20 customers. Isn't that right?
- 21 A. I don't know if it -- I mean, I don't know.
- Q. Okay. Now, turning to some of the models that
- 23 you've run, you've run models that assume certain
- 24 pressures at the various city gates that serve your
- 25 Wasatch Front distribution facilities; is that right?

- 1 A. That's correct.
- Q. And do you have an assumed delivery pressure in
- 3 connection with the Kern River connections?
- 4 A. Do I have an assumed delivery pressure? The
- 5 delivery pressure -- so, just to give you a little
- 6 history on Kern River, the facility agreement at those
- 7 gate stations guaranteed a pressure higher than our MAOP
- 8 along the Wasatch Front.
- 9 Q. Okay.
- 10 A. However, the volume, as I stated before, is
- 11 more important to the pressure downstream than the
- 12 pressure upstream. And so if there's 650 pounds of
- 13 pressure upstream and the gate station is flowing one
- 14 standard cubic foot, the pressure downstream could drop
- 15 well below 650 -- it would drop well below 650. It
- 16 would drop to whatever the system was around that, if
- 17 that makes sense.
- 18 O. I believe it does. Is it safe to say that Kern
- 19 River runs at a significantly -- a fairly significantly
- 20 higher pressure than what your distribution system is?
- 21 A. 650 versus 354. I mean if that's fairly
- 22 significantly higher, that's a determination for someone
- 23 else.
- Q. Right. Thank you. And that applies to both of
- 25 the existing Kern River interconnections with your

- 1 system?
- 2 A. Correct.
- Q. And you also are aware of the soon to be
- 4 completed Rose Park interconnection; is that right?
- 5 A. Looking forward to it.
- 6 Q. And would the same delivery pressures be
- 7 available at that new gate station?
- 8 A. Right.
- 9 Q. I asked before -- perhaps you know -- are any
- 10 of these Kern River -- well, is the Hunter Park or the
- 11 Rose Park Kern River interconnection, either one of
- 12 them, located within or near the area that was
- 13 designated for the optimal delivery area identified in
- 14 the LNG RFP?
- 15 A. Hunter Park is relatively close to the optimal
- 16 delivery location.
- 17 Q. Okay. And what about Rose Park?
- 18 A. Rose Park is located, or will be located, when
- 19 it's constructed, within that.
- Q. Okay. Now, what is the status of Dominion's
- 21 proposed high pressure trunk line that has been
- 22 discussed that might connect the northern portions of
- 23 the Wasatch Front with the southern portions?
- 24 A. The 720 corridor?
- 25 Q. Yes.

- 1 A. So, the 720 corridor is what I like to refer to
- 2 as the 75-year plan because our entire feeder line
- 3 replacement program needs to be completed in order for
- 4 it to be also completed. We will have to upgrade the
- 5 feeder lines, which is hundreds of miles from Payson to
- 6 Hyrum. Line heaters will have to be installed.
- 7 Regulation between the 720 corridor and the other MAOP
- 8 zones will be required. It's a very extensive project
- 9 and we're stepping through it as a vision, an ideal, in
- 10 the future.
- 11 Q. Do you expect that you will continue to pursue
- 12 it?
- 13 A. We will continue to pursue it.
- 14 Q. Okay. Can we assume that that will be a given
- 15 even though it's a long-term perspective?
- 16 A. I don't know that we can assume that it will be
- 17 a given, no.
- 18 Q. Have any of the planning scenarios and analyses
- 19 that you have run assumed that the trunk line would be
- 20 in place?
- 21 A. So, in my --
- Q. That's a yes or no.
- 23 A. Well --
- Q. Thank you.
- 25 A. The 720 line would be complete -- the answer is

- 1 no; however, certain portions of it would be complete in
- 2 order to benefit certain proposals that we won't get
- 3 into, yes. And it didn't perform in that scenario, so
- 4 other reinforcements were required.
- 5 O. Would some of those locations that would
- 6 benefit from that feeder line include the locations from
- 7 Bluffdale to the magic triangle?
- 8 A. So, the Bluffdale location to the optimal
- 9 delivery location -- but I like your terminology, so
- 10 thank you for that. One of the problems with the 720
- 11 corridor at all is that we currently require the
- 12 capacity on feeder line 35, which is that 720 line as it
- 13 extends north, or will be, we require the capacity.
- 14 Since the other gate stations on our system cannot feed
- 15 at the pressures, 720, yet it cuts off the supply to
- 16 those. And this is -- in my direct testimony -- so,
- 17 it's actually a net negative for that to be complete
- 18 right now.
- 19 Q. What are the pressures assumed coming in from
- 20 the DEQP pipeline at your various interconnection
- 21 points?
- 22 A. So I think that this is a complicated question
- 23 because each -- so, first of all, each year, we do a
- 24 joint operations agreement analysis where we take our
- 25 Design Day for the current year, determine how it will

- 1 operate best from a Dominion Energy Utah standpoint,
- 2 give those pressures and flows to the Dominion Energy
- 3 Questar pipeline team, engineering team, and they run
- 4 analysis.
- 5 And this is an iterative process until they
- 6 come up with a pressure that they will provide on a
- 7 design peak day. So say and assume -- I just wanted to
- 8 clarify, it's not really an assumption, it's more what
- 9 will happen. But, also, I don't remember every single
- 10 gate station off the top of my mind. So I'm limited
- 11 that way. Sorry, the rain man and I aren't pals.
- 12 Q. I didn't check before commencing this but isn't
- 13 there an assumed tariff delivery pressure coming off the
- 14 Dominion pipeline?
- 15 A. An assumed pressure that is required?
- 16 Q. Isn't there a pressure relationship that
- 17 Dominion Energy Questar Pipeline must meet in connection
- 18 with its own tariff to serve its customers?
- 19 A. There's no guaranteed pressure in our contract,
- 20 as far as I'm aware.
- 21 O. Well, okay. We'll take that for now and we'll
- 22 talk to a tariff expert or consult it that way.
- 23 A. Fair enough.
- 24 Q. How was the distribution company planning to
- 25 beef up the pressure for this planned trunk line?

- 1 A. So, beefing up the pressure for the planned
- 2 trunk line, if you look at the system the way it
- 3 operates today, casing pressures come in with a
- 4 guarantee only at base at 700 pounds. We feel that as
- 5 Dominion Energy Questar Pipeline replaces their existing
- 6 pipes, their design standard will be in line with our
- 7 future vision. So one of the many reasons why is
- 8 because operating lines cost money. And they will be
- 9 replacing these lines over time. And hopefully they
- 10 will be -- hopefully, they will be replacing these lines
- 11 to meet our future needs since we've communicated
- 12 regularly about them.
- 13 Q. Okay. Do you know what the operating pressure
- 14 is on the Ruby Pipeline up north?
- 15 A. I know that it's relatively high. I'm not sure
- 16 the exact number, but I believe that it's greater than
- 17 720 pounds. But in regards to that, the Hyrum gate
- 18 historical pressures have also upstream been higher than
- 19 720 pounds, so --
- 20 Q. Okay. Did you run any probability analysis or
- 21 comparisons between the proposed LNG facilities and some
- 22 of the other solutions that have been used by the
- 23 company on a regular basis to solve their supply risks
- 24 on a regular short-term basis?
- 25 A. I'm sorry, I don't understand what

- 1 probabilities I would be calculating.
- Q. Well, when we talk about a freeze-off, what's
- 3 the probability of a freeze-off and what's the
- 4 consequence of the freeze-off? Have you done a specific
- 5 calculation on that?
- 6 A. So I think that if you look at my -- let me
- 7 find it.
- 8 Q. Let me withdraw that question. And I'll just
- 9 ask another way, okay? One of the statutory
- 10 requirements we have to be mindful of in connection with
- 11 this application is that the proposal, we need to have
- 12 some kind of assurance, or the commission does, that
- 13 whatever facilities we propose will provide a least cost
- 14 alternative to deal with the issues that were
- 15 identified.
- 16 Now I know you've done a lot of analysis on
- 17 the LNG plant. And I think your analysis is -- has
- 18 assured us that the plant, if in place, can respond to
- 19 outages at each of the locations. You run scenario
- 20 after scenario to prove that.
- 21 Have you run any analysis to determine
- 22 whether or not the installation of the LNG plant to meet
- 23 all those needs is more expensive or less expensive than
- 24 the different alternatives that are being used right now
- 25 to deal with these reliability issues on a short-term

- 1 basis? Successfully, by the way.
- 2 A. So I think if you recall the 18-057-3, we
- 3 looked at all of the options. In this docket, Mr.
- 4 Schwarzenbach looked at the options that were proposed,
- 5 and the LNG facility was the least cost option. So, I
- 6 don't see -- I guess I don't understand how a system
- 7 analysis and a cost analysis are related. And since
- 8 the supplier reliability review analysis that
- 9 Mr. Schwarzenbach presented has already been covered, I
- 10 don't understand what your question is.
- 11 Q. Then is it fair to say that your testimony
- 12 doesn't deal with a comparative analysis of the LNG
- 13 facility being a solution compared to the cost and
- 14 effectiveness of some other solution that may have been
- 15 discussed by Ms. Faust or Mr. Schwarzenbach? Is that
- 16 right?
- 17 A. My testimony is focused on the system analysis
- 18 and the risk. That's not a cost comparison.
- 19 Q. Okay. That's what I wanted to know. Thank
- 20 you. I have no further questions.
- 21 COMMISSIONER LEVAR: Mr. Russell?
- 22 MR. RUSSELL: Thank you Mr. Chairman.
- 23 CROSS-EXAMINATION
- 24 BY MR. RUSSELL:
- Q. Good afternoon, Mr. Platt. How are you?

- 1 A. Good afternoon. How are you?
- Q. Doing okay. I want to talk a little bit about
- 3 some of the modeling that you ran a little bit. You, in
- 4 your testimony, describe a model that you ran in an
- 5 effort to determine the loss, the magnitude of the loss
- 6 to customers in the event that there's a 150,000
- 7 decatherm shortfall on a Design Day, right?
- 8 A. It does.
- 9 Q. Okay. Can you explain -- you set forth your
- 10 testimony -- but maybe it's probably quicker for you
- 11 just to do it again. Can you just explain to us what
- 12 assumptions you made in running that model?
- 13 A. So, in setting up this model -- and I won't
- 14 read verbatim -- I used Design Day model, so, standard
- 15 process. And then I removed 150,000 decatherms from the
- 16 supply to that. And I ran the model until I hit a zero
- 17 pressure for the model scale. So I mean --
- 18 (Briefly off the record.)
- 19 Q. I will say for the record, I won't feel
- 20 offended if you don't face me while you're answering the
- 21 question, if it's easier for you to speak in the mic
- 22 that way.
- 23 A. I'd prefer to face you.
- 24 0. Yeah, that's fine.
- 25 A. It feels like I'm talking to a person then.

Page 236 (Briefly off the record.) 1 2. So I will get as close as I possibly can, even Α. 3 though my voice is annoying to myself. So where was I? 4 So a Design Day, standard conditions, synergy gas software, unsteady state analysis, when you initiate the 5 analysis, it starts to count through time. And so at 6 7 the time that my pressures in the system reached zero psig, the model fails. 8 And so at that point, I, in order to 9 10 represent what might happen in reality, I removed the 11 demand at that point using a profile that would go to 12 that point and then dropped the demand to zero because 13 nothing would be flowing at that point. I stepped through and did this a number of times until I had a 14 15 model that would completely solve and give me the 16 resulting pressures. 17 I then took the pressures at these regulator stations and calculated for each regulator 18 19 station for the types of regulators that they have in 20 them the remaining capacity. If there's a greater than 21 zero pressure, I took that value for each of the 22 hundreds of regulator stations that were at sub 23 operational pressures and loaded my IHP models, which are separate models, with that new capacity at each req 24 25 station and then solved it and determined where

- 1 pressures fell below five pounds, which is where the
- 2 majority, or at least we think, our IHP will lose
- 3 service because there won't be pressure to push it
- 4 across their service regulator and meter. Then I
- 5 counted all those customers up. And that's how I
- 6 determined that value.
- 7 Q. Okay. You indicated that you used a Design Day
- 8 model. Is it -- is that a Design Day model for current
- 9 conditions?
- 10 A. That is a Design Day model for the current
- 11 year, yes.
- 12 Q. Okay. And you assumed a loss of a hundred
- 13 fifty thousand decatherms at, I think -- was it
- 14 Riverton?
- 15 A. It was Riverton for the specific part of this
- 16 analysis, yes.
- 17 Q. Right. And then I think I understand your
- 18 testimony to indicate that you asked the model to assume
- 19 a 150,000 decatherm loss at Riverton two hours prior to
- 20 peak hour on that peak day?
- 21 A. Right. So, about six a.m.
- Q. Okay. This is going to come across as an
- 23 ignorant question, and I apologize for that. When you
- 24 asked the model to assume a loss of 150,000 decatherms
- 25 per day, is that 150,000 decatherms at once or is it

- 1 over a period of time? I'm trying to figure that out.
- 2 A. So, don't feel bad. I talk to engineers every
- 3 day that don't understand exactly what we're talking
- 4 about. So, 150,000 decatherms per gate rate. That's
- 5 the rate of volume coming through that gate station.
- 6 And so I'm not reducing the amount of gas in the system
- 7 by 150,000 decatherms by making it evaporate, I'm
- 8 cutting the volume rate coming through that gate down by
- 9 150,000.
- 10 O. And what effect does that have on the number of
- 11 decatherms that you might receive in a day?
- 12 A. So, if we look at this and at six a.m., you
- 13 reduce by 150,000 decatherms, that means that you are
- 14 getting 150,000 for six hours that you lost for another
- 15 18 hours, right? So you would have to say two-thirds of
- 16 that, or a hundred thousand decatherms at the end of the
- 17 day is gone.
- 18 Q. Okay. So, I think I understood that but I'm
- 19 going to try to put it in words that I actually
- 20 understand. Does that -- by dropping it by 150,000
- 21 decatherms per day by that rate, if you assume that
- 22 shortfall over -- is it a 24-hour period? You will have
- 23 lost by the end of that 24-hour period 150,000
- 24 decatherms? Is that how it works?
- 25 A. So, if the analysis had lost that rate for 24

- 1 hours, it would be 150,000 decatherms that you lost for
- 2 that day. But since it starts at six -- and I'm doing
- 3 bad math because six and 24, that's a quarter. So I've
- 4 never felt pressure before in my life but -- and I don't
- 5 get nervous in these types of situations. So you would
- 6 be missing a guarter of 150 at the end of the day. So
- 7 it would be a little bit more than 100.
- 8 Q. So you'd lose three-quarters of a hundred and
- 9 fifty at the end of the day; is that right?
- 10 A. Right.
- 11 Q. Okay.
- 12 A. Right.
- 13 Q. Okay. I think we're there.
- 14 A. We're solid.
- 15 Q. Okay, I think we're there. Thank you. And
- 16 when you ask it to assume a loss of a hundred and fifty
- 17 thousand decatherms per day, that rate, does that
- 18 correspond with certain NAESB cycles where you would
- 19 lose a certain amount with this cycle or this cycle, or
- 20 are you just asking it to assume a loss spread evenly
- 21 over the next 18 hours?
- 22 A. A loss spread evenly.
- 23 Q. Okay.
- 24 A. And if you look at the way the Hunter Park and
- 25 Riverton gates are designed, they're flow set. So if

- 1 we lost a hundred and fifty, it would be exactly like
- 2 that.
- 3 Q. Okay. And when you say you just -- you asked
- 4 it to assume that loss of rate two hours before peak
- 5 hour, you said six o'clock. So does that mean peak hour
- 6 is eight o'clock?
- 7 A. Peak hour is at 8:30, so it's actually 6:30.
- 8 But --
- 9 Q. Sure. You had also run -- I'm going to talk
- 10 about some different modeling you had run against the
- 11 proposals received from the RFP. And that model is
- 12 slightly different than this one in that it is a 2023
- 13 Design Day model, correct?
- 14 A. Correct.
- 15 Q. And so can you explain to me the difference
- 16 between a 2023 Design Day model and the current Design
- 17 Day model that you ran against that Riverton situation
- 18 we just talked about?
- 19 A. So the difference in the 2023 Design Day model
- 20 is that if you look at the most recent IRP, there's a
- 21 peak day demand volume for each year. So, it is
- 22 projecting that 2023 amount. It's actually not too
- 23 different from the different peak day in absolute terms,
- 24 but because this isn't going to be in service until
- 25 about then, it didn't really make sense to evaluate it

- 1 using a 2019 peak day.
- 2 And there are going to be system
- 3 reinforcements that occur between now and then that are
- 4 planned. Those are also in the --
- Q. And are there -- with those system
- 6 reinforcements, are there also volume differences in
- 7 what the volume of the gas in the system is now versus
- 8 what there will be in 2023?
- 9 A. Right. So, I mean, contracts will change. And
- 10 there are some assumptions there, but there are also
- 11 some knowns.
- 12 Q. Okay. And all I'm trying to get at is you took
- 13 into account those changes as well?
- 14 A. Correct.
- 15 Q. We don't need to talk about what the specifics
- 16 are. You in your testimony indicated that all of the --
- 17 all of the proposals that delivered to the optimal
- 18 delivery location, whether by design or with
- 19 reinforcements, were able to meet system requirements
- 20 when you ran those models, right?
- 21 A. Correct. Options that deliver in the optimal
- 22 delivery zone met our customers' needs.
- Q. Okay. And that includes the options that got
- 24 there through reinforcements, right?
- 25 A. Right.

- 1 Q. Okay. There was a small paragraph -- and I can
- 2 find it if we need it -- indicating that delivery into
- 3 the optimal delivery location may end up losing one
- 4 customer in Payson, right?
- 5 A. So, if there's a Payson outage -- and, I'm
- 6 sorry that you don't have the Wasatch Front system
- 7 memorized like I do -- but from Payson to about
- 8 Vineyard, our system operates at an MAOP of 720 pounds.
- 9 And there's a customer, a small customer, that requires
- 10 about 210,000 decatherms per day and a pressure of 525
- 11 pounds at the end of that line. You might be able to
- 12 think of who that is.
- 13 If the pressures drop below 525, that
- 14 customer will no longer be served. So in a Payson
- 15 outage, in any scenario, that customer is going to lose
- 16 service or will have to switch delivery points for their
- 17 own gas supply.
- 18 Q. You say in any scenario. Does that include the
- 19 scenarios where delivery is made at Bluffdale?
- 20 A. Right.
- 21 O. Okay. So it wasn't just the deliveries into
- 22 the optimal delivery location, it was all of the
- 23 proposals failed to meet that?
- 24 A. Right.
- 25 Q. Okay.

- 1 A. In that gate station outage scenario.
- Q. Okay. I misunderstood your testimony on that
- 3 point. I want to talk a little bit about what you --
- 4 what assumptions you made in using this 2023 Design Day
- 5 model with each of the proposals in the RFP. We kind of
- 6 walked through some of those assumptions for the
- 7 Riverton outage scenario. Did you do the same thing
- 8 with respect to the proposals in the RFP? We talked
- 9 about a loss of a hundred fifty thousand decatherm rate.
- 10 Was it that same --
- 11 A. It's the same idea. The only addition that I
- 12 would put to that is that there are some gate stations
- 13 that are not capable of feeding 150,000. So in those
- 14 scenarios, they just fed whatever their capacity was.
- 15 Q. Yeah, I think in your testimony Sunset was one
- 16 of those.
- 17 A. Right. So Sunset's physical capacity is like
- 18 93 million cubic feet per day. But its actual flowing
- 19 capacity at pressure that's meaningful is somewhere
- 20 around 75. So, it is about half of what the shortfall
- 21 scenario at other gate stations would have been but --
- Q. Got it. Now, we've talked about these two
- 23 Design Day models and that there was some changes made.
- 24 In a current Design Day model, do you know what the
- 25 capacity of the Hyrum gate station is?

- 1 A. The capacity at the Hyrum gate station in the
- 2 current model is about 142 million, so 142,000
- 3 decatherms. It's pretty close to 150.
- 4 Q. That's a question I've been meaning to ask. So
- 5 there's different uses of the hundred and fifty million
- 6 cubic feet per day and a hundred fifty thousand
- 7 decatherms per day. Are those essentially the same
- 8 thing?
- 9 A. For purposes of this discussion, they are
- 10 essentially the same thing.
- 11 Q. When you go back to your office and talk to
- 12 your engineers, I assume there might be a difference.
- 13 But for our purposes, we don't need to know what that
- 14 difference is?
- 15 A. No, it's close enough.
- 16 Q. So, in terms of the current capacity at Hyrum,
- 17 it doesn't have a 150,000 decatherm capacity. I assume
- 18 that in the -- my understanding is that in the 2023
- 19 Design Day model, that gate station has an upgrade to
- 20 it, right?
- 21 A. Right.
- Q. And what is that upgrade?
- 23 A. So, with the completion of feeder line
- 24 replacement between Hyrum, feeder line 40 and feeder
- 25 line 19, it's increasing from 12 inch to 24 inch. And

- 1 along with that, there's plenty of upstream capacity at
- 2 the Hyrum gate station. So there's a hundred thousand
- 3 extra decatherms of supply there.
- 4 Q. I had you right up until the end. So there's a
- 5 hundred thousand extra decatherms of Hyrum how?
- 6 A. So, this is -- I'm sorry. So, take away
- 7 capacity matters and take away capacity. When I use it,
- 8 I'm talking about the system's ability to take gas from
- 9 the gate station and deliver it to the customers.
- 10 So, when our feeder lines are replaced with
- 11 a larger diameter, we will be able to take more gas.
- 12 And that gas is about a hundred thousand more
- 13 decatherms.
- 14 Q. Okay. And when you're talking about your
- 15 feeder lines, you're talking about lines that feed into
- 16 that gate station on a distribution system, right?
- 17 A. I'm talking -- yes, except feed out of that
- 18 gate station.
- 19 Q. Oh, feed out of the gate station to customers,
- 20 right. Okay.
- 21 A. Right.
- Q. So the customers with those upgrades to that
- 23 system will have more access to more gas from that gate
- 24 station?
- 25 A. Correct.

Page 246 1 More quickly? Q. 2. Α. Well --Well, perhaps. 3 Q. 4 We can talk about response time but that will take us down another rabbit hole that's going no where. 5 Let's not. So -- okay, we've -- I think you've 6 0. educated me on at least some of this stuff. So, walk me 7 through the modeling that you ran for the -- you've 8 heard us talk, I think, about the Magnum proposal or 9 10 Option 1A where there was an assumption of delivery to 11 Bluffdale. 12 So, any option that delivered to Bluffdale, I 13 placed the source not unlike any other source in my So, there are source nodes. And the response 14 15 time -- oh, I lost it. 16 Q. Ah-oh. 17 Am T back? Α. 18 0. Yes. 19 Α. Sorry. So, the response time for all scenarios that I ran was ten minutes. So I assumed in my modeling 2.0 21 that ten minutes from when the shortfall began, the 22 response would also instantly replace the hundred and 23 fifty thousand. 24 So at each gate station for each scenario, all of the 40 models that I ran for every possible 25

- 1 option at every possible gate station, I did this. And
- 2 I stepped through time to see what would happen.
- Now, the Bluffdale option without
- 4 reinforcements, with a Hyrum outage, which I think is
- 5 where we're going, and I'm just going to take us
- 6 there --
- Q. Sure.
- 8 A. After replacing that volume, pressures began to
- 9 drop because it's such a far extent and you're not
- 10 getting the pressure up to the 471 zone. And so, at
- 11 some point -- and I think it's a couple hours into the
- 12 analysis, I don't recall exactly -- basically every
- 13 customer from Brigham City north has lost service.
- 14 Q. Okay. And you indicated that you assumed a ten
- 15 minute response time for each proposal, right?
- 16 A. Right.
- 17 Q. And do you -- so we have 150,000 decatherm rate
- 18 drop at Hyrum two hours before the peak hour, right?
- 19 A. Yes.
- 20 Q. And so ten minutes later, we have in your
- 21 model, the option of Bluffdale responding by injecting
- 22 a hundred fifty thousand decatherm per day rate into the
- 23 system, is that right?
- A. Correct.
- 25 Q. And at what point in -- as you run that model

- 1 through, do you know how long it takes before customers
- 2 start losing power?
- 3 A. So, customers losing power isn't -- I'm not a
- 4 power quy.
- 5 Q. Sorry, I --
- 6 A. But customers --
- 7 Q. -- you every once in a while. When a customer
- 8 is losing service.
- 9 A. So, like I said, I don't remember. I would
- 10 have to bring up my model results. But I think that the
- 11 first customer loses service within a couple of hours.
- 12 So it's pretty fast and in model time.
- 13 Q. Okay. Before running that type of modeling
- 14 against the proposals, what did you do to determine what
- 15 analysis you were going to run against each of the
- 16 proposals? Did you speak with anyone else at the
- 17 company or was it entirely your idea to run the model
- 18 this way? How did the company determine that that's the
- 19 model it wanted to run?
- 20 A. So, I talked to my colleagues and discussed how
- 21 I was going to evaluate this. I talked to the employees
- 22 that work for me in the system planning group about how
- 23 I was going to evaluate them and make sure that everyone
- 24 thought what I was doing was fair and how I was going
- 25 about it was the right way. Because, often when we are

- 1 unchecked, we choose something and we're not really
- 2 being fair.
- 3 So I went out of my way to make sure that
- 4 everybody who had any expertise in the area agreed with
- 5 my method. And they did.
- 6 Q. Did you talk to folks in the gas supply side of
- 7 the company to determine if it would be possible for a
- 8 single gate station to experience the type of shortfall
- 9 we're discussing here?
- 10 A. William Frederick Schwarzenbach, the third, and
- 11 I did speak. And we have spoken on a number of
- 12 occasions about the types of shortfalls and how they
- 13 might affect our system, yes.
- 14 O. Okay. And did you talk about -- this is going
- 15 to get a little bit more into the risk side of things,
- 16 which I haven't talked about with you yet. But did you
- 17 determine the probability of a -- of this kind of supply
- 18 shortfall at each gate station?
- 19 A. I did not. And I think that, you know, what
- 20 happens upstream is a little outside of my realm. So I
- 21 didn't get into how probable each scenario might be. I
- 22 know that, from experience and just talking to Will --
- 23 and maybe if he were up here, he would slap me and tell
- 24 me I'm wrong -- but a lot of our gas supply comes from
- 25 Wyoming. That's close to Hyrum. It is a concern to me

- 1 that we might not have gas show up there.
- 2 And there are different lines that feed
- 3 Hyrum than the Coalville, Sunset, Porter's Lane, Little
- 4 Mountain system. So it is a little isolated. I think
- 5 that -- I mean, just from intuition, the Coalville
- 6 system -- because it connects at Coalville and there's
- 7 not really any supply downstream, may be a little less
- 8 unlikely based on a freeze-off scenario. But as far as
- 9 mechanical failure or improper operations, human error
- 10 type failures, they're just as likely at any gate
- 11 station.
- 12 Q. Sure. And so for your purposes in running the
- 13 modeling, it was enough to determine that it was
- 14 possible. You didn't look into the issues of how likely
- 15 a 150,000 decatherm per day shortfall at a given gate
- 16 station might be?
- 17 A. I think that's a fair assessment.
- 18 Q. You had indicated in your response to questions
- 19 from, I think it was Mr. Snarr, that you participated in
- 20 the evaluation of what reinforcements would be required
- 21 to get from the Bluffdale delivery location to the
- 22 optimal delivery location. Did I hear that right?
- 23 A. Right. I did participate in determining what
- 24 reinforcements would be required.
- Q. Okay. I want to ask what those are but I don't

HEARING (NON CONFIDENTIAL), DOCKET NO. 19-057-13 - 09/26/2019 Page 251 know whether that's confidential. I don't know that 1 2 it's been described in the testimony, but --MR. SABIN: Yes, as long as we're not 3 going into the costs of the reinforcement, you can 5 discuss the engineering aspect of it, if that's where 6 you're going. 7 Q. Yes, I'd just like to know what it is. MS. NELSON-CLARK: I would also be wary 9 of...(inaudible). 10 (Briefly off the record.) 11 MR. SABIN: She was just saying, you want 12 to be sensitive to time, particularly reinforcements, 13 particularly bidders, because that might go into highly confidential information. Certainly if you want to talk 14 about your own clients' reinforcements, that's up to 15 16 you. 17 Yes, I -- okay. I think we're okay. Q. 18 MR. SABIN: I wasn't sure if you were doing 19 that to me or --20 COMMISSIONER LEVAR: This is probably a

- 21 good time for a five minute break anyway. And so why
- 22 don't we come back at 4:20.
- 23 (A ten minute recess was commenced.)
- 24 COMMISSIONER LEVAR: Okay. We're back on
- 25 the record. Mr. Russell?

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Page 252
                                Thank you, Mr. Chairman.
 1
                  MR. RUSSELL:
 2
             (By Mr. Russell) We ended with a question that
         Q.
    indicated we were going to use reinforcements. We will,
 3
    but I need to backtrack just a second. We talked about
 4
    whether it was possible to -- for each gate station on a
 5
    company's distribution system to experience a 150,000
 6
    decatherm per day loss. I want to ask that question a
 7
 8
    slightly different way. Is it possible for the company
 9
    to not have warning of a loss at each gate station until
    it reaches that point where it's a hundred fifty
10
11
    thousand decatherms per day?
12
         Α.
             So, if the question -- am I close enough?
                                                         Ιf
13
    the question is, is it possible that the company might
14
    not have any warning that 150,000 decatherm per day rate
15
    shortfall could occur at each gate station, the answer
    is yes. And so if we look back at the supply
16
    reliability risk analysis, we're not just looking at
17
18
    freeze-offs, right? We're also looking at earthquakes,
    landslides, cyber attacks, inappropriate or inadequacy
19
    of the design or maintenance and, as Mr. Paskett pointed
20
21
    out, internal and external corrosion, corrosion
22
    cracking, and there was one other that he pointed out
23
    that wasn't in the supply reliability risk analysis.
24
                  And I would say that there are a number of
25
    other things that could happen that the company would
```

- 1 have no indication prior to the shortfall actually
- 2 occurring, many possibilities.
- Q. In your modeling, did you conduct -- did you go
- 4 to an effort to determine the rate of shortfall at
- 5 which the Magnum Option 1A could meet that shortfall at
- 6 Hyrum?
- 7 A. So, I think that -- I think that what you're
- 8 asking me is, per the requirements set out in the RFP,
- 9 did I evaluate other criteria? And the answer would be
- 10 no, I didn't evaluate options that weren't presented. I
- 11 didn't evaluate lower shortfall scenarios. I evaluated
- 12 what the company determined as the need and what would
- 13 be required or how that option would respond to those
- 14 scenarios.
- 15 Q. Well, okay. But the RFP itself didn't say, it
- 16 needs to meet 150,000 decatherm per day shortfall at
- 17 each gate station, that's a model you ran after the RFP
- 18 responses came in, right?
- 19 A. But I think that since the shortfall could
- 20 occur at each gate station and the RFP said we need a
- 21 resource that supplies this and has similar system
- 22 performance or meets our customer needs and these are
- 23 scenarios that are realistic, I don't think that the
- 24 analysis that was done was inappropriate. I think it
- 25 was exactly appropriate.

Page 254 1 And, as you suggest, lower volumes -- well 2 the RFP didn't say, we want a lower volume resource. So, that would be a pointless analysis. 3 4 Q. Do you have the RFP there? I think it's Schwarzenbach 3.02, Exhibit 3.02. 5 I do have it in front of me. 6 Α. Will you turn to page 2 and to footnote one at 7 the bottom? And I'll just go ahead and read it. 9 says, "DEU will consider proposed options that will provide less than 150,000 decatherms per day of 10 deliverability, however, preference will be given to 11 12 proposals that meet the full 100,000 decatherms per day, 13 either on its own or in conjunction with other 14 proposals." 15 If the company were willing to accept proposals that injected something les than 150,000 16 decatherms per day, wouldn't any such solution fail your 17 18 modeling test? 19 So I think that this statement is getting at, yes, there could be multiple proposals of less than 150, 20 21 but if we had a proposal that, for instance, delivered 22 145,000 decatherms and couldn't quite meet the 150, is 23 it possible that in conjunction with that and line pack it could meet our customers' needs. Yes, it could. 24

But at some point would that proposal

25

- 1 volume hit a limit where it would need another resource
- 2 to make up the need? Yes. And I didn't analyze what
- 3 that was because no proposals that were offered less
- 4 than 150,000 decatherms. So I don't feel like making up
- 5 proposals.
- 6 Q. Yes, I guess I understand that. I was just
- 7 wondering if you had run the proposals against
- 8 something -- against a shortfall of something less than
- 9 a hundred fifty just to determine where that line
- 10 between success and failure was. With respect to this
- 11 particular one -- you don't have to go into the rest.
- 12 A. So, let me draw out how that would look just so
- 13 that --
- 14 Q. It would be a lot of time, I'm guessing.
- 15 A. It would be a lot of analysis. And what does
- 16 it show, right? So, if 150,000 decatherms, I ran 40
- 17 different models for all of the options provided,
- 18 including our LNG facility, shortfalls at each gate
- 19 station, if I'm being fair, should I not run each
- 20 proposal at that lower volume and also at every
- 21 iteration to get down to that volume where it works? It
- 22 becomes unmanageable.
- Q. Understood. But in any event, you didn't do
- 24 that with respect to the Magnum Option 1A to determine
- 25 what shortfall it could be at a higher rate?

- 1 A. I didn't perform that analysis with any option,
- 2 no.
- Q. Okay. And, so if it's possible to upgrade some
- 4 other portion of the system to allow that option to meet
- 5 a shortfall of 150,000 decatherms per day at Hyrum, we
- 6 don't know that. If there's a way to -- I mean is it --
- 7 if it would be meet a -- if that option would meet a
- 8 130,000 decatherms shortfall, total hypothetical, but
- 9 with some other system reinforcement, it might meet 150,
- 10 we just don't know?
- 11 A. So, in my testimony, and this is a fact, the
- 12 reinforcements that were added to any option that
- 13 delivered outside the optimal delivery location were the
- 14 minimum system for 150.
- So, in this hypothetical question, could a
- 16 Bluffdale option perhaps meet a 130,000 decatherm
- 17 shortfall at Hyrum with a lesser extent of recent
- 18 reinforcement, I'm sure that there's a line but it's not
- 19 going to be zero reinforcement.
- The problem really is that between the
- 21 Bluffdale location and the 471 zone, there's so much
- 22 pressure loss in the system and/or lack of capacity that
- 23 it's not reasonable to make up significant shortfalls
- 24 from the Hyrum. So would I expect that 130 would be the
- 25 line? No, I don't. I think it would be a very small

- 1 and insignificant shortfall amount.
- Q. But the fact is we don't know, right?
- 3 A. We don't know. But I've done enough analysis
- 4 to know that it's not -- it's not going to be a
- 5 significant shortfall that would have been able to be
- 6 accounted for at the Bluffdale location without the
- 7 reinforcements specified.
- Q. And so we also don't know what reinforcements
- 9 would be necessary to bridge the gap, whatever the gap
- 10 is, between what that delivery option does meet at Hyrum
- 11 and where it would need to get to satisfy the system
- 12 requirements in the event of a 150,000 decatherm
- 13 shortfall at that gate station, right?
- 14 A. So, I think that the question you just asked is
- 15 do we know the reinforcements required to meet a 150,000
- 16 decatherm per day shortfall at Hyrum. And I think
- 17 that's what was specified. So either I misheard you or
- 18 there is another question in there that got lost
- 19 somewhere on me.
- 20 O. Well the reinforcements that are assumed with
- 21 respect to the Magnum Option 1A are the reinforcements
- 22 that are required to get it to deliver into the
- 23 optimum --
- A. Optimal?
- Q. -- optimal delivery location, correct?

- 1 A. Right.
- Q. And do we know whether that -- whether delivery
- 3 into the optimal delivery location is itself required to
- 4 satisfy the hundred and fifty thousand decatherm per
- 5 day shortfall at Hyrum or whether there is some lesser
- 6 reinforcement that would satisfy that requirement?
- 7 A. The reinforcements specified are the minimum
- 8 system requirements for the Bluffdale option to account
- 9 for that shortfall. So if a lesser shortfall -- and I'm
- 10 imagining hypotheticals, and I don't know the specifics
- 11 without running analyses -- but if a lesser shortfall
- 12 could be met with lesser reinforcements, what I would
- 13 say about that is I think that there are other potential
- 14 options that maybe could have accounted, but a Bluffdale
- 15 delivery location required a certain length of pipe and
- 16 a certain capacity in that pipe.
- 17 And so unless you get to such a small
- 18 number that you no longer have to run that length of
- 19 pipe, that reinforcement is appropriate for lesser
- 20 shortfalls, if that makes sense.
- 21 O. I think it does. Let's talk about the
- 22 reinforcements themselves. I had asked you a question
- 23 before we took a break and we've now been on a tangent
- 24 for a few minutes, and that's my fault.
- The information I'm trying to get out of

- 1 the question about reinforcements is there's been some
- 2 discussion about the reinforcements that are required to
- 3 get from the Bluffdale delivery location to the optimal
- 4 delivery location. There's been a separate discussion
- 5 about Dominion's sort of long-term plan to upgrade to
- 6 this high pressure corridor, some of which would be
- 7 installed somewhere between sort of the Wasatch -- well
- 8 the Salt Lake delivery center and Bluffdale. My
- 9 question to you is: How much overlap is there between
- 10 those two discussions?
- 11 A. So, the reinforcement required is actually a
- 12 new feeder line. And using the existing feeder line --
- 13 and I have this discussion probably in more detail in a
- 14 confidential section of my direct testimony, which we
- 15 won't have to go to -- but running a new line is
- 16 required, and there is no overlap because the capacity
- 17 that exists in that line and will exist when the 720
- 18 corridor is completed in 75 years or whenever we get
- 19 done with all the replacement and upgrades that is
- 20 required is required for the demand on the system
- 21 without a shortfall.
- 22 And so by operating that now or in 2023 for
- 23 the purpose of a supply reliability option without the
- 24 remainder of the project complete, which will take a
- 25 long time, it's basically removing that pipe and its

- 1 capacity out of the system. So can we take a 24-inch
- 2 pipeline out of the system and still meet peak days?
- 3 The answer is no. Does that make sense?
- 4 Q. Not to me. Maybe to others who are in the
- 5 room. Sorry. What I think I heard you say was that
- 6 there -- I think you were explaining why there isn't any
- 7 overlap, okay?
- 8 A. There is no overlap. That's the bottom line.
- 9 Q. Okay. I want to talk about some of the
- 10 assumptions in the peak day -- in the 2023 peak model
- 11 that you used, peak day model that you used. Does that
- 12 include any upgrades related -- or that would sit
- 13 between where the LNG plant is sited and the optimal
- 14 delivery location or where that gas would have to flow?
- 15 And I don't know whether that's helpful. I
- 16 don't think it is but -- I'm not intending to ask a
- 17 confidential question.
- 18 A. So, the 2023 protected model doesn't include
- 19 any reinforcements or any pipelines that aren't
- 20 specified in testimony and are not planned without the
- 21 LNG plan.
- Q. No, I understand that there is -- there are
- 23 some upgrades that are planned separate from the LNG
- 24 plan. I'm just wondering if those were taken into
- 25 account in the 2023 model?

- 1 A. But I think what you asked, is there anything
- 2 between the LNG facility and the optimal delivery
- 3 location. And the only thing is the tap line that would
- 4 be required to get from the LNG plant to the optimal
- 5 delivery location.
- 6 Q. And that tap line would connect to a feeder
- 7 line that will be upgraded, right?
- 8 A. It will be upgraded.
- 9 Q. Okay. When will that occur?
- 10 A. I don't know the schedule. I know it's in the
- 11 next couple of years.
- 12 Q. Before the proposed online date for the LNG
- 13 plant?
- 14 A. Correct.
- 15 Q. Okay. And so that upgrading is included in the
- 16 Design Day model?
- 17 A. Correct.
- 18 Q. That's what I was trying to ask. Okay.
- 19 I think I am out of questions for you.
- 20 Thank you.
- 21 COMMISSIONER LEVAR: Thank you. Any
- 22 redirect?
- 23 MR. SABIN: Just a few questions. Thank
- 24 you.
- 25 REDIRECT EXAMINATION

- 1 BY MR. SABIN:
- Q. Mr. Platt, several of the attorneys here have
- 3 asked you questions about pointing out that the company
- 4 hasn't, at least in recent memory, and maybe even
- 5 further back, had an outage of the kind we're talking
- 6 about here. Do you think that it is reasonable to wait
- 7 for either the Design Day or some sort of outage before
- 8 you plan for that kind of eventuality?
- 9 A. I do not. And let me explain a little further.
- 10 I think that the Southwest Gas incident and the Enbridge
- 11 Pipeline or Fortis, BC situation that occurred last year
- 12 are two good examples of industry experience with this
- 13 specific scenario.
- 14 And we would be foolish to ignore what's
- 15 happened to other companies. We don't want to lose
- 16 40,000 customers. We want to have LNG on the system
- 17 like Fortis, BC does so that when it occurs -- and it
- 18 will -- we are prepared.
- 19 Q. Is it customary for companies -- for LDCs in
- 20 the nation to share information to learn from one
- 21 another to discuss problems that come up and mutually
- 22 address them?
- 23 A. It is. And I believe that one of the
- 24 organizations where people need to discuss these things
- 25 as far as LDCs are concerned is the American Gas

- 1 Association, or AGA, that Mr. Paskett has participated
- 2 in for many years. We have personnel at the company
- 3 that participate in AGA and we discuss industry problems
- 4 and try to share best practices and learn from each
- 5 other all the time.
- 6 Q. And when an event occurs for some other LDC,
- 7 let's say serious event like the Southwest Gas or like
- 8 the Enbridge event, is that something that you guys talk
- 9 about internally as you plan and as you strategize for
- 10 avoiding those kinds of events?
- 11 A. Absolutely. If we ignored the news and what's
- 12 happening in the industry, we would be far behind in --
- 13 I mean, that's just bad practice. And we try to
- 14 address everything as we become aware of issues in the
- 15 industry.
- 16 Q. I want to be very practical in the last few
- 17 questions I have. What I want you to focus on as I ask
- 18 these questions is just this -- in each case, I want you
- 19 to talk to us about how a supply reliability resource
- 20 located in the optimal delivery area would help each of
- 21 these situations, or potentially help them. Okay? Do
- 22 you follow?
- 23 A. Okay.
- 24 Q. So, Mr. Russell asked you about some of these
- 25 single event occurrences that might happen. So, let me

- 1 just take a couple of examples. If there were an
- 2 occurrence -- can you think of an occurrence -- let's
- 3 take the Hyrum gate station -- of a single event
- 4 occurrence that could result in that specific gate
- 5 station failing or not providing the hundred and
- 6 forty-two or three, I don't remember what you said,
- 7 thousand decatherms of gas during a day? Can you think
- 8 of an event where that could realistically happen?
- 9 A. So, the Hyrum gate station is fed by a long
- 10 straight pipe. And so if there were supply shortfalls
- 11 upstream of that, it could directly impact the Hyrum
- 12 gate station, absolutely. In addition, anywhere along
- 13 that long, straight, singular pipe, third-party damage
- 14 could occur, a landslide could occur, an earthquake
- 15 could occur. Any number of things could occur to the
- 16 valve assemblies. Cyber attacks could occur. And
- 17 potentially things could change from a gas control
- 18 standpoint, which I hope never happens to us or anyone.
- 19 Failures at the gate station could occur.
- 20 There are -- from what I understand of this specific
- 21 gate station, there's a single pipe going in and a
- 22 single pipe going out for miles. So anything could
- 23 happen to the pipeline downstream and anything could
- 24 happen to the pipeline upstream.
- 25 Gate stations are very complex pieces of

- 1 equipment. And so there are lots of potential failures
- 2 that could occur at that gate station that are listed
- 3 and in our supply reliability document.
- 4 Q. So, if an event like that occurred in
- 5 Monticello, you have just a physical -- somebody makes a
- 6 mistake, closes the valve -- closes the valve to the
- 7 gate station and you don't have gas flowing for a period
- 8 of time, is that a realistic -- tell me, what would be
- 9 the impact of that at the Hyrum gate station?
- 10 A. So if a valve upstream of the Hyrum gate
- 11 station were shut the gas flowing to the Hyrum gate
- 12 station would stop. It would drop to zero. The
- 13 pressures locally would drop and that would expand out.
- 14 Without a supply reliability resource, we
- 15 would start to lose service to customers. And that,
- 16 depending on the temperature, could expand to up to
- 17 650,000 customers.
- 18 Q. So now if we expand that to the larger system,
- 19 not just Hyrum, are there other gate stations that are
- 20 serviced by just one feeder line or one -- is that the
- 21 right term?
- 22 A. Well, on the transportation side, they're
- 23 called main lines --
- 24 O. Main lines?
- 25 A. -- or --

- 1 Q. Are there other stations, gate stations, that
- 2 are serviced just by, or where the gas comes just by one
- 3 main line?
- 4 A. Well, all of them more or less have one line or
- 5 one alignment feeding them. And that's even including
- 6 the Little Mountain gate station, which has two physical
- 7 pipelines in the same alignment feeding it from
- 8 Coalville to Little Mountain. If something happened to
- 9 that alignment, like a landslide, it would take both
- 10 lines out, or both lines would be -- service would
- 11 likely be stopped because of the risk, if there was a
- 12 landslide, for instance, of rupture affecting both
- 13 lines, so --
- Q. So, in other words, if I'm hearing you right,
- 15 what we just talked about with Hyrum, all of those
- 16 issues that could affect that one main line coming in
- 17 could happen at any one of those gate stations with a
- 18 very similar result?
- 19 A. Correct.
- 20 Q. Now, talk to me about -- we now have a
- 21 facility, whether it's an LNG or some other resource,
- 22 that delivers into that optimal delivery zone. How
- 23 would that help us respond to those particular incidents
- 24 at each of those gate stations, if you'd talk about that
- 25 for a minute. And get very practical. I want you to

- 1 just -- we're interested in knowing what would that
- 2 resource do for you in that event?
- A. So, in that event, assuming that it was a day
- 4 where that gate station was flowing 150,000 decatherms
- 5 rate or less, the LNG plant would start vaporizing or
- 6 ramp up vaporizing into the system at the rate of the
- 7 loss and it would mitigate a loss of service to
- 8 customers by replacing that supply and providing
- 9 pressure support to the system so that instead of
- 10 pressures dropping to suboperational pressures, that
- 11 pressure in the heart of the system at the optimal
- 12 delivery location extends out both north and south
- 13 preventing suboperational pressures anywhere.
- 14 Q. So it would be true, is it not, that up to 150,
- 15 that facility or that resource could solve a shortage up
- 16 to 150,000?
- 17 A. Correct, based on any cause.
- 18 Q. And then there are some gate stations that
- 19 actually flow more than 150,000 decatherms in a day,
- 20 right? At those gate stations, would a facility or
- 21 resource located in that same region, the optimal
- 22 delivery zone, would the LNG facility have any benefit
- 23 if -- or could it have any benefit if there was
- 24 something that occurred at a gate station that was
- 25 flowing more than that?

- 1 A. It could. It's a little less certain what the
- 2 result of that would be. But let's say hypothetically
- 3 that something happened at the Porter's Lane gate
- 4 station, which is capable of feeding a bit more than
- 5 150, that LNG facility would be able to absorb the
- 6 initial impact and slow the loss of pressure in the
- 7 system so that other mitigative actions could be taken
- 8 to minimize the loss of service or completely eliminate
- 9 it if such options exist.
- 10 O. And let's take Porter's gate station for a
- 11 second. It flows more than a hundred fifty at some
- 12 times of the year. Is that true all year?
- 13 A. No.
- 14 Q. So would a resource located in this area we're
- 15 talking about, could it help at times where it wasn't
- 16 flowing above 150, I assume?
- 17 A. Absolutely.
- 18 Q. It would solve any -- even though that gate
- 19 station is capable of warming, if it's only flowing 130
- 20 and it gets a rupture --
- 21 A. It would prevent a loss of service.
- 22 Q. Okay. Finally, Mr. Russell asked you about
- 23 instances where you didn't model necessarily each
- 24 possible shortfall less than a hundred and fifty
- 25 decatherms at any of the gate stations. But I want you

- 1 to assume you have a resource that, all other things
- 2 being equal, one resource can flow a hundred and thirty
- 3 and one resource can flow a hundred and fifty, and just
- 4 assume the price is the same, cost is the same. Is
- 5 there any reason why you wouldn't select the one that
- 6 chooses -- that provides 150?
- 7 A. I would always choose the more reliable and
- 8 more capable piece of equipment. If it were my money, I
- 9 would always choose the better option, which would be
- 10 the one that covers more scenarios.
- 11 Q. In your mind, it's better because you could
- 12 flow more and cover potentially more scenarios?
- 13 A. Correct. So, more volume is more capability.
- 14 O. Okay. Thank you. No further questions.
- 15 COMMISSIONER LEVAR: Thank you. Any
- 16 recross from the division?
- 17 MR. JETTER: I just have a brief follow-up
- 18 to the questions they've asked -- your counsel just
- 19 asked you.
- 20 RECROSS-EXAMINATION
- 21 BY MR. JETTER:
- Q. Let's just take a hypothetical that fits July,
- 23 a very low customer demand, and you have a gate outage
- 24 or partial outage of 150 decatherms.
- 25 A. 150 decatherms.

- 1 Q. 150,000 decatherms. I'm not sure you can
- 2 measure 150. Would you anticipate in that scenario --
- 3 and maybe this is not the right question -- but would
- 4 you anticipate -- we know there's a cost, but I don't
- 5 know necessarily the cost exactly, specifically -- but
- 6 the cost to liquefy and vaporize adds a certain amount
- 7 to the cost of the decatherm. That's correct, right?
- 8 A. The way I understand it, all options at cost,
- 9 yes.
- 10 Q. And so would you anticipate that the company
- 11 would purchase available market gas if that gas is
- 12 available at a lower cost?
- A. I don't work in gas supply, so I don't pretend
- 14 to know how they would purchase gas.
- 15 Q. Okay. That's probably a question for someone
- 16 else. Thank you.
- 17 COMMISSIONER LEVAR: Okay. Thank you.
- 18 Mr. Snarr?
- 19 MR. SNARR: I have no additional questions.
- 20 COMMISSIONER LEVAR: Mr. Russell, any
- 21 recross?
- MR. RUSSELL: No. Thank you, Mr. Chairman.
- 23 COMMISSIONER LEVAR: Commissioner Clark,
- 24 any questions?
- 25 COMMISSIONER CLARK: There's one that I

- 1 would like to ask now and then I might have some
- 2 questions after Mr. Gill testifies. And I'm just
- 3 wondering if he'll be here tomorrow.
- 4 A. I'm planning on it. This is the place to be.
- 5 COMMISSIONER CLARK: We agree with that.
- 6 In discussing historical conditions of severe weather,
- 7 whether it be a design peak day or something like that,
- 8 and the absence of the outages in the history that we're
- 9 -- that you're anticipating in the future and that we're
- 10 addressing in this docket -- one of the -- I think I
- 11 heard you say that one contributing factor to the
- 12 additional risk that you perceive is lack of cooperation
- 13 that used to exist. I assume you meant between
- 14 suppliers and the pipelines and the distribution
- 15 companies. But I want to know what you meant by it.
- 16 A. So, I've heard Tina Faust testify before, and
- 17 she's mentioned that before, I believe it's Order 636,
- 18 that transportation companies and distribution companies
- 19 could operate as one. So it's not that there's a lack
- 20 of cooperation or discussion, it's that, legally, that
- 21 type of -- those type of actions cannot take place
- 22 anymore.
- 23 COMMISSIONER CLARK: I see what you mean.
- 24 Thank you. And that concludes my questioning for today.
- 25 Thank you.

Page 272 1 COMMISSIONER WHITE: I have no questions. 2 Thank you. 3 COMMISSIONER LEVAR: And I don't have others. Thank you. We appreciate your testimony today. 5 Α. Thank you. 6 COMMISSIONER LEVAR: And we obviously don't have time to complete Mr. Gill, but does it make sense 8 to get his summary in before we adjourn today or would we rather just start fresh tomorrow? I don't think we 10 have a preference one way or the other. 11 MR. SABIN: If it's all the same to you, 12 I'd just as soon start fresh. I think we'd all just be 13 a little fresher. 14 COMMISSIONER LEVAR: If anyone in the room feels differently, let me know. Otherwise we're in 15 recess until nine --16 17 MR. JETTER: Can I address that? 18 COMMISSIONER LEVAR: 19 MR. JETTER: I'd like speak to the -tomorrow, Trish will represent the division, attend for 20 21 the division. 22 COMMISSIONER LEVAR: Certainly. You don't 23 need our approval to do that but we'll expect that

24

25

tomorrow.

MR. JETTER: Thank you.

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                  COMMISSIONER LEVAR: We're in recess until
 2
   nine a.m. tomorrow. Thank you.
         (The commission hearing was recessed at 4:51 p.m.)
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1	CERTIFICATE
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3	:ss COUNTY OF SALT LAKE )
4	COUNTY OF SALI LAKE )
5	
6	THE TO TO CEPTEV that the DCC hearing named was
7	THIS IS TO CERTIFY that the PSC hearing named was taken before Rashell Garcia and Karen Christensen, Certified Shorthand Reporters and Notaries Public in and
8	for the State of Utah, residing in Salt Lake City.
9	That the said witnesses were, before examination, duly sworn to testify the truth, the whole truth, and
10	nothing but the truth in said cause.
11	That the testimony in the above-named hearing was reported in Stenotype, and thereafter caused to be
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13	transcribed is set forth in the foregoing pages, numbered from 5 to 273, inclusive.
14	We further certify that we are not of kin or
15	otherwise associated with any of the parties to said cause of action, and that we are not interested in the
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