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STATE OF NEW HAMPSHIRE
SITE EVALUATION

October 23 2017 - 1:21 p.m. DAY 50
49 Donovan Street AFTERNOON Session ONLY
Concord, New Hampshire

{Electronically filed with SEC on 11-6-17}

IN RE: SEC DOCKET NO. 2015-06
Joint Application of Northern
Pass Transmission, LLC, and
Public Service Company of
New Hampshire d/b/a Eversource
Energy for a Certificate
of Site and Facility.
(Hearing on the merits)

PRESENT FOR SUBCOMMITTEE/SITE EVALUATION COMMITTEE:
Chrmn. Martin P. Honigberg Public Utilities Comm.
(Presiding as Presiding Officer)

Cmsr. Kathryn M. Bailey Public Utilities Comm.
Dir. Craig Wright, Designee Dept. of Environ. Serv.
Christopher Way, Designee Dept. of Resources &
Economic Development
William Oldenburg, Designee Dept. of Transportation
Patricia Weathersby Public Member

ALSO PRESENT FOR THE SEC:
Iryna Dore, Esq., Counsel to the SEC
(Brennan, Caron, Lenehan & Iacopino)

Pamela G. Monroe, SEC Administrator

(No Appearances Taken)

COURT REPORTER: Susan J. Robidas, NH LCR No. 44

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I N D E X

WITNESS PANEL: EARLE "RUSTY" BASCOM, III
ADAM ZYSK
DAVID TAYLOR, JR.
BRENDEN ALEXANDER

EXAMINATION	PAGE
Cross-examination by Ms. Pastoriza	3
Cross-examination by Ms. Manzelli	39
Cross-examination by Mr. Thompson	74
Cross-examination by Mr. Cunningham	121
Cross-examination by Mr. Ahern	144

EXHIBITS	DESCRIPTION	PAGE
JT MUNI 305	Documents presented by Ms. Pastoriza for cross-examination	3
DNA 61	"Advanced Analysis of HVDC Electrodes Interference on Neighboring Pipelines" analysis	132
DNA 62	"Criteria for Pipelines Co-Existing with Electric Power Lines" analysis	132
DNA 64	Applicants' Co-location study	140

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P R O C E E D I N G S
(Resumed at 1:21 p.m.)

CHAIRMAN HONIGBERG: Ms.
Pastoriza, whenever you're ready.

CROSS-EXAMINATION

BY MS. PASTORIZA:

Q. So, I'm Kris Pastoriza, Eastern Conservation
Commission.

(Pause in proceedings)

CHAIRMAN HONIGBERG: You may
proceed.

MS. PASTORIZA: Thanks.

BY MS. PASTORIZA:

Q. So, Mr. Bascom, this is part of your prefiled
testimony, dated 12/30/2016. You state here,
"Based on materials provided for review, it
appears that the Applicants have not yet
fully evaluated the details of the many
underground project work areas, so the
viability of construction in some areas is
uncertain."

Would you agree that the new materials
you have seen in the last six months, since
mid-April, indicates that the viability of

1 construction in some areas is still
2 uncertain?

3 A. (Bascom) Some areas do have designations that
4 don't fully document, for example, the limits
5 of disturbance or temporary work areas. To
6 the extent that the material that was
7 evaluated at that time, there was a lot of
8 information that was still missing at the
9 time that I prepared this document.

10 Q. So having seen what you saw in the last six
11 months, would you state that there is still
12 material missing?

13 A. (Bascom) Yes.

14 Q. You also state, "Applicants' drawings show
15 conceptual traffic control plans for only
16 some areas, some of which include completely
17 closing portions of the road. Given the
18 complexity and longer duration construction
19 activities associated with horizontal
20 directional drilling, the traffic control
21 plans for each of these areas should be
22 defined and explained to fully assess the
23 impact."

24 Now, I want to focus on the statement

1 "fully assess the impacts."

2 MS. PASTORIZA: No. 2, Steve.

3 BY MS. PASTORIZA:

4 Q. So, on October 13th of this year, DOT issued
5 a memorandum that states, Northern Pass must
6 complete a traffic control plan because the
7 proposed project, if approved, would create
8 significant traffic impacts. So a traffic
9 control plan would help the SEC and the
10 public fully assess the impact of the
11 problem -- project; would it not?

12 A. (Bascom) In my opinion it would, yes.

13 Q. And this is partly because a traffic control
14 plan would include an assessment of the
15 length of delays that travelers would be
16 subject to and the number of travelers
17 delayed in any given location; is that right?

18 A. (Bascom) That's generally consistent with a
19 traffic control plan, yes.

20 Q. And are there other helpful things that it
21 might include?

22 A. (Bascom) It could include information such as
23 the frequency and activity of construction
24 vehicles arriving and departing from the

1 site, for example.

2 Q. So could you give a broad estimate of how
3 long it would take to research and write a
4 traffic control plan for this project?

5 A. (Bascom) I cannot. I'm not a traffic control
6 plan specialist.

7 Q. Do anybody on the panel have an estimate they
8 could give within several months?

9 A. (Taylor) I do not.

10 Q. A year? Six months?

11 A. [No verbal response]

12 Q. Okay. Exhibit -- sorry. Page 3. And this
13 is Joint Muni 305. So this shows two things:
14 It shows DOT guidelines for work safety and
15 mobility. That's the title page and then a
16 snip from the document. And then below that
17 is part of a Northern Pass and Quanta
18 presentation to DOT.

19 Would you concur with DOT that
20 significant projects should be identified as
21 early as feasible in the project development,
22 prior to the development of alternatives?

23 Any one of you can answer that.

24 A. (Bascom) Could you just restate the question?

1 Exactly what --

2 Q. Would you concur with DOT in that statement,
3 the first paragraph, that, quote,
4 "Significant projects should be identified as
5 early as feasible in the project development,
6 prior to the development of alternatives"?

7 A. (Zysk) I think it's a reasonable statement.

8 Q. Are you aware that the DOT only identified
9 this project as "significant" within the past
10 two weeks?

11 A. (Bascom) I was not aware of that.

12 A. (Zysk) I don't think we were, no.

13 Q. And is it typical in your experience that a
14 project would be identified as "significant"
15 this late in permitting proceedings?

16 A. (Zysk) It does seem a bit late to identify it
17 as such, yes.

18 Q. So are you aware that the Applicant was asked
19 by DOT to confirm the right-of-way boundaries
20 in April of 2016; they submitted right-of-way
21 width surveys to DOT in April of 2017, and
22 these surveys were rejected by DOT in August
23 of this year?

24 A. (Zysk) We were aware of that, yes.

1 Q. Can a traffic control plan be made without
2 knowledge of the width of the right-of-way on
3 the proposed route?

4 A. (Zysk) In this case I would say probably not.
5 Parts of it could, but not fully.

6 A. (Bascom) If the limit of disturbance is
7 confined to the available right-of-way, then
8 you would need to know the boundaries of the
9 right-of-way to develop the traffic control
10 plan.

11 Q. So the Applicant's construction witnesses
12 estimated that it will take until November
13 for the second survey to be completed. The
14 first survey took DOT three months to reject.
15 So, for the purposes of my question, assume
16 that it would take DOT at least three months
17 to assess the second, more detailed survey.
18 If the SEC and intervenors do not see a
19 complete and accepted survey until January,
20 or even February of 2018, could you give an
21 estimate of when the traffic control plan
22 would be completed, approved by DOT and
23 available to the SEC and intervenors?

24 A. (Taylor) I don't believe we'd be able to give

1 you an answer on how long it would take them
2 to do that.

3 Q. So, Northern Pass indicates in their
4 presentation from Quanta, in part, to DOT,
5 which is the second snip on the screen there,
6 that they plan to submit the Traffic
7 Management Plan to DOT prior to the start of
8 the Project. Would you agree that for the
9 intervenors and SEC to be able to thoroughly
10 assess the effects of traffic delays,
11 closures and detours in the affected areas,
12 the traffic control plan needs to be
13 available to us all well before the end of
14 the hearings?

15 A. (Taylor) That's a reasonable request.

16 MS. PASTORIZA: All right. So,
17 No. 4, Steve.

18 BY MS. PASTORIZA:

19 Q. So on the screen is Page 4 from the same
20 presentation made by the Applicant, PAR and
21 Quanta, to DOT this May. In this
22 presentation to the DOT, the Applicants'
23 subcontractors, PAR and Quanta, give a short
24 list of project experience, but do not show

1 how long each of these projects took.

2 My research shows that the Tehachapi --
3 is that the correct pronunciation? The
4 Tehachapi Renewable Transmission Project took
5 7-1/2 years to construct 3 miles of
6 underground. The SDG&E took a year and a
7 half for 14 miles for the whole project. I
8 could find a breakdown on the underground.
9 PPL Hershey Project, I could not find
10 anything about this except as a withdrawn
11 project due to public resistance. I could
12 not find the Oakland Transmission Project.
13 And the Jefferson-Martin Project came up as
14 done by Black & Veatch with Quanta.

15 So, are you familiar with any of these
16 underground trenching projects and how long
17 they took?

18 A. (Taylor) No.

19 A. (Bascom) I am familiar with some of these
20 projects.

21 Q. Do you know how long they took?

22 A. (Bascom) I believe your estimate from the
23 start of planning to completion for the
24 Tehachapi Renewable Project is approximately

1 accurate. The construction on that project
2 was started entirely overhead, and the
3 community along part of the route objected to
4 a portion of the route, and it was
5 constructed underground as an alternative.
6 And that redesigned process, including the
7 installation, I believe took approximately
8 seven years as you described.

9 Q. And that's the one that you're familiar with?

10 A. (Bascom) Of that first group, yes.

11 Q. Okay. So do you know how long the
12 underground portion itself took once it was
13 designed, permitted?

14 A. (Bascom) I do not know precisely, no.

15 Q. So can you explain why the Applicant did not
16 state on this list how long it took them to
17 do each of the jobs?

18 MR. NEEDLEMAN: Objection.

19 Calls for speculation.

20 CHAIRMAN HONIGBERG: Ms.

21 Pastoriza.

22 BY MS. PASTORIZA:

23 Q. As construction people who might be
24 presenting a project to a client, can you

1 explain why a client would not say how long
2 it took them to do a job that they're
3 presenting as experience?

4 CHAIRMAN HONIGBERG: I don't
5 know that that improves the question.

6 BY MS. PASTORIZA:

7 Q. If you were going to make a resume of your
8 work experience, would you place on it how
9 long those jobs took you to complete?

10 A. (Taylor) Typically we do not.

11 A. (Bascom) I typically would not either unless
12 specifically requested to do so.

13 Q. So, for the HDD, they give a list of five
14 projects. And are you familiar with any of
15 these?

16 A. (Taylor) I am not.

17 A. (Alexander) No.

18 A. (Bascom) I am familiar with two of the
19 projects.

20 Q. Which two of those?

21 A. (Bascom) The Hudson Transmission Project and
22 Florida Power & Light's Miami reconstruction
23 project.

24 Q. So when I was trying to research these, I

1 found the Platte River and Hudson
2 Transmission and the Dominion Project appear
3 to have been done by Mears, which is a
4 subsidiary of Quanta. And do you know who
5 did the Florida Power & Light?

6 A. (Bascom) I believe Mears was also the
7 contractor that did the HDD on that project
8 as well.

9 MS. PASTORIZA: No. 5, Steve.

10 BY MS. PASTORIZA:

11 Q. So this is from Quanta's web site. It shows
12 their contractors for HDD, and PAR is not
13 listed among these. So, do any of you know
14 who is proposed to be doing the HDD for this
15 project?

16 A. (Taylor) Nothing beyond what's been already
17 stated by the Applicant.

18 Q. Do you consider experience to be important in
19 HDD work and safety?

20 A. (Bascom) Yes, generally with any project.

21 Q. Would you consider that whoever PAR Electric
22 is using to give correct engineering
23 decisions for each HDD is important to the
24 safety and quality of the work?

1 MR. NEEDLEMAN: Objection, Mr.
2 Chair. This is all general information
3 regarding HDD that could have and should have
4 been included in their testimony.

5 CHAIRMAN HONIGBERG: Ms.
6 Pastoriza.

7 MS. PASTORIZA: It's related to
8 this recent, to us, proposal from Quanta to
9 DOT, where they do not say who is doing their
10 HDD, though they're listing on their resume
11 their HDD experience.

12 CHAIRMAN HONIGBERG: Overruled.
13 You can answer, if you remember the question.

14 A. (Bascom) If you can repeat the question?

15 BY MS. PASTORIZA:

16 Q. Would you consider whoever PAR Electric is
17 using to give the correct engineering
18 decisions for each HDD is important to the
19 safety and quality of the work?

20 A. (Bascom) I think generally that would be
21 acknowledged, yes.

22 Q. Would you consider that the geotechnical
23 engineer overseeing the HDD and making
24 decisions before and during the HDD is

1 critical to limiting the risk of frac-out and
2 maintaining the safety of the work?

3 A. (Zysk) Yes, I would agree with that.

4 Q. So how can the SEC assess the Project or
5 control the standards for HDD work crew
6 experience if they don't know anything about
7 the HDD contractor?

8 A. (Bascom) I'm not aware to what extent the SEC
9 has knowledge about the contractors going to
10 be used or not used for the Project, so I
11 can't answer personally on that question.

12 Q. So would you consider that them knowing who
13 the contractor is could be helpful in their
14 assessment of the Project?

15 A. (Zysk) Yes.

16 Q. So do you know if DOT has any standards for
17 HDD contractor work experience, New Hampshire
18 DOT?

19 A. (Zysk) I'm not sure what their requirements
20 for the contractors are. I know they have
21 design guides, a design guide for HDD work.

22 Q. And you know that that design guide is
23 entirely voluntary?

24 A. (Zysk) I personally have not seen that guide.

1 I am aware that it exists, but I have not
2 been able to get a copy of it.

3 Q. I have seen it. It's recommendations.

4 MS. PASTORIZA: So, No. 6,
5 Steve. You can start at the top portion of the
6 map.

7 BY MS. PASTORIZA:

8 Q. So this is Exception Request No. 125. And
9 can you see the streams on this map?

10 A. (Taylor) I believe there's one.

11 MS. PASTORIZA: So, Steve, can
12 you scroll down to the next map?

13 BY MS. PASTORIZA:

14 Q. So this is the map where I drew the streams
15 in, to the best of my ability, knowing them
16 fairly well.

17 A. (Taylor) Okay.

18 Q. So assume that the conditions on the ground
19 here are: No. 1, the right-of-way width is
20 unknown; No. 2, the right-of-way will be set
21 at a prescriptive width, most likely 25 feet,
22 the existing pavement width at the most
23 constrained sections, and it will be up to
24 30 feet at some locations where the steep

1 slope on the west side ends and the stream on
2 the east side curves away from the road; and
3 Condition No. 3 is the Gibson Road entry,
4 which is shown here at the very bottom right
5 of the screen has been rebuilt further south,
6 which is also to the right onto 116. So that
7 entry is no longer there.

8 And the legend on the map, the pavement
9 edge is the faint solid gray line; the
10 proposed new splice vault location is a green
11 rectangle; the proposed new HDD bore hole and
12 conduit locations are dashed red lines; the
13 gray dashed and dotted line is the claimed
14 right-of-way of 66 feet; and there is a
15 utility pole between the proposed splice
16 vault location and the HDD exit locations.

17 So, given these conditions, could you
18 describe how the proposed splice vault would
19 be installed and the proposed HDD done in
20 less than a 20-foot-wide workspace with a
21 steep slope down to a stream abutting the
22 proposed HDD exit pits, a fairly steep grade
23 on the road at the proposed exit pit
24 location, and a very steep slope immediately

1 abutting the road on the west side with
2 utility poles?

3 A. (Taylor) There was a lot to that question.

4 Q. I can repeat things one by one if you need
5 that.

6 A. (Taylor) Please.

7 Q. So the right-of-way width is unknown.
8 Because of this, the right-of-way will be set
9 at a prescriptive width. Given that the
10 existing pavement is 25 feet wide, the
11 prescriptive right-of-way would be mostly 25,
12 expanding to 30 feet, and some locations
13 where the stream isn't present on the east
14 side of the steep slope, isn't present on
15 west side.

16 MR. NEEDLEMAN: Mr. Chair, are
17 these meant to be assumptions or facts?

18 CHAIRMAN HONIGBERG: I think she
19 introduced it with assumptions.

20 MS. PASTORIZA: Yes.

21 BY MS. PASTORIZA:

22 Q. Are you following this?

23 A. (Taylor) Yes.

24 Q. Do you need me to repeat something?

1 There is the Gibson Road entry which you
2 see in the lower right is no longer there;
3 it's further south on the road. Do you get
4 that?

5 A. (Zysk) Yes.

6 Q. And there is a utility pole between the
7 proposed HDD pits and the proposed splice
8 vault location. Can you see that?

9 A. (Zysk) Yes.

10 Q. And you can see what the conditions indicated
11 by the various lines and colors are there?

12 A. (Zysk) Yes.

13 Q. So, given these conditions, could you
14 describe how the proposed splice vault would
15 be installed and the proposed HDD be done
16 with less than a 20-foot-wide workspace; with
17 a steep slope down to the stream, abutting
18 the proposed HDD exit pits; a fairly steep
19 grade on the road at the HDD exit pit
20 proposed locations, and a very steep slope
21 immediately abutting the road on the west
22 side with utility poles?

23 A. (Zysk) Let's start with the splice vault.

24 There would have to be, I'm guessing, some

1 temporary relocation of that utility pole to
2 get the overhead line out of the way for both
3 the splice pit and the HDD activity.

4 Obviously, there's going to be some conflict.

5 The splice vault looks like it's in a
6 fairly level area. While I don't disagree
7 there's a steep slope, there looks to be some
8 20-plus feet of a level area, reasonably
9 level area if you're going across the road,
10 not accounting for the longitudinal grade of
11 the road.

12 Given that now, your assumption that the
13 right-of-way is going to be basically at the
14 edge of the road, so that would put everybody
15 outside the right-of-way. So I'm not sure
16 that requires easements or some temporary
17 arrangement with the landowner, assuming that
18 the landowner's property would then come up
19 to the edge of the road.

20 Q. So, without an easement from the abutting
21 landowner, could this be done here at this
22 corner?

23 A. (Zysk) Yes.

24 Q. So how would it be done without any easement

1 within the width of the pavement?

2 A. (Taylor) Well, I think it would have to be
3 within the pavement, under the assumptions
4 that you have put forward.

5 Q. So everything would be under the pavement?

6 A. (Taylor) Under the assumptions you've laid
7 out, if it's a narrower right-of-way, which
8 is essentially equal to the pavement width or
9 slightly larger. If the splice pit could not
10 be outside the right-of-way, then that would
11 push it into the pavement area. That's how
12 it could be done under this scenario.

13 Q. So if it were done that way, would it require
14 a road closure?

15 A. (Taylor) I think by default it would if you
16 were constructing in the middle of the road.

17 Q. And what area would the crane for the splice
18 vault take up with the outriggers?

19 A. (Taylor) I couldn't say. It would depend on
20 the equipment that the contractor was using.

21 Q. An estimate if it was on the larger side?
22 Twenty feet, 30 feet?

23 A. (Taylor) Somewhere between 20 and 30 feet of
24 width, sure.

1 Q. What's your estimate of increase in
2 construction time if the right-of-way width
3 at this HDD location is two rods pavement
4 width?

5 A. (Zysk) An increase in construction time from
6 the current situation?

7 Q. From the 66-foot right-of-way plan.

8 A. (Zysk) There would be a requirement to repave
9 the road. So there would be some additional
10 time.

11 Q. But you don't think there would be an
12 increase in actual construction time with the
13 width constraint?

14 A. (Zysk) With the road closed? There may be
15 some, not -- it wouldn't double it or
16 something along those lines. There might be
17 some small increase.

18 MS. PASTORIZA: So, Steve,
19 Page 7.

20 BY MS. PASTORIZA:

21 Q. So this shows the underground profile of the
22 same location. The bore hole notation says
23 rock depth, 43.5.

24 Given that the surface altitude is 1145

1 and the boring goes down to 1080, is it
2 reasonable to assume the two 18-inch bore
3 holes would be going through bedrock?

4 A. (Zysk) I would say so, yes.

5 Q. Would this increase the drilling time?

6 A. (Zysk) I believe it would go into rock,
7 regardless of whether the splice pit was --
8 or the location of the HDD operation was,
9 where it is shown on the plan or if it was
10 moved 20 feet into the roadway. You're going
11 to hit rock regardless, based on this
12 information. So it would not increase the
13 time as it is projected right now.

14 Q. But my question is, rock conditions in HDD,
15 does that slow down the boring speed?

16 A. (Zysk) Yes.

17 Q. And does the rock make it more difficult to
18 keep to the proposed bore path?

19 A. Not necessarily, no. It's just a harder --
20 it takes longer for them to drill through it.

21 Q. So are the 60-foot geotechnical borings at
22 the beginning and end of this HDD enough
23 information to fully assess the issues with
24 the HDD, in terms of underground conditions?

1 A. (Taylor) The two bores or the two cores that
2 I think you're referencing are typical of
3 what we see for this type of design. So it
4 could be, subject to what is actually
5 encountered during the drill.

6 Q. So, for a reasonable safety level, or if you
7 wanted to do a frac-out assessment, how many
8 borings might be done for HDD of this length?

9 A. (Taylor) Again, as I indicated, we typically
10 would see a geotechnical boring at the entry
11 area and exit area. So this would be in line
12 with that for an HDD drill.

13 Q. And are there any cases where you would do
14 more borings?

15 A. (Bascom) From my experience on some other
16 projects, usually an initial set of
17 geotechnical borings might be done near the
18 entry and exit pit, and then additional
19 borings might be warranted once the drilling
20 contractor has been selected and a more
21 detailed plan has been developed for that
22 particular site.

23 A. (Taylor) I'd add one thing to that, to
24 Rusty's statement. Doing additional bores

1 along the length of an HDD actually creates a
2 potential area for a return.

3 Q. So if you had a geotechnical boring which led
4 to a frac-out, what would be your next step
5 in assessment?

6 MR. NEEDLEMAN: Mr. Chair,
7 objection. This sounds to me like this is
8 generic testimony.

9 CHAIRMAN HONIGBERG: Ms.
10 Pastoriza.

11 MS. PASTORIZA: I was just
12 generally curious. I can move on.

13 BY MS. PASTORIZA:

14 Q. So, does the road grade here look problematic
15 for setting up an HDD exit pit and pulling
16 conduit?

17 A. (Zysk) I would say no.

18 Q. So when they say they need a flat, level
19 surface to work, that's a flat, level
20 surface? Or are they simply going to make it
21 into a flat, level surface?

22 A. (Zysk) I believe when they're referring to
23 "flat" and "level," it's more across the road
24 than longitudinally along the road.

1 Q. And what shoring, if any, is needed around an
2 exit or entrance pit for HDD?

3 A. (Zysk) I think that would depend on the
4 material that they're exiting into.

5 A. (Bascom) Generally the area around the entry
6 and exit pit are contained to capture and
7 recover the drilling mud that's used as part
8 of the drilling process. But typically
9 sheeting and shoring where you would normally
10 be having a worker enter into the pit is not
11 common for that type of installation.

12 Q. So the red lettering in the upper right-hand
13 corner says, "Actual proposed depth of
14 utilities to be updated in final drawings."

15 So, deeper trenches than those shown
16 would require greater construction times;
17 would they not?

18 A. (Zysk) Generally, yes.

19 Q. And this would be due to material excavation,
20 more trucking, more fill, more water pumping
21 and spoils dumping. Any other considerations
22 that would lead to a longer construction
23 time?

24 A. (Bascom) As the trench depth becomes deeper,

1 there might be a necessity to introduce
2 sheeting and shoring, where it might not
3 otherwise be necessary for a shallower
4 trench, and that can add construction time as
5 well.

6 Q. And as the trenches get deeper, will the
7 thermal dissipation slow down, and will this
8 require more fluidized thermal concrete?

9 A. (Bascom) The volume of material introduced
10 back in the trench would include FTB, most
11 likely, and it's possible additional material
12 might be used, depending upon the specifics
13 of the soil parameters and the native
14 conditions at that location.

15 Q. So the amount of FTB would be the same,
16 regardless of the depth?

17 A. (Bascom) It would be site-specific.

18 Q. And what depth does OSHA require trench
19 sheeting and shoring?

20 A. (Zysk) I believe it's not more than 5 feet.

21 Q. And how much space do the noise barriers for
22 the HDD take up?

23 A. (Taylor) What do you mean, "noise barriers"?

24 Q. Well, HDD is known to be very loud, and I'm

1 assuming there would be noise barriers set up
2 probably on at least two sides of the HDD
3 rig.

4 A. (Zysk) We haven't seen anything relative to
5 this.

6 Q. So you know of no plans by the Applicant for
7 noise mitigation at HDD sites?

8 A. (Taylor) Not that I'm aware of.

9 MS. PASTORIZA: No. 8, Steve.

10 BY MS. PASTORIZA:

11 Q. So, this shows Exception Request No. 125, the
12 same one farther north. The red dashed lines
13 show the proposed 18-inch-diameter bore holes
14 and cable locations; the faint gray lines are
15 the existing pavement, and the dashed gray
16 lines are the right-of-way boundaries that
17 the Applicant drew in at 66 feet. I measure
18 900 feet of bore holes and lines outside the
19 traveled way just in this screenshot. In the
20 entire exception request there is 1500 feet
21 of 18-inch bore holes outside the pavement
22 that would be filled with conductor and
23 bentonite slurry, I think.

24 If the right-of-way here being unknown

1 is set at the prescriptive width of the
2 travel way, the HDD bore hole paths as shown
3 would be on private property for a
4 considerable distance; would they not?

5 A. (Taylor) It would appear so.

6 Q. Excuse me?

7 A. (Taylor) It would appear so.

8 Q. Thank you.

9 If the Northern Pass were given the
10 travel way to work within, would you agree
11 that the need for a 20-foot separation of the
12 cables at depth, the foot-and-a-half diameter
13 of the bore holes, and the only 5-foot
14 accuracy of the tracking of the boring would
15 make it highly improbable that Northern Pass
16 could guarantee no trespass on private
17 property by its bore holes and conduit?

18 MR. NEEDLEMAN: Objection.

19 Again, all generic information that could have
20 been included.

21 CHAIRMAN HONIGBERG: Ms.
22 Pastoriza.

23 MS. PASTORIZA: This is an
24 exception request that was recently posted, and

1 the survey rejection was also recently posted.

2 MR. NEEDLEMAN: The exception
3 request is recent, but the design is the same
4 issue.

5 MS. PASTORIZA: The survey --

6 MR. NEEDLEMAN: To the extent
7 the witnesses had concerns about these sorts of
8 issues, they could have raised them, and in
9 fact did raise them with respect to temporary
10 easement needs in places.

11 MS. PASTORIZA: The survey is
12 new information. The rejection of the survey
13 now calls into question every width drawn and
14 permit plans.

15 CHAIRMAN HONIGBERG: Overruled.
16 You can continue.

17 BY MS. PASTORIZA:

18 Q. Do you want me to repeat the question?

19 A. (Taylor) Yes, please.

20 Q. If Northern Pass were given the travel way to
21 work within, which is roughly 25 feet wide,
22 would you agree that the need for 20-foot
23 separation of the cables at depth, the
24 foot-and-a-half diameter of the bore holes,

1 and only the 5-foot accuracy of the tracking
2 for the HDD would make it highly improbable
3 that the Northern Pass could guarantee no
4 trespass on private property by its bore
5 holes and conduit at this location?

6 A. (Taylor) Based on those assumptions, it would
7 definitely be tight. But I would defer to
8 see an actual alignment and layout for how
9 that might be proposed to give you a
10 definitive answer, yes or no.

11 MS. PASTORIZA: No. 9, Steve.

12 BY MS. PASTORIZA:

13 Q. So this is a map of hydrocarbons and
14 groundwater at the corner of 116 and 112 in
15 Easton. So if you accept this map as
16 accurate, how might the remediation necessary
17 at this former gas station site delay
18 construction?

19 MR. NEEDLEMAN: Objection. This
20 is information that could have been included
21 and wasn't. Nothing new here.

22 CHAIRMAN HONIGBERG: Ms.
23 Pastoriza.

24 MS. PASTORIZA: Well, there's an

1 exception request that comes up for this corner
2 and it's related to this question.

3 CHAIRMAN HONIGBERG: Overruled.
4 You can continue.

5 A. (Taylor) Could you repeat your question?

6 BY MS. PASTORIZA:

7 Q. How much time might the remediation necessary
8 at this former gas station site delay
9 construction?

10 A. (Taylor) I wouldn't be able to speak to that.
11 I'm not familiar with the remediation
12 necessary for this site.

13 Q. So you would not know if it is typical
14 practice to notify the Department of
15 Environmental Services when you're on a
16 geotechnical boring crew and you encounter
17 hydrocarbons?

18 A. (Zysk) You would certainly notify your
19 client, who I would then expect to run that
20 up to the appropriate agencies, yes. The
21 drilling contractor would not make
22 necessarily a direct report.

23 Q. And No. 10. This is the same location. The
24 exception request for this location does not

1 include moving the trench to the other side
2 of the road to attempt to avoid the
3 hydrocarbons. Would normal practice be to
4 survey the site for contamination and decide
5 on the location of the trenching that was
6 least likely to spread the contamination?

7 A. (Zysk) If a remediation were not in process,
8 I would say yes. Sounds like there is
9 something in process, based on what you've
10 described.

11 Q. I don't know of anything in process. I only
12 know that hydrocarbons were encountered
13 there.

14 A. (Zysk) Okay. You've just mentioned a
15 remediation of a gas station.

16 Q. I only assume that if the Northern Pass were
17 to build here, they would have to do
18 remediation before construction.

19 A. (Bascom) As a general strategy in terms of
20 selecting an alignment, one would want to
21 avoid potentially contaminated soils. And so
22 designing the route to avoid those areas
23 might be advantageous, but I don't know that
24 we can speak to this specific location.

1 Q. So if the right-of-way width on 116 from
2 Franconia, south of the town center to the
3 Easton border, roughly 7 miles, is three rods
4 rather than the four rods shown on Northern
5 Pass's DOT permit packages, how much might
6 that increase construction times?

7 A. (Taylor) I don't know that we could answer
8 that without seeing an alignment that would
9 be proposed under those right-of-way
10 conditions.

11 Q. Can we assume it would take longer because
12 there is a narrower area to work within?

13 A. (Taylor) Not necessarily.

14 Q. So how could an area be narrower yet not slow
15 down the process?

16 A. (Taylor) Again, without seeing the alignment,
17 whether it's off to one side of the road, in
18 one continuous straight run going back and
19 forth across the road, whether there was one
20 or many trenchless versus open trench,
21 there's a lot of variables there. So those
22 variables could in fact be in play currently,
23 and they could be similar under the scenario
24 that you're mentioning.

1 Q. Has the Applicant provided any documentation
2 that they have acquired the upland locations
3 required by DOT and DES for dumping the water
4 that would be pumped for the trenches?

5 MR. NEEDLEMAN: Objection.

6 Again, calls for generic testimony.

7 CHAIRMAN HONIGBERG: Ms.

8 Pastoriza.

9 MS. PASTORIZA: We're dealing
10 with new information coming in, and I'm
11 wondering if there's new information that has
12 come in since April that I simply haven't seen
13 and that these men know about.

14 CHAIRMAN HONIGBERG: Overruled.

15 You can answer, if you know.

16 A. (Taylor) I'm not aware of any, no.

17 Q. Without such locations, how would
18 construction proceed?

19 A. (Taylor) Let me step back. Repeat your
20 question, the first question, and then I'll
21 jump to this one.

22 Q. If the Northern Pass has no locations, upland
23 locations that they've acquired to dump the
24 water from their trenches, which is required

1 by DOT and DES, how would they proceed with
2 construction?

3 A. (Taylor) If that's a requirement, then they
4 would have to get those approvals.

5 Q. Has the Applicant provided any documentation
6 that you have seen since April that they have
7 secured any laydown or staging areas in the
8 southern 52 miles of the route?

9 A. (Taylor) I'm not aware of any.

10 Q. And without such locations, how would
11 construction proceed?

12 A. (Taylor) Well, if they don't get additional
13 laydown and staging areas, they would have to
14 stage the job from what they have.

15 Q. And that would increase construction times?

16 A. (Taylor) I would think so.

17 Q. And that would increase traffic?

18 A. (Taylor) I think it would be the same amount
19 of traffic, but traffic extending over much
20 larger areas of the Project corridor.

21 Q. Given that they are not based on a legal
22 survey of road width, would you say the
23 Applicant's statement that their construction
24 plans are at 60 percent is accurate?

1 A. (Taylor) There's a yes and no to that.
2 Sixty-percent plans can be using best
3 available data, which I believe is what they
4 have indicated that they're working with and
5 through. But the no is that, historically on
6 projects that I have seen, by the time we're
7 at 60 percent, property rights and boundaries
8 are fairly firm in most instances.

9 Q. So the Applicant has said that there will
10 always be a lane open at all construction
11 sites on the 52-mile buried section of the
12 route. Have you seen any contract since you
13 filed your testimonies that ensures this?

14 A. (Taylor) I'm not aware of any contracts.

15 A. (Zysk) Contracts? No.

16 Q. So, to summarize, we have a project without a
17 legal project boundary survey, without
18 accepted plans based on the survey, without a
19 traffic control plan, without staging areas,
20 without spoils storage areas, without
21 concrete batch plans, and without dewatering
22 areas. What potential problems do you see
23 arising if a decision is made regarding
24 permitting this project without this

1 information?

2 MR. NEEDLEMAN: Objection.

3 Again, calls for general testimony. And I
4 don't know whether those are assumptions or
5 stated facts.

6 CHAIRMAN HONIGBERG: Yeah, you
7 were layering speculation on speculation on
8 speculation.

9 BY MS. PASTORIZA:

10 Q. If we assume those to be true based on new
11 information that we have and have not
12 received, what potential problems might be
13 happening?

14 CHAIRMAN HONIGBERG: I'm going
15 to sustain the objection.

16 BY MS. PASTORIZA:

17 Q. What potential problems do you see with
18 construction beginning in the spring of 2018
19 if the Project were permitted?

20 MR. NEEDLEMAN: Objection. This
21 is calling for basic generic testimony. That's
22 everything that's already been included in the
23 testimony.

24 CHAIRMAN HONIGBERG: Yeah, I

1 don't -- what is this related to?

2 MS. PASTORIZA: All right.

3 That's good. I'm done. Thank you.

4 CHAIRMAN HONIGBERG: Next on the
5 list is Ms. Saffo, but I know she's not here.

6 Ms. Manzelli, that puts you
7 up.

8 CROSS-EXAMINATION

9 BY MS. MANZELLI:

10 Q. Good afternoon. My name is Amy Manzelli,
11 representing the Forest Society. So I want
12 to start with one of the rules that governs
13 this proceeding. Have you guys had occasion
14 to review this rule? That's Administrative
15 Rule Site 301.08(d)(5). Well, I'm going to
16 get to (d)(5.) 301.08?

17 A. (Zysk) Not specifically, no.

18 Q. Okay. So let's walk through it. This
19 particular rule is about the effects on
20 public health and safety. I've highlighted
21 the pertinent part here. Applications have
22 to include the following information
23 regarding the effects of and plans for
24 avoiding, minimizing or mitigating the

1 potential adverse effects of the proposed
2 energy facility on public health and
3 safety --

4 CHAIRMAN HONIGBERG: Slow down
5 when you read, please.

6 BY MS. MANZELLI:

7 Q. So, just walking through here, you can see
8 Section D applies to all energy facilities;
9 right?

10 A. (Zysk) Yes.

11 Q. And then, finally, getting to Section 5, you
12 can see that that requires a description of
13 any additional measures taken or planned to
14 avoid, minimize or mitigate the public health
15 and safety impacts that would result. And
16 here what I'm talking with you about, of
17 course, is that first part from the
18 construction, not from the operation, but
19 from the construction of the proposed
20 facility, and the alternative measures
21 considered, but rejected by the Applicant.
22 Do you see that provision?

23 A. (Taylor) Yes.

24 A. (Zysk) Yes.

1 Q. Okay. So, based on what you've seen so far,
2 new and old, have you seen anything from the
3 Applicant that is a description of any
4 additional measures taken or planned to
5 avoid, minimize or mitigate, et cetera, as
6 this rule discusses?

7 A. (Zysk) I know they put out and we did review
8 some of their alternative route analysis that
9 they did early on and rejected for various
10 reasons to come up with the route they have
11 now.

12 Q. And do you consider those to be public
13 health-related reasons?

14 A. (Zysk) In part, yes.

15 Q. Okay. Anyone else?

16 A. (Taylor) I have nothing further to add.

17 Q. Okay. Now, I understand that some or perhaps
18 all of you have you had an opportunity to
19 review what I'll call the co-location study.
20 Is that correct?

21 A. (Zysk) I have not reviewed that.

22 Q. And what I was going to do is further
23 identify the report that I'm talking about.
24 This is... it's in the record in this case

1 as Applicant's Exhibit 179. And it is from a
2 company called Corrpro, and it's a
3 Preliminary Interference Assessment.

4 So now that I have more specifically
5 identified that, have any of you had a chance
6 to review this?

7 A. (Alexander) Should we be seeing something on
8 the screen?

9 Q. I don't have a hard copy with me.

10 MS. MANZELLI: I don't know,
11 Dawn, if you're able to put Applicant's 179 on
12 the screen. I can certainly try to put my own
13 with the ELMO on my laptop. Thank you, Dawn.

14 BY MS. MANZELLI:

15 Q. So this is just the first page of what's --
16 you know, it has a few pages following. Is
17 it on your screen yet? There we go.

18 A. (Taylor) Just came up.

19 Q. Okay. So let me give you a moment to at
20 least scan the first page here.

21 (Pause)

22 Q. Now, this was provided in this case under a
23 cover letter dated June 30th, 2017, from Tom
24 Getz, from the legal team from McLane

1 Middleton. And let me just back up.

2 I see you guys studying this intently.
3 Does this look familiar to any of you? Do
4 any of you have any recollection of having
5 seen this before?

6 A. (Taylor) I have not reviewed this document,
7 no.

8 A. (Bascom) I have not seen it.

9 A. (Zysk) Not this one, no.

10 Q. Okay. Have any of you reviewed any
11 information about the gas pipeline that, if
12 this project were to go through, this project
13 would be co-located with that gas pipeline?

14 A. (Zysk) Any information? Yes.

15 Q. Okay. Could you identify what that
16 information is?

17 A. (Zysk) I have a couple of different ones. I
18 have one that's "Criteria for Pipelines
19 Co-Existing with Electric Power Lines," dated
20 October 2015, by the INGAA Foundation. And I
21 have another one by the Canadian Association
22 of Petroleum Producers. That is their guide
23 for the influence of high-voltage DC power
24 lines on metallic pipelines.

1 Q. Thank you for that. And are these materials
2 that you yourself researched and obtained?
3 Or how did you get these materials?

4 A. (Zysk) I researched and obtained them myself.

5 Q. Okay. And why did you do that?

6 A. (Zysk) It was discussed at some point along
7 the line.

8 Q. Okay. When you say "it," what do you mean?

9 A. (Zysk) The potential for co-location, it was
10 brought up as a concern. And this was after
11 we had submitted our testimony.

12 Q. Understood. It was probably about the time
13 that this study was produced because there
14 were some pleadings that led to the
15 production of this study.

16 So I had some questions about whether
17 this study was a preliminary study or whether
18 this was a full and complete evaluation of
19 all issues associated with such potential
20 co-location. But what I'm hearing is you
21 have not reviewed this study sufficiently to
22 answer that type of question; is that
23 correct?

24 A. (Taylor) That's correct.

1 A. (Zysk) Yes.

2 Q. Okay. So do you have concerns about the
3 potential co-location of the proposed project
4 with the Portland Natural Gas pipeline?

5 MR. NEEDLEMAN: Objection.
6 Location of the line was well known when they
7 did their work. To the extent they had
8 concerns, that could have and should have been
9 raised.

10 CHAIRMAN HONIGBERG: Ms.
11 Manzelli.

12 MS. MANZELLI: My understanding
13 is that the Application did not contain any
14 information about the Portland Natural Gas
15 pipeline and that it was only through the
16 course of this calendar year that this study
17 was produced and further information was known.

18 CHAIRMAN HONIGBERG: It's well
19 known where the Portland Natural Gas line is
20 and that this was going to be co-located.
21 That's been known from the beginning.

22 MS. MANZELLI: My understanding
23 is that was not depicted on the original set of
24 project maps.

1 CHAIRMAN HONIGBERG: It's
2 sustained.

3 MS. MANZELLI: Mr. Chair, could
4 you please explain the rationale for why that
5 is sustained?

6 CHAIRMAN HONIGBERG: Everyone
7 knows where the Portland Natural Gas
8 transmission line is. Everybody knows that the
9 existing corridor is co-located with it and
10 this is going in the same corridor. That's
11 been known from the beginning.

12 MS. MANZELLI: And so we're not
13 allowed -- I'm not allowed to ask the witnesses
14 questions about it because it is not, quote,
15 unquote, "new information"?

16 CHAIRMAN HONIGBERG: If they had
17 opinions about it and concerns about it, they
18 were free to express them in their prefiled
19 testimony. I'm not going to expand the scope
20 of their prefiled testimony.

21 MS. MANZELLI: Are you making a
22 ruling that the Counsel for the Public's
23 witnesses, what they may think about the
24 Portland Natural Gas pipeline co-location is

1 irrelevant or immaterial or unduly repetitious?

2 CHAIRMAN HONIGBERG: I don't
3 think I'm ruling any of those. I sustained the
4 objection to your question on the grounds that
5 if they had opinions about it, they needed to
6 be expressed in their prefiled testimony. And
7 as we've gone over numerous times in the
8 cross-examination of witnesses other than the
9 Applicant's witnesses, because they are
10 different in this context, we're not going
11 beyond the scope of their prefiled testimony.
12 If there's new information that has come in,
13 and there's been plenty of new information,
14 then intervenors are free to ask about that.
15 And there was another exception, the true
16 clarification. There was the "I don't
17 understand something" question when a
18 legitimate "I don't understand." And there's
19 been a few of those as well.

20 MS. MANZELLI: Yeah. And let me
21 just clarify a word that you just said. An
22 "exception" to what? You just said there was
23 another exception, and then you stated what
24 that was. An exception --

1 CHAIRMAN HONIGBERG: We're not
2 going to play games, Ms. Manzelli.

3 MS. MANZELLI: I'm not --

4 CHAIRMAN HONIGBERG: The
5 objection's sustained. If you want to have a
6 conversation with some of the other intervenors
7 about prior rulings that have happened orally
8 when others have been questioning, I encourage
9 you to confer with Mr. Pappas, Mr. Aslin or any
10 of the other lawyers who have been here.

11 MS. MANZELLI: Mr. Chair, let me
12 assure you that I have had such conferences,
13 and I have reviewed the --

14 CHAIRMAN HONIGBERG: Why don't
15 you ask your next question, Ms. Manzelli.

16 MS. MANZELLI: -- transcripts at
17 length.

18 I'd like to make an oral
19 objection to the ruling on the question that
20 I just tried to ask and to the manner in
21 which cross-examination has been handled for
22 Track 3. So, my understanding --

23 CHAIRMAN HONIGBERG: Track 3?

24 MS. MANZELLI: Sorry. My

1 understanding of Track 3 is the Counsel for the
2 Public's witnesses and the intervenors'
3 witnesses.

4 CHAIRMAN HONIGBERG: Everybody
5 but the Applicant.

6 MS. MANZELLI: Yes. Track 1 was
7 the first part of the Applicant; Track 2, the
8 second part of the Applicant; Track 3, Counsel
9 for the Public and Intervenors. That's what I
10 meant when I said Track 3.

11 CHAIRMAN HONIGBERG: So you want
12 to take time right now to make a motion of some
13 sort or a request for reconsideration or --
14 what exactly are we doing here instead of
15 asking questions of the witnesses who are in
16 front of you?

17 MS. MANZELLI: And I am prepared
18 to ask questions. I don't agree with the
19 limitations put on the questions I'm attempting
20 to ask, and so I'd like to make a statement on
21 the record about the Forest Society's position
22 on those limitations. And I'd like to make
23 this on the record so that I don't have to do
24 it again, so that we can just state our

1 objection and then move on so the rest of the
2 many witnesses we have for what I refer to as
3 Track 3, we don't have to keep doing this.

4 CHAIRMAN HONIGBERG: Okay.
5 Whatcha got?

6 MS. MANZELLI: All right. I
7 want to first touch on the procedural history
8 of how I understand this issue has come to the
9 floor today.

10 On March 7th, 2017, Applicants
11 made a motion to clarify the use of "friendly
12 cross-examination." The Forest Society
13 objected to that. On March 31st, 2017, the
14 Chair issued an order. It recited the
15 correct standards, RSA 541-A:33, IV and
16 Administrative Rule Site 202.11, and it
17 denied the motion. In particular, it said,
18 quote, "The Presiding Officer cannot, as
19 requested by the Applicant, make a prehearing
20 determination that all friendly
21 cross-examination will impede the prompt and
22 orderly conduct of the proceeding. Such a
23 determination must be made during the course
24 of the proceeding." That was at Pages 3 and

1 4. So that was March of this year.

2 Next up, more recently in
3 August, the Applicants filed another motion
4 to determine the extent of friendly cross.
5 That requested an order, quote, "requiring an
6 offer of proof at a prehearing conference..."
7 I'll skip rest of that. The Forest Society
8 again objected.

9 The written order came out on
10 September 12th, and it denied the specific
11 request. It denied the request for a
12 prehearing conference; but otherwise, it
13 granted the motion.

14 CHAIRMAN HONIGBERG: Oh, I would
15 disagree with that statement.

16 MS. MANZELLI: I have a quote.

17 CHAIRMAN HONIGBERG: Go ahead.

18 MS. MANZELLI: It ordered,
19 quote, "On or [sic] before September 22, 2017,
20 each intervenor shall file a list identifying
21 each witness that the intervenor seeks to
22 cross-examine (excluding the remaining
23 Applicant witnesses). Regarding each witness
24 or witness panel, the list shall include the

1 following information: Whether the examining
2 party believes that its position is adverse to
3 the witness, including all reasons; and if the
4 examining party is not adverse to the witness,
5 the examining party must identify the areas of
6 cross-examination and why cross-examination is
7 necessary to a full and true disclosure of the
8 facts." And that was part of the order at
9 Pages 3 and 4.

10 CHAIRMAN HONIGBERG: And where
11 was the word "granted" in that order?

12 MS. MANZELLI: I don't know if
13 the word "granted" was in that order. So I am
14 happy --

15 CHAIRMAN HONIGBERG: Good call.

16 MS. MANZELLI: -- striking that
17 characterization. But I do think that I have
18 accurately quoted the order.

19 CHAIRMAN HONIGBERG: And has
20 anyone been prevented from asking questions of
21 a witness categorically? You're not adverse
22 and you haven't adequately identified the
23 reasons. Answer, no. It has all been done on
24 a question-by-question basis, as stated in the

1 March 31st Order. So we are proceeding
2 consistently with that. No one who filed
3 either good-faith or not good-faith responses
4 to the Order you were talking about has been
5 told, no, you may not ask questions because you
6 didn't adequately identify anything. Because
7 many people did not take that effort seriously
8 other than putting a lot of time into
9 preserving every possible angle, every possible
10 reason they might ask a witness a question.
11 But no one was stopped. No order has been
12 entered orally or otherwise preventing any
13 intervenor from questioning witnesses.
14 Specific questions have drawn objections. Many
15 of those objections have been overruled. Many
16 objections have been sustained.

17 MS. MANZELLI: Following that
18 order, the Forest Society moved for rehearing,
19 many other parties have joined, and that motion
20 is now pending.

21 The next part of the
22 procedural history is that on October 6th
23 there were a series of rulings that you've
24 just described specific to questions that

1 arose at the first time -- or the first day
2 that cross-examination of non-Northern Pass
3 witnesses occurred; and in this case, it was
4 a witness for the Counsel for the Public.

5 Over the course of
6 October 6th, the Chair made several rulings
7 contained throughout the hundreds of pages of
8 transcripts that day. And I would submit
9 that these rulings were not entirely clear
10 when they were made and have not become clear
11 over the course of time. There is no written
12 order, they are not consistent with each
13 other, and they're not implemented
14 consistently among all witnesses. In
15 particular, it seems that the most stringent
16 approach is with represented intervenors, the
17 medium stringent is for Counsel for the
18 Public, and the least stringent is with the
19 pro se intervenors. Now, we have tried to
20 understand what these limits are, and the
21 gist seems to be that all witnesses for all
22 intervenors, and Counsel for the Public, are
23 friendly to each other; in other words, they
24 are non-adverse; and further, this so-called

1 "friendly cross" is not allowed unless, and
2 there are a couple of exceptions, and that's
3 why I asked earlier when you were making an
4 exception, to what were you making an
5 exception.

6 CHAIRMAN HONIGBERG: Ms.
7 Manzelli, do you have any further questions for
8 this panel?

9 MS. MANZELLI: Yes, I do.

10 CHAIRMAN HONIGBERG: Whatever
11 you need to say further beyond what you've said
12 you need to put in writing.

13 MS. MANZELLI: Mr. Chair, we are
14 in the process of writing a motion for
15 rehearing based on the October 6th rulings from
16 the Bench. But I would point out that that
17 motion is not due for 30 days from the time of
18 those rulings; yet, the proceedings are under
19 way. I certainly don't want to put the
20 proceedings on hold.

21 CHAIRMAN HONIGBERG: Yes,
22 actually, you do. But you're not going to make
23 that request because it would be outrageous.

24 So what is your next question

1 for the witnesses who are in front of you
2 waiting to be asked another question?

3 MS. MANZELLI: With all due
4 respect, the Forest Society does not wish to
5 delay these proceedings.

6 CHAIRMAN HONIGBERG: What is the
7 next question you have for the witnesses in
8 front you? If you do not one ask one, I will
9 assume you have no more.

10 MS. MANZELLI: I just want to
11 make sure that I'm clear with what's happening
12 now, is that I am not allowed to state an
13 objection on the record to a question that I
14 tried to --

15 CHAIRMAN HONIGBERG: An
16 objection to what?

17 MS. MANZELLI: To the limitation
18 that has been placed upon the Forest Society in
19 undertaking cross-examination of the Counsel
20 for the Public's witnesses. If I understand
21 that correctly, I'm ready to move on to my next
22 questions.

23 CHAIRMAN HONIGBERG: And you are
24 free to make offers of proof regarding

1 questions to which objections are sustained.
2 If you choose to take advantage of that, that's
3 fine. If you have concerns about what you
4 perceive to be inconsistent rulings, you need
5 to put that in writing. And whether you think
6 you have 30 days -- if you have a problem, you
7 should alert the tribunal in writing when you
8 can. It's not going to get addressed orally.

9 MS. MANZELLI: Understood.

10 CHAIRMAN HONIGBERG: Do you want
11 to make an offer of proof on the question, the
12 objection to which was sustained --

13 MS. MANZELLI: Yes.

14 CHAIRMAN HONIGBERG: -- if they
15 were allowed to testify.

16 MS. MANZELLI: Yes. I have some
17 concrete illustrations from today of how I
18 believe that a different standard is being used
19 for witnesses that appear to be friendly. But
20 I'm working through the determination to not
21 raise that any further right now and make my
22 offer of proof.

23 So I would like -- I would
24 have discussed with this panel the fact that

1 the co-location study that was done by the
2 Applicant was preliminary in nature and was
3 not a full analysis of the issues associated
4 with the prospective co-location. All right.
5 Next topic.

6 MS. MANZELLI: Dawn, could you
7 please turn on the ELMO?

8 BY MS. MANZELLI:

9 Q. All right. This is one of the project maps.
10 I believe this is Applicant's Exhibit 2. Is
11 that correct? It's Bates stamped APP 67741.
12 And you can see here that this depicts a
13 portion of the proposed route in Clarksville.
14 Is it up on your screen?

15 A. (Taylor) It is.

16 A. (Alexander) Yes.

17 MS. MANZELLI: Now, I do want to
18 state for the record, I understand that this is
19 the August version of the plan set and that a
20 more recent plan set is available. I don't
21 have that with me today. But I don't think
22 that it affects my questions here.

23 BY MS. MANZELLI:

24 Q. So are you aware generally -- well, first of

1 all, are you aware that the Forest Society
2 has some property ownership on this side of
3 the river?

4 A. (Taylor) I am not aware of that, no.

5 Q. Are you aware of a parking lot maintained in
6 this vicinity here, right near to the right
7 of the symbol of Route 3?

8 A. (Zysk) Yes.

9 Q. That's the Forest Society's parking lot that
10 they maintain for fishing access to the
11 river. Based on the testimony that you
12 rendered earlier today and your understanding
13 of the exception requests, what do you think
14 will be the impact to that parking lot if
15 this project were to be constructed?

16 A. (Taylor) If I have the area correctly,
17 there's I recall an HDD entry pit just south
18 of that area, with the work area extending to
19 the south. So, impacts would be during
20 construction with the one lane of traffic,
21 presumably next to the HDD entry pit work
22 area, getting through that work zone. And in
23 this case, it would be a northbound
24 right-hand turn in; or conversely, if you

1 were exiting and taking a right-hand going
2 north, there would be interplay with the
3 traffic stacking.

4 Q. Understood. And do I understand from your
5 testimony this morning that that impact would
6 exist for at least six weeks?

7 A. (Taylor) I'd have to go back and look at that
8 exception request for what they were
9 indicating. But that sounds correct.

10 Q. And generally, that would be if things go
11 according to plan. So it could be longer,
12 but we don't know how it's going to unfold.

13 A. (Taylor) Correct.

14 Q. This is from the same exhibit. This is Bates
15 stamped APP 67843. And this shows some of
16 the Kauffmann Forest, which is owned by the
17 Forest Society. I think it's going to be
18 very faint on your screen. But can you see
19 the label "Kauffmann tract," "Kauffmann
20 tract" --

21 A. (Taylor) Yes.

22 Q. Okay. So you agree that in some locations,
23 and this is one example, that the height of
24 the poles is planned to be greater than the

1 distance from the base of the pole to the
2 edge of the right-of-way; right?

3 MR. NEEDLEMAN: Objection.

4 There's nothing new here at all. This pertains
5 to testimony that was previously filed.

6 CHAIRMAN HONIGBERG: Ms.
7 Manzelli.

8 MS. MANZELLI: Same response,
9 that there should be no prohibition to
10 addressing information that is relevant,
11 material and not unduly repetitious.

12 CHAIRMAN HONIGBERG: Sustained.

13 MS. MANZELLI: So I'd like to
14 make an offer of proof, that I would have
15 discussed with this panel their opinion, if
16 they had any, about the risk of infrastructure,
17 Northern Pass infrastructure falling outside of
18 the right-of-way; and if it were to be designed
19 to not fall in a tipping-over fashion, but to
20 fall in more of a crumbling fashion, whether
21 they would have concerns with large towers
22 crumbling in a narrow right-of-way where there
23 is also co-located an underground gas pipeline.

24 BY MS. MANZELLI:

1 Q. All right. Given the revisions to the
2 project maps that have occurred this year --
3 and let me back up for a second and strike
4 that question.

5 My understanding is that there were
6 something like a 188 exception requests made
7 to DOT and that all of the exception requests
8 that have not yet been granted have been
9 withdrawn. Are you aware of that?

10 A. (Taylor) Yes.

11 Q. Okay. So I want to ask you a question that
12 includes an assumption that the exception
13 requests were granted. And so I'm asking you
14 to assume that all of the exception requests
15 that were not withdrawn -- or excuse me --
16 that were withdrawn, were actually not
17 withdrawn and that they were granted. Okay?
18 So in other words, if the Project were to be
19 built as described in the exception requests
20 that have been approved and the exception
21 requests that have been withdrawn, if that
22 was the Project that was built, do you have
23 an opinion on how long the construction
24 period would be?

1 A. (Taylor) A specific time frame, no. However,
2 of the exception requests that I have
3 reviewed where the open trench is crossing
4 the road and then crossing back, it's my
5 opinion that I would expect some level of
6 increased project time if additional crews
7 were not put on the overall job.

8 Q. Are you able to quantify that addition,
9 either by order of magnitude or percentage?

10 A. (Taylor) Not as I sit here. But as I stated,
11 I believe earlier this morning, the fact that
12 it's a longer route inherently because you're
13 crossing the road then crossing back, and
14 there are multiple traffic control set-ups,
15 that leads me to the conclusion that it
16 likely would be longer.

17 Q. And does the duration depend on what time of
18 the year construction would begin? In other
19 words, does it matter if it was started in
20 April of 2018 or October of 2018?

21 A. (Taylor) I'm not sure I fully understand your
22 question.

23 Q. Let me try to explain it without just saying
24 it again. You know, sometimes seasonality,

1 the season of the year that a construction
2 project commences, would have construction
3 benefits, in that things could move a little
4 bit more quickly, and sometimes it would be
5 an impediment, such that things would move a
6 little bit more slowly. So I'm asking if
7 you're generally stating that construction
8 would take longer if all the exception
9 requests were granted. So I'm asking you
10 would it take even longer if it started at
11 certain times of the year? Or does that not
12 even matter? No matter what time of the year
13 it starts, it's going to take whatever it
14 takes?

15 A. (Taylor) Assuming a full work year, it's
16 logical to project they get the same number
17 of work days whether they start at one time
18 or another. You may have a slower rate if
19 you start at a different time of year -- for
20 example, if you had a long string of
21 inclement weather, if that was typical for
22 that time of year versus a time period where
23 that is not the case. But from a yearly
24 standpoint, the number of yearly work days I

1 would assume to even out.

2 A. (Bascom) To add to what David said, I would
3 make the additional comment that, if the work
4 were to start in the middle of a construction
5 season, there might be an additional
6 mobilization because it spans three years as
7 opposed to two calendar years.

8 Q. Okay. I want to talk with you about --
9 starting with looking at this letter. This
10 letter was referenced earlier today, I
11 believe. This is the August 11, 2017 letter,
12 which is Applicant's Exhibit 220 and also
13 Counsel for the Public Exhibit 493. Have you
14 guys seen this letter? And this is the
15 letter that encloses the comments from DOT
16 finding the proposed survey to be not
17 acceptable.

18 A. (Taylor) Yes.

19 A. (Zysk) Yes.

20 Q. And just to show you the whole thing here, it
21 encloses just a brief one-page memo. Are you
22 familiar with this?

23 A. (Taylor) Yes.

24 A. (Zysk) Yes.

1 A. (Bascom) Yes.

2 Q. Now, according to this, DOT is looking for,
3 quote, "accurate locations defined by ground
4 survey," end quote, for purposes of defining
5 the right-of-way; right?

6 A. (Zysk) Hmm-hmm.

7 A. (Taylor) Correct.

8 Q. I think you agreed to this earlier, but let
9 me just -- earlier today, but let me just
10 clarify.

11 Do you agree that you cannot accurately
12 determine whether the Project as proposed
13 would go into privately-owned property
14 because the right-of-way has not been defined
15 by a ground survey showing accurate
16 locations?

17 A. (Taylor) That's correct.

18 Q. And would it be helpful in this case for DOT
19 to exercise its statutory authority to survey
20 the right-of-way itself?

21 A. (Taylor) I would defer to DOT on that matter.

22 Q. Would it be helpful to you in your analysis
23 of whether this project did or did not go
24 into private property rights if had you a

1 survey from DOT?

2 A. (Zysk) A survey approved by DOT, whether they
3 did it or somebody else did it.

4 Q. Can you help me understand, is there a
5 distinction between a boundary line survey
6 and something less than a boundary line
7 survey?

8 A. (Taylor) Short answer is yes. I'll speak to
9 this at a high level. That's a pretty broad
10 of set of variables that you gave.

11 A boundary survey implies that it has
12 been surveyed and certified by a licensed
13 surveyor using deeds and field monumentation
14 and whatever readily-available documents.
15 The other term I think you used, boundary
16 determination --

17 Q. Just something less.

18 A. (Taylor) There's many things that are less
19 than that, both from a deed and plotted. It
20 could be readily-available GIS information
21 that you couldn't define the source and the
22 accuracy of. Sure.

23 Q. In your opinion, do we need a boundary line
24 survey to define the right-of-way adequately

1 enough to determine if the Project does or
2 does not go onto private property?

3 A. (Taylor) I wouldn't -- I can't say a boundary
4 line survey. But I think what would helpful
5 is if there were a survey and a right-of-way
6 line that were represented and backed by a
7 licensed surveyor that took into account the
8 various deeds and plats and field
9 monumentation so that an accurate
10 representation could be put forward. Even if
11 it uncovered uncertainties, there would be no
12 uncertainties at that point.

13 Q. So, with respect to any uncertainties that
14 you just identified might exist, are you
15 aware that for areas where the boundary of
16 the right-of-way cannot be ascertained with
17 certainty, that the Applicant plans to
18 establish the boundary with DOT through
19 prescriptive rights?

20 A. (Taylor) I'm generally aware that's being
21 considered.

22 Q. And do you have any concerns about that?

23 A. (Taylor) I wouldn't say I have concerns, no.

24 Q. Are you familiar with such a process?

1 A. (Taylor) I have been on projects where that
2 has come into play in the past, yes.

3 Q. Can you describe that for me?

4 A. (Taylor) Sure. So, from a prescriptive
5 standpoint, if an area of land has been used
6 for a certain time period, per regulatory
7 requirements it could be construed as that
8 entity or person's property, or they have a
9 right to it. And that could influence the
10 ultimate boundary or easement or right-of-way
11 location, sure.

12 Q. And are you talking -- the process that
13 you're talking about, does that involve the
14 determination by a court about who owns what
15 or who has what property rights to what land?

16 A. (Taylor) I haven't been involved with a
17 project to that level. My experience has
18 been at the agency level at the state or
19 county where the parties gather all available
20 information and in the end come to an
21 agreement as to what the land rights are.

22 Q. And in that case, when you say "the parties,"
23 do you include in that the abutting private
24 property owners?

1 A. (Taylor) For the examples that I've been in,
2 it was the property owner in question, and
3 the agency in this case I believe it was the
4 state highway. I don't recall abutting,
5 adjacent property owners who were not
6 proximal or immediate to the area in
7 question.

8 Q. I just got a little bit confused by the last
9 part of what you said there. Did you say
10 that the process did not include abutting
11 property owners who were not nearby?

12 A. (Taylor) That's correct. In the examples
13 that I have been a part of, the area in
14 question was wholly within a tract boundary.
15 So, adjacent owners were not necessarily
16 close to the area in question; therefore, I
17 believe that's why they weren't included.

18 Q. All right. Are you aware that, even though
19 the exception requests have been withdrawn,
20 my understanding is still that the Project
21 plan is for all of the HDD to go under
22 pavement or under gravel, under the traveled
23 way of the road? Are you aware of that?

24 A. (Taylor) I haven't reviewed all of the

1 exemption requests, but I'll accept that as
2 accurate.

3 Q. Is that your general understanding, that
4 where there's HDD, it's going to be under the
5 traveled way?

6 A. (Taylor) I wouldn't say in all cases.

7 A. (Zysk) It's going to be within the
8 right-of-way, but not necessarily under the
9 traveled way.

10 Q. Okay. When you design a project and you
11 apprise yourself of what the requirements
12 would be from a document like the Utility
13 Accommodation Manual, and you decide for
14 whatever reason that you need to deviate from
15 the requirements in that Utility
16 Accommodation Manual, or analogue publication
17 for a different state, would you file your
18 special exception requests at the time you
19 submit your application -- excuse me -- your
20 exception requests at the time you submit
21 your application, or would you file them a
22 couple years later?

23 A. (Taylor) It depends on the agency
24 requirements and the staging of what I'll

1 call the "entitlement process." Although, I
2 will say, generally speaking, exceptions to
3 the rules that you need to follow, they're
4 generally identified. The level of
5 specificity is often longer in duration, I
6 would say, as opposed to doing none.

7 Q. When you say that they're generally
8 identified, at what time would you generally
9 identify those?

10 A. (Taylor) For linear projects such as this,
11 typically in the 30-percent range. As a
12 design team, we're aware of those types of
13 issues.

14 Q. Have you had the opportunity, or are you
15 aware of the Massachusetts Request for
16 Proposals process, the Mass. RFP?

17 A. (Taylor) I'm not personally familiar with it.

18 A. (Bascom) I am generally aware of it.

19 A. (Alexander) Yes.

20 Q. Have either of you had an opportunity to
21 review the Northern Pass bids into the
22 Massachusetts RFP?

23 A. (Bascom) I have not.

24 A. (Zysk) I have not.

1 A. (Alexander) I have not.

2 Q. Are you generally aware that one of the bids
3 is for a hundred percent hydropower and one
4 of the bids is for a combination of
5 hydropower and wind power?

6 MR. NEEDLEMAN: Objection.
7 Relevance, and how does it bear on the
8 testimony of this panel?

9 CHAIRMAN HONIGBERG: Ms.
10 Manzelli.

11 MS. MANZELLI: I would like to
12 ask them if they have studied anything about
13 the wind aspect of one of those bids.

14 CHAIRMAN HONIGBERG: Why is it
15 relevant?

16 MS. MANZELLI: Because it
17 appears that, while it may not be clear in this
18 docket, it appears that in other -- that in
19 connection with the Massachusetts RFP, the
20 Applicant is holding out this process as the
21 process through which the combination
22 wind-hydropower project would be approved. So
23 I want to know if they have seen anything in
24 this docket about a wind part of this proposal.

1 CHAIRMAN HONIGBERG: I'll
2 sustain the objection on relevance grounds,
3 among others, I think, but at least relevance.

4 MS. MANZELLI: Thank you. I
5 have no further questions.

6 CHAIRMAN HONIGBERG: All right.
7 Let's take a 10-minute break.

8 (Recess was taken at 2:50 p.m.
9 and the hearing resumed at 3:12 p.m..)

10 CHAIRMAN HONIGBERG: All right.
11 Next up is Mr. Thompson. Are you ready to go?

12 CROSS-EXAMINATION

13 BY MR. THOMPSON:

14 Q. Are you ready, gentleman? My name is Brad
15 Thompson. I'm spokesman for the intervenor
16 group of abutters and non-abutters of
17 Pittsburg, Clarksville and Stewartstown.
18 I've been allotted about three hours. And
19 I'm certain, just so you can plan, that I
20 won't be using that much time, if that's
21 okay.

22 First of all, just to hit on a couple
23 quick subjects and just kind of for
24 clarification. We've heard quite a bit about

1 the exception requests. I'm a little bit
2 confused because I'm not -- being in the
3 construction business for many years, I'm not
4 used to this leniency. Is this a typical
5 technique used in the energy construction
6 field, or is it a technique that you
7 gentlemen are exposed to often? Whoever
8 wants to answer any of these questions can.

9 A. (Taylor) Are you referring to the fact that
10 there is an exception request?

11 Q. I'm not aiming at anyone. Just in general,
12 it's the technique that I didn't expect to
13 find and that's being used. Is it common in
14 this industry?

15 A. (Taylor) Are you referring to filing the
16 exemption request?

17 Q. Yes.

18 A. (Taylor) If there's a rule or a regulation
19 that's not being followed, or you would like
20 it to be considered in another manner, then
21 some version of an exemption, or another name
22 it may be called, yes.

23 Q. My first opinion when I started seeing these
24 come out was that it kind of takes away from

1 the competitive bidding process. Any
2 thoughts on that? I mean, how do you bid on
3 a project of this size, \$1.6 billion, knowing
4 you can ask for exception requests and
5 changes, depending on a number of reasons?
6 Maybe there's a better way to do it or a more
7 convenient way or a cheaper way or less
8 destructive way, part of what's available.

9 A. (Bowes) I guess I would respond that
10 typically in a competitive bidding process,
11 the selected supplier or contractor -- a
12 determination is made about the selected
13 supplier or contractor to provide the system
14 that's being purchased, and at that point is
15 when exemption requests might come into play,
16 with the understanding that at the bidding
17 process usually there's an equal, or intended
18 to be equal playing field for all the
19 potential suppliers.

20 Q. Is it possible to equate it at all to a
21 change order? And is there money involved
22 when one of these requests are permitted?

23 A. (Zysk) These are requests regarding the
24 design. If they're denied or granted,

1 whatever gets set is what goes into the bid
2 documents.

3 Q. And then the next step down the road would be
4 to evaluate if it's more costly or less
5 costly, or not?

6 A. (Zysk) That would be reflected in the
7 contractors' bids.

8 Q. Haven't they already bid? We have a general
9 contractor, PAR Electric.

10 A. (Zysk) I don't think they have any
11 construction contracts bid.

12 A. (Bascom) I think the situation with the
13 Applicant's project is that they've assembled
14 a team and are trying to do a project, in
15 comparison to a competitive bidding process
16 which is normally associated with a public
17 sector-type project or a private-sector
18 project where more than one supplier of a
19 system could be offering services or
20 equipment. So I think it's a different
21 scenario. And in any case, as David
22 mentioned, the deviation from accepted rules,
23 laws or practices to either make a project
24 less costly or easier to construct would be

1 put forth in some type of a request. And in
2 the context of this forum, that's
3 determined -- that is an exemption request.

4 Q. Thank you.

5 Moving along, another aspect that I'm
6 used to, and I guess I'll ask any one of you,
7 in projects like this, is it typical that
8 each town, if they so desire, would be
9 represented by a clerk of the works? Is that
10 common?

11 A. (Bascom) From my experience, the jurisdiction
12 where a project is going to be installed
13 would have an interest in the project and
14 therefore be a stakeholder and probably have
15 their own representation, either collectively
16 with others or individually. If I understood
17 your question correctly, that's my general
18 experience.

19 Q. There would be some logic in the possibility
20 that our three towns could be represented by
21 one clerk of the works. And their job would
22 be, I assume, and do you agree, to protect
23 the town, represent them in being sure that
24 proper technique is performed?

1 A. (Bascom) I mean, you know, any agreement
2 among agreeing parties is I think acceptable
3 among the parties.

4 Q. Yeah. If our towns decided to have a clerk
5 of the works representative, who would you
6 say should pay for it?

7 MR. NEEDLEMAN: Objection.
8 Relevance and beyond the scope of the
9 testimony.

10 CHAIRMAN HONIGBERG: Mr.
11 Thompson. It does seem a little out there in
12 terms of relevance. Why does it matter?

13 MR. THOMPSON: Well, it matters
14 because I'm a taxpayer.

15 CHAIRMAN HONIGBERG: If you had
16 such a thing, it would matter if it were
17 happening. But in terms of what we have in
18 front of us, what part of this case is that
19 relevant to?

20 MR. THOMPSON: I guess I'm just
21 trying to get a feel for the overall game plan
22 as we possibly could move forward.

23 CHAIRMAN HONIGBERG: I mean, I
24 think you got their sense of the overall game

1 planning. I think you've probably run this as
2 far as is appropriate. I'll sustain the
3 objection and ask you to move on.

4 MR. THOMPSON: Thank you.

5 BY MR. THOMPSON:

6 Q. Will you accept my statement that there's at
7 least some confusion as to whether direct
8 burial is actually under the gravel and
9 pavement roads or in the ditches of the
10 municipal roads in Clarksville and
11 Stewartstown?

12 A. (Taylor) I think either the plans or
13 exemption requests combined would outline
14 whether they're under the road or outside.

15 Q. So as far as you know, there haven't been any
16 changes from the original documents, as far
17 as where the...

18 A. (Taylor) Beyond the exemption requests, I'm
19 not aware of anything else.

20 Q. All right. Thank you.

21 In that case, we can expect that burial
22 in and under the dirt and paved roads of our
23 towns will be built according to the plans
24 and will include typical excavation around

1 5 feet and setting the conduit, the fluidized
2 fill, concrete, and more fluidized fill.
3 That is the planned approach.

4 A. (Taylor) That's my understanding.

5 Q. Okay. Are you aware that Mr. Bowes stated,
6 when the Northern Pass construction crew
7 gathered here three weeks ago, called back
8 for more questioning, stated that he'd like
9 to see the cables, when they intersect or
10 come in contact with other utilities crossing
11 perpendicular on the road, would like to go
12 over those utilities rather than under?

13 A. (Taylor) I recall.

14 Q. You do?

15 A. (Taylor) Yeah.

16 Q. Would you say that having the lines above
17 utilities presents a serious obstacle and
18 cost to future development of property owners
19 on these town roads?

20 A. (Taylor) It could, and I would say it would
21 vary on a case-by-case basis.

22 Q. Could you also agree that this could very
23 well add devaluation to the private property
24 owners' property along our roads?

1 MR. NEEDLEMAN: Objection.

2 Beyond the scope of their testimony.

3 CHAIRMAN HONIGBERG: Mr.
4 Thompson, this is the construction panel.

5 MR. THOMPSON: All right. I'll
6 move on. Thank you.

7 BY MR. THOMPSON:

8 Q. You agree that if a property owner on one
9 side of the street needs to get electric
10 across to the other side of the road to a
11 power line and wants to do it underground,
12 which is logical, there'll be extra effort
13 and cost involved if he has to go under the
14 5-foot typical direct burial?

15 A. (Taylor) I'll accept that.

16 Q. And then the long and short of it, that has
17 to be looked at as extra costs to whatever
18 project he may be doing.

19 A. (Taylor) Correct.

20 Q. Thank you.

21 And this could be defined, the extra
22 efforts involved could be defined as "unduly
23 interference with the orderly development of
24 the region."

1 MR. NEEDLEMAN: Objection.

2 Calls for legal conclusion.

3 CHAIRMAN HONIGBERG: Mr.

4 Thompson.

5 MR. THOMPSON: Seems like

6 there's a lot of logic in that question.

7 CHAIRMAN HONIGBERG: Again, this
8 is the construction panel talking about how to
9 build and what the ramifications of it are, not
10 necessarily about the long-term economic or
11 even short- or immediate-term economic aspects
12 regarding development.

13 MR. THOMPSON: Thank you.

14 BY MR. THOMPSON:

15 Q. Okay. CFP 002991, which we saw earlier
16 today --

17 MS. MERRIGAN: Dawn, could you
18 please switch to my system?

19 BY MR. THOMPSON:

20 Q. This is Google Earth coming up of the
21 intersection of Creampoke Road, North Hill
22 and Old County. If you look from the top of
23 the page coming down, that's Creampoke Road
24 coming up gradual uphill from Route 145.

1 Does this make sense, look familiar?

2 A. (Taylor) Yes.

3 A. (Bascom) Yes.

4 Q. Actually want to concentrate on a bridge down
5 Creampoke Road about 300 feet.

6 MR. THOMPSON: Okay, Pam.

7 BY MR. THOMPSON:

8 Q. Are you familiar with the --

9 MS. MONROE: Need the ELMO.

10 MR. THOMPSON: I'm sorry.

11 BY MR. THOMPSON:

12 Q. Are you familiar with the crossing of one of
13 the tributaries into Bishop Brook roughly
14 300 feet down the road from the intersections
15 of those three roads?

16 A. (Bascom) I'm familiar with it because I went
17 down that road by mistake.

18 Q. Not good this year.

19 Creampoke Road, for those who need
20 direction, is an access off of Route 145,
21 state highway which goes Colebrook to
22 Pittsburg to go up to the many homes up in
23 that area of Old County Road, North Hill and
24 Creampoke.

1 Looking at the picture of my pickup,
2 would you call this a single-lane bridge?

3 A. (Taylor) I think we would agree, yeah.

4 Q. Would you agree that this Creampoke Road --
5 and Mr. Bascom, since you recognize it and
6 seen it, this is a major, or will have to be,
7 clearly, a major access road for construction
8 vehicles working on the south end of Old
9 County Road or the north side of North Hill
10 Road.

11 A. (Bascom) I would agree with that
12 characterization, yes.

13 Q. Thank you.

14 Would you care to speculate, on an
15 average day of construction, the number of
16 vehicles that probably -- or definitely would
17 have to cross this bridge going up to the job
18 site? And I know I'm speculating but --

19 A. (Bascom) I could not speculate without
20 knowing a construction plan in more detail.

21 Q. Correct. At some point in time there's going
22 to be a lot of vehicles crossing that bridge
23 in the next two-year span that would involve
24 construction; correct?

1 A. (Zysk) Yes.

2 Q. Would you think that a traffic control
3 person -- or lights would be necessary at
4 this bridge to control any possible
5 conflicts?

6 A. (Taylor) I would reiterate Mr. Bascom's
7 comment, that without a traffic control plan
8 in more detail as to how the vehicles are
9 going to be routed, it's difficult to say.

10 A. (Zysk) Hard to say.

11 A. (Taylor) Yeah.

12 Q. Thank you. Will you accept my comment that
13 two and a half, three weeks ago when the
14 construction panel was here, Mr. Bowes
15 referred to the possible use of trench
16 plates, and he used as reasoning, among
17 others, to speed up the construction process?
18 Would you accept that?

19 A. (Taylor) I do.

20 Q. Thank you. Would one of you explain to
21 everyone here -- describe first the trench
22 plate and then some of the uses that it
23 provides.

24 A. (Zysk) A trench plate is a piece of steel

1 plate varying in size from 4 by 8 or smaller
2 or bigger, typically 4 by 8, and they're used
3 to temporarily cover a trench to allow access
4 over it.

5 Q. Probably an inch thick would you say?

6 A. (Zysk) Probably an inch thick or heavier,
7 yes.

8 Q. Yeah, 4 by 8 or conceivably much larger than
9 that; would you say?

10 A. (Zysk) If available and they can get them to
11 the site, yes.

12 Q. Yeah. In past testimony there's been
13 reference to what they called the
14 "1600-foot-long moving construction site."
15 Have you read that or seen that referred to?

16 A. (Zysk) Yes.

17 Q. And am I correct that a typical 1600-foot
18 moving construction site would probably
19 exist, where at the front end would be saw
20 cutting, or perhaps even before that some
21 layout, and at the tail end, 1600 feet back,
22 would be probably temporary paving, with
23 permanent paving at a later date? Would
24 that --

1 A. (Zysk) If they were moving in a chain, linear
2 fashion, yes.

3 Q. Let's concentrate for a minute on part of
4 that 1600 feet, and that's the area of
5 excavation. And that could vary depending on
6 the conditions.

7 A. (Zysk) Absolutely.

8 Q. You might get 20 feet done if you're on the
9 Main Street in Plymouth, or you might get
10 200 feet done if you're on North Hill in good
11 digging; correct?

12 A. (Zysk) Correct. Yes.

13 Q. I'd like to go through a day's work of what
14 would happen at that 200-foot of area and
15 concentrate a little bit on timing that the
16 road -- and for simplicity, let's think about
17 the town roads in Clarksville and
18 Stewartstown.

19 Correct that you'd start off in the
20 morning first thing by removing the plates of
21 the 200 feet that you did from the day before
22 in order to get the job going for the day?
23 That probably logically be one of the first
24 things you do?

1 A. (Zysk) Sure.

2 Q. Or at some point you'd have to do it.

3 A. (Zysk) Early on, yes, if that was your next
4 step in your process.

5 Q. Then excavate the 200 feet, the next 200
6 feet, as you're probably finishing up on the
7 back 200 feet from yesterday.

8 A. (Zysk) Sure.

9 Q. You'd excavate the new 200 feet and place the
10 conduit.

11 A. (Zysk) Yes.

12 Q. And bring in a Ready Mix truck?

13 A. (Zysk) Yes.

14 Q. Pour flowable fill?

15 MR. NEEDLEMAN: Mr. Chair,
16 objection. Sounds like we're just walking
17 through general testimony.

18 CHAIRMAN HONIGBERG: Mr.
19 Thompson.

20 MR. THOMPSON: Mr. Bowes made
21 the comment that he was going to make use of
22 trench plates and the reasons for it. And I'm
23 going to argue, and it won't take me long, that
24 there are reasons why you wouldn't want to do

1 it.

2 CHAIRMAN HONIGBERG: All right.

3 I'll overrule the objection. You can continue.

4 BY MR. THOMPSON:

5 Q. So a typical day, we've spent some time
6 taking the plates off. That requires, am I
7 correct, that a machine would have to come in
8 and pick the plates up, take them and store
9 them someplace nearby? Closer the better;
10 right?

11 A. (Zysk) Yes. If they can put it right next to
12 the trench, that's ideal.

13 Q. That's ideal.

14 A. (Zysk) Yes.

15 Q. But the fact is that it's 200 feet. Let's
16 say we're using 8-by-12 plates.

17 A. (Zysk) Okay.

18 Q. That's going to require 17 or 16 plates. How
19 long do you think it would take to remove
20 those plates? Thirty, 40 minutes sound good?

21 A. (Zysk) Yeah, between that, up to an hour.

22 Q. All right. Let's say 45 minutes.

23 Then, later on, after you've dug the
24 ditch, set the conduit, you're going to pour

1 the flowable fill.

2 A. (Zysk) Yes.

3 Q. That has to be poured out of a Ready Mix
4 truck.

5 A. (Zysk) Yes.

6 Q. We've seen photos here of a Ready Mix truck
7 pouring, and he's clearly in the next lane to
8 where the ditch is; correct?

9 A. (Zysk) That would be the fastest way to do
10 it. If there were other constraints, they
11 could transfer the material to an
12 intermediate vehicle to bring it to the
13 trench to deposit it. But yes, pouring it
14 straight out of the mixer would be the best
15 way to do it.

16 Q. But even if there was another transport, it
17 would still eat up and use both lanes to
18 place the concrete in the ditch.

19 A. (Zysk) If they were working in a linear
20 fashion, not necessarily.

21 Q. Define "lineal fashion."

22 A. (Zysk) Based on one of the graphics that was
23 shown earlier, where everything is within the
24 one travel lane. And it would extend the

1 time because vehicles would have to swap
2 places, potentially.

3 Q. The Ready Mix truck's going to be behind the
4 excavator that's going to bucket material
5 into the ditch, and the Ready Mix truck is
6 straddling the ditch as he's backing down?

7 A. (Zysk) Could be.

8 Q. Really? Thank you.

9 So we're not going to close that second
10 lane or pour in the concrete?

11 A. (Bascom) I would say typical construction
12 practice would be to dispatch concrete from
13 an adjacent lane directly from a concrete
14 truck, although it's possible it could be
15 done in a linear fashion.

16 A. (Zysk) Right. Again, depends on the criteria
17 that's set.

18 Q. That would probably --

19 A. (Zysk) -- in that specific location.

20 Q. -- cut into the production time definitely.

21 A. (Zysk) Yes.

22 Q. And then there's two more steps with
23 concrete. The protection layer, the 6-inch
24 protection layer, a second pouring. And then

1 state highways apparently are not going to
2 have fluidized thermal backfill above the
3 protection, but town roads still do. That
4 would be a third pouring that we'd be facing.

5 A. (Zysk) Yes.

6 Q. So if we take a worst-case scenario, or a
7 best case, depending how you define it, and
8 do have the concrete out of the second lane,
9 which it's hard to -- wouldn't you say it's
10 hard to believe that that could occur for
11 60 miles of not using the second lane? Be
12 pretty cumbersome.

13 A. (Zysk) Yes, that would be difficult.

14 Q. Yeah. Would you project 10 minutes to dump a
15 9-yard load of concrete? Not going to take
16 long to pour it in a ditch.

17 A. (Zysk) Probably not, no. Yeah, that's not
18 unreasonable.

19 Q. So in that 200 feet, if my figures are
20 correct, would you agree that 29 yards of
21 flowable fill, 10 yards of protective
22 concrete, and 51 yards of flowable fill above
23 the protective concrete, representing 8 loads
24 of concrete at 10 minutes apiece, that road,

1 if poured out of the other lane, will take an
2 hour and 20 minutes a day? Would you accept
3 that?

4 A. (Zysk) In total, yes.

5 Q. Thank you. And then the last step, because
6 we got to remember we got concrete on
7 concrete that's got -- one pour's got to set
8 up at least somewhat before the second one
9 can be poured and then the third. But at the
10 end of the day the plates go back on.

11 A. (Zysk) Yes.

12 Q. Took us 45 minutes to take the plates off.
13 How long do you it'll take to put the plates
14 on?

15 A. (Zysk) Probably longer.

16 Q. Say an hour?

17 A. (Zysk) Okay. Yes.

18 Q. Okay. I haven't kept track of the time.
19 Maybe somebody else has. But we're talking
20 three to four hours of time where that second
21 lane more than likely will be obstructed and
22 closed. Do you agree?

23 A. (Zysk) In total, yes.

24 Q. When you set the plates at the end of the

1 day, is the idea that the plates are
2 replacing the roadway as the traveled way in
3 one lane, or wherever the construction's
4 occurring?

5 A. (Zysk) In this instance, I would say yes.

6 Q. That's really what the whole point of the
7 plate is, so you can get back to where the
8 road can be used.

9 A. (Zysk) Correct.

10 Q. And setting the plates, you need to be
11 somewhat careful to be using a fairly flat
12 surface which typically an asphalt road
13 offers; correct?

14 A. (Zysk) Yes.

15 Q. In other words, you don't want the plate
16 dipping and wiggling around and teetering.

17 A. (Zysk) Correct.

18 Q. How does it work on a dirt road, a typical
19 dirt road? I mean, ideally the road would be
20 level and flat. You could put the plates
21 down and it sets there. But there's going to
22 be extra effort involved to try to get the
23 plates settled in.

24 A. (Zysk) I guess it depends on the extent of

1 the disturbance to the road. But there is...
2 they may have to take a little bit of time to
3 level them out. But yes, it would be
4 slightly longer than just placing them on top
5 of a paved road.

6 Q. Thank you.

7 Splice pits. Would you accept my
8 statement that the weight of one half of a
9 splice pit per the plan documents -- which is
10 34 feet long, 10 feet wide, and each half
11 4 feet high, reinforced with 8-inch-thick
12 walls and an 8-inch top and an 8-inch
13 bottom -- that one half of that weighs just
14 over 25 ton, almost 51,000 pounds?

15 A. (Taylor) I'll accept that.

16 Q. Are you aware that at the construction
17 meeting reunion three weeks ago, when Mr.
18 Bowes and Mr. Johnson were asked what size
19 crane was needed to lift one of these 25-ton
20 manholes and set it in place, they looked at
21 each other and responded "probably 15- to 20-
22 ton crane"? Are you aware of that? Would
23 you accept that?

24 A. (Taylor) I don't recall that statement.

1 A. (Alexander) Do you know when that statement
2 was made?

3 Q. It was made at the construction hearing three
4 weeks ago. Would you accept it as having
5 occurred?

6 A. (Alexander) Do you have a document or
7 testimony that we could look at to verify, or
8 a day that --

9 Q. It exists, but I do not have it.

10 A. (Taylor) We'll accept that it was said. Just
11 don't recall it specifically.

12 Q. Yeah, thank you.

13 Here's off a web site for Cote Crane in
14 Lewiston, Maine, and 15- to 20-ton, the
15 second one down, is the most typical of that.
16 That would be what they would propose to pick
17 up the crane -- or pick up half of a manhole.

18 Would you accept the fact that, based on
19 the conditions, typical site conditions and
20 the weight of the manhole, that in fact a
21 130-pound -- 130,000-pound crane with another
22 110,000 pounds of counterweight is necessary
23 to safely set a 25-ton, one-half splice pit?

24 A. (Alexander) There are a large number of

1 variables that go into the selection of the
2 crane, including the swing distance, pick
3 height --

4 Q. Right.

5 A. (Alexander) -- distance it has to travel. So
6 without knowing those factors, we can't speak
7 to any specific type of crane that may or may
8 not be used. Also, there are variations in
9 the types of cranes that may be used, from
10 hydraulic to boom variations. So, without
11 selecting --

12 Q. And I will --

13 (Court Reporter interrupts.)

14 A. Without selecting a specific location or
15 type, it's hard for us to say what exact
16 crane would be used in a specific location.

17 Q. Have any of you ever seen the setting of a
18 splice pit with a crane?

19 A. (Taylor) Yes.

20 A. (Bascom) Yes.

21 Q. How about a 25-ton splice pit?

22 A. (Taylor) Yes.

23 A. (Bascom) Yes.

24 Q. Do you remember the size crane that was

1 needed?

2 A. (Bascom) I don't know the size --

3 Q. Any idea what it would look like?

4 A. (Bascom) -- but know the typical
5 characteristics.

6 Q. Is either a trench box or steel sheathing
7 necessary for protection against the side
8 walls of an excavated pit when you're going
9 to set a splice pit?

10 A. (Taylor) Typically that's the case, yes.

11 Q. Otherwise, there's one heck of a lot of room;
12 correct?

13 A. (Taylor) That's correct.

14 A. (Bascom) And due to the depth of the
15 excavation for safety reasons.

16 Q. Sure.

17 Okay. Let's go to CS135 [sic], the
18 crane.

19 MS. MONROE: 136 you mean?

20 MR. THOMPSON: No, 135.

21 MS. MONROE: I have -- okay.

22 Got it.

23 BY MR. THOMPSON:

24 Q. There you go. Mr. Bascom, does this vehicle

1 look something like a crane that probably set
2 a 25-ton manhole?

3 A. (Bascom) I can't specifically say, other than
4 it did have outriggers to support the crane.

5 Q. Would you accept the fact that this crane is
6 typical of the ones at the bottom of the page
7 on CS127?

8 MR. THOMPSON: The bottom --
9 yeah, go back to that, Pam, for a minute.

10 BY MR. THOMPSON:

11 Q. You can see the yellow ones at the bottom,
12 and they're -- if you look over to the right,
13 they're all -- base weight of the vehicle is
14 right at or around the 130,000-pound, and
15 then it talks about the counterweight
16 necessary. Would you accept my statement
17 that the counterweight gets you to where you
18 need to be in order to counterweight picking
19 up about a 25-ton splice pit?

20 A. (Alexander) The amount of counterweight for
21 any specific type of crane, again, is
22 dependent on the swing, boom and distance
23 that the weight has to travel and weight of
24 the vehicle itself.

1 Q. Right. I have some sketches now. They're a
2 little crude, but I think they're
3 descriptive.

4 MR. THOMPSON: Let's try...
5 let's go to CS136, Pam.

6 BY MR. THOMPSON:

7 Q. If you can bear with me for my rather rough
8 sketches, but descriptive, this is showing
9 the key ingredient here, Mr. Alexander. The
10 key number from the right-hand side is the
11 splice pit inside a sheathing-created hole,
12 with 5 feet of protection which is safety
13 around the 10-by-34 pit. And the line going
14 vertical down the page is the center line of
15 the pit. The other line cutting down the
16 middle is the center of the boom where it
17 hooks to the truck. My numbers, if you add
18 them up, half the pit is 17 feet; the hole is
19 5 feet to the sheathing; then the truck to
20 the outriggers is 15; the outriggers are
21 30 -- and this is per specifications, 30 feet
22 by 30 feet, the four round holes for the
23 outriggers. So, center line to outriggers
24 toward the pit is 15 feet, half of it. And

1 then there's a somewhat unknown of how close
2 you can get the truck to the sheathing. It's
3 usually in the typical 5 to 15, so I averaged
4 it at 10. And that bring us to 47 feet.

5 And Mr. Alexander, would you accept that
6 is a lot of the important information that
7 dictates how big a crane and how much
8 counterweight you need to pick the 25-ton
9 manhole off a flatbed and into the hole?

10 MR. NEEDLEMAN: Mr. Chairman,
11 I'm going to object. First of all, it's
12 testimony. Second of all, to the extent that
13 it's meant to be a hypothetical, I suppose
14 that's fine. But I believe that the record
15 reflects that Mr. Bowes said it was going to be
16 a 30- to 40-ton, over-the-road crane that they
17 would be using.

18 CHAIRMAN HONIGBERG: Mr.
19 Thompson.

20 MR. THOMPSON: My recollection's
21 15 to 20. And I'm certain I read it a couple
22 days ago.

23 CHAIRMAN HONIGBERG: Well, you
24 can ask them to assume that's what he said.

1 The record will reflect whatever it reflects.
2 And if you want to ask them a hypothetical
3 based on that assumption, you can do that.
4 Although, you were moving toward testifying.

5 MR. THOMPSON: Yeah, yeah. I'm
6 sorry.

7 CHAIRMAN HONIGBERG: Don't
8 apologize.

9 MR. THOMPSON: Try to stay away
10 from that, sir.

11 CHAIRMAN HONIGBERG: Don't
12 apologize.

13 BY MR. THOMPSON:

14 Q. Hypothetically speaking, do you accept the
15 numbers that I have just gone through and
16 come up with 47 feet center to center, that
17 these are the types of numbers that are
18 necessary to know what size crane is needed?

19 A. (Alexander) For the layout you provided on
20 the sketch, given your assumptions, yes,
21 those are dimensions that would be required
22 to help select the crane.

23 Q. Hmm-hmm. And would you accept the fact that
24 the center line to center line of the

1 stabilizers at the end of the outriggers,
2 30 feet by 30 feet, from a safety point
3 there's need for another 5 feet wider than
4 the 30 by 30, which will make it a 40-by-40
5 landing area for the crane? Would you accept
6 that?

7 A. (Alexander) I can't speak to the 5 feet
8 safety around the outriggers.

9 Q. Seems somewhat logical that you'd need some
10 buildup on the landing beyond the center line
11 of the outriggers.

12 A. (Alexander) It is likely some additional
13 space would be needed.

14 Q. Yeah. Okay. Sketch 138. No, let's look at
15 137 for just a bit.

16 This simply takes it one step further.
17 This is looking sideways at it. You come up
18 with 47 feet at the corner. It's not quite
19 as far, depending on how close you can get
20 the tractor trailer delivering the tank. But
21 the point being, and you'll accept my sketch,
22 that you do have a considerable reach. And
23 then one way or another, you got to turn --
24 and go to the third sketch, 138 -- you got to

1 make the 180-degree turn. Accept that it's
2 been determined that there are areas on
3 especially Bear Rock Road where it's a
4 three-rod-wide road, which is roughly
5 50 feet. Would you accept that?

6 A. (Taylor) Yes.

7 Q. As a matter of fact, where the Project comes
8 down North Hill and turns up Bear Rock Road,
9 which is a -- right there is a HDD drilling.
10 Just beyond the HDD drilling there's a
11 manhole at Grid No. 249+00 in the
12 right-of-way. Would you accept, according to
13 Steve Nicks, who testified last week, in his
14 supplemental prefiled testimony, that in fact
15 the Application scales to 50 feet at that
16 manhole? You weren't here, but I'm offering
17 that that is the case. And would you accept
18 it?

19 A. (Taylor) While I haven't measured it, I'll
20 accept that.

21 Q. That leads to the important issue, going back
22 to page CS -- or stay with 138.

23 If you would make the assumption that
24 you have a landing pad that's 40 by 40, as

1 the one we see on CS138, the box square
2 encompassing the crane, and if you would make
3 the assumption at the bottom of the page it's
4 directly on the right-of-way, as close as it
5 could possibly be, and at that manhole on
6 Bear Rock Road -- and as a matter of fact,
7 the next one 1800 feet up the road is the
8 same thing, 50 feet -- if that landing area
9 is 40 by 40, how much right-of-way is left in
10 the 50 feet?

11 A. (Taylor) Ten feet.

12 Q. Ten feet. Would you accept the fact that Ms.
13 Farrington, who was here as part of the
14 construction crew, testified that the width
15 of a lane to get through a construction site
16 needs to be a minimum of 11 feet, even if
17 it's off the side of the road in the gravel
18 or something --

19 A. (Taylor) correct.

20 Q. -- 11 feet is the number?

21 Based on my sketch, CS138, would you say
22 the road's going to be closed during this
23 whole process?

24 A. (Taylor) Yes.

1 Q. Okay. Now I'd like to get a better
2 understanding of the splice pits and the
3 splicing process. CS135. Mr. Bascom --

4 MS. MERRIGAN: Hold on, Brad.
5 Dawn, can you switch back to me, please?

6 BY MR. THOMPSON:

7 Q. Okay. Have you ever witnessed the splicing
8 of a 320 kV cable?

9 A. (Bascom) I've witnessed the splicing of a
10 345 kV AC cable, yes.

11 Q. And I'm not overly familiar with this, but is
12 320 -- they keep talking about 320 kV cable.
13 Is that a popular, used often size cable?

14 A. (Bascom) For an HVDC project, it's not
15 uncommon.

16 Q. Looking at part of your technical report
17 which is part of your prefiled testimony, it
18 kind of hit it fairly quick, but quickly
19 describe I would say the splicing process
20 very quickly.

21 First of all, the photo that we see here
22 on Page 20 of what looks like a heavy-duty
23 trailer, specialized trailer that hauls the
24 reel, is that -- strike that. No, let's go

1 back a couple steps.

2 ABB is the provider of the cable;
3 correct?

4 A. (Bascom) That's my understanding.

5 Q. And they're the manufacturer also?

6 A. (Bascom) The terms are synonymous, unless I'm
7 missing a subtlety that you're trying to
8 make.

9 Q. No.

10 A. (Bascom) The supplier and provider are the
11 person -- or the company that manufactures
12 the cable is ABB.

13 Q. Right. Do you have any idea where they do
14 this, where they're located to actually
15 manufacture the cable?

16 A. (Bascom) I suspect they're located in Europe.

17 Q. So this is -- the process would probably be
18 to ship it by ship to someplace like Boston
19 or Portland or someplace and then haul it
20 over the road to the job site.

21 Would it be hauled -- would you know if
22 it would be hauled on a trailer and spool
23 like this, or would they get delivered on a
24 flatbed and then transferred?

1 A. (Bascom) Normally the cable would be
2 transported on a larger flatbed to a staging
3 area. And then this particular piece of
4 equipment is what I would characterize as a
5 reel cart. It would pick up the reel and
6 bring it to the installation site, normally
7 more locally to where the installation is
8 going to take place. This type of a trailer
9 is not intended for long-haul purposes on
10 highways.

11 Q. All right. I suspected that. Thank you.

12 So the tractor trailer would show up.
13 Might have two of those spools?

14 A. (Bascom) Potentially two or three, depending
15 on the length of the cable being installed,
16 yes.

17 Q. Would you accept my calculations that
18 typically one of these spools is going to
19 have in the vicinity of 2,000 feet, roughly a
20 third of a mile, a little more a little less?

21 A. (Bascom) I would accept that, yes.

22 Q. And according to some documentation I read,
23 the weight of that is 20.9 pounds per linear
24 foot. Will you accept that?

1 A. (Bascom) That's in the range of what it could
2 be, yes, depending on the construction of the
3 cable.

4 Q. Add that spool. Wooden or steel?

5 A. (Bascom) Almost definitely would be a steel
6 reel.

7 Q. Yup. Weighs another estimated two to three
8 ton. Heavy. We are again looking at
9 something in the vicinity of 23 to 25 tons.
10 Will you accept that?

11 A. (Bascom) Yes, I would say approximately
12 40,000 to 50,000 pounds for --

13 Q. And a crane would be required at the staging
14 site to take it off the truck at least once.
15 If you had three on a trailer, you're going
16 to put two on the ground and then need it
17 again to load up, adding to the process;
18 correct?

19 A. (Bascom) The crane would be necessary to
20 unload the reels from a tractor-trailer.
21 This particular piece of equipment that is in
22 my report is actually capable of picking up a
23 reel off the ground, so a crane is not
24 required to load the reel onto the cart.

1 Q. Got some kind of hydraulics --

2 A. (Bascom) Something like that.

3 Q. -- to lift it?

4 A. (Bascom) It picks up the arbor on the reel.

5 Q. I see that now.

6 The 320 kV cable's got enough
7 flexibility to be rolled up on the spool. So
8 it must have enough flexibility to go down if
9 it's a manhole application with a chimney,
10 make the turn inside the manhole and then go
11 into the conduit where it can get pulled.
12 This cable apparently does have that much
13 flexibility; correct?

14 A. (Bascom) It does. And if you'd like, I could
15 refer you to a photograph in the Applicant's
16 material, if we want to look at that. It's
17 Applicant's Exhibit 227, Page APP 833386.
18 Looks to be 37th page of that reference.

19 MS. MERRIGAN: Can you repeat
20 the number again?

21 WITNESS BASCOM: Sure. It's
22 Applicant's Exhibit 227.

23 MS. MERRIGAN: And the APP
24 number, please?

1 WITNESS BASCOM: Is 833386.

2 (Discussion among witnesses.)

3 WITNESS BASCOM: Sorry. My
4 mistake. It's 83386. I added an extra 3.

5 BY MR. THOMPSON:

6 Q. That's good. That is very descriptive.

7 Thank you.

8 (Pause)

9 Q. So, here we see this is a 3-inch at minimum
10 diameter, and certainly it's showing good
11 flexibility in being able to run it down into
12 the manhole.

13 A. (Bascom) Approximate minimum radius of bend
14 is about 20 times the outer diameter. And
15 for a cable this size, it's probably on the
16 order of 80 inches, 6 to 7 feet.

17 Q. Yup. Thank you.

18 Confusion started to set in on the
19 difference between a splice pit and a
20 manhole. You're using in your description of
21 splicing, you're using the word "manhole."
22 Care to try to define the difference between
23 the two?

24 A. (Bascom) I would say typically a manhole is a

1 characteristic area where connection of
2 underground utilities might take place, and
3 the free space within the manhole is left
4 open so that a worker or workers could
5 re-enter that space on relatively short
6 notice. A splice pit, in my
7 characterization, may be filled with a
8 thermal sand or it may be left open. And the
9 terms, depending on the circumstance, might
10 be synonymous.

11 Q. And certainly you could fill a manhole down
12 the chimney with thermal backfill if you so
13 wanted to.

14 A. (Bascom) Typically be a granular sand if that
15 were the case. I'm not aware that that would
16 be necessary or done in this particular
17 situation.

18 Q. Getting back to your Page 20, back where we
19 were, CFP135 again. You talk about, and I
20 assume it's a local expression of a -- let me
21 find it here. I think it's called the "bread
22 truck." Is that what you use to describe the
23 unit that keeps all the tools and stuff you
24 set on top of the manhole, Mr. Bascom?

1 A. (Bascom) Yes. It's somewhat of a
2 colloquialism for a box, an oversized box
3 panel truck in which splicing equipment and
4 other tools are contained. And they may also
5 have environmental control that directly
6 connects to the manhole chimney so that
7 access to the manhole is also in a confined
8 or controlled environment to minimize
9 contaminants to the manhole during the
10 splicing operation.

11 Q. Which is important?

12 A. (Bascom) It is.

13 Q. Yeah. Now, you also made the point, and so
14 did ABB in their technical report which we're
15 going to look at next, that in fact
16 specialized splicers, finely trained,
17 oftentimes provided by the manufacturer are
18 used.

19 A. (Bascom) That's correct.

20 Q. You need somebody that really knows what
21 they're doing.

22 Now it's CFP Ex 76. As comparison, now
23 we're going to look at ABB, the manufacturer
24 and supplier of the cable's definition of

1 splicing. Page 10, I believe. And beginning
2 on the second paragraph on Page 10 of 24, it
3 refers to custom splicing containers. That's
4 more than likely the equivalent of your
5 container that you work out of, would you
6 say?

7 A. (Bascom) Yes.

8 Q. If you go to the next page, 11, the upper
9 left shows a good-size container setting on
10 the top of the manhole.

11 By the way, have you noticed that this
12 ABB manual, technical proposal, is earmarked
13 directly for Northern Pass? If you look in
14 the upper left corner, it's a Northern Pass
15 technical proposal?

16 A. (Bascom) I see that, yes.

17 Q. So it would appear that this manual was
18 produced for this project and not just a
19 generic manual?

20 MR. NEEDLEMAN: Objection. It
21 was also produced in discovery. It's the same
22 issue we talked about this morning with Mr.
23 Pappas. And it could have and should have been
24 included.

1 CHAIRMAN HONIGBERG: Mr.
2 Thompson, it seems like information that this
3 panel could have included in its testimony if
4 Counsel for the Public had wanted to. No? Do
5 you agree or disagree?

6 MR. THOMPSON: Well, it sounds
7 logical. Thank you.

8 CHAIRMAN HONIGBERG: I think Mr.
9 Pappas concluded that, too, ultimately. So I'm
10 going to sustain the objection and ask you to
11 move on.

12 MR. THOMPSON: Yup.

13 BY MR. THOMPSON:

14 Q. So I guess my big question is: If this
15 manual -- how would you respond to my
16 statement that, if this manual seemed to be
17 designed for the Northern Pass project, would
18 logic say that it should be followed?

19 A. (Bascom) I would say generally, yes, it
20 should be followed.

21 Q. Yeah. And it's certainly got a lot more
22 detail, which is not a criticism, but a lot
23 more detail than you put in. But it must be
24 for a reason.

1 A. (Bascom) Yes. In terms of my report, I was
2 trying to characterize for the general
3 audience the circumstances and steps in
4 installing a cable system without
5 specifically addressing one manufacturer's
6 methods and means.

7 Q. They go into great length on Pages 10 and 11
8 of showing the custom splicing container and
9 what it does. It's even showing, if you
10 notice in the -- would you accept in the
11 lower left corner of the Page 11 they use the
12 words "AC," indicating to me that it must be
13 air-conditioned, which, again, talks about
14 the importance of clean environment?

15 MR. NEEDLEMAN: Objection, Mr.
16 Chair. We're still on the same document.

17 CHAIRMAN HONIGBERG: Mr.
18 Thompson.

19 MR. THOMPSON: All right. I'm
20 going to move on.

21 CHAIRMAN HONIGBERG: Okay.

22 BY MR. THOMPSON:

23 Q. Page 12, on top of everything else on Page 10
24 and 11, talks about the possibility of an

1 alternate manhole versus --

2 CHAIRMAN HONIGBERG: Mr.
3 Thompson, you should be moving off of this
4 document because this document --

5 MR. THOMPSON: Oh, okay.

6 CHAIRMAN HONIGBERG: That's sort
7 of the fundamental problem with this.

8 MR. THOMPSON: Okay. All right.
9 Guess we've made the point, or tried to. Thank
10 you.

11 BY MR. THOMPSON:

12 Q. Last subject. Would you accept my saying
13 that a couple weeks ago, when Mr. Bowes was
14 here, he made the comment that there are no
15 transmission lines buried in the state of New
16 Hampshire at this time?

17 A. (Taylor) I don't recall him saying that, no.

18 Q. Page 59, Line 17 of the transcript will show
19 that, if you'd like to take it out.

20 CHAIRMAN HONIGBERG: You want
21 him to assume that that's what it said for the
22 purpose of this next question, or do you
23 actually want to show him the page?

24 MR. THOMPSON: No.

1 BY MR. THOMPSON:

2 Q. Would you accept the fact that on Page 59,
3 Line 17 of the transcript two and a half
4 weeks ago, that was the statement by Mr.
5 Bowes?

6 A. (Taylor) I'll accept that.

7 Q. Thank you.

8 Mr. Bascom, at technical sessions we had
9 a few months ago, I asked you if you knew of
10 any kV lines buried in the dirt road in a
11 geographical area typical of northern New
12 Hampshire. Do you recall that?

13 A. (Bascom) I do recall it, yes.

14 Q. And how many states would you say you're
15 familiar and have worked in that are somewhat
16 typical to the geographical area of northern
17 New Hampshire? I'm thinking of, for
18 instance, northern New York state. Have you
19 had projects --

20 A. (Bascom) Yes, I'm aware of projects in
21 northern New York state and Connecticut, for
22 that matter, if you consider that similar.

23 Q. Well, Connecticut, it's kind of out of the --
24 weather-wise. How about Michigan?

1 Wisconsin?

2 A. (Bascom) Michigan, Minneapolis or Minnesota.

3 Q. You've worked in areas like that.

4 As we ended the day, I asked you the
5 same question, if you remembered any buried
6 line in this type of geographical area. And
7 as the end of the day came of our talk, I
8 asked you to maybe look into it more or think
9 about it. Since that technical session, have
10 you found any dirt roads typical of northern
11 New Hampshire with buried electric
12 transmission lines?

13 A. (Bascom) I did not in the context of what you
14 had asked. At the time, my response was that
15 the installation of cables like that
16 underneath dirt or gravel were typically
17 confined to substation areas, or conventional
18 utility projects would otherwise be
19 underneath public roadways, asphalt-covered
20 public roadways. So in that context, there's
21 a limited basis for my experience in a dirt
22 road situation.

23 Q. It's possible that none exist?

24 A. (Bascom) It's possible.

1 Q. There might be a reason why they don't exist;
2 isn't that true?

3 A. (Bascom) I think it's likely that some do
4 exist, but I'm just not aware of them.

5 Q. Thank you.

6 MR. THOMPSON: That's it. Thank
7 you, Mr. Chairman.

8 CHAIRMAN HONIGBERG: Next on my
9 list is Mr. Cunningham.

10 CROSS-EXAMINATION

11 BY MR. CUNNINGHAM:

12 Q. You guys have been working hard. Thank you.
13 I'm not going to take very long.

14 My name is Art Cunningham. I'm an
15 attorney, and I represent Kevin Spencer and
16 Mark Legasse, who own -- or construct and own
17 the Percy Lodge and Campground in Stark, New
18 Hampshire. I'm also here as a representative
19 of the Dummer, Stark, Northumberland Group.
20 And are you familiar with that area of the
21 Project?

22 A. (Taylor) Yes.

23 A. (Alexander) Yes.

24 A. (Zysk) In general, yes.

1 Q. And have you been there?

2 A. (Taylor) Yes.

3 Q. And are you familiar with the Project at the
4 Percy Lodge and Campground? That's the
5 overhead portion of the Project.

6 A. (Taylor) I'm not familiar with the
7 campground, no.

8 CHAIRMAN HONIGBERG: Mr. Taylor,
9 no one can hear you at this point.

10 A. (Taylor) I'm not familiar with the
11 campground.

12 BY MR. CUNNINGHAM:

13 Q. Okay. That's fair enough.

14 A. (Alexander) Is this campground active or is
15 it closed?

16 Q. Just about finished. It's active now, and
17 the lodge is just about done. And I can tell
18 you this, that the back of the lodge is
19 somewhere between 3- and 400 feet from the
20 overhead portion of the line.

21 Okay. And I don't have many questions,
22 but I did a pretty extensive
23 cross-examination of the construction and
24 environmental panel, the Applicant's

1 construction and environmental panel. And a
2 big concern my clients have, and the folks in
3 Dummer, Stark and Northumberland have, are
4 two: One is what blasting will have to be
5 done in the Dummer, stark, Northumberland
6 stretch of the Project; and two, what impact
7 the co-location of these two high-voltage
8 electric lines, both the DC line and the AC
9 line, will have in terms of the safety of the
10 Project.

11 So my first questions are: When you did
12 your analysis and your testimony and prefiled
13 testimony, what did you have in front of you?

14 A. (Taylor) I would refer to our response to one
15 of the Applicant's data requests for the list
16 of documents that we had. But I would say
17 substantially for the overhead line what
18 comes to mind are the various maps and plans
19 which would show the alignment and the
20 context of the line.

21 Q. Okay. And I'm not so much interested in the
22 maps. I'm interested in the plans. What
23 plans did you have?

24 A. (Taylor) Relative to the overhead?

1 Q. Yes, to this particular section, the Dummer,
2 Stark and Northumberland section.

3 A. (Taylor) Sure. I'm just drawing off of top
4 my head. Appendix 47 comes to mind, which
5 are in fact aerial maps, but it does show the
6 location of the lines, the work pad areas, or
7 crane pads, where the sediment and erosion
8 control and other items, to the extent they
9 were shown.

10 Q. Would you call those preliminary plans?

11 A. (Taylor) I wouldn't use the term
12 "preliminary." But they definitely show the
13 intent of where the line is to be located,
14 where the work pads are to be placed. I
15 wouldn't call them construction documents. I
16 wouldn't go that far.

17 Q. That's my point. Those were not -- the plans
18 that you looked at were not build plans, were
19 they?

20 A. (Taylor) No.

21 Q. And in terms of percentage, I know in
22 response to some questions you had earlier
23 today from one of the cross-examiners, they
24 weren't even 30-percent plans, were they?

1 A. (Taylor) I wouldn't say that. No, I wouldn't
2 characterize it that way. Because 30-percent
3 plans generally show alignment and where
4 you're getting into type, size and location
5 information. And it's beyond that point
6 where you get into what I would call the
7 construction, more detailed level.

8 Q. And were they 10-percent plans?

9 A. (Taylor) No, they're more than 10 percent.
10 I'm going to say they're closer to the
11 30 percent because they're showing type, size
12 and location. But I wouldn't characterize
13 that appendix as more than that.

14 Q. All right. And in terms of my client's
15 concern and the folks in that stretch of
16 Dummer, Stark and Northumberland, in the
17 somewhere between 10- and 30-percent plans,
18 were you able to, with engineering precision,
19 establish how many foundations would have to
20 be built?

21 A. (Taylor) I don't recall that number, off the
22 top of my head. But there are -- that could
23 be calculated from the plans.

24 A. (Alexander) Yes. The plans that we had been

1 provided showed locations of proposed
2 foundations. So the ability to quantify and
3 document those I believe were available.

4 Q. And according to the record, and this is
5 already in the record, there will be,
6 according to those plans, 161 HVDC
7 foundations. Would you agree with that?

8 A. (Taylor) I'll accept it. I don't have a
9 reason to confirm or not at this point.

10 Q. And this is in the record as well. There
11 will be 159, 115 kV AC foundations.

12 A. (Taylor) I'll accept that.

13 Q. So the total, by my count, is 320
14 foundations, HVDC foundations and AC
15 foundations through that stretch, the Dummer,
16 Stark, Northumberland stretch.

17 A. (Taylor) I'll accept that.

18 Q. And based on the information you had to
19 develop your testimony and your reports, do
20 you have the dimensions of those foundations?
21 For example, for the DC foundations, the
22 depth, the size, do you have that
23 information?

24 A. (Alexander) The Applicant provided

1 preliminary estimate size, type of
2 foundation. But those were estimates only.
3 Exact depth, functionality of each location,
4 was to be determined based on geotechnical
5 information yet to be provided.

6 Q. And I assume the same is true with respect to
7 the AC foundations; it's estimates?

8 A. (Alexander) Correct.

9 Q. And when you did your study and prepared your
10 testimony and did your reports, did you have
11 in front of you any geotechnical information?

12 A. (Alexander) I believe there was some limited
13 geotechnical information. I believe that was
14 mostly focused on the underground portions,
15 though, not the overhead as much.

16 Q. Right. So how would you characterize the
17 geotechnical information you had in front of
18 you with respect to the overhead portion?

19 A. (Alexander) Those would be preliminary. I
20 believe they were mostly based on soil maps
21 by the USGS.

22 Q. And did you have any specific information
23 with respect to, say geotechnical boring
24 information, to determine the quality of the

1 terrain? Did you have that kind of
2 information in front of you?

3 A. (Alexander) For the overhead?

4 Q. Yes, I'm talking about the overhead.

5 A. (Taylor) I don't recall that information at
6 that time.

7 A. (Alexander) No, I don't believe so.

8 Q. So, referring again specifically to the
9 Dummer, Stark and Northumberland stretch of
10 the overhead project, we don't know whether
11 it was ledge or sand or a combination of
12 ledge and sand. We just don't know, do we?

13 A. (Taylor) Correct.

14 Q. So we don't know, based on the information
15 that's in the Application, nor the
16 information that you had in your possession
17 when you prepared your report, whether or not
18 blasting would be required. You don't know
19 that, do you?

20 A. (Taylor) That's correct. Not at specific
21 locations.

22 Q. All right. And so we don't know the size of
23 the foundations. We don't know whether
24 blasting would be required. So we don't have

1 any information with respect to the
2 hydrogeology of those 320 foundation sites in
3 the Dummer, Stark, Northumberland stretch.

4 A. (Taylor) That's correct. Not that I'm aware
5 of.

6 Q. And so you can't tell this Committee whether
7 or not any blasting whatsoever will be
8 required to construct the foundation in that
9 stretch, can you?

10 A. (Taylor) That is correct.

11 Q. And are you familiar with blasting?

12 A. (Taylor) Generally aware of blasting, yes.

13 Q. And I remember specifically, much to my great
14 shock, that I asked Mr. Keiser if he'd ever
15 heard of the blasting compound called ANFO.
16 Do any of you know what ANFO is?

17 A. (Taylor) I do not.

18 A. (Bascom) I'm aware of it, but not in the
19 context of building power lines.

20 Q. And if blasting is required, and if ANFO is
21 used, do you know what the components of ANFO
22 are, for example, in the hydrogeology of this
23 project?

24 MR. NEEDLEMAN: Objection, Mr.

1 Chair. This is all generic material that could
2 have and should have been included in the
3 testimony.

4 CHAIRMAN HONIGBERG: Mr.
5 Cunningham.

6 MR. CUNNINGHAM: Well, it was
7 not included, so I'm making that point, Mr.
8 Chair.

9 CHAIRMAN HONIGBERG: Point made.
10 Objection sustained.

11 BY MR. CUNNINGHAM:

12 Q. And if I told you that ANFO includes the
13 compound nitrate, are you aware of that?

14 MR. NEEDLEMAN: Same objection.

15 CHAIRMAN HONIGBERG: Sustained.

16 BY MR. CUNNINGHAM:

17 Q. Now, the other area that is of great concern
18 to my client, of course, and Ms. Manzelli
19 raised the issue, is the co-location of these
20 high-voltage power lines with the Portland
21 Natural Gas transmission system. And I think
22 you told us that you looked at a couple
23 documents with respect to co-location of
24 high-voltage electric lines with

1 high-pressure gas pipelines?

2 A. (Zysk) With gas pipelines, yes.

3 Q. Yes. And what do you know about this
4 Portland Natural Gas pipeline?

5 MR. NEEDLEMAN: Objection, Mr.
6 Chair. No. 1, this was already covered. No.
7 2, since that point we've identified four
8 different data requests that covered this
9 topic, including one from Mr. Cunningham's
10 client and one from Counsel for the Public,
11 showing that this was an issue that these folks
12 were aware of in August of 2016.

13 CHAIRMAN HONIGBERG: Mr.
14 Cunningham.

15 MR. CUNNINGHAM: Both these
16 gentlemen identified two documents, Mr. Chair,
17 that they looked at. And I happen to have
18 those previously marked as exhibits in the
19 Dummer, Stark, Northumberland exhibit list.

20 CHAIRMAN HONIGBERG: Okay.

21 MR. CUNNINGHAM: So I want to
22 show them to make sure they're the documents
23 that they identified that they looked at.

24 CHAIRMAN HONIGBERG: Okay. If

1 that's what you want to do, that's okay.

2 MR. CUNNINGHAM: Okay. Thank
3 you.

4 BY MR. CUNNINGHAM:

5 Q. I'm showing you a document that's entitled
6 "Advanced Analysis of HVDC Electrodes
7 Interference on Neighboring Pipelines." Is
8 that one of the documents?

9 A. (Zysk) It is not.

10 Q. It is not?

11 A. (Zysk) Correct.

12 Q. For the record, that's DNA Exhibit 61.

13 And now I show you a document entitled,
14 "Criteria for Pipelines Co-Existing with
15 Electric Power Lines." Is that one of the
16 documents that you looked at?

17 A. (Zysk) It is.

18 Q. And could you tell me when you were asked to
19 look at that or when you did look at that
20 particular document?

21 A. (Zysk) I would say I first looked at it
22 probably in the spring.

23 Q. Of 2017?

24 A. (Zysk) Of this year, yes.

1 MR. CUNNINGHAM: And let the
2 record reflect that this is DNA Exhibit No. 62
3 in the ShareFile.

4 BY MR. CUNNINGHAM:

5 Q. And you read that document; did you not?

6 A. (Zysk) I did.

7 Q. And did that document raise concerns about
8 the co-location of the pipeline, the Portland
9 Natural Gas pipeline, with respect to the
10 high-voltage electric --

11 MR. NEEDLEMAN: Objection. Same
12 basis.

13 CHAIRMAN HONIGBERG: Mr.
14 Cunningham.

15 MR. CUNNINGHAM: Well, they
16 opened that door, Mr. Chair, and I certainly
17 think I can ask them about the existence of
18 that document and their impression of that --

19 CHAIRMAN HONIGBERG: What door
20 are you talking about?

21 MR. CUNNINGHAM: The door that
22 they identified documents.

23 CHAIRMAN HONIGBERG: Who's the
24 "they" in that sentence?

1 MR. CUNNINGHAM: This panel.

2 CHAIRMAN HONIGBERG: No. Sorry.

3 That's not what happened here. The question is
4 the scope of the testimony that they submitted
5 at Counsel for the Public's request, or on
6 behalf of Counsel for the Public. The
7 questions you're asking are beyond the scope of
8 that testimony. I'm going to sustain the
9 objection.

10 MR. CUNNINGHAM: Well, let me
11 make one more point with respect to the scope
12 of their testimony issue. If -- and here's an
13 argument I think has not been advanced, that I
14 think I must advance for the record. Your
15 premise, Mr. Chair, is that this is friendly
16 cross-examination and this is beyond the scope
17 of that examination. I would suggest, Mr.
18 Chair, since they did not cover this critical
19 subject in their testimony, knowing about the
20 existence of the pipeline, that it's not
21 friendly cross-examination, it's
22 cross-examination.

23 CHAIRMAN HONIGBERG: Explain to
24 me how your position on the line in the area

1 you're talking about differs from Counsel for
2 the Public's?

3 MR. CUNNINGHAM: It doesn't
4 differ. It's just something I think that the
5 Counsel for the Public's experts should have
6 covered because of the critical nature of the
7 issue.

8 CHAIRMAN HONIGBERG: And they
9 didn't. And that was their decision. That's
10 the witness -- that's the scope of the witness
11 testimony.

12 The scope of
13 cross-examination, speaking broadly, is
14 limited to the scope of what the witnesses
15 testified to on direct. Now, there are
16 certainly plenty of times when you can go
17 beyond that, but that's where you start. You
18 start with the scope of their direct
19 testimony. In this context, because this is
20 friendly, meaning that you are on the same
21 side of this and don't disagree on any
22 significant issue with respect to what you're
23 talking about with these witnesses, that is
24 the basis for the ruling.

1 MR. CUNNINGHAM: But the point,
2 Mr. Chair, is it is not friendly because they
3 did not cover this very important issue. So
4 it's cross-examination, not friendly
5 cross-examination.

6 CHAIRMAN HONIGBERG: You think
7 that these witnesses are not credible because
8 they didn't do certain work, so you want to
9 impeach Counsel for the Public's witnesses and
10 undercut their credibility in the eyes of the
11 Committee?

12 MR. CUNNINGHAM: Yes. I think
13 it's very, very important that the fact that
14 they did not cover this critical co-location
15 issue in their direct testimony allows me to
16 cross-examine them on the lack of coverage of
17 that particular issue, this co-location issue.

18 CHAIRMAN HONIGBERG: Mr.
19 Needleman.

20 MR. NEEDLEMAN: Two things:
21 First of all, if Mr. Cunningham is going to
22 stand by that statement and allow it to stand
23 on the record, that he doesn't find these
24 witnesses credible, I may entertain allowing

1 him to go forward if it's my choice.

2 But second of all, just so the
3 record's clear, it was unequivocal in August
4 of last year, six months before their
5 testimony was due, that they knew about this
6 issue, and they chose not to include it. And
7 to the extent that this repeats itself as we
8 go forward with other parties, and they want
9 to make same claim as Mr. Cunningham, I think
10 they're going to need take the same position
11 as him.

12 CHAIRMAN HONIGBERG: Mr. Pappas,
13 you have any thoughts on Mr. Cunningham
14 attacking your experts' credibility?

15 MR. PAPPAS: Couple thoughts.
16 One, certainly any party is entitled to attack
17 any other party's witness's credibility. And
18 they're capable of defending their credibility
19 as a general proposition.

20 The second point is that these
21 gentlemen were given charges by Counsel for
22 the Public as to what to look at and what not
23 to look at, so it was Counsel for Public's
24 choice what they should look at and not look

1 at. He certainly can inquire about what they
2 looked at what and what they didn't look at
3 and what they investigated and didn't
4 investigate, but ultimately their charge came
5 from Counsel for the Public as to what they
6 should look at and study and analyze on
7 behalf of Counsel for the Public.

8 CHAIRMAN HONIGBERG: And Mr.
9 Cunningham, you have asked the witnesses what
10 it is they looked at. You may not have closed
11 the loop on everything they looked at or didn't
12 look at. But if you want to run that down, you
13 certainly can. But I'm not persuaded that you
14 should go beyond that at this point.

15 Mr. Pappas.

16 MR. PAPPAS: Let me just make
17 one final point, that Counsel for the Public is
18 not aligned with any party. We're an
19 independent party. So we're not friendly or
20 unfriendly with any particular party. We have
21 a statutory role, and I'm reminded that we're
22 an independent party, not aligned with any of
23 the parties.

24 CHAIRMAN HONIGBERG: Understood

1 as a legal matter. But the positions you
2 articulate and your witnesses articulate are
3 agreeable to the folks who are opposed to this
4 project.

5 MR. PAPPAS: Well, on some
6 issues they may be, but on other issues they're
7 not.

8 CHAIRMAN HONIGBERG: Oh, I
9 acknowledge that. That is clearly true. There
10 are areas where I think burial versus
11 non-burial is one where there are places where
12 some people say bury the line and others say
13 don't, and that's an area where the parties are
14 actually adverse to each other. The
15 intervenors who are generally opposed to the
16 Project, there are areas where on specific
17 issues they are not aligned. This does not
18 appear to be one of those issues, however.

19 Mr. Cunningham.

20 MR. CUNNINGHAM: I would proceed
21 to ask them about my Exhibit DNA 64, which is
22 the letter from Tom Getz that included the
23 preliminary co-location study, the Applicant's
24 co-location study, and ask them about that

1 document.

2 MR. NEEDLEMAN: This is now a
3 different issue, Mr. Chair. They testified
4 earlier they never saw it.

5 CHAIRMAN HONIGBERG: True. What
6 would your question be about it?

7 MR. CUNNINGHAM: I'm going to
8 repeat the question that Mr. Needleman just
9 asked.

10 BY MR. CUNNINGHAM:

11 Q. Did you see the Applicant's co-location study
12 that I've got identified as DNA Exhibit No.
13 64? And the exhibit itself is the so-called
14 Corrpro Preliminary Interference Assessment
15 for the Burns & McConnell/Northern Pass HVDC
16 project. Have you seen that document?

17 A. (Taylor) I've seen the document today, but
18 it's not a document that I have reviewed.

19 Q. And you did not conduct any independent
20 examination of the co-location issue that is
21 between HVDC lines, high-voltage HVDC lines
22 and high-voltage AC lines. You did not do an
23 independent study of my client's concern
24 about the dangers posed by that co-location

1 issue.

2 A. (Taylor) No, we have not.

3 Q. And you're aware, are you not, that, say for
4 example, the 320 HVDC is a variable voltage
5 -- in other words, it's not a steady-state
6 voltage -- are you aware of the dangers
7 caused by -- let's put it in numbers. 320
8 kV, DC line is 320,000 volts; is it not?

9 A. (Bascom) Yes, it's 320,000 volts.

10 Q. And it's 320 plus or minus. So it can be as
11 much as 340,000 volts of electricity running
12 through that DC line; can it not be?

13 A. (Bascom) I'm not certain of the basis for
14 that, no.

15 Q. In other words, you don't know.

16 A. (Bascom) I do not.

17 Q. And it can also be steady state; can it not?

18 It can be 320 --

19 A. (Bascom) Yes.

20 Q. -- thousand volts. And are you aware, for
21 example, and these are pointed out in the
22 so-called Corrpro study, that there is faults
23 that can come from the 640,000-volt DC line
24 that pose danger when co-located with

1 pipelines?

2 A. (Bascom) As we've testified, I haven't
3 reviewed this particular report to make a
4 comment on the statement that was made in
5 that report.

6 Q. And you have not investigated or looked at
7 other experts or other aspects other than the
8 one document that you have identified for us.

9 A. (DeWan) My focus as a underground cable
10 engineer was to focus on the sections that
11 were to be buried underground. And this
12 co-location is a section that as I understand
13 is overhead, so I did not study that at all.

14 Q. How about any of the rest of the members of
15 this panel?

16 A. (Taylor) No, I have not.

17 Q. Can you help us understand the dangers of
18 this co-location issue and the overhead
19 portion of this project?

20 A. (Taylor) This isn't something that I have
21 reviewed.

22 Q. Any of you?

23 A. (Alexander) This is not my area of expertise,
24 sir.

1 A. (Zysk) Again, as I mentioned this morning, I
2 read through the two referenced documents
3 that I have, and which you have one, and what
4 I found appears to be the damage would be
5 potentially to the coating on the pipeline,
6 which would over time potentially cause
7 long-term corrosion. The two documents seem
8 to indicate that effects on other things,
9 persons, whatnot, outside of the actual
10 construction of the line were reasonably
11 within the realm of safety.

12 Q. And is that your testimony? Based on what?

13 A. (Zysk) Based on reading those two documents.

14 Q. And you have not read the Corrpro document?

15 A. (Zysk) I think that's been made clear.

16 MR. CUNNINGHAM: That's all I
17 have.

18 CHAIRMAN HONIGBERG: Let's go
19 off the record for a minute.

20 (Discussion off the record)

21 CHAIRMAN HONIGBERG: Mr. Ahern,
22 you may proceed.

23 CROSS-EXAMINATION

24 BY MR. AHERN:

1 Q. Gentlemen, I'm Bruce Ahern. I'm one of the
2 intervenors from Bethlehem to Bridgewater --
3 CHAIRMAN HONIGBERG: Off the
4 record.

5 (Discussion off the record)

6 BY MR. AHERN:

7 Q. I'm Bruce Ahern, one of the intervenors in
8 the group from Bethlehem to Plymouth. And
9 I'm the only intervenor from the Plymouth
10 area, and that's the area that I'm going to
11 talk about because that's the area I'm
12 familiar with, mainly Route 3 South in
13 Plymouth.

14 The first thing I want to start off with
15 is, Mr. Taylor -- or excuse me -- Mr. Bascom,
16 in your prefiled testimony, you talked about
17 the Applicants having an unreasonable rate of
18 construction estimation. I've heard
19 different figures and seen different figures
20 in the testimony. I'm assuming that's
21 referring to the 300 feet per day that they
22 originally talked about? Or is that -- I've
23 seen 10 to 100 feet per day figures recently.

24 A. (Bascom) It was in reference to 300 feet per

1 day.

2 Q. So you think that the 10 to 100 feet per day
3 is a more realistic number for the current,
4 or do you think that's even an
5 over-estimation?

6 A. (Bascom) I think that's generally acceptable
7 or expected per crew, yes.

8 Q. Okay. Thank you.

9 And Mr. Taylor, in your prefiled
10 testimony, which is up on the screen there,
11 you mentioned the figure of 19,653 concrete
12 and dump truck trips for the open trench
13 construction. And am I correct in assuming
14 that those figures -- I think they also came
15 from the Applicant -- that was for the 4-foot
16 depth on the trenches; is that correct?

17 A. (Taylor) Yes. The 19,653 is our calculation,
18 not from the Applicant. But it is based on
19 the Applicant's typical detailed
20 cross-section.

21 Q. But that was when they were planning on a
22 4-foot depth; is that correct?

23 A. (Taylor) That's correct.

24 Q. Okay. Now that they're having to go down

1 7 feet, what do you figure that number is
2 going to be?

3 A. (Taylor) I don't know specifically. But if
4 the average trench depth increases, then that
5 number would increase as well.

6 Q. Can you basically assume it's going to, I
7 mean, increase by at least three quarters
8 since we're going from 4 feet to 7 feet?

9 A. (Taylor) No, I can't make that statement.
10 But I will say definitively that if the line
11 is deeper, they're going to need more dump
12 trucks to bring in. In this case, that was
13 relating to... I believe concrete was our
14 calculation for that, related to the flowable
15 fill from our report.

16 Q. Okay. Your testimony talks about... it says
17 concrete and dump truck deliveries.

18 A. (Taylor) That's correct.

19 Q. So I assumed that you were talking about
20 trucking out the stuff that they've dug out
21 and then hauling it back, whatever they need
22 to after they put their concrete in, to fill
23 over the top. And I'm talking about the
24 areas outside the pavement. Is that --

1 A. (Taylor) Correct. If I understand your
2 question, it does refer to both concrete
3 trucks and dump trucks in this calculation.
4 But our estimated volume for a concrete
5 truck, I believe we ran at 8 cubic yards and
6 10 cubic yards for a dump truck. So that
7 while those numbers aren't the same, I would
8 really have to run the numbers with the new
9 depth to tell you what the increase would be.

10 Q. Okay. But you would -- as far as the fill
11 that they're taking -- or the dirt they're
12 taking out and bringing back in, it's going
13 to be a significant increase in the number of
14 trucks since you're going 3 feet deeper into
15 the hole.

16 A. (Taylor) I would assume that to be the case,
17 yes.

18 Q. And I'm correct, and just the way you
19 understand it, they're going to take dirt
20 out, haul it to a holding location, and then
21 once they're finished with their
22 installation, they're going to bring some of
23 that fill back and put it back in the hole.

24 A. (Taylor) That could be the case if it's

1 suitable material. The DOT's recent finding
2 of a definition of the structural box of the
3 road and the extent that flowable fill could
4 be brought up from within the trench, I
5 haven't run those specific numbers. But that
6 has a factor on -- those too have a factor on
7 how much would be hauled away and/or brought
8 back of native material.

9 Q. But the way I understand it, a lot of their
10 plans have the ditch outside of the actual
11 structure box of the road. The DOT's
12 requiring them to be outside the pavement,
13 outside that structure box that they're
14 talking about.

15 A. (Taylor) They could be. I haven't reviewed
16 the exemption request at that level.

17 Q. Okay. Well, the exception request is you get
18 into the road. The DOT wants them outside
19 the road.

20 A. (Taylor) That's a true statement. However,
21 on the exemption request, they do show
22 alignments that are in green in some cases
23 where they are realigning outside of the
24 pavement, but still within the right-of-way.

1 That's what I'm referring to.

2 Q. I'm not talking about the right-of-way. I'm
3 talking about the structural box on the road.

4 A. (Taylor) That's correct. If I recall the
5 definition from DOT, the structural box was a
6 distance below the pavement, and it extended
7 horizontally outwards to the terminus of the
8 slope, which could be whatever the slope is
9 outside of the road edge.

10 Q. Okay. I'll agree with that. But some of the
11 ditches that they talked about, to me, from
12 what I've seen from the diagrams, have been
13 actually outside of the structure box.

14 A. (Taylor) That could be the case, yeah.

15 Q. Okay. Next thing I want to refer to, and
16 I'll bring it up in a minute, is Exception
17 Request No. 3 dealing with an area around
18 Glove Hollow Brook. Are you gentlemen
19 generally familiar with that area?

20 A. (Taylor) Generally from the maps, but --

21 Q. The building on the left at the bottom of the
22 picture is the Italian Farmhouse. The road
23 to the right near the top is Cummings Hill
24 Road. The blue lines there show the area

1 that bounds the brook itself.

2 A. (Taylor) Okay.

3 Q. Are you familiar with that? As I said, this
4 is Exception Request No. 3, Revision No. 3.
5 And it shows there an estimated time of
6 installation of three to five weeks. Do you
7 see that?

8 A. (Taylor) I do.

9 Q. Okay. I don't know how clear that is for
10 you, but it's the exception request. And I
11 heard you testify earlier today that on --
12 actually, I'm sorry. I meant to...

13 The area that I'm concerned about is
14 this top picture. Do you remember that view?
15 That's Route 3 looking north towards the
16 Italian Farmhouse. I think basically you're
17 down almost to the brook, the Glove Hollow
18 Brook, looking north. That's uphill.

19 A. (Taylor) Okay.

20 Q. And you couldn't tell from the picture. But
21 if you look at this diagram, and I'll try
22 and... okay. If you look at the really light
23 lines that go across the road, do you know
24 what those are? I mean, can you explain to

1 the Committee what those lines are?

2 A. (Taylor) Are you referring to the contour
3 lines?

4 Q. Yes, that's what I'm getting at.

5 A. (Taylor) Okay.

6 Q. Okay. And also down at the bottom, the
7 diagram at the bottom, you see there is a
8 fair slope to this area. And I understand
9 from your testimony, or from the testimony
10 this morning, that the HDD drilling can drill
11 on a slope like that. It doesn't have to
12 be -- the machine doesn't have to be in a
13 flat area? Because I understood from
14 previous testimony from the construction
15 panel that it needed to have a flat area.

16 A. (Zysk) A flat area is ideal, but they can
17 work with the grades that are out there.

18 Q. Okay. So they wouldn't have to dig into the
19 road to make a flat area for the drilling
20 machine to drill the holes?

21 A. (Zysk) In general, no.

22 Q. Okay. I don't know if you can see the
23 topographic lines on the left-hand side of
24 the picture just above the road. Can you see

1 those lines?

2 A. (Zysk) Yes.

3 Q. Yeah. And what does it mean when they're
4 real close together like that?

5 A. (Zysk) A steep slope.

6 Q. Steep slope?

7 A. (Zysk) Yes.

8 Q. Within the right-of-way; correct?

9 A. (Zysk) Yes, in this case.

10 Q. Okay. And this is the area we were just --
11 this is another drawing depicting the work
12 area in that section. Can you see that, or
13 do you need me to rotate it?

14 A. (Zysk) No, that's fine.

15 Q. Okay. My first question is: Do you see that
16 square that's on the left-hand side of the
17 road? That is a house. Is it normal for the
18 work area to go through a house?

19 A. (Taylor) No.

20 Q. Okay. This morning they were making a big
21 thing about being within 6 feet of somebody's
22 house; yet, in this example, it's going
23 through somebody's house. Do you find it
24 unusual that they would have that pictured

1 that way even on the third revision to their
2 exception request?

3 A. (Taylor) Yes. It's not something I'm used to
4 seeing on plans.

5 Q. Okay. The other thing on this, you notice
6 that the work area actually extends out to
7 the very edge of the right-of-way.

8 A. (Taylor) That's correct.

9 Q. One of you testified this morning they
10 needed, across the road, they needed a flat
11 area to work. Does that mean they're going
12 to have to dig into that bank that had up to
13 8 feet of slope within the right-of-way? Are
14 they going to have to excavate all that
15 material so that they have a flat area to
16 work?

17 A. (Zysk) I don't know that the entire work area
18 has to be flat.

19 Q. But I mean where there's -- because I'm
20 talking about mainly that area where the
21 entry holes are and the drilling rig has to
22 sit.

23 A. (Zysk) Yes.

24 Q. We talked earlier that they needed 30 feet of

1 flat area, a flat area for the rig --

2 A. (Zysk) Correct.

3 Q. -- which they depict as going out to the edge
4 of the right-of-way, which means they're
5 going to have to excavate a good portion of
6 that bank to get a flat area.

7 A. (Zysk) They may have to do some there, yes.

8 Q. Okay. The other thing that I'm concerned
9 about here, I submitted when I was talking to
10 the construction panel, that the right-of-way
11 in this area is depicted as being four rods
12 wide. I told them that the actual width of
13 this road is only three rods wide. So
14 they're going to have to adjust this work
15 area inward, and they're going to have a
16 limited amount of space. And to maintain a
17 single lane of traffic for passage of
18 vehicles, they're going to have to stay on
19 the, well, the lower side of that picture,
20 which is actually the west side of the road.
21 And if they have to bring their work area in,
22 which they said the minimum they need is
23 30 feet, then they're going to have to
24 actually go off the pavement on the west side

1 of the road. And do you see the contour
2 lines there on both sides of Cummings Hill
3 Road?

4 A. (Taylor) I do.

5 Q. Okay. Fairly steep?

6 A. (Taylor) Correct.

7 A. (Zysk) Yes.

8 Q. Okay. In a situation like that, how do
9 they -- are you familiar with how they would
10 handle -- because they're actually going to
11 have to be to the edge of the right-of-way
12 where some of those steep slopes are, are
13 they going to cut into Cummings Hill Road?
14 Because it slopes down at that point, and
15 then it doesn't show across on the left side
16 of Cummings Hill Road here. It doesn't go as
17 far as the house that's there. But it's a
18 fairly steep slope up to that house. So
19 you're going to have a difficult time keeping
20 the cars going along that area. And I was
21 just wondering if you see any problem with
22 this, as far as maintaining a lane for
23 traffic in that area.

24 A. (Taylor) Given the current configuration,

1 they can likely get a lane of traffic, from
2 what I've seen on the plans. Your
3 hypothetical, where it's I believe one rod
4 narrower, it's likely that they couldn't do
5 that.

6 Q. Okay. And that's what I'm concerned about
7 because that's my access to town, and the
8 traffic on that road is fairly heavy.

9 I just wanted to point out one other
10 thing. Again, that's the same area. And if
11 you look at the building that's on the
12 right-hand side of the road there, you notice
13 it's right at the edge of their depicted
14 right-of-way. And if they have to move their
15 work area closer to the center of the road,
16 or even across the center of the road to stay
17 out of the house that's on the left side, the
18 travel lane is going to have to be very close
19 to the house that's there on the right.

20 Would you agree?

21 A. (Taylor) That could be the case, depending on
22 how they configure the work area.

23 Q. Okay. Do you see -- I mean, do you see
24 enough room there to do a work area plus have

1 a lane of traffic between the -- you got a
2 maximum of 66 feet as depicted by the
3 right-of-way lines that they depict, which is
4 four rods. Do you see enough room there to
5 have a work area plus a travel lane, plus
6 room for the -- you notice that the gentleman
7 on the right-hand side, his driveway goes to
8 the front of the building, so that's where he
9 parks his cars.

10 A. (Taylor) Yeah, there's no doubt that would be
11 a challenge. I suspect that the
12 configuration of the work area as shown,
13 which is more of a complete rectangle, would
14 likely not be able to be maintained. And
15 if -- depending what the ultimate
16 right-of-way is, you may not be able to get
17 one lane of traffic through there without
18 widening the road, so to speak, temporarily.
19 But there's a number of hypotheticals there
20 that would need to be look at.

21 Q. But I mean just looking at the two buildings
22 only 66 feet apart, do you think that they
23 would be able to maintain a lane of traffic
24 through there, even if they had the

1 right-of-way?

2 A. (Taylor) It's possible. And I'll reiterate
3 my statement. If the work area is able to
4 and they choose to reconfigure it, by way of
5 example, perhaps the work area in front of
6 the square building that's shown on the
7 left-hand side of this image, it may very
8 well only be enough just to traverse the work
9 vehicles back and forth. Or the work
10 vehicles could go out into the single lane of
11 controlled traffic.

12 Q. But that would slow down any traffic that was
13 trying to pass by there.

14 A. (Taylor) Oh, for sure, that would be the
15 case.

16 Q. Okay. The last question I have is: Are you
17 gentlemen familiar with Japanese knotwood
18 [sic]?

19 A. (Taylor) I can't say I'm particularly
20 familiar with that.

21 A. (Zysk) It's an invasive species, if I
22 remember correctly.

23 Q. That's correct. And some of the changes that
24 have occurred to the plans that the

1 Applicants have submitted now have them
2 digging in areas where there is Japanese
3 knotwood. You said earlier that they're
4 going to haul material out and probably haul
5 material back in to these areas. How are
6 they going to be sure they aren't spreading
7 Japanese knotwood to areas where it isn't at
8 the present time? Do you have any idea as to
9 how they do that with other invasive species
10 if you're not familiar with Japanese
11 knotwood?

12 A. (Zysk) Offhand, no. I assume it's something
13 the environmental folks would cover in
14 requirements on treating or not treating.

15 Q. Okay. That wouldn't be part of the
16 construction consideration?

17 A. (Zysk) Not specifically.

18 Q. Okay. That's all the questions I have, Mr.
19 Chairman.

20 CHAIRMAN HONIGBERG: All right.
21 That brings us to the end of the day today.
22 When we come back tomorrow morning, Mr. Lakes
23 will have the microphone, and we'll continue
24 with the list from there. Thank you all.

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(Whereupon Day 50 Afternoon
Session was adjourned at 5:11
p.m., with the Day 51 hearing to resume
on October 24, 2017 at 9:00 a.m.)

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C E R T I F I C A T E

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	105:12;109:22; 126:4,6	70:5,15;92:13	143:21,24;144:1,6, 7	71:16
§	account (1) 68:7	adjourned (1) 160:2	aiming (1) 75:11	analysis (5) 41:8;58:3;66:22; 123:12;132:6
\$1.6 (1) 76:3	accounting (1) 20:10	adjust (1) 154:14	air-conditioned (1) 117:13	analyze (1) 138:6
[accuracy (3) 29:14;31:1;67:22	Administrative (2) 39:14;50:16	alert (1) 57:7	and/or (1) 148:7
[No (1) 6:11	accurate (7) 11:1;31:16;36:24; 66:3,15;68:9;71:2	advance (1) 134:14	Alexander (25) 12:17;42:7;58:16; 72:19;73:1;97:1,6, 24;98:5;100:20; 101:9;102:5;103:19; 104:7,12;121:23; 122:14;125:24; 126:24;127:8,12,19; 128:3,7;142:23	ANFO (5) 129:15,16,20,21; 130:12
[sic] (3) 51:19;99:17; 158:18	accurately (2) 52:18;66:11	advantage (1) 57:2	aligned (3) 138:18,22;139:17	angle (1) 53:9
A	acknowledge (1) 139:9	advantageous (1) 33:23	alignment (6) 31:8;33:20;34:8, 16;123:19;125:3	apart (1) 157:22
ABB (5) 108:2,12;114:14, 23;115:12	acknowledged (1) 14:21	adverse (5) 40:1;52:2,4,21; 139:14	alignments (1) 148:22	apiece (1) 93:24
ability (2) 16:15;126:2	acquired (2) 35:2,23	aerial (1) 124:5	allotted (1) 74:18	apologize (2) 103:8,12
able (12) 8:24;9:9;16:2; 32:10;42:11;63:8; 112:11;125:18; 157:14,16,23;158:3	across (8) 20:9;25:23;34:19; 82:10;150:23; 153:10;155:15; 156:16	affected (1) 9:11	allow (2) 87:3;136:22	APP (4) 58:11;60:15; 111:17,23
above (4) 81:16;93:2,22; 151:24	active (2) 122:14,16	affects (1) 58:22	allows (1) 136:15	apparently (2) 93:1;111:12
Absolutely (1) 88:7	activities (1) 4:19	afternoon (2) 39:10;160:1	allowed (5) 46:13,13;55:1; 56:12;57:15	appear (6) 13:2;29:5,7;57:19; 115:17;139:18
abutters (1) 74:16	activity (2) 5:23;20:3	Again (19) 24:9;29:19;34:16; 35:6;38:3;49:24; 51:8;63:24;83:7; 92:16;100:21;110:8, 17;111:20;113:19; 117:13;128:8;143:1; 156:10	allowing (1) 136:24	appears (4) 3:17;73:17,18; 143:4
abutting (8) 17:21;18:1;19:17, 21;20:20;69:23;70:4, 10	actual (6) 22:12;26:13;31:8; 143:9;148:10;154:12	against (1) 99:7	allows (1) 136:15	Appendix (2) 124:4;125:13
AC (7) 107:10;117:12; 123:8;126:11,14; 127:7;140:22	actually (16) 24:4;25:1;55:22; 62:16;80:8;84:4; 108:14;110:22; 118:23;139:14; 149:13;150:12; 153:6;154:20,24; 155:10	agencies (1) 32:20	almost (3) 96:14;110:5; 150:17	Applicant (22) 7:18;9:20;11:15; 13:17;28:6,17;35:1; 36:5;37:9;40:21; 41:3;49:5,7,8;50:19; 51:23;58:2;68:17; 73:20;126:24; 145:15,18
accept (37) 31:15;71:1;80:6; 82:15;86:12,18;94:2; 96:7,15,23;97:4,10, 18;100:5,16;102:5; 103:14,23;104:5,21; 105:1,5,12,17,20; 106:12;109:17,21,24; 110:10;117:10; 118:12;119:2,6; 126:8,12,17	add (7) 24:23;27:4;41:16; 65:2;81:23;101:17; 110:4	agency (3) 69:18;70:3;71:23	along (8) 11:3;22:16;25:1, 24;44:6;78:5;81:24; 155:20	Applicants (5) 3:17;50:10;51:3; 144:17;159:1
acceptable (3) 65:17;79:2;145:6	added (1) 112:4	ago (8) 81:7;86:13;96:17; 97:4;102:22;118:13; 119:4,9	alternating (1) 118:1	Applicants' (2) 4:14;9:22
accepted (3) 8:19;37:18;77:22	adding (1) 110:17	agree (20) 3:22;9:8;15:3; 29:10;30:22;49:18; 60:22;66:11;78:22; 81:22;82:8;85:3,4, 11;93:20;94:22; 116:5;126:7;149:10; 156:20	alternative (3) 11:5;40:20;41:8	Applicant's (16) 8:11;36:23;42:1, 11;47:9;58:10;65:12; 77:13;111:15,17,22; 122:24;123:15; 139:23;140:11; 145:19
access (6) 59:10;84:20;85:7; 87:3;114:7;156:7	addition (1) 63:8	agreeable (1) 139:3	Although (3) 72:1;92:14;103:4	Application (6) 45:13;71:19,21; 105:15;111:9;128:15
Accommodation (2) 71:13,16	additional (11) 22:9;24:18,24; 27:11;36:12;40:13; 41:4;63:6;65:3,5; 104:12	agreed (1) 66:8	altitude (1) 22:24	Applications (1) 39:21
according (7) 60:11;66:2;80:23;	addressed (1) 57:8	agreeing (1) 79:2	always (1) 37:10	applies (1) 40:8
	addressing (2) 61:10;117:5	agreement (2) 69:21;79:1	among (7) 13:13;54:14;74:3; 79:2,3;86:16;112:2	apprise (1) 71:11
	adequately (3) 52:22;53:6;67:24	ahead (1) 51:17	amount (4) 27:15;36:18; 100:20;154:16	approach (2) 54:16;81:3
	adjacent (3)	Ahern (5)	Amy (1) 39:10	
			analogue (1)	

<p>appropriate (2) 32:20;80:2</p> <p>approvals (1) 36:4</p> <p>approved (5) 5:7;8:22;62:20; 67:2;73:22</p> <p>Approximate (1) 112:13</p> <p>approximately (3) 10:24;11:7;110:11</p> <p>April (5) 7:20,21;35:12; 36:6;63:20</p> <p>arbor (1) 111:4</p> <p>area (70) 20:6,8,9;21:11,17; 24:11,11;25:2;26:5; 34:12,14;59:16,18, 18,22;69:5;70:6,13, 16;84:23;88:4,14; 104:5;106:8;109:3; 113:1;119:11,16; 120:6;121:20; 130:17;134:24; 139:13;142:23; 144:10,10,11;149:17, 19,24;150:13;151:8, 13,15,16,19;152:10, 12,18;153:6,11,15, 17,20;154:1,1,6,11, 15,21;155:20,23; 156:10,15,22,24; 157:5,12;158:3,5</p> <p>areas (27) 3:19,20;4:1,3,5,16, 21;9:11;33:22;36:7, 13,20;37:19,20,22; 52:5;68:15;105:2; 120:3,17;124:6; 139:10,16;146:24; 159:2,5,7</p> <p>argue (1) 89:23</p> <p>argument (1) 134:13</p> <p>arising (1) 37:23</p> <p>arose (1) 54:1</p> <p>around (8) 26:1,5;80:24; 95:16;100:14; 101:13;104:8;149:17</p> <p>arrangement (1) 20:17</p> <p>arriving (1) 5:24</p> <p>Art (1) 121:14</p> <p>articulate (2) 139:2,2</p>	<p>ascertained (1) 68:16</p> <p>Aslin (1) 48:9</p> <p>aspect (2) 73:13;78:5</p> <p>aspects (2) 83:11;142:7</p> <p>asphalt (1) 95:12</p> <p>asphalt-covered (1) 120:19</p> <p>assembled (1) 77:13</p> <p>assess (7) 4:22;5:1,10;8:17; 9:10;15:4;23:23</p> <p>assessment (6) 5:14;15:14;24:7; 25:5;42:3;140:14</p> <p>associated (4) 4:19;44:19;58:3; 77:16</p> <p>Association (1) 43:21</p> <p>assume (17) 8:15;16:18;23:2; 33:16;34:11;38:10; 56:9;62:14;65:1; 78:22;102:24; 113:20;118:21; 127:6;146:6;147:16; 159:12</p> <p>assumed (1) 146:19</p> <p>assuming (5) 20:17;28:1;64:15; 144:20;145:13</p> <p>assumption (5) 20:12;62:12;103:3; 105:23;106:3</p> <p>assumptions (7) 18:17,19;21:3,6; 31:6;38:4;103:20</p> <p>assure (1) 48:12</p> <p>attack (1) 137:16</p> <p>attacking (1) 137:14</p> <p>attempt (1) 33:2</p> <p>attempting (1) 49:19</p> <p>attorney (1) 121:15</p> <p>audience (1) 117:3</p> <p>August (6) 7:22;51:3;58:19; 65:11;131:12;137:3</p> <p>authority (1) 66:19</p>	<p>available (9) 8:7,23;9:13;37:3; 58:20;69:19;76:8; 87:10;126:3</p> <p>average (2) 85:15;146:4</p> <p>averaged (1) 102:3</p> <p>avoid (5) 33:2,21,22;40:14; 41:5</p> <p>avoiding (1) 39:24</p> <p>aware (38) 7:8,11,18,24;15:8; 16:1;28:8;35:16; 36:9;37:14;58:24; 59:1,4,5;62:9;68:15, 20;70:18,23;72:12, 15,18;73:2;80:19; 81:5;96:16,22; 113:15;119:20; 121:4;129:4,12,18; 130:13;131:12; 141:3,6,20</p> <p>away (4) 17:2;75:24;103:9; 148:7</p>	<p>24;100:3;107:3,9,14; 108:4,6,10,16;109:1, 14,21;110:1,5,11,19; 111:2,4,14,21;112:1, 3,13,24;113:14,24; 114:1,12,19;115:7, 16;116:19;117:1; 119:8,13,20;120:2, 13,24;121:3;129:18; 141:9,13,16,19; 142:2;144:15,24; 145:6</p> <p>Bascom's (1) 86:6</p> <p>base (2) 61:1;100:13</p> <p>Based (21) 3:16;23:11;31:6; 33:9;36:21;37:18; 38:10;41:1;55:15; 59:11;91:22;97:18; 103:3;106:21; 126:18;127:4,20; 128:14;143:12,13; 145:18</p> <p>basic (1) 38:21</p> <p>basically (3) 20:13;146:6; 150:16</p> <p>basis (6) 52:24;81:21; 120:21;133:12; 135:24;141:13</p> <p>batch (1) 37:21</p> <p>Bates (2) 58:11;60:14</p> <p>bear (5) 73:7;101:7;105:3, 8;106:6</p> <p>become (1) 54:10</p> <p>becomes (1) 26:24</p> <p>bedrock (1) 23:3</p> <p>begin (1) 63:18</p> <p>beginning (5) 23:22;38:18;45:21; 46:11;115:1</p> <p>behalf (2) 134:6;138:7</p> <p>behind (1) 92:3</p> <p>believes (1) 52:2</p> <p>below (2) 6:16;149:6</p> <p>Bench (1) 55:16</p> <p>bend (1) 112:13</p>	<p>benefits (1) 64:3</p> <p>benonite (1) 28:23</p> <p>best (4) 16:15;37:2;91:14; 93:7</p> <p>Bethlehem (2) 144:2,8</p> <p>better (3) 76:6;90:9;107:1</p> <p>beyond (13) 13:16;47:11;55:11; 79:8;80:18;82:2; 104:10;105:10; 125:5;134:7,16; 135:17;138:14</p> <p>bid (4) 76:2;77:1,8,11</p> <p>bidding (4) 76:1,10,16;77:15</p> <p>bids (5) 72:21;73:2,4,13; 77:7</p> <p>big (4) 102:7;116:14; 123:2;152:20</p> <p>bigger (1) 87:2</p> <p>billion (1) 76:3</p> <p>Bishop (1) 84:13</p> <p>bit (9) 7:16;64:4,6;70:8; 74:24;75:1;88:15; 96:2;104:15</p> <p>Black (1) 10:14</p> <p>blasting (8) 123:4;128:18,24; 129:7,11,12,15,20</p> <p>blue (1) 149:24</p> <p>boom (3) 98:10;100:22; 101:16</p> <p>border (1) 34:3</p> <p>bore (12) 17:11;22:22;23:2, 18;28:13,18,21;29:2, 13,17;30:24;31:4</p> <p>bores (2) 24:1,24</p> <p>boring (7) 23:1,15;24:10; 25:3;29:14;32:16; 127:23</p> <p>borings (5) 23:21;24:8,14,17, 19</p>
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B

<p>Boston (1) 108:18</p> <p>both (7) 20:2;67:19;91:17; 123:8;131:15;147:2; 155:2</p> <p>bottom (9) 17:4;96:13;100:6, 8,11;106:3;149:21; 151:6,7</p> <p>boundaries (4) 7:19;8:8;28:16; 37:7</p> <p>boundary (11) 37:17;67:5,6,11,15, 23;68:3,15,18;69:10; 70:14</p> <p>bounds (1) 150:1</p> <p>Bowes (8) 76:9;81:5;86:14; 89:20;96:18;102:15; 118:13;119:5</p> <p>box (10) 99:6;106:1;114:2, 2;148:2,11,13;149:3, 5,13</p> <p>Brad (2) 74:14;107:4</p> <p>bread (1) 113:21</p> <p>break (1) 74:7</p> <p>breakdown (1) 10:8</p> <p>bridge (5) 84:4;85:2,17,22; 86:4</p> <p>Bridgewater (1) 144:2</p> <p>brief (1) 65:21</p> <p>bring (8) 89:12;91:12;102:4; 109:6;146:12; 147:22;149:16; 154:21</p> <p>bringing (1) 147:12</p> <p>brings (1) 159:21</p> <p>broad (2) 6:2;67:9</p> <p>broadly (1) 135:13</p> <p>Brook (5) 84:13;149:18; 150:1,17,18</p> <p>brought (3) 44:10;148:4,7</p> <p>Bruce (2) 144:1,7</p> <p>bucket (1)</p>	<p>92:4</p> <p>build (3) 33:17;83:9;124:18</p> <p>building (5) 129:19;149:21; 156:11;157:8;158:6</p> <p>buildings (1) 157:21</p> <p>buildup (1) 104:10</p> <p>built (4) 62:19,22;80:23; 125:20</p> <p>burial (4) 80:8,21;82:14; 139:10</p> <p>buried (6) 37:11;118:15; 119:10;120:5,11; 142:11</p> <p>Burns (1) 140:15</p> <p>bury (1) 139:12</p> <p>business (1) 75:3</p>	<p>120:7;138:4;145:14</p> <p>Campground (5) 121:17;122:4,7,11, 14</p> <p>can (71) 6:23;8:1;11:15,24; 14:13,14;15:4;16:5,9, 11;18:4;19:8,10; 25:12;27:4;30:16; 32:4;33:24;34:11; 35:15;37:2;40:7,12; 42:12;49:24;57:8; 58:12;60:18;67:4; 69:3;74:19;75:8; 76:4;80:21;87:10; 90:3,11;94:9;95:7,8; 100:11;101:7;102:2, 24;103:3;104:19; 107:5;111:11,19; 122:9,17;129:9; 133:17;135:16; 138:1,13;141:10,12, 17,17,18,23;142:17; 146:6;150:24; 151:10,16,22,24; 152:12;156:1</p> <p>Canadian (1) 43:21</p> <p>capable (2) 110:22;137:18</p> <p>capture (1) 26:6</p> <p>care (2) 85:14;112:22</p> <p>careful (1) 95:11</p> <p>cars (2) 155:20;157:9</p> <p>cart (2) 109:5;110:24</p> <p>case (23) 8:4;41:24;42:22; 54:3;59:23;64:23; 66:18;69:22;70:3; 77:21;79:18;80:21; 93:7;99:10;105:17; 113:15;146:12; 147:16,24;149:14; 152:9;156:21;158:15</p> <p>case-by-case (1) 81:21</p> <p>cases (3) 24:13;71:6;148:22</p> <p>categorically (1) 52:21</p> <p>cause (1) 143:6</p> <p>caused (1) 141:7</p> <p>center (11) 34:2;101:14,16,23; 103:16,16,24,24; 104:10;156:15,16</p>	<p>certain (6) 64:11;69:6;74:19; 102:21;136:8;141:13</p> <p>certainly (11) 32:18;42:12;55:19; 112:10;113:11; 116:21;133:16; 135:16;137:16; 138:1,13</p> <p>certainty (1) 68:17</p> <p>certified (1) 67:12</p> <p>cetera (1) 41:5</p> <p>CFP (2) 83:15;114:22</p> <p>CFP135 (1) 113:19</p> <p>chain (1) 88:1</p> <p>Chair (19) 14:2;18:16;25:6; 46:3;48:11;50:14; 54:6;55:13;89:15; 117:16;130:1,8; 131:6,16;133:16; 134:15,18;136:2; 140:3</p> <p>CHAIRMAN (99) 3:3,10;11:20;12:4; 14:5,12;18:18;25:9; 29:21;30:15;31:22; 32:3;35:7,14;38:6,14, 24;39:4;40:4;45:10, 18;46:1,6,16;47:2; 48:1,4,14,23;49:4,11; 50:4;51:14,17;52:10, 15,19;55:6,10,21; 56:6,15,23;57:10,14; 61:6,12;73:9,14;74:1, 6,10;79:10,15,23; 82:3;83:3,7;89:18; 90:2;102:10,18,23; 103:7,11;116:1,8; 117:17,21;118:2,6, 20;121:7,8;122:8; 130:4,9,15;131:13, 20,24;133:13,19,23; 134:2,23;135:8; 136:6,18;137:12; 138:8,24;139:8; 140:5;143:18,21; 144:3;159:19,20</p> <p>challenge (1) 157:11</p> <p>chance (1) 42:5</p> <p>change (1) 76:21</p> <p>changes (3) 76:5;80:16;158:23</p> <p>characteristic (1)</p>	<p>113:1</p> <p>characteristics (1) 99:5</p> <p>characterization (3) 52:17;85:12;113:7</p> <p>characterize (5) 109:4;117:2;125:2, 12;127:16</p> <p>charge (1) 138:4</p> <p>charges (1) 137:21</p> <p>cheaper (1) 76:7</p> <p>chimney (3) 111:9;113:12; 114:6</p> <p>choice (2) 137:1,24</p> <p>choose (2) 57:2;158:4</p> <p>chose (1) 137:6</p> <p>circumstance (1) 113:9</p> <p>circumstances (1) 117:3</p> <p>claim (1) 137:9</p> <p>claimed (1) 17:13</p> <p>clarification (2) 47:16;74:24</p> <p>clarify (3) 47:21;50:11;66:10</p> <p>Clarksville (4) 58:13;74:17;80:10; 88:17</p> <p>clean (1) 117:14</p> <p>clear (7) 54:9;10;56:11; 73:17;137:3;143:15; 150:9</p> <p>clearly (3) 85:7;91:7;139:9</p> <p>clerk (3) 78:9,21;79:4</p> <p>client (5) 11:24;12:1;32:19; 130:18;131:10</p> <p>clients (1) 123:2</p> <p>client's (2) 125:14;140:23</p> <p>close (7) 70:16;92:9;102:1; 104:19;106:4;152:4; 156:18</p> <p>closed (5) 22:14;94:22; 106:22;122:15; 138:10</p>
C				
<p>cable (15) 28:14;107:8,10,12, 13;108:2,12,15; 109:1,15;110:3; 111:12;112:15; 117:4;142:9</p> <p>cables (4) 29:12;30:23;81:9; 120:15</p> <p>cable's (2) 111:6;114:24</p> <p>calculated (1) 125:23</p> <p>calculation (3) 145:17;146:14; 147:3</p> <p>calculations (1) 109:17</p> <p>calendar (2) 45:16;65:7</p> <p>call (7) 41:19;52:15;72:1; 85:2;124:10,15; 125:6</p> <p>called (6) 42:2;75:22;81:7; 87:13;113:21;129:15</p> <p>calling (1) 38:21</p> <p>Calls (5) 11:19;30:13;35:6; 38:3;83:2</p> <p>came (6) 10:13;42:18;51:9;</p>				

<p>Closer (3) 90:9;125:10; 156:15</p> <p>closing (1) 4:17</p> <p>closure (1) 21:14</p> <p>closures (1) 9:11</p> <p>coating (1) 143:5</p> <p>Co-Existing (2) 43:19;132:14</p> <p>Colebrook (1) 84:21</p> <p>collectively (1) 78:15</p> <p>colloquialism (1) 114:2</p> <p>co-located (5) 43:13;45:20;46:9; 61:23;141:24</p> <p>co-location (20) 41:19;44:9,20; 45:3;46:24;58:1,4; 123:7;130:19,23; 133:8;136:14,17; 139:23,24;140:11,20, 24;142:12,18</p> <p>colors (1) 19:11</p> <p>combination (3) 73:4,21;128:11</p> <p>combined (1) 80:13</p> <p>coming (4) 35:10;83:20,23,24</p> <p>commences (1) 64:2</p> <p>comment (6) 65:3;86:7,12; 89:21;118:14;142:4</p> <p>comments (1) 65:15</p> <p>Commission (1) 3:8</p> <p>Committee (3) 129:6;136:11; 151:1</p> <p>common (3) 26:11;75:13;78:10</p> <p>community (1) 11:3</p> <p>company (2) 42:2;108:11</p> <p>comparison (2) 77:15;114:22</p> <p>competitive (3) 76:1,10;77:15</p> <p>complete (5) 5:6;8:19;12:9; 44:18;157:13</p> <p>completed (2)</p>	<p>8:13,22</p> <p>completely (1) 4:16</p> <p>completion (1) 10:23</p> <p>complexity (1) 4:18</p> <p>components (1) 129:21</p> <p>compound (2) 129:15;130:13</p> <p>conceivably (1) 87:8</p> <p>concentrate (3) 84:4;88:3,15</p> <p>conceptual (1) 4:15</p> <p>concern (5) 44:10;123:2; 125:15;130:17; 140:23</p> <p>concerned (3) 150:13;154:8; 156:6</p> <p>concerns (9) 30:7;45:2,8;46:17; 57:3;61:21;68:22,23; 133:7</p> <p>concluded (1) 116:9</p> <p>conclusion (2) 63:15;83:2</p> <p>concrete (22) 27:8;37:21;57:17; 81:2;91:18;92:10,12, 13,23;93:8,15,22,23, 24;94:6,7;145:11; 146:13,17,22;147:2,4</p> <p>concur (2) 6:19;7:2</p> <p>Condition (1) 17:3</p> <p>conditions (11) 16:18;17:17;19:10, 13;23;14,24;27:14; 34:10;88:6;97:19,19</p> <p>conduct (2) 50:22;140:19</p> <p>conductor (1) 28:22</p> <p>conduit (8) 17:12;25:16;29:17; 31:5;81:1;89:10; 90:24;111:11</p> <p>confer (1) 48:9</p> <p>conference (2) 51:6,12</p> <p>conferences (1) 48:12</p> <p>configuration (2) 155:24;157:12</p> <p>configure (1)</p>	<p>156:22</p> <p>confined (3) 8:7;114:7;120:17</p> <p>confirm (2) 7:19;126:9</p> <p>conflict (1) 20:4</p> <p>conflicts (1) 86:5</p> <p>confused (2) 70:8;75:2</p> <p>confusion (2) 80:7;112:18</p> <p>Connecticut (2) 119:21,23</p> <p>connection (2) 73:19;113:1</p> <p>connects (1) 114:6</p> <p>Conservation (1) 3:7</p> <p>consider (7) 13:18,21;14:16,22; 15:12;41:12;119:22</p> <p>considerable (2) 29:4;104:22</p> <p>consideration (1) 159:16</p> <p>considerations (1) 26:21</p> <p>considered (3) 40:21;68:21;75:20</p> <p>consistent (2) 5:18;54:12</p> <p>consistently (2) 53:2;54:14</p> <p>constrained (1) 16:23</p> <p>constraint (1) 22:13</p> <p>constraints (1) 91:10</p> <p>construct (4) 10:5;77:24;121:16; 129:8</p> <p>constructed (2) 11:5;59:15</p> <p>constructing (1) 21:16</p> <p>construction (63) 3:20;4:1,18;5:23; 8:11;11:1,23;22:2,5, 12;26:16,22;27:4; 31:18;32:9;33:18; 34:6;35:18;36:2,11, 15,23;37:10;38:18; 40:18,19;59:20; 62:23;63:18;64:1,2, 7;65:4;75:3,5;77:11; 81:6;82:4;83:8;85:7, 15,20,24;86:14,17; 87:14,18;92:11; 96:16;97:3;106:14,</p>	<p>15;110:2;122:23; 123:1;124:15;125:7; 143:10;144:18; 145:13;151:14; 154:10;159:16</p> <p>construction's (1) 95:3</p> <p>construed (1) 69:7</p> <p>contact (1) 81:10</p> <p>contain (1) 45:13</p> <p>contained (3) 26:6;54:7;114:4</p> <p>container (3) 115:5,9;117:8</p> <p>containers (1) 115:3</p> <p>contaminants (1) 114:9</p> <p>contaminated (1) 33:21</p> <p>contamination (2) 33:4,6</p> <p>context (7) 47:10;78:2;120:13, 20;123:20;129:19; 135:19</p> <p>continue (4) 30:16;32:4;90:3; 159:23</p> <p>continuous (1) 34:18</p> <p>contour (2) 151:2;155:1</p> <p>contract (1) 37:12</p> <p>contractor (10) 13:7;15:7,13,17; 21:20;24:20;32:21; 76:11,13;77:9</p> <p>contractors (3) 13:12;15:9,20</p> <p>contractors' (1) 77:7</p> <p>contracts (3) 37:14,15;77:11</p> <p>control (20) 4:15,20;5:6,9,13, 19;6:4,5;8:1,9,21; 9:12;15:5;37:19; 63:14;86:2,4,7; 114:5;124:8</p> <p>controlled (2) 114:8;158:11</p> <p>convenient (1) 76:7</p> <p>conventional (1) 120:17</p> <p>conversation (1) 48:6</p> <p>conversely (1)</p>	<p>59:24</p> <p>copy (2) 16:2;42:9</p> <p>cores (1) 24:1</p> <p>corner (7) 20:22;26:13;31:14; 32:1;104:18;115:14; 117:11</p> <p>correctly (4) 56:21;59:16;78:17; 158:22</p> <p>corridor (3) 36:20;46:9,10</p> <p>corrosion (1) 143:7</p> <p>Corrpro (4) 42:2;140:14; 141:22;143:14</p> <p>cost (2) 81:18;82:13</p> <p>costly (3) 77:4,5,24</p> <p>costs (1) 82:17</p> <p>Cote (1) 97:13</p> <p>Counsel (20) 46:22;49:1,8;54:4, 17,22;56:19;65:13; 116:4;131:10;134:5, 6;135:1,5;136:9; 137:21,23;138:5,7,17</p> <p>count (1) 126:13</p> <p>counterweight (6) 97:22;100:15,17, 18,20;102:8</p> <p>county (4) 69:19;83:22;84:23; 85:9</p> <p>couple (9) 43:17;55:2;71:22; 74:22;102:21;108:1; 118:13;130:22; 137:15</p> <p>course (6) 40:17;45:16;50:23; 54:5,11;130:18</p> <p>court (2) 69:14;98:13</p> <p>cover (6) 42:23;87:3;134:18; 136:3,14;159:13</p> <p>coverage (1) 136:16</p> <p>covered (3) 131:6,8;135:6</p> <p>crane (26) 21:17;96:19,22; 97:13,17,21;98:2,7, 16,18,24;99:18; 100:1,4,5,21;102:7,</p>
---	---	--	--	--

16;103:18,22;104:5; 106:2;110:13,19,23; 124:7 cranes (1) 98:9 Creampoke (6) 83:21,23;84:5,19, 24;85:4 create (1) 5:7 creates (1) 25:1 credibility (4) 136:10;137:14,17, 18 credible (2) 136:7,24 crew (5) 15:5;32:16;81:6; 106:14;145:7 crews (1) 63:6 Criteria (3) 43:18;92:16; 132:14 critical (4) 15:1;134:18;135:6; 136:14 criticism (1) 116:22 cross (3) 51:4;55:1;85:17 CROSS-EXAMINATION (20) 3:5;39:8;47:8; 48:21;50:12,21;52:6, 6;54:2;56:19;74:12; 121:10;122:23; 134:16,21,22;135:13; 136:4,5;143:23 cross-examine (2) 51:22;136:16 cross-examiners (1) 124:23 crossing (7) 63:3,4,13,13; 81:10;84:12;85:22 cross-section (1) 145:20 crude (1) 101:2 crumbling (2) 61:20,22 CS (1) 105:22 CS127 (1) 100:7 CS135 (2) 99:17;107:3 CS136 (1) 101:5 CS138 (2) 106:1,21 cubic (2)	147:5,6 cumbersome (1) 93:12 Cummings (4) 149:23;155:2,13, 16 Cunningham (32) 121:9,11,14; 122:12;130:5,6,11, 16;131:14,15,21; 132:2,4;133:1,4,14, 15,21;134:1,10; 135:3;136:1,12,21; 137:9,13;138:9; 139:19,20;140:7,10; 143:16 Cunningham's (1) 131:9 curious (1) 25:12 current (3) 22:6;145:3;155:24 currently (1) 34:22 curves (1) 17:2 custom (2) 115:3;117:8 cut (2) 92:20;155:13 cutting (2) 87:20;101:15 D d5 (1) 39:16 damage (1) 143:4 danger (1) 141:24 dangers (3) 140:24;141:6; 142:17 dashed (4) 17:12,13;28:12,15 data (3) 37:3;123:15;131:8 date (1) 87:23 dated (3) 3:15;42:23;43:19 David (2) 65:2;77:21 Dawn (5) 42:11,13;58:6; 83:17;107:5 day (19) 54:1,8;85:15; 88:21,22;90:5;94:2, 10;95:1;97:8;120:4, 7;144:21,23;145:1,2; 159:21;160:1,3	days (5) 55:17;57:6;64:17, 24;102:22 day's (1) 88:13 DC (6) 43:23;123:8; 126:21;141:8,12,23 dealing (2) 35:9;149:17 decide (2) 33:4;71:13 decided (1) 79:4 decision (2) 37:23;135:9 decisions (3) 13:23;14:18,24 deed (1) 67:19 deeds (2) 67:13;68:8 deeper (5) 26:15,24;27:6; 146:11;147:14 default (1) 21:15 defending (1) 137:18 defer (2) 31:7;66:21 define (5) 67:21,24;91:21; 93:7;112:22 defined (5) 4:22;66:3,14; 82:21,22 defining (1) 66:4 definitely (5) 31:7;85:16;92:20; 110:5;124:12 definition (3) 114:24;148:2; 149:5 definitive (1) 31:10 definitively (1) 146:10 delay (3) 31:17;32:8;56:5 delayed (1) 5:17 delays (2) 5:15;9:10 delivered (1) 108:23 deliveries (1) 146:17 delivering (1) 104:20 denied (4) 50:17;51:10,11;	76:24 departing (1) 5:24 Department (1) 32:14 depend (3) 21:19;26:3;63:17 dependent (1) 100:22 depending (10) 27:12;76:5;88:5; 93:7;104:19;109:14; 110:2;113:9;156:21; 157:15 depends (3) 71:23;92:16;95:24 depict (2) 154:3;157:3 depicted (4) 45:23;154:11; 156:13;157:2 depicting (1) 152:11 depicts (1) 58:12 deposit (1) 91:13 depth (14) 22:23;26:13,24; 27:16,18;29:12; 30:23;99:14;126:22; 127:3;145:16,22; 146:4;147:9 DES (2) 35:3;36:1 describe (6) 17:18;19:14;69:3; 86:21;107:19;113:22 described (4) 11:8;33:10;53:24; 62:19 description (3) 40:12;41:3;112:20 descriptive (3) 101:3,8;112:6 design (8) 15:21,21,22;24:3; 30:3;71:10;72:12; 76:24 designations (1) 4:3 designed (3) 11:13;61:18; 116:17 designing (1) 33:22 desire (1) 78:8 destructive (1) 76:8 detail (4) 85:20;86:8;116:22, 23	detailed (4) 8:17;24:21;125:7; 145:19 details (1) 3:18 determination (6) 50:20,23;57:20; 67:16;69:14;76:12 determine (4) 51:4;66:12;68:1; 127:24 determined (3) 78:3;105:2;127:4 detours (1) 9:11 devaluation (1) 81:23 develop (2) 8:9;126:19 developed (1) 24:21 development (7) 6:21,22;7:5,6; 81:18;82:23;83:12 deviate (1) 71:14 deviation (1) 77:22 DeWan (1) 142:9 dewatering (1) 37:21 diagram (2) 150:21;151:7 diagrams (1) 149:12 diameter (4) 29:12;30:24; 112:10,14 dictates (1) 102:7 differ (1) 135:4 difference (2) 112:19,22 different (10) 43:17;47:10;57:18; 64:19;71:17;77:20; 131:8;140:3;144:19, 19 differs (1) 135:1 difficult (4) 23:17;86:9;93:13; 155:19 dig (2) 151:18;153:12 digging (2) 88:11;159:2 dimensions (2) 103:21;126:20 dipping (1) 95:16
--	--	--	---	---

<p>direct (6) 32:22;80:7;82:14; 135:15,18;136:15</p> <p>direction (1) 84:20</p> <p>directional (1) 4:20</p> <p>directly (4) 92:13;106:4;114:5; 115:13</p> <p>dirt (9) 80:22;95:18,19; 119:10;120:10,16,21; 147:11,19</p> <p>disagree (4) 20:6;51:15;116:5; 135:21</p> <p>disclosure (1) 52:7</p> <p>discovery (1) 115:21</p> <p>discussed (3) 44:6;57:24;61:15</p> <p>discusses (1) 41:6</p> <p>Discussion (3) 112:2;143:20; 144:5</p> <p>dispatch (1) 92:12</p> <p>dissipation (1) 27:7</p> <p>distance (6) 29:4;61:1;98:2,5; 100:22;149:6</p> <p>distinction (1) 67:5</p> <p>disturbance (3) 4:5;8:6;96:1</p> <p>ditch (7) 90:24;91:8,18; 92:5,6;93:16;148:10</p> <p>ditches (2) 80:9;149:11</p> <p>DNA (4) 132:12;133:2; 139:21;140:12</p> <p>docket (2) 73:18,24</p> <p>document (22) 4:4,9;6:16;43:6; 71:12;97:6;117:16; 118:4,4;126:3;132:5, 13,20;133:5,7,18; 140:1,16,17,18; 142:8;143:14</p> <p>documentation (3) 35:1;36:5;109:22</p> <p>documents (15) 67:14;77:2;80:16; 96:9;123:16;124:15; 130:23;131:16,22; 132:8,16;133:22;</p>	<p>143:2,7,13</p> <p>Dominion (1) 13:2</p> <p>done (19) 10:14;13:3;17:19; 19:15;20:21,24; 21:12,13;24:8,17; 39:3;52:23;58:1; 88:8,10;92:15; 113:16;122:17;123:5</p> <p>door (3) 133:16,19,21</p> <p>DOT (32) 5:4;6:14,18,19;7:2, 8,19,21,22;8:14,16, 22;9:4,7,21,22;14:9; 15:16,18;34:5;35:3; 36:1;62:7;65:15; 66:2,18,21;67:1,2; 68:18;148:18;149:5</p> <p>DOT's (2) 148:1,11</p> <p>dotted (1) 17:13</p> <p>double (1) 22:15</p> <p>doubt (1) 157:10</p> <p>down (28) 16:12;17:21;19:17; 23:1,15;27:7;34:15; 40:4;77:3;83:23; 84:4,14,17;92:6; 95:21;97:15;101:14, 15;105:8;111:8; 112:11;113:11; 138:12;145:24; 150:17;151:6; 155:14;158:12</p> <p>drawing (2) 124:3;152:11</p> <p>drawings (2) 4:14;26:14</p> <p>drawn (2) 30:13;53:14</p> <p>drew (2) 16:14;28:17</p> <p>drill (5) 23:20;24:5,12; 151:10,20</p> <p>drilling (11) 4:20;23:5;24:19; 26:7,8;32:21;105:9, 10;151:10,19;153:21</p> <p>driveway (1) 157:7</p> <p>due (6) 10:11;26:19;55:17; 56:3;99:14;137:5</p> <p>dug (2) 90:23;146:20</p> <p>Dummer (9) 121:19;123:3,5;</p>	<p>124:1;125:16; 126:15;128:9;129:3; 131:19</p> <p>dump (7) 35:23;93:14; 145:12;146:11,17; 147:3,6</p> <p>dumping (2) 26:21;35:3</p> <p>duration (3) 4:18;63:17;72:5</p> <p>during (6) 14:24;24:5;50:23; 59:19;106:22;114:9</p>	<p>123:8;130:24; 132:15;133:10</p> <p>electricity (1) 141:11</p> <p>Electrodes (1) 132:6</p> <p>ELMO (3) 42:13;58:7;84:9</p> <p>else (5) 41:15;67:3;80:19; 94:19;117:23</p> <p>encloses (2) 65:15,21</p> <p>encompassing (1) 106:2</p> <p>encounter (1) 32:16</p> <p>encountered (2) 24:5;33:12</p> <p>encourage (1) 48:8</p> <p>end (12) 9:13;23:22;66:4; 69:20;85:8;87:19,21; 94:10,24;104:1; 120:7;159:21</p> <p>ended (1) 120:4</p> <p>ends (1) 17:1</p> <p>energy (3) 40:2,8;75:5</p> <p>engineer (2) 14:23;142:10</p> <p>engineering (3) 13:22;14:17; 125:18</p> <p>enough (8) 23:22;68:1;111:6, 8;122:13;156:24; 157:4;158:8</p> <p>ensures (1) 37:13</p> <p>enter (1) 26:10</p> <p>entered (1) 53:12</p> <p>entertain (1) 136:24</p> <p>entire (2) 28:20;153:17</p> <p>entirely (3) 11:2;15:23;54:9</p> <p>entitled (3) 132:5,13;137:16</p> <p>entitlement (1) 72:1</p> <p>entity (1) 69:8</p> <p>entrance (1) 26:2</p> <p>entry (9) 17:3,7;19:1;24:10,</p>	<p>18;26:5;59:17,21; 153:21</p> <p>environment (2) 114:8;117:14</p> <p>Environmental (5) 32:15;114:5; 122:24;123:1;159:13</p> <p>equal (3) 21:8;76:17,18</p> <p>equate (1) 76:20</p> <p>equipment (5) 21:20;77:20;109:4; 110:21;114:3</p> <p>equivalent (1) 115:4</p> <p>erosion (1) 124:7</p> <p>especially (1) 105:3</p> <p>essentially (1) 21:8</p> <p>establish (2) 68:18;125:19</p> <p>estimate (7) 6:2,7;8:21;10:22; 21:21;22:1;127:1</p> <p>estimated (4) 8:12;110:7;147:4; 150:5</p> <p>estimates (2) 127:2,7</p> <p>estimation (1) 144:18</p> <p>et (1) 41:5</p> <p>Europe (1) 108:16</p> <p>evaluate (1) 77:4</p> <p>evaluated (2) 3:18;4:7</p> <p>evaluation (1) 44:18</p> <p>even (16) 8:20;64:10,12; 65:1;68:10;70:18; 83:11;87:20;91:16; 106:16;117:9; 124:24;145:4;153:1; 156:16;157:24</p> <p>everybody (3) 20:14;46:8;49:4</p> <p>Everyone (2) 46:6;86:21</p> <p>Ex (1) 114:22</p> <p>exact (2) 98:15;127:3</p> <p>Exactly (2) 7:1;49:14</p> <p>examination (2) 134:17;140:20</p>
---	--	---	--	--

examining (3) 52:1,4,5	17:16,22,23;19:18, 19:24;11,18;25:15; 26:2,6	40:8	79:21	firm (1) 37:8
example (10) 4:4;6:1;60:23; 64:20;126:21; 129:22;141:4,21; 152:22;158:5	exiting (2) 26:4;60:1	facility (2) 40:2,20	feet (71) 16:21,24;17:14; 18:10,12;20:8;21:22, 22,23;23:10;27:20; 28:17,18,20;30:21; 81:1;84:5,14;87:21; 88:4,8,10,21;89:5,6, 7,9;90:15;93:19; 96:10,10,11;101:12, 18,19,21,22,24; 102:4;103:16;104:2, 2,3,7,18;105:5,15; 106:7,8,10,11,12,16, 20;109:19;112:16; 122:19;144:21,23,24; 145:2;146:1,8,8; 147:14;152:21; 153:13,24;154:23; 157:2,22	first (24) 7:3;8:14;11:10; 35:20;40:17;42:15, 20;49:7;50:7;54:1,1, 58:24;74:22;75:23; 86:21;88:20,23; 102:11;107:21; 123:11;132:21; 136:21;144:14; 152:15
examples (2) 70:1,12	expanding (1) 18:12	facing (1) 93:4	few (3) 42:16;47:19;119:9	fishing (1) 59:10
excavate (4) 89:5,9;153:14; 154:5	expect (4) 32:19;63:5;75:12; 80:21	fact (18) 30:9;34:22;57:24; 63:11;75:9;90:15; 97:18,20;100:5; 103:23;105:7,14; 106:6,12;114:15; 119:2;124:5;136:13	field (4) 67:13;68:8;75:6; 76:18	five (2) 12:13;150:6
excavated (1) 99:8	expected (1) 145:7	factor (2) 148:6,6	figure (2) 145:11;146:1	flat (16) 25:18,19,21,23; 95:11,20;151:13,15, 16,19;153:10,15,18; 154:1,1,6
excavation (4) 26:19;80:24;88:5; 99:15	experience (13) 7:13;9:24;12:3,8; 13:18;14:11;15:6,17; 24:15;69:17;78:11, 18;120:21	factors (1) 98:6	figures (5) 93:19;144:19,19, 23;145:14	flabed (3) 102:9;108:24; 109:2
excavator (1) 92:4	expert (1) 142:23	facts (3) 18:17;38:5;52:8	file (3) 51:20;71:17,21	flexibility (4) 111:7,8,13;112:11
except (1) 10:10	experts (2) 135:5;142:7	faint (3) 17:9;28:14;60:18	filed (4) 37:13;51:3;53:2; 61:5	floor (1) 50:9
Exception (34) 16:8;28:11,20; 29:24;30:2;32:1,24; 47:15,22,23,24;55:4, 5;59:13;60:8;62:6,7, 12,14,19,20;63:2; 64:8;70:19;71:18,20; 75:1,10;76:4;148:17; 149:16;150:4,10; 153:2	experts' (1) 137:14	fair (2) 122:13;151:8	fill (13) 26:20;81:2,2; 89:14;91:1;93:21,22; 113:11;146:15,22; 147:10,23;148:3	Florida (2) 12:22;13:5
exceptions (2) 55:2;72:2	explain (7) 11:15;12:1;46:4; 63:23;86:20;134:23; 150:24	fairly (10) 16:16;17:22;19:18; 20:6;37:8;95:11; 107:18;155:5,18; 156:8	finally (1) 40:11	fluidized (4) 27:8;81:1,2;93:2
excluding (1) 51:22	explained (1) 4:22	fall (2) 61:19,20	find (7) 10:8,9,12;75:13; 113:21;136:23; 152:23	focus (3) 4:24;142:9,10
Excuse (4) 29:6;62:15;71:19; 144:15	express (1) 75:7	falling (1) 61:17	finding (2) 65:16;148:1	focused (1) 127:14
excuse (4) 29:6;62:15;71:19; 144:15	expressed (1) 47:6	familiar (28) 10:15,19;11:9; 12:14,18;32:11;43:3; 65:22;68:24;72:17; 84:1,8,12,16;107:11; 119:15;121:20; 122:3,6,10;129:11; 144:12;149:19; 150:3;155:9;158:17, 20;159:10	filled (2) 28:22;113:7	folks (5) 123:2;125:15; 131:11;139:3;159:13
excuse (4) 29:6;62:15;71:19; 144:15	expression (1) 113:20	far (9) 41:1;80:2,15,16; 104:19;124:16; 147:10;155:17,22	fill (13) 26:20;81:2,2; 89:14;91:1;93:21,22; 113:11;146:15,22; 147:10,23;148:3	follow (1) 72:3
excuse (4) 29:6;62:15;71:19; 144:15	extend (1) 91:24	Farmhouse (2) 149:22;150:16	fill (13) 26:20;81:2,2; 89:14;91:1;93:21,22; 113:11;146:15,22; 147:10,23;148:3	followed (3) 75:19;116:18,20
excuse (4) 29:6;62:15;71:19; 144:15	extended (1) 149:6	Farrington (1) 106:13	fill (13) 26:20;81:2,2; 89:14;91:1;93:21,22; 113:11;146:15,22; 147:10,23;148:3	following (5) 18:22;39:22;42:16; 52:1;53:17
excuse (4) 29:6;62:15;71:19; 144:15	extending (2) 36:19;59:18	farther (1) 28:12	fill (13) 26:20;81:2,2; 89:14;91:1;93:21,22; 113:11;146:15,22; 147:10,23;148:3	foot (1) 109:24
excuse (4) 29:6;62:15;71:19; 144:15	extends (1) 153:6	fashion (6) 61:19,20;88:2; 91:20,21;92:15	fill (13) 26:20;81:2,2; 89:14;91:1;93:21,22; 113:11;146:15,22; 147:10,23;148:3	foot-and-a-half (2) 29:12;30:24
excuse (4) 29:6;62:15;71:19; 144:15	extensive (1) 122:22	fastest (1) 91:9	fill (13) 26:20;81:2,2; 89:14;91:1;93:21,22; 113:11;146:15,22; 147:10,23;148:3	Forest (11) 39:11;49:21;50:12; 51:7;53:18;56:4,18; 59:1,9;60:16,17
excuse (4) 29:6;62:15;71:19; 144:15	extent (10) 4:6;15:8;30:6; 45:7;51:4;95:24; 102:12;124:8;137:7; 148:3	faults (1) 141:22	fill (13) 26:20;81:2,2; 89:14;91:1;93:21,22; 113:11;146:15,22; 147:10,23;148:3	former (2) 31:17;32:8
excuse (4) 29:6;62:15;71:19; 144:15	extra (5) 82:12,17,21;95:22; 112:4	feasible (2) 6:21;7:5	fill (13) 26:20;81:2,2; 89:14;91:1;93:21,22; 113:11;146:15,22; 147:10,23;148:3	forth (3) 34:19;78:1;158:9
excuse (4) 29:6;62:15;71:19; 144:15	eyes (1) 136:10	February (1) 8:20	fill (13) 26:20;81:2,2; 89:14;91:1;93:21,22; 113:11;146:15,22; 147:10,23;148:3	forum (1) 78:2
excuse (4) 29:6;62:15;71:19; 144:15	F	feel (1)	fill (13) 26:20;81:2,2; 89:14;91:1;93:21,22; 113:11;146:15,22; 147:10,23;148:3	
excuse (4) 29:6;62:15;71:19; 144:15	facilities (1)		fill (13) 26:20;81:2,2; 89:14;91:1;93:21,22; 113:11;146:15,22; 147:10,23;148:3	

<p>forward (5) 21:4;68:10;79:22; 137:1,8</p> <p>found (3) 13:1;120:10;143:4</p> <p>Foundation (4) 43:20;127:2;129:2, 8</p> <p>foundations (11) 125:19;126:2,7,11, 14,14,15,20,21; 127:7;128:23</p> <p>four (6) 34:4;94:20;101:22; 131:7;154:11;157:4</p> <p>frac-out (3) 15:1;24:7;25:4</p> <p>frame (1) 63:1</p> <p>Franconia (1) 34:2</p> <p>free (4) 46:18;47:14;56:24; 113:3</p> <p>frequency (1) 5:23</p> <p>friendly (12) 50:11,20;51:4; 54:23;55:1;57:19; 134:15,21;135:20; 136:2,4;138:19</p> <p>front (11) 49:16;56:1,8; 79:18;87:19;123:13; 127:11,17;128:2; 157:8;158:5</p> <p>FTB (2) 27:10,15</p> <p>full (4) 44:18;52:7;58:3; 64:15</p> <p>fully (8) 3:18;4:4,22;5:1,10; 8:5;23:23;63:21</p> <p>functionality (1) 127:3</p> <p>fundamental (1) 118:7</p> <p>further (11) 17:5;19:3;41:16, 22;45:17;54:24;55:7, 11;57:21;74:5; 104:16</p> <p>future (1) 81:18</p>	<p>31:17;32:8;33:15; 43:11,13;45:4,14,19; 46:7,24;61:23; 130:21;131:1,2,4; 133:9</p> <p>gather (1) 69:19</p> <p>gathered (1) 81:7</p> <p>gave (1) 67:10</p> <p>general (12) 14:2;33:19;38:3; 71:3;75:11;77:8; 78:17;89:17;117:2; 121:24;137:19; 151:21</p> <p>generally (23) 5:18;13:20;14:20; 25:12;26:5,18;58:24; 60:10;64:7;68:20; 72:2,4,7,8,18;73:2; 116:19;125:3; 129:12;139:15; 145:6;149:19,20</p> <p>generic (6) 25:8;29:19;35:6; 38:21;115:19;130:1</p> <p>gentleman (2) 74:14;157:6</p> <p>gentlemen (6) 75:7;131:16; 137:21;144:1; 149:18;158:17</p> <p>geographical (3) 119:11,16;120:6</p> <p>geotechnical (11) 14:22;23:21;24:10, 17;25:3;32:16;127:4, 11,13,17,23</p> <p>gets (2) 77:1;100:17</p> <p>Getz (2) 42:24;139:22</p> <p>Gibson (2) 17:3;19:1</p> <p>GIS (1) 67:20</p> <p>gist (1) 54:21</p> <p>Given (14) 4:17;5:17;17:17; 18:9;19:13;20:12; 22:24;29:9;30:20; 36:21;62:1;103:20; 137:21;155:24</p> <p>Glove (2) 149:18;150:17</p> <p>goes (4) 23:1;77:1;84:21; 157:7</p> <p>good (9) 39:3,10;52:15;</p>	<p>84:18;88:10;90:20; 112:6,10;154:5</p> <p>good-faith (2) 53:3,3</p> <p>good-size (1) 115:9</p> <p>Google (1) 83:20</p> <p>governs (1) 39:12</p> <p>grade (4) 17:22;19:19;20:10; 25:14</p> <p>grades (1) 151:17</p> <p>gradual (1) 83:24</p> <p>granted (8) 51:13;52:11,13; 62:8,13,17;64:9; 76:24</p> <p>granular (1) 113:14</p> <p>graphics (1) 91:22</p> <p>gravel (4) 70:22;80:8;106:17; 120:16</p> <p>gray (4) 17:9,13;28:14,15</p> <p>great (3) 117:7;129:13; 130:17</p> <p>greater (2) 26:16;60:24</p> <p>green (2) 17:10;148:22</p> <p>Grid (1) 105:11</p> <p>ground (5) 16:18;66:3,15; 110:16,23</p> <p>grounds (2) 47:4;74:2</p> <p>groundwater (1) 31:14</p> <p>group (4) 11:10;74:16; 121:19;144:8</p> <p>guarantee (2) 29:16;31:3</p> <p>guess (6) 76:9;78:6;79:20; 95:24;116:14;118:9</p> <p>guessing (1) 19:24</p> <p>guide (4) 15:21,22,24;43:22</p> <p>guidelines (1) 6:14</p> <p>guides (1) 15:21</p> <p>guys (4)</p>	<p>39:13;43:2;65:14; 121:12</p> <p style="text-align: center;">H</p> <p>half (9) 10:7;86:13;96:8, 10,13;97:17;101:18, 24;119:3</p> <p>Hampshire (6) 15:17;118:16; 119:12,17;120:11; 121:18</p> <p>handle (1) 155:10</p> <p>handled (1) 48:21</p> <p>happen (2) 88:14;131:17</p> <p>happened (2) 48:7;134:3</p> <p>happening (3) 38:13;56:11;79:17</p> <p>happy (1) 52:14</p> <p>hard (6) 42:9;86:10;93:9, 10;98:15;121:12</p> <p>harder (1) 23:19</p> <p>haul (4) 108:19;147:20; 159:4,4</p> <p>hailed (3) 108:21,22;148:7</p> <p>hauling (1) 146:21</p> <p>hauls (1) 107:23</p> <p>HDD (48) 12:13;13:7,12,14, 19,23;14:3,10,11,18, 23,24;15:5,7,17,21; 17:11,16,19,22;19:7, 15,18,19;20:3;22:3; 23:8,14,22,24;24:8, 12;25:1,15;26:2; 27:22,24;28:2,7; 29:2;31:2;59:17,21; 70:21;71:4;105:9,10; 151:10</p> <p>head (2) 124:4;125:22</p> <p>health (3) 39:20;40:2,14</p> <p>health-related (1) 41:13</p> <p>hear (1) 122:9</p> <p>heard (4) 74:24;129:15; 144:18;150:11</p> <p>hearing (4)</p>	<p>44:20;74:9;97:3; 160:3</p> <p>hearings (1) 9:14</p> <p>heavier (1) 87:6</p> <p>Heavy (2) 110:8;156:8</p> <p>heavy-duty (1) 107:22</p> <p>heck (1) 99:11</p> <p>height (2) 60:23;98:3</p> <p>help (4) 5:9;67:4;103:22; 142:17</p> <p>helpful (5) 5:20;15:13;66:18, 22;68:4</p> <p>Hershey's (2) 97:13;134:12</p> <p>Hershey (1) 10:9</p> <p>high (2) 67:9;96:11</p> <p>highlighted (1) 39:20</p> <p>highly (2) 29:15;31:2</p> <p>high-pressure (1) 131:1</p> <p>high-voltage (7) 43:23;123:7; 130:20,24;133:10; 140:21,22</p> <p>highway (2) 70:4;84:21</p> <p>highways (2) 93:1;109:10</p> <p>Hill (9) 83:21;84:23;85:9; 88:10;105:8;149:23; 155:2,13,16</p> <p>historically (1) 37:5</p> <p>history (2) 50:7;53:22</p> <p>hit (3) 23:11;74:22; 107:18</p> <p>Hmm-hmm (2) 66:6;103:23</p> <p>hold (2) 55:20;107:4</p> <p>holding (2) 73:20;147:20</p> <p>hole (8) 17:11;22:22;29:2; 101:11,18;102:9; 147:15,23</p> <p>holes (11) 23:3;28:13,18,21;</p>
G				
<p>game (2) 79:21,24</p> <p>games (1) 48:2</p> <p>gas (16)</p>	<p>Glove (2) 149:18;150:17</p> <p>goes (4) 23:1;77:1;84:21; 157:7</p> <p>good (9) 39:3,10;52:15;</p>			

29:13,17;30:24;31:5; 101:22;151:20; 153:21 Hollow (2) 149:18;150:17 homes (1) 84:22 HONIGBERG (96) 3:3,10;11:20;12:4; 14:5,12,18;18:25;9; 29:21;30:15;31:22; 32:3;35:7,14;38:6,14, 24;39:4;40:4;45:10, 18;46:1,6,16;47:2; 48:1,4,14,23;49:4,11; 50:4;51:14,17;52:10, 15,19;55:6,10,21; 56:6,15,23;57:10,14; 61:6,12;73:9,14;74:1, 6,10;79:10,15,23; 82:3;83:3,7;89:18; 90:2;102:18,23; 103:7,11;116:1,8; 117:17,21;118:2,6, 20;121:8;122:8; 130:4,9,15;131:13, 20,24;133:13,19,23; 134:2,23;135:8; 136:6,18;137:12; 138:8,24;139:8; 140:5;143:18,21; 144:3;159:20 hooks (1) 101:17 horizontal (1) 4:19 horizontally (1) 149:7 hour (3) 90:21;94:2,16 hours (2) 74:18;94:20 house (8) 152:17,18,22,23; 155:17,18;156:17,19 Hudson (2) 12:21;13:1 hundred (1) 73:3 hundreds (1) 54:7 HVDC (8) 107:14;126:6,14; 132:6;140:15,21,21; 141:4 hydraulic (1) 98:10 hydraulics (1) 111:1 hydrocarbons (4) 31:13;32:17;33:3, 12 hydrogeology (2)	129:2,22 hydropower (2) 73:3,5 hypothetical (3) 102:13;103:2; 156:3 Hypothetically (1) 103:14 hypotheticals (1) 157:19 I idea (4) 95:1;99:3;108:13; 159:8 ideal (3) 90:12,13;151:16 ideally (1) 95:19 identified (15) 6:20;7:4,8,14;42:5; 52:22;68:14;72:4,8; 131:7,16,23;133:22; 140:12;142:8 identify (6) 7:16;41:23;43:15; 52:5;53:6;72:9 identifying (1) 51:20 illustrations (1) 57:17 image (1) 158:7 immaterial (1) 47:1 immediate (1) 70:6 immediately (2) 17:24;19:21 immediate-term (1) 83:11 impact (5) 4:23;5:10;59:14; 60:5;123:6 impacts (4) 5:1,8;40:15;59:19 impeach (1) 136:9 impede (1) 50:21 impediment (1) 64:5 implemented (1) 54:13 implies (1) 67:11 importance (1) 117:14 important (8) 13:18,23;14:18; 102:6;105:21; 114:11;136:3,13	impression (1) 133:18 improbable (2) 29:15;31:2 improves (1) 12:5 inch (2) 87:5,6 inches (1) 112:16 inclement (1) 64:21 include (12) 4:16;5:14,21,22; 27:10;33:1;39:22; 51:24;69:23;70:10; 80:24;137:6 included (10) 14:4;29:20;31:20; 38:22;70:17;115:24; 116:3;130:2,7; 139:22 includes (2) 62:12;130:12 including (4) 11:6;52:3;98:2; 131:9 inconsistent (1) 57:4 increase (13) 22:1,5,12,17;23:5, 12;34:6;36:15,17; 146:5,7;147:9,13 increased (1) 63:6 increases (1) 146:4 independent (4) 138:19,22;140:19, 23 indicate (1) 143:8 indicated (3) 19:10;24:9;37:4 indicates (2) 3:24;9:3 indicating (2) 60:9;117:12 individually (1) 78:16 industry (1) 75:14 influence (2) 43:23;69:9 information (41) 4:8;5:22;14:2; 23:12,23;29:19; 30:12;31:20;35:10, 11;38:1,11;39:22; 43:11,14,16;45:14, 17;46:15;47:12,13; 52:1;61:10;67:20; 69:20;102:6;116:2;	125:5;126:18,23; 127:5,11,13,17,22, 24;128:2,5,14,16; 129:1 infrastructure (2) 61:16,17 INGAA (1) 43:20 ingredient (1) 101:9 inherently (1) 63:12 initial (1) 24:16 inquire (1) 138:1 inside (2) 101:11;111:10 installation (7) 11:7;26:11;109:6, 7;120:15;147:22; 150:6 installed (4) 17:19;19:15;78:12; 109:15 installing (1) 117:4 instance (2) 95:5;119:18 instances (1) 37:8 instead (1) 49:14 intended (2) 76:17;109:9 intent (1) 124:13 intently (1) 43:2 interest (1) 78:13 interested (2) 123:21,22 Interference (4) 42:3;82:23;132:7; 140:14 intermediate (1) 91:12 interplay (1) 60:2 interrupts (1) 98:13 intersect (1) 81:9 intersection (1) 83:21 intersections (1) 84:14 intervenor (5) 51:20,21;53:13; 74:15;144:9 intervenor (1) 8:18,23;9:9;47:14;	48:6;49:9;54:16,19, 22;139:15;144:2,7 intervenor (1) 49:2 into (32) 21:11;23:6,10; 25:21;26:4,10;30:13; 53:8;66:13,24;68:7; 69:2;72:21;76:15; 77:1;84:13;92:5,20; 98:1;102:9;111:11; 112:11;117:7;120:8; 125:4,6;147:14; 148:18;151:18; 153:12;155:13; 158:10 introduce (1) 27:1 introduced (2) 18:19;27:9 invasive (2) 158:21;159:9 investigate (1) 138:4 investigated (2) 138:3;142:6 involve (2) 69:13;85:23 involved (5) 69:16;76:21;82:13, 22;95:22 inward (1) 154:15 irrelevant (1) 47:1 issue (18) 30:4;50:8;105:21; 115:22;130:19; 131:11;134:12; 135:7,22;136:3,15, 17,17;137:6;140:3, 20;141:1;142:18 issued (2) 5:4;50:14 issues (9) 23:23;30:8;44:19; 58:3;72:13;139:6,6, 17,18 Italian (2) 149:22;150:16 items (1) 124:8 IV (1) 50:15 J January (1) 8:19 Japanese (4) 158:17;159:2,7,10 Jefferson-Martin (1) 10:13
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<p>job (7) 12:2;36:14;63:7; 78:21;85:17;88:22; 108:20</p> <p>jobs (2) 11:17;12:9</p> <p>Johnson (1) 96:18</p> <p>joined (1) 53:19</p> <p>Joint (1) 6:13</p> <p>jump (1) 35:21</p> <p>June (1) 42:23</p> <p>jurisdiction (1) 78:11</p>	<p>label (1) 60:19</p> <p>lack (1) 136:16</p> <p>laid (1) 21:6</p> <p>Lakes (1) 159:22</p> <p>land (3) 69:5,15,21</p> <p>landing (4) 104:5,10;105:24; 106:8</p> <p>landowner (2) 20:17,21</p> <p>landowner's (1) 20:18</p> <p>lane (21) 37:10;59:20;91:7, 24;92:10,13;93:8,11; 94:1,21;95:3;106:15; 154:17;155:22; 156:1,18;157:1,5,17, 23;158:10</p> <p>lanes (1) 91:17</p> <p>laptop (1) 42:13</p> <p>large (2) 61:21;97:24</p> <p>larger (5) 21:9,21;36:20; 87:8;109:2</p> <p>last (8) 3:23;4:10;70:8; 94:5;105:13;118:12; 137:4;158:16</p> <p>late (2) 7:15,16</p> <p>later (3) 71:22;87:23;90:23</p> <p>laws (1) 77:23</p> <p>lawyers (1) 48:10</p> <p>laydown (2) 36:7,13</p> <p>layer (2) 92:23,24</p> <p>layering (1) 38:7</p> <p>layout (3) 31:8;87:21;103:19</p> <p>lead (1) 26:22</p> <p>leads (2) 63:15;105:21</p> <p>least (11) 8:16;28:2;33:6; 42:20;54:18;60:6; 74:3;80:7;94:8; 110:14;146:7</p> <p>led (2) 25:3;44:14</p>	<p>ledge (2) 128:11,12</p> <p>left (9) 106:9;113:3,8; 115:9,14;117:11; 149:21;155:15; 156:17</p> <p>left-hand (3) 151:23;152:16; 158:7</p> <p>legal (5) 36:21;37:17;42:24; 83:2;139:1</p> <p>Legasse (1) 121:16</p> <p>legend (1) 17:8</p> <p>legitimate (1) 47:18</p> <p>length (6) 5:15;24:8;25:1; 48:17;109:15;117:7</p> <p>leniency (1) 75:4</p> <p>less (9) 17:20;19:16;67:6, 17,18;76:7;77:4,24; 109:20</p> <p>letter (7) 42:23;65:9,10,11, 14,15;139:22</p> <p>lettering (1) 26:12</p> <p>level (17) 20:6,8,9;24:6; 25:18,19,21,23;63:5; 67:9;69:17,18;72:4; 95:20;96:3;125:7; 148:16</p> <p>Lewiston (1) 97:14</p> <p>licensed (2) 67:12;68:7</p> <p>lift (2) 96:19;111:3</p> <p>Light (2) 13:5;150:22</p> <p>lights (1) 86:3</p> <p>Light's (1) 12:22</p> <p>likely (11) 16:21;27:11;33:6; 63:16;94:21;104:12; 115:4;121:3;156:1,4; 157:14</p> <p>limit (1) 8:6</p> <p>limitation (1) 56:17</p> <p>limitations (2) 49:19,22</p>	<p>limited (4) 120:21;127:12; 135:14;154:16</p> <p>limiting (1) 15:1</p> <p>limits (2) 4:4;54:20</p> <p>line (37) 17:9,13;20:2; 24:11;44:7;45:6,19; 46:8;67:5,6,23;68:4, 6;82:11;101:13,14, 15,23;103:24,24; 104:10;118:18; 119:3;120:6;122:20; 123:8,9,17,20; 124:13;134:24; 139:12;141:8,12,23; 143:10;146:10</p> <p>lineal (1) 91:21</p> <p>linear (5) 72:10;88:1;91:19; 92:15;109:23</p> <p>lines (30) 17:12;19:11;22:16; 28:12,14,16,18; 43:19,24;81:16; 118:15;119:10; 120:12;123:8;124:6; 129:19;130:20,24; 132:15;140:21,21,22; 149:24;150:23; 151:1,3,23;152:1; 155:2;157:3</p> <p>list (10) 9:24;11:16;12:13; 39:5;51:20,24;121:9; 123:15;131:19; 159:24</p> <p>listed (1) 13:13</p> <p>listing (1) 14:10</p> <p>little (10) 64:3,6;70:8;75:1; 79:11;88:15;96:2; 101:2;109:20,20</p> <p>load (3) 93:15;110:17,24</p> <p>loads (1) 93:23</p> <p>local (1) 113:20</p> <p>locally (1) 109:7</p> <p>located (3) 108:14,16;124:13</p> <p>location (24) 5:17;17:10,16,24; 19:8;22:3,22;23:8; 27:14;31:5;32:23,24; 33:5,24;45:6,69;11;</p>	<p>92:19;98:14,16; 124:6;125:4,12; 127:3;147:20</p> <p>locations (16) 16:24;17:12,16; 18:12;19:20;28:14; 35:2,17,22,23;36:10; 60:22;66:3,16;126:1; 128:21</p> <p>Lodge (4) 121:17;122:4,17, 18</p> <p>logic (3) 78:19;83:6;116:18</p> <p>logical (4) 64:16;82:12;104:9; 116:7</p> <p>logically (1) 88:23</p> <p>long (18) 6:3;9:1;10:1,16,21; 11:11,16;12:1,9; 62:23;64:20;82:16; 89:23;90:19;93:16; 94:13;96:10;121:13</p> <p>longer (14) 4:18;17:7;19:2; 23:20;26:22;34:11; 60:11;63:12,16;64:8, 10;72:5;94:15;96:4</p> <p>long-haul (1) 109:9</p> <p>longitudinal (1) 20:10</p> <p>longitudinally (1) 25:24</p> <p>long-term (2) 83:10;143:7</p> <p>look (28) 25:14;43:3;60:7; 83:22;84:1;97:7; 99:3;100:1,12; 104:14;111:16; 114:15,23;115:13; 120:8;132:19,19; 137:22,23,24,24; 138:2,6,12;150:21, 22;156:11;157:20</p> <p>looked (12) 82:17;96:20; 124:18;130:22; 131:17,23;132:16,21; 138:2,10,11;142:6</p> <p>looking (9) 65:9;66:2;85:1; 104:17;107:16; 110:8;150:15,18; 157:21</p> <p>looks (4) 20:5,7;107:22; 111:18</p> <p>loop (1) 138:11</p>
K				
<p>Kauffmann (3) 60:16,19,19</p> <p>keep (3) 23:18;50:3;107:12</p> <p>keeping (1) 155:19</p> <p>keeps (1) 113:23</p> <p>Keiser (1) 129:14</p> <p>kept (1) 94:18</p> <p>Kevin (1) 121:15</p> <p>key (2) 101:9,10</p> <p>kind (6) 74:23;75:24; 107:18;111:1; 119:23;128:1</p> <p>knew (2) 119:9;137:5</p> <p>knotwood (4) 158:17;159:3,7,11</p> <p>knowing (6) 15:12;16:15;76:3; 85:20;98:6;134:19</p> <p>knowledge (2) 8:2;15:9</p> <p>known (6) 27:24;45:6,17,19, 21;46:11</p> <p>knows (3) 46:7,8;114:20</p> <p>Kris (1) 3:7</p> <p>kV (7) 107:8,10,12;111:6; 119:10;126:11;141:8</p>				
L				

<p>lot (14) 4:7;18:3;34:21; 53:8;59:5,9,14;83:6; 85:22;99:11;102:6; 116:21,22;148:9</p> <p>loud (1) 27:24</p> <p>lower (3) 19:2;117:11; 154:19</p> <hr/> <p style="text-align: center;">M</p> <hr/> <p>machine (3) 90:7;151:12,20</p> <p>magnitude (1) 63:9</p> <p>Main (1) 88:9</p> <p>Maine (1) 97:14</p> <p>mainly (2) 144:12;153:20</p> <p>maintain (3) 59:10;154:16; 157:23</p> <p>maintained (2) 59:5;157:14</p> <p>maintaining (2) 15:2;155:22</p> <p>major (2) 85:6,7</p> <p>making (6) 14:23;46:21;55:3, 4;130:7;152:20</p> <p>Management (1) 9:7</p> <p>manhole (21) 97:17,20;100:2; 102:9;105:11,16; 106:5;111:9,10; 112:12,20,21,24; 113:3,11,24;114:6,7, 9;115:10;118:1</p> <p>manholes (1) 96:20</p> <p>manner (2) 48:20;75:20</p> <p>Manual (7) 71:13,16;115:12, 17,19;116:15,16</p> <p>manufacture (1) 108:15</p> <p>manufacturer (3) 108:5;114:17,23</p> <p>manufacturer's (1) 117:5</p> <p>manufactures (1) 108:11</p> <p>many (14) 3:18;24:7;34:20; 50:2;53:7,14,15,19; 67:18;75:3;84:22;</p>	<p>119:14;122:21; 125:19</p> <p>Manzelli (49) 39:6,9,10;40:6; 42:10,14;45:11,12, 22;46:3,12,21;47:20; 48:2,3,11,15,16,24; 49:6,17;50:6;51:16, 18;52:12,16;53:17; 55:7,9,13;56:3,10,17, 57:9,13,16;58:6,8,17, 23;61:7,8,13,24; 73:10,11,16;74:4; 130:18</p> <p>map (7) 16:6,9,12,14;17:8; 31:13,15</p> <p>maps (8) 45:24;58:9;62:2; 123:18,22;124:5; 127:20;149:20</p> <p>March (4) 50:10,13;51:1;53:1</p> <p>Mark (1) 121:16</p> <p>marked (1) 131:18</p> <p>Mass (1) 72:16</p> <p>Massachusetts (3) 72:15,22;73:19</p> <p>material (16) 4:6,12;26:4,19; 27:9,11;61:11;91:11; 92:4;111:16;130:1; 148:1,8;153:15; 159:4,5</p> <p>materials (4) 3:16,22;44:1,3</p> <p>matter (10) 63:19;64:12,12; 66:21;79:12,16; 105:7;106:6;119:22; 139:1</p> <p>matters (1) 79:13</p> <p>maximum (1) 157:2</p> <p>may (23) 3:10;9:21;22:14; 46:23;53:5;64:18; 73:17;75:22;82:18; 96:2;98:7,7,9;113:7, 8;114:4;136:24; 138:10;139:6; 143:22;154:7; 157:16;158:7</p> <p>Maybe (3) 76:6;94:19;120:8</p> <p>McConnell/Northern (1) 140:15</p> <p>McLane (1) 42:24</p>	<p>mean (14) 27:23;44:8;76:2; 79:1,23;95:19;99:19; 146:7;150:24;152:3; 153:11,19;156:23; 157:21</p> <p>meaning (1) 135:20</p> <p>means (2) 117:6;154:4</p> <p>meant (4) 18:17;49:10; 102:13;150:12</p> <p>Mears (2) 13:3,6</p> <p>measure (1) 28:17</p> <p>measured (1) 105:19</p> <p>measures (3) 40:13,20;41:4</p> <p>medium (1) 54:17</p> <p>meeting (1) 96:17</p> <p>members (1) 142:14</p> <p>memo (1) 65:21</p> <p>memorandum (1) 5:5</p> <p>men (1) 35:13</p> <p>mentioned (4) 33:14;77:22;143:1; 145:11</p> <p>mentioning (1) 34:24</p> <p>MERRIGAN (4) 83:17;107:4; 111:19,23</p> <p>metallic (1) 43:24</p> <p>methods (1) 117:6</p> <p>Miami (1) 12:22</p> <p>Michigan (2) 119:24;120:2</p> <p>microphone (1) 159:23</p> <p>mid-April (1) 3:24</p> <p>middle (3) 21:16;65:4;101:16</p> <p>Middleton (1) 43:1</p> <p>might (25) 5:21;11:23;22:16; 24:8,17,19;27:1,2,12; 31:9,16;32:7;33:23; 34:5;38:12;53:10; 65:5;68:14;76:15;</p>	<p>88:8,9;109:13;113:2, 9;121:1</p> <p>mile (1) 109:20</p> <p>miles (5) 10:5,7;34:3;36:8; 93:11</p> <p>mind (2) 123:18;124:4</p> <p>minimize (3) 40:14;41:5;114:8</p> <p>minimizing (1) 39:24</p> <p>minimum (4) 106:16;112:9,13; 154:22</p> <p>Minneapolis (1) 120:2</p> <p>Minnesota (1) 120:2</p> <p>minus (1) 141:10</p> <p>minute (4) 88:3;100:9;143:19; 149:16</p> <p>minutes (6) 90:20,22;93:14,24; 94:2,12</p> <p>missing (3) 4:8,12;108:7</p> <p>mistake (2) 84:17;112:4</p> <p>mitigate (2) 40:14;41:5</p> <p>mitigating (1) 39:24</p> <p>mitigation (1) 28:7</p> <p>Mix (5) 89:12;91:3,6;92:3, 5</p> <p>mixer (1) 91:14</p> <p>mobility (1) 6:15</p> <p>mobilization (1) 65:6</p> <p>moment (1) 42:19</p> <p>money (1) 76:21</p> <p>MONROE (3) 84:9;99:19,21</p> <p>months (8) 3:23;4:11;6:8,10; 8:14,16;119:9;137:4</p> <p>monumentation (2) 67:13;68:9</p> <p>more (39) 8:17;23:17;24:14, 20;25:23;26:20,20, 20;27:8,20;42:4; 51:2;56:9;58:20;</p>	<p>61:20;64:4,6;76:6; 77:4,18;81:2,8; 85:20;86:8;92:22; 94:21;109:7,20; 115:4;116:21,23; 120:8;125:7,9,13; 134:11;145:3; 146:11;157:13</p> <p>morning (9) 60:5;63:11;88:20; 115:22;143:1; 151:10;152:20; 153:9;159:22</p> <p>most (6) 16:21,22;27:10; 37:8;54:15;97:15</p> <p>mostly (3) 18:11;127:14,20</p> <p>motion (8) 49:12;50:11,17; 51:3,13;53:19;55:14, 17</p> <p>move (11) 25:12;50:1;56:21; 64:3,5;79:22;80:3; 82:6;116:11;117:20; 156:14</p> <p>moved (2) 23:10;53:18</p> <p>moving (7) 33:1;78:5;87:14, 18;88:1;103:4;118:3</p> <p>much (14) 27:21;32:7;34:5; 36:19;74:20;87:8; 102:7;106:9;111:12; 123:21;127:15; 129:13;141:11;148:7</p> <p>mud (1) 26:7</p> <p>multiple (1) 63:14</p> <p>Muni (1) 6:13</p> <p>municipal (1) 80:10</p> <p>must (7) 5:5;50:23;52:5; 111:8;116:23; 117:12;134:14</p> <p>myself (1) 44:4</p> <hr/> <p style="text-align: center;">N</p> <hr/> <p>name (4) 39:10;74:14;75:21; 121:14</p> <p>narrow (1) 61:22</p> <p>narrower (4) 21:7;34:12,14; 156:4</p>
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<p>native (2) 27:13;148:8</p> <p>Natural (8) 45:4,14,19;46:7, 24;130:21;131:4; 133:9</p> <p>nature (2) 58:2;135:6</p> <p>near (3) 24:17;59:6;149:23</p> <p>nearby (2) 70:11;90:9</p> <p>necessarily (7) 23:19;32:22;34:13; 70:15;71:8;83:10; 91:20</p> <p>necessary (12) 27:3;31:16;32:7, 12;52:7;86:3;97:22; 99:7;100:16;103:18; 110:19;113:16</p> <p>necessity (1) 27:1</p> <p>need (27) 8:8;18:4,24;25:18; 29:11;30:22;55:11, 12;57:4;67:23;71:14; 72:3;84:9,19;95:10; 100:18;102:8;104:3, 9;110:16;114:20; 137:10;146:11,21; 152:13;154:22; 157:20</p> <p>needed (10) 26:1;47:5;96:19; 99:1;103:18;104:13; 151:15;153:10,10,24</p> <p>NEEDLEMAN (29) 11:18;14:1;18:16; 25:6;29:18;30:2,6; 31:19;35:5;38:2,20; 45:5;61:3;73:6;79:7; 82:1;83:1;89:15; 102:10;115:20; 117:15;129:24; 130:14;131:5; 133:11;136:19,20; 140:2,8</p> <p>needs (4) 9:12;30:10;82:9; 106:16</p> <p>Neighboring (1) 132:7</p> <p>new (23) 3:22;15:17;17:10, 11;30:12;31:21; 35:10,11;38:10;41:2; 46:15;47:12,13;61:4; 89:9;118:15;119:11, 17,18,21;120:11; 121:17;147:8</p> <p>next (24) 16:12;25:4;39:4;</p>	<p>48:15;51:2;53:21; 55:24;56:7,21;58:5; 59:21;74:11;77:3; 85:23;89:3,5;90:11; 91:7;106:7;114:15; 115:8;118:22;121:8; 149:15</p> <p>Nicks (1) 105:13</p> <p>nitrate (1) 130:13</p> <p>noise (4) 27:21,23;28:1,7</p> <p>non-abutters (1) 74:16</p> <p>non-adverse (1) 54:24</p> <p>non-burial (1) 139:11</p> <p>none (2) 72:6;120:23</p> <p>non-Northern (1) 54:2</p> <p>nor (1) 128:15</p> <p>normal (2) 33:3;152:17</p> <p>normally (4) 26:9;77:16;109:1,6</p> <p>north (10) 28:12;60:2;83:21; 84:23;85:9,9;88:10; 105:8;150:15,18</p> <p>northbound (1) 59:23</p> <p>Northern (21) 5:5;6:17;9:3;29:9, 15;30:20;31:3;33:16; 34:4;35:22;61:17; 72:21;81:6;115:13, 14;116:17;119:11,16, 18,21;120:10</p> <p>Northumberland (9) 121:19;123:3,5; 124:2;125:16; 126:16;128:9;129:3; 131:19</p> <p>notation (1) 22:22</p> <p>notice (5) 113:6;117:10; 153:5;156:12;157:6</p> <p>noticed (1) 115:11</p> <p>notify (2) 32:14,18</p> <p>November (1) 8:12</p> <p>number (16) 5:16;64:16,24; 76:5;85:15;97:24; 101:10;106:20; 111:20,24;125:21;</p>	<p>145:3;146:1,5; 147:13;157:19</p> <p>numbers (7) 101:17;103:15,17; 141:7;147:7,8;148:5</p> <p>numerous (1) 47:7</p>	<p>61:14</p> <p>offering (2) 77:19;105:16</p> <p>offers (2) 56:24;95:13</p> <p>Offhand (1) 159:12</p> <p>Officer (1) 50:18</p> <p>often (3) 72:5;75:7;107:13</p> <p>oftentimes (1) 114:17</p> <p>old (4) 41:2;83:22;84:23; 85:8</p> <p>once (4) 11:12;24:19; 110:14;147:21</p> <p>one (72) 6:23;11:9;16:10; 18:4,4;24:23;28:12; 33:20;34:17,18,19; 35:21;39:12;43:9,18, 21;53:2,11;56:8,8; 58:9;59:20;60:23; 64:17;73:2,3,13; 76:22;77:18;78:6,21; 82:8;84:12;86:20; 88:23;91:22,24;94:7, 8;95:3;96:8,13,19; 97:15;99:11;104:16, 23;106:1,7;109:18; 117:5;122:9;123:4, 14;124:23;131:9,10; 132:8,15;134:11; 137:16;138:17; 139:11,18;142:8; 143:3;144:1,7;153:9; 156:3,9;157:17</p> <p>one-half (1) 97:23</p> <p>one-page (1) 65:21</p> <p>ones (3) 43:17;100:6,11</p> <p>only (12) 4:15;7:8;29:13; 31:1;33:11,16;45:15; 127:2;144:9;154:13; 157:22;158:8</p> <p>onto (3) 17:6;68:2;110:24</p> <p>open (6) 34:20;37:10;63:3; 113:4,8;145:12</p> <p>opened (1) 133:16</p> <p>operation (3) 23:8;40:18;114:10</p> <p>opinion (6) 5:12;61:15;62:23; 63:5;67:23;75:23</p>	<p>opinions (2) 46:17;47:5</p> <p>opportunity (3) 41:18;72:14,20</p> <p>opposed (4) 65:7;72:6;139:3,15</p> <p>oral (1) 48:18</p> <p>orally (3) 48:7;53:12;57:8</p> <p>order (17) 50:14;51:5,9;52:8, 11,13,18;53:1,4,11, 18;54:12;63:9;76:21; 88:22;100:18;112:16</p> <p>ordered (1) 51:18</p> <p>orderly (2) 50:22;82:23</p> <p>original (2) 45:23;80:16</p> <p>originally (1) 144:22</p> <p>OSHA (1) 27:18</p> <p>others (5) 48:8;74:3;78:16; 86:17;139:12</p> <p>otherwise (5) 27:3;51:12;53:12; 99:11;120:18</p> <p>out (29) 20:2;21:7;41:7; 51:9;55:16;65:1; 73:20;75:24;79:11; 91:3,14;93:8;94:1; 96:3;115:5;118:19; 119:23;141:21; 146:20,20;147:12,20; 151:17;153:6;154:3; 156:9,17;158:10; 159:4</p> <p>outer (1) 112:14</p> <p>outline (1) 80:13</p> <p>outrageous (1) 55:23</p> <p>outriggers (9) 21:18;100:4; 101:20,20,23,23; 104:1,8,11</p> <p>outside (15) 20:15;21:10;28:18, 21;61:17;80:14; 143:9;146:24; 148:10,12,13,18,23; 149:9,13</p> <p>outwards (1) 149:7</p> <p>over (11) 36:19;47:7;54:5, 11;81:12;87:4;96:14;</p>
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<p>100:12;108:20; 143:6;146:23 overall (3) 63:7;79:21,24 over-estimation (1) 145:5 overhead (13) 11:2;20:2;122:5, 20;123:17,24;127:15, 18;128:3,4,10; 142:13,18 overly (1) 107:11 overrule (1) 90:3 Overruled (5) 14:12;30:15;32:3; 35:14;53:15 overseeing (1) 14:23 oversized (1) 114:2 over-the-road (1) 102:16 own (4) 42:12;78:15; 121:16,16 owned (1) 60:16 owner (2) 70:2;82:8 owners (5) 69:24;70:5,11,15; 81:18 owners' (1) 81:24 ownership (1) 59:2 owns (1) 69:14</p>	<p>panel (17) 6:7;51:24;55:8; 57:24;61:15;73:8; 82:4;83:8;86:14; 114:3;116:3;122:24; 123:1;134:1;142:15; 151:15;154:10 Pappas (8) 48:9;115:23;116:9; 137:12,15;138:15,16; 139:5 PAR (6) 9:20,23;13:12,21; 14:16;77:9 paragraph (2) 7:3;115:2 parameters (1) 27:13 parking (3) 59:5,9,14 parks (1) 157:9 part (22) 3:14;6:17;9:4; 11:3;26:7;39:21; 40:17;41:14;49:7,8; 52:8;53:21;70:9,13; 73:24;76:8;79:18; 88:3;106:13;107:16, 17;159:15 particular (12) 24:22;39:19;50:17; 54:15;109:3;110:21; 113:16;124:1; 132:20;136:17; 138:20;142:3 particularly (1) 158:19 parties (8) 53:19;69:19,22; 79:2,3;137:8;138:23; 139:13 partly (1) 5:13 Parts (1) 8:5 party (8) 52:2,4,5;137:16; 138:18,19,20,22 party's (1) 137:17 Pass (18) 5:5;6:17;9:3;29:9, 15;30:20;31:3;33:16; 35:22;54:2;61:17; 72:21;81:6;115:13, 14;116:17;140:15; 158:13 passage (1) 154:17 Pass's (1) 34:5 past (3)</p>	<p>7:9;69:2;87:12 Pastoriza (45) 3:4,6,7,12,13;5:2,3; 9:16,18;11:21,22; 12:6;13:9,10;14:6,7, 15;16:4,7,11,13; 18:20,21;22:18,20; 25:10,11,13;28:9,10; 29:22,23;30:5,11,17; 31:11,12,23,24;32:6; 35:8,9;38:9,16;39:2 path (1) 23:18 paths (1) 29:2 Pause (3) 3:9;42:21;112:8 paved (2) 80:22;96:5 pavement (18) 16:22;17:8;18:10; 21:1,3,5,8,11;22:3; 28:15,21;70:22;80:9; 146:24;148:12,24; 149:6;154:24 paving (2) 87:22,23 pay (1) 79:6 pending (1) 53:20 people (3) 11:23;53:7;139:12 per (9) 69:6;96:9;101:21; 109:23;144:21,23,24; 145:2,7 perceive (1) 57:4 percent (5) 36:24;37:7;73:3; 125:9,11 percentage (2) 63:9;124:21 Percy (2) 121:17;122:4 performed (1) 78:24 perhaps (3) 41:17;87:20;158:5 period (3) 62:24;64:22;69:6 permanent (1) 87:23 permit (2) 30:14;34:5 permitted (3) 11:13;38:19;76:22 permitting (2) 7:15;37:24 perpendicular (1) 81:11 person (2)</p>	<p>86:3;108:11 personally (3) 15:11,24;72:17 persons (1) 143:9 person's (1) 69:8 persuaded (1) 138:13 pertains (1) 61:4 pertinent (1) 39:21 Petroleum (1) 43:22 photo (1) 107:21 photograph (1) 111:15 photos (1) 91:6 pick (6) 90:8;97:16,17; 98:2;102:8;109:5 picking (2) 100:18;110:22 picks (1) 111:4 pickup (1) 85:1 picture (6) 85:1;149:22; 150:14,20;151:24; 154:19 pictured (1) 152:24 piece (3) 86:24;109:3; 110:21 pipeline (11) 43:11,13;45:4,15; 46:24;61:23;131:4; 133:8,9;134:20; 143:5 Pipelines (7) 43:18,24;131:1,2; 132:7,14;142:1 pit (26) 17:23;19:19;20:3; 21:9;23:7;24:18; 25:15;26:2,6,10; 59:17,21;96:9;97:23; 98:18,21;99:8,9; 100:19;101:11,13,15, 18,24;112:19;113:6 pits (5) 17:22;19:7,18; 96:7;107:2 Pittsburg (2) 74:17;84:22 place (6) 12:8;89:9;91:18; 96:20;109:8;113:2</p>	<p>placed (2) 56:18;124:14 places (3) 30:10;92:2;139:11 placing (1) 96:4 plan (25) 5:6,9,14,19;6:4,6; 8:1,10,21;9:6,7,12; 22:7;23:9;24:21; 37:19;58:19,20; 60:11;70:21;74:19; 79:21;85:20;86:7; 96:9 planned (4) 40:13;41:4;60:24; 81:3 planning (3) 10:23;80:1;145:21 plans (29) 4:15,21;28:6; 30:14;36:24;37:2,18, 21;39:23;68:17; 80:12,23;123:18,22, 23;124:10,17,18,24; 125:3,8,17,23,24; 126:6;148:10;153:4; 156:2;158:24 plate (5) 86:22,24;87:1; 95:7,15 plates (16) 86:16;88:20;89:22; 90:6,8,16,18,20; 94:10,12,13,24;95:1, 10,20,23 plats (1) 68:8 Platte (1) 13:1 play (4) 34:22;48:2;69:2; 76:15 playing (1) 76:18 pleadings (1) 44:14 Please (8) 18:6;30:19;40:5; 46:4;58:7;83:18; 107:5;111:24 plenty (1) 47:13;135:16 plotted (1) 67:19 plus (4) 141:10;156:24; 157:5,5 Plymouth (4) 88:9;144:8,9,13 pm (4) 3:2;74:8,9;160:3 point (25)</p>
P				
<p>packages (1) 34:5 pad (2) 105:24;124:6 pads (2) 124:7,14 Page (24) 6:12,15;9:19; 22:19;42:15,20; 83:23;100:6;101:14; 105:22;106:3; 107:22;111:17,18; 113:18;115:1,2,8; 117:11,23,23;118:18, 23;119:2 pages (5) 42:16;50:24;52:9; 54:7;117:7 Pam (3) 84:6;100:9;101:5</p>				

<p>44:6;55:16;68:12; 76:14;85:21;89:2; 95:6;104:2,21; 114:13;118:9;122:9; 124:17;125:5;126:9; 130:7,9;131:7; 134:11;136:1; 137:20;138:14,17; 155:14;156:9</p> <p>pointed (1) 141:21</p> <p>pole (4) 17:15;19:6;20:1; 61:1</p> <p>poles (3) 18:2;19:22;60:24</p> <p>popular (1) 107:13</p> <p>portion (9) 11:4,12;16:5; 58:13;122:5,20; 127:18;142:19;154:5</p> <p>portions (2) 4:17;127:14</p> <p>Portland (9) 45:4,14,19;46:7, 24;108:19;130:20; 131:4;133:8</p> <p>pose (1) 141:24</p> <p>posed (1) 140:24</p> <p>position (4) 49:21;52:2;134:24; 137:10</p> <p>positions (1) 139:1</p> <p>possession (1) 128:16</p> <p>possibility (2) 78:19;117:24</p> <p>possible (10) 27:11;53:9,9; 76:20;86:4,15;92:14; 120:23,24;158:2</p> <p>possibly (2) 79:22;106:5</p> <p>posted (2) 29:24;30:1</p> <p>potential (9) 25:2;37:22;38:12, 17;40:1,44:9,19; 45:3;76:19</p> <p>potentially (5) 33:21;92:2;109:14; 143:5,6</p> <p>pounds (4) 96:14;97:22; 109:23;110:12</p> <p>Pour (4) 89:14;90:24;92:10; 93:16</p> <p>poured (3)</p>	<p>91:3;94:1,9</p> <p>pouring (4) 91:7,13;92:24;93:4</p> <p>pour's (1) 94:7</p> <p>Power (9) 12:22;13:5;43:19, 23;73:5;82:11; 129:19;130:20; 132:15</p> <p>PPL (1) 10:9</p> <p>practice (3) 32:14;33:3;92:12</p> <p>practices (1) 77:23</p> <p>precisely (1) 11:14</p> <p>precision (1) 125:18</p> <p>prefiled (10) 3:14;46:18,20; 47:6,11;105:14; 107:17;123:12; 144:16;145:9</p> <p>prehearing (3) 50:19;51:6,12</p> <p>Preliminary (9) 42:3;44:17;58:2; 124:10,12;127:1,19; 139:23;140:14</p> <p>premise (1) 134:15</p> <p>prepared (4) 4:9;49:17;127:9; 128:17</p> <p>prescriptive (6) 16:21;18:9,11; 29:1;68:19;69:4</p> <p>present (3) 18:13,14;159:8</p> <p>presentation (4) 6:18;9:4,20,22</p> <p>presenting (2) 11:24;12:3</p> <p>presents (1) 81:17</p> <p>preserving (1) 53:9</p> <p>Presiding (1) 50:18</p> <p>presumably (1) 59:21</p> <p>pretty (3) 67:9;93:12;122:22</p> <p>prevented (1) 52:20</p> <p>preventing (1) 53:12</p> <p>previous (1) 151:14</p> <p>previously (2) 61:5;131:18</p>	<p>prior (4) 6:22;7:6;9:7;48:7</p> <p>private (7) 29:3,16;31:4; 66:24;68:2;69:23; 81:23</p> <p>privately-owned (1) 66:13</p> <p>private-sector (1) 77:17</p> <p>pro (1) 54:19</p> <p>probably (21) 8:4;28:2;44:12; 78:14;80:1;85:16; 87:5,6,18,22;88:23; 89:6;92:18;93:17; 94:15;96:21;100:1; 108:17;112:15; 132:22;159:4</p> <p>problem (4) 5:11;57:6;118:7; 155:21</p> <p>problematic (1) 25:14</p> <p>problems (3) 37:22;38:12,17</p> <p>procedural (2) 50:7;53:22</p> <p>proceed (6) 3:11;35:18;36:1, 11;139:20;143:22</p> <p>proceeding (4) 39:13;50:22,24; 53:1</p> <p>proceedings (5) 3:9;7:15;55:18,20; 56:5</p> <p>process (25) 11:6;26:8;33:7,9, 11;34:15;55:14; 68:24;69:12;70:10; 72:1,16;73:20,21; 76:1,10,17;77:15; 86:17;89:4;106:23; 107:3,19;108:17; 110:17</p> <p>produced (4) 44:13;45:17; 115:18,21</p> <p>Producers (1) 43:22</p> <p>production (2) 44:15;92:20</p> <p>profile (1) 22:21</p> <p>prohibition (1) 61:9</p> <p>project (77) 3:19;5:7,11;6:4,21; 7:5,9,14;9:8,24;10:4, 7,9,11,12,13,24;11:1, 24;12:21,23;13:2,7,</p>	<p>15,20;15:4,10,14; 36:20;37:16,17,24; 38:19;43:12,12;45:3, 24;58:9;59:15;62:2, 18,22;63:6;64:2,16; 66:12,23;68:1;69:17; 70:20;71:10;73:22; 76:3;77:13,14,17,18, 23;78:12,13;82:18; 93:14;105:7;107:14; 115:18;116:17; 121:21;122:3,5; 123:6,10;128:10; 129:23;139:4,16; 140:16;142:19</p> <p>projected (1) 23:13</p> <p>projects (15) 6:20;7:4;10:1,16, 20;12:14,19;24:16; 37:6;69:1;72:10; 78:7;119:19,20; 120:18</p> <p>prompt (1) 50:21</p> <p>pronunciation (1) 10:3</p> <p>proof (5) 51:6;56:24;57:11, 22;61:14</p> <p>proper (1) 78:24</p> <p>property (19) 20:18;29:3,17; 31:4;37:7;59:2; 66:13,24;68:2;69:8, 15,24;70:2,5,11; 81:18,23,24;82:8</p> <p>proposal (4) 14:8;73:24;115:12, 15</p> <p>Proposals (1) 72:16</p> <p>propose (1) 97:16</p> <p>proposed (28) 5:7;8:3;13:14; 17:10,11,15,18,19,22, 23;19:7,7,14,15,18, 20;23:18;26:13; 28:13;31:9;34:9; 40:1,19;45:3;58:13; 65:16;66:12;126:1</p> <p>proposition (1) 137:19</p> <p>prospective (1) 58:4</p> <p>protect (1) 78:22</p> <p>protection (5) 92:23,24;93:3; 99:7;101:12</p> <p>protective (2)</p>	<p>93:21,23</p> <p>provide (1) 76:13</p> <p>provided (9) 3:16;35:1;36:5; 42:22;103:19; 114:17;126:1,24; 127:5</p> <p>provider (2) 108:2,10</p> <p>providers (1) 86:23</p> <p>provision (1) 40:22</p> <p>proximal (1) 70:6</p> <p>public (21) 5:10;10:11;39:20; 40:2,14;41:12;49:9; 54:4,18,22;65:13; 77:16;116:4;120:19, 20;131:10;134:6; 137:22;138:5,7,17</p> <p>publication (1) 71:16</p> <p>Public's (8) 46:22;49:2;56:20; 134:5;135:2,5;136:9; 137:23</p> <p>pulled (1) 111:11</p> <p>pulling (1) 25:15</p> <p>pumped (1) 35:4</p> <p>pumping (1) 26:20</p> <p>purchased (1) 76:14</p> <p>purpose (1) 118:22</p> <p>purposes (3) 8:15;66:4;109:9</p> <p>push (1) 21:11</p> <p>put (20) 20:14;21:4;41:7; 42:11,12;49:19; 55:12,19;57:5;63:7; 68:10;78:1;90:11; 94:13;95:20;110:16; 116:23;141:7; 146:22;147:23</p> <p>puts (1) 39:6</p> <p>putting (1) 53:8</p>
Q				
<p>quality (3) 13:24;14:19; 127:24</p>				

<p>Quanta (7) 6:17;9:4,21,23; 10:14;13:4;14:8</p> <p>Quanta's (1) 13:11</p> <p>quantify (2) 63:8;126:2</p> <p>quarters (1) 146:7</p> <p>question-by-question (1) 52:24</p> <p>quick (2) 74:23;107:18</p> <p>quickly (3) 64:4;107:18,20</p> <p>quite (2) 74:24;104:18</p> <p>quote (8) 7:3;46:14;50:18; 51:5,16,19;66:3,4</p> <p>quoted (1) 52:18</p> <hr/> <p style="text-align: center;">R</p> <hr/> <p>radius (1) 112:13</p> <p>raise (3) 30:9;57:21;133:7</p> <p>raised (3) 30:8;45:9;130:19</p> <p>ramifications (1) 83:9</p> <p>ran (1) 147:5</p> <p>range (2) 72:11;110:1</p> <p>rate (2) 64:18;144:17</p> <p>rather (3) 34:4;81:12;101:7</p> <p>rational (1) 46:4</p> <p>reach (1) 104:22</p> <p>read (7) 40:5;87:15;102:21; 109:22;133:5;143:2, 14</p> <p>readily-available (2) 67:14,20</p> <p>reading (1) 143:13</p> <p>ready (9) 3:4;56:21;74:11, 14;89:12;91:3,6; 92:3,5</p> <p>real (1) 152:4</p> <p>realigning (1) 148:23</p> <p>realistic (1) 145:3</p>	<p>Really (5) 92:8;95:6;114:20; 147:8;150:22</p> <p>realm (1) 143:11</p> <p>reason (5) 53:10;71:14; 116:24;121:1;126:9</p> <p>reasonable (4) 7:7;9:15;23:2;24:6</p> <p>reasonably (2) 20:8;143:10</p> <p>reasoning (1) 86:16</p> <p>reasons (8) 41:10,13;52:3,23; 76:5;89:22,24;99:15</p> <p>rebuilt (1) 17:5</p> <p>recall (11) 59:17;70:4;81:13; 96:24;97:11;118:17; 119:12,13;125:21; 128:5;149:4</p> <p>received (1) 38:12</p> <p>recent (4) 14:8;30:3;58:20; 148:1</p> <p>recently (4) 29:24;30:1;51:2; 144:23</p> <p>Recess (1) 74:8</p> <p>recited (1) 50:14</p> <p>recognize (1) 85:5</p> <p>recollection (1) 43:4</p> <p>recollection's (1) 102:20</p> <p>recommendations (1) 16:3</p> <p>reconfigure (1) 158:4</p> <p>reconsideration (1) 49:13</p> <p>reconstruction (1) 12:22</p> <p>record (18) 41:24;49:21,23; 56:13;58:18;102:14; 103:1;126:4,5,10; 132:12;133:2; 134:14;136:23; 143:19,20;144:4,5</p> <p>record's (1) 137:3</p> <p>recover (1) 26:7</p> <p>rectangle (2) 17:11;157:13</p>	<p>red (3) 17:12;26:12;28:12</p> <p>redesigned (1) 11:6</p> <p>reel (7) 107:24;109:5,5; 110:6,23,24;111:4</p> <p>reels (1) 110:20</p> <p>re-enter (1) 113:5</p> <p>refer (5) 50:2;111:15; 123:14;147:2;149:15</p> <p>reference (3) 87:13;111:18; 144:24</p> <p>referenced (2) 65:10;143:2</p> <p>referencing (1) 24:2</p> <p>referred (2) 86:15;87:15</p> <p>referring (7) 25:22;75:9,15; 128:8;144:21;149:1; 151:2</p> <p>refers (1) 115:3</p> <p>reflect (2) 103:1;133:2</p> <p>reflected (1) 77:6</p> <p>reflects (2) 102:15;103:1</p> <p>regarding (7) 14:3;37:23;39:23; 51:23;56:24;76:23; 83:12</p> <p>regardless (3) 23:7,11;27:16</p> <p>region (1) 82:24</p> <p>regulation (1) 75:18</p> <p>regulatory (1) 69:6</p> <p>rehearing (2) 53:18;55:15</p> <p>reinforced (1) 96:11</p> <p>reiterate (2) 86:6;158:2</p> <p>reject (1) 8:14</p> <p>rejected (3) 7:22;40:21;41:9</p> <p>rejection (2) 30:1,12</p> <p>related (4) 14:7;32:2;39:1; 146:14</p> <p>relating (1) 146:13</p> <p>relative (2) 28:4;123:24</p> <p>relatively (1) 113:5</p> <p>Relevance (5) 73:7;74:2,3;79:8, 12</p> <p>relevant (3) 61:10;73:15;79:19</p> <p>relocation (1) 20:1</p> <p>remaining (1) 51:22</p> <p>remediation (6) 31:16;32:7,11; 33:7,15,18</p> <p>remember (6) 14:13;94:6;98:24; 129:13;150:14; 158:22</p> <p>remembered (1) 120:5</p> <p>reminded (1) 138:21</p> <p>remove (1) 90:19</p> <p>removing (1) 88:20</p> <p>rendered (1) 59:12</p> <p>Renewable (2) 10:4,24</p> <p>repave (1) 22:8</p> <p>repeat (8) 14:14;18:4,24; 30:18;32:5;35:19; 111:19;140:8</p> <p>repeats (1) 137:7</p> <p>repetitious (2) 47:1;61:11</p> <p>replacing (1) 95:2</p> <p>report (10) 32:22;41:23; 107:16;110:22; 114:14;117:1; 128:17;142:3,5; 146:15</p> <p>Reporter (1) 98:13</p> <p>reports (2) 126:19;127:10</p> <p>represent (2) 78:23;121:15</p> <p>representation (2) 68:10;78:15</p> <p>representative (2) 79:5;121:18</p> <p>represented (4) 54:16;68:6;78:9,20</p>	<p>representing (2) 39:11;93:23</p> <p>request (26) 9:15;16:8;28:11, 20;29:24;30:3;32:1, 24;49:13;51:11,11; 55:23;60:8;72:15; 75:10,16;78:1,3; 134:5;148:16,17,21; 149:17;150:4,10; 153:2</p> <p>requested (3) 12:12;50:19;51:5</p> <p>requests (22) 59:13;62:6,7,13,14, 19,21;63:2;64:9; 70:19;71:1,18,20; 75:1;76:4,15,22,23; 80:13,18;123:15; 131:8</p> <p>require (5) 21:13;26:16;27:8, 18;90:18</p> <p>required (9) 35:3,24;103:21; 110:13,24;128:18,24; 129:8,20</p> <p>requirement (2) 22:8;36:3</p> <p>requirements (6) 15:19;69:7;71:11, 15,24;159:14</p> <p>requires (3) 20:16;40:12;90:6</p> <p>requiring (2) 51:5;148:12</p> <p>research (3) 6:3;10:2;12:24</p> <p>researched (2) 44:2,4</p> <p>resistance (1) 10:11</p> <p>respect (11) 30:9;56:4;68:13; 127:6,18,23;129:1; 130:23;133:9; 134:11;135:22</p> <p>respond (2) 76:9;116:15</p> <p>responded (1) 96:21</p> <p>response (4) 61:8;120:14; 123:14;124:22</p> <p>response] (1) 6:11</p> <p>responses (1) 53:3</p> <p>rest (3) 50:1;51:7;142:14</p> <p>restate (1) 6:24</p> <p>result (1)</p>
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<p>40:15 resume (3) 12:7;14:10;160:3 Resumed (2) 3:2;74:9 return (1) 25:2 reunion (1) 96:17 review (6) 3:16;39:14;41:7, 19;42:6;72:21 reviewed (11) 41:21;43:6,10; 44:21;48:13;63:3; 70:24;140:18;142:3, 21;148:15 Revision (2) 150:4;153:1 revisions (1) 62:1 RFP (3) 72:16,22;73:19 rig (3) 28:3;153:21;154:1 right (45) 5:17;9:16;17:4,6; 19:2;23:13;39:2; 40:9;49:12;50:6; 57:21;58:4,9;59:6,6; 61:2;62:1;66:5;69:9; 70:18;74:6,10;80:20; 82:5;90:2,10,11,22; 92:16;98:4;100:12, 14;101:1;105:9; 108:13;109:11; 117:19;118:8; 125:14;127:16; 128:22;149:23; 156:13,19;159:20 right-hand (6) 26:12;59:24;60:1; 101:10;156:12;157:7 right-of-way (47) 7:19,20;8:2,7,9; 16:19,20;17:14;18:7, 8,11;20:13,15;21:7, 10;22:2,7;28:16,24; 34:1,9;61:2,18,22; 66:5,14,20;67:24; 68:5,16;69:10;71:8; 105:12;106:4,9; 148:24;149:2;152:8; 153:7,13;154:4,10; 155:11;156:14; 157:3,16;158:1 rights (5) 37:7;66:24;68:19; 69:15,21 risk (2) 15:1;61:16 River (3) 13:1;59:3,11</p>	<p>road (84) 4:17;17:2,3,23; 18:1;19:1,3,19,21; 20:9,11,14,19;21:14, 16;22:9,14;25:14,23, 24;33:2;34:17,19; 36:22;63:4,13;70:23; 77:3;80:14;81:11; 82:10;83:21,23;84:5, 14,17,19,23;85:4,7,9, 10;88:16;93:24;95:8, 12,18,19,19;96:1,5; 105:3,4,8;106:6,7,17; 108:20;119:10; 120:22;148:3,11,18, 19;149:3,9,22,24; 150:23;151:19,24; 152:17;153:10; 154:13,20;155:1,3, 13,16;156:8,12,15, 16;157:18 roads (9) 80:9,10,22;81:19, 24;84:15;88:17;93:3; 120:10 road's (1) 106:22 roadway (2) 23:10;95:2 roadways (2) 120:19,20 rock (8) 22:23;23:6,11,14, 17;105:3,8;106:6 rod (1) 156:3 rods (6) 22:3;34:3,4; 154:11,13;157:4 role (1) 138:21 rolled (1) 111:7 room (4) 99:11;156:24; 157:4,6 rotate (1) 152:13 rough (1) 101:7 roughly (5) 30:21;34:3;84:13; 105:4;109:19 round (1) 101:22 route (15) 8:3;11:3,4;33:22; 36:8;37:12;41:8,10; 58:13;59:7;63:12; 83:24;84:20;144:12; 150:15 routed (1) 86:9</p>	<p>RSA (1) 50:15 rule (6) 39:14,15,19;41:6; 50:16;75:18 rules (3) 39:12;72:3;77:22 ruling (4) 46:22;47:3;48:19; 135:24 rulings (7) 48:7;53:23;54:6,9; 55:15,18;57:4 run (7) 32:19;34:18;80:1; 112:11;138:12; 147:8;148:5 running (1) 141:11 Rusty's (1) 24:24</p> <p style="text-align: center;">S</p> <p>safely (1) 97:23 safety (15) 6:14;13:19,24; 14:19;15:2;24:6; 39:20;40:3,15;99:15; 101:12;104:2,8; 123:9;143:11 Saffo (1) 39:5 same (23) 9:19;22:22;27:15; 28:12;30:3;32:23; 36:18;46:10;60:14; 61:8;64:16;106:8; 115:21;117:16; 120:5;127:6;130:14; 133:11;135:20; 137:9,10;147:7; 156:10 sand (4) 113:8,14;128:11, 12 saw (4) 4:10;83:15;87:19; 140:4 saying (3) 63:23;118:12,17 scales (1) 105:15 scan (1) 42:20 scenario (4) 21:12;34:23;77:21; 93:6 scope (12) 46:19;47:11;79:8; 82:2;134:4,7,11,16; 135:10,12,14,18</p>	<p>screen (9) 9:5,19;17:5;42:8, 12,17;58:14;60:18; 145:10 screenshot (1) 28:19 scroll (1) 16:12 SDG&E (1) 10:6 se (1) 54:19 season (2) 64:1;65:5 seasonality (1) 63:24 SEC (6) 5:9;8:18,23;9:9; 15:4,8 second (16) 8:13,17;9:5;49:8; 62:3;92:9,24;93:8, 11;94:8,20;97:15; 102:12;115:2;137:2, 20 section (7) 37:11;40:8,11; 124:1,2;142:12; 152:12 sections (2) 16:23;142:10 sector-type (1) 77:17 secured (1) 36:7 sediment (1) 124:7 seeing (5) 34:8,16;42:7; 75:23;153:4 seeks (1) 51:21 seem (3) 7:16;79:11;143:7 seemed (1) 116:16 seems (5) 54:15,21;83:5; 104:9;116:2 select (1) 103:22 selected (3) 24:20;76:11,12 selecting (3) 33:20;98:11,14 selection (1) 98:1 sense (2) 79:24;84:1 sentence (1) 133:24 separation (2) 29:11;30:23</p>	<p>September (2) 51:10,19 series (1) 53:23 serious (1) 81:17 seriously (1) 53:7 Services (2) 32:15;77:19 session (2) 120:9;160:2 sessions (1) 119:8 set (20) 16:20;18:8;24:16; 28:1;29:1;45:23; 58:19,20;67:10;77:1; 90:24;92:17;94:7,24; 96:20;97:23;99:9; 100:1;112:18;113:24 sets (1) 95:21 setting (5) 25:15;81:1;95:10; 98:17;115:9 settled (1) 95:23 set-ups (1) 63:14 seven (1) 11:8 several (2) 6:8;54:6 shall (2) 51:20,24 shallower (1) 27:3 ShareFile (1) 133:3 sheathing (3) 99:6;101:19;102:2 sheathing-created (1) 101:11 sheeting (3) 26:9;27:2,19 ship (2) 108:18,18 shock (1) 129:14 shoring (4) 26:1,9;27:2,19 short (4) 9:23;67:8;82:16; 113:5 short- (1) 83:11 show (16) 4:14;9:24;28:13; 65:20;109:12; 118:18,23;123:19; 124:5,12;125:3; 131:22;132:13;</p>
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<p>148:21;149:24; 155:15 showed (1) 126:1 showing (8) 66:15;101:8; 112:10;117:8,9; 125:11;131:11;132:5 shown (9) 17:4;23:9;26:15; 29:2;34:4;91:23; 124:9;157:12;158:6 shows (9) 6:13,14;10:2; 13:11;22:21;28:11; 60:15;115:9;150:5 side (27) 17:1,2;18:1,14,15; 19:22;21:21;33:1; 34:17;59:2;82:9,10; 85:9;99:7;101:10; 106:17;135:21; 151:23;152:16; 154:19,20,24;155:15; 156:12,17;157:7; 158:7 sides (2) 28:2;155:2 sideways (1) 104:17 significant (7) 5:8;6:20;7:4,9,14; 135:22;147:13 similar (2) 34:23;119:22 simplicity (1) 88:16 simply (3) 25:20;35:12; 104:16 single (2) 154:17;158:10 single-lane (1) 85:2 sit (2) 63:10;153:22 site (19) 6:1;13:11;24:22; 31:17;32:8,12;33:4; 39:15;50:16;85:18; 87:11,14,18;97:13, 19;106:15;108:20; 109:6;110:14 sites (3) 28:7;37:11;129:2 site-specific (1) 27:17 situation (5) 22:6;77:12;113:17; 120:22;155:8 six (5) 3:23;4:10;6:10; 60:6;137:4</p>	<p>Sixty-percent (1) 37:2 size (13) 76:3;87:1;96:18; 98:24;99:2;103:18; 107:13;112:15; 125:4,11;126:22; 127:1;128:22 sketch (5) 103:20;104:14,21, 24;106:21 sketches (2) 101:1,8 skip (1) 51:7 slightly (2) 21:9;96:4 slope (15) 17:1,21,24;18:14; 19:17,20;20:7;149:8, 8;151:8,11;152:5,6; 153:13;155:18 slopes (2) 155:12,14 slow (5) 23:15;27:7;34:14; 40:4;158:12 slower (1) 64:18 slowly (1) 64:6 slurry (1) 28:23 small (1) 22:17 smaller (1) 87:1 snip (2) 6:16;9:5 so-called (3) 54:24;140:13; 141:22 Society (8) 39:11;50:12;51:7; 53:18;56:4,18;59:1; 60:17 Society's (2) 49:21;59:9 soil (2) 27:13;127:20 soils (1) 33:21 solid (1) 17:9 somebody (3) 67:3;94:19;114:20 somebody's (2) 152:21,23 someplace (3) 90:9;108:18,19 sometimes (2) 63:24;64:4 somewhat (6)</p>	<p>94:8;95:11;102:1; 104:9;114:1;119:15 Somewhere (3) 21:23;122:19; 125:17 sorry (7) 6:12;48:24;84:10; 103:6;112:3;134:2; 150:12 sort (2) 49:13;118:6 sorts (1) 30:7 sound (1) 90:20 sounds (5) 25:7;33:8;60:9; 89:16;116:6 source (1) 67:21 south (7) 17:5;19:3;34:2; 59:17,19;85:8; 144:12 southern (1) 36:8 space (5) 27:21;104:13; 113:3,5;154:16 span (1) 85:23 spans (1) 65:6 speak (6) 32:10;33:24;67:8; 98:6;104:7;157:18 speaking (3) 72:2;103:14; 135:13 special (1) 71:18 specialist (1) 6:6 specialized (2) 107:23;114:16 species (2) 158:21;159:9 specific (14) 33:24;51:10;53:14, 24;63:1;92:19;98:7, 14,16;100:21; 127:22;128:20; 139:16;148:5 specifically (10) 12:12;39:17;42:4; 97:11;100:3;117:5; 128:8;129:13;146:3; 159:17 specifications (1) 101:21 specificity (1) 72:5 specifics (1)</p>	<p>27:12 speculate (2) 85:14,19 speculating (1) 85:18 speculation (4) 11:19;38:7,7,8 speed (2) 23:15;86:17 Spencer (1) 121:15 spent (1) 90:5 splice (22) 17:10,15,18;19:7, 14,23;20:3,5;21:9,17; 23:7;96:7,9;97:23; 98:18,21;99:9; 100:19;101:11; 107:2;112:19;113:6 splicers (1) 114:16 splicing (10) 107:3,7,9,19; 112:21;114:3,10; 115:1,3;117:8 spoils (2) 26:21;37:20 spokesman (1) 74:15 spool (3) 108:22;110:4; 111:7 spools (2) 109:13,18 spread (1) 33:6 spreading (1) 159:6 spring (2) 38:18;132:22 square (3) 106:1;152:16; 158:6 stabilizers (1) 104:1 stacking (1) 60:3 stage (1) 36:14 staging (6) 36:7,13;37:19; 71:24;109:2;110:13 stakeholder (1) 78:14 stamped (2) 58:11;60:15 stand (2) 136:22,22 standard (1) 57:18 standards (3) 15:5,16;50:15</p>	<p>standpoint (2) 64:24;69:5 Stark (10) 121:17,19;123:3,5; 124:2;125:16; 126:16;128:9;129:3; 131:19 start (12) 9:7;10:23;16:5; 19:23;39:12;64:17, 19;65:4;88:19; 135:17,18;144:14 started (5) 11:2;63:19;64:10; 75:23;112:18 starting (1) 65:9 starts (1) 64:13 state (16) 3:15;4:11,14; 11:16;49:24;56:12; 58:18;69:18;70:4; 71:17;84:21;93:1; 118:15;119:18,21; 141:17 stated (7) 13:17;38:5;47:23; 52:24;63:10;81:5,8 statement (19) 4:24;7:2,7;24:24; 36:23;49:20;51:15; 80:6;96:8,24;97:1; 100:16;116:16; 119:4;136:22;142:4; 146:9;148:20;158:3 states (2) 5:5;119:14 stating (1) 64:7 station (3) 31:17;32:8;33:15 statutory (2) 66:19;138:21 stay (4) 103:9;105:22; 154:18;156:16 steady (1) 141:17 steady-state (1) 141:5 steel (4) 86:24;99:6;110:4,5 steep (14) 16:24;17:21,22,24; 18:14;19:17,18,20; 20:7;152:5,6;155:5, 12,18 step (6) 25:4;35:19;77:3; 89:4;94:5;104:16 steps (3) 92:22;108:1;117:3</p>
--	--	---	---	---

<p>Steve (9) 5:2;9:17;13:9;16:5, 11;22:18;28:9;31:11; 105:13</p> <p>Stewartstown (3) 74:17;80:11;88:18</p> <p>still (8) 4:1,8,11;70:20; 91:17;93:3;117:16; 148:24</p> <p>stopped (1) 53:11</p> <p>storage (1) 37:20</p> <p>store (1) 90:8</p> <p>straddling (1) 92:6</p> <p>straight (2) 34:18;91:14</p> <p>strategy (1) 33:19</p> <p>stream (4) 17:1,21;18:13; 19:17</p> <p>streams (2) 16:9,14</p> <p>street (2) 82:9;88:9</p> <p>stretch (7) 123:6;125:15; 126:15,16;128:9; 129:3,9</p> <p>strike (2) 62:3;107:24</p> <p>striking (1) 52:16</p> <p>string (1) 64:20</p> <p>stringent (3) 54:15,17,18</p> <p>structural (3) 148:2;149:3,5</p> <p>structure (3) 148:11,13;149:13</p> <p>studied (1) 73:12</p> <p>study (16) 41:19;44:13,15,17, 17,21;45:16;58:1; 127:9;138:6;139:23, 24;140:11,23; 141:22;142:13</p> <p>studying (1) 43:2</p> <p>stuff (2) 113:23;146:20</p> <p>subcontractors (1) 9:23</p> <p>subject (4) 5:16;24:4;118:12; 134:19</p> <p>subjects (1)</p>	<p>74:23</p> <p>submit (4) 9:6;54:8;71:19,20</p> <p>submitted (5) 7:20;44:11;134:4; 154:9;159:1</p> <p>subsidiary (1) 13:4</p> <p>substantially (1) 123:17</p> <p>substation (1) 120:17</p> <p>subtlety (1) 108:7</p> <p>sufficiently (1) 44:21</p> <p>suggest (1) 134:17</p> <p>suitable (1) 148:1</p> <p>summarize (1) 37:16</p> <p>supplemental (1) 105:14</p> <p>supplier (5) 76:11,13;77:18; 108:10;114:24</p> <p>suppliers (1) 76:19</p> <p>support (1) 100:4</p> <p>suppose (1) 102:13</p> <p>sure (17) 15:19;20:15;21:24; 56:11;63:21;67:22; 69:4,11;78:23;89:1, 8;99:16;111:21; 124:3;131:22; 158:14;159:6</p> <p>surface (5) 22:24;25:19,20,21; 95:12</p> <p>survey (24) 8:13,14,17,19;30:1, 5,11,12;33:4;36:22; 37:17,18;65:16;66:4, 15,19;67:1,2,5,7,11, 24;68:4,5</p> <p>surveyed (1) 67:12</p> <p>surveyor (2) 67:13;68:7</p> <p>surveys (2) 7:21,22</p> <p>suspect (2) 108:16;157:11</p> <p>suspected (1) 109:11</p> <p>sustain (5) 38:15;74:2;80:2; 116:10;134:8</p> <p>sustained (10)</p>	<p>46:2,5;47:3;48:5; 53:16;57:1,12;61:12; 130:10,15</p> <p>swap (1) 92:1</p> <p>swing (2) 98:2;100:22</p> <p>switch (2) 83:18;107:5</p> <p>symbol (1) 59:7</p> <p>synonymous (2) 108:6;113:10</p> <p>system (5) 76:13;77:19;83:18; 117:4;130:21</p>	<p>86:6,11,19;96:15,24; 97:10;98:19,22; 99:10,13;105:6,19; 106:11,19,24;118:17; 119:6;121:22;122:2, 6,8,10;123:14,24; 124:3,11,20;125:1,9, 21;126:8,12,17; 128:5,13,20;129:4, 10,12,17;140:17; 141:2;142:16,20; 144:15;145:9,17,23; 146:3,9,18;147:1,16, 24;148:15,20;149:4, 14,20;150:2,8,19; 151:2,5;152:19; 153:3,8;155:4,6,24; 156:21;157:10; 158:2,14,19</p> <p>team (3) 42:24;72:12;77:14</p> <p>technical (6) 107:16;114:14; 115:12,15;119:8; 120:9</p> <p>technique (4) 75:5,6,12;78:24</p> <p>teetering (1) 95:16</p> <p>Tehachapi (3) 10:2,4,24</p> <p>temporarily (2) 87:3;157:18</p> <p>temporary (5) 4:5;20:1,16;30:9; 87:22</p> <p>Ten (2) 106:11,12</p> <p>term (2) 67:15;124:11</p> <p>terminus (1) 149:7</p> <p>terms (10) 23:24;33:19;79:12, 17;108:6;113:9; 117:1;123:9;124:21; 125:14</p> <p>terrain (1) 128:1</p> <p>testified (6) 105:13;106:14; 135:15;140:3;142:2; 153:9</p> <p>testify (2) 57:15;150:11</p> <p>testifying (1) 103:4</p> <p>testimonies (1) 37:13</p> <p>testimony (46) 3:15;14:4;25:8; 35:6;38:3,21,23; 44:11;46:19,20;47:6,</p>	<p>11;59:11;60:5;61:5; 73:8;79:9;82:2; 87:12;89:17;97:7; 102:12;105:14; 107:17;116:3; 123:12,13;126:19; 127:10;130:3;134:4, 8,12,19;135:11,19; 136:15;137:5; 143:12;144:16,20; 145:10;146:16; 151:9,9,14</p> <p>Thanks (1) 3:12</p> <p>therefore (2) 70:16;78:14</p> <p>there'll (1) 82:12</p> <p>thermal (5) 27:7,8;93:2;113:8, 12</p> <p>thick (2) 87:5,6</p> <p>thinking (1) 119:17</p> <p>third (5) 93:4;94:9;104:24; 109:20;153:1</p> <p>Thirty (1) 90:20</p> <p>Thompson (50) 74:11,13,15;79:11, 13,20;80:4,5;82:4,5, 7;83:4,5,13,14,19; 84:6,7,10,11;89:19, 20;90:4;99:20,23; 100:8,10;101:4,6; 102:19,20;103:5,9, 13;107:6;112:5; 116:2,6,12,13; 117:18,19,22;118:3, 5,8,11,24;119:1; 121:6</p> <p>thoroughly (1) 9:9</p> <p>though (3) 14:10;70:18; 127:15</p> <p>thoughts (3) 76:2;137:13,15</p> <p>thousand (1) 141:20</p> <p>three (18) 8:14,16;34:3;65:6; 74:18;78:20;81:7; 84:15;86:13;94:20; 96:17;97:3;109:14; 110:7,15;146:7; 150:6;154:13</p> <p>three-rod-wide (1) 105:4</p> <p>throughout (1) 54:7</p>
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T

<p>tight (1) 31:7</p> <p>times (7) 26:16;34:6;36:15; 47:7;64:11;112:14; 135:16</p> <p>timing (1) 88:15</p> <p>tipping-over (1) 61:19</p> <p>title (1) 6:15</p> <p>today (11) 50:9;57:17;58:21; 59:12;65:10;66:9; 83:16;124:23; 140:17;150:11; 159:21</p> <p>together (1) 152:4</p> <p>told (4) 53:5;130:12,22; 154:12</p> <p>Tom (2) 42:23;139:22</p> <p>tomorrow (1) 159:22</p> <p>ton (3) 96:14,22;110:8</p> <p>tons (1) 110:9</p> <p>took (13) 8:14;10:1,4,6,17, 21;11:7,12,16;12:2,9; 68:7;94:12</p> <p>tools (2) 113:23;114:4</p> <p>top (12) 16:5;83:22;96:4, 12;113:24;115:10; 117:23;124:3; 125:22;146:23; 149:23;150:14</p> <p>topic (2) 58:5;131:9</p> <p>topographic (1) 151:23</p> <p>total (3) 94:4,23;126:13</p> <p>touch (1) 50:7</p> <p>toward (2) 101:24;103:4</p> <p>towards (1) 150:15</p> <p>towers (1) 61:21</p> <p>town (7) 34:2;78:8,23; 81:19;88:17;93:3; 156:7</p> <p>towns (3) 78:20;79:4;80:23</p>	<p>Track (9) 48:22,23;49:1,6,7, 8,10;50:3;94:18</p> <p>tracking (2) 29:14;31:1</p> <p>tract (3) 60:19,20;70:14</p> <p>tractor (2) 104:20;109:12</p> <p>tractor-trailer (1) 110:20</p> <p>traffic (33) 4:15,20;5:6,8,8,13, 19;6:4,5;8:1,9,21;9:6, 10,12;36:17,19,19; 37:19;59:20;60:3; 63:14;86:2,7;154:17; 155:23;156:1,8; 157:1,17,23;158:11, 12</p> <p>trailer (7) 104:20;107:23,23; 108:22;109:8,12; 110:15</p> <p>trained (1) 114:16</p> <p>transcript (2) 118:18;119:3</p> <p>transcripts (2) 48:16;54:8</p> <p>transfer (1) 91:11</p> <p>transferred (1) 108:24</p> <p>Transmission (8) 10:4,12;12:21; 13:2;46:8;118:15; 120:12;130:21</p> <p>transport (1) 91:16</p> <p>transported (1) 109:2</p> <p>travel (8) 29:2,10;30:20; 91:24;98:5;100:23; 156:18;157:5</p> <p>traveled (5) 28:19;70:22;71:5, 9;95:2</p> <p>travelers (2) 5:15,16</p> <p>traverse (1) 158:8</p> <p>treating (2) 159:14,14</p> <p>trench (18) 26:24;27:4,10,18; 33:1;34:20;63:3; 86:15,21,24;87:3; 89:22;90:12;91:13; 99:6;145:12;146:4; 148:4</p> <p>trenches (5) 26:15;27:6;35:4, 24;145:16</p> <p>trenching (2) 10:16;33:5</p> <p>trenchless (1) 34:20</p> <p>trespass (2) 29:16;31:4</p> <p>tribunal (1) 57:7</p> <p>tributaries (1) 84:13</p> <p>tried (4) 48:20;54:19;56:14; 118:9</p> <p>trips (1) 145:12</p> <p>truck (15) 89:12;91:4,6;92:5, 14;101:17,19;102:2; 110:14;113:22; 114:3;145:12; 146:17;147:5,6</p> <p>trucking (2) 26:20;146:20</p> <p>trucks (4) 146:12;147:3,3,14</p> <p>truck's (1) 92:3</p> <p>true (8) 38:10;47:15;52:7; 121:2;127:6;139:9; 140:5;148:20</p> <p>try (7) 42:12;63:23;95:22; 101:4;103:9;112:22; 150:21</p> <p>trying (6) 12:24;77:14;79:21; 108:7;117:2;158:13</p> <p>turn (5) 58:7;59:24;104:23; 105:1;111:10</p> <p>turns (1) 105:8</p> <p>Twenty (1) 21:22</p> <p>two (27) 6:13;7:10;12:18, 20;22:3;23:2;24:1,1; 28:2;65:7;86:13; 92:22;109:13,14; 110:7,16;112:23; 119:3;123:4,6,7; 131:16;136:20; 143:2,7,13;157:21</p> <p>two-year (1) 85:23</p> <p>type (12) 24:3;26:11;44:22; 78:1;98:7,15;100:21; 109:8;120:6;125:4, 11;127:1</p>	<p>types (3) 72:12;98:9;103:17</p> <p>typical (21) 7:13;24:2;32:13; 64:21;75:4;78:7; 80:24;82:14;87:17; 90:5;92:11;95:18; 97:15,19;99:4;100:6; 102:3;119:11,16; 120:10;145:19</p> <p>Typically (13) 12:10,11;24:9; 26:8;72:11;76:10; 87:2;95:12;99:10; 109:18;112:24; 113:14;120:16</p> <p style="text-align: center;">U</p> <p>ultimate (2) 69:10;157:15</p> <p>ultimately (2) 116:9;138:4</p> <p>uncertain (2) 3:21;4:2</p> <p>uncertainties (3) 68:11,12,13</p> <p>uncommon (1) 107:15</p> <p>uncovered (1) 68:11</p> <p>under (18) 21:3,5,6,12;34:9, 23;42:22;55:18; 70:21,22,22;71:4,8; 80:8,14,22;81:12; 82:13</p> <p>undercut (1) 136:10</p> <p>underground (14) 3:19;10:6,8,16; 11:5,12;22:21;23:24; 61:23;82:11;113:2; 127:14;142:9,11</p> <p>underneath (2) 120:16,19</p> <p>Understood (6) 44:12;57:9;60:4; 78:16;138:24;151:13</p> <p>undertaking (1) 56:19</p> <p>unduly (3) 47:1;61:11;82:22</p> <p>unequivocal (1) 137:3</p> <p>unfold (1) 60:12</p> <p>unfriendly (1) 138:20</p> <p>unit (1) 113:23</p> <p>unknown (4) 16:20;18:7;28:24;</p>	<p>102:1</p> <p>unless (3) 12:11;55:1;108:6</p> <p>unload (1) 110:20</p> <p>unquote (1) 46:15</p> <p>unreasonable (2) 93:18;144:17</p> <p>unusual (1) 152:24</p> <p>up (48) 10:13;16:23;20:18; 21:18;25:15;27:22; 28:1;32:1,20;39:7; 41:10;42:18;43:1; 44:10;51:2;58:14; 62:3;74:11;83:20,24; 84:22,22;85:17; 86:17;89:6;90:8,21; 91:17;94:8;97:17,17; 100:19;101:18; 103:16;104:17; 105:8;106:7;109:5, 12;110:17,22;111:4, 7;145:10;148:4; 149:16;153:12; 155:18</p> <p>updated (1) 26:14</p> <p>uphill (2) 83:24;150:18</p> <p>upland (2) 35:2,22</p> <p>upon (2) 27:12;56:18</p> <p>upper (3) 26:12;115:8,14</p> <p>use (7) 50:11;86:15;89:21; 91:17;113:22; 117:11;124:11</p> <p>used (21) 15:10,10;26:7; 27:12;57:18;67:15; 69:5;75:4,5,13;78:6; 86:16;87:2;95:8; 98:8,9,16;107:13; 114:18;129:21;153:3</p> <p>uses (1) 86:22</p> <p>USGS (1) 127:21</p> <p>using (12) 13:22;14:17;21:20; 37:2;67:13;74:20; 90:16;93:11;95:11; 102:17;112:20,21</p> <p>usually (3) 24:16;76:17;102:3</p> <p>utilities (5) 26:14;81:10,12,17; 113:2</p>
---	--	--	---

<p>utility (8) 17:15;18:2;19:6; 22:20:1;71:12,15; 120:18</p>	<p>walk (1) 39:18 walking (2) 40:7;89:16 walls (2) 96:12;99:8 wants (3) 75:8;82:11;148:18 warranted (1) 24:19 water (3) 26:20;35:3,24 way (24) 20:2;21:13;28:19; 29:2,10;30:20;55:19; 70:23;71:5,9;76:6,7, 7,8;91:9,15;95:2; 104:23;115:11; 125:2;147:18;148:9; 153:1;158:4 weather (1) 64:21 weather-wise (1) 119:24 web (2) 13:11;97:13 week (1) 105:13 weeks (9) 7:10;60:6;81:7; 86:13;96:17;97:4; 118:13;119:4;150:6 weighs (2) 96:13;110:7 weight (6) 96:8;97:20;100:13, 23,23;109:23 weren't (3) 70:17;105:16; 124:24 west (6) 17:1;18:1,15; 19:21;154:20,24 Whatcha (1) 50:5 whatnot (1) 143:9 what's (5) 13:16;22:1;42:15; 56:11;76:8 whatsoever (1) 129:7 whenever (1) 3:4 Whereupon (1) 160:1 wherever (1) 95:3 whole (4) 10:7;65:20;95:6; 106:23 wholly (1) 70:14</p>	<p>Who's (1) 133:23 wide (5) 18:10;30:21;96:10; 154:12,13 widening (1) 157:18 wider (1) 104:3 width (19) 7:21;8:2;16:19,21, 22;18:7,9;21:1,8,24; 22:2,4,13;29:1; 30:13;34:1;36:22; 106:14;154:12 wiggling (1) 95:16 wind (3) 73:5,13,24 wind-hydropower (1) 73:22 Wisconsin (1) 120:1 wish (1) 56:4 withdrawn (7) 10:10;62:9,15,16, 17,21;70:19 within (17) 6:8;7:9;21:1,3; 29:10;30:21;34:12; 70:14;71:7,9;23; 113:3;143:11;148:4, 24;152:8,21;153:13 without (23) 8:1;20:20,24;34:8, 16;35:17;36:10; 37:16,17,18,19,20,20, 21,24;63:23;85:19; 86:7;98:6,10,14; 117:4;157:17 witness (13) 51:21,23,24;52:3,4, 21;53:10;54:4; 111:21;112:1,3; 135:10,10 witnessed (2) 107:7,9 witnesses (27) 8:11;30:7;46:13, 23;47:8,9;49:2,3,15; 50:2;51:23;53:13; 54:3,14,21;56:1,7,20; 57:19;112:2;135:14, 23;136:7,9,24;138:9; 139:2 witness's (1) 137:17 wondering (2) 35:11;155:21 Wooden (1) 110:4 word (4)</p>	<p>47:21;52:11,13; 112:21 words (7) 54:23;62:18;63:19; 95:15;117:12;141:5, 15 work (47) 3:19;4:5;6:14; 12:8;13:19,24;14:19; 15:2,5,17,21;25:19; 29:10;30:21;34:12; 45:7;59:18,21,22; 64:15,17,24;65:3; 88:13;95:18;115:5; 124:6,14;136:8; 151:17;152:11,18; 153:6,11,16,17; 154:14,21;156:15,22, 24;157:5,12;158:3,5, 8,9 worked (2) 119:15;120:3 worker (2) 26:10;113:4 workers (1) 113:4 working (5) 37:4;57:20;85:8; 91:19;121:12 works (3) 78:9,21;79:5 workspace (2) 17:20;19:16 worst-case (1) 93:6 write (1) 6:3 writing (4) 55:12,14;57:5,7 written (2) 51:9;54:11</p>	<p>119:18,21 Yup (3) 110:7;112:17; 116:12</p>
<p>V</p>			<p>Z</p>	
<p>variable (1) 141:4 variables (4) 34:21,22;67:10; 98:1 variations (2) 98:8,10 various (4) 19:11;41:9;68:8; 123:18 vary (2) 81:21;88:5 varying (1) 87:1 vault (8) 17:10,16,18;19:8, 14,23;20:5;21:18 Veatch (1) 10:14 vehicle (4) 91:12;99:24; 100:13,24 vehicles (9) 5:24;85:8,16,22; 86:8;92:1;154:18; 158:9,10 verbal (1) 6:11 verify (1) 97:7 version (2) 58:19;75:21 versus (4) 34:20;64:22;118:1; 139:10 vertical (1) 101:14 viability (2) 3:20,24 vicinity (3) 59:6;109:19;110:9 view (1) 150:14 voltage (2) 141:4,6 volts (4) 141:8,9,11,20 volume (2) 27:9;147:4 voluntary (1) 15:23</p>			<p>zone (1) 59:22 Zysk (119) 7:7,12,16,24;8:4; 15:3,15,19,24;19:5,9, 12,23;20:23;22:5,8, 14;23:4,6,16;25:17, 22;26:3,18;27:20; 28:4;32:18;33:7,14; 37:15;39:17;40:10, 24;41:7,14,21;43:9, 14,17;44:4,6,9;45:1; 59:8;65:19,24;66:6; 67:2;71:7;72:24; 76:23;77:6,10;86:1, 10,24;87:6,10,16; 88:1,7,12;89:1,3,8, 11,13;90:11,14,17, 21;91:2,5,9,19,22; 92:7,16,19,21;93:5, 13,17;94:4,11,15,17, 23;95:5,9,14,17,24; 121:24;131:2;132:9, 11,17,21,24;133:6; 143:1,13,15;151:16, 21;152:2,5,7,9,14; 153:17,23;154:2,7; 155:7;158:21; 159:12,17</p>	
			<p>0</p>	
			<p>002991 (1) 83:15</p>	
		<p>Y</p>	<p>1</p>	
		<p>yards (5) 93:20,21,22;147:5, 6 year (17) 5:4;6:10;7:23; 10:6;45:16;51:1; 62:2;63:18;64:1,11, 12,15,19,22;84:18; 132:24;137:4 yearly (2) 64:23,24 years (6) 10:5;11:8;65:6,7; 71:22;75:3 yellow (1) 100:11 yesterday (1) 89:7 York (2)</p>	<p>1 (3) 16:19;49:6;131:6 1:21 (1) 3:2 10 (14) 32:23;93:14,21,24; 96:10;102:4;115:1,2; 117:7,23;125:9; 144:23;145:2;147:6 10- (1) 125:17 100 (2) 144:23;145:2 1080 (1) 23:1 10-by-34 (1) 101:13 10-minute (1) 74:7</p>	
<p>W</p>				
<p>waiting (1) 56:2</p>				

<p>10-percent (1) 125:8</p> <p>11 (7) 65:11;106:16,20; 115:8;117:7,11,24</p> <p>110,000 (1) 97:22</p> <p>112 (1) 31:14</p> <p>1145 (1) 22:24</p> <p>115 (1) 126:11</p> <p>116 (3) 17:6;31:14;34:1</p> <p>12 (1) 117:23</p> <p>12/30/2016 (1) 3:15</p> <p>125 (2) 16:8;28:11</p> <p>12th (1) 51:10</p> <p>130,000-pound (2) 97:21;100:14</p> <p>130-pound (1) 97:21</p> <p>135 (1) 99:20</p> <p>136 (1) 99:19</p> <p>137 (1) 104:15</p> <p>138 (3) 104:14,24;105:22</p> <p>13th (1) 5:4</p> <p>14 (1) 10:7</p> <p>145 (2) 83:24;84:20</p> <p>15 (4) 101:20,24;102:3, 21</p> <p>15- (2) 96:21;97:14</p> <p>1500 (1) 28:20</p> <p>159 (1) 126:11</p> <p>16 (1) 90:18</p> <p>1600 (2) 87:21;88:4</p> <p>1600-foot (1) 87:17</p> <p>1600-foot-long (1) 87:14</p> <p>161 (1) 126:6</p> <p>17 (4) 90:18;101:18; 118:18;119:3</p>	<p>179 (2) 42:1,11</p> <p>1800 (1) 106:7</p> <p>180-degree (1) 105:1</p> <p>188 (1) 62:6</p> <p>18-inch (2) 23:2;28:21</p> <p>18-inch-diameter (1) 28:13</p> <p>19,653 (2) 145:11,17</p> <p style="text-align: center;">2</p> <p>2 (5) 5:2;16:20;49:7; 58:10;131:7</p> <p>2,000 (1) 109:19</p> <p>2:50 (1) 74:8</p> <p>20 (8) 21:23;23:10;88:8; 94:2;102:21;107:22; 112:14;113:18</p> <p>20- (1) 96:21</p> <p>20.9 (1) 109:23</p> <p>200 (8) 88:10,21;89:5,5,7, 9;90:15;93:19</p> <p>200-foot (1) 88:14</p> <p>2015 (1) 43:20</p> <p>2016 (2) 7:20;131:12</p> <p>2017 (8) 7:21;42:23;50:10, 13;51:19;65:11; 132:23;160:4</p> <p>2018 (4) 8:20;38:18;63:20, 20</p> <p>202.11 (1) 50:16</p> <p>20-foot (2) 29:11;30:22</p> <p>20-foot-wide (2) 17:20;19:16</p> <p>20-plus (1) 20:8</p> <p>20-ton (1) 97:14</p> <p>22 (1) 51:19</p> <p>220 (1) 65:12</p> <p>227 (2)</p>	<p>111:17,22</p> <p>23 (1) 110:9</p> <p>24 (2) 115:2;160:4</p> <p>249+00 (1) 105:11</p> <p>25 (6) 16:21;18:10,11; 30:21;96:14;110:9</p> <p>25-ton (6) 96:19;97:23;98:21; 100:2,19;102:8</p> <p>29 (1) 93:20</p> <p style="text-align: center;">3</p> <p>3 (19) 6:12;10:5;17:3; 48:22,23;49:1,8,10; 50:3,24;52:9;59:7; 112:4;144:12; 147:14;149:17; 150:4,4,15</p> <p>3- (1) 122:19</p> <p>3:12 (1) 74:9</p> <p>30 (16) 16:24;18:12;21:22, 23;55:17;57:6; 101:21,21,22;104:2, 2,4,4;125:11;153:24; 154:23</p> <p>30- (1) 102:16</p> <p>300 (4) 84:5,14;144:21,24</p> <p>301.08 (1) 39:16</p> <p>301.08d5 (1) 39:15</p> <p>305 (1) 6:13</p> <p>30-percent (4) 72:11;124:24; 125:2,17</p> <p>30th (1) 42:23</p> <p>31st (2) 50:13;53:1</p> <p>320 (10) 107:8,12,12;111:6; 126:13;129:2;141:4, 7,10,18</p> <p>320,000 (2) 141:8,9</p> <p>34 (1) 96:10</p> <p>340,000 (1) 141:11</p> <p>345 (1)</p>	<p>107:10</p> <p>37th (1) 111:18</p> <p>3-inch (1) 112:9</p> <p style="text-align: center;">4</p> <p>4 (9) 9:17,19;51:1;52:9; 87:1,2,8;96:11;146:8</p> <p>40 (5) 90:20;105:24,24; 106:9,9</p> <p>40,000 (1) 110:12</p> <p>400 (1) 122:19</p> <p>40-by-40 (1) 104:4</p> <p>40-ton (1) 102:16</p> <p>43.5 (1) 22:23</p> <p>45 (2) 90:22;94:12</p> <p>47 (4) 102:4;103:16; 104:18;124:4</p> <p>493 (1) 65:13</p> <p>4-foot (2) 145:15,22</p> <p style="text-align: center;">5</p> <p>5 (9) 13:9;27:20;40:11; 81:1;101:12,19; 102:3;104:3,7</p> <p>5:11 (1) 160:2</p> <p>50 (5) 105:5,15;106:8,10; 160:1</p> <p>50,000 (1) 110:12</p> <p>51 (2) 93:22;160:3</p> <p>51,000 (1) 96:14</p> <p>52 (1) 36:8</p> <p>52-mile (1) 37:11</p> <p>541-A33 (1) 50:15</p> <p>59 (2) 118:18;119:2</p> <p>5-foot (3) 29:13;31:1;82:14</p>	<p style="text-align: center;">6</p> <p>6 (3) 16:4;112:16; 152:21</p> <p>60 (3) 36:24;37:7;93:11</p> <p>60-foot (1) 23:21</p> <p>61 (1) 132:12</p> <p>62 (1) 133:2</p> <p>64 (2) 139:21;140:13</p> <p>640,000-volt (1) 141:23</p> <p>66 (4) 17:14;28:17;157:2, 22</p> <p>66-foot (1) 22:7</p> <p>67741 (1) 58:11</p> <p>67843 (1) 60:15</p> <p>6-inch (1) 92:23</p> <p>6th (3) 53:22;54:6;55:15</p> <p style="text-align: center;">7</p> <p>7 (5) 22:19;34:3;112:16; 146:1,8</p> <p>7-1/2 (1) 10:5</p> <p>76 (1) 114:22</p> <p>7th (1) 50:10</p> <p style="text-align: center;">8</p> <p>8 (7) 28:9;87:1,2,8; 93:23;147:5;153:13</p> <p>80 (1) 112:16</p> <p>833386 (2) 111:17;112:1</p> <p>83386 (1) 112:4</p> <p>8-by-12 (1) 90:16</p> <p>8-inch (2) 96:12,12</p> <p>8-inch-thick (1) 96:11</p>
---	--	--	--	--

<p style="text-align: center;">9</p>				
<p>9 (1) 31:11 9:00 (1) 160:4 900 (1) 28:18 9-yard (1) 93:15</p>				