

THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE APPLICATION BY
TRANSCANADA KEYSTONE PIPELINE, LP FOR
A PERMIT UNDER THE SOUTH DAKOTA ENERGY HP09-001
CONVERSION AND TRANSMISSION FACILITY
ACT TO CONSTRUCT THE KEYSTONE XL PROJECT

Transcript of Proceedings
November 3, 2009
Volume II, Pages 169-393

BEFORE THE PUBLIC UTILITIES COMMISSION,
DUSTY JOHNSON, CHAIRMAN
STEVE KOLBECK, VICE CHAIRMAN
GARY HANSON, COMMISSIONER

COMMISSION STAFF
John Smith
Kara Semmler
Greg Rislov
Tim Binder
Stacy Splittstoesser
Nathan Solem
Bob Knadle
Anissa Grambihler

APPEARANCES

James E. Moore appearing on behalf of the Applicant
Brett M. Koenecke appearing as co-counsel on behalf of the Applicant
James White appearing as co-counsel on behalf of the Applicant
Bill Taylor appearing as co-counsel on behalf of the Applicant
Paul Blackburn appearing on behalf of Dakota Rural Action

Reported By Cheri McComsey Wittler, RPR, CRR

1 TRANSCRIPT OF PROCEEDINGS, held in the
2 above-entitled matter, at the South Dakota State Capitol
3 Building, 500 East Capitol Avenue, Pierre, South Dakota,
4 on the 3rd day of November, 2009, commencing at
5 9:30 a.m.

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1 ALSO PRESENT:
2 Kelly Fuller, Plains Justice

3
4 I N D E X

5 APPLICANT WITNESSES DIRECT CROSS REDIRECT RECROSS

6 Tom Oster 174 -- -- --

7 STAFF WITNESSES DIRECT CROSS REDIRECT RECROSS

8 Tim Binder 221 225 225 --

9 Dan Flo 237 244 264 262,263

10 James Arndt 266 283 317 318,321

11 Ross Hargrove 333 338 -- 331,332

12 William Walsh 354 360 385 385,387

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1 - Tim Binder Direct 170 223 223

2 - Michael Madden Direct 170 223 223

3 - Patrick Robblee Direct 170 223 223

4 - James Arndt Direct 170 223 223

5 - Ross Hargrove Direct 170 223 223

6 - Hargrove Supplemental 170 223 223

7 - William Walsh Direct 170 223 223

8 - Walsh Supplemental 170 223 223

9 - Jenny Hudson Direct 170 223 223

10 - William Mampre Direct 170 223 223

11 - Mampre Supplemental 170 223 223

12 - David Schramm Direct 170 223 223

13 - Michael Kenyon Direct 170 223 223

14 - Paige Hoskinson Olson Direct 170 223 223

15 - Tom Kirshenmann Direct 170 223 223

16 - Derric Iles Direct 170 223 223

17 - Brian Walsh Direct 170 223 223

18 - Kimberly McIntosh Direct 170 223 223

19 - Dan Flo Resume 170 223 223

(Staff Exhibits 1 through 19 are marked)

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1 CHAIRMAN JOHNSON: Well, good morning, ladies
2 and gentlemen. We'll go ahead and call to order the
3 second day of hearings for the Keystone XL Pipeline.

4 First, I'm Dusty Johnson. Joining me here are
5 Commissioners Steve Kolbeck and Gary Hanson. I apologize
6 for my absence yesterday. Luckily, I am not contagious.
7 The clinic tells me it was a particularly insidious
8 24-hour stomach virus. I would have much rather been
9 here with all of you than doing what I was doing. I was
10 not able to follow most of the day on the internet
11 archives.

12 Certainly, I will catch up on the transcript and
13 archived audio since I wasn't able to follow on the
14 internet so some of my questions today may be redundant
15 from what Commission Hanson and Kolbeck asked yesterday.
16 So I apologize in advance.

17 Just a reminder to speak slowly and clearly and
18 into your microphone so that those folks listening out on
19 the internet as well as our court reporter can make sure
20 we are communicating well.

21 And, oh, Commissioner Hanson had a good
22 suggestion yesterday to some folks that perhaps this
23 would be a good opportunity to better explain the
24 difference between Commission advisors and Commission
25 staff because their roles are really very different. And

1 for some people that may not be clearly evident.
 2 Commissioner advisors like John Smith and
 3 Greg Rislov interact with Commissioners almost in
 4 exclusion of everyone else. They're dealing with us and
 5 providing us insight on a one-on-one basis to help us
 6 during our deliberations.
 7 Commission staff, the staff for the Public
 8 Utilities Commission, is interested in the public
 9 interest. They're not fighting for any particular party
 10 but rather for any broad public interest. They put forth
 11 their own case, which we'll be spending quite a bit of
 12 time on today. They have their own witnesses. They
 13 cross-examine as we saw yesterday. And obviously
 14 Mr. Smith and Mr. Rislov don't call their own witnesses
 15 or anything like that.
 16 So with that, let me pause. Commissioner
 17 Kolbeck and Commissioner Hanson, anything else by way of
 18 reiteration? And I'll reiterate that tonight for our
 19 public input meeting. Unless there's anything I've
 20 forgot, at this point I'll turn it back over to Mr. Smith
 21 who's operating as our Hearing Examiner.
 22 MR. SMITH: Thank you, Mr. Chairman. Where we
 23 left off at the recess yesterday was still in the
 24 Applicant's direct case. The Applicant had one witness
 25 who was unable to be present yesterday afternoon. And so

1 with that, Mr. Koenecke, I will turn it over to you to
 2 proceed to conclude your case in chief.
 3 MR. KOENECKE: Thank you.
 4 Thank you, Mr. Smith. The Applicant calls
 5 Tom Oster to the stand.
 6 DIRECT EXAMINATION
 7 BY MR. KOENECKE:
 8 **Q.** Good morning, Mr. Oster.
 9 **A.** **Good morning.**
 10 **Q.** Will you introduce yourself to the Commissioners,
 11 please.
 12 **A.** **Good morning, Commissioners. I'm Tom Oster,**
 13 **Secretary of the Department of Education.**
 14 **Q.** And is it correct that you're employed by the State
 15 of South Dakota?
 16 **A.** **That is correct.**
 17 **Q.** Did you provide written testimony for this
 18 proceeding?
 19 **A.** **I did.**
 20 **Q.** I've put a copy of that in front of you marked as an
 21 exhibit. Have you found that?
 22 **A.** **Yes.**
 23 **Q.** Is that the testimony which you prepared?
 24 **A.** **Yes, it is.**
 25 **Q.** If I asked you all of those questions here this

1 morning, would your answers be the same?
 2 **A.** **Yes, they would.**
 3 **Q.** Can you just briefly indicate for the Commissioners
 4 what the balance of your testimony would be about?
 5 **A.** **My testimony would just reiterate the fact that an**
 6 **increase in assessed valuation for school districts would**
 7 **be a positive thing for them. Irrespective of how that**
 8 **increase happens, it would be a positive impact for**
 9 **school districts.**
 10 MR. KOENECKE: Thank you. I have nothing
 11 further at this time.
 12 MR. SMITH: Mr. Blackburn, do you have questions
 13 of this Mr. Oster?
 14 MR. BLACKBURN: No questions.
 15 MR. SMITH: Ms. Semmler.
 16 MS. SEMMLER: No questions.
 17 MR. SMITH: Commissioners. Commissioner
 18 Kolbeck.
 19 COMMISSIONER KOLBECK: Yes, Mr. Oster. Thank
 20 you for being here today.
 21 Do you know if the pipeline will be assessed
 22 like a home as the value will increase for school
 23 districts to tax on, or do you think that the pipeline
 24 will decrease in value over the years to appreciate out?
 25 Do you have an answer to that?

1 THE WITNESS: I don't have a detailed answer to
 2 that. The pipeline, as I understand it, will be assessed
 3 in two forms. The pipeline itself would be assessed like
 4 a home. It would be an increased valuation just like
 5 building a new home. The pumping stations would be taxed
 6 as that, but they would also have a gross receipts tax
 7 which would benefit the school districts' general fund.
 8 COMMISSIONER KOLBECK: Okay. And how much money
 9 of that would stay local? Do you know the percentages of
 10 that?
 11 THE WITNESS: The gross receipts taxes paid
 12 would all stay local in whichever school district that
 13 they reside in. The same with the pipeline itself. The
 14 taxes generated as a result of the pipeline would stay in
 15 the school district in which the pipeline resides.
 16 COMMISSIONER KOLBECK: Okay. Is this taxed any
 17 differently than any other say ethanol plant that's built
 18 or new grain drying facility or anything like that? Is
 19 it all taxed on the same amount?
 20 THE WITNESS: I'm not a revenue expert, but to
 21 the best of my knowledge, yes, it would be taxed the
 22 same.
 23 COMMISSIONER KOLBECK: Okay. Thank you.
 24 MR. SMITH: I would note too, Commissioner
 25 Kolbeck, that a subsequent witness for the staff will

1 be -- is from the Department of Revenue and will be
 2 providing detailed information on the calculations,
 3 et cetera.
 4 COMMISSIONER KOLBECK: Thank you.
 5 CHAIRMAN JOHNSON: Understanding that you're not
 6 a revenue expert, Secretary Oster, have you had a chance
 7 to take a look at Michael Kenyon's prefiled testimony?
 8 THE WITNESS: I did read that briefly, yes.
 9 CHAIRMAN JOHNSON: Was there anything in
 10 Mr. Kenyon's testimony which struck you as inconsistent
 11 with what you would expect?
 12 THE WITNESS: No. It was absolutely consistent
 13 with what I would expect and the way I would explain it
 14 as well.
 15 CHAIRMAN JOHNSON: Okay. Thank you very much.
 16 That's all, Mr. Smith.
 17 MR. SMITH: Questions, Commissioner Hanson?
 18 COMMISSIONER HANSON: No. Actually my questions
 19 were asked. Thank you.
 20 MR. SMITH: Okay. Do you have any redirect?
 21 MR. KOENECKE: No, Mr. Smith.
 22 MR. SMITH: Okay. I think you may be excused
 23 then, Mr. Oster. Thank you very much.
 24 COMMISSIONER KOLBECK: Also thank you for
 25 changing your schedule for us. We appreciate that.

1 CHAIRMAN JOHNSON: Mr. Smith, I might -- and you
 2 probably all did this yesterday, but I might make it
 3 clear to those folks listening on the internet that
 4 although it didn't sound like a lot took place there,
 5 that is in large part the Commission's standard operating
 6 procedure of asking for prefiled testimony.
 7 So, you know, much of what Mr. Oster would have
 8 said was already said and, in fact, the public had, you
 9 know, days and weeks in order to examine that in advance
 10 of today. So it didn't seem like a lot, but in the end
 11 it's more for the public's benefit than anything.
 12 MR. SMITH: That's true. And I would -- for
 13 anyone out there who's interested, all of the prefiled
 14 testimony is available for public review on our internet
 15 site. And I think it's accessible right from the home
 16 page. So just go on our internet site, click on the
 17 button, and it will take you right there.
 18 Mr. Koenecke, please proceed with your case in
 19 chief.
 20 MR. KOENECKE: That's the end of our direct
 21 case, Mr. Smith. Thank you.
 22 MR. SMITH: With that then, I think we will turn
 23 to Mr. Blackburn, representing Dakota Rural Action, an
 24 Intervener in the case.
 25 And, Mr. Blackburn, we had a brief discussion

1 yesterday about some exhibits you wish to attempt to get
 2 introduced into the record. And perhaps you could
 3 proceed now with your direct case with respect to those
 4 exhibits.
 5 MR. BLACKBURN: Thank you, Mr. Smith. And I
 6 have distributed copies of the exhibit list to counsel
 7 for TransCanada and for the PUC staff as well as the
 8 Commissioners.
 9 This is a list of documents, most of which were
 10 provided -- were either discovered by Dakota Rural Action
 11 during its investigation prior to this proceeding or
 12 provided by TransCanada as part of the discovery. And
 13 you can see that it's related -- I've broken up by
 14 specific issues just for convenience and then numbered
 15 it.
 16 And what I'd ask is to see if the other parties
 17 would stipulate to allowing these documents to be
 18 introduced as evidence.
 19 MR. SMITH: Okay. Thank you. I guess I'll turn
 20 to the other parties then.
 21 Mr. Koenecke, has TransCanada Keystone had an
 22 opportunity to look at this stuff and --
 23 MR. KOENECKE: Thank you, Mr. Smith. We got the
 24 list this morning about an hour ago. We provided several
 25 of the documents on the list. There are a number of them

1 we did not provide. The only one which I'm prepared to
 2 stipulate to is the direct testimony of Heidi Tillquist
 3 in the '07 proceeding.
 4 The remainder of these documents are hearsay at
 5 best, to the best of my knowledge not having seen a
 6 number of them, and I think it's somewhat an unfair and a
 7 distortion of the process to ask the Applicant to
 8 stipulate to their introduction and then ask the
 9 Commissioners to go ahead and consider them without the
 10 benefit of foundation, cross-examination, and the
 11 standard evidentiary techniques that we use to put
 12 evidence in a formal proceeding such as this.
 13 So I don't -- I don't wish to seem harsh or
 14 difficult, but really I -- paper from the Canadian
 15 National Energy Board staff from 1985, I have never seen
 16 and have no ability to tell you what the value of that
 17 is, the relevance to this proceeding even, let alone who
 18 it was prepared by and what kind of things they
 19 considered in the course of their putting together the
 20 paper. So I don't feel like I can stipulate to those.
 21 MR. SMITH: Commission staff. Ms. Semmler.
 22 MS. SEMMLER: I have some concerns with some of
 23 the documents. For example, in the first TransCanada
 24 hearing the Commission found that easements were not
 25 admissible. And we also had significant discussion

1 regarding the relevance of the Bemidji spill. And there
2 was just so much detail to that spill and the continued
3 study at that site that those are just a couple of
4 examples of documents included in this list that the
5 Commission did have significant evidentiary discussion on
6 at the last hearing. So I too have some concerns.

7 MR. SMITH: Response, Mr. Blackburn.

8 MR. BLACKBURN: Sure. Would you like to go
9 through these? Because, for example, the first document
10 that Mr. Koenecke described was provided by TransCanada
11 as part of its discovery response.

12 And I think that the question here is the
13 Commission can either consider these as part of its
14 discretion, you know, and -- or -- well, a lot of these
15 documents are from other jurisdictions.

16 For example, the abandonment documents. You
17 know, Dakota Rural Action does not have the resources to
18 hire an expert to come in and talk to you on abandonment.
19 We wish we did. You know, in the absence of an expert
20 the only thing I can do is have the witness come up and
21 say where they got these documents and if they're true
22 copies. Otherwise, we don't have the capacity to provide
23 evidence on those particular issues.

24 So, therefore, having somebody come up and
25 testify to them would not provide and not allow for any

1 discovery about the merits and scope.

2 Also a lot of these documents are included --
3 for example, abandonment documents are included
4 specifically to allow the Commission to consider policy
5 options. We're not presenting information about how
6 much, for example, it would cost to deal with abandonment
7 of the Keystone XL Pipeline.

8 You know, if we were putting in evidence that it
9 would cost X numbers of dollars to provide -- to pay for
10 abandonment costs for Keystone XL Pipeline, then I think
11 there would be a need for expert testimony and
12 cross-examination about the merits of that.

13 But all we're providing evidence for is that
14 abandonment is a problem and that the Commission should
15 consider it as an issue. And the solution that we're
16 intending to propose for this from a policy point of view
17 is that the Commission conduct a study to determine
18 whether -- to the degree to which abandonment is a
19 problem, what the policy options and solutions should be
20 for abandonment and, you know, to investigate and conduct
21 an additional hearing on that.

22 The reason we're doing that is because in
23 TransCanada -- I mean, sorry, in Canada the National
24 Energy Board looked at abandonment in the context of
25 specific pipeline hearings in a number of occasions. And

1 those hearings never produced any particular results.

2 And I think the reason for that is because
3 abandonment is a big problem. It's a big issue. It's a
4 very expensive issue. In fact, Enbridge Pipeline
5 declared the potential liability in Canada on its most
6 recent FCC filings. So there's a lot of money at stake
7 potentially.

8 And so having this be dealt with on a
9 case-by-case basis in the context of a pipeline
10 proceeding did not work in Canada, and it probably won't
11 work here because it's such a big and complex issue.

12 So all we're doing is providing evidence that
13 shows abandonment is a problem. We are not saying
14 anything in particular about this pipeline. We'd like
15 the Commission to consider a set of fairly reasonable
16 policy solution about abandonment. And the intent of
17 these documents is just to show it is an issue and the
18 landowners have a legitimate concern the Commission
19 should consider how to address.

20 So, you know, I don't agree with Mr. Koenecke
21 about the need to do cross-examination if we allow these
22 documents in under that context because we're not
23 providing specific information about whether this
24 pipeline should be built or the exact cost or terms
25 for -- that would be imposed by the Commission of this

1 pipeline but rather a way for the Commission to recognize
2 abandonment as a problem and then move ahead with a
3 possible policy solution which TransCanada would have a
4 full opportunity to provide evidence and cross-examine
5 and do whatever else it felt it needed to do in terms of
6 its actual financial -- cost of financial or policy
7 regulatory and any implications for it.

8 The same thing is true for the pipeline impact
9 zone and setback documents. The only thing we're really
10 interested in is the Bemidji spill, not the entire
11 impacts of the Bemidji spill, and, you know, water
12 impacts and all that kind of thing.

13 What we're interested in and the landowners have
14 said consistently is that they want to know what the zone
15 of danger is if this pipeline has a major eruption.

16 That's apparently something from -- own
17 TransCanada's witnesses said that they had conducted such
18 a study. And the landowners would like to know what
19 happens, you know, what the zone danger is for that.

20 Now in the Bemidji spill it shows the spray zone
21 and Heidi Tillquist's testimony said it was 120 meters, I
22 believe. So whatever 120 -- yeah. I think it's 120
23 meters so that's 300 something feet of oil sprayed out.
24 It's a very high pressure pipeline. You know, it's
25 not -- 1,500 -- what is it 1,440 -- 1,500 psi. 1,600

1 psi. Very large volume pipeline.
 2 If it has a major rupture, that oil's not going
 3 to stay in the ground and bubble up. It's going to come
 4 out in pretty high volume. The landowners would like to
 5 know whether they should be comfortable building a house
 6 within 100 feet or 200 feet or 300 feet or 400 feet. And
 7 the landowners don't have the resources to conduct such a
 8 study.

9 So, you know, the documents we'd like to present
 10 are just simply to show that there is a problem with the
 11 zone of danger, that the pipeline could do harm and the
 12 landowners and local governments could have the resources
 13 necessary and the information needed to make their own
 14 decisions about how to proceed with this.

15 If the Commission also chose to establish a
 16 consultation zone, the document we have in here that's
 17 the Pipeline and Informed Planning Alliance Draft Final
 18 Report of Recommended Practices. It was done in April of
 19 this year. It was a national process conducted by the
 20 Federal Government which TransCanada participated and
 21 it's -- and it's also a variety trade associations.

22 And it basically has some policy recommendations
 23 for bodies to consider what sorts of actions local
 24 governments should take to protect their citizens from
 25 pipeline hazards.

1 And, again, this is a policy solution. There's
 2 no disagreement that this pipeline could have impacts to
 3 health and safety if it does rupture. And, you know,
 4 we're asking that the Commission consider it as a
 5 recommendation of counties and/or -- as I said, I don't
 6 believe the Commission has authority to impose local
 7 planning and zoning restrictions on counties. That would
 8 be something counties would need to consider, whether to
 9 have a consultation zone or setbacks or some other sorts
 10 of things.

11 Because DRA landowners are concerned about their
 12 own property but also should we be putting hospitals, you
 13 know, within 50 feet, which is the federal construction
 14 setback of the pipeline or nursing homes or day care
 15 centers, you know. And should the counties have the
 16 knowledge of what sorts of actions they could take to
 17 consider to protect their citizens.

18 The maintenance and depth of cover issues is
 19 something we'd like to put in there because we don't
 20 believe -- depth of cover is a federal requirement,
 21 frankly, not a state requirement. It hasn't been
 22 discussed very much. These documents are the comments of
 23 TransCanada itself.

24 So if Mr. Koenecke hasn't seen them, that's not
 25 my problem. I mean, this is a TransCanada document.

1 Next one is the comments of the Interstate and
 2 Natural Gas Association. That is an organization which
 3 TransCanada isn't affiliated which its comments are based
 4 on, the prior comments are based on that document. So
 5 they've certainly seen that. And then TransCanada --

6 CHAIRMAN JOHNSON: I'm sorry to interrupt,
 7 Mr. Blackburn, that last one -- I'm trying to follow
 8 along. What number exhibit are you talking about?

9 MR. BLACKBURN: Document 18. The comment of the
 10 Interstate and Natural Gas Association. That document
 11 was relied on by TransCanada in preparing Document 17.
 12 Document 19 is TransCanada's own internal operating
 13 procedures which they provided in discovery. It's their
 14 own document. So if they want to call their own
 15 documents hearsay, they certainly can.

16 And then the demand start date is the Canadian
 17 Association Of Petroleum Producers forecast which is the
 18 major industry forecast for production in Canada. That
 19 document was relied on by TransCanada in its Application.
 20 Actually the 2008 one. And we'd like to just provide
 21 that to the Commission so that they can see what the
 22 forecasts are in Canada instead of the old forecast
 23 provided by TransCanada.

24 Similarly, TransCanada said it relies on the
 25 EIA, Energy Information Agency, federal agency Energy

1 Outlet 2009 Report for its estimated demand in the
 2 United States. And that's certainly a federal document
 3 that the Commission is free to look at, should it wish
 4 to. I don't think we need to bring in a federal
 5 regulator just to discuss that as an expert. We can talk
 6 about the implications of it. But the document itself is
 7 what it is.

8 So, you know, the -- I could go through the
 9 documents in more detail, but, you know, as I said, if we
 10 want to limit these to the purposes, as I've said, so the
 11 Commission can consider policy options, none of these
 12 documents are offered for the proof of, you know -- about
 13 anything about TransCanada's Keystone XL Pipelines.
 14 That's what we're offering them for.

15 And there isn't -- there's several. Almost all
 16 of these documents were provided by TransCanada in its
 17 discovery. Abandonment documents 1, 2, 4 -- 3, 4, 5 is a
 18 TransCanada document itself.

19 CHAIRMAN JOHNSON: Okay. If we're going to do
 20 this right now, Mr. Blackburn, if I could interrupt,
 21 let's go ahead and go through those -- the ones that were
 22 provided by TransCanada. If you can go through those
 23 slower, that way we can all follow along. Go ahead.

24 MR. BLACKBURN: Sure. TransCanada provided
 25 documents 2, which was -- I don't remember the exact

1 exhibit but it's TransCanada supplemental response
 2 related to the local landowner consultant -- land matters
 3 consultations initiative process by the National Energy
 4 Board in Canada. That is an attachment to one of the
 5 documents TransCanada provided. It is a document from
 6 1985 that talks about the various policy factors related
 7 to the practical nature and costs of abandoning
 8 pipelines.

9 CHAIRMAN JOHNSON: Rather than going through
 10 them in detail right now, just tell us which of the
 11 exhibits were provided by TransCanada in their entirety
 12 to you.

13 MR. BLACKBURN: Okay. I believe 2, 3, 4, 5,
 14 which is the TransCanada subsidiary document, 6, 7, which
 15 is a TransCanada document, 8, which is a TransCanada
 16 document, 9, which is the Canadian National Energy
 17 Board's reason for decision. They did not provide that
 18 one to us. I'm trying to remember all the documents that
 19 were provided. They were not.

20 10 is a TransCanada operating procedures for
 21 deactivation and abandonment. They did not provide 11,
 22 which is a press clip from the Oil and Gas Journal. That
 23 just simply describes that abandonment is becoming a
 24 problem.

25 They did not provide 12. They did not

1 provide -- I'm sorry. They did not provide 13. They did
 2 not provide 14. 15 they provided. 16 was provided by
 3 TransCanada. 17 was not provided, but like I said, it is
 4 a TransCanada document.

5 18 is the document relied on by TransCanada, and
 6 they're a member of that association. 19 is a document
 7 provided by TransCanada. 20 is a document relied on by
 8 TransCanada. And 21 is also relied on by TransCanada.
 9 And they provided both of those. Well, what I would like
 10 to do is be able to introduce evidence from any of the
 11 prior CAP or EIA reports because how they change over
 12 time is relevant too. And they're all the same sorts of
 13 documents. It's just updates every year.

14 CHAIRMAN JOHNSON: So, Mr. Smith, with your
 15 permission I'd ask a few questions if it's appropriate at
 16 this time?

17 MR. SMITH: Sure. Can I ask one clarifying one
 18 on 18? Just did you state that was a TransCanada
 19 provided document?

20 MR. BLACKBURN: No. TransCanada didn't provide
 21 those documents under 17, 18, or 19. But 17, as I said,
 22 is a TransCanada authored document. 18 is referenced by
 23 the TransCanada authored document. So they must have had
 24 it in order to draft 17. And 19 is a TransCanada
 25 authored document.

1 MR. SMITH: Okay. And both 20 and 21 were
 2 provided to you by TransCanada?

3 MR. BLACKBURN: 20, the 2008 report, was relied
 4 on by TransCanada in their Application. The 2009 report
 5 I believe was provided by TransCanada as a final update.
 6 I just don't have the piles of documents in front of me
 7 but I think they provided the most recent one, which is
 8 the 2009 report I get.

9 MR. SMITH: Well, and those last reports, are
 10 those publicly available? I guess what I'm getting at
 11 here and maybe I'll defer to Commissioner -- Chairman
 12 Johnson to ask the questions he had, but just looking at
 13 this list in addition to TransCanada provided documents,
 14 would you want to take a stab at denominating any or all
 15 of these documents that you believe would -- assuming we
 16 decide they're sufficiently relevant and so forth, that
 17 are judicially noticeable by the Commission?

18 And again it may be something we'll want to take
 19 under advisement because we haven't seen this stuff. But
 20 some of this stuff looks like it's probably judicially
 21 noticeable by the Commission.

22 MR. BLACKBURN: I believe that documents from
 23 that Canadian National Energy Board should be judicially
 24 noticeable because that is a jurisdiction which is also
 25 reviewing this pipeline, frankly. And there are official

1 documents either filed by TransCanada or prepared by the
 2 National Energy Board itself. And they're documents
 3 relied on for a recent set of decisions in which the
 4 Canadian government decided to impose costs -- to impose
 5 a fee on pipeline operators to pay for abandonment.

6 And in that sense I think it's a sister
 7 jurisdiction from another country but, nonetheless,
 8 looking at a lot of the same policy and practical
 9 problems. So those documents should be allowed in, be
 10 judicially noticed.

11 CHAIRMAN JOHNSON: First off, Mr. Blackburn, I
 12 mean, you did mention policy concerns about things like
 13 abandonment. Granted Commission staff doesn't work for
 14 you, but if you had something you thought was of concern
 15 in the public interest and did not have the resources to
 16 flesh that out with witnesses, I mean, did you ever have
 17 a conversation with Commission staff about their
 18 willingness to call such a witness?

19 MR. BLACKBURN: We submitted this list of
 20 interest to the Commission staff back as part of our
 21 response to discovery. And in response to that discovery
 22 Commission staff sent what I thought were a fair number
 23 of very problematic and difficult discovery requests
 24 which, frankly, took a lot of our time to respond to.

25 I was not aware and not aware that the

1 Commission staff would be willing to look at this kind of
2 thing. Commission staff witnesses have mentioned
3 abandonment, but none of them have been willing to talk
4 about anything beyond the fact that abandonment is
5 something that happens to pipelines.

6 As I said, I understand that this is coming in
7 late. We don't have the resources to do a full review on
8 abandonment. As I said, the suggested policy solution
9 here is for the Commission to consider a future
10 investigation into abandonment issues.

11 Because, frankly, when you read these documents
12 this is a big issue. It's very complex, and in trying to
13 prepare for it in the context of this particular hearing
14 would be very burdensome on the Commission. It would be
15 very difficult to fit an analysis of abandonment into
16 this process. And that's just based on all policy
17 factors with the large costs involved and the difficulty
18 of doing such --

19 CHAIRMAN JOHNSON: So if you think it's of
20 interest and it's not appropriate for this process, for
21 what process is it appropriate?

22 MR. BLACKBURN: Well, the Commission I believe
23 has, for example, the authority to conduct investigations
24 of different issues that it believes to be of concern to
25 the Commission or to the citizens of the state related to

1 its jurisdiction.

2 CHAIRMAN JOHNSON: Well, I don't deny that. I
3 think my concern would be that, you know, this pipeline
4 is not in the, you know, pipeline safety sense part of
5 this Commission's jurisdiction long term.

6 And so this is really our opportunity to ask
7 questions that are -- we think are key important
8 questions in the public interest. Do you disagree,
9 Mr. Blackburn?

10 MR. BLACKBURN: I'm sorry. I don't understand
11 what your question is.

12 CHAIRMAN JOHNSON: Well, you said the
13 Commission's got the authority to, you know, have
14 discussions and investigate things. But, I mean, you're
15 aware that interstate crude oil pipelines are not part of
16 the Commission's Office of Pipeline Safety jurisdiction.

17 MR. BLACKBURN: Abandonment is not regulated by
18 the Federal Government with the exception of purging,
19 clearing, and capping and disconnecting from other
20 pipeline systems. The cost of abandonment is not
21 regulated by the Federal Government. Nor is removal of
22 the pipeline or any kind of remediation process.

23 CHAIRMAN JOHNSON: But what authority under
24 state law does South Dakota have to deal with abandonment
25 after this proceeding is done?

1 I mean, you just said that you understand that
2 this proceeding would be very difficult to really address
3 abandonment. My question is if not in this proceeding,
4 then under what proceeding allowed under state law would
5 this Commission undertake abandonment examination?

6 MR. BLACKBURN: Well, as I said, I think there
7 doesn't have to be specific state law for the Commission
8 to conduct an investigation. We do regulate pipeline
9 permitting and including, you know, future pipelines.

10 And so certainly in the context of looking at
11 future pipeline permitting decisions you could decide to
12 conduct an investigation in that sense.

13 CHAIRMAN JOHNSON: I do agree with that. I
14 think that's a strong point. The question that that begs
15 is -- because I agree with you. I mean, I think
16 abandonment potentially is an issue of, you know, real
17 concern, potentially.

18 I don't know the documents -- I haven't looked
19 at the documents you're referring to so I just don't know
20 what they say. But if it is not of direct implication to
21 this particular project, need these be entered into the
22 record if by your own admission this proceeding is not a
23 particularly good fit to have those conversations?

24 MR. BLACKBURN: Well, the Commission, for
25 example, could also impose conditions in this proceeding

1 related to abandonment. For example, making clear that
2 pipeline owners are not liable for the costs of
3 abandonment.

4 You know, the Commission could consider, you
5 know, the procedure for abandonment should it choose to.
6 TransCanada already has an operating procedure about how
7 it would seek to conduct abandonment proceedings. That
8 is a voluntary document in the United States. And the
9 Commission could decide that the conditions that
10 TransCanada has imposed on itself would be conditions of
11 the permit as well.

12 You know, so there are -- short of a fee-based
13 structure, which is what Canada has set up to set aside
14 funds for this sort of -- for abandonment, there are
15 basic questions about liability. There are basic
16 questions for abandonment. There are basic questions
17 about the procedure for abandonment, the timing and
18 process of it.

19 TransCanada's document says after 12 months the
20 pipeline will be in use -- it's more specific than this
21 but will be considered abandonment. Some of the kinds --

22 CHAIRMAN JOHNSON: I apologize for interrupting
23 you, but what I don't want to do is get into the policy
24 discussion yet unless we know we're going to do these. I
25 want to focus on the legal stand, the legal basis.

1 Would you have had -- again, I wasn't here
 2 yesterday. My apologies. I mean, did you during your
 3 cross-examination of TransCanada witnesses ever attempt
 4 to introduce any of these documents into evidence? I
 5 mean, would it have been appropriate?
 6 I mean, did they -- did anything they said
 7 yesterday contradict what we would find in these
 8 TransCanada-offered documents?
 9 MR. BLACKBURN: The only thing that I asked them
 10 about was whether there were any regulatory requirements
 11 for abandonment in South Dakota or in the Federal
 12 Government to the extent those requirements exist.
 13 I did not seek to cross-examine them on that
 14 because it was not part of the testimony that they
 15 provided. And I didn't see that trying to cross-examine
 16 them on matters which they did not, you know, provide --
 17 I mean, this is an area that has not been raised and was
 18 not raised by TransCanada's employees to any significant
 19 degree, I believe. I mean, there is a lot of testimony
 20 there, but it's something that's new. So.
 21 CHAIRMAN JOHNSON: Mr. Blackburn, Mr. Koenecke
 22 raised -- I think it is a very important issue, which is
 23 a failure to fully vet this evidence.
 24 And I understand that in a lot of cases we're
 25 talking about TransCanada documents or government

1 documents. So maybe not vetting in the traditional
 2 sense, but if you're talking about offering policy
 3 solutions, those are going to be one-sided. I mean,
 4 almost by definition. Any document provides one set of
 5 opinions generally.
 6 What mechanism does the Commission have to make
 7 sure that we get 360 degrees of information if we
 8 don't -- I mean, what option would we have? I mean, you
 9 introduce a document, TransCanada doesn't get an
 10 opportunity to call a witness to rebut that. They just
 11 got this list today. Staff doesn't have any experts that
 12 have reviewed these.
 13 Any concerns? Any thoughts? They don't have a
 14 witness of yours to cross-examine; right?
 15 MR. BLACKBURN: Well, that is why we're trying
 16 to look to see whether the Commission would be willing to
 17 condition the permit or just discuss the possibility of
 18 having an investigation because we understand we're
 19 bringing this at a late date.
 20 And, you know, that was -- that's why looking at
 21 the practical situation we wanted to provide these
 22 documents to the Commission for its consideration.
 23 Now we could do that separately from this
 24 proceeding, as you said. At the same time, you know, the
 25 Commission could also look at some of these documents and

1 determine -- that would help determine whether it wanted
 2 to have it be a condition of the permit or if it wanted
 3 to have a separate discussion about abandonment could
 4 decide not to do anything with abandonment in this
 5 proceeding.
 6 But it is a problem about where we bring this
 7 up. So, you know, I appreciate -- I mean, you have to
 8 realize too, Chairman Johnson, that we don't have the
 9 resources to bring the witnesses in. And the staff is
 10 certainly aware of abandonment. It was raised last time.
 11 They didn't bring it up this time. You know, it's not
 12 necessarily -- if they choose not to bring up an issue
 13 like this that landowners have brought up in the past and
 14 they choose not to bring it up again, I suppose I could
 15 argue with them about what they're supposed to do or not
 16 do. You know, that is where we stand right now.
 17 CHAIRMAN JOHNSON: Well, all the time this
 18 Commission, you know, has Interveners who do not have
 19 robust financial resources. I mean, that is not unusual.
 20 We deal with a lot of consumer cases where, they're, you
 21 know, pro se representation.
 22 But I don't get to tell staff who to call as
 23 witnesses. I don't get to call and tell you who to call
 24 as witnesses or the Applicant. I mean, it is going to be
 25 difficult for us I think to put together a full record if

1 we don't have an opportunity to talk to any witnesses who
 2 could stand behind the information that you would like to
 3 see this Commission admit.
 4 MR. BLACKBURN: If the Commission chooses not to
 5 look at abandonment in this proceeding, it certainly can
 6 do that.
 7 CHAIRMAN JOHNSON: And I'm not saying that we're
 8 not going to. I'm just saying you're asking the
 9 Commission -- or you're telegraphing that, that you're
 10 going to ask the Commission to condition this permit on
 11 some sort of further investigation or study on
 12 abandonment.
 13 I haven't read these documents so I don't know,
 14 but at some point you've got to reach a certain
 15 threshold. I mean, we don't just get to put conditions
 16 on because we think they sound swell. I mean, we need to
 17 have evidence in the record that indicates that this is a
 18 threshold issue.
 19 And maybe these documents if they're admitted
 20 will get us there. I just don't know yet. I've got some
 21 questions for Mr. Koenecke, but I've been hogging the
 22 floor so let me pause and see if there are other
 23 questions and then we can come back to me.
 24 MR. SMITH: Commissioners, do you have questions
 25 of Mr. Blackburn?

1 COMMISSIONER KOLBECK: Mr. Blackburn, just to
2 recap, the documents that you said were provided by
3 TransCanada, they came through discovery; correct?

4 MR. BLACKBURN: Some of them came -- yeah. The
5 ones I said were provided by TransCanada they came
6 through discovery. Some of the other documents
7 TransCanada relied on in its Application. So I assume
8 they have them.

9 COMMISSIONER KOLBECK: Okay. And you want these
10 all admitted as evidence?

11 MR. BLACKBURN: We would prefer that, yes.
12 Otherwise, we can always have the citizens include them
13 in their comments and the Commission can take them for
14 what they're worth.

15 If TransCanada would like to exclude these kinds
16 of documents from citizen comment, they can certainly ask
17 the Commission to strike those from citizen comments.

18 If they're not evidence, then, you know, the
19 Commission can consider them for what they're worth. I
20 don't believe the Commission has limits for what people
21 can provide through the comment period tonight.

22 COMMISSIONER KOLBECK: No. I don't believe
23 that's limited either. They can put in there what
24 they --

25 MR. BLACKBURN: Right. And this is a discussion

1 Mr. Smith and I have had about how to present these kinds
2 of documents given the limited resources that we have.
3 And, you know, I've put them in this way, but if the
4 Commission -- as I said, if citizens want to put them in
5 tonight, they could certainly do that, and then the
6 Commission can take them for what they're worth.

7 COMMISSIONER KOLBECK: Sure. Okay. So,
8 Mr. Smith, those are our two options basically is to
9 allow them into evidence or take them in another
10 matter -- or another way, I should say, not another
11 matter?

12 MR. SMITH: Sure. If Mr. Blackburn or someone
13 wants to provide them tonight or later in the process as
14 comment documents, we obviously accept basically
15 everything that people send to us as -- by way of
16 comment.

17 COMMISSIONER KOLBECK: Yeah. I would think that
18 I -- I've never seen the Commission disallow anything as
19 far as comments. Whatever people want to say, we'll take
20 them. But if we were to write an order or find
21 something, we'd have to have them admitted as evidence;
22 correct?

23 MR. SMITH: That's correct. You know, with the
24 other -- with respect to some of these things hit me as
25 probably judicially noticeable by us.

1 For example, PIPA Draft Report. I mean, I've
2 read that. It is what it is. It's an official document
3 of the United States Government. You know, again, is it
4 likely to lead to Commission action?

5 I think not since what it deals with is the
6 actions of local government. And we have no ability to
7 tell them what to do.

8 And so from that standpoint honestly one might
9 argue about relevance, but in terms of what it is, it's
10 an official document of the United States. So I think
11 from that standpoint we can -- we can probably judicially
12 notice that.

13 CHAIRMAN JOHNSON: So, I mean, I would pick up
14 that thread, Mr. Smith, and ask Mr. Koenecke or rather
15 the Applicant, would there be any objection, you know,
16 from the Applicant in allowing government documents to be
17 judicially noticed?

18 MR. KOENECKE: Thank you, Commissioner Johnson.
19 I haven't looked at the judicial notice statutes
20 recently, but I think my recollection of them is that
21 they're fairly strict and binding.

22 It's my recollection that, for example, you
23 couldn't take judicial notice of a city ordinance in this
24 state, that you'd have to call an official of the city in
25 command of the city's ordinances or county ordinances,

1 for another example, in order to put those into evidence.
2 I don't think you can simply take notice of a number of
3 government documents, even those that would rise to the
4 level of an ordinance.

5 I would expect that the Commission would follow
6 statute on that issue, whatever it is. I hope that's
7 responsive to your question. It does occur to me that my
8 recollection and Commission practice is you've always
9 accepted documents in the public comments portion of the
10 Docket, and they're available on-line. I think there's a
11 number of them available based on the last pipeline
12 proceeding we had two years ago.

13 CHAIRMAN JOHNSON: Well, and I would concur with
14 Commissioner Kolbeck. We haven't ever disallowed
15 anything from my recollection from citizen comment.

16 With that being said, if the documents are
17 admissible, then I'd like them admitted. That's if
18 they're admissible.

19 MR. SMITH: And I agree with that. I think
20 where I'm ultimately going with this -- and I agree with
21 your -- your observations, Mr. Koenecke, that, you know,
22 I'd like to take another look obviously at the judicial
23 notice statute, which I've got sitting right over here.

24 But it occurs to me -- and we haven't even seen
25 these things. I mean, I've read the PIPA report. You

1 know, I've read that. I know what that says. And -- and
2 I've -- I know what the EIA energy outlooks are. I look
3 at them all the time, you know. And so I know what those
4 are.

5 But I would point out too -- and just to point
6 this out for everyone here that the standards for
7 admission of evidence are a little bit different under
8 the Administrative Procedures Act than they are in a jury
9 trial, as I think you know under -- and we'll have to
10 factor that into the equation too.

11 I'll give you an example is, you know, last
12 time -- and we do have certain notice requirements with
13 respect to taking judicial notice because parties have to
14 have the opportunity to respond and to object. And the
15 only way I know to do that -- we haven't seen this stuff.
16 You know, other than those things that I'm personally
17 familiar with and have looked at because -- I mean, they
18 are official records of the United States because I've --
19 I've seen them, you know.

20 Are they, nevertheless, admissible? Again, I'd
21 like to take a look at that. I guess my point on this
22 is, Mr. Blackburn, I guess where I think we're at -- my
23 mic is doing something odd here. But where I think we're
24 at on this is what I would recommend you do is offer them
25 and then afford -- with the understanding that we will --

1 I would like to then undergo -- we have to see them,
2 though.

3 I mean, I think you need to -- if you want to
4 offer exhibits, I really think we ought to have them here
5 and be able to look at them.

6 MR. BLACKBURN: I agree with that. Some of
7 these are like, you know, the federal reports, EIA
8 reports that are quite lengthy and would be better
9 provided in electronic form, frankly, than in a vast huge
10 pile of paper that TransCanada gave it to us in. So we
11 certainly have all of these documents.

12 In addition the government documents, I'm a
13 little bit surprised that the Applicant hasn't stipulated
14 to the documents. For example, their own internal
15 operating procedures for how they deal with abandonment.
16 They are their own documents and they can speak for
17 themselves and they are relevant to this Commission
18 proceeding.

19 And we're not sure why they wouldn't stipulate
20 to allow their own documents in that describe their own
21 operating procedures.

22 CHAIRMAN JOHNSON: Well, I think that's a
23 potentially valid comment. I mean, Mr. Koenecke, I mean,
24 if these were documents provided by you all, why would we
25 doubt their validity?

1 MR. KOENECKE: Commissioner, I think there's --
2 more importantly perhaps is at least three times in
3 Mr. Blackburn's comments on this issue he's said that
4 they're not relevant to the issues in this hearing that
5 this isn't part of the pipeline -- I would have to read
6 back the transcript and even then I'm not sure of the --
7 even Cheri might not have gotten Mr. Blackburn's rapid
8 comments down, but I heard him say at least three times
9 they're not relevant to these issues. We want these
10 brought up for policy-making considerations.

11 The Commission and the Legislature have a number
12 of avenues available to develop pipeline policy in this
13 state. You're well-aware of that. We have the
14 Governor's Task Force On Underground Pipelines.
15 Commissioner Hanson, I recall, was the chairman of that.
16 The Legislature will meet here every day in January and
17 February, and I'll be here every day for those kind of
18 discussions to be brought up and held in a forum where
19 those are much easier made. You can have a rule-making
20 procedure. Much easier to make policy considerations in
21 those kinds of avenues.

22 But as to the issues that are at hand in this
23 Docket, what Mr. Blackburn himself says is what he wants
24 to introduce is not relevant to these issues. We'd like
25 to keep the record clean for our use for posthearing for

1 the proceedings leading up to a permit.

2 CHAIRMAN JOHNSON: Well, I don't think
3 Mr. Blackburn -- and he'll correct me if I'm misstating
4 his words, but I don't think he said that everything he's
5 offering is not relevant to the current proceeding.

6 I mean, that was in a line of questioning that
7 he and I had specifically regarding abandonment. Now
8 maybe it is true for all these documents. But, I mean,
9 the Commission will determine relevancy.

10 What I'm asking you is given that these are
11 TransCanada documents, why should the Commission, you
12 know, shy away from allowing them to be admitted into the
13 record?

14 MR. KOENECKE: Commissioner, to answer your --

15 MR. SMITH: Brett, I've been advised by Anissa
16 that you're breaking up there. Can you get that thing
17 right up to your head?

18 MR. KOENECKE: I'll do the best I can,
19 Mr. Smith.

20 MR. SMITH: Thanks. Sorry for interrupting.

21 MR. KOENECKE: Commissioner, I think the most
22 important reason is that these documents are still
23 hearsay. Without the benefit of a witness to lay the
24 foundation and to determine the -- those necessary
25 elements of an evidentiary proceeding to give you the

1 kind of background that you deserve with that kind of a
2 document, that opportunity is passed.

3 That's the best answer I can give you. I
4 haven't even seen the documents yet. Are they physically
5 present in the room? I don't know the answer to that.

6 Have you put together, Mr. Blackburn, a stack of
7 documents like I did yesterday that sat up here on the
8 desk that were marked as exhibits? I'd have to look at
9 them to see further.

10 All I've gotten, Commissioner, is this front and
11 back document which was received in my e-mail inbox about
12 9 o'clock this morning.

13 MR. BLACKBURN: Right. As I said, no, I don't
14 have all of those documents physically present. It's a
15 very large amount of paper. We didn't want to waste
16 burning a lot of copies on that paper if there was going
17 to be objection.

18 As I said, Mr. Smith and I talked about whether
19 these should be introduced in comment or introduced in
20 evidence. And, you know, I didn't feel it was necessary
21 to bring in a foot and a half of paper and copy
22 everything for everybody if these were going to be kept
23 out in total.

24 I do have them electronically on my computer.
25 You know, TransCanada prefers to provide everything in

1 hardcopy rather than electronic form. I can provide
2 copies in electronic form I think for almost all of these
3 documents immediately. There may be a few in my office,
4 very short ones I need to scan.

5 But I think almost all of them I have on my
6 computer right here. So I didn't think it was necessary
7 to bring copies in and provide them because I wasn't sure
8 how they were going to respond to this.

9 And as I said, you know, this is not a big fight
10 that I would prefer to have. Mr. Smith and I had an
11 e-mail dialogue about this about whether they should be
12 introduced as public comments or as evidence. I thought
13 I would go ahead and see what happens in terms of
14 evidence, bringing them in that way. But we can
15 certainly have citizens provide them to the Commission
16 tonight.

17 But I am a bit surprised some of these documents
18 they are internal TransCanada documents that would help
19 the Commission understand the nature of its obligations
20 to the citizens of South Dakota, and I'm not exactly sure
21 why Mr. Koenecke wouldn't stipulate to those.

22 They certainly have a final briefing opportunity
23 to describe, you know, the relevance of these documents
24 or the import of these documents to the Commission. And
25 I'll leave it at that for now.

1 MR. SMITH: Any other Commissioner comments,
2 thoughts?

3 COMMISSIONER HANSON: Yes. If we could continue
4 with the questions from the Commissioners.

5 CHAIRMAN JOHNSON: And I'm sorry, Commissioner
6 Hanson. I said I was going to give everybody an
7 opportunity, and I butted right back in. So my
8 apologies.

9 COMMISSIONER HANSON: Mr. Blackburn, do you have
10 access to any of the items that you have on the sheet
11 that DRA -- you have provided to us two pages. I'm
12 curious of any of those that you have access to without
13 going through TransCanada.

14 MR. BLACKBURN: The ones that I did not get by
15 going through TransCanada, I can go through this --

16 COMMISSIONER HANSON: No. I'm not asking that
17 question. I'm asking just a yes or no. Do you have
18 access to any of the documents that you have set forth
19 here without going through TransCanada?

20 Do you have any of these documents accessible to
21 you without going through TransCanada?

22 MR. BLACKBURN: Right now? Do you mean do I
23 have these documents right now without going to
24 TransCanada to ask for copies of them, or did I get them
25 only from TransCanada?

1 COMMISSIONER HANSON: No. My first question --
2 first reiteration would be the closest. I'm interested
3 in knowing if whether or not you can -- for instance, let
4 me give you an example. Perhaps that would be easier.

5 On item number which you have shown as
6 Exhibit 11 it's a press clipping, I believe, Pipeline and
7 Gas Journal, Who Owns Abandoned Pipelines, and it was
8 written by David Howell in August of 2009.

9 That would seem to be something that would be
10 accessible to you that you could obtain without going
11 through TransCanada.

12 MR. BLACKBURN: Yes. That's one of the few
13 documents on here that DRA found without going through
14 TransCanada, and we certainly have copies of everything
15 in this list.

16 COMMISSIONER HANSON: So you do have -- you've
17 just told me then that you have access to everything
18 that's on this list? You have copies of everything that
19 you have provided to us?

20 MR. BLACKBURN: Some in electronic form and some
21 in hardcopy form. Some of the documents are very long,
22 and I think they're much more usable and accessible in
23 electronic form than they are in hardcopy form.

24 COMMISSIONER HANSON: That's fine. So why would
25 you not simply introduce those as exhibits without saying

1 that you had not received them from TransCanada? I don't
2 understand why -- I don't want to say pontificate, but
3 why are you arguing that you did not receive these from
4 TransCanada when, in fact, you have them and can present
5 them as exhibits?

6 MR. BLACKBURN: I'm not arguing that we --
7 anything about -- I'm merely pointing out that
8 TransCanada when Mr. Koenecke said that he had never seen
9 these he personally may not have. However, the vast
10 majority of these documents were provided by TransCanada
11 as part of their discovery proceedings so they certainly
12 have them all.

13 And that's the only point I'm making, that the
14 contents of these documents may not be certainly
15 knowledge to their attorney but they certainly are very
16 familiar and, in fact, many of them were drafted by
17 TransCanada itself. So the Applicant has those
18 documents.

19 But I'm not sure I'm getting to your concern.

20 COMMISSIONER HANSON: So you don't need to
21 receive any of these exhibits at this juncture? You have
22 them all available to you, and you can present them?

23 MR. BLACKBURN: We have them all available, and
24 we can present them. But, as I said, I didn't want to
25 have them all be brought in hardcopy because it's a large

1 volume of paper. And I would rather simply provide them
2 in electronic copy.

3 Because I think, frankly, the Commission and
4 Commission staff would prefer to get these documents in
5 electronic form because of the large volume of them. I'm
6 trying to make it easier.

7 COMMISSIONER HANSON: That's fine. I just
8 wanted to understand what the discussion was here today.
9 And it's not that TransCanada has not been forthcoming
10 with documents to you.

11 MR. BLACKBURN: I've raised that issue in the
12 past, but that's not the discussion I'm raising today,
13 no.

14 COMMISSIONER HANSON: Okay. Thank you. Thank
15 you, Mr. Smith.

16 MR. SMITH: Any other Commissioner questions?
17 Otherwise, I think what I'm going to do here -- pardon
18 me. I've got a frog in my throat here.

19 What I'm going to do since we don't have a
20 stipulation on anything, I think, Mr. Blackburn, we
21 haven't seen any of this stuff. And obviously to rule on
22 these without having seen them and they're kind of
23 hitting us out of the blue today, you know, unlike the
24 rest of the stuff which was all prefiled and so forth,
25 what I'm going to --

1 Right. Except did you agree to Heidi's
2 testimony, Mr. Koenecke?

3 MR. KOENECKE: Yes, Mr. Smith.

4 MR. SMITH: Okay. Except for Heidi's, what I'm
5 going to recommend you do -- that's been stipulated to --
6 is that you make an offer of these as evidence. And I'm
7 going to recommend at least that we -- that we defer
8 action on these pending the opportunity for not only me
9 and the Commission to review what they are and weigh them
10 against the standards of judicial notice and relevancy,
11 et cetera, but also to afford the other parties an
12 opportunity to do the same.

13 MR. BLACKBURN: And I thank you -- appreciate
14 that. And, as I said, I'll just have citizens submit
15 comments and include these as comments. And that way,
16 you know, the Commission can decide which of them it
17 feels are important for evidence and which of them it
18 feels, you know, it should consider in terms of however
19 it considers public comments. And then all the material
20 will be available to the Commission, and it can treat
21 them as is appropriate legally.

22 MR. SMITH: Okay. Well, with that, does
23 staff -- is staff willing to join in the stipulation
24 regarding Ms. Tillquist's testimony in the HP07-001?

25 MS. SEMMLER: Yes.

1 MR. SMITH: Okay. I'm going to rule that that's
2 admitted. And as to the rest, it's my understanding
3 you're offering those into evidence at this point.

4 MR. BLACKBURN: That's correct.

5 MR. SMITH: And I'm going to not rule but to
6 defer ruling on those to give the parties an opportunity
7 to review these things and determine what their positions
8 are after they've had an opportunity and I've had an
9 opportunity to look at the documents.

10 So one way or another electronically or
11 otherwise please get them to us immediately when you have
12 a chance.

13 MR. BLACKBURN: Sure. No problem. I will send
14 them all to you I would assume by the end of the week
15 since the hearing is going fairly quickly.

16 And, as I said, the citizens don't always have
17 the opportunity and the capacity to provide this exactly
18 as the Commission would like. Nonetheless, they do have
19 valid concerns. They've been voiced to Commission staff.

20 If Commission staff does not choose to actually
21 provide -- you know, to take the concerns that have been
22 voiced by citizens seriously enough to investigate them,
23 you know, that is a problem perhaps. And DRA will do it
24 again to raise the concerns of its members. And, you
25 know, that's, you know, where I'd like to leave it for

1 now.

2 But we will send these in, and the Commission
3 can certainly take them in as public comment.

4 CHAIRMAN JOHNSON: So you'll say you'll get us
5 these documents by the end of the week. So Mr. Smith --
6 I mean, when are we going to rule on these?

7 MR. SMITH: Well, I was assuming during the
8 hearing. I mean, I think if we're going to have these
9 admitted as evidence in the hearing itself, we better
10 be -- we got to get them during the hearing. Prior to
11 the adjournment of the hearing and while the parties
12 still have an opportunity to present responsive
13 testimony.

14 MR. BLACKBURN: Would it be acceptable for me to
15 burn a CD and give to you all the documents I have and
16 provide them in electronic form that way?

17 I mean, I could also e-mail them but that would
18 be hundreds of megabytes of e-mails and I'm not sure that
19 would be very constructive either.

20 If you really want, I could make thousands and
21 thousands of pages of copies at a copy shop and get those
22 to you, but I think that would be wasteful, frankly, to
23 do that. So I could get a CD and burn a CD for you with
24 all of these documents on it.

25 MR. SMITH: Why don't you do that. I think one

1 way or another, though, if these are going to be -- other
2 than those that might be able to be admitted through
3 judicial notice, which I'd call to everyone's attention
4 we did do that in the first proceeding with respect to
5 the Final EIS document, the DOS, Department of State
6 Final EIS. We took judicial notice of that believing
7 that it sufficiently met the standards for judicial
8 notice under the statute.

9 If you recall, the procedure we went through in
10 that case is we served a formal notice of our intent to
11 take judicial notice and afforded all parties an
12 opportunity to object to its admissibility and to respond
13 if necessary.

14 And barring that, I guess I don't know what to
15 do. But one way or another I think, you know, with
16 respect to exhibits I think it's very, very difficult to
17 admit material into evidence that isn't present, if that
18 makes any sense. And to me it does make sense.

19 MR. BLACKBURN: I understand that. At the same
20 time, as I said, you know, I wasn't sure that this would
21 come in -- how the Commission would choose to treat it.
22 And, you know, that's why I've not presented it
23 physically here today and wanted to provide it.

24 But, as I said, if we want to just withdraw this
25 and have it be submitted by public comment, we could do

1 that too. So I don't --

2 CHAIRMAN JOHNSON: I'm sorry. I don't think
3 anybody's asking for that. I think Mr. Smith has said
4 let's get some CDs burned. There's been no objection
5 from Commissioners. Let's do that.

6 In future reference, yeah, we don't need piles
7 and piles of paper, but having that CD in advance and
8 having -- if we would have had that CD, it would have
9 been helpful to having this discussion I think. So let's
10 just get it, and the Commission can make its ruling.

11 MR. BLACKBURN: Okay.

12 MR. KOENECKE: Mr. Smith, I would just like to
13 observe that we will need a CD as well then. Anything
14 that's submitted to the Commission I would hope that's
15 Mr. Blackburn's intention.

16 MR. BLACKBURN: Obviously.

17 MR. KOENECKE: Thank you.

18 MR. SMITH: Thank you. And to staff obviously.
19 Okay? I don't know that staff needs a CD separate from
20 mine as I think we can probably load it onto the network
21 here and all access it. But if we could, that would be
22 great.

23 And, again, I want to reiterate at least prior
24 to the time when the Applicant's rebuttal case we're
25 going to have to have that so they have an opportunity to

1 present responsive testimony in the event we decide to
2 admit any of it into evidence.

3 MR. BLACKBURN: Sure.

4 MR. SMITH: Okay. Okay. With that, then Dakota
5 Rural Action, do you have anything further other than the
6 offer of these documents into evidence in terms of a
7 direct case?

8 MR. BLACKBURN: No, we do not.

9 MR. SMITH: Thank you. What do you think? We
10 haven't gone on that long but would you like to take a
11 short break before we commence with staff's case and,
12 staff, I'd give you a little chance to get organized here
13 too.

14 MS. SEMMLER: I'm ready.

15 MR. SMITH: What do you think, Cheri? Would you
16 like a short break? Our court reporter would like a
17 little break here. So we're going to be in recess for
18 10 minutes.

19 (A short recess is taken)

20 MR. SMITH: If we could get situated here and
21 we'll get underway again.

22 With that, we'll call the hearing back to order
23 here in HP09-001. I just can't make this thing work. I
24 don't know what the deal is. I think it's defective.

25 CHAIRMAN JOHNSON: User error.

1 MR. SMITH: Yeah. I think then, staff, are you
2 ready to proceed with your direct case?

3 MS. SEMMLER: I am. And I would like to call
4 witness Tim Binder.

5 (The witness is sworn by the court reporter)

6 DIRECT EXAMINATION

7 BY MS. SEMMLER:

8 Q. Mr. Binder, please introduce yourself to the
9 Commission.

10 A. **My name is Tim Binder. I'm employed as a staff
11 analyst for the South Dakota Public Utilities Commission.
12 My address is 500 East Capitol Avenue here in Pierre,
13 South Dakota. I've worked with the Commission for a
14 little over a year now.**

15 Q. And you are one of the analysts that reviewed this
16 Application; is that correct?

17 A. **That is correct. There is a team of analysts, staff
18 analysts, that are assigned to every Docket. On this
19 Docket that's the staff you see over here on our side.**

20 **What we do for the review process is we look at all
21 the applicable codified laws, which is 49-41B in this
22 case, and also Administrative Rules. We go through those
23 to make sure that the Applicant has addressed every
24 Administrative Rule and every other law in there.**

25 **Further, for the review process there's also public**

1 **input hearings. Those took place in Philip, Winner, and
2 Buffalo. The public was allowed to attend those and ask
3 questions. The Commission was there and actually able to
4 ask direct questions of Applicant.**

5 **Beyond that, obviously staff isn't obviously
6 completely called to address every single issue that
7 comes up in a case of this nature. With the permission
8 of the Commission, we hired experts. You'll hear from
9 them later today.**

10 **In addition to that as well, we subpoenaed several
11 state experts, state witnesses, that you will hear from
12 as well today to address several detail, issues questions
13 that came up from the input hearings and from our own
14 review.**

15 **From the review process from us, the experts, and
16 the state experts, we came up with four sets of data
17 requests that included 147 detailed questions that really
18 dove into the tough parts of the Application about what
19 really needs to be addressed.**

20 **Several of the questions are multipart questions.
21 Well, two from the Applicant, which we received standard
22 responses to all, which you'll here about many of those
23 from our expert witnesses later today.**

24 Q. And based on -- well, and I should go back. You
25 filed -- wrote prefiled testimony?

1 **A. I do.**

2 Q. And do you see that there in front of you marked as
3 Exhibit S1?

4 **A. Yes, I do.**

5 Q. And I asked yesterday that our list of exhibits be
6 stipulated by the parties, but I failed to do that before
7 you hit the stand, Mr. Binder.

8 MS. SEMMLER: So I'd like to introduce
9 Exhibit S1.

10 MR. SMITH: Is there objection?

11 MR. KOENECKE: No objection.

12 MR. SMITH: Mr. Blackburn.

13 MR. BLACKBURN: No objection.

14 MR. SMITH: Okay. Exhibit S1 is admitted. Do
15 you want to get a stipulation right now so we get that
16 out of the way?

17 MS. SEMMLER: That would be great. I apologize
18 for forgetting to do it before.

19 MR. SMITH: Are the other parties willing to
20 stipulate to the admission of the staff set of exhibits?

21 MR. KOENECKE: The Applicant is so willing.

22 MR. BLACKBURN: Dra is too.

23 MR. SMITH: Mr. Blackburn, based on that
24 stipulation Staff Exhibits S1 through S19 are admitted.

25 Please proceed.

1 Q. So then based on those very tough 147 multipart
2 questions that the staff asked the Applicant and the
3 review of the Application itself, did staff find the
4 Application complete?

5 **A. Yes, we did. It's a very important part of the
6 process to make sure that everything's addressed that can
7 be addressed given our South Dakota Codified Laws and
8 Administrative Rules that we're given.**

9 Q. Some of the questions asked were in regards to the
10 indemnity bond for road damages. Do you have a
11 recommendation?

12 Does Commission staff have a recommendation
13 regarding the amount of that bond?

14 **A. Yes, we do. It was in my prefiled testimony as
15 well. We reviewed the statute that's applicable, the
16 prior Commission actions in the last TransCanada case for
17 Keystone base. And based on that review regarding the
18 feedback we've gotten, we do recommend the bond of
19 15.6 million for 2011 and the same amount in 2012 as
20 well.**

21 MS. SEMMLER: I have no further questions for
22 Mr. Binder.

23 MR. SMITH: Applicant.

24 MR. KOENECKE: Just one, Mr. Smith.

25

CROSS-EXAMINATION

1
 2 BY MR. KOENECKE:
 3 **Q.** Good morning, Mr. Binder. Does the Applicant have
 4 any outstanding data requests with you? Do we owe you
 5 any information at this point to which I'm unaware?
 6 **A. No. To the best of my knowledge, every request that**
 7 **we sent to TransCanada was answered to our satisfaction.**
 8 MR. KOENECKE: Thank you.
 9 MR. SMITH: Dakota Rural Action.
 10 CROSS-EXAMINATION
 11 BY MR. BLACKBURN:
 12 **Q.** Mr. Binder, you testified that 15 parties have
 13 intervened in this proceeding?
 14 **A. Yes, that's correct.**
 15 **Q.** Do you know how many parties intervened with
 16 Keystone I?
 17 **A. Not to the best of my knowledge. I believe it was**
 18 **over 100, though.**
 19 **Q.** Did you ask any -- do you have any sense of why that
 20 is?
 21 **A. Why what is?**
 22 **Q.** Why the difference in terms in the number of
 23 Interveners this time than last time?
 24 **A. I could speculate a lot of different areas such as**
 25 **land coverage and the amount of property owners this one**

1 **crossed. But beyond that I was not involved with the**
 2 **original Keystone Pipeline.**
 3 **Q.** Thank you. And how many pieces of correspondence
 4 have you received from the community or from any of the
 5 Interveners or parties to date?
 6 **A. Have we? Individual pieces, I have not counted that**
 7 **up.**
 8 **Q.** Could you give us a general number?
 9 **A. I can't give you a number, but what I can tell you**
 10 **is that with the exception of the parties that are in the**
 11 **room today, we've received very few other correspondence**
 12 **from the actual Interveners in this case.**
 13 **Q.** Did staff inquire of any of the landowners why that
 14 is?
 15 **A. Inquire of the landowners?**
 16 **Q.** Yes.
 17 **A. We did submit I believe two or three different**
 18 **letters to each one of the Interveners notifying them of**
 19 **their ability to intervene and what that entails and the**
 20 **support they can get from us.**
 21 **Q.** Which were requests for documents. They weren't
 22 inquiring about why people hadn't contacted staff more?
 23 **A. No. What it entailed was first the letter outlining**
 24 **what they could and couldn't do. The second half of that**
 25 **first letter you received as well too were the actual**

1 **data requests, and that's how we go through the discovery**
 2 **process for any actual intervenor Docket -- staff's**
 3 **process is to go through and use formal data requests**
 4 **with every legal Intervener in our dockets.**
 5 **Q.** So those were the minimum legally required
 6 communications with Interveners?
 7 **A. I'm not sure if there's a minimum legally at all. I**
 8 **can't speak to that. But that's what our standard**
 9 **procedure is for any Docket.**
 10 **Q.** Ms. Semmler characterized these questions provided
 11 by staff as being tough. Is that something that in your
 12 opinion they were?
 13 **A. Yes. Definitely. The first data requests that**
 14 **staff comes up with are generally very brief just to make**
 15 **sure that they all -- statutes and rules have been**
 16 **addressed.**
 17 **What you'll see in subsequent data requests and I**
 18 **think one of them had over 116 different questions.**
 19 (Discussion off the record)
 20 **A. Which delved into the detailed portions of the**
 21 **Application for the construction of the pipeline.**
 22 **Q.** Thank you. And in developing these questions did
 23 staff consult with any of the landowners who were most
 24 affected by the pipeline?
 25 **A. What we do -- we didn't know. We didn't directly**

1 **consult with individual landowners that intervened in the**
 2 **process.**
 3 MR. BLACKBURN: Thank you. No more questions.
 4 MR. SMITH: Commissioner questions?
 5 Commissioner Kolbeck.
 6 COMMISSIONER KOLBECK: I missed that last one.
 7 What was your response to Mr. Blackburn's last question?
 8 THE WITNESS: That we didn't directly address --
 9 or we didn't directly talk with any landowners regarding
 10 our individual data requests. It's not our -- it's not
 11 staff's standard procedure to go out and contact
 12 individual affected landowners.
 13 What we did respond to is the -- just the
 14 general comments that we get from landowners, the
 15 Commission gets, as well as what we heard from the public
 16 input hearings. And that's generally the way that we get
 17 input from landowners, rather than going out, us actually
 18 going out and asking individuals whether or not they're
 19 going to be affected and what the concerns are.
 20 COMMISSIONER KOLBECK: But there were public
 21 notices and public meetings, hearings?
 22 THE WITNESS: Oh, definitely. The Applicant is
 23 required to notify all landowners within a certain
 24 radius. We had three public hearings, which I said
 25 earlier, which were very well attended in all three

1 communities. And then throughout the entire process we
 2 received comments, all sorts of information from the
 3 outside that might not be necessarily part of the legal
 4 proceedings, but it's always something staff considers
 5 when they're looking at the individual codified laws and
 6 Administrative Rules that are applicable in this case.

7 COMMISSIONER KOLBECK: I just wanted to make
 8 sure your answers were more directed towards data
 9 responses, not necessarily no contact with landowners.

10 THE WITNESS: That's correct.

11 COMMISSIONER KOLBECK: Because that's kind of
 12 how it sounded when it came out. Is that correct?

13 THE WITNESS: That is correct.

14 COMMISSIONER KOLBECK: Thank you.

15 MR. SMITH: Chairman Johnson.

16 CHAIRMAN JOHNSON: Just by way of clarification
 17 first, I made a Motion to Mr. Binder when you're speaking
 18 with Commissioner Kolbeck that was to insinuate slow
 19 down, which you then did do. I don't want anybody to
 20 think I was trying to coach you on any anything in
 21 particular other than your speed.

22 Secondly, you mentioned the public input
 23 hearings. Did you attend those three public input
 24 hearings?

25 THE WITNESS: Yes, I did. Our entire staff team

1 attended all three of the public hearings.

2 CHAIRMAN JOHNSON: You mentioned they were well
 3 attended. Did you have an opportunity to speak with any
 4 landowners at those meetings?

5 THE WITNESS: Yeah. I don't remember specific
 6 names, but definitely part of what we do as staff is we
 7 go out and try to get a feel at these meetings what the
 8 concerns are, what the issues, what the general sentiment
 9 of the landowners.

10 CHAIRMAN JOHNSON: What was the general
 11 sentiment?

12 THE WITNESS: I honestly was surprised how
 13 little opposition we heard at these hearings. I
 14 suspected a lot more people being upset with TransCanada
 15 just because of my own limited experience in other siting
 16 cases where landowners aren't always that satisfied with
 17 the way they've been treated.

18 I didn't hear from any landowners at those
 19 meetings personally that I spoke with that were upset
 20 with the way they've been treated.

21 CHAIRMAN JOHNSON: There were certainly some
 22 that raised their voices during the formal portion of
 23 that public input hearing.

24 THE WITNESS: Yes.

25 CHAIRMAN JOHNSON: So you heard their concerns.

1 Did those concerns that were raised during that process,
 2 were those internalized in any way to staff?

3 What I'm asking is did those guide how you
 4 proceeded with regard to how you dealt with your
 5 witnesses, the Interrogatories you submitted to the
 6 Applicant?

7 THE WITNESS: Definitely. I think you'll see
 8 throughout the witnesses that we have coming today after
 9 the experts that are actually going to testify to all of
 10 this, these input hearings give us an opportunity to
 11 form a lot of our questions you see in those data
 12 requests.

13 So while in our data request it might not say
 14 specifically this landowner or this individual asked this
 15 question, but what you'll see is all of those issues
 16 brought up are addressed through either our witness
 17 testimony or through staff data requests as well too.
 18 With the caveat if they're applicable to our codified
 19 laws or Administrative Rules that are actually
 20 jurisdictional in this case.

21 CHAIRMAN JOHNSON: So would you say then,
 22 Mr. Binder, that the vast majority of the beneficial
 23 impact that landowners and other interested citizens have
 24 as a part of this process comes through their involvement
 25 with these public input hearings?

1 THE WITNESS: Definitely. It's very helpful
 2 that we get as much input that as we can, and we got a
 3 lot of input, yes.

4 CHAIRMAN JOHNSON: I just asked because
 5 Mr. Blackburn hit on something that was a little
 6 disconcerting that there was not more formal input from,
 7 you know, formal Interveners. I mean, I feel a little
 8 bit better about that that given that we had so much
 9 informal comment at the public input hearings.

10 But anything in particular that you can -- let
 11 me ask you, were you concerned at all by a lack of formal
 12 written filings by citizen Interveners?

13 THE WITNESS: Yeah. We definitely were. We
 14 received a few e-mail communications from some of them
 15 that might not have fully understood what the legal
 16 ramifications were of legally intervening. And those
 17 people did express their concerns through sending
 18 e-mails. I'm thinking Debra Niemi is one of them. We
 19 also received communications from Dakota Rural Action
 20 indicating they were intervening on behalf of several
 21 landowners too.

22 But, yes, it was concerning initially. But as
 23 it progressed there didn't seem to be a need for us to
 24 pursue that any further than we do with any other docket
 25 or case.

1 CHAIRMAN JOHNSON: Thank you very much.
 2 MR. SMITH: Commissioner Hanson.
 3 COMMISSIONER HANSON: Thank you, Mr. Smith.
 4 Mr. Binder, in your recommendation on -- well, it's on
 5 page 3, just not -- it's just a Q and A. You recommended
 6 that a \$15,600,000 indemnity bond for 2011 and a second
 7 one in the amount -- same amount apparently for 2012 be
 8 appropriate.
 9 How did you arrive at that number?
 10 THE WITNESS: That number was actually
 11 recommended by TransCanada. It's a number that we had
 12 our experts examine to see if it would be sufficient. It
 13 also follows the same line of reason that was used in the
 14 first Keystone case as well too that the Commission found
 15 was adequate.
 16 COMMISSIONER HANSON: Don't wish to put you on
 17 the spot now, but do you remember -- I guess you are on
 18 the spot. Do you recall which expert it was that
 19 provided that information?
 20 THE WITNESS: I believe for staff's side it was
 21 in -- forgive me on the name here. It was the direct
 22 testimony of John Muehlhausen, and that was our staff's
 23 witness actually in the initial Docket. I'm sorry.
 24 That's not a witness that we have here today.
 25 COMMISSIONER HANSON: Thank you very much.

1 Thank you, Mr. Smith.
 2 MR. SMITH: Staff, do you have follow-up
 3 questions?
 4 MS. SEMMLER: I do not.
 5 COMMISSIONER HANSON: Mr. Smith, may I ask a
 6 process question?
 7 MR. SMITH: Please. Yeah.
 8 COMMISSIONER HANSON: We're all trying to read a
 9 number of different things and go over a variety of
 10 things at the same time here while we're trying to
 11 balance this. And forgive me. I did not hear the --
 12 whether the testimony, the prefiled testimony of
 13 Mr. Binder, was offered and whether he was asked if it
 14 would be substantially the same, et cetera, at the
 15 beginning.
 16 Was it? Was that accomplished?
 17 COMMISSIONER HANSON: I don't know that --
 18 does --
 19 COMMISSIONER HANSON: Or does it need to be?
 20 MR. SMITH: I don't remember.
 21 MS. SEMMLER: It was offered, and we have no
 22 corrections or changes to make.
 23 COMMISSIONER HANSON: All right. Thank you very
 24 much.
 25 MR. SMITH: Yeah. All of the staff exhibits

1 have been admitted into evidence. I think your question
 2 was more did you ask him whether his testimony would be
 3 the same today.
 4 COMMISSIONER HANSON: Correct. And as is being
 5 done by all the other direct testimony when they come up.
 6 I don't know if that's just a formality that TransCanada
 7 is making certain of, but I think it's proper to do
 8 certainly and I'm just curious -- I had not heard it and
 9 that's why I prefaced my remarks by saying that I'm
 10 trying to do too many things at the same time.
 11 MR. SMITH: I regret to say I don't remember,
 12 but I'll just do that right now.
 13 If you were asked the same questions today on
 14 the stand, would your answers be the same?
 15 THE WITNESS: Yes. My answers would be the
 16 same.
 17 MR. SMITH: As are included in staff exhibit?
 18 THE WITNESS: Yes. In my prefiled testimony,
 19 yes.
 20 MR. SMITH: One last question. You did then as
 21 is normally the case submit data requests to each of the
 22 individual landowners?
 23 THE WITNESS: Yes. Definitely.
 24 MR. SMITH: Interveners.
 25 THE WITNESS: There are several ways Interveners

1 are notified. First of all, us sending data requests.
 2 Every data request sent out -- or initial one went to
 3 every single Intervener. As well, Interveners are on our
 4 service list so they would receive all the correspondence
 5 as well too involved with this case.
 6 MR. SMITH: And my understanding is none of the
 7 Interveners submitted any responses to your data
 8 requests.
 9 THE WITNESS: None of them with the exception of
 10 Dakota Rural Action, who's here in the room.
 11 MR. SMITH: Right. Okay. Thank you.
 12 Staff, do you have follow up?
 13 MS. SEMMLER: I do not.
 14 MR. SMITH: And Applicant, because you've -- the
 15 Commissioners have had some questions, I'm going to give
 16 each of the parties a chance to follow up with respect to
 17 what the Commissioners have delved into.
 18 MR. KOENECKE: Thank you, Mr. Smith. Nothing
 19 further.
 20 MR. SMITH: Dakota Rural Action.
 21 MR. BLACKBURN: Nothing further.
 22 MR. SMITH: Thank you. I think you may step
 23 down then, Mr. Binder. Thank you.
 24 MS. SEMMLER: Staff would like to call
 25 Mr. Dan Flo.

1 (The witness is sworn by the court reporter)

2 DIRECT EXAMINATION

3 BY MS. SEMMLER:

4 Q. Good morning, Mr. Flo. Could you please introduce
5 yourself to the Commission.

6 A. Of course. Good morning. My name is Daniel Flo. I
7 am employed by Natural Resource Group, and I am an
8 environmental consultant and project manager for NRG. My
9 business address is 1000 IDS Center, 80 South Eighth
10 Street in Minneapolis, Minnesota.

11 And because I'm a replacement testimony, I will give
12 a little bit more about my background.

13 In 1996 I received a Bachelor of Science Degree in
14 geography from Minnesota State University-Mankato. And
15 in 2002 I received a J.D. from Lewis & Clark Law School
16 in Portland, Oregon. While there I focused in
17 environmental law, federal Indian law, and land use
18 issues.

19 In, excuse me, my professional experience as related
20 to the subject matter, from 2002 to 2005 I worked for the
21 Minnesota Department of Commerce in an environmental
22 reimbursement fund.

23 In 2005 I joined Natural Resource Group. For the
24 first year I was a land use specialist and prepared
25 documents and several Environmental Impact Statement

1 sections focusing primarily on socio-economic and land
2 use issues.

3 And since 2006 while at Natural Resource Group I've
4 been a deputy project manager for several liquid
5 petroleum pipeline projects in the U.S. For those
6 projects the U.S. Department of State has been the lead
7 federal agency for environmental review.

8 Q. And at the bottom of that stack of exhibits to your
9 left you're going to find S19. And it is a copy of your
10 resume. I'd like for you to look at that and assure that
11 it is correct. And then --

12 A. Yes, it is.

13 Q. Perfect.

14 MR. SMITH: May I butt in here a minute? At
15 least on my exhibit sheet I'm showing an S19 to already
16 exist and have been admitted.

17 MS. SEMMLER: I'm going to ask the questions
18 that I apparently left out the first time regarding it
19 and his testimony and whether or not there's any changes
20 today.

21 MR. SMITH: Okay. At least let me see here.

22 MS. SEMMLER: It should be his resume,
23 Mr. Smith, on your list.

24 MR. SMITH: I'm showing it as the -- I'm
25 thinking maybe it should be marked S20 because I'm

1 showing Kim McIntosh as --

2 MS. SEMMLER: You have an old one.

3 MR. SMITH: Am I out of date here? Okay. I'm
4 sorry.

5 Q. You'll also see what's beside you in that pile as
6 S2. Oh, I'm sorry. You'll see what's beside you as S3.

7 A. Yes. S3 is the prefiled testimony of Patrick
8 Robblee. He's a colleague of mine at Natural Resource
9 Group. Mr. Robblee is ill and unfortunately could not
10 attend the hearing. So I am adopting his previous
11 testimony.

12 Q. And if all of those questions were asked of you
13 today, would you answer them the same, and do you have
14 any corrections additions or deletions to either or the
15 resume that's been presented today?

16 A. No corrections or deletions.

17 Q. And you'd answer all of those questions the same?

18 A. I would.

19 Q. What portion of the testimony -- or what portion of
20 the Application then did you review?

21 A. I reviewed the Application to the Public Utilities
22 Commission submitted by the TransCanada Keystone XL
23 Project and reviewed the -- also the Application to the
24 State Department for a presidential permit.
25 Specifically in the PUC Application materials I

1 reviewed information about paleontological and cultural
2 resources as to Mr. Robblee.

3 Q. And it does appear from your testimony that the
4 presidential permit process which does have jurisdiction
5 over this project as a whole does subject the company to
6 significant scrutiny including some significant public
7 and agency review.

8 Is that accurate and was there a public comment
9 period and when did that period open?

10 A. That is correct. Under -- because of the
11 requirement of a presidential permit because of the
12 international border crossing, the U.S. State Department
13 is the lead federal agency for the environmental review
14 under the National Environmental Policy Act, and NEPA
15 requires a high-level of environmental scrutiny.

16 And the State Department published a notice of
17 intent to conduct a NEPA review and as part of that NOI
18 the State Department solicited comments from the public.
19 That public comment period opened on January 28 of 2009.

20 Q. And then all of those comments are used to help
21 draft the Environmental Impact Statement; correct?

22 A. That's correct. Under NEPA the environmental impact
23 statement is open to including discussions and analysis
24 of issues that are most pertinent to the project at hand,
25 and that public comment period affords the legal federal

1 **agency, in this case the State Department, the**
2 **opportunity to identify the issues that are of greatest**
3 **import to the project and then to include them in the**
4 **NEPA document, which for this project will be an**
5 **Environmental Impact Statement.**

6 **Q.** And then even after that Draft Environmental Impact
7 Statement is created there is an additional comment
8 period; correct?

9 **A. That's right. There's a 45-day comment period at**
10 **which time members of the public, state agencies, federal**
11 **agencies have the opportunity to comment on the content**
12 **of the Draft Environmental Impact Statement.**

13 **Q.** And is this process we're engaging in here as the
14 Public Utilities Commission of South Dakota at all
15 connected with that NEPA process?

16 **A. No. This is a separate process.**

17 **Q.** Did the team of resource specialists at Natural
18 Resource Group make a determination with respect to the
19 completeness of the -- completeness and compliance of the
20 Application and those relevant South Dakota codes and
21 statutes?

22 **A. Yes. The team examined the materials in the**
23 **Application and concluded that Keystone's initial**
24 **Application plus the subsequent responses to staff's data**
25 **requests augmented by the recommendations of the NRG**

1 **team, which you'll hear more of today, constitute a --**
2 **excuse me, a complete Application in compliance with**
3 **applicable South Dakota regulations.**

4 **Q.** And although the Public Utilities Commission is
5 limited in its ability to dictate the best route of this
6 pipeline, is an analysis of best route done by some
7 agency at some point in this process?

8 **A. Yes. Speaking specifically to NEPA, the federal**
9 **environmental review process as compared to the**
10 **South Dakota PUC process, the PUC asks for information**
11 **about alternatives but is not afforded the ability to**
12 **designate a route.**

13 **The State Department through the NEPA analysis and**
14 **environment impact statement will conduct a robust**
15 **analysis of project alternatives which for linear**
16 **projects of this sort usually almost always does include**
17 **route alternative analysis.**

18 **And because this project will be subject to an**
19 **Environmental Impact Statement, at the end of the process**
20 **the State Department will issue a record of decision and**
21 **in that record of decision will identify a preferred --**
22 **an environmentally preferred route.**

23 **That does not give -- that does not mean that the**
24 **State Department has routing authority, but they simply**
25 **designate a preferred route.**

1 **Q.** Did the group at Natural Resource Group find
2 TransCanada's plans regarding paleontological and
3 cultural resources responsible and proper?

4 **A. Yes. Specifically regarding paleontological**
5 **resources, if I may offer just a quick clarification to**
6 **some testimony that we heard yesterday, paleontological**
7 **resources seemed to be included in the discussion of**
8 **cultural resources and specifically Section 106 of the**
9 **National Historic Preservation Act.**

10 **Just a clarification that paleontological resources**
11 **are not subject to or protected by Section 106 of the**
12 **NHPA. Section 106 is specific to cultural resources.**

13 **There are federal statutes and regulations that**
14 **protect paleo resources on federal lands only, and as**
15 **discussed in Keystone's Application to the PUC in**
16 **South Dakota no federal lands or tribal lands will be**
17 **crossed by the proposed route.**

18 **So that being said, the proposals for paleo**
19 **monitoring and a treatment plan by Keystone are both**
20 **typical and proper, and similarly the plans for cultural**
21 **resources, unanticipated discoveries, et cetera, are also**
22 **proper.**

23 **Q.** Your recommendation would then follow that the
24 company be required to implement those plans and that if
25 there are any requested changes by the South Dakota

1 Historical Office or the Department of State, that then
2 they make those changes?
3 **A. Yes. It is our recommendation that Keystone**
4 **implement the stated plans. And, similarly, under**
5 **Section 106 of the NHPA the State Department will be the**
6 **lead agency for implementation of that law covering**
7 **cultural resources.**

8 **And so if the State Department has any**
9 **recommendations or changes, we recommend those be**
10 **included, it is the responsibility of the lead agency,**
11 **the State Department in this case, to consult with State**
12 **Historic Preservation Offices and Tribal Historic**
13 **Preservation Offices if applicable.**

14 **And, similarly, if any of those entities would have**
15 **recommendations that do not conflict with the State**
16 **Department's recommendations, we would also recommend**
17 **that those be adopted by Keystone.**

18 MS. SEMMLER: I have no further questions for
19 the witness.

20 MR. SMITH: Mr. Koenecke or, Mr. Moore, you look
21 like you're moving over there.

22 MR. MOORE: Thank you, Mr. Smith.

23 CROSS-EXAMINATION

24 BY MR. MOORE:

25 **Q.** Good morning, Mr. Flo. I'm one of the attorneys for

1 TransCanada.
 2 **A. Good morning.**
 3 **Q.** This is referred to on your page 46, Mr. Robblee's
 4 actual direct testimony that you adopted. But I just
 5 want to clarify this for the record.
 6 As part of its work required by NEPA the Department
 7 of State has held public scoping meetings in
 8 South Dakota. And I think there were three of them here
 9 in Murdo, Faith, and Buffalo; is that correct?
 10 **A. That is my understanding.**
 11 **Q.** And there was an opportunity for public comment at
 12 those meetings on issues to be covered by the
 13 Environmental Impact Statement; is that correct?
 14 **A. That is right.**
 15 MR. MOORE: Thank you. That's all I have.
 16 MR. SMITH: Dakota Rural Action.
 17 CROSS-EXAMINATION
 18 BY MR. BLACKBURN:
 19 **Q.** Good morning. You reviewed all of the documentation
 20 from the Department of State related to the EIS,
 21 development of the EIS and the NEPA process?
 22 **A. I reviewed the Application by Keystone to the State**
 23 **Department for a presidential permit.**
 24 **Q.** Did you review the scoping report that was prepared
 25 by the Department of State?

1 **A. I did not review that. Because of my role as a**
 2 **substitute testimony, I did not have the opportunity to**
 3 **get that deep into the review.**
 4 **Q.** Did you review the notices provided by the
 5 Department of State related to the NEPA process?
 6 **A. No. I did not review those notices. The published**
 7 **federal notices you're referring to?**
 8 **Q.** Yes.
 9 **A. No, I didn't.**
 10 **Q.** You testified about the alternatives process within
 11 NEPA, did you not?
 12 **A. I did.**
 13 **Q.** Are you aware that the scoping notice provided by
 14 the Federal Government prepares no list of alternatives
 15 for the project?
 16 MS. SEMMLER: And I would make an objection to
 17 relevancy. I don't -- to the relevancy.
 18 MR. SMITH: Overruled.
 19 **A. Because I haven't reviewed the notices, I do not**
 20 **know what is contained in them regarding alternatives. I**
 21 **know that under NEPA it is the NEPA documents that**
 22 **themselves that must contain a consideration of**
 23 **alternatives.**
 24 **Q.** So just a second here.
 25 So you're here today to talk as an expert on the

1 environmental review process; is that correct?
 2 **A. I'm here to discuss the -- yes, the federal**
 3 **environmental review process.**
 4 **Q.** That's correct.
 5 **A. Under NEPA.**
 6 **Q.** So you're aware that 40 CFR 1508.22 states, "The
 7 notice of intent shall briefly describe possible
 8 alternatives"?
 9 MS. SEMMLER: You know, I object again. We're
 10 just not here to dissect the filings made to or from
 11 NEPA. The witness was here to provide the Commission
 12 with the background overall regarding how the process
 13 works and how this is separate from that.
 14 So I'm going to make the same objection,
 15 Mr. Smith.
 16 MR. BLACKBURN: The degree of the witness's
 17 review is relevant here, and the degree of the witness's
 18 knowledge of the federal review process is what he's
 19 testifying to. So, therefore, questions about his scope
 20 of review and his knowledge are relevant.
 21 MS. SEMMLER: Again, I would disagree. I think
 22 generally his knowledge of the overall process for
 23 background purposes is relevant so we all are on the same
 24 page today.
 25 However, his dissection of the actual documents

1 produced as to their -- as to whether or not they were
 2 adequately produced and whether or not they're
 3 substantively adequate isn't the purpose.
 4 MR. BLACKBURN: The witness has testified that
 5 the Federal Government and TransCanada's complied with
 6 NEPA.
 7 MR. SMITH: I'm going to sustain the objection,
 8 and let's move along. Again, there's general relevancy
 9 to the fact that there is an environmental, but the
 10 decisions relative to the adequacy of documents and that
 11 is for the Department of State to make.
 12 CHAIRMAN JOHNSON: I think, Mr. Smith, I would
 13 agree with regard to whether or not the specific
 14 documents were technically prepared properly by the
 15 Federal Government.
 16 I do think Mr. Blackburn makes an appropriate
 17 point that we've got a witness who's saying the NEPA
 18 process was sufficient to address these topics.
 19 Are you saying that his entire line of
 20 questioning is out of line or just the specific request
 21 to technical document preparation?
 22 MR. SMITH: I guess my point is in the end other
 23 than just the general observations about the process,
 24 I -- I don't know where we can go with this, other than
 25 just a public relations exercise here.

1 THE WITNESS: Perhaps I could --
 2 MR. SMITH: If you want to, would the Commission
 3 rather overrule me? You have the right to do that.
 4 COMMISSIONER HANSON: No. I agree with
 5 sustaining the objection. So it's up to Commissioner
 6 Kolbeck at this juncture.
 7 CHAIRMAN JOHNSON: And I'm not asking for us to
 8 overrule Mr. Smith's ruling. I just wanted greater
 9 insight into your ruling.
 10 I mean, if it was on the technical merits, part
 11 of me feels like if the witness says the NEPA process has
 12 been sufficient, then poking around into that is probably
 13 not inappropriate.
 14 MR. BLACKBURN: And I fail to see the difference
 15 between just determining whether they complied with the
 16 law. It's not a technical requirement whether they
 17 complied with the law or not. It's what the witness has
 18 testifying to.
 19 And if they failed to comply with the law and
 20 he's not aware of that, then that's a question that's
 21 relevant. I don't think it's a technical -- whether they
 22 prepared the documents technically or not, they didn't
 23 follow the law, then they're not in compliance.
 24 MR. SMITH: Well, I guess our statute does state
 25 that the Applicant must comply with all applicable laws.

1 So with that, I'm going to change my ruling and allow you
 2 to answer the question, if you can.
 3 **A. Okay. Perhaps I could start by clarifying what may**
 4 **have been unclear testimony. I am here to testify about**
 5 **the NEPA process and how it differs from the South Dakota**
 6 **PUC process.**
 7 **With regard to the Applicant's compliance under**
 8 **NEPA, NEPA is an ongoing process and it's far from**
 9 **complete. The Draft Environmental Impact Statement has**
 10 **not been published yet by the lead federal agency in this**
 11 **case.**
 12 **As to the notice that Mr. Blackburn referred to, I**
 13 **stated that I personally have not reviewed that notice so**
 14 **I don't know of its content. In a general way I would**
 15 **say that if there were any inadequacies with that notice,**
 16 **that is not an inadequacy on the part of the Applicant.**
 17 **Q.** So just to be clear, you're not testifying on the
 18 adequacy of the compliance of federal agencies with NEPA?
 19 **A. I think that's correct. I am here to testify about**
 20 **the procedural process -- the procedures of NEPA and what**
 21 **the Applicant and the lead federal agency will have to do**
 22 **to go through the process, the federal review process.**
 23 **Q.** You did not testify that the Pipeline Hazardous
 24 Material Safety Administration, or PHMSA, is intending to
 25 comply with NEPA with regard to the preparation of its

1 special permit to increase the maximum operating
 2 pressure.
 3 **A. Yes. That -- you're correct that I did not testify**
 4 **in that regard, and when that statement was made during**
 5 **yesterday's proceedings that was the first that I had**
 6 **heard of that. And so I cannot speak to the -- whether**
 7 **it's true, whether -- anything else that might be asked**
 8 **on that.**
 9 **Q.** But you can testify that that is not an issue that
 10 was included within the scoping notices or within any of
 11 the documents provided through the NEPA process so far?
 12 **A. No. I can't. I also cannot testify to that.**
 13 MR. BLACKBURN: Okay. Thank you. No further
 14 questions.
 15 MR. SMITH: Commissioners?
 16 CHAIRMAN JOHNSON: Because your
 17 recommendations -- or rather because Mr. Robblee --
 18 that's how you say his name; right?
 19 THE WITNESS: Yes. Sorry. Mr. Robblee's.
 20 CHAIRMAN JOHNSON: Because of the
 21 recommendations made by Mr. Robblee and yourself appear
 22 in a couple different places, I want to make sure that I
 23 understand them.
 24 THE WITNESS: Yes, sir.
 25 CHAIRMAN JOHNSON: First, that the Applicant

1 should conduct a literature review to identify known
 2 fossil sites. Second, the preconstruction field survey
 3 along sensitive portions should be conducted. Third,
 4 that a paleontological mitigation plan should be
 5 prepared. Fourth, that fossils should be returned to
 6 appropriate landowners or the Museum of Geology at
 7 South Dakota School of Mines of Geology -- or it's
 8 located on federal state lands. And then, fifth, that
 9 the unanticipated finds plan be implemented by the
 10 Applicant.
 11 It appears in a couple different places. Did I
 12 get -- are those five parts the totality of the
 13 recommendations made by you and Mr. Robblee?
 14 THE WITNESS: Those five recommendations, yes,
 15 are all recommendations that we have made as part of our
 16 review. And I do believe that that constitutes all of
 17 the recommendations.
 18 CHAIRMAN JOHNSON: Okay. You raised the
 19 paleontological issue earlier. And if you'll look at
 20 A6 -- it's attached to Mr. Robblee's testimony, your
 21 testimony -- or page 12 of that -- I think it's the
 22 unanticipated finds document.
 23 THE WITNESS: Yes.
 24 CHAIRMAN JOHNSON: And either one. I mean,
 25 they're different charts, but they show the same

1 branching off. And which page are you looking at,
2 Mr. Flo?
3 THE WITNESS: I don't have the unanticipated
4 finds.

5 CHAIRMAN JOHNSON: No problem. I'll describe
6 it. On A6 it says, "The archeology field team discovers
7 potential human remains and examines the materials."

8 And you get an arrow off. It says, "The
9 archeologist determines that the remains are not human.
10 The site is treated similar to other discoveries."

11 So I'm asking specific about paleontological
12 resources here. Bones are uncovered, an archeologist
13 determines that they're not human, they are something
14 else, maybe prehistoric, and then site treated similar to
15 other discoveries.

16 What does that mean, just that you go back into
17 the main flow and those paleontological resources are
18 treated similar to how? Describe it.

19 THE WITNESS: I believe that because there will
20 be a separate plan for paleontological resources, that
21 that's not covered by this, by this flowchart. This
22 flowchart covers cultural resources that are not
23 specifically human remains.

24 That could be an archaeological resource. It
25 could be evidence of a human habitation. It could be

1 postcontact historical remains.

2 And when it says site treated similar to other
3 discoveries, there are procedures under Section 106 for
4 how all cultural resources should be treated, and the
5 plan discusses treatment of those items during
6 construction.

7 CHAIRMAN JOHNSON: And so the Federal Government
8 does not have any similar provisions for paleontological
9 resources found on private lands? Is that your
10 testimony?

11 THE WITNESS: That is correct.

12 CHAIRMAN JOHNSON: And so you have recommended
13 that the Applicant prepare a paleontological mitigation
14 plan. At this point do we have any idea of what key
15 components they would include in such a plan?

16 The reason I'm asking is you said that their
17 treatment of paleontological resources would be typical
18 and proper. How do we know that?

19 THE WITNESS: Sure. First of all, we know from
20 testimony yesterday that the Applicant has already
21 identified the likely areas where paleontological
22 resources could be found.

23 And perhaps I'll let them speak to how far that
24 process has gone, but I believe that they will have
25 monitors on the ground during construction in those

1 designated areas.

2 The plan that they proposed to develop would
3 then discuss how any of those finds might be treated
4 during construction upon discovery.

5 And I don't know of the details of that except,
6 as you mentioned earlier, that the disposition of those
7 paleontological resources would be that they would be
8 provided to the landowner if privately owned -- on
9 privately owned property and to the Museum of Geology and
10 Mines if on state land or otherwise public land.

11 And as to your question about proper procedure,
12 based primarily on other project experience, because
13 there are no laws that protect paleo resources on private
14 lands, I have seen projects where the lead agency,
15 including the State Department, has asked the project
16 proponent, the Applicant, to include the treatment of
17 paleo resources in their unanticipated discoveries plan,
18 even though the unanticipated discoveries plan is
19 primarily and originally a Section 106 cultural resources
20 document.

21 It is essentially voluntary upon the project
22 proponent to include treatment of paleo resources in a
23 similar plan.

24 CHAIRMAN JOHNSON: So and although that isn't
25 your recommendation, your recommendation is similar not

1 working it into one document, rather, have a separate
2 paleontological mitigation plan prepared and that that
3 would be a condition that the Commission would apply
4 prior to any permit application?

5 THE WITNESS: That's correct. And that's based
6 primarily on the -- simply the location of the project.
7 There's a higher likelihood than in other areas around
8 the country that paleontological resources could be found
9 during construction of this project when it gets to that
10 point.

11 So it is a good recommendation on the part of
12 the Applicant and a recommendation by my team that such a
13 plan, a separate plan for paleo resources, be adopted and
14 required.

15 CHAIRMAN JOHNSON: And let's presume that this
16 Commission, this State places a very high priority and
17 value on paleontological resources.

18 Given that presumption, do you think your
19 recommendations sufficiently provide for the adequate
20 handling of those resources?

21 THE WITNESS: Yes, I do.

22 CHAIRMAN JOHNSON: Okay. Thank you.

23 MR. SMITH: Other Commissioner questions?

24 COMMISSIONER HANSON: Thank you. Mr. Flo, I'm
25 curious, talking about fossils, that area is lousy with

1 fossils.

2 So they come across fossils. What do they do?

3 I mean, you can literally walk that area and just -- and
4 pick them up. There are so many.

5 THE WITNESS: Sure. And I'm not a
6 paleontologists and I'll defer to the Applicant for more
7 detail but I believe some of the discussion has been to
8 essentially tier or prioritize different types of
9 fossils. Vertebrates, I believe, are of greater
10 scientific value than invertebrates.

11 So I would leave it to the Applicant to consult
12 with experts and develop the plan accordingly. But I
13 believe that that's the way that it is being developed or
14 considered at this point, to prioritize types of fossils.

15 COMMISSIONER HANSON: That would make sense.

16 Mr. Smith, may I ask counsel a question? Or
17 perhaps you can help. Do you know of another witness
18 that's going to be coming before us to discuss any of
19 this?

20 MR. SMITH: Well, we had yesterday, if you
21 recall, Mr. Schmidt --

22 COMMISSIONER HANSON: Right.

23 MR. SMITH: -- discussed it in some detail.

24 COMMISSIONER HANSON: I forgot to ask that
25 question.

1 MR. SMITH: I would certainly think -- remember
2 I asked him some questions, but maybe I'll ask the
3 Applicant here, if Commissioner Hanson has some questions
4 that remain unanswered that Mr. Schmidt might be able to
5 answer, would Applicant be amenable to recalling him for
6 that purpose at some point here?

7 MR. MOORE: Yes, Mr. Smith.

8 MR. SMITH: Okay. Thank you. Why don't we do
9 that then.

10 COMMISSIONER HANSON: Thank you. I'm just
11 particularly interested in how they -- and this witness
12 did a good job of answering it to that extent. But
13 it's -- you can walk through the ranches in that area and
14 find a lot of fossils. And it just occurred to me as you
15 were testifying that how can they go through this process
16 under those circumstances.

17 So thank you very much. That's all the
18 questions I have. Thank you.

19 MR. SMITH: Commissioner Kolbeck, do you have
20 any questions?

21 COMMISSIONER KOLBECK: I just have one. We had
22 a letter from a Mr. Larson. He's the president of the
23 Black Hills Institute for Geographical Research. And
24 basically he mentions some of the same things that are in
25 the testimony here.

1 Do you believe that it is impossible to pass
2 through this terrain without discovering a fossil?

3 THE WITNESS: I'm afraid I don't have enough on
4 the ground experience or knowledge to answer that
5 question, Commissioner. I'm sorry.

6 COMMISSIONER KOLBECK: Would it be -- do you
7 believe that once a fossil is disturbed it's ruined?

8 THE WITNESS: Again, I'm not an expert, but I
9 don't believe that to be the case. I believe if you go
10 to any museum that has fossils, you'll see them in
11 pieces.

12 COMMISSIONER KOLBECK: Okay.

13 THE WITNESS: Reconstructed.

14 COMMISSIONER KOLBECK: The only reason I asked
15 is the testimony kind of corresponds to the letter that
16 he sent, and there's some of these different issues.

17 I think the other Commissioners have done a good
18 job of asking questions. So that's all I have.

19 CHAIRMAN JOHNSON: Well, I'm glad you brought up
20 that particular citizen, Commissioner Kolbeck, because
21 there's a good example of where the written comments --
22 he spoke in Bison, I think.

23 That's a good example that citizens can raise
24 issues and put something on our radar maybe greater than
25 they otherwise would be. So good point.

1 MR. SMITH: Yesterday you heard Mr. Schmidt's
2 testimony, correct, about the fact that they've already
3 undertaken through -- in cooperation with an academic
4 group -- and I can't remember the name of it right now.
5 One of the institutes out in the Black Hills. And
6 they've already done an on-the-ground survey.

7 And, as I understand it, in those areas where
8 that study by that institute revealed a high probability,
9 if I understood the testimony correct, is that
10 TransCanada will actually have a paleontological expert
11 out there in the field and continuously basically
12 monitoring the project's progress through that area.

13 Is that the kind of -- does that comport with
14 your recommendation, that kind of procedure?

15 THE WITNESS: Yes, it does. My -- and I was
16 here, Mr. Smith, yesterday. My notes on that testimony
17 are that Keystone has already conducted surveys on state
18 and federal land and on private land in Harding County --
19 I think that was the name of the county -- to identify
20 the likely areas where there's a higher likelihood that
21 such resources could be found and that during
22 construction monitors or paleo experts will be on the
23 ground in case of a finding. Yes, that is consistent
24 with our recommendations.

25 MR. SMITH: And that expert would be the type of

1 person then that would be able to distinguish between a
2 significant paleontological discovery and the type of
3 fossils that are in every single rock one picks up out at
4 the Oahe Reservoir, for example?

5 THE WITNESS: Such expertise would be consistent
6 with other types of resource monitors that I have
7 experience with.

8 MR. SMITH: Okay. Thank you. Any other
9 Commissioner questions?

10 COMMISSIONER KOLBECK: Could you just -- I'm
11 sorry. Could you just clarify that again? There will be
12 the paleontologist on site during the construction? Is
13 that what you said?

14 THE WITNESS: I can't -- I don't remember from
15 the testimony whether they will actually be
16 paleontologists on site, but they will be -- I believe
17 the testimony was that trained monitors will be --

18 COMMISSIONER KOLBECK: That's what I thought,
19 yeah.

20 THE WITNESS: -- on site.

21 COMMISSIONER KOLBECK: I guess my question was
22 does NEPA require that a paleontologist be at the site?

23 THE WITNESS: NEPA does not.

24 COMMISSIONER KOLBECK: Okay. Thank you.

25 MR. SMITH: Staff.

1 MS. SEMMLER: I don't have any clarification
2 questions.

3 MR. SMITH: Okay. Thank you. Are there any
4 follow-up questions by the Applicant, Mr. Moore, in
5 response to what you heard?

6 MR. MOORE: Thank you, Mr. Smith. I have just
7 two follow-ups.

8 REXCROSS-EXAMINATION

9 BY MR. MOORE:

10 Q. Mr. Flo, just so the record is clear, when
11 Mr. Blackburn was asking you about the notice of intent
12 filed by the State as part of the NEPA process that the
13 Department of State is conducting with respect to
14 alternatives, that notice was prepared by the Department
15 of State, not TransCanada; correct?

16 A. That is correct.

17 Q. And with respect to the unanticipated discovery plan
18 that is attached as an exhibit to Mr. Robblee's
19 testimony, which you have adopted, it is your
20 understanding that that document has been submitted to
21 the Department of State and is subject to approval by the
22 Department of State and the State Historic Preservation
23 Office; is that correct?

24 A. I was not aware as to whether it had been submitted
25 yet, but it is part of the NEPA process that such a

1 document will become part of the record and submitted to
2 the State Department and will become part of the Final
3 Environmental Impact Statement.

4 MR. MOORE: Thank you. That's all I have.

5 MR. SMITH: Mr. Blackburn, any follow-ups?

6 MR. BLACKBURN: Yes.

7 REXCROSS-EXAMINATION

8 BY MR. BLACKBURN:

9 Q. I believe you testified, and I'm sorry I don't have
10 all -- I can't remember exactly. It's been a while now.
11 That there are no laws that particularly protect
12 paleontological resources?

13 A. On private lands.

14 Q. On private lands.

15 A. That's my understanding.

16 Q. And I just want to ask this question as a precursor.
17 Are you aware of the value of a full Tyrannosaurus Rex
18 skeleton fossil?

19 A. In general I'm aware that such a thing could be
20 worth millions of dollars, but again I'm not a
21 paleontologist.

22 Q. Are you aware that one of the property owners in
23 South Dakota along the pipeline route has discovered
24 three over time, three different Tyrannosaurus Rex
25 complete fossils on his land?

1 A. No, I am not.

2 Q. Are you aware it is possible for the landowner to
3 recover damages for the theft or removal or destruction
4 of a fossil that's found on their land?

5 A. Inasmuch as such a thing could be considered private
6 property, then yes.

7 Q. So a landowner would have recourse, legal recourse,
8 to recover for the damages to the paleontological
9 resources of value on their land?

10 A. I believe that is correct. I am not an attorney,
11 but I think that's right.

12 MR. BLACKBURN: Thank you. No further
13 questions. But I do have one other -- I'd like to make a
14 Motion here.

15 MR. SMITH: Staff, any follow up? Redirect?

16 REDIRECT EXAMINATION

17 BY MS. SEMMLER:

18 Q. Other than the clarification that we did not study
19 private property, you know, the recourse or easements, we
20 didn't study any of those documents as that is outside
21 the jurisdiction of this Commission; correct?

22 A. That is correct.

23 MR. SMITH: I think with that unless there are
24 any last Commissioner questions. Mr. Moore, did you have
25 something?

1 MR. MOORE: No. Nothing. Thank you.
 2 MR. SMITH: You're excused. Thank you very
 3 much.
 4 THE WITNESS: Thank you.
 5 MR. SMITH: Mr. Blackburn, you have a Motion you
 6 want to make?
 7 MR. BLACKBURN: Yeah. I'd like to move to
 8 strike from the record a comment made by you, Mr. Smith,
 9 related to the -- during the discussion of the NEPA
 10 process where you referred to that this may be a PR
 11 opportunity, that discussion.
 12 I'm not sure whose PR opportunity you're talking
 13 about, the Commission's, TransCanada's, or ours. But in
 14 any case, it seems to relate to the motivation of the
 15 parties here rather than to the questions. And I'd move
 16 to strike any comment related to the motivation of the
 17 parties for bringing questions.
 18 MR. SMITH: The Motion is granted. My apologies
 19 for that. I apologize for making the comment. I'm
 20 sorry.
 21 With that, we're at noon which would seem to be
 22 a logical break time. And what's the pleasure of the
 23 Commissioners?
 24 CHAIRMAN JOHNSON: I haven't eaten a meal in so
 25 long I hardly know how long it takes.

1 MR. SMITH: Are you hungry, though? That's the
 2 issue. 1:30 or --
 3 CHAIRMAN JOHNSON: 1:15.
 4 COMMISSIONER HANSON: 1:30.
 5 MR. SMITH: 1:30 is the consensus of the
 6 Commission. So we'll resume at 1:30. And until then
 7 we're in recess. Thank you.
 8 (A lunch recess is taken)
 9 MR. SMITH: Good afternoon, everyone. It's a
 10 little bit after 1:30, our scheduled recess ending time.
 11 And so we'll bring the hearing back to order in HP09-001,
 12 TransCanada Keystone Pipeline, LP.
 13 We were proceeding with staff's direct case and,
 14 Ms. Semmler, please call your next witness.
 15 MS. SEMMLER: I would ask Mr. James Arndt to
 16 please take the stand.
 17 (The witness is sworn by the court reporter)
 18 DIRECT EXAMINATION
 19 BY MS. SEMMLER:
 20 Q. Good afternoon. Could you please introduce yourself
 21 and give us a little explanation of your work and
 22 educational background.
 23 A. Okay. My name is James Arndt. I work for Natural
 24 Resource Group as a senior consultant. My address is
 25 1000 IDS Center, 80 South Eighth Street in Minneapolis,

1 Minnesota.
 2 My educational background, I have my B.S. in soils
 3 and natural resource management from the University of
 4 Wisconsin-Stevens Point and my master's and my PhD in
 5 soil science from North Dakota State University.
 6 My educational background is I spent 15 years as the
 7 supervisor of the soil and water environmental laboratory
 8 and other various capacities for North Dakota State
 9 University. In that soils laboratory we worked with the
 10 NRCS doing cooperative soil survey investigations of
 11 North Dakota, both east and west North Dakota.
 12 I performed soil water compatibility analyses and
 13 soil salinity analyses, and I actually specialized in
 14 wetlands investigations. I worked at North Dakota State
 15 University until 1995.
 16 And in 1995 I went to Minneapolis and became a
 17 consultant for Peterson Environmental Consulting where my
 18 primary responsibilities were to do soils investigations,
 19 wetlands work. I did several portions of environmental
 20 impact statements. One for Devil's Lake, the Devil's
 21 Lake out in North Dakota. And I started doing a lot of
 22 pipeline work.
 23 In 1996 we did a soils investigation to take a look
 24 at soils limitations for the Alliance Pipeline utilizing
 25 GIS and NRCS digital soils products.

1 We expanded that into doing three or four other
 2 projects for Peterson Environmental Consulting. I left
 3 Peterson Environmental Consulting four years ago to go to
 4 Natural Resource Group where I have been working
 5 primarily in soils issues and wetlands issues, again,
 6 doing resource reports for soils and geology.
 7 I've also been involved in writing agricultural
 8 impact mitigation plans in Minnesota, Wisconsin, and
 9 Illinois. And also completed a couple of organic farm
 10 appendices to those plans.
 11 Q. And did you write and submit prefiled testimony for
 12 this proceeding?
 13 A. I did.
 14 Q. And do you see that there beside you as S4?
 15 A. S4. I do.
 16 Q. And if you were asked those questions today, would
 17 you answer them the same? Do you have any corrections or
 18 deletions of any sort?
 19 A. No corrections or deletions. I would answer the
 20 questions in the same manner.
 21 Q. What portions of the Application did you review?
 22 A. I reviewed the soils portion, which was
 23 Section 3.5.3.4, the erosion and sedimentation section,
 24 to determine whether a sufficient level of detail was
 25 provided to assess limitations and soil-related hazards

1 along the pipeline right of way.
 2 I also reviewed the construction mitigation plan,
 3 the CMRP, to determine if those items would sufficiently
 4 be addressed, soil limitations and hazards be
 5 sufficiently addressed such that the affected areas could
 6 be properly restored to the extent practicable.
 7 Q. Were any questions you had based on that review
 8 sufficiently answered by the Applicant through the
 9 discovery process?
 10 A. I did have originally several questions on the
 11 Application. And to give TransCanada credit, I did ask
 12 several specific questions for more detail on
 13 soils-related limitations and soils-related hazards. And
 14 they were all appropriately addressed in their responses,
 15 primarily in response 3 for staff.
 16 And one of the things that I would like to actually
 17 expand upon that was present in the responses that
 18 TransCanada produced, I did provide a couple of
 19 resources. And these are directly -- these are actually
 20 in the record so they don't have to be addressed again.
 21 But one of the things that I did ask was for
 22 additional soils information in order to establish more
 23 completely the distribution of soil characteristics and
 24 soil limitations along the right of way in South Dakota.
 25 This was done by assessing the -- in the GIS assessing

1 the spacial distribution of soils along the right of way
 2 and then utilizing the digital attribute data to identify
 3 specific characteristics and limitations that would
 4 affect soil quality and also constructibility and several
 5 other issues.
 6 This is common technology that is used -- that I
 7 have used on several pipeline projects.
 8 And what we have in the first table is an example of
 9 the detailed soil analysis that TransCanada did provide.
 10 And what it basically shows is all of the information
 11 that would be provided on a soils survey mile posted by
 12 entry and exit mile posts for the entire route through
 13 South Dakota.
 14 It identifies the map units, the soil map units, by
 15 mile post. And it also shows several specific
 16 limitations. And these are mile posted again as they
 17 would be in the county soils survey.
 18 And the type of limitations that we have are shallow
 19 bedrock. All shallow restrictive layers, drought prone
 20 soils, steeply sloping soils, saline sodic and saline
 21 sodic soils, which I'll discuss in a little while. Low
 22 or high pH, lower in vegetation potential. Compaction
 23 prone, wind prone, erosion prone, and severe water
 24 erosion prone, stony or rocky soils, and prime farm land.
 25 And these are characteristics that would be

1 important for determining soil quality and some aspects
 2 of constructibility along the pipeline right of way.
 3 Q. Do you believe the tables and other information --
 4 A. Can I just expand a little bit more?
 5 Q. Certainly.
 6 A. Okay. I'd like to draw your attention to the second
 7 set of tables. I think there was a few surprises. I had
 8 a few surprises in these tables. There was a second page
 9 of tables that I provided that shows a centerline summary
 10 and the centerline summary for the same types of
 11 limitations provided by county. And this was something
 12 that was not done in the Application.
 13 And, again, the distribution of these soil
 14 limitations and soil properties are provided by county.
 15 And what I'd like to draw your attention to would be like
 16 the saline soils. They have miles of saline soils with a
 17 total of 74.18 miles of saline soils would be expected to
 18 be encountered along the 313 miles right of way in
 19 South Dakota.
 20 They have a percentage of that. That's 23.6 percent
 21 of saline soils would be expected. Not very much sodic
 22 soils but saline sodic soils would also account for a
 23 significant mileage along the corridor, and that would be
 24 65.97. Total percentage would be around 45 percent of
 25 soils in saline or saline sodic categories.

1 The second example -- and this is to show you how
 2 this information can be utilized by TransCanada and by
 3 the Public Utilities Commission in assessing
 4 environmental impacts and hazards along the right of way.
 5 On page 41 of the red line Application I draw your
 6 attention to the second paragraph where it indicates that
 7 there are scattered areas of saline or sodic soils known
 8 to occur in the project region specifically around
 9 Butte County.
 10 And if you take a look at the table, again, they had
 11 not done this analysis to this level of detail in the
 12 Application. Butte County has a relatively low crossing
 13 length. And there are other counties that have
 14 significantly more proportions of saline sodic soils.
 15 They call them sensitive soils here and that they would
 16 have low reclamation potential.
 17 And if you take a look at the last paragraph, again
 18 they talk about low reclamation potential soils. And the
 19 last sentence in that paragraph that continues on to
 20 page 42 indicates that the success of stabilization and
 21 restoration efforts in these areas, being saline and
 22 sodic soils, may be limited unless additional treatments
 23 and practices are employed to offset the adverse physical
 24 and chemical characteristics of the soils.
 25 Now again this does not mean that TransCanada and

1 **Keystone, that this is going to be a significant problem.**
 2 **But it is going to have to be a problem that is**
 3 **addressed, and they are addressing it. And we'll be**
 4 **discussing it later on when we talk about their con/rec**
 5 **units to be setting up in cooperation with the NRCS.**
 6 **Q.** So do you believe then that these tables, this other
 7 information that you received, does show the Applicant
 8 has an understanding of the need for specific
 9 construction reclamation to deal with this extreme
 10 variety of landform and soils?
 11 **A. Well, I do. In the Application and in the**
 12 **Construction Mitigation and Reclamation Plan there was**
 13 **really no mention made of the construction and**
 14 **reclamation units.**
 15 **But now they are proposing to develop construction**
 16 **reclamation units that can be utilized, basically mapped**
 17 **on the ground to identify areas where there may be**
 18 **specific -- site-specific problems that they can**
 19 **basically adapt their construction procedures to on a**
 20 **site-specific basis.**
 21 **Q.** So then while a lot of the questions you had were
 22 because that information wasn't necessarily contained in
 23 the CMRP, the Construction Mitigation Reclamation Plan,
 24 you did just testify then that that information per the
 25 Applicant's response to your question will all be

1 contained in these con/rec unit maps. And you do believe
 2 that is sufficient; correct?
 3 **A. Well, they've provided a summary of what they have**
 4 **considered their construction reclamation units to be.**
 5 **And it seems like -- it seems to me that it's very**
 6 **appropriate and a very good start. They are going to be**
 7 **collaborating with the NRCS and I understand from Kara**
 8 **that they are in the process of doing that now.**
 9 **So they should be actually getting some local expert**
 10 **assistance in dealing with some of the more unique**
 11 **problems that there may be with construction in these**
 12 **particular areas.**
 13 **And what I would like to say is I wanted -- if I**
 14 **were going to define what a construction reclamation unit**
 15 **would be is it would be a mapping unit that would have**
 16 **internally consistent soil characteristics. And these**
 17 **characteristics would respond similarly to construction.**
 18 **Those units may be combined with other units in a**
 19 **complex that would be repeating on the landscape.**
 20 **However, those units would actually be a management unit**
 21 **that they could utilize to identify specific construction**
 22 **techniques as well as reclamation techniques that would**
 23 **be appropriate.**
 24 **Q.** And do you have a recommendation then regarding
 25 the -- those maps and whether they should be filed here

1 at the PUC?
 2 **A. The recommendation that I have in testimony and that**
 3 **I would provide to the Commissioners is that the PUC**
 4 **basically make it a condition or a requirement that**
 5 **Keystone Limited Partnership provide its con/rec unit**
 6 **classification system and the corresponding pipeline mile**
 7 **post references for those units within South Dakota prior**
 8 **to construction and that this classification system be**
 9 **prepared in accordance with an appropriate agency, which**
 10 **would be in this case the Natural Resource Conservation**
 11 **Service.**
 12 **Q.** Do you have any further recommendations regarding
 13 alternate soil handling procedures?
 14 **A. Alternative soil handling procedures is something**
 15 **that has come up. It is not a universally accepted**
 16 **standard, industry practice, to do the type of things**
 17 **that I'm going to be discussing.**
 18 **However, it has been a requirement to adapt to**
 19 **specific soil quality issues in Wisconsin and Minnesota**
 20 **and as well as in Canada. And what I'm calling**
 21 **alternative soil handling procedures is also something**
 22 **that should not be thought of as being universally**
 23 **applicable to similar settings up and down the pipeline.**
 24 **It would be designed for particularly sensitive**
 25 **areas. You know, very high value agricultural areas.**

1 **Areas where a degradation of soil quality would be**
 2 **particularly important.**
 3 **And what I'm basically calling out for here is**
 4 **basically a triple lift. Because there are several soils**
 5 **that have very dramatically different subsoil**
 6 **characteristics. So usually when you're doing most**
 7 **pipeline construction you consider the topsoil to be the**
 8 **most valuable horizon. That's the one that is stripped**
 9 **and treated and segregated separately. And then there's**
 10 **the subsoil underneath that which basically continues to**
 11 **the bottom of the trench.**
 12 **There are certain soils that have very poor quality**
 13 **subsoils that underlie much better quality subsoils. And**
 14 **these particular situations you may want to in certain**
 15 **situations treat these three separate entities as a -- to**
 16 **be segregated separately along the pipeline route.**
 17 **The examples they've provided in testimony would be**
 18 **both physical and chemical characteristics, and the**
 19 **chemical characteristics have been primarily adapted in**
 20 **Canada. The work that has been done in Minnesota and in**
 21 **Wisconsin deals with a very strong textural discontinuity**
 22 **when there may be very course textures under fine**
 23 **textures.**
 24 **So when you're doing the segregation during the**
 25 **pipeline construction process you basically are mixing**

1 course and fine textures in the subsoil. And that can
2 change the hydrologic characteristics and lower the plant
3 productivity and the soil quality.

4 The same type of a thing can happen when you have a
5 lot of soluble salts which basically compete with plants
6 for water. And if you bring the zone of soluble salts up
7 within the rooting zone that would not be representative
8 with a native soil, you may have problems with
9 reclamation. And Keystone did recognize this in their
10 Application. I do think that they have probably more of
11 this type of soil than they originally had thought.

12 So the recommendations that I would have would be to
13 basically incorporate that type of an analysis, taking a
14 look at these very special soils and special settings
15 where a decrease in soil quality would have a
16 particularly negative impact and incorporate those in
17 these con/rec units or construction reclamation units.

18 Q. There was some rebuttal filed by Mr. Schmidt and
19 just if you have any comments regarding what he did file?

20 A. Uh-huh. Mr. Schmidt, again, the information that
21 was provided in response to my queries in 3, which was
22 a -- counter response 3, third set, was very good.

23 The one question that I did have about something
24 that Mr. Schmidt said, and it's on his rebuttal
25 testimony, is he indicates that it's not really practical

1 to try to identify these soils. And that you really can
2 just take a look at the surface of the soil and you can't
3 really tell what's going on in the subsurface.

4 But again if you take a look at these as applicable
5 to very specific settings, some of which can be
6 identified by land use and by the NRCS, there is
7 technology right now that is -- has been used for several
8 years in the precision agriculture where they can go in
9 and utilize a multifunction probe and probe the soil and
10 determine the penetration resistance, the presence of
11 paralithic shale. They can determine the salinity of the
12 subsoil and various subsoil layers in addition to several
13 other characteristics.

14 The probe is attached to a GIS unit and basically
15 allows them to run right down the centerline taking
16 samples every 100, 150 feet. And they can probably go
17 through several miles in one day. This is something that
18 has been done on several pipeline projects in Wisconsin.
19 And it's probably more commonly associated with
20 monitoring.

21 Q. You specifically mentioned the presence of sodium
22 bentonite and saline sodic soils could pose some
23 challenges. If you could just tell us what the
24 challenges are for those two types of soils and just in
25 layman's terms what it means.

1 A. Sodium bentonite is a material that was recognized
2 as being problematic in the Application. And it's also
3 been recognized as being problematic in a lot of the
4 responses.

5 And what it is is it's a two-to-one expandable clay
6 that is dominated -- there are cations that are
7 exchangeable on this clay. And when it's saturated with
8 respect to sodium when it gets wet, the sodium has a
9 higher hydrated radius and it blows these particles
10 apart.

11 So the bentonite has a tendency to slick in water,
12 becomes very greasy when it's wet, and then when it dries
13 it actually forms a crust. The sodium affected soils
14 that -- they would have problems with germination because
15 of the crust on the surface. And the sodium bentonite
16 once it gets wet can also serve as a slipping plane and
17 allow for slumping. So the distribution of sodium
18 bentonite is a particular issue.

19 And when we get into the saline sodic soils these
20 are soils that are actually very common range soils, and
21 they are agricultural soils to a large degree at least in
22 North Dakota. And they are leached in the surface and
23 they have a sodium affected layer in the middle and then
24 they have a very saline soil that is in the lower portion
25 of the subsoil.

1 And if these zones are mixed, again, you can have
2 some problems because you bring the salts up into the
3 rooting zone and creating conditions where you might have
4 crop problems.

5 Q. Specific then to sodium bentonite and the challenges
6 that you just described, did the Applicant accurately
7 identify those challenges and list proper methods for
8 dealing with them?

9 A. They did from the standpoint of construction. I
10 believe they did. And in the response that they had in
11 the third set of responses they also did identify a suite
12 of construction measures that could be utilized to
13 minimize impacts and also mitigate impacts affected with
14 saline sodic soils.

15 So what we're really looking at here is the
16 Construction Mitigation Reclamation Plan is kind of like
17 a toolbox. And the con/rec units that are being
18 developed the way I perceive them would be a mechanism to
19 assist the Applicant, which would be TransCanada, in
20 utilizing the most appropriate construction technology to
21 that particular situation.

22 Q. The sand hills region is another diverse area that
23 the pipeline will cross. Are the Applicant's data
24 procedures for addressing the challenges in this area
25 appropriate, and do you have any recommendations specific

1 to these areas?

2 **A. Well, when I was looking at the conservation -- or**
 3 **the Construction Mitigation and Reclamation Plan it was**
 4 **one of the areas where they actually did identify a**
 5 **land-based unit called the sand hills where they called**
 6 **for specific training techniques and specific**
 7 **construction techniques to appropriately go through the**
 8 **area and minimize their impacts on natural resources.**

9 **They had a series of bullets in the construction**
 10 **mitigation plan that dealt with how they were going to**
 11 **construct through there. I believe that what they had**
 12 **proposed was appropriate and probably could be used as a**
 13 **template for how they would address progressing through**
 14 **and constructing through several other areas in**
 15 **South Dakota where they may have not similar problems --**
 16 **actually would be quite different problems but where they**
 17 **might be utilizing different construction techniques.**

18 **And that might involve full topsoil stripping,**
 19 **partial topsoil stripping, or just trench only topsoil**
 20 **stripping, identifying areas where potential triple lift**
 21 **would be indicated due to the sensitivity of that area.**

22 **So the sand hills region I thought that they did --**
 23 **they did a good job on that. They didn't originally**
 24 **identify the specific soil types that they were concerned**
 25 **about. However, they did provide a large table that now**

1 **does identify not only saline soils and wetland soils but**
 2 **blowout soils and other areas that would be sensitive in**
 3 **that region.**

4 **Q.** So generally then does it appear from your review
 5 that these con/rec units we've been referring to and
 6 proposed by the Applicant do properly identify situations
 7 where site-specific procedures could be implemented to
 8 minimize the impacts and to facilitate restoration and
 9 reclamation?

10 **A. I have not seen the system. I know that they are**
 11 **working on it. And I know that the plan is sound. And I**
 12 **think that their approach is sound. But, again, I think**
 13 **that the structure that's been provided is a good one**
 14 **that will minimize impacts and actually result -- what is**
 15 **the term? That they'll be -- the impacts will basically**
 16 **be acceptable for the purposes of this project.**

17 **Q.** Finally, anything else that you'd like to share with
 18 the Commission? And if not, I'll turn you over for
 19 cross.

20 **A. Nothing. Nothing more. Thank you.**

21 MR. SMITH: Applicant.

22 MR. MOORE: Can I have one moment? Thank you,
 23 Mr. Smith. I have no questions for Dr. Arndt at this
 24 point.

25 MR. SMITH: Dakota Rural Action.

CROSS-EXAMINATION

1 BY MR. BLACKBURN:

2 **Q.** Dr. Arndt, in your testimony you noted that you
 3 evaluated -- certain sections of Keystone's Application
 4 you utilized your region knowledge of soil
 5 characteristics and reviewed Keystone's responses to your
 6 data requests?
 7

8 **A. That's correct.**

9 **Q.** In preparing your testimony. Did you look at
 10 anything else?

11 **A. I did take a look at their tables. I also took a**
 12 **look at several soil maps. There are a lot of resources**
 13 **for soils that are available on the internet. I did take**
 14 **a look at several of the soils that they have that are**
 15 **saline sodic. I did take a look at the distribution. I**
 16 **just basically did a very brief thumbnail QAQC of the**
 17 **tabulated data that they provided.**

18 MR. SMITH: One second. Could I please ask you
 19 to move the mic? Especially when you're looking over
 20 that way. The mics -- I'm sorry to interrupt.

21 **Q.** So you're doing a thumbnail -- what were the
 22 abbreviations you used there? You said a thumbnail Q?

23 **A. Quality assurance/quality control. I basically**
 24 **looked at the table. I provided the comment to the PUC**
 25 **regarding my need for a little bit more data and also**

1 **established how I would go about getting it, and then**
 2 **they provided the response.**

3 **And this is -- it's relatively new technology and**
 4 **it's also technology that our firm developed in 1996 to**
 5 **deal with the STATSGO and also now with the SURGO and so**
 6 **you really should have a soil scientist taking a look at**
 7 **the data.**

8 **Q.** Did they provide the data to you in electronic form
 9 or hardcopy?

10 **A. They provided the data to me as basically hardcopy**
 11 **from an Excel table.**

12 **Q.** Uh-huh. So along the lines of this is a hardcopy?

13 **A. Uh-huh.**

14 **Q.** Okay. Let's see. When you -- I mean, looking at
 15 your qualifications you've obviously been concerned and
 16 working with soils for a very long time here. And it
 17 seems that trying not to summarize what you've been
 18 saying but that there were some concerns that you had
 19 that perhaps TransCanada's level of information wasn't
 20 detailed enough in some areas that partially it has to do
 21 with how the quality of the analysis, the amount of
 22 detail that was provided for the analysis and that
 23 TransCanada didn't provide in some areas as much detailed
 24 information as you would have preferred.

25 Is that a fair -- I'm trying to figure out a

1 layman's way of saying some of the concerns that you had.
 2 Is that a fair generalization?
 3 **A. I think that's a fair assessment. But this whole**
 4 **process is an iterative process. They provide an**
 5 **Application to the PUC. The PUC hired experts to take a**
 6 **look at the Application, provide comments so that**
 7 **TransCanada could then respond. So this is a process**
 8 **that works in my opinion.**
 9 **Q.** Are there -- is info from landowners on soil types
 10 and soil vulnerabilities or sensitivities a useful source
 11 of information in doing an analysis of this sort?
 12 **A. I would say that landowners, depending on how much**
 13 **land they actually use and how intensively it's used,**
 14 **probably know their land better than anyone else. I've**
 15 **done soil investigations in dilts lisam. One's acid.**
 16 **One's basic. The landowners there are very aware of the**
 17 **capability of the land.**
 18 **Q.** Did you talk to any landowners in preparation for
 19 your testimony today before the Commission?
 20 **A. No. I had no opportunity to talk to landowners.**
 21 **Q.** Did you review any of the comments provided at the
 22 public hearings from landowners expressing their concern
 23 with different soil issues on their lands?
 24 **A. No. I reviewed the Application.**
 25 **Q.** Okay. Did staff convey any of the information from

1 the hearings to you?
 2 **A. The basic fact that they had hearings. No specific**
 3 **instances were brought up, and no specific soil quality**
 4 **related issues were mentioned.**
 5 **Q.** You also mentioned that you had -- starting a number
 6 of things. You mentioned that the sand hill analysis was
 7 fairly good, in your opinion, but other areas could
 8 benefit from the same level of analysis. Other parts of
 9 South Dakota along the route would benefit from a greater
 10 level of analysis more like that was done for the sand
 11 hills.
 12 Could you describe what those areas are?
 13 **A. Well, the areas actually have -- I have not done a**
 14 **analysis of the construction reclamation units that**
 15 **Keystone is working on. They are working with the**
 16 **Natural Resource Conservation Service, and I am sure they**
 17 **will be working with area soil scientists and possibly**
 18 **some local soil scientists who will have local expertise**
 19 **and local knowledge of these areas and these conditions.**
 20 **Q.** Thank you. Are there -- these areas that you would
 21 personally recommend that some alternative soil handling
 22 procedures be applied in, or should that be applied for
 23 the entire line?
 24 **A. I think that that is something that would be**
 25 **discussed within the Natural Resource Conservation**

1 **Service. I don't think that it would be appropriate**
 2 **for -- to expect that an Applicant would be doing triple**
 3 **lift soil handling procedures through the entire line.**
 4 **And one of the reasons for that is that there may be a**
 5 **requirement for additional work space. There may be some**
 6 **tradeoffs that have to be assessed for a given particular**
 7 **area.**
 8 **So if you do have to do triple lift, you have to**
 9 **have a space to put three lift soils. In a 110-foot**
 10 **right of way there may be some space limitations, and**
 11 **they may require a wider right of way under those**
 12 **circumstances.**
 13 **Q.** What your analysis looked at is the quality of
 14 information that's available to TransCanada or that
 15 TransCanada has provided and the amount of information
 16 that's been provided.
 17 Is access to information alone, does that guarantee
 18 that the soils will be treated properly during
 19 construction?
 20 **A. Well, there is going to be environmental oversight**
 21 **through environmental inspectors. And they -- similar to**
 22 **what they would be in the sand hills area, they would be**
 23 **trained. I would imagine that they would be trained in**
 24 **the specifics of the construction reclamation unit that**
 25 **they're going through and some of the particular**

1 **considerations.**
 2 **The value of the data as -- again, as I said, it is**
 3 **equivalent to the level of detail in a county soil**
 4 **survey. And I could go on for a long time about how soil**
 5 **surveys are done.**
 6 **But a lot of the soil map units that are provided in**
 7 **the county soil survey are complexes, and they contain**
 8 **more than one type of soil that might be dissimilar. And**
 9 **the Natural Resource Conservation Service estimates the**
 10 **percentage of the soil composition of these complexes.**
 11 **It does not indicate where there's going to be**
 12 **exactly. And that's something that would be dealt with**
 13 **onsite during construction.**
 14 **Q.** What regulatory agency's responsible for ensuring
 15 that construction is performed appropriately, vis-a-vis
 16 soils?
 17 MS. SEMMLER: I think that may call for a legal
 18 conclusion. If you feel comfortable answering but --
 19 **A. And I guess I would agree with that. In other**
 20 **states it's the Department of Agriculture. In other**
 21 **states they may have agricultural impact mitigation**
 22 **plans. And in other states they may have environmental**
 23 **monitors that are actually -- have oversight and report**
 24 **to agencies.**
 25 **I do not know what the requirements are in**

1 **South Dakota. But there will be an oversight that is**
2 **indicated in the plans for environmental monitors, and**
3 **I'm sure that the environmental monitors will be trained**
4 **in how to handle construction through agricultural lands**
5 **and range lands.**

6 **Q.** Were you given any of the materials provided by
7 landowners to the Commission on what some landowners saw
8 as improper construction techniques used in Keystone I,
9 Keystone east construction process to review?

10 **A. I have not been provided anything specific with**
11 **Keystone East. But with any pipeline construction there**
12 **are going to be some controversies as to how land is**
13 **taken care of.**

14 **There is a process again in any pipeline**
15 **construction where there is monitoring and there is**
16 **compensation so there's a legal process for a landowner**
17 **if he believes that his land has been abused or that**
18 **something hasn't gone right, that he can petition and**
19 **find some recourse.**

20 **Q.** A lot of the -- my understanding is that the reason
21 for looking at -- for reclamation is to ensure -- to
22 limit soil erosion primarily and to ensure that the
23 species of plants that grow there again and/or crop
24 productivity is appropriate.

25 Are those the core reasons for reclamation?

1 **A. Well, the reason for reclamation is to basically**
2 **bring the soil back to the best condition that is**
3 **practicable after construction. I don't think that**
4 **anybody would think that you would be getting -- if**
5 **you're crossing an agricultural field after construction,**
6 **one year after construction you're going to be getting**
7 **100 percent of your original yield, which is one of the**
8 **reasons why they compensate landowners generally on a**
9 **sliding scale for their assumed impacts to yields that**
10 **would be a result of pipeline construction.**

11 **Q.** And reclamation is -- part of that purpose for
12 reclamation is to limit future soil erosion; is that
13 correct?

14 **A. That would be one component.**

15 **Q.** Uh-huh. You may or may not be aware that the
16 pipeline is -- if it was constructed, would likely be
17 constructed with a 4 foot depth of cover.

18 **A. Uh-huh. That's typical.**

19 **Q.** And so, therefore, one of the reasons -- since
20 erosion would remove soils, would it not, above the
21 pipeline?

22 **A. Well, that has -- yeah. That actually has been an**
23 **issue in several other states that's been looked at.**

24 **Q.** Uh-huh.

25 **A. The fact that, you know, basically the depth of**

1 **cover that is required after construction is something**
2 **that also is very landowner specific. So if you have a**
3 **4 foot depth of cover in Minnesota and a knob and you**
4 **have a landowner that's basically plowing up and down the**
5 **hill and isn't using wise conservation practices and**
6 **allowing his hill to erode, you can have erosion that**
7 **would go below the 4 foot depth of cover. I could see**
8 **that happening in several circumstances.**

9 **Q.** Would depth of cover be only lost, though, were
10 there improper farming practices? And remember that the
11 life of the pipeline is projected to be around 50 years.

12 MS. SEMMLER: Now this is outside the scope of
13 direct testimony. We didn't include this in prefiled
14 testimony. So I'd make that objection.

15 MR. SMITH: Well, I -- partially it's my own
16 inability to remember exactly who testified -- but
17 somebody testified as to erosion; right? I just honestly
18 can't remember off the top of my head.

19 MS. SEMMLER: I would simply argue it wasn't
20 analyzed to the extent that now cross is heading. But I
21 anticipate that Commissioners are interested in this
22 information, and I anticipate my objection won't be
23 successful but --

24 MR. BLACKBURN: Where I'm heading is just
25 another question or so, and that was just to confirm that

1 one of the things that the witness did not examine was
2 the potential for soil erosion along the route on a mile
3 post basis to result in a loss of depth of cover.

4 And if the witness did not do that, that's fine.
5 I just want to get that on the record that the witness --

6 **Q.** So I guess my question would be --

7 **A. I did not analyze that.**

8 MR. BLACKBURN: And that's all I'm asking for is
9 just to confirm that that was not reviewed and that, you
10 know, I don't believe that staff analyzed the risk of
11 loss of depth of cover over time of the pipeline, and the
12 witness wasn't asked to do that.

13 MS. SEMMLER: I think counsel's testifying at
14 this time so if you could get back on track.

15 MR. SMITH: The objection is overruled. Please
16 proceed. Thank you.

17 MR. BLACKBURN: Thank you.

18 **Q.** So just again to restate, you did not analyze
19 whether the risk of loss of depth of cover would be to
20 this pipeline from soil erosion anywhere along the route
21 of the pipeline?

22 **A. No, I did not.**

23 MR. BLACKBURN: Thank you. No more questions.

24 MR. SMITH: Thank you. Commissioners.

25 COMMISSIONER HANSON: Dr. Arndt, when I look at

1 your resume I am reminded of William Shakespeare.
 2 THE WITNESS: Much ado about nothing?
 3 CHAIRMAN JOHNSON: Very good. Very quick.
 4 COMMISSIONER HANSON: Very well done. I guess
 5 we could quote from a lot of his plays, couldn't we? No.
 6 A lot of people -- actually it's a compliment, not a
 7 derogatory statement.

8 A lot of people say they can't believe that he
 9 wrote as much as he did, that he was as prolific of a
 10 writer and accomplished as much as he did, and when I
 11 look at your resume I can't believe that one person has
 12 written and participated and done as much as you and
 13 you've been extremely busy. And obviously we should take
 14 note of your expertise. I sincerely appreciate your
 15 testimony.

16 You were -- I was especially interested in
 17 the -- I believe you said sodium bentonite, and you
 18 talked about cationic process, and I'm somewhat familiar
 19 with that having been in the water purification business
 20 and ionic and cationic processes.

21 And I had asked questions here -- I don't know
 22 if you were here yesterday. Were you in the audience
 23 yesterday?

24 THE WITNESS: I was in the audience yesterday.

25 COMMISSIONER HANSON: I was curious at that

1 point about the laying of pipe and how they might get
 2 past cliffs and things of that nature. It was brought up
 3 by some of the landowners that as the route traversed
 4 through river areas and valleys and there were some areas
 5 where there were cliffs, and they were wondering how they
 6 might get through those areas.

7 Understanding that destabilization can take
 8 place with the movement of soils even if they're somehow
 9 stacked back in the same order, do you have concerns with
 10 that process?

11 THE WITNESS: As far as the stabilization of
 12 some of the -- primarily it's probably tertiary sediments
 13 that would be dominated by the sodium bentonite. Usually
 14 they'll be layers, and if they're particularly steep,
 15 they probably won't be sodium bentonite.

16 Sodium bentonite when you take a look at the
 17 landforms that are created by the presentation of the
 18 type of erosion that you have with sodium bentonite you
 19 think of some of the areas like maybe in the Badlands of
 20 North Dakota where you'll see very rounded hills. The
 21 sodium bentonite, that erosional process really doesn't
 22 hold a real steep slope very well.

23 Although it can, depending upon what's holding
 24 up the slope. If it's capped by sandstone, obviously
 25 it's going to form a butte, and it's going to have steep

1 slopes.

2 Typically what pipeline construction will do,
 3 and again I can't -- I can only speak from the experience
 4 that I have on other pipelines but when they are going up
 5 steep slopes they normally tend to follow the topography.
 6 But when they're going up and down, straight up and down
 7 a steep slope, they will vary the depth of cut that they
 8 have so that they can modify the angle that's actually
 9 required in the pipe bends.

10 So typically at the sharpest angles for these
 11 slopes is where you're going to have a fairly significant
 12 trench and a deeper pipe.

13 There are other things that they can do if they
 14 are having -- you know, in sodium bentonite areas the
 15 trench may be filled back with shale that is paralthic
 16 and it's not really hard rock but it forms pieces. And
 17 that can conduct water. So if you don't put in trench
 18 breakers, you'll basically have preferential water flow
 19 along the trench.

20 So I would imagine in these situations they
 21 would be putting in trench breakers to basically prevent
 22 that which may be particularly important because the
 23 sodium bentonite is unstable when it's wet.

24 COMMISSIONER HANSON: Thank you. So would it be
 25 fair to say then that there will be challenges -- in

1 essence, there could be significant challenges with the
 2 construction of the pipeline because of soils; however,
 3 they are not insurmountable by my means?

4 THE WITNESS: That's correct. I think if they
 5 experience areas that are going to be really problematic,
 6 you have to understand they're putting a pipeline in the
 7 ground and they don't want to put a pipeline in a place
 8 that has a poor chance for pipeline integrity. They
 9 would normally want to route around it.

10 So in particularly steep areas that are affected
 11 by sodium bentonite and some of these other areas I'm
 12 sure they would be looking to make some modifications to
 13 go around areas simply because of the fact that the
 14 integrity of the pipe would be compromised at some time
 15 in the future.

16 COMMISSIONER HANSON: Thank you. You had some
 17 suggestions, and as I read your testimony in different
 18 areas you stated -- no need to go and look at these, I
 19 don't believe. You stated, "Does not meet industry
 20 standards for presenting soil limitations along the
 21 pipeline right of way for the reasons described below."
 22 And then you describe a number of different challenges.

23 And in the very end of your testimony you state
 24 that Keystone has not yet identified specific areas
 25 requiring site-specific erosion and sediment control

1 plans.
 2 Do you wish to comment further on those?
 3 THE WITNESS: Site-specific erosion control
 4 plans I think would be called for again in areas where
 5 they are at a point where they really know exactly where
 6 they're going. And they have made a -- they have made
 7 the minor adjustments to avoid, you know, some of these
 8 features. And I'm sure they're still in that process.
 9 Also we have not really had a chance to take a
 10 look at the completed construction reclamation process
 11 that they're going through right now. I was very
 12 delighted to hear that they have already contacted the
 13 Natural Resources Conservation Service and that they will
 14 be working with them. Because sometimes if you start
 15 that process too late, you won't get any response from
 16 the Natural Resources Conservation Service.
 17 So at this particular juncture I'm sure that
 18 they'll be working collaboratively with them to identify
 19 areas that are going to be problematic.
 20 COMMISSIONER HANSON: Thank you very much.
 21 Again, I appreciate your testimony.
 22 Thank you, Mr. Smith.
 23 MR. SMITH: Other Commissioner questions?
 24 Commissioner Kolbeck, any questions?
 25 COMMISSIONER KOLBECK: I just have two. Could

1 you explain the problem with the clay again? When you
 2 said that the saline will collect more moisture and then
 3 expand and break is that something that happens after it
 4 dries when it's in the trench, or what exactly is the
 5 problem -- would it shale off on top?
 6 THE WITNESS: The definition of a saline
 7 affected soil is one that slakes, disperses when it's wet
 8 and becomes hard and massive when it's dry. And it has
 9 to do with the way sodium hydrates when it gets wet. It
 10 ends up pulling in water so it has a very large shell of
 11 water around the particular ion.
 12 And so when you have the sodium ions on the
 13 exchange site and it gets wet the particles that are
 14 forming the soil structure in this particular unit, they
 15 just basically blow apart. And so that's called
 16 dispersion.
 17 That's also one of the reasons why drilling mud
 18 that they use in HDDs is primarily bentonite; because
 19 it's very easy to mix in water. If you take a calcium
 20 saturated clay and try to mix it in water, it's going to
 21 be really hard. It's going to take forever, and it's
 22 going to be really lumpy.
 23 But a lot of the sodium saturated bentonite will
 24 form a mud very quickly. It's something they can
 25 utilize.

1 COMMISSIONER KOLBECK: Like with directional
 2 boring?
 3 THE WITNESS: Right.
 4 COMMISSIONER KOLBECK: That makes sense. But
 5 will the -- do you see any problems with this clay area
 6 with the top of the soil if it's done properly, could the
 7 erosion be mitigated to you said an acceptable level?
 8 THE WITNESS: I think that it can be mitigated
 9 to a practicable level. I think that there -- and this
 10 is something that has to be taken into consideration with
 11 the construction reclamation units is where to apply
 12 certain construction measures.
 13 This is something that happens all the time. I
 14 can give a little anecdote. Hugh Bennett was associated
 15 and him and another fellow named Kellogg are actually
 16 basically from North Dakota. And he was the first avid
 17 leader of the Soil Conservation Service. And he had a
 18 deputy that was from New York and they went out for a
 19 trip into North Dakota and the fellow from New York was
 20 just astonished that the people out there had let erosion
 21 go to the point where it was just amazing.
 22 And so I guess what I'm saying is that erosion
 23 is a natural feature on this landscape. And I don't
 24 think anybody should expect that they're going to prevent
 25 erosion in a landscape where every time you get 2 inches

1 of rain if you're in the back country and need skis to
 2 get out and you're getting an awful lot of sediment
 3 that's going into the coulees and the draws, it's a
 4 natural process and a very significant natural process in
 5 those areas.
 6 COMMISSIONER KOLBECK: And you had mentioned you
 7 did not study something that Mr. Blackburn had asked you.
 8 I didn't catch that last part of that conversation. You
 9 had not looked at what?
 10 THE WITNESS: Well, what Mr. Blackburn was
 11 talking about is there is a requirement for depth of
 12 cover.
 13 COMMISSIONER KOLBECK: Okay.
 14 THE WITNESS: And the Keystone TransCanada are
 15 utilizing 4 feet of cover, which is traditional. That's
 16 the normal amount of depth of cover. And that when you
 17 get into a situation where there's a strong amount of
 18 erosion going on you might be able -- if it gets extreme,
 19 you might even be able to have the pipeline exposed. I
 20 don't see that as being real significant.
 21 I think it's probably more of a potentially -- a
 22 potentially significant issue in areas where they're
 23 cultivating and probably doing some deep ripping to
 24 decompact. And normally that's not going to happen on
 25 hill slopes. But if the pipeline depth of cover is

1 reduced in an agricultural area and it goes from 4 feet
2 to 2 feet, you can have some problems.
3 COMMISSIONER KOLBECK: I see what you're getting
4 at. Thank you.

5 CHAIRMAN JOHNSON: First just a clarification
6 question. Did you prepare -- a couple of clarification
7 questions.

8 Did you prepare the summary sheet on the second
9 page of what was handed out?

10 THE WITNESS: I requested that information, and
11 it came from Keystone.

12 CHAIRMAN JOHNSON: Okay. Were you able to see
13 the work within these charts? I mean, were you able to
14 see what the formulas were essentially?

15 THE WITNESS: What they did, I requested that
16 they provide the definitions for the limitations, and
17 they did do that.

18 CHAIRMAN JOHNSON: Okay.

19 THE WITNESS: That was one minor exception, and
20 that was actually the depth to the restrictive layer
21 because there's lots of restrictive layers that are in
22 the database. But the dominant ones are paralithic and
23 lithic and I did take a look at the example database and
24 virtually all the restrictive layers are paralithic.

25 CHAIRMAN JOHNSON: Sure. So in your testimony

1 you note that originally the Applicant did not provide
2 sufficient information or organization to identify the
3 location, magnitude, and type of soil-related limitation.

4 I think in your testimony you then explained
5 that by and large those insufficiencies were corrected
6 through further information exchange.

7 THE WITNESS: They were.

8 CHAIRMAN JOHNSON: Did the insufficiency in the
9 original Application put up any red flags of concern to
10 you beyond just the fact that the information wasn't
11 there?

12 THE WITNESS: It was typical. I was surprised
13 to not see the information broken down by county. It was
14 broken down by state. And there were several limitations
15 that again I -- I would have been concerned with that
16 weren't present there that I had identified to them.

17 CHAIRMAN JOHNSON: Were those omissions, were
18 they so severe as to raise concern in your mind as to
19 whether or not, I mean, these folks knew what they were
20 doing enough to build a pipeline?

21 THE WITNESS: No, not at all. One of the things
22 that actually is continuing to amaze is the amount of
23 progress that's going on with geographic information
24 systems and information systems in general.

25 And there are a lot of people, a lot of pipeline

1 contractors and a lot of pipeline companies that really
2 aren't aware of some of the technology that's available.
3 Now a lot of it was developed with precision
4 agricultural. And precision agriculture, the landowner
5 basically does what's called an order 1 soil survey where
6 they map what's called a consociation, which means one
7 particular soil series.

8 And then they continually monitor yields on that
9 particular area so people that are involved in that or
10 that have yield monitors and know their soils, they
11 pretty much know what kind of yields they're getting off
12 of their ground.

13 CHAIRMAN JOHNSON: So at some point I think you
14 said -- and I'm going to try to paraphrase your testimony
15 so correct me to the extent I'm wrong.

16 You mentioned that the integrity of the pipe
17 could potentially be compromised in areas with high
18 sodium bentonite content; is that right?

19 THE WITNESS: If it's subject to slump. I think
20 that those are areas that are going to have to be -- if
21 they go through them and they can't avoid them, that is a
22 condition that will have to be considered.

23 Because anybody that -- if you see along the
24 sides of the river you'll see slumping. You take a look
25 at the sides of the Missouri River around here you'll see

1 sides of slumping.

2 CHAIRMAN JOHNSON: To go -- you're probably
3 aware that the Commission can't in a formal way route a
4 pipeline route. But are there particular soil
5 characteristics where you would say, boy, a person really
6 shouldn't put a pipeline there?

7 If they can avoid it, here are the places they
8 really shouldn't go through?

9 THE WITNESS: And I would expect that the NRCS,
10 they are cooperating with in the development of these
11 con/rec units would basically be able to do that. I
12 would give them a first shot by just taking a very
13 detailed look which I have not done at the --

14 CHAIRMAN JOHNSON: And I'm not talking about
15 specific areas. I'm talking about general
16 characteristics. I mean, what would you tell me if you
17 were going to give me the 3-minute lecture on, boy, here
18 are the areas you really want to avoid in general?

19 Anything come to mind?

20 THE WITNESS: Areas that, you know, basically
21 are dominated by sodium bentonite that are very steep, if
22 they can be avoided.

23 CHAIRMAN JOHNSON: You note -- I think you did a
24 good job in your testimony of explaining some of the
25 particular areas of concern with regard to South Dakota

1 soils. It would include soils with restrictive layers,
2 steep slopes high pH and highly wind and water erodible
3 soils.

4 Are there -- is this mixture of, you know, risk
5 factors or soil vulnerabilities unique to South Dakota?
6 Are there some best practices or standard operating
7 procedures that should be in place to deal with this set
8 of risk factors above and beyond what would normally be
9 encountered in other locales?

10 THE WITNESS: Again, what they're doing with
11 their Construction Mitigation Reclamation Plan is they --
12 it's built in flexibility so that if they're doing
13 erosion control, one of the important things that they
14 can vary is the spacing of the erosion controls.

15 So if you're on the highly erodible area and
16 you're looking at water bars, it's what type of erosion
17 control measure you use which is listed in the
18 conservation and reclamation plan and what the spacing
19 may be.

20 So I -- the only thing that I saw that was not
21 provided in the Construction Mitigation Reclamation Plan
22 was the accommodation of this potential for triple lift.

23 And, again, I think that it's very expensive,
24 and it also requires a lot of site-specific analysis.

25 But I think that there are areas where it's probably

1 something that they would want to have in their toolbox.

2 CHAIRMAN JOHNSON: Well, the reason I'm asking,
3 Dr. Arndt, is we've heard from a number of landowners
4 that their particular area, their particular spot of
5 range ground, is highly and perhaps even uniquely
6 erodible. I don't know enough to say whether that is the
7 case or not.

8 I mean, given your 25 years in this arena, I
9 mean, is it likely that there are areas that are uniquely
10 erodible for which the management techniques you
11 described will be insufficient?

12 THE WITNESS: There probably are some areas that
13 are going to be like that.

14 CHAIRMAN JOHNSON: And in those instances the
15 pipeline would need to be rerouted, or what would your
16 professional recommendation be?

17 THE WITNESS: My professional recommendation
18 would be to adapt the conditions of the Construction
19 Mitigation Reclamation Plan to ensure to the extent
20 practicable that the area gets reclaimed.

21 But probably the best thing to do is to ensure
22 that there are some -- some form, some method for
23 re-vegetating the area that's susceptible to erosion.
24 But if it is in an area where chemistry or some other
25 soil property prevents re-vegetation, and there could be

1 very many of those, there are a lot of other different
2 types of physical erosion controls that they can
3 implement in those areas.

4 CHAIRMAN JOHNSON: You have worked on a number
5 of pipeline projects and for a variety of folks who are
6 paying the bills on the federal level and the state
7 level.

8 I mean, are you familiar with on any of the
9 projects you've worked with where 10 or 15 or 20 years
10 after the fact it was -- it was plainly evident that a
11 pipeline had gone through that area, meaning that the
12 reclamation activities that were undertaken were
13 insufficient to return the area to, you know, practical,
14 useful, or similar to the way it was found?

15 THE WITNESS: I mean, if you take an aerial --
16 if you take a look at an aerial photograph of Wyoming
17 where they've got a lot of pipelines going through,
18 you'll see areas that have not re-vegetated similarly to
19 adjacent areas.

20 I believe that it would probably be somewhat
21 naive to assume that within two or three years you're
22 going to get re-vegetation to the point that you have off
23 right of way. And there may be areas where re-vegetation
24 is impossible.

25 If you go out to, you know, northwestern or

1 southwestern North Dakota or the area around Harding
2 County, there's a lot of bald spots or slick spots that
3 aren't vegetated naturally and they're going to be going
4 through those. So the expectation that they're going to
5 re-vegetate one of those areas is -- again, it's not
6 going to happen.

7 CHAIRMAN JOHNSON: And I know every area's going
8 to have -- you know, you've recommended that, you know,
9 these con/rec units be analyzed, and it's almost as
10 though there's a spot-by-spot plan for dealing with these
11 situations.

12 But in general from a bigger picture perspective
13 in those types of areas where re-vegetation would be very
14 difficult are there things the Commission needs to be
15 keeping in mind?

16 THE WITNESS: That's probably true. This is
17 green field. This is green field where there's no
18 existing pipe. But if it's an area to area
19 re-vegetation, I mean, if you're going to get 14 to 18
20 inches of rain and a dry year is 10, establishing
21 vegetation's going to be difficult.

22 CHAIRMAN JOHNSON: And you spoke -- I mean, you
23 talked about two or three years, you know, it would be
24 tough to expect. But looking longer term -- I mean, in
25 the short-term I think there's some understanding and

1 expectation that the Applicant would have the resources
2 to be able to make people whole with that.
3 But let's look long-term. Let's look out a
4 couple, three decades. Are there instances where you
5 could just tell a pipeline came through and it continues
6 to cause problems with regard to vegetation or sloping of
7 the land or soil types were not put back in the right
8 way?

9 THE WITNESS: Sure. And one of the reasons for
10 that is three decades ago they didn't do topsoil
11 stripping. They didn't do decompaction. They didn't do
12 soil segregation.

13 There are several -- I'm aware of several
14 scientific studies, actually the best of which come out
15 of Canada, where they have investigated the long-term
16 reclamation potential of pipelines in relationship to the
17 type of restoration process that was used at a particular
18 time.

19 And originally when they went through if they
20 didn't do any topsoil stripping, they didn't do any soil
21 segregation, and they didn't do any decompaction, they're
22 getting yield reductions that go out 10, 15 years.

23 But the latest research at least in the
24 agricultural areas is showing that with the methods that
25 actually came into being with the Federal Energy

1 Regulatory Commission started providing their plan of
2 procedures and they started utilizing topsoil stripping.
3 They did have environmental mitigation, and they had
4 environmental inspection. They had wet weather shutdown,
5 which is one of the more important things that a pipeline
6 can do. That the re-vegetation of the lands that would
7 be utilized for cropping for intensive agriculture, that
8 they are getting the reestablishment of preconstruction
9 yields, preconstruction yields meaning maybe 90 percent
10 of the off-right-of-way yields is occurring within four
11 or five years.

12 CHAIRMAN JOHNSON: So you're testifying that the
13 reclamation approaches and techniques being used today
14 are significantly more sophisticated than what was being
15 used a few decades ago?

16 THE WITNESS: Absolutely. Just the idea of
17 depth of cover. I'm familiar with a pipeline in
18 Minnesota that pipelines that were installed 30 years ago
19 they went through a wetland. What they basically did is
20 laid the pipe on top of the wetland and then covered it
21 up with peat, you know.

22 So yeah. The techniques are continuing to
23 improve as the, you know, technology to do the
24 environmental assessments prior to the siting of the
25 pipeline continue to improve. The equipment continues to

1 improve.
2 We've been talking about these SCADA systems.
3 Those are relatively new, and it's fairly high technology
4 and very appropriate technology.

5 CHAIRMAN JOHNSON: You testified that erosion is
6 a significant natural process. I mean, are you aware of
7 other pipeline projects that have gone to a standard
8 depth of cover of greater than 4 feet in highly erodible
9 areas?

10 THE WITNESS: I believe that they have done that
11 in some places in northern Illinois. You know, this is
12 corn and soybean country, and the cost per acre is
13 probably on the order of 3 to \$4,000. But they have gone
14 to some deeper depth of cover.

15 But, again, what you're talking about everything
16 that you do is a tradeoff. If you go to a deeper depth
17 of cover, you're going to a deeper trench. You're going
18 to have more storage. You're going to have more
19 disturbance, you know.

20 And any of the gentlemen from Keystone, I mean,
21 they've built lots of pipelines, and one of the things
22 that's kind of an axiom of construction is that there is
23 a whole series of tradeoffs to basically any activity
24 that you're doing.

25 CHAIRMAN JOHNSON: You described this process as

1 an iterative process and a process that works. Should
2 this Commission have any concern that -- I know the
3 thorough con/rec units are being done right now. Should
4 this Commission have any concern that you haven't
5 reviewed them prior to your testimony today? You haven't
6 had that opportunity?

7 THE WITNESS: I have not had that opportunity.
8 But, again, I have several friends in the NRCS, and
9 that's something that how the condition is written by the
10 Commission for these con/rec units, there might be some
11 leeway there that could give you an opportunity to take a
12 look at them.

13 You know, but again I think that just the
14 evidence that I've seen is that TransCanada has been very
15 responsive to my questions. And I think that they are
16 probably going to work effectively with the Natural
17 Resource Conservation Service in the development of these
18 units.

19 CHAIRMAN JOHNSON: Thanks very much.

20 MR. SMITH: Thank you. I'm going to -- I wanted
21 to follow up just a sec., if I might, on Chairman
22 Johnson's question there.

23 Would it be your thought -- and, again, your
24 condition was fairly clear in that you would like the
25 con/rec, as I understand it, details provided to the

1 Commission prior to commencement of construction.
 2 Is that a fair statement?
 3 THE WITNESS: That's correct.
 4 MR. SMITH: And just following up on where I
 5 think Commissioner Johnson was going, ought that then be
 6 subject to some form -- I mean, for us to get them in
 7 order to attain any value from that, that implies that we
 8 perform some form of review of those; right? And have
 9 some opportunity to weigh in with -- if we see something
 10 that we think are deficiencies or flaws, would it be your
 11 recommendation that we have some kind of review by
 12 somebody that knows what they're doing like yourself and
 13 then have the ability at least to comment or maybe even,
 14 you know, have some kind of review -- approval process of
 15 that?
 16 THE WITNESS: Well, legally I do not know what
 17 type of requirements or restrictions the Commission would
 18 be operating under. It was my understanding that
 19 basically what you do is that you could require them to
 20 be provided prior to construction.
 21 Beyond that, I don't know what type of
 22 conditions you could put on there. But you do have
 23 the -- obviously you have the opportunity to receive --
 24 or you're going to be receiving the con/rec units prior
 25 to construction and that you certainly would have the

1 opportunity to comment. How any deficiencies that you
 2 perceive get resolved, I don't know how that would
 3 happen.
 4 MR. SMITH: Okay. But, I mean, the legal issue
 5 again you're not a lawyer and the extent of -- that's an
 6 argument all of us counsel -- or the counsel can have at
 7 some point. But from a practical standpoint, would it be
 8 useful or valuable, I guess, for those con/rec detail
 9 plans once they're completed as they become completed to
 10 be submitted and then for the Commission using the
 11 resources hopefully of a professional to review those
 12 and --
 13 THE WITNESS: I would think there would be some
 14 value to that, yes.
 15 MR. SMITH: Okay. I mean, that's not something
 16 the NRCS itself would do. I mean, their input would be
 17 on the input side working with TransCanada to develop
 18 those detailed plans.
 19 THE WITNESS: That's the way I perceive the
 20 process to be.
 21 MR. SMITH: Okay. Thank you. Now one last
 22 thing and that's with respect -- you mentioned the
 23 probing. Did I hear that right?
 24 What's that? A soil probe? Is that like a rod
 25 you stick down in the ground?

1 THE WITNESS: It's a rod you stick down in the
 2 ground that has several sensors that can determine a lot
 3 of the most important soil parameters that you'll be
 4 looking at.
 5 Just to give you an example, there was much made
 6 in the Application about compaction. Compaction is
 7 something that is dependent upon moisture content, and
 8 it's very easy to do moisture content with these probes
 9 now.
 10 Identification of underlying paralithic or
 11 lithic material is something that's very easily done.
 12 And also taking a look at the salinity. So you can just
 13 shoot the probe down one time, and you get all of that
 14 information.
 15 It's mounted on a four-wheel drive Gator, and
 16 they can just -- you know, they go right down the
 17 centerline. These companies that actually have this
 18 equipment routinely do this for areas that are involved
 19 with precision agriculture.
 20 MR. SMITH: Is the term precision agriculture,
 21 is that like a term of art in your line of work, or is
 22 that -- that isn't a company name or anything like that?
 23 THE WITNESS: No. No. It's actually a term --
 24 it's a subsistence of agronomy now, to tell you the truth.
 25 There are landowners that basically are utilizing GPS

1 equipment and order 1 soil surveys and satellites in
 2 order to fertilize their fields by soil type. So they
 3 actually plug it in to the fertilizer and their tractors
 4 and they go down the field and the equipment tailors the
 5 fertility to the soil type and what they got last year
 6 for a yield. So it's fairly high technology.
 7 MR. SMITH: I think that -- one of the jobs of
 8 the Commission here is regulating elevator companies, and
 9 I know that Wheat Growers and some of those do that work
 10 for a living I know. That's one of their lines of work
 11 that's growing I know a lot.
 12 Just one last question on the probing then is,
 13 you know, you were here for the testimony relative to
 14 paleontological resources.
 15 THE WITNESS: Uh-huh.
 16 MR. SMITH: And sort of the focusing of the
 17 areas where more stringent monitoring, if you want to
 18 call it that, would be undertaken by the company. And
 19 those areas have been outlined via a survey done by an
 20 outside party.
 21 THE WITNESS: Uh-huh.
 22 MR. SMITH: Is that same kind of narrowing of
 23 the field doable, or should it be done? And if the
 24 Commission decided this probing is something that was a
 25 useful idea to include in what we do here, is that

1 something pertinent to the entirety of the route, or is
2 that something that could be limited with respect to
3 certain areas where lithic or paralithic or some of the
4 other more problematic condition types might be present?

5 THE WITNESS: I had visualized this as being
6 something that would be site specific towards the
7 sensitive areas on this route. However, there are -- and
8 I will bring up Canada and Alberta.

9 Alberta requires order 1 soil surveys in all the
10 agricultural areas that they have pipelines going
11 through.

12 It's an additional expense. There's absolutely
13 no doubt about it. But it is also not standard industry
14 practice certainly in the United States.

15 MR. SMITH: Thank you. Any other Commissioner
16 questions?

17 Staff, do you have redirect?

18 MS. SEMMLER: I just had one clarification.

19 REDIRECT EXAMINATION

20 BY MS. SEMMLER:

21 Q. Did you review the PHMSA special permit --

22 A. **No, I didn't.**

23 Q. -- constructed by staff? So then you'd have no
24 reason to doubt it? If I told you that federal code
25 normally requires 3 feet of cover, the special permit

1 requires 4 and is enforceable by PHMSA?

2 A. **I have no reason to disagree.**

3 MR. SMITH: Maybe could I have you respond to
4 that with the mic a little closer, Doctor.

5 A. **I have no reason to disagree.**

6 MR. SMITH: Thank you. And again like we've
7 been doing so that you guys get a chance, the other two
8 counsel, to follow up on the Commissioners' questions,
9 I'm going to give you another bite at the apple here.

10 MR. MOORE: Thank you, Mr. Smith. I do have a
11 couple of follow-up questions.

12 RE-CROSS-EXAMINATION

13 BY MR. MOORE:

14 Q. Dr. Arndt, related to the question that Ms. Semmler
15 just asked you, similarly are you aware that Condition
16 No. 20 of the special permit granted by PHMSA for the
17 Keystone Pipeline required 48 inches of cover for that
18 pipeline?

19 A. **No. I was not aware of that.**

20 Q. And are you aware that Keystone proposes 48 inches
21 of cover for the Keystone XL Pipeline?

22 A. **That I am aware of, yeah.**

23 Q. With respect to the issue of landowner involvement
24 in the issues that are addressed by the construction
25 reclamation units, you reviewed Dr. Schmidt's rebuttal

1 testimony; is that correct?

2 A. **I did.**

3 Q. And in paragraph 10 of his rebuttal testimony he
4 indicated that Keystone would develop the con/rec units
5 in consultation with the NRCS and would then discuss with
6 landowners the proposed con/rec units to take account for
7 best farm management practices and any particular insider
8 information that landowners have?

9 A. **It's an excellent idea.**

10 Q. You think that is appropriate?

11 A. **Yes.**

12 Q. As a follow up then, would it be appropriate for the
13 Public Utilities Commission in considering the con/rec
14 units that are developed by TransCanada to rely on the
15 NRCS which has local expertise with the particular soils
16 involved to determine whether the con/rec units have been
17 appropriately involved rather than for the PUC itself to
18 try to determine that?

19 A. **The NRCS would have -- especially -- it depends --
20 NRCS has the expertise. If they go to the State soil
21 scientist, it's -- he's probably not going to know very
22 much. If they go to the area soil scientist, he's going
23 to know an awful lot. And there may not be -- there may
24 be a residual soil survey group in some areas.**

25 **Again, I think Keystone has already contacted the**

1 **NRCS, and you will probably identify the area -- the
2 person with the greatest expertise.**

3 Q. But you're satisfied that some person with the NRCS
4 has the appropriate expertise to determine whether the
5 con/rec units are appropriate for the purpose for which
6 they're intended?

7 A. **I believe so. Even in range areas there is a lot of
8 involvement with the NRCS in range. BLM may have more,
9 but I don't believe there's any BLM that's being
10 traversed.**

11 Q. One last question. Commissioner Johnson asked you
12 about one thing that you would definitely recommend in
13 terms of construction and whether there are areas to
14 avoid, and you mentioned steeply sloping soils with
15 bentonite.

16 Did you hear testimony yesterday that, in fact, that
17 was one of the considerations that TransCanada looked at
18 in routing the pipeline and made an effort to avoid those
19 areas?

20 A. **I believe it was Heidi's testimony, and I also
21 believe that they were looking at flyovers, which would
22 give them even a better idea of what's actually going on.**

23 **The soil survey certainly has identified an awful
24 lot of sloping areas as well. But these were areas that
25 were just minor adjustments. And, again, I don't know**

1 **what your full approved right of way is. But minor**
2 **adjustments can solve an awful lot of problems.**

3 MR. MOORE: Thank you. That's all I have.

4 MR. SMITH: Mr. Blackburn.

5 RE-CROSS-EXAMINATION

6 BY MR. BLACKBURN:

7 **Q.** You haven't studied the depth of cover issue or soil
8 erosion on the entire pipeline as you testified before,
9 but you offered an opinion you didn't think it would be
10 that big of a problem here?

11 **A.** I said -- what I had indicated, that it would be a
12 larger problem in areas where there is intensive farming
13 and potential for decompaction because some of the
14 decompaction equipment rippers may go down 2 feet. And
15 I've seen them actually going down 4 feet.

16 **And obviously if you have a pipeline that is losing**
17 **its depth of cover, tillage is much more of an issue. I**
18 **think that if there is -- if there is a problem with this**
19 **in rangeland, then that's something that's going to be**
20 **captured -- excuse me. That's going to be captured by**
21 **the flyovers and the operations during the operations**
22 **period.**

23 **So these pipelines once they're put in, they**
24 **normally go -- routinely go through several flyovers and**
25 **depending -- several flyovers a year. So they would be**

1 **able to identify areas where they might be losing depth**
2 **of cover.**

3 **And, again, it's not to the pipeline's advantage --**
4 **the pipeline does not want to lose depth of cover and**
5 **have an exposed pipe. And if they have an exposed pipe,**
6 **I'm sure they're going to have some contingencies that**
7 **are going to rectify that situation. I don't know that**
8 **for certain. But I'm sure that you would be able to find**
9 **that information.**

10 **Q.** You had also mentioned that you heard of other
11 problems in other states where pipelines had lost depth
12 of cover. How many examples of that are you aware of
13 from your personal experience?

14 **A.** There are one or two instances in some older
15 pipelines in Wisconsin.

16 **Q.** Uh-huh.

17 **A.** And in Wisconsin they have loess soils. I don't
18 know if you're familiar with soils, but loess is a very
19 highly erodible soil and when it's subject to poor
20 management practices can erode quite rapidly, and there
21 were areas where they had lost depth of cover.

22 **Q.** Have you heard of any -- that was due to -- an
23 agricultural area in loess soils?

24 **A.** What's that?

25 **Q.** That was in agricultural areas the loess soils, or

1 was that in nonagricultural areas?

2 **A.** In agricultural area.

3 **Q.** You also mentioned that wet weather shutdown was
4 important. Could you describe a little bit more about
5 why wet weather shutdown is important?

6 **A.** That was specifically in regards to rutting and
7 compaction. As far as compaction goes, if the soils are
8 dry, the soil particles basically lock together, and
9 compaction is not that much of an issue.

10 **When soils are completely saturated again because**
11 **water's incompressible, generally soil compaction is not**
12 **that much of an issue. Soil compaction is an issue when**
13 **the soils are moist. And wet weather shutdown would be**
14 **something that would be done -- and I believe that it's**
15 **in the Construction and Reclamation Mitigation Plan that**
16 **Mr. Hargrove is going to discuss later.**

17 **But wet weather shutdown occurs when basically the**
18 **construction is adversely affecting the productivity of**
19 **the soil where they could be getting excessive compaction**
20 **and where they could be getting rutting and soil mixing.**

21 **Q.** And would that excessive compaction happen at the
22 entire depth of the trench? In other words, it wouldn't
23 be -- it seems like it might be possible to decompact the
24 topsoil that was replaced if it was put in wet but that
25 even there lower in the trench if the soils were returned

1 deeper in the trench during wet weather conditions, that
2 the soil could be compacted from the top all the way down
3 to the bottom?

4 **A.** Compaction in the trenches is generally not a
5 problem. The compaction that occurs associated with
6 pipeline construction is a feature primarily of the
7 working site while the equipment is trafficking.

8 **If anything, the trench areas have the opposite**
9 **problem where they will because of the way the soil goes**
10 **in and a lot of times the contractors will attempt to**
11 **compact the soil to the extent that they can, you know,**
12 **but they still end up having a trench that will for a**
13 **period of time after construction hold an awful lot of**
14 **water.**

15 **Which is one of the reasons why they put in water**
16 **bars if they're on steeply sloping areas because they'll**
17 **get preferential flow of water within the macro bores**
18 **that are present in the trench.**

19 **So when we talk about compaction as being an issue**
20 **it's primarily an issue associated with equipment**
21 **trafficking on the working site.**

22 **Q.** Okay. Thank you. You also mentioned that the depth
23 of trench -- how deep a trench should be is something of
24 a trade-off, that, you know, the deeper you go there may
25 be advantages to the pipe. But, there again, it also

1 requires greater construction area.

2 And as Ms. Semmler mentioned, this pipe will be a
3 foot deeper than the standard, which is 3 feet. Could
4 you describe what the difference would be in terms of
5 construction impact from having a trench be a foot
6 deeper, be it a 3-foot level as opposed to a 4-foot
7 level?

8 **A. You would have a deeper trench, and you would
9 require more construction right of way in order to store
10 the soil. Depending upon how much topsoil there would
11 be, you would have topsoil segregation and subsoil
12 segregation.**

13 **And, again, this is one of those tradeoffs where you
14 have a limited construction right of way and it's -- and
15 it's specifically limited. There's a lot of activity
16 that goes on in a construction right of way on a
17 pipeline. And what they're doing is they actually
18 minimize the right of way -- the length or width to the
19 extent in order to minimize impacts to the environment or
20 to agricultural land or whatever.**

21 **So if you're going into an area where you're
22 requiring three or four lifts and you have to keep that
23 material separate, you're going to have to increase your
24 width because you're just not going to have enough width
25 to get the equipment in and to get everything done.**

1 **Q.** To go a foot deeper would the impacts -- I mean,
2 from a layperson's point of view going from a 3-foot
3 depth to a 4-foot of depth would increase the volume
4 proportionally. But the construction impacts would
5 actually increase -- the deeper you go the greater the
6 construction impacts relative to the depth.

7 So going from 3 feet to 4 feet one could say, well,
8 that's another foot deeper so the construction impacts
9 would be a third greater than --

10 **A. What specific construction impacts are you
11 addressing?**

12 **Q.** How wide the right of way is and as you said having
13 greater need for storing trenching materials in the soils
14 along the right of way.

15 **A. I believe that they have established a 110-foot
16 right of way for this pipeline in upland areas and
17 narrower in wetland areas, again, to reduce impacts.**

18 **If you're asking me if I think there are going to be
19 more construction related impacts with a deeper trench, I
20 would say no. You know, for some of the reasons that you
21 yourself had already indicated, that you're getting a
22 deeper depth of cover in areas where there's a
23 possibility for erosion.**

24 **Q.** So you're saying -- I didn't say safety, though. So
25 you're saying that a deeper depth of trench would not

1 result in greater construction impacts?

2 **A. Again, I don't -- I guess I don't know exactly what
3 you're getting at. Greater construction impacts is
4 they're going to be there for slightly longer in order to
5 dig the trench. They're going to require slightly more
6 right of way in order to accommodate the extra foot of
7 dirt. That's not that significant.**

8 **I don't think that the construction-related impacts
9 would be that much more significant. But then again I
10 don't know the reason for the increased depth. I have
11 not talked to anyone at Keystone for that reason.**

12 **Q.** Yeah. And I'm not asking what the reasons are for
13 going a foot deeper. Just simply what the construction
14 impacts would be.

15 So at a minimum you would need to dig out an
16 additional foot of material and place that outside of the
17 trench.

18 **A. If you're going an extra foot deeper, that's
19 correct.**

20 **Q.** And that material would require -- could require
21 additional space at the top and on the side of the trench
22 for storage because there's more material?

23 **A. I don't think that they're going to be asking for
24 additional right of way over what they've already asked
25 for. I think that's all been involved with the plan.**

1 **Q.** They asked for the right of way knowing they would
2 do 4 foot depth of cover. So it's not really that
3 they've -- you know, had a 3 foot and now they got to do
4 4 foot suddenly. They've always planned for a 4 foot
5 depth of cover is my understanding.

6 The NRCS is a federal agency; that's correct?

7 **A. That's correct. It's very state-oriented, though.**

8 **Q.** And the resources to assist and work with
9 TransCanada and the landowners through this process would
10 be provided by the Federal Government?

11 **A. That -- I have not made the NRCS contact. The NRCS
12 is an agency that is designed to help people that are
13 involved with land use projects.**

14 **Most of the time they're associated with, you know,
15 doing agriculture and they'll have farm plans and they'll
16 have another agency like the Farm Services Agency which
17 will be involved in a slightly different aspect of
18 agriculture.**

19 **But the NRCS has engineers, and they have several
20 technical experts that would be capable of providing the
21 type of assistance that they would have to develop these
22 con/rec units that will be primarily focused on soil
23 issues.**

24 **Q.** And that would be -- would that be a substantial
25 task for NRCS to do that for this pipeline?

1 **A. Again, it would be a task. I don't know how it**
 2 **would be arranged, and I have no knowledge of what**
 3 **arrangements Keystone has made with the NRCS. I don't**
 4 **know.**

5 **Q.** Commissioner Johnson had discussed what -- NRCS
 6 would implement this, and of course there was some
 7 conversation about the time of all that.

8 And what I'm getting at is just simply it's one
 9 thing to say that NRCS will do this or should do this or
 10 may do this. It's no, you know -- it's a different thing
 11 when it actually happens whether they, in fact, do this
 12 properly and have the time and resources to, you know, do
 13 things right.

14 And it sounds like you're saying that you don't have
 15 an opinion about their resources and the capability of
 16 doing it or their -- the resources they have to do this
 17 fully, this project fully, that's not even yours?

18 **MS. SEMMLER:** Again, I think we're getting
 19 outside the scope of not only direct testimony but
 20 Commissioner clarification questions which is the point
 21 we're at -- we're not here to analyze NRCS's abilities.

22 **MR. BLACKBURN:** She's relying heavily on NRCS
 23 participation in this, and I think the landowners are
 24 also wanting to make sure it isn't just empty promises
 25 and that there really are the resources and the

1 capabilities to go to the level of detail that would
 2 protect the landowners.

3 **Q.** And you may not have a direct experience or
 4 knowledge of that. And that's fine. Just wanted to know
 5 whether you had an opinion about whether, you know, they
 6 had the resources to fulfill the commitments that I think
 7 people are expecting them to fulfill.

8 **CHAIRMAN JOHNSON:** Before Dr. Arndt answers, I
 9 do think we have an objection. I just also want to state
 10 that I don't think the questions that I was asking
 11 Dr. Arndt specifically related to NRCS. I just want to
 12 clarify.

13 **MR. BLACKBURN:** I'm sorry. I mischaracterized.

14 **CHAIRMAN JOHNSON:** You didn't upset me. I just
 15 wanted to make it clear for the record.

16 **MR. SMITH:** Well, I think I understand the point
 17 you're trying to make, and I'm going to let you -- maybe
 18 could we just cut to the chase as quick as we can on it.

19 **MR. BLACKBURN:** That was my last question.

20 **MR. SMITH:** Fire away then. Go ahead. Can you
 21 answer? Do you know?

22 **A. I can't definitely answer, but I have enough friends**
 23 **in the NRCS in North Dakota and other places around the**
 24 **state that have been extremely helpful on both large and**
 25 **small projects. And they have even been helpful on**

1 **residential developments in the Twin Cities area.**
 2 **The NRCS is a service agency. That's basically what**
 3 **they're around for. They may have -- they may make some**
 4 **arrangements with payment. I don't know that. I really**
 5 **don't. And I can't really address it.**

6 **MR. BLACKBURN:** Thank you.

7 **MR. SMITH:** Additional questions, Mr. Blackburn?

8 **MR. BLACKBURN:** No more questions. Thank you.

9 **MR. SMITH:** Thank you. Is there any follow up
 10 by staff? He's your witness.

11 **MS. SEMMLER:** I have no further questions.

12 **MR. SMITH:** Okay. Thank you. Oh, Mr. Moore,
 13 did you have a question?

14 **MR. MOORE:** Thank you, Mr. Smith. May I follow
 15 up with one issue raised by Mr. Blackburn in his
 16 questions?

17 RE-CROSS-EXAMINATION

18 BY MR. MOORE:

19 **Q.** Dr. Arndt, Mr. Blackburn asked you a number of
 20 questions related to depth of cover and the loss of depth
 21 of cover through various activities like deep tilling of
 22 the soil.

23 I know you testified that you're not familiar with
 24 the special permit conditions imposed by PHMSA on the
 25 Keystone Pipeline, but I want to read you two of those

1 conditions and ask if they address the issue that was
 2 raised.

3 In Condition No. 20 the special permit says, "In
 4 areas where the pipeline is susceptible to threats from
 5 chisel plowing or other activities, the top of the
 6 pipeline must be installed at least one foot below the
 7 deepest penetration above the pipeline. If routine
 8 patrols indicate the possible loss of cover over the
 9 pipeline, Keystone must perform a depth of cover study
 10 and replace cover as necessary to meet the minimum depth
 11 of cover requirements specified herein."

12 Are those conditions appropriate to address the
 13 issues that you discussed with depth of cover?

14 **A. Yes, they are.**

15 **MR. MOORE:** Thank you. That's all I have.

16 **MR. BLACKBURN:** May I ask one follow-up question
 17 on that?

18 **MR. SMITH:** Please. Yes.

19 RE-CROSS-EXAMINATION

20 BY MR. BLACKBURN:

21 **Q.** The review that counsel for TransCanada just
 22 mentioned was fly over with a jet helicopter. And are
 23 all soil erosion events such that you can identify soil
 24 erosion including long-term or chronic soil erosion from
 25 a jet helicopter at say 200 feet?

1 **A. Yes.**
 2 MR. BLACKBURN: So -- okay. Then that's all the
 3 questions I have.
 4 MR. SMITH: Staff, you don't have anything, any
 5 follow up?
 6 MS. SEMMLER: No.
 7 MR. SMITH: We've been at it here quite a while.
 8 I think we'll give our reporter a break. Why don't we
 9 take a 10-minute or so recess and reconvene at 20 after 3
 10 by that clock up there.
 11 (A short recess is taken)
 12 MR. SMITH: We're going to call the hearing back
 13 to order. Staff, please proceed.
 14 MS. SEMMLER: Thank you. I'd like to call
 15 Ross Hargrove to the stand, please.
 16 (The witness is sworn by the court reporter)
 17 DIRECT EXAMINATION
 18 BY MS. SEMMLER:
 19 **Q.** Welcome. Could you please introduce yourself to the
 20 Commission.
 21 **A. My name is Ross Hargrove. I work for the Natural**
 22 **Resource Group. My business address is 1000 IDS Center,**
 23 **80 South Eighth Street, Minneapolis, Minnesota 55402.**
 24 **My educational background is I received a Bachelor**
 25 **of Science Degree in forest resource management from the**

1 **University of Minnesota. Since the year 2000 I've worked**
 2 **for the Natural Resource Group and enrolled as a**
 3 **consultant and manager of our operational compliance**
 4 **group.**
 5 **My specific job duties include acquiring permits for**
 6 **various pipeline expansion and maintenance and operation**
 7 **projects, drafting construction mitigation plans,**
 8 **environmental and inspection supervision, environmental**
 9 **compliance management, and authoring of sections of EISs**
 10 **for the Federal Energy Regulatory Commission and topics**
 11 **such as land use impacts, vegetation, and transportation.**
 12 **Q.** Did you write and submit prefiled testimony for this
 13 matter?
 14 **A. Yes, I did.**
 15 **Q.** And did you write and submit some supplemental
 16 testimony?
 17 **A. Yes, I did.**
 18 **Q.** And if you were asked all of those questions with
 19 those changes made in the supplemental testimony, would
 20 you answer them all the same today?
 21 **A. Yes, I would.**
 22 **Q.** And they are in front of you as Exhibit 5 and 6.
 23 Overall -- now I'll back up. What portion of the
 24 Application did you review?
 25 **A. I reviewed the portion of the Application that is**

1 **considered as TransCanada's Construction Mitigation**
 2 **Reclamation Plan.**
 3 **Q.** And overall was that plan consistent with industry
 4 best practices?
 5 **A. In general I would agree to that statement. What I**
 6 **did as part of my review is I compared that document to**
 7 **documents that have been prepared by the Federal Energy**
 8 **Regulatory Commission. These documents include their**
 9 **upland erosion re-vegetation and maintenance plan and**
 10 **wetland and water body construction mitigation**
 11 **procedures.**
 12 **These plans are applicable to the construction of**
 13 **natural gas pipelines, but they are very relevant to**
 14 **review of TransCanada's Construction Reclamation and**
 15 **Mitigation Plan.**
 16 **Q.** We heard a lot in previous testimony about the
 17 construction reclamation mapping units.
 18 Do you have anything in addition to share, any other
 19 recommendations regarding those aside from what's
 20 previously been entered into the record?
 21 **A. No. Dr. Arndt's testimony I believe covered most of**
 22 **my comments on that.**
 23 **I do recommend that they be submitted to the Public**
 24 **Utilities Commission prior to construction.**
 25 **Q.** Some of the questions that you asked throughout the

1 discovery process went towards TransCanada's plan to deal
 2 with crop loss with those landowners along the route.
 3 Is their plan adequate, in your opinion?
 4 **A. TransCanada's intention I think is pretty clear, to**
 5 **compensate landowners fairly for potential impacts on**
 6 **crop loss. It is my opinion that a more structured crop**
 7 **monitoring program may be appropriate for the project.**
 8 **One in which they offered the opportunity to landowners**
 9 **to participate in a program that allows for two or more**
 10 **years of crop monitoring to be conducted on their**
 11 **property to adequately determine if restoration is**
 12 **progressing.**
 13 **Q.** After your analysis of the original Application you
 14 had several questions that went specifically towards a
 15 frac-out plan, and the company did submit what they have.
 16 Tell us about what we received and your opinion regarding
 17 that plan.
 18 **A. TransCanada provided a frac-out plan, which is -- it**
 19 **appears to be applicable to the entire pipeline project.**
 20 **My recommendation is that TransCanada provide a plan that**
 21 **is more specific to the State of South Dakota and more**
 22 **specific to the horizontal directional drill crossings to**
 23 **be conducted within the state.**
 24 **Q.** There also were some questions regarding adverse
 25 weather plans. Do you have a position on their answer to

1 those questions?

2 **A. Yes. In Mr. Hicks' testimony, rebuttal testimony to**

3 **my earlier testimony, he clarified that TransCanada's wet**

4 **weather shutdown procedures would apply in all**

5 **agricultural lands and not just cultivated agricultural**

6 **lands.**

7 **And he also identified some language in the previous**

8 **Keystone Pipeline Project order which clarifies of when**

9 **wet weather shutdown would be appropriate. And that**

10 **language satisfied my concerns.**

11 **Q.** In your supplemental testimony you made some changes

12 to the CMRP review that you did. If there's any specific

13 explanation of those exchanges that you'd like to share

14 with the Commission, please do that at this time.

15 **A. Mr. Hicks provided rebuttal testimony. And in my**

16 **revised testimony I tried to address many of the**

17 **questions that he had or provided clarifications where I**

18 **thought appropriate.**

19 **Many of these changes are primarily wording or**

20 **qualifying of certain statements. Just to kind of run**

21 **through a summary of those changes, is the first one is**

22 **on Section 3.0 of the document entitled Construction**

23 **Mitigation Reclamation Plan Review I elaborated on what I**

24 **believed to be the industry standards for refueling and**

25 **spill prevention in the vicinity of wells.**

1 **My previous testimony had omitted the Federal Energy**

2 **Regulatory's common guidance for refueling and storage of**

3 **fuels near private wells. So I added that text.**

4 **I also qualified some statements regarding when**

5 **decompaction should occur when using the full right of**

6 **way topsoil segregation method. I added that**

7 **decompaction or ripping, as you would say, be completed a**

8 **second time if the topsoil's replaced under wet or moist**

9 **soil conditions or if the right of way continues to be**

10 **used as a travel lane following replacement of the**

11 **topsoil.**

12 **I revised the Section 4.7, Trenching and Alternative**

13 **Soil Handling Methods, to be consistent with Jim Arndt's**

14 **testimony, which has been previously discussed.**

15 **And in several sections I added language to provide**

16 **some flexibility for cleaning up to TransCanada in areas**

17 **that may be delayed for -- because of weather conditions.**

18 **And I made other changes kind of throughout the document**

19 **that were appropriate that Keystone had identified.**

20 MS. SEMMLER: No further questions.

21 MR. SMITH: Applicant.

22 MR. TAYLOR: Thank you, Mr. Smith.

23 CROSS-EXAMINATION

24 BY MR. TAYLOR:

25 **Q.** Mr. Hargrove, my name's William Taylor, and I

1 represent TransCanada. I just have a few questions for

2 you. Actually clarifications of the points that you

3 raised in your revised testimony.

4 First I'd like to talk to you for a moment about

5 spill containment issues. In your original testimony you

6 suggested that TransCanada be prohibited from fueling

7 activities or fuel storage activities within 400 feet of

8 a domestic water well.

9 In your revised testimony you suggested 200 feet

10 from a private water well, 400 feet from municipal wells,

11 but most importantly rather than saying prohibited you

12 suggest that TransCanada avoid or minimize those

13 activities.

14 Is that correct?

15 **A. Yes, it is.**

16 **Q.** And you understand, of course, that fuel storage

17 most typically is done at some distance away from where

18 the equipment is located during construction process as

19 opposed to refueling activities which are done where the

20 equipment is located.

21 **A. That's correct.**

22 **Q.** And so fuel storage is much easier to locate more

23 than 400 feet away; right?

24 **A. Yes.**

25 **Q.** You don't suggest that refueling activities should

1 not be undertaken within the right of way, only that

2 TransCanada should be alert to the locations of private

3 water wells and try and minimize refueling activities

4 near them.

5 **A. That is correct.**

6 **Q.** Thank you. Now the soil segregation issue that has

7 been discussed, first of all, you received Dr. Arndt's

8 testimony; correct?

9 **A. Yes.**

10 **Q.** As to the soil segregation issue, you say in your

11 testimony that you encourage TransCanada to work closely

12 with landowners.

13 Are you aware of the -- what TransCanada calls the

14 binding construction agreement arrangement that it enters

15 into with landowners?

16 **A. I'm not familiar with it at this time.**

17 **Q.** Perhaps it's expressed differently in TransCanada's

18 writings. It's a process by where each landowner is

19 offered the opportunity to suggest what type of topsoil

20 stripping and topsoil removal he wants of three different

21 designs and the landowner's also asked about any unusual

22 or unique characteristics of his land and how that should

23 be specially treated and then TransCanada in effect

24 contracts with the landowner to comply with an agreed

25 upon set of conditions?

1 Do you think that's a wise and prudent method for
 2 TransCanada to proceed with the landowners?
 3 **A. I do. In my testimony and in that document**
 4 **regarding the view of the construction mitigation plan I**
 5 **did point out several pros and cons of each method. But**
 6 **I recognized that the appropriate topsoil segregation**
 7 **method, you know, it's a very -- considered on a**
 8 **site-by-site basis. And I believe that input from the**
 9 **landowner is very important.**
 10 **Q.** And ultimately it should be the landowner's choice
 11 in the end; right?
 12 **A. Yes. But I think there are some situations where,**
 13 **you know, that TransCanada provide expertise in guiding**
 14 **what situations may be appropriate for the property.**
 15 **Q.** And I want to ask you about one other element of
 16 your commentary on the soil segregations issue. You
 17 commented that when wet conditions or compaction
 18 conditions exist the topsoil after it's been replaced
 19 should also be ripped. You used the word "ripped."
 20 **A. Yes.**
 21 **Q.** Now in this part of the country ripping typically
 22 talks about using a tooth on a decompaction device that's
 23 20 or 30 inches in length.
 24 You wouldn't suggest that a deep ripper be used on
 25 the topsoil because of the intermixing that goes with

1 that; right?
 2 **A. In my experience there are implements available that**
 3 **do not mix the topsoil. It's more of a Paraplow shape**
 4 **that fractures --**
 5 **Q.** Exactly.
 6 **A. -- the soil and kind of -- it lifts it.**
 7 **Q.** What you're looking for is -- what you're looking
 8 for is for that topsoil, whatever it is, 1 inch,
 9 3 inches, 6 inches, 12 inches, whatever, it is to be
 10 decompacted?
 11 **A. Yes.**
 12 **Q.** And, for example, using a traditional farm disk
 13 pulled by a traditional farm tractor in many instances
 14 will provide that; right?
 15 **A. In certain cases, yes. In the Construction**
 16 **Reclamation Mitigation Plan Keystone stated its intent to**
 17 **use ripping implements, you know, up to the depth of**
 18 **18 inches, which I believe is appropriate for pipeline**
 19 **construction.**
 20 **Q.** All right. So insofar as the topsoil goes, though,
 21 if any decompaction activities are taken place, your
 22 advice to TransCanada would be to avoid soil mixing and
 23 to use the conventional implements that are available to
 24 the farming community to decompact that topsoil; right?
 25 **A. In most situations, yes.**

1 **Q.** Thank you. In your commentary there also is an
 2 issue about rock removal. And at first you suggested
 3 that all rock be removed to some depth, and then later
 4 you suggested to the extent practical if the top
 5 12 inches of topsoil rock be removed.
 6 TransCanada's policy is to return the topsoil
 7 conditions to those of the immediately adjacent soil.
 8 You find that acceptable also, do you not?
 9 **A. Yes.**
 10 **Q.** And, finally, lastly, you made the observation that
 11 all drain tile repairs that are undertaken should be done
 12 by a qualified drain tile repair person. By qualified
 13 you mean experienced?
 14 **A. I think the definition is similar. I revised the**
 15 **statement to be more consistent with that in the FERC's**
 16 **upland erosion re-vegetation and maintenance plan.**
 17 **Q.** Because there may be parts of the country where
 18 there are union drain tile persons, but in this part of
 19 the country there aren't.
 20 **A. That may be the case. I do not know.**
 21 MR. TAYLOR: All right. Thank you. That's all
 22 the questions I have.
 23 MR. SMITH: Dakota Rural Action.
 24
 25

1 CROSS-EXAMINATION
 2 BY MR. BLACKBURN:
 3 **Q.** A few questions, Mr. Hargrove. Thank you. You say
 4 in your testimony that you reviewed the revised
 5 Application, the Application -- revised Application,
 6 CMRP, and other documents following the document as well
 7 as Keystone's responses to data requests to the PUC
 8 staff, and you also reviewed comments by the PUC, by the
 9 public or the Interveners, and particularly questions
 10 about what comments were received in the CRMP (sic) by
 11 Interveners?
 12 **A. I do not believe there were any.**
 13 **Q.** Were there any comments from the public on the CRMP?
 14 **A. None that I'm aware.**
 15 **Q.** Is the CMRP also subject to review and the federal
 16 EIS process, the NEPA process?
 17 **A. I am not certain, but I would speculate that it is.**
 18 **Q.** Did you review any of the comments concerning --
 19 provided by the public at the public hearings on soil and
 20 soil erosion problems or soil compaction and the
 21 mitigation reclamation plan?
 22 **A. I don't recall any specific comments, but I did**
 23 **review the scoping -- or the scoping summary document**
 24 **prepared by the Department of State.**
 25 **Q.** Okay. But not the transcripts from the hearings

1 held by the PUC on this pipeline?

2 **A. No, I did not.**

3 **Q.** Did staff convey any of the comments provided by the
4 public to you on soil problems and concerns with
5 construction mitigation?

6 **A. We have had some discussions, yes.**

7 **Q.** Okay. What were those discussions?

8 **A. Some discussions regarding soil decompaction and
9 then crop monitoring.**

10 **Q.** Were they related to any particular lands or any
11 particular landowners?

12 **A. No, they were not.**

13 **Q.** Have you reviewed any of TransCanada's actual
14 construction process and their existing -- during the
15 Keystone I or Keystone east pipeline in terms of how
16 they're laying a construction plan and reclamation
17 mitigation plan?

18 **A. I'm not familiar with how construction is currently
19 going on that project.**

20 MR. BLACKBURN: Okay. Thank you. No further
21 questions.

22 MR. SMITH: Commissioners, questions of
23 Mr. Hargrove?

24 COMMISSIONER KOLBECK: You say environmental
25 inspectors in your direct testimony, page 3. Could you

1 give me a little more insight as to environmental
2 inspector, what their certifications would be, what their
3 qualifications would be?

4 THE WITNESS: Sure. Keystone commits to the use
5 of environmental inspectors during construction. In my
6 experience these are full-time, dedicated inspectors to
7 provide the contractor, implement conditions of permits,
8 and then also basically ensure compliance with permits
9 and other agreements that TransCanada has made.

10 There is no, you know, specific qualifications,
11 but in my experience most of them have a lot of
12 experience with environmental regulations and
13 implementation of best management practices and pipeline
14 construction techniques.

15 COMMISSIONER KOLBECK: Okay. Would they be
16 employed by the Commission normally, or would they be
17 employed by TransCanada?

18 THE WITNESS: They would be employed by
19 TransCanada.

20 COMMISSIONER KOLBECK: Okay. Would they report
21 to the Commission, though?

22 THE WITNESS: No, they would not.

23 COMMISSIONER KOLBECK: They would not. So this
24 inspector that you're speaking about is TransCanada's
25 employee who is on that side of the fence, I should --

1 THE WITNESS: Yes. That's correct.

2 COMMISSIONER KOLBECK: Okay. And you said that
3 you basically agree with Mr. Arndt's testimony -- or you
4 do agree with everything in Mr. Arndt's testimony.

5 THE WITNESS: Yes.

6 COMMISSIONER KOLBECK: Okay. And do you see any
7 problems with the clay and the other erosion factors that
8 we've covered so extensively?

9 THE WITNESS: I really can't comment on specific
10 soils issues. I do not have the background. But as far
11 as erosion concerns, you know, I believe that the plan
12 provided by TransCanada, you know, in addition to some of
13 my recommendations I believe is, you know, close
14 adherence to industry standards and are likely to be
15 effective.

16 COMMISSIONER KOLBECK: And then I just have one
17 more clarifying question. In your supplemental you have
18 the Construction Mitigation Reclamation Plan review and
19 you added some of that stuff you said?

20 THE WITNESS: Yes. I revised some statements
21 within the plan based upon rebuttal testimony from
22 Steve Hicks.

23 COMMISSIONER KOLBECK: Okay. And the best way
24 for me to see what was there and what was not is a stare
25 and compare, or did you -- is everything in here your

1 words or is part of it your words and part of it their
2 words?

3 THE WITNESS: Most -- all the changes are in my
4 words.

5 COMMISSIONER KOLBECK: Your words. Okay. So in
6 your supplemental this is all your recommendations?

7 THE WITNESS: Yes, it is.

8 COMMISSIONER KOLBECK: Okay. That's what I need
9 to know. Thank you.

10 CHAIRMAN JOHNSON: Mr. Hargrove, I did note
11 those changes that you made to your supplemental
12 testimony. I tried to compare it with what the
13 Applicant -- what -- the Hicks rebuttal with what you had
14 added.

15 What I didn't see if there were substantial
16 areas of disagreement still remaining. Are there?

17 THE WITNESS: I do not believe so.

18 CHAIRMAN JOHNSON: Okay. And then at the very
19 beginning someone asked you -- I think Ms. Semmler asked
20 you if what the Applicant has laid out is consistent with
21 industry best practices with regard to construction
22 mitigation reclamation.

23 And you said -- you hesitated a bit and then you
24 said in general, yes. And the hesitancy, you know,
25 raised a question in my mind as well as the answer in

1 general, yes. So I'll ask it a little differently.
2 Are there things the Applicant has proposed that
3 are not consistent with industry best practices? And if
4 so, what?

5 THE WITNESS: Well, when I conducted the review
6 it's against a document prepared by the Federal Energy
7 Regulatory Commission and appropriate to the entire
8 country.

9 What I did in my review, you know, is I tried to
10 clue in, you know, to topics that I thought were
11 important in South Dakota and, you know, the landscape
12 that would be affected by the pipeline project.

13 So that's why I say that they're -- in general
14 they're in compliance with industry standards.

15 CHAIRMAN JOHNSON: So was anything that the
16 Applicant has proposed inconsistent with industry
17 standards?

18 THE WITNESS: Just those that I identified in
19 that review document.

20 CHAIRMAN JOHNSON: Okay. And so maybe
21 inconsistent isn't the right word. I mean, substandard.
22 I mean, was anything below which the industry generally
23 feels comfortable?

24 THE WITNESS: There were some things in the
25 original document that I thought were below the industry

1 standards. And I identified those in my review. In some
2 situations TransCanada provided rebuttal. And I, you
3 know, tried to address those where I thought it was
4 appropriate. But in other cases TransCanada seems fine
5 with my changes.

6 CHAIRMAN JOHNSON: Great. Thanks.

7 MR. SMITH: Commissioner Hanson, do you have
8 questions?

9 COMMISSIONER HANSON: Thank you, Mr. Smith.
10 Excuse me. Mr. Smith.

11 Mr. Hargrove, I really appreciate your
12 recommendations and the information that you provided to
13 us. One of your recommendations is that the PUC require
14 Keystone to utilize floating sediment curtains. I'm
15 familiar with other methods of mitigation for
16 sedimentation but not with those type of curtains. Could
17 you explain how those function?

18 It seems fairly obvious just from the name
19 itself, floating they float, but I don't know just how
20 they work.

21 THE WITNESS: Yes. I mean, it's basically a
22 curtain with floats on top which can be installed in
23 areas of open water to prevent migration of turbulent
24 water or heavier sediments outside the construction right
25 of way.

1 I identified it as a recommendation because in
2 Keystone's Application they identified several small
3 reservoir or stock ponds which may be crossed by the
4 project. In that case I think that a measure like that
5 would be appropriate to limit impacts to the construction
6 right of way.

7 COMMISSIONER HANSON: Do you know what type of
8 materials they use to construct those?

9 THE WITNESS: They're usually made out of kind
10 of a geotech style or plastic fabric.

11 COMMISSIONER HANSON: Okay. Thank you very
12 much. Thank you, Mr. Smith.

13 MR. SMITH: Other Commissioner questions or
14 advisor?

15 Mr. Rislov.

16 MR. RISLOV: I just had one. It occurred to me
17 that there may be people along the route that may desire
18 a different method of I'll call it harrowing along the
19 strip for, you know, loosening the soil than what the
20 company would recommend.

21 Would it be your recommendation that if the
22 farmer, rancher, whatever wants a different method
23 utilized, that they should be able to do it?

24 THE WITNESS: Yes.

25 MR. RISLOV: Okay. Thank you.

1 MR. SMITH: Any last Commissioner questions?
2 Ms. Semmler.

3 MS. SEMMLER: I don't have any clarification.

4 MR. SMITH: Any Applicant follow-on to the
5 Commissioner questions?

6 MR. TAYLOR: Two questions.

7 RE-CROSS-EXAMINATION

8 BY MR. TAYLOR:

9 Q. You've worked as an environmental inspector on a
10 crude oil pipeline project, have you not?

11 A. **Yes. Mostly in terms of pipeline right-of-way
12 restoration. I have managed environmental inspectors on
13 large scale projects, and I've also served as -- in
14 compliance monitoring on projects as well.**

15 Q. Typically the environmental inspector while employed
16 by the owner, in this case, TransCanada, is really the
17 owner's eyes and ears that assure that the contractor
18 complies with the environmental provisions of the
19 construction contract and of the permit; right?

20 A. **Yes.**

21 Q. So you're the insulation between the contractor
22 and -- you're the person who's keeping an eye on the
23 contractor to make sure they do what they're obligated to
24 do on behalf of the owner.

25 A. **That is correct.**

1 **Q.** Second question. The floating sediment curtains, to
 2 be clear you recommended use of floating sediment
 3 curtains in those situations where the water depth is
 4 greater than bale height; right?
 5 **A. Bale height or silt fence height.**
 6 **Q.** Yes. Bale height or silt fence height. And,
 7 finally, just one other point. The FERC plan and
 8 procedures that are used for Construction Mitigation and
 9 Reclamation Plan review, the FERC procedures are
 10 routinely modified by the Applicant, are they not, and
 11 then ultimately approved by the FERC?
 12 **A. Yes. That is possible. On a natural gas pipeline**
 13 **project it is common for an Applicant such as TransCanada**
 14 **to request variances to certain provisions within the**
 15 **plan. These variances are considered on more of a**
 16 **site-by-site case or can be project specific as well.**
 17 **Q.** And typically that's to take a nationalized plan and
 18 reduce it to a localized plan, is it not?
 19 **A. That is correct. And that was the focus of some of**
 20 **my revisions to my original plan was to make it flexible**
 21 **and in certain instances where I thought that would be**
 22 **appropriate.**
 23 **Q.** In fact, in your exchange with TransCanada through
 24 the DRs and so forth you've resulted in a more localized
 25 plan, have you not?

1 **A. That is correct.**
 2 MR. TAYLOR: Thank you very much. No further
 3 questions.
 4 MR. SMITH: Mr. Blackburn, follow up?
 5 MR. BLACKBURN: No further questions.
 6 MR. SMITH: Any last staff follow up?
 7 MS. SEMMLER: No.
 8 MR. SMITH: Okay. Thank you. I think,
 9 Mr. Hargrove, you may step down.
 10 THE WITNESS: All right. Thank you.
 11 MS. SEMMLER: I'd call Mr. William Walsh to the
 12 stand, please.
 13 (The witness is sworn by the court reporter)
 14 DIRECT EXAMINATION
 15 BY MS. SEMMLER:
 16 **Q.** Mr. Walsh, please introduce yourself to the
 17 Commission.
 18 **A. Good afternoon. My name is William Walsh. I'm**
 19 **employed with EN Engineering as a senior project manager**
 20 **in the metallurgy group. My business address is**
 21 **7135 James Avenue, Woodridge, Illinois 60517.**
 22 **My educational background, I have a B.S. in**
 23 **engineering mechanics and an M.S. in metallurgical**
 24 **engineering, both from the University of Illinois, and I**
 25 **have a Ph.D. in theoretical implied mechanics from**

1 **Northwestern University.**
 2 **My work experience, I'm a registered professional**
 3 **engineer in the State of Illinois, and I'm currently a**
 4 **senior project manager at EN Engineering. My work**
 5 **responsibilities include steel mill and pipe mill audits,**
 6 **development of welding procedures for pipeline**
 7 **construction projects, conduction of failure analyses,**
 8 **and performance of fitness for service analyses for**
 9 **pipeline components.**
 10 **I've also worked as a metallurgist for Natural**
 11 **Gas Pipeline Company of America with similar**
 12 **responsibilities.**
 13 **In addition to my pipeline experience, I also have**
 14 **research experience in pipeline issues of stress**
 15 **corrosion, cracking, and residual strength of corroded**
 16 **pipelines at Bell Columbus division as a research**
 17 **scientist.**
 18 **In addition, I've worked in the manufacturing field**
 19 **as a project engineer for Snap-on Tools and Rexam**
 20 **Beverage Can.**
 21 MR. SMITH: Mr. Walsh, can I ask you to pull
 22 that mic real close? Because you're really quiet.
 23 THE WITNESS: Sorry about that.
 24 **Q.** Did you write and submit prefiled testimony for this
 25 matter?

1 **A. Yes, I did.**
 2 **Q.** Did you write and submit some supplemental testimony
 3 for this matter?
 4 **A. Yes, I did.**
 5 **Q.** And do you see those in front of you as S7 and S8?
 6 **A. Yes, I do.**
 7 **Q.** And if I asked you those questions today, would you
 8 answer them all the same?
 9 **A. Yes, I would.**
 10 **Q.** What area of the Application did you review?
 11 **A. I reviewed the Application for compliance to Federal**
 12 **Code Part 195, particularly the reporting documentation,**
 13 **applications. Also the design, construction, and the**
 14 **operation and maintenance portions of that code.**
 15 **Q.** And from your testimony it appears that extensive
 16 quantity of documents must be provided to PHMSA as part
 17 of its safety compliance.
 18 Is that an accurate depiction?
 19 **A. Yes. The reporting requirements are operation and**
 20 **maintenance plans, which also includes the emergency**
 21 **response procedures, integrity management plan, damage**
 22 **prevention program, continuing public education program,**
 23 **and operator qualification program.**
 24 **Also Part 194 requires an Oil Spill Response Plan,**
 25 **which does require PHMSA approval, as well as an antidrug**

1 **plan and an alcohol misuse plan.**

2 **Q.** And you did just touch on it, but I'll just ask
3 again. One of those plans must be approved by PHMSA, and
4 if you could explain that approval.

5 **A. The Oil Spill Response Plan needs approval by PHMSA.**

6 **Q.** Aside from that example of where approval is
7 required, generally could you describe to us PHMSA's role
8 regarding all of those working plans of the Applicant?

9 **A. Yes. The agency responsible for the oversight of
10 pipeline safety is the Pipeline and Hazardous Materials
11 Safety Administration, commonly referred to as PHMSA.**

12 **PHMSA's role in pipeline projects such as this is
13 largely one of an auditor. They review the documents and
14 the plans that I mentioned earlier for compliance during
15 the construction and operations phase of the program. So
16 they're looking for compliance with the programs that
17 were provided by the Applicant and also compliance with
18 the federal codes.**

19 **Q.** There's a big difference then between what the PUC
20 is doing this week and what PHMSA's role will be
21 throughout the life and beyond of this pipeline. Is that
22 accurate?

23 **A. Yes. The Public Utilities Commission hearing is the
24 opportunity for the Applicant to provide evidence that
25 the facility will not harm the environment or the**

1 **citizens of the state to the Commission. Whereas,
2 PHMSA's role is largely one of auditing, of compliance to
3 the plans that I mentioned.**

4 **Q.** And these same audits that you've mentioned and
5 compliance checks do occur after the useful life or
6 abandonment which sounds if it's very unlikely.

7 So if you could comment first to the likelihood of
8 abandonment and then the continuing audits and compliance
9 checks that will occur?

10 **A. Well, the likelihood of abandoning a facility of
11 this size I would feel is small just based on
12 historical -- historical data of abandonment.**

13 **The -- there has been some talk about the
14 abandonment phase so I think it would be worthwhile to
15 read from the code just what is required for abandonment
16 of a pipeline. This is from CFR 195. And this is for
17 the -- this is in the operation and maintenance plan that
18 the Applicant must come up with. Part of that plan has
19 to deal with the abandonment of pipeline facilities.**

20 **So the code reads, "Abandonment of pipeline
21 facilities including safe disconnection from an operating
22 pipeline system, purging of combustibles and sealing
23 abandoned facilities left in place to minimize safety and
24 environmental hazards. For each abandoned offshore
25 pipeline facility or each abandoned onshore pipeline**

1 **facility that crosses over, under, or through**

2 **commercially navigable waterways the last operator of
3 that facility must file a report upon abandonment of that
4 facility in accordance with 195.59," which is an earlier
5 section of the code.**

6 **So basically says that the responsibilities are to
7 purge the pipeline of combustibles so there will not be a
8 danger of fire or explosion getting the substance below
9 the lower LEL. So the -- and the reporting
10 responsibilities are -- come into play in the areas of
11 navigable waterways only.**

12 **Q.** And I won't get into a lot of detail regarding the
13 special permit. We've heard a lot about it already.

14 Just want to confirm that depth of cover is an element
15 and will be enforced by PHMSA.

16 **A. Yes. The special permit requires a 48 inch depth of
17 cover which was explained earlier.**

18 **Q.** You also studied the planned placement of valves
19 along this pipeline. Give just a brief explanation, if
20 you could, as to why it's so important to properly plan
21 for the placement of those valves.

22 **A. The placement of valves is largely a function of
23 protection of the environmental concerns that takes into
24 account the unusually sensitive areas, the HCAs, the high
25 consequence areas, in order if there was a release of**

1 **product.**

2 **So the -- in the State of South Dakota for this
3 project there are 16 main line valves in place. And I've
4 reviewed the spacing of those with regard to elevation,
5 the relationship to the water bodies, and the USAs and
6 HCAs and I've found the spacing to be adequate, in my
7 opinion.**

8 **Q.** Do you have any other recommendations based on your
9 evaluation of the Application?

10 **A. No. I don't have any other recommendations at this
11 time.**

12 MS. SEMMLER: No further questions.

13 MR. SMITH: Applicant, is that Mr. Taylor?

14 MR. TAYLOR: It is, Mr. Smith.

15 CROSS-EXAMINATION

16 BY MR. TAYLOR:

17 **Q.** Dr. Walsh, I'm William Taylor. I'm representing
18 TransCanada.

19 I'd like to talk to you for a moment about PHMSA and
20 draw an analogy. PHMSA's like the IRS, isn't it? It
21 sets the rules. It expects the taxpayer to comply with
22 the rules, and then it audits to be sure that the
23 taxpayers complied with the rules.

24 Substitute pipeline owner for taxpayer and you have
25 the same system?

1 **A. That appears to be an apt analogy.**
 2 **Q.** So while PHMSA does not come out and do an
 3 inspection every day, it may come out and do an
 4 inspection for compliance on a periodic basis to make
 5 sure that your operations are complying with the many
 6 standards and rules that PHMSA has set; right?
 7 **A. That's correct.**
 8 **Q.** And in this case this pipeline like the Keystone I
 9 pipeline has a whole set of conditions, special
 10 conditions, attached to its operational -- attached to
 11 its operations because of the special permit; right?
 12 **A. Correct.**
 13 **Q.** And PHMSA also audits for compliance with those
 14 conditions?
 15 **A. Yes. That's correct.**
 16 **Q.** And the same is true with abandonment. Now in the
 17 abandonment world when, if, and should that ever happen,
 18 abandonment is really not the right word. It's
 19 demobilization or taking it out of service is really the
 20 correct word, isn't it? Decommissioning I think is the
 21 word you use?
 22 **A. The code calls it abandonment, abandoning pipeline**
 23 **facilities so.**
 24 **Q.** The pipeline company doesn't just get to walk away,
 25 though.

1 **A. Some of that is dependent on the -- on the easement**
 2 **agreements, I believe.**
 3 **Q.** But the pipeline company has to purge the line?
 4 Yes?
 5 **A. Yes.**
 6 **Q.** And it has to ensure the continued mechanical
 7 integrity of the line for a period of time, does it not?
 8 **A. Yes.**
 9 **Q.** And it has to maintain, for example, the corrosion
 10 protection devices for a period time?
 11 **A. For abandonment that's not called for.**
 12 **Q.** CP is not -- continued CP is not called for?
 13 **A. If it's inactivating the line where it's for future**
 14 **use or sale, perhaps then it would be certainly a good**
 15 **practice to maintain the corrosion protection on the**
 16 **line.**
 17 **Q.** In any event, whatever the regulations are that
 18 govern operations or that govern abandonment, in addition
 19 to auditing for compliance, PHMSA also has the legal
 20 authority to enforce compliance, does it not?
 21 **A. Yes, it does.**
 22 **Q.** And it has an enforcement arm?
 23 **A. Yes.**
 24 MR. TAYLOR: Thank you. That's all the
 25 questions.

1 MR. SMITH: Mr. Blackburn.
 2 MR. BLACKBURN: Just getting back to my other
 3 set of notes here. Excuse me. Just bear with me a
 4 second.
 5 MR. SMITH: Yeah. Take your time.
 6 CROSS-EXAMINATION
 7 BY MR. BLACKBURN:
 8 **Q.** In your testimony you note -- just trying to get
 9 back to the exact language, what I'm looking for here.
 10 You state "In general plans and programs are not
 11 'approved.'" The quotations are your quotations. "But
 12 rather the PHMSA inspection process reviews the documents
 13 for accuracy during compliance audits."
 14 Why do you put that in quotations, the word
 15 "approve" in quotations?
 16 **A. Because the one filing that does require approval is**
 17 **the Oil Response Plan, 194.**
 18 **Q.** Yeah. But you said in general plans and programs
 19 are not approved. So you're talking about the ones other
 20 than that particular one that is approved.
 21 **A. Correct.**
 22 **Q.** And why are you -- why do you use the term -- why do
 23 you use the word "approve" with quotations around it?
 24 Why don't you just say it's not approved?
 25 **A. I could say not approved, and I think that would**

1 **have the same effect.**
 2 **Q.** And in the regulations, the term that is used for
 3 the process that PHMSA goes through is that they
 4 conduct -- for example, with the integrity management
 5 plan they conduct an audit of that plan before the
 6 pipeline is put into operations?
 7 **A. That's correct.**
 8 **Q.** They use the term audit of the plan?
 9 **A. I'd have to look up the -- what the language is in**
 10 **the code. There are other witnesses that are taking care**
 11 **of the integrity management portion of the code.**
 12 **Q.** Well, I just looked through 195 and it only uses the
 13 word "audit" in two places and that's related to
 14 operations taken by the operator and not by PHMSA. So it
 15 doesn't appear that the regulation actually uses the term
 16 "audit" for any of the actions it takes in implementing
 17 these regulations.
 18 So are you sure that audit isn't a word that you're
 19 using but not that the regulations use?
 20 **A. I'm using the word "audit" because that's largely**
 21 **the function of what PHMSA does.**
 22 **Q.** And I appreciate your correction that the word
 23 "abandonment" is, in fact, the term that's used in the
 24 regulation to describe these facilities and but I -- it's
 25 remarkable that you said you don't think this pipeline

1 will ever be abandoned.

2 So this pipeline will operate in perpetuity? Is
3 that what you're saying?

4 MS. SEMMLER: I think it unlikely -- I think
5 it's a mischaracterization of the testimony. I think
6 unlikely was the word used.

7 Q. Well, in that case it's unlikely to be abandoned in
8 perpetuity?

9 **A. It is unlikely to be abandoned.**

10 Q. Ever?

11 **A. Certainly within the 50-year life cycle that --
12 50-year design cycle that it's -- that was mentioned
13 earlier.**

14 Q. So what you're saying is that after the 50-year
15 design cycle that the pipeline at some point would be
16 abandoned because it would no longer be in use and be
17 abandoned?

18 **A. It's very difficult to say what the -- what the
19 future of the pipeline will be. My opinion is that it is
20 unlikely that it will be abandoned in the near future.**

21 Q. So pipelines have nearly an indefinite lifetime? In
22 the near future is what you're saying. So you're
23 qualifying your testimony now to say that it's unlikely
24 to be abandoned in the near future?

25 MR. TAYLOR: Mr. Smith, I'd object to the form

1 of the question. It's argumentative and assumes a
2 plethora of facts that are far from evidence. This is
3 not a debate. It's a question and answer proceeding.

4 MR. SMITH: I don't know, Mr. Blackburn. Is
5 there a rephrasing that you could do? I think I
6 understood the question actually, but maybe try it again
7 because I'm sure by now he's forgotten what it was
8 anyway.

9 Q. As I remember your testimony now, you said --
10 correct me if I'm wrong here, but the likelihood of
11 abandoning a facility of this size is small; is that
12 correct?

13 **A. I don't remember my exact words, but I believe that
14 it is unlikely that it would be abandoned.**

15 Q. And what I'm trying to get at here is that you are
16 not describing this -- you're discussing this without the
17 context of time. Because abandonment doesn't happen
18 instantly, nor does corrosion of pipelines, which is one
19 of the factors that leads to pipeline -- well, let me
20 rephrase the question.

21 Do pipelines corrode over time?

22 **A. There are corrosion -- there are corrosion avoidance
23 measures that are put in place to --**

24 Q. That's not my question. Do pipelines corrode over
25 time?

1 **A. Everything corrodes over time.**

2 Q. Thank you. Given that everything corrodes over
3 time, isn't it true that at some point in this pipeline
4 the steel in the ground that that pipeline will start to
5 corrode and gradually weaken to the point where it's no
6 longer serviceable at some point in time in the future?

7 **A. I can't say that for sure.**

8 Q. And you've testified that you are an expert in
9 metallurgy and corrosion; isn't that correct?

10 **A. I have a degree in metallurgical engineering.**

11 Q. And you're not -- and you don't -- have no opinion
12 about whether this pipeline will corrode over time?

13 **A. Well, time frame's important also. You know, I did
14 say that it would -- it would have to -- it would corrode
15 over time so at some point it would corrode, yes.**

16 Q. Also you cited CFR 195.59, but you didn't site --
17 you also didn't say that part of the element of 195.59 is
18 that the pipeline -- the report must include if they do
19 report compliance with other laws, applicable laws, as
20 part of the abandonment process.

21 Isn't that correct? I mean, doesn't the code
22 require compliance with other laws?

23 **A. Reporting to the National Pipeline Mapping System?
24 Is that what you're referring to? Yes. Yeah. That
25 was -- in my testimony I was reading the 195.402 which**

1 **referred to 195.59.**

2 Q. You also mentioned that when counsel for Applicant
3 questioned you about whether the Federal Government had
4 control over abandonment that other kinds of requirements
5 might exist other than federal requirements, legal
6 requirements for abandonment such as easements.

7 **A. Correct. The agreement for the easement would come
8 into place after the abandonment -- if there was such an
9 agreement, that it referred to the abandonment of the
10 pipeline.**

11 Q. And once a pipeline is sealed -- well, purged,
12 sealed and disconnected from other pipelines, which is
13 what the full totality of federal requirements are for
14 abandonment, are there any other federal requirements
15 other than those requirements?

16 **A. Those are the only requirements that I am aware of.**

17 Q. Are there any requirements that the pipeline
18 operator once those things are accomplished, any federal
19 requirements that the pipeline operator maintain that
20 pipeline once those three things are done?

21 **A. Not to my knowledge.**

22 Q. Are you aware of any laws in the United States that
23 require a pipeline operator to remove abandoned
24 facilities?

25 **A. No, I'm not.**

1 **Q.** Have you worked on any -- have any professional
2 experience in pipeline abandonment proceedings or
3 disputes or litigation?

4 **A. No, I have not.**

5 **Q.** Have you done any surveys or reviews of pipeline
6 abandonment in the United States?

7 **A. No, I have not.**

8 **Q.** Also you describe -- you used -- counsel for
9 TransCanada described the IRS code as being somewhat
10 similar to the PHMSA process in the sense that the IRS
11 sets up standards and then has -- does audits to ensure
12 compliance with those standards.

13 And you agreed that auditing -- that that was an
14 apt, appropriate analogy and said that whereas what
15 this -- also described this Commission as being concerned
16 about safety and doing a permit that would review the
17 safety of the pipeline and consider those issues and that
18 PHMSA would just simply conduct an audit of Applicant's
19 compliance with the PHMSA regulations.

20 Isn't it true, though, that PHMSA regulations, the
21 entire point of PHMSA regulations is to ensure public
22 safety?

23 **A. PHMSA is responsible for the pipeline safety, yes.**

24 **Q.** So in that sense, therefore, PHMSA's -- compliance
25 with PHMSA requirements is intended to promote public

1 safety and, in fact, PHMSA has more authority than this
2 Commission does to control safety of -- or to require
3 safety and safety regulations related to pipelines?

4 **A. That's my understanding of the -- of this
5 Commission's -- of this Commission's charge.**

6 **Q.** And is it your understanding of PHMSA's charge too?

7 **A. Yes.**

8 **Q.** Have you ever drafted a Emergency Response Plan or
9 been involved in the drafting of an Emergency Response
10 Plan?

11 **A. No, I have not.**

12 **Q.** Have you ever worked for PHMSA and reviewed
13 Emergency Response Plans?

14 **A. Being employed by PHMSA?**

15 **Q.** Yes.

16 **A. No, I have not.**

17 **Q.** Have you ever been involved in any way with the
18 development for the Emergency Response Plan?

19 **A. No, I haven't.**

20 **Q.** So you are -- therefore, your opinion about how
21 PHMSA operates and approves Emergency Response Plans is
22 based on -- could you describe the knowledge that's based
23 on?

24 MS. SEMMLER: I'm going to object that this
25 witness isn't on the stand to analyze the Emergency

1 Response Plan nor PHMSA's process regarding the Emergency
2 Response Plan. Testimony was offered simply to state
3 that it must be approved by PHMSA, period.

4 MR. BLACKBURN: The witness is testifying
5 that -- is in part testifying that the Applicant is
6 complying with federal law. And I want to know what the
7 basis for the witness's experience and knowledge is to
8 ensure that, in fact, the Applicant is complying with
9 federal law.

10 MS. SEMMLER: Federal law requires filing,
11 period. PHMSA does the rest. I believe this
12 Commission's opinion of how PHMSA does it is irrelevant.

13 MR. BLACKBURN: That is Ms. Semmler's opinion
14 about how the process works at PHMSA. And I wanted to
15 see whether this witness could actually describe how that
16 process works because that's an opinion not grounded in,
17 for example, the testimony of TransCanada's witness Hayes
18 yesterday.

19 MS. SEMMLER: My objection stands. It's outside
20 the scope of this witness's testimony, and it's
21 irrelevant to this process.

22 MR. SMITH: I guess the only testimony I recall
23 him having about the Emergency Response Plan is just that
24 it -- and he calls it the oil -- the words you used were
25 not that. They were --

1 THE WITNESS: Oil Spill Response Plan, Part 194.

2 MR. SMITH: Response Plan requires approval.
3 Just going from recollection, is there anything else that
4 he testified to regarding that?

5 MR. BLACKBURN: He described the process based
6 on they sent the plan, they had a meeting with PHMSA,
7 PHMSA sent them a letter, PHMSA required a number of
8 changes in the plan, TransCanada changed the plan so
9 there was actually quite an engaged process between PHMSA
10 and TransCanada during that effort.

11 And here just to read the witness's own
12 testimony, it describes the process of the Oil Spill
13 Response Plan is to submit a duplicate to PHMSA. The
14 Office of Pipeline Safety and PHMSA will approve the plan
15 if it meets all the requirements --

16 (Discussion off the record)

17 MR. BLACKBURN: And I can read the witness's
18 testimony is "The Oil Spill Response Plan is submitted in
19 duplicate to PHMSA. The Office of Pipeline Safety of
20 PHMSA will approve the plan if it meets all requirements
21 of Part 194. If PHMSA determines the plan does not meet
22 all the requirements, they will notify the operator of
23 apparent deficiencies and provide an opportunity for the
24 operator to respond."

25 The witnesses testified on the processes of

1 PHMSA, and I'm not testifying myself, just describing it.
 2 What I'm doing is establishing the witness's knowledge
 3 and experience in working with PHMSA to note whether
 4 that's truly what happened with PHMSA.

5 MS. SEMMLER: And I would argue that's a
 6 function of the code. That's what the code requires.
 7 Period.

8 MR. SMITH: Well, I -- I'm going to overrule the
 9 objection and allow the Commission -- or the question to
 10 be answered. To the best -- to the best you can, you
 11 know.

12 **A. The testimony was based on discussions with PHMSA of**
 13 **what the procedure is.**

14 MR. BLACKBURN: Thank you.

15 MR. SMITH: Commissioner questions?

16 CHAIRMAN JOHNSON: At some point -- and I'm
 17 paraphrasing here, Mr. Walsh. My apologies -- you had
 18 mentioned that the location of the valves was due
 19 primarily to environmental safety.

20 I mean, wouldn't the totality of the location of
 21 the valves be dependent on environmental safety? I mean,
 22 I understand there's vehicular access and electrical
 23 liability. But all of those things really flow into
 24 environmental safety; is that right?

25 THE WITNESS: Right. That's correct. The other

1 aspects that you didn't mention were included in a -- in
 2 a data request that the Applicant had responded to one of
 3 my questions.

4 CHAIRMAN JOHNSON: But ultimately those are all
 5 related in a rather direct way for the environmental
 6 safety -- you know, you want to have vehicular access so
 7 you can ensure if something else doesn't work you can get
 8 there quickly to minimize environmental impact.

9 Is there anything I'm missing? Would anything
 10 other than environmental safety be considered?

11 THE WITNESS: No. It's -- it's primarily the --
 12 the goal of valve placement.

13 CHAIRMAN JOHNSON: Thanks. And then we've had
 14 some discussion about time as a factor for corrosion.

15 How would you compare the effect of time on corrosion as
 16 opposed to -- I mean, how does it compare to integrity
 17 management? I mean, is time a bigger component of
 18 corrosion, or is integrity management practices more
 19 important to the rate of corrosion?

20 THE WITNESS: Are we discussing after
 21 abandonment or --

22 CHAIRMAN JOHNSON: In an operational pipeline.

23 THE WITNESS: In an operational pipeline the --
 24 there are procedures in place and protection, corrosion
 25 protection activities, that are run by the pipeline

1 company, cathodic protection, coating of the pipeline, to
 2 minimize corrosion. So the intent is to not have the
 3 pipeline corrode at all while it's in service because of
 4 these measures.

5 CHAIRMAN JOHNSON: And I -- and I don't want to
 6 talk about forever because I think that is a tough
 7 concept at least for me to grasp.

8 So let's focus -- for instance, the Applicant
 9 indicates that in 29 years of utilizing cathodic
 10 protection and FBE coating that they have not had any
 11 failures on those pipelines. I believe that was the
 12 testimony. And that to the extent that those sections of
 13 pipeline have been excavated that there has been no
 14 evidence of corrosion.

15 Do you think that that's a reasonable
 16 expectation for this Commission to have that that would
 17 be the experience not just over 29 years but say over
 18 50 years or something along that terms of time frame?

19 THE WITNESS: Absolutely no corrosion?

20 CHAIRMAN JOHNSON: To have no evidence of
 21 corrosion.

22 THE WITNESS: I would think that would be --
 23 that would probably be unlikely. There are other --
 24 other activities such as in-line inspection where you're
 25 looking for the corrosion and are actively trying to find

1 it and mitigate it.

2 CHAIRMAN JOHNSON: So I'm going to pause for
 3 just a minute because I think it was in Ms. Kothari's
 4 testimony. And if you'll give me just a few seconds, I
 5 want to ask you about that.

6 Ms. Kothari's testimony she says there have been
 7 no leaks on this type of pipe -- she's talking about FBE
 8 coated pipe installed by TransCanada with the FBE coating
 9 and cathodic protection system during that time.

10 "When TransCanada has excavated pipe to validate
 11 FBE coating performance there has been no evidence of
 12 external corrosion."

13 So do you find that hard to believe?

14 THE WITNESS: No. If it has been properly
 15 maintained and the coating is intact and cathodic
 16 protection is in place, you would expect it not to
 17 corrode.

18 CHAIRMAN JOHNSON: So then help me understand
 19 how we get to you wouldn't be surprised this would be the
 20 experience over 29 years but when we get out to 50 you
 21 would be surprised not to have any evidence of corrosion.

22 Am I missing an important component here?

23 THE WITNESS: Well, if all the corrosion and
 24 cathodic protection systems are in place and activated,
 25 it should be the same 29 or 50. If the corrosion

1 protection systems are turned off, like I say, in an
 2 abandonment case, then the -- you know, the -- the pipe
 3 would start to corrode if there was access to the pipe
 4 through the coating through damage or some other means.
 5 CHAIRMAN JOHNSON: Okay. Thank you. I have
 6 nothing further, Mr. Smith. Thanks.
 7 MR. SMITH: Other Commissioner questions.
 8 COMMISSIONER HANSON: Thank you, Mr. Smith. You
 9 have -- and I may be piggybacking a little bit on
 10 Commissioner Johnson's questions.
 11 You had set forth in your testimony on Exhibit A
 12 and in other areas you gave the five areas that -- where
 13 you think that should determine where locations of valves
 14 are.
 15 And I'm going to try to ask a question that
 16 deals with the Exhibit B which is a confidential exhibit.
 17 However, I'm hoping that neither my question nor your
 18 answer will involve anything confidential.
 19 And so I'd like you to pause after I ask the
 20 question and make sure that I have not trespassed that
 21 area and attorney for the -- I always think of
 22 Ms. Semmler as being an attorney for the citizens. She
 23 is a staff member of the PUC, however. And give her an
 24 opportunity to intercept anything that I may trespass on.
 25 First of all, do you know -- in Exhibit B you

1 talk about the -- the location where the potential for
 2 the highest -- or for the greatest contamination that
 3 could take place as a result of a pipe failure, if I'm
 4 phrasing that properly.
 5 It reminds me of putting it in perspective, the
 6 analysis that is done on an annual basis in the larger
 7 cities as to which intersection is the worst
 8 intersection. And we always keep in mind not to get too
 9 excited about it because there will always be the worst
 10 intersection regardless if once we bring down some of the
 11 challenges there, we now have another worst intersection.
 12 So keeping that in mind, I don't mean to try to
 13 do away with the worst-case scenario in every instance
 14 because once we do away with that, we're going to be in
 15 the next challenge.
 16 However, I am concerned from a standpoint of
 17 whether or not this has a remotely controlled valve. And
 18 this is in a remote area certainly.
 19 So are you aware of whether this has a remotely
 20 controlled valve? And it appears that you can answer
 21 that question.
 22 THE WITNESS: I don't recall if it does or not.
 23 When I was looking at the analysis I knew, but I don't --
 24 I can't go by memory I guess.
 25 COMMISSIONER HANSON: So I'm going to assume

1 that you don't know -- if you don't know that, you
 2 certainly don't know the distance to an electrical power
 3 supply.
 4 THE WITNESS: That's correct. I didn't know the
 5 distance.
 6 COMMISSIONER HANSON: Would someone be able to
 7 get that to us, please?
 8 MR. KOENECKE: Yes.
 9 COMMISSIONER HANSON: And Attorney Brett
 10 Koenecke is saying yes. Thank you.
 11 No further questions. Thank you.
 12 MR. SMITH: Commissioner Kolbeck, did you have a
 13 question?
 14 COMMISSIONER KOLBECK: Yes. You spoke in
 15 your -- this isn't in your direct testimony, per se, but
 16 you've had -- your responsibilities in your past
 17 positions are materials and pipes and components and
 18 stuff like that.
 19 Would you say that the pipe that the Applicant
 20 is using is of the highest quality or of the most up to
 21 date in technology?
 22 THE WITNESS: Based on the -- based on the
 23 requirement for the 80 percent -- 80 percent special
 24 permit, they are required to use API 5L PSL 2, which has
 25 high fracture resistance properties compared to PSL 1,

1 which is all that is required in the case of where there
 2 would not be that -- where they would not need the
 3 permit. So yes.
 4 COMMISSIONER KOLBECK: Okay. I think I have the
 5 decommissioning thing straight in my mind.
 6 In your opinion a company can continue to do the
 7 corrosion protection or they may choose not to. Is that
 8 your testimony?
 9 THE WITNESS: That's my understanding, yes.
 10 COMMISSIONER KOLBECK: Okay. And if they choose
 11 to, it would probably be because they want to keep the
 12 pipe in a salable state maybe?
 13 THE WITNESS: I believe so.
 14 COMMISSIONER KOLBECK: Or convert it to an
 15 ethanol pipeline or whatever may come about.
 16 Do you know of any problems in the United States
 17 right now with decommissioning of pipelines?
 18 THE WITNESS: No, I don't.
 19 COMMISSIONER KOLBECK: Okay. Have you ever had
 20 any experience with --
 21 THE WITNESS: No. I'm -- I'm specifically
 22 referring to what the code requires.
 23 COMMISSIONER KOLBECK: Okay. Okay. You're
 24 basically telling me that the code says they have to
 25 decommission.

1 THE WITNESS: Correct.
 2 COMMISSIONER KOLBECK: You're not necessarily
 3 elaborating your testimony on digging into the federal
 4 regulations.
 5 THE WITNESS: Correct.
 6 COMMISSIONER KOLBECK: Okay. Perfect. I think
 7 that's it for now. Thank you.
 8 MR. SMITH: Additional Commissioner questions?
 9 Commissioner Johnson, do you have another question?
 10 Hearing none, staff -- oh, wait a minute.
 11 Commissioner Kolbeck.
 12 COMMISSIONER KOLBECK: Sorry. Just so I have
 13 your testimony correct, when you say that a pipeline may
 14 never cease to be in use -- or the pipeline may never
 15 corrode and go out of use, is that your testimony? Could
 16 you refresh me?
 17 THE WITNESS: If the -- if it's protected with
 18 the corrosion protection measures, right, if those are
 19 turned off, you could expect the pipeline to start
 20 corroding.
 21 COMMISSIONER KOLBECK: To start corroding?
 22 Okay. Or stop corroding?
 23 THE WITNESS: Start.
 24 COMMISSIONER KOLBECK: Okay. And referring to
 25 Commissioner Johnson's questions a little bit, were you

1 trying to say that a pipeline, thinking of a pipeline in
 2 its entirety you could replace parts if they did corrode
 3 so that a pipeline in the entirety may never go out of
 4 Commission?
 5 Was that the point you were trying to make? Or
 6 were you trying to say that a specific chunk will never
 7 corrode?
 8 THE WITNESS: Well, your first statement was
 9 correct. If pipelines do -- if they do corrode, they can
 10 be replaced or repaired. I don't know if that's --
 11 COMMISSIONER KOLBECK: I think I said
 12 Commissioner Johnson. I think I meant Mr. Blackburn.
 13 THE WITNESS: Okay.
 14 COMMISSIONER KOLBECK: But to think of it as
 15 corrosion, I guess -- and you said that, no, it could go
 16 on indefinitely. I was taking that as a pipeline in an
 17 entirety.
 18 You could replace sections along the way. You
 19 may get corrosion along the way, but the pipeline, per
 20 se, may never stop being used for one reason or another.
 21 THE WITNESS: That's correct.
 22 COMMISSIONER KOLBECK: Okay. So I think I
 23 understood what you were saying. Thank you.
 24 MR. SMITH: Any follow up? Any other
 25 Commissioner questions? Commissioner Hanson?

1 COMMISSIONER HANSON: I shouldn't, but I shall.
 2 Do you have any familiarity at all with
 3 Insituform?
 4 THE WITNESS: No, I do not.
 5 COMMISSIONER HANSON: Do you have any
 6 familiarity at all with the lining of pipe, the process
 7 of lining pipe, the interior of the pipe?
 8 THE WITNESS: Internal coating of pipe?
 9 COMMISSIONER HANSON: Yes.
 10 THE WITNESS: Just that it is done and often and
 11 sometimes required for different applications.
 12 COMMISSIONER HANSON: Do you know if it can be
 13 accomplished in pipe the size of what Keystone -- what
 14 TransCanada has laying there?
 15 THE WITNESS: Yes, it can. But the internal
 16 coating for a pipe is typically for -- to increase the
 17 flowability and not corrosion aspects.
 18 COMMISSIONER HANSON: Certainly. Well, I don't
 19 want to testify so I won't say anything further. Thank
 20 you.
 21 MR. SMITH: Commissioners, are you done? Staff?
 22 MS. SEMMLER: I have just two clarification
 23 questions.
 24
 25

1 REDIRECT EXAMINATION
 2 BY MS. SEMMLER:
 3 **Q.** One, corrosion control takes up an entire body of
 4 code. Is that accurate? It's very specific and in
 5 depth?
 6 **A. Are you referring to Part 195 code?**
 7 **Q.** Correct.
 8 **A. Yes.**
 9 **Q.** And I think there was an attempt maybe earlier to
 10 portray that there's some joint pipeline safety
 11 responsibilities in this aspect of pipelines between
 12 PHMSA and the PUC.
 13 And as a nonlawyer it's impossible for you to draw
 14 legal conclusions regarding any joint responsibility, or
 15 you've not cited any case law that would indicate there's
 16 preemption issues. Is that accurate?
 17 **A. Yes.**
 18 MS. SEMMLER: Nothing further.
 19 MR. SMITH: Any follow up, Applicant, to
 20 Commissioner questions?
 21 MR. TAYLOR: Thank you, Mr. Smith.
 22 RECROSS-EXAMINATION
 23 BY MR. TAYLOR:
 24 **Q.** You know, Dr. Walsh, something that nobody talks
 25 about is that an owner who invests, say, \$10 billion in

1 the construction of a pipeline that runs from Canada
 2 through the United States, it's also reasonable to expect
 3 that the owner will protect its property, isn't it?
 4 **A. I would think that would be reasonable.**
 5 **Q.** In fact, many of the corrosion protections that are
 6 installed on this pipeline and operated by the owner are
 7 designed to do just exactly what we've talked about, and
 8 that is to control corrosion indefinitely, isn't it?
 9 **A. The -- if that's the intent of the Applicant, then**
 10 **it is. But I'm just saying that the -- the corrosion**
 11 **measures are effective for stopping corrosion.**
 12 **Q.** Yes. And the science of corrosion control has made
 13 great strides and advancement in the last decade or so,
 14 has it not?
 15 **A. Yes, it has.**
 16 **Q.** And this pipeline from the best you can tell has all
 17 of those advanced corrosion protections, does it not?
 18 **A. There is a -- another witness who will be examining**
 19 **the corrosion aspects of the code.**
 20 **Q.** Mr. Schramm?
 21 **A. Mr. Schramm, yes.**
 22 **Q.** All right. When we discuss compliance auditing by
 23 PHMSA, unlike the IRS, compliance auditing by PHMSA is
 24 something that is ongoing and frequent, is it not?
 25 For example, during the course of construction you

1 would expect that there will be PHMSA auditors or
 2 inspectors who show up to audit compliance with the
 3 requirements?
 4 **A. That's correct.**
 5 **Q.** In fact, frequently show up to check the status of
 6 construction.
 7 **A. I wouldn't -- the frequency varies from project to**
 8 **project.**
 9 **Q.** It's a question I shouldn't ask, but I'd -- like
 10 Mayor Hanson, I can't resist asking. You're aware of the
 11 fact that there are 60 year old pipelines operating in
 12 South Dakota right now?
 13 **A. I'm aware that there are 60 year old pipelines**
 14 **operating. I don't know if they're in South Dakota or**
 15 **not.**
 16 MR. TAYLOR: Mayor Hanson and I know of one
 17 that -- that's all the questions I have. Thank you.
 18 MR. SMITH: Mr. Blackburn, do you have any
 19 follow up to the Commissioner questions?
 20 MR. BLACKBURN: Yes.
 21 RE-CROSS-EXAMINATION
 22 BY MR. BLACKBURN:
 23 **Q.** I think a number of questions here that will help to
 24 clarify this.
 25 You've described the design life of this pipeline to

1 say that TransCanada has stated there's a design life for
 2 this pipeline; is that correct?
 3 **A. I recall -- I don't know who said it, but somebody**
 4 **did mention a design life within these hearings.**
 5 **Q.** Do pipelines typically --
 6 CHAIRMAN JOHNSON: I'm sorry to interrupt,
 7 Mr. Blackburn. If we could speak a little more clearly
 8 into the microphone, Mr. Walsh, I think that will help
 9 folks on the internet. Thanks.
 10 THE WITNESS: I'm sorry. I said that was
 11 mentioned during these two days of hearings so far. I
 12 don't recall who had actually mentioned it, though.
 13 **Q.** Do pipelines typically have a design life?
 14 **A. Yeah. I believe they do. I've never -- I've never**
 15 **been in on the portion of the design where I have to make**
 16 **a decision, but I do hear that. So.**
 17 **Q.** Do you know what the factors are that go into
 18 determining the design life of the pipeline?
 19 MS. SEMMLER: I think we're outside the scope of
 20 intended line of question.
 21 MR. BLACKBURN: The Commission is concerned
 22 about how long this pipeline would last, and a number of
 23 the Commissioners asked questions about that.
 24 I think that it's helpful like all machinery,
 25 you know, Commissioner Kolbeck asked about how long this

1 pipeline could be maintained and what its life would be.
 2 Design life is essentially the term that's used to
 3 determine how long equipment like this will last. So I
 4 think it's very much in response to the Commissioner's
 5 questions.
 6 MR. SMITH: Again, you know, if you know,
 7 please, if you can.
 8 **A. I don't know.**
 9 **Q.** Are you aware whether the pipe -- steel that's being
 10 used in this pipeline has internal coatings on it?
 11 **A. No, I'm not.**
 12 **Q.** And you also described advanced corrosion
 13 protection, or there was some discussion of advanced
 14 corrosion protection. As I understand it, it's the
 15 corrosion protections provided for this pipeline are
 16 primarily cathodic protection and fusion bond epoxy
 17 coating on the outside of the pipeline.
 18 Start with those two. Is cathodic protection a
 19 new or advanced technology that's only come about in the
 20 last decade?
 21 **A. I'd like to defer that question to the witness who**
 22 **will be -- who will be discussing the corrosion aspects**
 23 **of the line.**
 24 **Q.** Uh-huh. It's just that you had given an opinion
 25 about whether or not, you know, there have been new and

1 advanced technologies included in this pipeline to
2 prevent corrosion.

3 MS. SEMMLER: It's already been answered. Like
4 to defer.

5 Q. And so since you gave an opinion on that, I wanted
6 to find out what the basis for that opinion was and what,
7 in fact, new technologies were included in this pipe to
8 prevent corrosion.

9 MR. SMITH: I'm going to overrule. But, again,
10 answer within what you know.

11 **A. The new technologies, being FBE coating, which has
12 been very successful in mitigating corrosion.**

13 Q. And when were FBE coatings developed and used in
14 steel for any corrosion in steel?

15 **A. I believe they've been in operation 25 or 30 years,
16 but again that's -- there are other witnesses who will
17 be -- could be more accurate with that.**

18 MR. BLACKBURN: Thank you. That's all the
19 questions I have.

20 MR. SMITH: Staff, do you have any final
21 rebuttal questions?

22 MS. SEMMLER: No.

23 MR. SMITH: Thank you. You may step down then,
24 Mr. Walsh. Thank you very much.

25 I know it's late in the day and -- you didn't

1 have anything, did you, Bill?

2 MR. TAYLOR: No, I don't.

3 MR. SMITH: Okay. It gets tougher at this time
4 of the day to hang in there. Thank you very much.

5 Staff, did you want to try to work any
6 additional witnesses -- well, maybe I should ask,
7 Commissioners, since we're going to be going tonight,
8 should we call it a day for now for the evidentiary
9 portion of the hearing?

10 CHAIRMAN JOHNSON: Let's hear staff's opinion
11 first.

12 MR. SMITH: Staff, do you have an opinion on
13 that?

14 MS. SEMMLER: We have three witnesses that
15 parties have stipulated to the fact they can be available
16 via phone. So we certainly could wait until tomorrow so
17 we can handle those phone calls all in a chunk. Maybe
18 the best use of the Commission's time.

19 MR. SMITH: Okay. I know earlier an attorney
20 for the Attorney General's Office who hasn't -- we
21 haven't had her make an appearance yet because her round
22 of people haven't been involved.

23 Ms. Giedd had mentioned to me that one of the
24 DENR witnesses -- is that -- are we too -- is that --

25 MS. SEMMLER: He's made other arrangements.

1 MR. SMITH: Oh, he has? Is that settled then?

2 Do you want to right now, Roxanne, make your appearance
3 and explain what your purpose in being here is? We can
4 at least take care of that.

5 MS. GIEDD: I will do that. Roxanne Giedd,
6 Assistant Attorney General.

7 I'm appearing on behalf of a group of witnesses
8 that have been subpoenaed by the PUC staff for the
9 Department of Environment and Natural Resources. Those
10 witnesses are Derric Iles, Brian Walsh, and Kim McIntosh.
11 And for the Division of History of the Department of
12 Tourism the witness is Paige Hoskinson Olson.

13 They will be appearing. The only difficulty we
14 had with arrangements was Mr. Iles, but he has agreed to
15 stay overnight. So he will be here tomorrow, and so I
16 think they'll all be here tomorrow to testify.

17 MR. SMITH: And maybe your role will be --

18 MS. GIEDD: My role is limited solely -- I'm
19 appearing solely on behalf of the witness. I will not be
20 conducting direct examination like I did last time. I
21 believe that your PUC attorney will be doing that.

22 I am just here to assert any privileges or
23 objections that may be personal to DENR or the Department
24 of Tourism as the proceedings go on.

25 MR. SMITH: Okay.

1 MS. GIEDD: So hopefully I won't say a word.

2 MR. SMITH: Thank you. Then I think if we can't
3 work anyone else in or it's not prudent to do so, we take
4 advantage of the 1 hour and 7 minutes we have, and we can
5 all try to get freshened up.

6 We'll be in recess then until tomorrow morning
7 at 8:30. Thank you everyone. It's been a long day.

8 CHAIRMAN JOHNSON: But maybe we'll reiterate for
9 anybody listening that there will be a public input
10 meeting tonight.

11 MR. SMITH: Right. At 6 o'clock in this room we
12 will be having an informal public input hearing at which
13 any member of the public who's interested may appear and
14 present their views to the Commission.

15 Thank you, everyone. We're in recess until
16 8:30.

17 (The hearing is in recess at 4:55 p.m.)

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1 STATE OF SOUTH DAKOTA)
2 :SS CERTIFICATE
3 COUNTY OF SULLY)
4

5 I, CHERI MCCOMSEY WITTLER, a Registered
6 Professional Reporter, Certified Realtime Reporter and
7 Notary Public in and for the State of South Dakota:
8 DO HEREBY CERTIFY that as the duly-appointed
9 shorthand reporter, I took in shorthand the proceedings
10 had in the above-entitled matter on the 3rd day of
11 November, 2009, and that the attached is a true and
12 correct transcription of the proceedings so taken.

13 Dated at Onida, South Dakota this 23rd day of
14 November, 2009.
15
16
17

18 _____
19 Cheri McComsey Wittler,
20 Notary Public and
21 Registered Professional Reporter
22 Certified Realtime Reporter
23
24
25

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