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MACKENZIE VALLEY ENVIRONMENTAL
IMPACT REVIEW BOARD

TALTSON HYDRO EXPANSION
IR SESSION

Facilitators:

Martin Haefele MVEIRB

HELD AT:

Yellowknife, NT
October 5, 2009
Day 3 of 3

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1 --- Upon commencing at 9:21 a.m.

2

3 MR. MARTIN HAEFELE: Good morning,
4 everybody. Welcome back to the third day of Taltson
5 Technical Information Request and everything else
6 sessions. I see we have a few new faces. My name is
7 Martin Haefele, I'm the Manager for Environmental Impact
8 Assessment from the Review Board. I will not say much
9 today I think but I want to welcome you all to the
10 session and I will not throw any more Winston Churchill
11 quotes around so I had like too many last week I think.

12 From what I have seen, Thursday, Friday we
13 had a very productive time and we had a lot of questions
14 answered and I guess we have even more that an answer has
15 been promised.

16 So I'm looking forward to another day of
17 good questions and good answers and with that, I'll
18 immediately hand it over to Allan Ehrlich who's going to
19 lead us through the session today or at least this
20 morning.

21 And thank you very much for coming.

22 MR. ALAN EHRLICH: Thanks, Martin. The
23 morning is going to be focussed on issues that relate to
24 caribou and in the afternoon we're going to be looking at
25 certain subjects of note including wildlife, traditional

1 harvesting and anything else that people want to ask
2 before the session finishes.

3 Before we go on, let me start off by just
4 making sure everyone knows who's in the room. I'm going
5 to go around -- going to circle, it would be good if you
6 could say your name and also any organization you might
7 represent.

8 I'm Alan Ehrlich, I'm the Senior
9 Environmental Assessment Officer with the Review Board.

10 MS. TAWANIS TESTART: My name is Tawanis
11 Testart. I'm an Environmental Assessment Officer with
12 the Review Board and I'm the lead on this project
13 although I've decided to not talk so much today.

14 And just before we get started, I did want
15 to make just a couple of notes. Just so everyone's
16 aware, Bertha Catholique is in the back and she is
17 translating today for Albert. And so when you're
18 speaking, if you could speak slowly and clearly and try
19 and minimize the scientific terminology and acronyms
20 because it makes it easier for Bertha to translate.
21 Thanks.

22 MR. CHUCK HUBERT: Chuck Hubert with the
23 Review Board assisting.

24 MS. WENDY BOTKIN: Wendy Botkin, Parks
25 Canada.

1 MR. ROBERT MULDER: Robert Mulders,
2 Wildlife Division GNWT.

3 MS. LORETTA RANSOM: Loretta Ransom,
4 GNWT.

5 MR. GAVIN MORE: Gavin More, Environment
6 Natural Resources, GNWT.

7 MS. BERTHA CATHOLIQUE: Bertha
8 Catholique, Lutsel K'e.

9 MR. ALBERT BOUCHER: Albert Boucher,
10 Lutsel K'e.

11 MR. GEORGE MARLOWE: Albert's supposed to
12 say old man, yeah, I'm old man too. Old man from Lutsel
13 K'e.

14 MR. PAUL SMITH: Paul Smith, Fort Res.

15 MR. LLOYD CARDINAL: Lloyd Cardinal, Fort
16 Resolution, Metis council.

17 MS. MARLENE GROOMS: Marlene Grooms,
18 (phonetic) Lutsel K'e.

19 MR. ARCHIE CATHOLIQUE: Archie
20 Catholique, Lutsel K'e.

21 MR. DON AUBREY: Don Aubrey, Indian
22 Northern Affairs, Yellowknife.

23 MS. PATRICIA ABLE: Patricia Able,
24 (phonetic) Lutsel K'e.

25 MR. DAN GRABKE: Dan Grabke, Deze.

1 MR. DAMIAN PANAYI: Damian Panayi, I'm a
2 consultant to Deze Energy.

3 MS. LINDA ZURKIRCHEN: Linda Zurkirchen,
4 consultant for Deze Energy.

5 MR. LOUIE AZZOLINI: Louie Azzolini also
6 a consultant to Deze Energy.

7 MR. PETR KOMERS: Petr Komers, Wildlife
8 Ecology, on behalf of the Review Board.

9 MS. ANNE GUNN: Anne Gunn, on behalf of
10 the Review Board.

11 MR. PAUL MERCREDI: Paul Mercredi,
12 Environmental Assessment Officer with the Review Board.
13 And I'll do the honours.

14 And this is the lovely Nicole Spencer with
15 the Review Board.

16 MR. ALAN EHRLICH: Okay, thank you.
17 Before we go ahead with talking about what happens today,
18 I just wanted to express the Review Board's regrets on
19 the passing of Joe Michel an Elder in Lutsel K'e. This
20 happened recently and some of the delegates from Lutsel
21 K'e will not be able to be here all day because they'll
22 have to go to -- to the funeral.

23 One of the things that makes this relevant
24 is he's an Elder who -- who had a vast amount of
25 knowledge about caribou, of course, and I'm sure that

1 much of that was passed on but, you know, it's sort of a
2 pointed thing to think about here today.
3 So, anyway, the Review Board is -- is very sorry to hear
4 about that.

5 For those of you who were not here
6 yesterday -- sorry, none of us were here yesterday, it
7 was the weekend. For those of you who were not here the
8 first two (2) days, what this session is intended to do
9 is to identify the information that parties need from the
10 developer to help understand the potential impacts from
11 this project.

12 This is -- in the past, it's sometimes
13 been done in -- as written Information Requests, this
14 time it's being done as a live session. There is
15 transcription going on in the corner, which is why when
16 you speak please use a microphone, please say your name
17 before you speak. Because the transcript will be on the
18 record, we're going to try to be as clear as possible to
19 understand whether each question has been answered, and
20 whether or not there is a written component to each
21 question.

22 There are three (3) ways, I think, that
23 each question can go. Questions can, in some cases, get
24 a straightforward answer, you know, of simply here. In
25 some cases we've seen that a few minutes of discussion is

1 quite useful for resolving an issue. And for some of the
2 more complex questions, a written response will be
3 expected.

4 Now, for every written response here today
5 the deadline, unless we hear otherwise, is the end of
6 October. We're saying October 30th because the 31st is a
7 weekend, but unless it's specified otherwise the deadline
8 for written responses is the 30th of October.

9 MS. TAWANIS TESTART: Sorry, I'm just
10 going to interrupt for a second.

11 For those of you who were here on Thursday
12 and Friday last week, there were several reports that
13 were talked about during our session that Deze Energy had
14 mentioned a turbine report for entrainment and also a
15 flood hydrology report.

16 And I just wanted to clarify for the
17 record that all of that information had been previously
18 submitted to the Review Board and they -- it was on the
19 public record and is on the public record.

20 And so, all of that information is
21 available for parties. And I think that there was a
22 little bit of confusion about whether it was there or
23 not. And it is, in fact, there and it has been there,
24 and it is part of our body of evidence.

25 So, I just wanted to clarify that for the

1 record and for everyone who was here, and -- and cares.
2 And with that I will stop talking and hand it back to
3 Alan.

4

5 QUESTION PERIOD:

6 MR. ALAN EHRLICH: Thanks. So, let's
7 start right in with people's request for information.
8 How about we start with the GNWT?

9 MR. ROBERT MULDER: Robert Mulders, with
10 the GNWT. In terms of process here, do you want me just
11 to read out one (1) of the IR requests, or ...

12 MR. ALAN EHRLICH: Yeah, I'd like to go
13 only one (1) at a time --

14 MR. ROBERT MULDER: Okay.

15 MR. ALAN EHRLICH: -- figure out what the
16 resolution of that -- that particular question's going be
17 and then move on to the next.

18 MR. ROBERT MULDER: So, you're asking me
19 just to read out the -- the formal request?

20 MR. ALAN EHRLICH: You're welcome to read
21 it. You're also welcome to discuss any preamble or any
22 other information you think would help Deze.

23 MR. ROBERT MULDER: Okay. I guess the -
24 - the DAR references information available regarding
25 caribou behaviour in relation to power transmission

1 lines. And based on the GMT's assessment of the
2 proposal, we've identified some uncertainty about how
3 powerlines may influence caribou behaviour, and we'd like
4 them to identify approaches to address this uncertainty.

5 So, the formal request was:

6 "Given the uncertainty of the effects
7 of the transmission line during
8 operation on caribou behaviour, on
9 movements and distribution, please
10 explain how that Deze Energy
11 Corporation plans on addressing this
12 uncertainty. And specifically, have or
13 will actions be taken that will reduce
14 the likelihood of such an impact, and
15 will actions be taken to detect
16 residual impacts?"

17 MR. ALAN EHRLICH: So I actually hear it
18 sounds like two (2) or three (3) questions in that.
19 Let's break it apart as -- as well as we can.

20 The first question, as I understand it
21 was, how will Deze account for what you describe as a
22 lack of understanding about how power lines influence
23 caribou behaviour; is that right?

24 MR. ROBERT MULDER: That's right.

25 MR. ALAN EHRLICH: Okay and, Deze, would

1 you like to respond to that here or would you prefer to
2 defer in writing?

3 MR. DAMIAN PANAYI: We'll certainly
4 attempt to respond to it here. Yeah, the --

5 MR. ALAN EHRLICH: Please state your
6 name.

7 MR. DAMIAN PANAYI: Oh, sorry, Damian
8 Panayi with Golder Associates for Deze.

9 Certainly there is some uncertainty
10 regarding how caribou will interact with a transmission
11 line and we discussed this during the technical sessions
12 and it's -- during the first technical session and it's
13 also outlined some of the uncertainties outlined in the
14 DAR.

15 To go back to a conversation which we had
16 in the first technical session, there are -- there is a
17 transmission line within the Bathurst caribou range
18 currently and that is the transmission line between
19 Yellowknife and Snare Hydro. And we -- following a
20 commitment during the first information session, we --
21 during the first technical session we went back and
22 looked more closely at the data, the satellite collar
23 data, and how that -- and how those satellite collared
24 caribou interacted with the Snare transmission line.

25 And unfortunately, the Snare -- well,

1 fortunately, but unfortunately for our analysis, the
2 Snare line is pretty much on the outer edge of the
3 caribou -- of the Bathurst caribou range but,
4 nonetheless, we do have maps where which illustrate
5 crossings of the Snare Hydro transmission line by
6 collared caribou on several occasions over three (3) or
7 four (4) years.

8 And further to that in 2006, there was
9 reports of caribou in the Snare area, so, we flew that --
10 we flew the transmission line in a helicopter and we made
11 observations of caribou underneath the transmission line.
12 There was feeding craters underneath the transmission
13 line, trails underneath the line and I think there is one
14 (1) of the photographs that we got up on the board there.

15 So with a reasonable amount of comfort we
16 can say that caribou in the boreal scenario did not --
17 did not seem to be too troubled by the transmission line.
18 The one (1) area where we have uncertainty is on the
19 tundra scenario where the same caribou would be
20 interacting with a transmission line and -- and also, to
21 be fair, probably a more sensitive time of year as
22 they're coming off the calving grounds.

23 So that's -- yes, there is uncertainty
24 there. We did attempt to -- to quantify it as best as we
25 could but it's -- yeah, there's only so much we can

1 extrapolate from what we've learned from the existing
2 transmission line.

3 MR. ALAN EHRLICH: Thank you. To
4 understand what you can extrapolate from you've just
5 described -- from what you've just described, has there
6 been any systematic attempt to quantify whether or not
7 the feeding areas and use areas underneath the -- the
8 power line you mentioned are as frequent or less frequent
9 or different from the areas without a powerline?

10 MR. DAMIAN PANAYI: Yes, so when we did
11 that survey of the Snare line into -- in the winter of
12 2006 on the way out, we flew along the line and on the
13 way back we flew about a kilometre south of the line and
14 the data's presented in the DAR. It was one (1) survey
15 so I -- I can't say too much, but, there was no obvious
16 difference between the two (2) and that's probably about
17 as much as I can say but, again, there's maps and data
18 presented in the DAR to describe all this.

19 MR. ALAN EHRLICH: Rob, your question
20 sounded a little bit broader to me. Would you like any
21 further elaboration in writing?

22 MR. ROBERT MULDER: Yeah, I think that'd
23 be appropriate.

24 I'm a little out of my element here. I'm
25 not the caribou biologist and so I think that we would

1 like to have some input from our -- our caribou folks and
2 so we just wanted to hear what the response was.

3 MR. ALAN EHRLICH: Okay, so that's a
4 request from the GNWT to get a bit more detail in
5 writing.

6 And Damian, as you mentioned, the
7 information that you pulled out is for a boreal area.
8 We'd be interested also in hearing what Deze thinks of
9 the likely responses on the tundra environment as well.

10 MR. DAMIAN PANAYI: I can't add much more
11 to what is already in the DAR. There are some maps which
12 we developed since then which, again, show movements of
13 collared caribou across the Snare transmission line, but
14 other than that, I -- I can't really offer much more than
15 what's already in the DAR.

16 I can volunteer some more information,
17 which might go to some of the points which Robert --
18 which the GNWT had brought up, if that's useful.

19 MR. ALAN EHRLICH: Please do.

20 MR. DAMIAN PANAYI: Okay. In terms of --
21 in terms of mitigation, the two (2) key things we're
22 looking at are, obviously, construction phase and then
23 operation phase. And I anticipate the effects during the
24 two (2) would be quite different -- of the bulk of the
25 disturbance to caribou, a potential disturbance,

1 occurring during the construction phase.

2 And during that time we will have
3 environmental monitors whose job it will be to make sure
4 that -- or to, you know, to the extent possible try and
5 avoid any human and any disturbance to caribou.

6 So, to do that we will be watching
7 movements of collared caribou, and if it appears that
8 there is collared caribou moving towards an area where
9 there's construction going on, then we can try and deal
10 with that at the time.

11 We also have a human wildlife mitigation
12 monitoring plan, which is in the DAR. And one (1) of the
13 things that we did in that plan was to look at the
14 transmission line and we were able to identify sectors of
15 the transmission line where there's a different
16 probability of encountering caribou during each of the
17 caribou's biological seasons.

18 So, for example, in the post calving
19 season, it's more likely to see -- there's a high
20 probability of encountering caribou in the Lac de Gras
21 zone, but less so down by, say, Artillery Lake. And in
22 the winter the probability of encountering caribou in
23 that Artillery Lake area is, obviously, a little higher.

24 So, we've developed these maps which will
25 give us some sort of warning as to when we might be able

1 to, you know, when we -- when the construction crews
2 might interact with caribou.

3 And as we get further into the engineering
4 and planning, we would try and schedule the construction
5 so that there's minimal chance of overlap between the two
6 (2) to try and minimize the chance of overlap. And that
7 -- yeah, that's in the DAR, in the Human/Wildlife
8 Conflict Mitigation Plan.

9 And the last point is that we're working
10 on a monitoring plan right now, and one (1) component of
11 that monitoring plan would be a -- a program to try and
12 quantify how caribou interact with a transmission line on
13 the barren ground -- on the barren lands.

14 So I hope that's a sufficient answer.

15 MR. ALAN EHRLICH: Thanks. Robert, it --
16 so it doesn't sound like there's a more written response
17 forthcoming knowing that one (1) or the other parts of
18 that first question, which had a couple of questions in
19 it, that you want to ask now.

20 Or, hearing that response, is there any
21 other information you'd like?

22 MR. ROBERT MULDER: Again, I think that
23 it's probably best that our era -- our caribou biologist
24 sort of review and maybe have the opportunity see if
25 there's any follow-up questions on it.

1 I think at this stage it might be best to,
2 basically have our caribou folks just review that, and
3 that they may have a follow-up question yet.

4 MR. ALAN EHRLICH: Okay. Now, one (1) of
5 the things that we're able to encourage in these session
6 are what we're calling sidebar meetings, which is where
7 parties can meet directly with the developer to discuss
8 specific technically issues.

9 I say "parties" because our experts, our
10 internal experts, so they can't do that because there's a
11 fairness problem if one (1) of the Board's experts goes
12 ahead and does that.

13 But, there's no reason that interested
14 parties can't meet with the developer and hash through
15 some of these issues and try and -- try and solve some of
16 these outstanding questions.

17 We have a form that we'd appreciate people
18 using that describes who held the meeting, who was there,
19 when it was, what the topics were covered, what positions
20 people took, how they were resolved. And has both sides
21 sign off. The form is under development.

22 Now Tawanis, is it available yet?

23 MS. TAWANIS TESTART: No, but I can
24 distribute it to -- Alan is talking about something that
25 I made on Friday.

1 So it's not yet on our web site or
2 anything but I can distribute it to Deze Energy and GNWT
3 and I think there's DFO also is going to have some
4 sidebar meetings, so, I'll give -- I'll be providing you
5 with that and we're also going to be putting it in our
6 reference library on our website.

7 So, it'll be available as part of the --
8 the tool box, EA tool box, that we have there.

9 MR. ALAN EHRLICH: Thanks, Tawanis. Once
10 that happens what we're hoping will be the result is that
11 parties will be able to quickly understand what's
12 happened in small meetings and get a summary of the --
13 the relevant parts of those meetings. They'll be a body
14 of information in -- in the evidence that the Board will
15 be able to refer to and hopefully some of the -- the
16 specific issues can be settled.

17 Robert, I would suggest that -- it -- it
18 sounds like a meeting like that could be quite productive
19 between your caribou expert and Deze. I would strongly
20 encourage such a meeting within the next month.

21 Deze, would you be open to such a thing?

22 MR. DAMIAN PANAYI: Yeah, we've already
23 had several meetings with -- with GNWT caribou biologist.

24 MS. TAWANIS TESTART: Just to clarify,
25 Damian, if you do have such meetings with GNWT and -- and

1 the outcome of the meeting is information that might be
2 useful to the EA and it would be useful for everybody
3 involved, all the participants to -- to know about that
4 information, it is really important that you report back
5 to the Review Board so that we know exactly what
6 commitments have been made, what issues have fallen off
7 the table, what issues there were in the beginning.

8 Those sorts of things are very vital for
9 us to know.

10 MR. ALAN EHRLICH: Robert, do you have
11 other questions?

12 MR. ROBERT MULDER: There was one other
13 IR. And it deals with access. So the Corporation had
14 put a fair bit of effort into identifying, evaluating and
15 proposing mitigations to control the potential for
16 increasing -- increased harvesting in the area of the
17 proposed project.

18 So, we had asked whether they can include
19 an assessment of how hunters from the Enobee (phonetic)
20 in Saskatchewan could potentially change their access
21 routes in response to changing caribou distribution.

22

23 MR. ALAN EHRLICH: Thank you. Deze, do
24 you want to answer that now?

25 MR. DAMIAN PANAYI: I hope Robert will

1 forgive me but I -- I don't think we're going to answer
2 that question because the question makes a number of
3 assumptions which aren't entirely clear to me.

4 The only access from Saskatchewan to the -
5 - to the proposed new winter roads are through Alberta
6 and into the Northwest Territories via, you know, Hay
7 River and Fort Smith.

8 So unless people are flying up, I -- I
9 don't really see the connection and I understand that
10 there are some regulatory controls in place which the
11 GNWT has -- has control over to manage out-of-province
12 hunters and including non -- or Aboriginal hunters.

13 So I, you know, I'll have to -- I -- I
14 can't honestly, you know, respond to the question.

15 MR. ALAN EHRLICH: Okay, Robert, perhaps
16 you could clarify. Were you referring to fly-in hunters
17 from Saskatchewan or is there another means of ingress
18 you were talking about?

19 MR. ROBERT MULDER: My understanding was
20 is there was winter road access during the winter months
21 there that, potentially, there would be -- with the
22 clearing along the -- the route and with winter road
23 access that potentially could have increased access
24 during the winter time by hunters.

25 And so had consideration been given to

1 what impact that might have on wintering Bathurst
2 caribou, that increase access?

3 MR. ALAN EHRLICH: So this time I heard a
4 broader question which had to do with increased access
5 and increased mortality on wintering caribou. Damian...?

6 MR. DAMIAN PANAYI: Yeah, access is a --
7 is a tricky nut to crack and the -- you know, the DAR
8 does present what information we were able to pull
9 together, both biological and in the socioec --
10 socioeconomic sphere.

11 There is mitigation proposed and the
12 mitigation which -- I mean, the main mitigation which
13 we're looking at in this particular scenario and, that
14 is, the new winter road which would run from Twin Gorges
15 -- I guess I'll take a step back and explain the -- the
16 larger scenario.

17 There is currently a winter road, an old
18 winter road access, from Fort Smith to Twin Gorges and
19 it's approximately 60 kilometres long, so, people already
20 have that access.

21 This project would entail refurbishing
22 that so that they can drive a truck down it and then
23 building a new winter road from Twin Gorges to Nonacho
24 Lake. There is also an old winter road alignment along
25 there but it's now complete -- you know, from the

1 original construction in the 1960s it's now completely
2 grown in, so, they're going to build a new winter road
3 there.

4 So this would allow vehicle access from
5 Fort Smith to Nonacho Lake presumably. The main mode of
6 mitigation which Deze is proposing is to put a gate on
7 the far side of the Slave River and only project
8 vehicles, only project trucks and cars would be allowed
9 past that point. Snowmobiles could easily find their way
10 around it, but they already can get to Twin Gorges.

11 So, the access, in practice, I think would
12 be improved for snowmobiles past Twin Gorges, so 60
13 kilometres out of Fort Smith there is the potential for
14 improved access for hunters.

15 Another one of the mitigation -- or
16 another -- so we've got -- we've got the gate to stop
17 people driving down this road and there's other sort of
18 natural mitigation in place as well which is, well, some
19 project mitigation and some sort of natural mitigation.
20 One (1) thing is that we will have environmental monitors
21 whose job it will be to record observations of non-
22 project use of that road.

23 And there's also a very definite season on
24 the use of that road because you have to cross the Slave
25 River to -- to get to this new access. So there's only

1 about four (4) or five (5) months a year there where you
2 can actually get across the Slave River, as I understand.

3 And one (1) of the last points is that
4 this winter road would only be maintained for three (3)
5 years and after that, it would be unmaintained and so
6 again only snowmobile access, you know, would be
7 possible.

8 And I guess the final point is that our
9 understanding of caribou movements in the last decade do
10 not indicate that caribou are in that area very
11 frequently and so it's only in -- in occasional years
12 when they're found as far south as Nonacho Lake and not
13 really much further than Nonacho Lake. So, it's a long
14 snowmobile drive to get to caribou from Fort Smith and so
15 we're not really anticipating a lot of additional hunting
16 beyond what we already have.

17 So I hope that answers the question and
18 all that information is in the DAR.

19 MR. ALAN EHRLICH: Robert, do you require
20 any other information on that?

21 MR. ROBERT MULDER: I don't and, again,
22 I'll just have our caribou folks review that and it's
23 possible they have a supplementary question on that but I
24 think that's -- that's it for now.

25 MR. ALAN EHRLICH: Okay. Before we go

1 any further, I -- I will ask in a moment our expert who I
2 know also has questions on -- on access to pick up that
3 subject if that's all right with you, Anne, but first,
4 Mr. Boucher has to leave and wants the opportunity to
5 talk.

6 As I mentioned, there's a funeral that --
7 that some people will have to attend. Sorry, it's
8 Marlowe. Oh, sorry, it's George Marlowe who wants to
9 speak.

10 MR. GEORGE MARLOWE: Thank you. This
11 morning I don't want to disturb but I have to leave
12 because my Elder passed away and I mentioned that
13 yesterday. That's a -- that's a person that teach me --
14 taught me how to hunt and trap, Joe Michel. So -- I
15 didn't know they were going to have a funeral service
16 here. I thought he was supposed to be sent back and the
17 funeral was there but it's not like that so I want to go
18 to church and maybe have to buy maybe flowers or
19 something before I -- I want to do that.

20 But to the -- Anne or Deze, about the
21 hydro line, I don't know about hydro line. I have to
22 tell people, like the Tlicho people because they have the
23 Snare Hydro line from here to there. I'm just wondering,
24 like, if a caribou pass, well pass underneath, I was
25 looking like I know they pass underneath the line but

1 they're -- they're not going to stay too long because I
2 was just thinking about the wind, north wind, big wind
3 make a big whistle, a noise.

4 And also the weather is different every
5 year, like, sometimes we had more -- maybe 40/60 below
6 some year, some years not like that. And all of a sudden
7 the weather change again to minus 10 sort of just like
8 summer again and so just wondering the line get ice with
9 warm weather, cold weather, ice and it's got to break
10 again. The wind move the line and it's going to break
11 all the ice again. So, those of things if there's
12 caribou underneath, I don't know how -- I don't know
13 anything about it.

14 I was just wondering how the caribou --
15 they got to -- they got to run away because the caribou
16 really hear something really loud from there. They're
17 like that.

18 So I was just wondering about that, the
19 line and from Taltson to -- all the way to the mine, from
20 Nonacho Lake about halfway up the lake, it's kind of
21 south like a little bit -- the weather's not that cold in
22 wintertime. But from there you pass towards over there
23 it's going to be colder and where the line is now is just
24 about every year there's the caribou there, line area,
25 around there.

1 So we'll see anyway. If -- if the project
2 goes through then we'll see if it's anything about the
3 line and you -- you could answer -- and I don't know
4 but...

5 And another one there about caribou maybe
6 Anne or -- Nonacho Lake I said that floods. Every year
7 water goes up and down and then it's different from
8 November to December. It's kind of not much snow on the
9 lake, you know that, and not much snow on the ground, not
10 much snow on the grass or anything but later it's
11 different again. Like on March there's a lot of snow,
12 lot of snow on the ground, on the lake and the grass
13 where the caribou eat.

14 And then sometimes, I say it again, that
15 goes up and down 20 to 60 below. I'm just wondering if
16 it's a lot of snow on Nonacho Lake and the grass you
17 could go -- you could -- you could step right through the
18 ice. It doesn't even freeze, nothing in the bush. I
19 wasn't going to tell you but I told you, I'm saying that
20 now. If we go make a trip I was going to make him walk
21 first.

22 But anyway, I was just wondering in the 40
23 below or 60 below, the caribou goes to the shore and the
24 bush, I wonder if they fall through the ice like 60 below
25 is cold. And look at the furs will be all ice. I'm just

1 wondering about that too. So there's a thing about that
2 too see.

3 I don't have any more but maybe you could
4 think about that, during the winter month is cold 20
5 below all of a sudden they change to 40 or 60 again,
6 comes down to 20 again and the lines -- ice on the line.
7 Ice -- soft ice by the shore and the grass where the
8 caribou eat grass like that. You know, think about it.
9 Thank you.

10 MR. ALAN EHRLICH: Mahsi, Mr. Marlowe.
11 I'm going to ask Deze to respond sort of one point at a
12 time because these are all important questions and I want
13 to make sure we've got clear answers for them.

14 The first question I heard had to do with
15 sound coming from the lines and it wasn't the hum that --
16 that we've read about elsewhere. It was the sound of --
17 of whistling in high winds and whether or not that would
18 be likely to occur and would disturb caribou.

19 Do you have a response?

20 MR. DAMIAN PANAYI: Thank you for the
21 question, George. It's Damian with Golder Associates.

22 It's -- it's a good -- it's a good
23 question and in the developer's assessment report we
24 present some information on caribou and how they interact
25 with transmission lines. And there's some studies done

1 in -- in Norway and Sweden. And sometimes they found
2 that caribou ignore the transmission lines and in other
3 times they found that caribou will avoid the transmission
4 lines.

5 But we don't know why and that's the
6 problem. It could be because of noise, it could be
7 because they just don't like having things over top of
8 them, it could be because of the clearing of the trees
9 underneath the transmission line.

10 So, those -- the -- the reason why caribou
11 might avoid or ignore transmission lines is -- is a tough
12 question to answer, and I don't think we ever will find
13 an answer to those questions.

14 All we can do is just monitor to see if
15 they do avoid them or not. That's about the best answer
16 I can give, I'm afraid.

17 MR. ALAN EHRLICH: Has Deze looked at
18 whether or not, in high winds, those lines will whistle?

19

20 (BRIEF PAUSE)

21

22 MR. DAMIAN PANAYI: No, we haven't.

23 MR. ALAN EHRLICH: Okay. We'd like it if
24 Deze could consider that point, and disturbance coming
25 from the -- the whistling noise that Mr. Marlowe

1 described, and give us your -- your thoughts in writing
2 please.

3

4 --- COMMITMENT NO. 48: Deze Energy to consider the
5 point of the line causing a
6 whistling noise and
7 disturbance therefrom and
8 provide your thoughts in
9 writing by October 30, 2009.

10

11 MR. ALAN EHRLICH: The next question that
12 -- that Mr. Marlowe asked has to do with ice formation in
13 times of temperature change and then falling ice from the
14 powerlines possibly harming or disturbing caribou.

15 Would you like to respond to that now?

16 MR. DAN GRABKE: Hi, Dan Grabke, Deze.

17 Unfortunately Tom Vernon, who's the
18 resident engineer, couldn't make today's session. There
19 is some issues with icing on -- it's called the static
20 wire, and that's the wire above the -- the wires that are
21 actually carrying the electricity. And we've had issues
22 before on the Snare line.

23 That wire is supposed to be for lightening
24 protection, and it doesn't work for lightening protection
25 anyway. And on the Snare line, I know, that they've

1 taken sections down that were prone to icing. And we
2 don't plan on having the static wire above the -- the
3 main conductors.

4 The main conductors have electricity going
5 through them, and so they stay fairly warm, it's pretty
6 hard for them to ice. There's more issues with ice down
7 by the Great Lakes where the lake is open all the time,
8 and you get these winds off the -- off the Great Lakes
9 and into the tower, so you get the, you know, rime icing
10 and that sort of thing.

11 The -- the overhead lines are going to be
12 designed spaced apart and high enough, so even if they
13 did get a little bit of ice they wouldn't, you know, sag
14 down into the ground or anything; that would be part of
15 the design package.

16 But, generally speaking, up here there's -
17 - there's not much issue with ice, other than the static
18 wire that's -- doesn't have power going through it.

19 MR. ALAN EHRLICH: Thank you, Dan.

20 The next question that I heard had to do
21 with changing levels on Nonacho Lake and including
22 periodic flooding and the question of whether or not that
23 would pose a hazard to caribou in winter, or a barrier --
24 or a restriction of their movements on the lake.

25 Do I have that question right, Mr.

1 Marlowe? I know there's other questions related to the
2 snow. Okay, he indicated yes.

3 Deze...?

4 MR. DAMIAN PANAYI: Yeah, thank you for
5 the question. It's Damian Panayi.

6 All -- we, I mean, there -- there's two
7 (2) things. First of all, is that the best information
8 about caribou on Nonacho Lake is probably the traditional
9 knowledge which you have in Lutsel K'e. And so, we would
10 probably have to come back to you to try and get an
11 answer to that question.

12 The one (1) thing I can offer is that
13 there have been water level changes on Nonacho Lake since
14 the project was first built in 1964. And we didn't come
15 across any stories of problems with changes in ice level
16 to caribou. If there's more information that we should
17 know about then, please, let us know.

18 MR. ALAN EHRLICH: Thank you. George
19 Marlowe, do you want -- want to respond to that?

20 MR. GEORGE MARLOW: Not -- not really.
21 But I'll ask for another question again, like, Beverley
22 Herd have a collar and how that for caribou to stay
23 underneath the line, got a lot of power, how does that
24 work for a -- for a collar for the caribou?

25 MR. ALAN EHRLICH: The -- is the question

1 then how would it affect the operation of the collar?

2 MR. GEORGE MARLOWE: Yeah.

3 MR. ALAN EHRLICH: Yeah.

4 MR. DAMIAN PANAYI: It's Damian Panayi.

5 It's a very technical question you've asked there,
6 George, and all I can tell you is that I have -- we have
7 maps showing caribou moving under transmission lines and
8 maps, in some cases, the caribou stayed under the
9 transmission line for some time and we were still
10 receiving signals from the collar.

11 So, that's really about the only answer I
12 can -- I can give you unless we start talking to some
13 real technical experts in the - in the area of -- of
14 radio collars.

15 So we've seen it and we've seen caribou
16 move, you know, collared caribou move under the
17 transmission lines in the past and we've been able to
18 record it and that's probably about the best answer I can
19 give you.

20 MR. ALAN EHRLICH: Damian, I'm going to
21 just step back to a couple of other questions that Mr.
22 Marlowe asked earlier that we haven't got to yet.

23 One (1) of his questions had to do with
24 repeated flooding and changing levels in Nonacho Lake and
25 that affecting the depth of the snow pack on Nonacho Lake

1 and potential impacts from a deeper snow pack on -- on
2 the lake on caribou.

3 Is this an impact that Deze has predicted;
4 if not, why not?

5

6 (BRIEF PAUSE)

7

8 MS. LINDA ZURKIRCHEN: Can you just give
9 us a moment here? We're going to look at some
10 information to see if we can answer that question
11 efficiently right now.

12 MR. ALAN EHRLICH: Absolutely. While
13 you're looking, I'm also going to remind you of the next
14 question that I -- I heard -- I heard Mr. Marlowe ask
15 which was whether or not there would be changes to the
16 snow depth surrounding the lake having to do with the
17 foraging by caribou.

18 MR. DAMIAN PANAYI: We didn't make any
19 predictions regarding a difference in snow depth around
20 the project so, again, that might be an area where we'd
21 look to Lutsel K'e for some help answering that question.

22 What I can offer is that deeper snow
23 certainly does make it harder for caribou to access the
24 lichen that they -- that they eat. I don't think that
25 that would be too much of an issue on the lake where

1 they're just bedded down but obviously if -- if that
2 extended into the forest next to the lake, then that
3 might make it more difficult for them to reach their --
4 their forage, but it wasn't one (1) of our predictions
5 that -- that snow levels would be different.

6 MR. ALAN EHRLICH: Is there any activity
7 that Deze's undertaking that -- that you would expect
8 would change the depth of snow surrounding the lake?

9 MR. DAMIAN PANAYI: I can't think of any
10 scenario that would lead to a change in snow depth, but I
11 -- I will think about that one and I think Linda also has
12 some information on changes to ice on Nonacho Lake.

13 MR. ALAN EHRLICH: Linda, please?

14 MS. LINDA ZURKIRCHEN: Yes, Linda
15 Zurkirchen.

16 In regards to the -- the changes in the
17 ice on Nonacho Lake, as we've heard, that currently the
18 water level over the winter months from ice development
19 into spring slowly is -- reduces the elevation in the
20 lake because there's less water coming into the lake and
21 as we've heard causes the ice to settle with the water
22 level.

23 There's no abrupt changes in water level
24 currently and there won't be under -- in the project
25 scenarios either, so, the water level will have a similar

1 -- similar pattern in the lake to what happens under
2 baseline conditions in that between ice creation in the
3 early winter months and as it melts off during the late
4 winter months, the water level will still reduce slightly
5 over those months but, as I mentioned, nothing happens
6 abruptly so there shouldn't be much difference occurring
7 after project to the ice conditions as we see what
8 happens currently now.

9 MR. ALAN EHRLICH: Mr. Marlowe, does that
10 answer have enough detail for you or would you prefer a
11 detailed response in writing?

12 Before we go on to more questions, would
13 you like a detailed response in writing?

14 So he's indicating yes, a -- we'd like a
15 detailed response from Deze on how changing levels in
16 Nonacho Lake affect ice and snow on the lake and how that
17 may affect caribou on the lake.

18 Is that right, Mr. Marlowe?

19 MR. GEORGE MARLOWE: Yes. Thank you very
20 much. Mahsi cho.

21 MR. ALAN EHRLICH: And Deze, can you
22 provide that for the next month?

23 MS. LINDA ZURKIRCHEN: Linda Zurkirchen,
24 yes we'll provide that?

25 MR. ALAN EHRLICH: In -- in October I

1 mean. Thank you.

2 MS. LINDA ZURKIRCHEN: End of October.

3

4 --- COMMITMENT NO. 49: For Deze Energy to provide a
5 detailed response on how
6 changing levels in Nonacho
7 Lake affect ice and snow on
8 the lake and how that may
9 affect caribou on the lake.

10

11 MR. ALAN EHRLICH: Okay, so we -- we
12 jumped out of sequence there because George had to go.
13 We were at the GNWT.

14 Does GNWT have any more questions related
15 to the subject of access?

16 MR. ROBERT MULDER: No.

17 MR. ALAN EHRLICH: And I'll ask the
18 Review Board's expert Anne Gunn just to get back to the
19 subject of access now since we were discussing it
20 recently.

21 Anne, are you prepared to ask your
22 questions on access?

23 MS. ANNE GUNN: Yes.

24 MR. ALAN EHRLICH: That's a directional
25 microphone so it has to be not only close but aimed

1 towards your mouth or it doesn't pick up much.

2 MS. ANNE GUNN: Yes, I have questions.

3 It's Anne Gunn. I guess my -- just as a background to my
4 question first.

5 It's fairly typical of caribou herds to go
6 through periods of abundance and low numbers. And when
7 this happens, there's a fair bit of information which is
8 not in -- in the DAR that shows that winter range, in
9 particular, the southern boundaries of winter range will
10 contract and they'll expand.

11 So does it -- sort of a phased dependence,
12 a caribou phased-dependence changes in distribution over
13 time. So at the moment the caribou herds are obviously
14 considerably reduced in abundance. So this -- but
15 hopefully they'll come back, the numbers will come back.
16 So over the decades because the life of the project is
17 forty (40) years, there will be an expansion of caribou
18 ranges. So the nature of -- of the caribou encountering
19 the winter access road will change over time.

20 I guess my -- my first part of my question
21 is: Do you -- would you include -- you haven't really
22 included -- should you include any information on changes
23 in caribou abundance over time relative to exposure to
24 roads, to the winter -- winter access road and how
25 phased-dependence changes might change your approach to

1 mitigation and monitoring?

2 MR. ALAN EHRLICH: I paraphrase this at
3 my own peril. But the question, as I understand it then,
4 and I'm guessing it's to you, Damian, and you have a
5 choice. You can respond here or you can -- you can look
6 at this on the transcript here and respond in writing if
7 you wish.

8 But have you considered how it changes in
9 phased dependence with caribou that fluctuates with
10 population levels interacts with the access and the
11 mitigations of impacts related to access proposed by
12 Deze?

13 Anne, is that roughly the right question?

14 MS. ANNE GUNN: One of them.

15 MR. ALAN EHRLICH: Thank you.

16 MR. DAMIAN PANAYI: Damian Panayi. No,
17 we did not specifically address the question of range
18 changes over time.

19 We -- in our -- in our affects assessment
20 we looked at the range of the Bathurst caribou based on
21 the satellite collar data which has been collected since
22 1996. We developed a -- a -- a range for the herd on
23 that data. The range which we developed for the herd is
24 -- is identical in almost every respect to the range for
25 the herd given by the Government of the Northwest

1 Territories, particularly, in regards to the layout of
2 the Taltson project.

3 It is certainly possible that -- or likely
4 expected that the range of the herd would change over
5 time with the population. However, I -- I think going
6 back to some of the traditional knowledge studies and
7 some of the historical studies, I don't -- I don't think
8 that the herd changes that much at these outer
9 boundaries. Like this is already getting pretty far out
10 from the, you know, outer extents of the -- of the herd,
11 of the herd's range. So, it -- it possible.

12 I -- I guess one (1) of the problems we
13 run into is that an environmental assessment, it's --
14 it's neither possible nor advisable to try and assess the
15 effects from every conceivable scenario, so, we assess
16 the effects based on the range that we have from the last
17 ten (10) or twelve (12) years which also match the range
18 presented by the Government of the Northwest Territories.

19 We prefer not to go down the route of then
20 assessing the effects to the caribou heard on a larger
21 range or a smaller range, whichever may -- you know,
22 whichever the future brings us, so, we'd prefer not to go
23 down that route.

24 I guess another sort of anecdotal piece of
25 information I can throw in is that there was a -- again,

1 there was a winter road to Nonacho Lake built in -- in
2 the 1960s for the construction of the original project.
3 I've seen it and that thing is now completely grown in
4 and is no longer access.

5 And so I would postulate that, you know,
6 given the time spans we're -- we're looking at here, if
7 the herd does start to come further south than we've seen
8 it in the past twelve (12) years, it's -- it's, you know,
9 it's -- it's speculative that the access would still be
10 there for people to -- to reach the caribou.

11 And, yeah, the last point is that the
12 construction road, the actual winter road which you could
13 drive a truck down, will only be in operation for three
14 (3) years.

15 MR. ALAN EHRLICH: Anne, is there more
16 information from the developer on that subject that you'd
17 like to request or are you okay with that?

18 MS. ANNE GUNN: Yes, there's -- there's
19 more information I'd like to request. I think the -- the
20 predictions in environmental assessment are only going to
21 be as good as the information that you've selected to
22 use.

23 I think there's a problem here with
24 restricting it -- the assessment to the Bathurst herd
25 because the Beverley herd, when you look at the historic

1 information that's available, suggests that there's
2 overlap with -- with the access road. So, restricting it
3 to the Bathurst herd, excluding the Beverley Herd, I -- I
4 guess my question to you is:

5 Why wouldn't you include the information
6 on -- the historic information on the Beverley herd?

7 The second part of that question is:
8 Excluding the Ahiak herd, also I would ask that you offer
9 an explanation of why you wouldn't include the Ahiak
10 herd?

11 And I think part of the problem is only
12 using radio-collar data; that data only really goes back
13 to 1996 and it only addresses the distribution of a few -
14 - of relatively few collared cows.

15 The one (1) thing we know about winter
16 distribution is that the bulls of any one (1) herd tend
17 to be distributed further south. So, picking a point in
18 time from 1996 to present is only kind of a snapshot of
19 potential distribution. Restricting it to cows is only a
20 snapshot of that herd's distribution because the bulls
21 will do different things.

22 And then excluding two (2) caribou herds
23 that use that area also seems a loss of information. So
24 I guess my -- my question is:

25 Will you include the two (2) herds; how

1 will you deal with the different distribution of bulls;
2 and how will you deal with information that's available
3 before 1996?

4 MR. ALAN EHRLICH: Okay, the herd
5 questions are pretty broad and I think it might be better
6 to respond in writing describing your predicted impacts
7 on the Beverley and Ahiak herds and whether those are the
8 same or different from what you've predicted from the
9 Bathurst herd.

10 Would you like to give it a try now or do
11 you want to stick to a written submission after?

12 MR. LOUIE AZZOLINI: Louie Azzolini. I
13 worked on the -- the social, and a little bit of the
14 economic component of the Assessment Report.

15 The socioeconomic aspect of this has to be
16 considered in light of what you're providing with respect
17 to comments. And what we found is that hunting and
18 trapping by all the aboriginal groups and non-aboriginal
19 groups has actually declined over the last twenty (20)
20 years. And the contri -- short contribution that the
21 road provides actually goes to enhancing that activity.

22 And the -- in the interviews that -- well,
23 not so much interviews, in the work that the -- was
24 conducted in the South Slave area by the people in Fort
25 Resolution and Fort Smith, they identified principally

1 that they were using the historic trail road, as Damian
2 spoke to, for access to facilitate that -- that practice
3 of hunting and trapping.

4 So, really, there's a positive
5 contribution here that can't be overlooked. And that
6 simple contribution is, is that it's helping to maintain
7 a particular lifestyle.

8 The information that was recorded, that
9 each of the crossings provided by the people who did
10 field research -- and this was local individuals doing
11 the research where they were provided a camera, GPS, and
12 so on. And they recorded, at each crossing, activity,
13 what they normally did there, ice conditions, and so on.

14 Most, if not all, of the activities in the
15 area were associated with trapping. And there wasn't
16 very much caribou hunting up in the area. In addition,
17 there used to be a commercial hunt and now it's
18 principally one (1) individual who's providing meat to
19 Elders.

20 So, from a socioeconomic standpoint, or
21 social standpoint, the positive contribution of this
22 former road which turned into a trail, is that it
23 actually contributed to the community's ability to create
24 an income by way of harvesting furs, but also by way of
25 obtaining meat.

1 The information provided by the people who
2 were in the field was that, it was locals that were going
3 up there. It wasn't the type of situation where you had
4 people coming from High Level accessing this path up to
5 Nonacho. And they felt that the short duration of the
6 road for years, and with the effective management closing
7 the road, and having local people manage and monitor that
8 road for inappropriate access, should it occur, that that
9 effectively dealt with the issue.

10 But principally, it was recognized, or
11 said by the folks locally, that they were quite happy to
12 see an upgrade in the road so that it would facilitate
13 their access into the area; where now, because of the
14 overgrowth it was getting more difficult.

15 And the numbers -- the harvest numbers, in
16 terms of fur harvest, species harvested, and income
17 generated, shows that there has been a decline.

18 So, you know, there are trade-offs here.
19 And I appreciate the concern with respect to what access
20 might do to caribou, but there's another side to this
21 coin, in that access also facilitates local use of the
22 area. And that, the sense is, is that it's managed and
23 it won't affect caribou.

24 MR. ALAN EHRLICH: Thanks, Louie. I'm
25 going to, for now, just park the -- the question of

1 access, social benefits, and costs in terms of mortality
2 at the population level and try to -- to get back to some
3 of the things that Anne mentioned that were specific but
4 I appreciate your -- your thoughts on that, Louie, and of
5 course they're -- they're on the record.

6 Do you have something to add, Louie?

7 MR. LOUIE AZZOLINI: Thank you, Alan. I
8 think you misinterpret a little bit what I'm getting at.
9 What I'm ultimately getting at is that there is no
10 linkage between the road and effects on caribou because
11 you need somebody to go in there and kill the caribou.

12 So to request -- and I'm not trying to
13 avoid answering the question because they're the ones
14 who'd be answering it, it's not my sweat, it's just I
15 think that an EA, you need to show a linkage and I don't
16 know how Anne has demonstrated that there's a linkage
17 there.

18 MR. ALAN EHRLICH: Thanks, Louie. No, I
19 -- I understand that. Your -- I understand your point
20 and your point relates to a much bigger question but
21 before we get to something like that, there were some --
22 some very specific questions that Anne asked regarding
23 whether or not the -- or why the Ahiak and Beverley herds
24 had not been excluded (sic), why collar information
25 exclusively from cows was expected to relate to the herd

1 range in terms of bulls, and I don't want to lose track
2 of those before charging into, you know, a much bigger
3 issue which is the one that -- that you're getting into.

4 These are interesting and relevant things
5 that you're raising. We'll get to it, but I don't want
6 to lose track of this yet.

7 So, getting back to -- to I guess you,
8 Damian, Anne's questions have to do with the herds that
9 were examined. Can you predict impacts on the Beverley
10 and Ahiak herds, preferably in writing, over the next
11 month or is there some information you can give us here
12 that will respond to that?

13 MR. DAMIAN PANAYI: Damian Panayi. It's
14 a good question. It's one which we didn't -- we possibly
15 didn't outline our thinking as well as we might have in
16 the DAR but we concentrated on trying to give a
17 quantitative assessment as much as possible. We wanted
18 to back up -- be able to back up all of our impact
19 predictions with data and that's where things begin to
20 fall apart when we attempt to do another effects
21 assessment for -- for the -- for the Beverley and Ahiak
22 herds.

23 So the situation we have is that for the
24 Beverley herd we've got years of collar data. We've got
25 data on demography. We've got regular population

1 estimates. We've got a lot of information on how that
2 herd interacts with the diamond mines and -- and
3 development and there's a lot of traditional knowledge
4 available.

5 As soon as we -- like, switching over to
6 the Ahiak and Beverley herds, we lose a lot of that
7 information. There's just not much out there. There is
8 some, to be sure, but we don't have as much on
9 demography. We don't have the regular, you know, as
10 intense collar data. We don't have the regular
11 population estimates, so, things begin to fall apart from
12 a quantitative perspective.

13 The other things to keep in mind are that
14 the Beverley and the Bathurst and the Ahiak are --
15 they're the same species. They're different populations
16 of the same species and more than that, the same ecotype
17 and they are exposed to the same North American weather
18 patterns. You can probably assume that they're going to
19 react to disturbance in a -- in a similar fashion and,
20 you know, and we likely overestimated the effects of that
21 disturbance in -- in the developer's assessment report.

22 And as you know, these herds are not
23 independent of one another either. There is -- there
24 have been individuals who have switched from one herd to
25 the other, you know, with apparently no, you know, and

1 apparently it happens fairly regularly.

2 So to -- so for those reasons we
3 concentrated on the -- on the Bathurst herd. We thought,
4 let's put our effort into this herd. It's also the herd
5 which is exposed to the greatest level of cumulative
6 effects. So if we're going to see an effect - either
7 incremental or cumulative - it's going to happen in the
8 Bathurst and, obviously, that's -- and it's also the herd
9 which is harvested the most by -- by the people of the
10 Northwest Territories.

11 So we thought, let's put our efforts in
12 there, do the best effort we can on that one. We didn't
13 address the Beverley and Ahiak for the reasons I've
14 outlined. And I think going down that route is perhaps
15 running into -- there would be diminishing returns. We
16 can spend some time on it, we're not necessarily going to
17 come up with different conclusions than what we made for
18 the Bathurst.

19 And the level of uncertainty in those
20 conclusions would necessarily be higher. So that's, you
21 know, it's -- it's really the best offer -- answer I can
22 offer.

23 We can go down that route -- that route,
24 it's not -- I don't believe it's -- it's going to add the
25 value that -- that we're looking for.

1 MR. ALAN EHRLICH: Thank you, Damian.

2 Anne, would you like to follow up?

3 MS. ANNE GUNN: Anne Gunn. Yes, I would
4 like to -- to comment. I think it's a dis-service to the
5 communities when -- when you -- when you're not wanting
6 to deal with the other herds because the -- the
7 communities that -- that harvest the Bathurst herd are
8 not the same as the communities that hunt the Ahiak and
9 the Beverley.

10 And I think they're also jurisdictional,
11 there are trans boundaries issues there to be
12 acknowledged with Nunavut who also a say in the
13 management of the Ahiak and the Beverley herd.

14 I appreciate your argument that there's
15 less data for the Beverley and the Ahiak but,
16 nevertheless, there still is information. In particular,
17 there's information on the distribution of the Beverley
18 herd from the 1980s when there was a -- there were a lot
19 of surveys and mapping done.

20 And that's all summarized and some of the
21 traditional knowledge I think is also summarized through
22 the work of the Beverley Qamanirjuaq Caribou Management
23 Board. And all -- I think that information is actually
24 on their website.

25 For the Ahiak, there's -- there's less

1 information but the reason I think the Ahiak herd should
2 be included is because it's -- it's a tun -- as well as
3 going into the trees, it's a tundra wintering herd. And
4 so it will be exposed to the transmission line during the
5 winter.

6 So I think it's -- it'll be a dis-service
7 to the communities and to the Board not to include the
8 two (2) herds.

9 In terms of having less information, you
10 mentioned one point there is a degree of synchrony in
11 their population trends. So if you spell out your
12 assumptions, I think you can make a reasonable argument -
13 - a reasoned argument that would be credible towards
14 applying some of the range of effects of the project on
15 these herds, the two (2) other herds.

16 It's -- although the Bathurst herd may be
17 exposed because it has the diamond mines, Beverley herd
18 has also been exposed to quite a lot of exploration
19 activity in association with proposed uranium mining.
20 And also, that herd has suffered a catastrophic decline.
21 So it probably means that it's already under considerable
22 stress. So it maybe less resilient to the effects of a
23 project than a herd that's already exposed to more
24 development.

25 So I would be cautious about the argument

1 about the Bathurst being exposed to more development,
2 therefore, going to show more effects. I think that's a
3 double-edged argument, I'd be cautious with it. The
4 Ahiak herd according to GNWT is also possibly starting to
5 decline so, again, it may be less resistant, less
6 resilient to changes in the environment.

7 So, I would ask again that you consider
8 including the information from the distribution of both
9 herds so we have a probability of the likelihood of those
10 herds encountering the project. And then that leads you
11 into an effect assessment.

12 And just -- just to point --

13 MR. ALAN EHRLICH: Oh Anne, before you go
14 any further. I want to make sure that we keep up with
15 you.

16 Don't -- don't lose your next point. But,
17 Anne, would you be satisfied then with a, kind of, a
18 higher level qualitative description of what Deze feels
19 the impacts would be on the Ahiak and Beverley Herds,
20 bearing in mind what you've just said?

21 MS. ANNE GUNN: I would satisfied with
22 that if there was an inclusion of all the information
23 that shows the probability of these herds over time
24 encountering the project. And then, how that leads into
25 an effects assessment extrapolated from the Bathurst

1 Herd, setting out the assumptions under that
2 extrapolation.

3 I don't think it's as -- I don't think
4 it's a huge step to ask for this to be done. I don't
5 thinks it's a huge imposition.

6 MR. ALAN EHRLICH: Deze, can you please
7 try to submit that in writing. I don't think we're going
8 to get any further with it here. You know, sometime this
9 month.

10 MS. ANNE GUNN: Alan, this is -- this is
11 a procedural point. This is Anne Gunn again.

12 To what extent can -- can I provide
13 information that might help them, Deze, get this
14 information.

15 MR. ALAN EHRLICH: You're -- you're
16 welcome to -- let's discuss this in the break. Thanks.

17 Before we go any further, I notice it's
18 10:30 which means we have a break scheduled. We've got a
19 fair bit of ground to cover. Let's make it just a ten
20 (10) minute break. So, we'll reconvene here at about
21 10:45. Thank you.

22

23 --- Upon recessing at 10:33 a.m.

24 --- Upon resuming at 10:46 a.m.

25

1 MR. ALAN EHRLICH: Move on. So, Damian
2 provided his answer to Anne's question about why those
3 herds weren't included.

4 Anne has a follow-up question just to
5 clarify some of the stuff that was going on in the
6 discussion before, which is her request for information.

7 Anne...?

8 MS. ANNE GUNN: Thank you. Anne Gunn.
9 I'm asking that -- that will you provide an analysis of
10 the probability of caribou from the Ahiak and the
11 Beverley Herd encountering the project.

12 I'm suggesting that this is, as Damian
13 pointed out, there is not much information, therefore, I
14 think this is very short, one (1) or two (2) days'
15 project to deal with to -- to get the information.

16 I recommend that you look at Rebecca
17 Zalatin's (phonetic) PhD thesis that give the hoof scars
18 on the spruce roots, and that will give you a sense of
19 going back in time as to when the numbers of caribou in
20 the area just north of your -- just around -- within your
21 study area over the -- going back to the 1900s.

22 I also recommend that you look at Don
23 Thomas' reports from the 1980s, as he did a series of
24 surveys and mapped -- with his flight lines mapped
25 caribou distribution. Those reports, I think -- or

1 certainly the maps are available from the BQ, Beverley
2 Qamanirjuaq Caribou Management Board website.

3 MR. ALAN EHRLICH: Thanks. So, Deze can
4 you provide that in writing?

5 MR. DAMIAN PANAYI: Yeah, yeah. I'm --
6 thank you to Anne for, sort of, fleshing out that
7 question a little bit more. And -- and that's certainly
8 something we can do.

9 I think we'll -- I'm familiar with some of
10 these studies and we'll take a closer look at those and
11 considering, you know, some of the uncertainties, I -- I
12 think the approach we would take is to look around and
13 see if this brings in anything which would mean that our
14 existing effects assessment for Bathurst, if there's any
15 particular areas where that needs to be revised, if
16 that's acceptable.

17 MR. ALAN EHRLICH: Thank you.

18

19 --- COMMITMENT NO. 50: Deze Energy to provide an
20 analysis of the probability
21 of caribou from the Ahiak and
22 the Beverley Herd
23 encountering the project.
24 Anne Gunn recommends that
25 Deze look at Rebecca

1 Zalatin's (phonetic) PhD
2 thesis and look at Don
3 Thomas' reports from the
4 1980s.

5
6 MR. ALAN EHRLICH: Now, since we're still
7 on the -- were on the rough subject of access, I don't
8 want to leave access alone too quickly.

9 Anne, do you have any other questions
10 related to access?

11 MS. ANNE GUNN: Anne Gunn. I wonder if
12 you have more details on the success of mitigation using
13 gates to control access from elsewhere?

14 MR. ALAN EHRLICH: Thanks. Deze ...?

15 MR. DAMIAN PANAYI: Damian Panayi. It's
16 not something which we elaborated on much in the DAR and
17 I've since been able to track down some more information,
18 so, we can provide that and we can provide that in
19 writing.

20 MR. ALAN EHRLICH: Thank you.

21
22 --- COMMITMENT NO. 51: Deze Energy to provide more
23 details on the success of
24 mitigation using gates to
25 control access from

1 elsewhere.

2

3 MR. ALAN EHRLICH: Anne ...?

4 MS. ANNE GUNN: I also -- I wonder if you
5 have -- if you can provide more information on the snow
6 machine, potential snow machine access, like, driving a
7 truck 60 kilometres is, I suspect, a benefit to someone
8 wanting to go hunting by snow machine.

9 So, I wonder if you have any more
10 information on the probability that even although the
11 road is gated to trucks, based on examples elsewhere,
12 that that will encourage snowmobile access?

13 MR. ALAN EHRLICH: Deze...?

14 MR. DAMIAN PANAYI: The existing studies
15 which discuss access and -- and efforts to mitigate
16 access or reduce access, the studies are qualitative.
17 So, we will do our best to not -- they're not
18 quantitative, so, we'll do our best to extrapolate what
19 we can from that information unless there's other sources
20 which -- which we don't know about.

21

22 --- COMMITMENT NO. 52: Deze Energy to provide any
23 more information on the
24 probability that even
25 although the road is gated to

1 trucks, based on examples
2 elsewhere, that that will
3 encourage snowmobile access.
4

5 MR. ALAN EHRLICH: Thank you. Deze, are
6 there other alternatives for mitigating access that you
7 can do if the gate proves ineffective or other
8 alternatives that you have considered?
9

10 (BRIEF PAUSE)
11

12 MR. DAN GRABKE: We were just discussing
13 this during the break. Dan Grabke, Deze.

14 I think it's important for everybody to
15 get a mental picture of -- of this -- this winter road.
16 It's very dissimilar from the Tibbitt-Contwoyto Road for
17 instance. It's actually going to be quite a difficult
18 road to put in. It goes kind of cross-wind -- crossways
19 to the -- the grain of the land, very rough country,
20 especially the initial part right from Twin Gorges out.
21 I think we have to do about 45 kilometres of zig-zagging
22 over really rough terrain in order to get 20 kilometres
23 by -- by air sort of thing and, so, there'll be kind of
24 natural mitigation in -- in this road. It's not going to
25 be a big highway. It's going to be more like a cat trail

1 and so there'll be less ability for -- for vehicles.
2 It's long, rough, and for a short time a -- the first
3 year to get material out, very little activity the second
4 year, and then the third year to bring the camps and that
5 back.

6 So there's kind of a natural mitigation to
7 access.

8 MR. ALAN EHRLICH: Thank you, Dan.

9 Candace, from INAC, you indicated to me
10 during the break that you had a question regarding
11 access. Can you go ahead, please?

12 MS. CANDACE ROSS: Candace Ross with
13 INAC. I just wanted to clarify or ask you to clarify how
14 many gates are there going to be and where are they going
15 to be located?

16 MR. DAN GRABKE: We're proposing that the
17 -- that the kind of main gate for the new winter road
18 would be on private property right at the Twin Gorges
19 site and that will control vehicle access beyond the Twin
20 Gorges' site. Damian mentioned a -- a gate, perhaps at
21 the beginning of the Slave River. We're not sure whether
22 that's possible or not.

23 MR. ALAN EHRLICH: Thanks, Candace, does
24 that satisfy your question?

25 MS. CANDACE ROSS: Yeah, that's great.

1 MR. ALAN EHRLICH: Thank you. The
2 Board's expert, Petr Komers also has some questions
3 regarding access. Petr...?

4 MR. PETR KOMERS: Petr Komers, Review
5 Board. The issue of access on wildlife in general we
6 were talking about caribou in particular just before.

7 But the issues for wildlife can
8 potentially be big. Yet we don't really see much of an
9 assessment in the DAR because there's a belief that
10 mitigation will be so perfect that there will be no
11 effects.

12 Yet we have heard just now from Louie that
13 there might be some positive effects. I would tend to
14 agree with the idea that there might be some effects;
15 whether positive or negative is a different matter. But
16 there are some effects, apparently.

17 Also we hear that I think contrary to a
18 previous assessment, a temporary road could develop into
19 a permanent trail. A potential effect might be existing
20 there.

21 But the direct question is, really: Are
22 you prepared to an effect assessment on the access and
23 provide the mitigation and monitoring measures that would
24 ensure that, indeed, the creation of -- of access is 100
25 percent mitigated? Because if it's anything less than

1 that 100 percent mitigated, there's an effect.

2 The other is --

3 MR. ALAN EHRLICH: Hold on before you
4 move on to the other.

5 Deze, are you prepared to -- to give us
6 something in writing on that over the next month?

7 MR. DAMIAN PANAYI: I'm not sure we can
8 offer much more than what is already in the developer's
9 assessment report. Again, we've proposed gates on the
10 road. It's a short, you know, a three (3) season road
11 and not, you know, a twenty (20) year road as we have for
12 the Tibbitt-Contwoyto Road.

13 There does already exist some access in
14 these areas. Even to get to this road you have to drive
15 to Fort Smith so it's -- you know, which is already at
16 the end of the road in some ways. So, we're not
17 anticipating that more hunters are going to, you know,
18 appear than are already in that area.

19 And there are a number of reasons why we
20 didn't believe that that road would really open up much
21 more than people don't already have at Fort Smith. And
22 one of the big ones is that this road is going to extend
23 from the Taiga Plains onto the Taiga Shield. And as you
24 make that transition, the amount of vegetation cover
25 drops quite substantially. There's a lot more open rock.

1 It's a, you know, getting into environments like we see
2 here. And the information we have suggests that moose
3 densities drop as you make that transition. There's
4 fewer martin, there's fewer lynx.

5 And so it's entirely possible that people
6 will go up there to have a look but I don't think that
7 it's going to become preferred hunting areas if that
8 makes sense.

9 Does that answer your question?

10 MR. ALAN EHRLICH: Petr...?

11 MR. PETR KOMERS: Petr Komers. Well in
12 part it does but I -- I guess I would have to take that
13 answer at face value, what you're saying. And I'm not
14 quite sure that's really convincing.

15 So if you can provide information to
16 support that answer, tangible information that we can
17 look up, that would be very useful.

18 MR. ALAN EHRLICH: Seeing as Board
19 experts can't have sidebar meetings with the developer,
20 if this was coming from another party, we'd say please
21 could you meet and try and discuss this.

22 But that's not an option due to the
23 constraints of procedural fairness. So we'd appreciate a
24 response in writing before the end of October. Thank
25 you.

1 Deze, can you do that?

2 MS. LINDA ZURKIRCHEN: Yes, we can do
3 that and just -- I'd just like to clarify what -- what
4 I'm thinking we -- what I'm proposing we provide in
5 writing to ensure that it covers off the Review Board's
6 expert's needs because we can't have the sidebar meeting.

7 So if we -- I'm thinking for this access
8 on wildlife issue that we're discussing, if we provide
9 the additional information on gate access restrictions
10 success that we had talked about earlier and a -- maybe a
11 document that identifies, clearly, all the mitigation
12 measures that we have been talking about and just clearly
13 articulates all those maybe in a chronological order --
14 that's not quite the right word -- succession order from
15 perhaps Fort Smith up through the site and as we cross
16 thresholds of different mitigation measures along the
17 road, provide that document as well as the success of
18 some of those mitigation measures as proven through
19 literature through other -- where they've been used on
20 other sites and whether that would address the -- your
21 interests.

22 MR. ALAN EHRLICH: Petr...?

23 MR. PETR KOMERS: Petr Komers. Yes, that
24 will be very useful, thank you. You might also want to
25 think of adding how -- some ideas next to each mitigation

2 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.
3 Yes, we'll add how we'd monitor that into that document
4 also.

9 MS. LINDA ZURKIRCHEN: Linda Zurkirchen,
10 yes, we can do that.

12 --- COMMITMENT NO. 53: Deze Energy re: access on
13 wildlife issue, provide the
14 additional information on
15 gate access restrictions
16 success and a document that
17 identifies all the mitigation
18 measures that Deze has been
19 talking about and just
20 clearly articulates all those
21 in a succession order from
22 perhaps Fort Smith up through
23 the site and as we cross
24 thresholds of different
25 mitigation measures along the

1 road, provide that document
2 as well as the success of
3 some of those mitigation
4 measures as proven through
5 literature and where they've
6 been used on other sites.
7 And adding some ideas next to
8 each mitigation how Deze
9 would think of monitoring
10 that in the future.
11 In addition to monitoring, to
12 provide management
13 alternatives to different
14 scenarios that the monitoring
15 indicates

16
17 MR. ALAN EHRLICH: Thank you. Petr, do
18 you have more questions related to access? Okay.

19 Now, getting back to the broader subject
20 of caribou, do we have more caribou questions for Deze?
21 Anne Gunn is indicating we do.

22 MS. ANNE GUNN: I would like to hear more
23 information on the justification you used in -- in your --
24 - in your approach to cumulative effects of looking at --
25 what you used was information on Woodland caribou

1 responses to predators and as you mentioned the -- most
2 of this area, the study area, is Taiga Shield and used by
3 migratory tundra caribou which have very different
4 behaviour and it's very different vegetation terrain from
5 the boreal caribou, the boreal plains.

6 So, I would be interested in more
7 information justifying the use of a boreal caribou model
8 in relation to predator avoidance compared to how barren-
9 ground caribou, their strategies to avoid predation and
10 how that relates to your buffering of areas and the -- I
11 mean, a lot of the cumulative effects are built on
12 enhanced wolf predation along -- potentially enhanced
13 wolf predation along seismic lines.

14 I'd like more information relative to
15 barren-ground caribou but that model.

16 MR. ALAN EHRLICH: Deze...?

17 MS. ANNE GUNN: Again, I -- I suspect
18 it's -- it's -- I'm not asking you to redo the analyses,
19 it's more a question of looking at the assumptions,
20 spelling out the assumptions and whether they're valid
21 under the model.

22 MR. ALAN EHRLICH: Thank you, Anne.
23 Deze...?

24 MR. DAMIAN PANAYI: Thank you. Once
25 again I'm in a tricky position because Anne has a lot of

1 that information in her head and -- or has knowledge of
2 that information more than I do.

3 I guess the question I would have is: Is
4 it correct -- would it be correct to assume that the
5 disturbance or effects of increased access by predators,
6 is that going to be less in the Taiga Shield than it is
7 in the plains because there's less forest cover?

8 MR. ALAN EHRLICH: Anne, if you could
9 respond it might help clarify your question.

10 MS. ANNE GUNN: I don't -- I think the
11 response won't be less, it'll be very different because
12 the caribou, the barren-ground caribou use that landscape
13 so differently from how boreal caribou deal with
14 predation on the Taiga plains.

15 So, it's -- it's caribou with different
16 behaviour in a different setting and I'm asking that you
17 spell out the assumptions that would then explain the
18 differences in the response. And I appreciate the
19 compliment about what I may or may not have in my head
20 but I also suspect that if you looked at some of the
21 papers by Tom Bergroud (phonetic), among others, I think
22 you'd find the same information.

23 MR. ALAN EHRLICH: Deze, can you do that?
24 And -- and provide a response in writing regarding your
25 assumptions?

1 MR. DAMIAN PANAYI: Yes, we can do that.

2

3 --- COMMITMENT NO. 54: Deze Energy to provide more
4 information justifying the
5 use of a boreal caribou model
6 in relation to predator
7 avoidance compared to how
8 barren-ground caribou, their
9 strategies to avoid predation
10 and how that relates to your
11 buffering of areas

12

13 MR. ALAN EHRLICH: Thank you. Anne...?

14 MS. ANNE GUNN: I have a -- I have a
15 question about low probability of an event that carries a
16 high risk. And I thought the -- the DAR did a very
17 credible job explaining how they assess low probability
18 high risk.

19 What concerns me -- my question to you is:
20 Would you include, or would you explain why you wouldn't
21 include, a low probability high risk event such as what
22 happened with ramping of the power plant, or ramping of
23 the water flow in conjunction with an unusual
24 environmental event.

25 And what I'm getting at, the -- the

1 example I have in mind is that, in the early 1980s Quebec
 2 Hydro, there was a heavy rainfall at the same time
 3 caribou were migrating, at the same time they had to
 4 release a large amount of water. And this occurred at
 5 Limestone Falls, and was a -- at the same -- during the -
 6 - the combined effect of these three (3) -- three (3)
 7 events, ten thousand (10 000) caribou drowned.

8 Now, I'm not saying that an event of that
 9 magnitude could happen here, but I think what's needed is
 10 -- what I'm asking you to do is look at the -- the
 11 chances of a one (1) -- one (1) in a hundred (100) year
 12 flood occurring with a ramping event occurring during
 13 caribou migration.

14 And the reason I think this is significant
 15 is because then this would interplay into your cumulative
 16 effects assessment, where you do get the potential for an
 17 effect like this which would have a large effect on the
 18 population dynamics of a caribou herd, particularly, say
 19 the Bathurst. Now, it's reduced to just over thirty
 20 thousand (30,000). It's obviously less resilient to
 21 these low probability/high risk events.

22 MR. ALAN EHRLICH: Thank you, Anne.
 23 Deze...?

24 MR. DAMIAN PANAYI: Yeah, I'll -- I'll
 25 have to throw another compliment your way, Anne.

1 In that when I -- the question certainly
2 led us to think a little differently about the effects
3 assessment that we've done and think through some
4 scenarios which we hadn't really considered and as we
5 were developing the -- the developer's Assessment Report.

6 Specific to ramping, we couldn't really
7 find a linkage because the ramp -- the greatest effects
8 from ramping would occur in Trudel Creek, which is
9 located right around the Twin Gorges facility.

10 So, aside from that one (1) area, the
11 changes to water levels in the Taltson River are going to
12 be very similar under this project to what they have been
13 over the last sixty (60) years under, you know, because -
14 - because of the Taltson project.

15 And I haven't heard of any -- and I don't
16 think the issue has been raised of effects to caribou up
17 until now because of that. So, I -- that, I didn't see
18 as a scenario. I will speak to the larger issue of -- of
19 the effects of accidents and malfunctions to caribou.

20 And when we saw this question it did cause
21 us to stop and think through and just make sure amongst
22 ourselves that we hadn't overlooked anything. And -- and
23 nothing really did come to mind. I mean, in this
24 particular project caribou's greatest exposure to the
25 project, if you will, is during construction, you know,

1 just construction activity, and then the presence of a
2 transmission line afterwards.

3 And so, you know, and we've got monitoring
4 in place under both scenarios to make, you know, to try
5 and detect something in the early phases. If there's
6 some sort of accident in regards to the transmission line
7 and caribou, I'm not sure what the consequences would be
8 but, again, the transmission line is going to be
9 inspected every year, so the worst thing you could kind
10 of envision is it falling over.

11 And, in regards to the question of effects
12 of these sort of unforeseen circumstances on caribou
13 populations and how that should be assessed, we did
14 include in the population viability analysis, you know,
15 consideration of stochasticity and what we included in
16 the model was a 12 1/2 percent reduction in vital rates
17 for caribou every ten (10) years. So presumably, that
18 would cover off -- that would sort of include any such
19 events that might result from the project and -- and then
20 some.

21 So I -- I hope I've answered your question
22 there and if not, please, elaborate and I think Anne
23 might -- or Linda might add something to that.

24 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.
25 Just clarity -- clarification on the -- the ramping in

1 that we -- the project can't physically have a ramping
2 event coming from Nonacho Lake. Ramping would only occur
3 as a result of the turbines going down at Twin Gorges,
4 so, upstream of Twin Gorges a ramping event as a result
5 of the project would -- would not occur.

6 MR. ALAN EHRLICH: Dan Grabke...?

7 MR. DAN GRABKE: Yeah, if I could -- Dan
8 Grabke, sorry.

9 If I could add one (1) thing of, like, a
10 practical nature. Hydrologically speaking the Nonacho
11 Lake will be at its lowest levels in the spring and it's
12 also the inflows -- peak inflows or freshet generally
13 occur up there around July or August and so the caribou
14 won't be in the area. If there was one in a thousand
15 year flood or whatever, it would probably occur in mid-
16 July or August.

17 Also, the design of the spillway, there --
18 there is some gates that you can open up but those are
19 for regulation, they're not flood control gates. The
20 flood control will actually be the overflow spillway.
21 And -- and that -- that's for a couple of reasons. One
22 is it regulates itself. As the water goes up, more and
23 more water pours over. It also reacts quite slowly and
24 there isn't this sudden release of water, there's a
25 gradual increase.

1 As you have a -- a flood coming the lake
2 goes up and more water pours over the spillway but the --
3 the actual operating gates are -- are more just to -- to
4 gradually release water in a more controlled manner for -
5 - for power production, so, it's not flood control.

6 MR. ALAN EHRLICH: Thank you. I still
7 think it would be helpful if Deze could submit a couple
8 of worst-case scenarios along with probabilities.

9 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.
10 Can you clarify specifically on caribou and in any area
11 or worst-case probabilities that we could imagine may
12 occur in a specific --

13 MR. ALAN EHRLICH: I was -- I was
14 referring specifically to caribou. With your knowledge
15 of the project, I think you'd be in a good position to
16 identify any -- when I say "worst-case," I'm talking
17 about pretty much the same thing Anne is, low likelihood,
18 high consequence events along with the probabilities of
19 that but I -- I don't expect you to do it on the spot.

20 It would be helpful if you could submit
21 some and I'm saying with accompanying probabilities so
22 that you can make it quite, you know, clear how these fit
23 into your impact predictions. Thank you. Will you do
24 that?

25 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.

1 Yes, we can -- we can do that.

2 Just a clarification, do you want it
3 specific to flooding or do you want it to be a worst-case
4 probability that may be a different scenario but may also
5 have a low prob -- low probability/high consequence kind
6 of situation on caribou? I'm imaging either/or would be
7 appropriate.

8 MR. ALAN EHRLICH: Anne...?

9 MS. ANNE GUNN: Anne Gunn. What I would
10 be looking for is environmental trends for the area
11 towards higher precipitation, so, probably a change in
12 the frequency of high precipitation events. So that
13 would be one (1) part of the scenario.

14 Given the longevity of the project, and
15 thinking optimistically expecting to see recovery in
16 caribou numbers, therefore, an expansion of caribou
17 distribution even as far south as -- including most of
18 the area down to the Twin Gorges is a poss -- I don't
19 think it's -- I don't think it can be ruled out by the
20 information presented on caribou distribution; so that
21 would be the second part.

22 And then with the changes in the
23 environmental trends, there might be a change in the
24 timing of caribou distribution, so, it could coincide
25 with a ramping event. So, it's a very low probability

1 but it's such a high risk if it occurred and that high
2 risk is not covered by 1/2 percent in caribou parameters
3 in the model.

4 I'm looking for something -- 12 1/2
5 percent is well within the range of variance in any one
6 phase of caribou abundance in that cycle. It's 12 1/2
7 percent is -- is very low. And it relates to your choice
8 of models, population viability analysis you did isn't
9 responsive to trends in data.

10 So, that means that to -- to offset that
11 you should probably increase your threshold of variance.
12 So, for a high risk event, I think you want to be
13 looking at values exceeding, say, 25 percent. Perhaps --
14 perhaps at a lower, not every ten (10) years but maybe,
15 you know -- but I think also you need to think phase
16 dependence in order to get -- to capture a low
17 probability/high risk event, the consequences.

18 MR. ALAN EHRLICH: Thanks. Linda...?

19 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.
20 Yes, we'll commit to providing of probability effects
21 analysis.

22 I'm hesitant a little bit, that best
23 addressees Anne's request, and where we think -- we will
24 also identify how the project works to ensure there's a
25 clear understanding of how the project is operated in

1 order to understand where the effects would arise from.

2 What I'm getting at specifically, I think
3 there may still be a misunderstanding on -- on the
4 effects of ramping and where they materialize, but we'll
5 just clarify that -- we'll make sure there's -- that's
6 clarified in our -- our response and in our probability
7 and risk assessment.

8 MR. ALAN EHRLICH: Anne...?

9 MS. ANNE GUNN: That -- that sounds very
10 reasonable to me. And considering that, you know, in the
11 literature there is this Limestone Falls.

12 So, I think it's -- it's as important --
13 one (1) of the reasons for addressing this is maybe to
14 allay fears about that as well, to show that, in fact,
15 it's an unlikely risk.

16 MS. LINDA ZURKIRCHEN: Yes. Linda
17 Zurkirchen. Yes, we'll do that.

18 MR. ALAN EHRLICH: And in terms of any
19 other worst-case scenario possibilities regarding
20 caribou, including the probabilities, will you submit
21 something?

22 MS. LINDA ZURKIRCHEN: Yes, we can do
23 that.

24

25 --- COMMITMENT NO. 55: Deze Energy to provide a

1 probability effects analysis
2 that best addressees Anne
3 Gunn's request, and also
4 identify how the project
5 works to ensure there's a
6 clear understanding of how
7 the project is operated in
8 order to understand where the
9 effects would arise from.
10 And in terms of any other
11 worst-case scenario
12 possibilities regarding
13 caribou, including the
14 probabilities.

15

16 MR. ALAN EHRLICH: Thank you. Anne, do
17 you have other questions?

18 MS. ANNE GUNN: Yeah, I have a -- I have
19 a couple more.

20 With icing, and I may have missed this in
21 the DAR, what is the -- the probability of not the lines
22 breaking, but the tower collapsing? Like, I'm thinking,
23 what happened in the icing storm in Ontario and Quebec a
24 few years ago.

25 And presumably it's very unlikely, but

1 what would be the mitigation for having the -- the lines
2 on the ground. I mean, what are the consequences?

3 MR. ALAN EHRLICH: Deze...?

4 MR. DAN GRABKE: Dan Grabke. The -- as
5 soon there's a -- any kind of ground fault, like say a
6 tower collapsed and the lines hit the ground, within
7 milliseconds the breakers open up at the generating
8 stations and disconnect that line and so there -- there
9 isn't power flowing through the line; that's, naturally,
10 to -- to protect the generator so it's not going into an
11 infinite fault.

12 And, as far as icing on the towers and
13 that sort of thing, they are designed for the -- the
14 conditions up here. And from our experts, the designers,
15 they say that the -- the Quebec ice storm, that had more
16 to do with the lake effect, the open water and that sort
17 of thing.

18 But, the -- it would be designed
19 appropriately to carry a certain ice load anyway.

20 MR. ALAN EHRLICH: Anne...?

21 MS. ANNE GUNN: Anne Gunn. Did those
22 predictions for the ice storms take into account there's
23 a very marked environmental trend in the -- in the Taiga
24 Shield area for, like, I think it's -- I think there's a
25 4.7 degree warming since the 1950s. There's also an

1 increase in icing events.

2 Did -- did your analysis of risk for the
3 towers include the most recent information on
4 environmental trends?

5 MR. DAN GRABKE: Dan Grabke. We -- we
6 haven't done final design on the towers but because of
7 the, I guess, economic implications of a tower collapsing
8 that would be part of the design and -- and look at the
9 appropriate both overbuild for -- for trends in -- in
10 icing and that sort of thing because we'd be supplying
11 customers that we'd be paying, you know, liquidated
12 damages to if we weren't providing power.

13 So, it could be catastrophic from an
14 economic point of view and so there -- there would be
15 that consideration in the design of the towers.

16 MS. ANNE GUNN: My -- my questions about
17 tower collapse is -- is not because I'm thinking of lines
18 carrying like sort of live wire on the ground, it's the -
19 - I don't think there was -- I didn't see any discussion
20 or description of caribou -- for some reason particularly
21 bulls seem to be attracted to cables or rope or lines and
22 it's -- although those lines are heavy, there is a
23 potential - again very low risk, I mean very low
24 probability of it happening - of caribou getting
25 entangled. So, I imagine the mitigation would be a very

1 prompt removal of any downed lines.

2 So I'm just asking if that is included as
3 a mitigation.

4 MR. ALAN EHRLICH: Deze...?

5 MS. LINDA ZURKIRCHEN: Yes, Linda
6 Zurkirchen. It was not identified in the DAR, the whole
7 mitigation, I think which is -- which would be the same
8 as the rapid response of Deze to try and get power back
9 online which would be one and the same. So, Deze would
10 also have an inherent interest to get the lines off the
11 ground and get the towers re-erected and having -- having
12 power back online.

13 That said, it is a very, very low
14 probability. I think we can commit to getting you some
15 probability numbers of an event such as the Quebec ice
16 storm if that would help address the issues that you're
17 bringing up and to -- so we can demonstrate the
18 probability of that kind of event happening.

19 Also, that in -- in an event such as an
20 ice storm that were to bring down I say towers plural
21 because in that kind of probability that -- that is
22 probably what would happen in that kind of storm, it
23 would be a longer duration. It would not be a short
24 duration as in a couple of days to get that back
25 together, it would be -- the power would be out for I

1 would expect in the range of a month, a couple of weeks
2 to get something back online.

3 And again, that is one (1) of the reasons
4 being that long-term duration, one (1) of the reasons
5 that Deze would design this -- this structure, the
6 transmission line, so that it would have a very, very low
7 probability of having that event occur.

8 So, we can commit to getting the
9 probability and that may address the issue.

10 MS. ANNE GUNN: I think it would help to
11 have the probability because I think it's -- this is most
12 likely to happen around Great Slave Lake and the time
13 when icing is most likely is in the fall or the spring
14 which, of course, is also when caribou are most likely to
15 be migrating and so if you had a collapse of towers, you
16 might get not only lines on the ground, but you might get
17 sagging lines.

18 You know, I think there is -- I don't
19 think you can rule out the potential for caribou
20 perceiving the line, downed line, as a very different
21 type of obstacle. I guess that's my point.

22 So, I would appreciate seeing the
23 probability and seeing it sort of in -- the probability
24 tied to the probability of caribou migration in terms of
25 timing.

1 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.

2 Yes, we can get that probability crossed with -- the
3 cross-reference with the timing of caribou.

4

5 --- COMMITMENT NO. 56: Deze Energy commits to
6 getting some probability
7 numbers of an event such as
8 the Quebec ice storm and that
9 probability cross-referenced
10 with the timing of caribou.

11

12 MR. ALAN EHRLICH: Thank you.

13 Anne, do you have another question? We
14 do. I think I've only got you here for the morning and
15 you're on a roll so...

16 MS. ANNE GUNN: I would like
17 clarification on the selection of pathways. The -- among
18 the criteria for the pathways to be invalid includes
19 where there was an effect but the mitigation was assumed
20 to be such that there would be no residual effect and
21 that's included in the same category as where an effect
22 is extremely unlikely because there's no overlap of, say,
23 caribou distribution with the project.

24 So it seems -- I guess my question to you
25 is ask you to justify why you would include two (2)

1 totally different criteria within the same category as an
2 invalid pathway?

3 MR. ALAN EHRLICH: Deze...?

4 MR. DAMIAN PANAYI: Sorry, could you
5 rephrase that one?

6 MR. PETR KOMERS: Okay, Petr Komers for
7 the Review Board. I -- it's really I can add to Anne's
8 comment here because I -- I made several comments along
9 those lines before as well.

10 It relates to the assessment approach for
11 wildlife in general. And the way that approach has been
12 taken was that if it is assumed - just like we mentioned
13 before about access - that mitigation is 100 percent
14 successful, there is no linkage.

15 But I guess what -- what Anne is saying,
16 and I wholeheartedly agree, is that if there is any
17 potential interaction between a valued component and the
18 project, the pathway is valid and needs to be assessed.

19 If the mitigation works, that's great but
20 we need to hear about it. And that's -- I had the same
21 sort of question on wildlife so that you may as well
22 address that question in general. Thank you.

23 MR. ALAN EHRLICH: And so the question is
24 why was that approach taken? Is that the questions
25 that's left here? Petr...?

1 MR. PETR KOMERS: I would go beyond just
2 why was the approach taken. I would go and I suggested
3 that, if you could think about looking at the potential
4 effects such as the effects of access and other effects
5 that you have dismissed because of your thinking of
6 invalid or minor linkage.

7 So what I'm asking for is -- is going
8 beyond not -- not to just explain why was it taken but
9 explain the actual effects, no matter how minor they
10 might be, but tell us about what the effects might be and
11 what would happen if mitigation actually does not work
12 the way you expect it to work.

13 MR. ALAN EHRLICH: Thank you. Deze, do
14 you want to go ahead?

15 MR. DAMIAN PANAYI: Yeah, Damian Panayi.
16 I'll take a crack at answering that recognizing this is
17 an issue which is probably best solved over a coffee.

18 But -- we -- we put a lot of thought into
19 our assessment approach before, you know, before diving
20 into writing this horribly huge document here.

21 And one of the things we wanted to do was
22 try and focus right away on the big effects. There's a
23 whole bunch of possible pathways which were identified
24 both during the initial scoping and were reflected in the
25 terms of reference and also in previous environmental

1 assessments and also just from our -- our own sort of
2 professional judgment.

3 And what we needed to do was find a way to
4 filter through all that and get to the ones which really
5 spoke to our assessment end points.

6 So -- I mean there's a number of ways to
7 do that. We chose one in which we thought, you know,
8 like there's a number of pathways which we thought could
9 be not dismissed but could be quickly shown to not have a
10 large bearing on the assessment end point.

11 And, you know, in the case of fur bearers
12 our assessment end point was, will harvesters still be
13 able to access fur bearers? Will they still have, you
14 know, will they still be fur bearers there for them to
15 harvest?

16 So using that as our goal that we were
17 aiming for, we thought, let's filter through all these
18 pathways, pick out the big ones and spend our time on
19 those.

20 And the ones which we picked out are the
21 ones which we believe are going to drive that final
22 impact assessment and drive any effects that we identify
23 to -- to the assessment end point.

24 And another advantage of that is that, you
25 know, this is already a -- a 2 or 3,000 page document and

1 there isn't necessarily a lot of value to be added to
2 assessing each one of these pathways when many of them
3 sort of end up in a, you know, negligible magnitude with
4 a small geographical extent and so on.

5 So by taking this pathway's approach and
6 only assessing the valid pathways, it means that the
7 assessment tables at the end really bring the reader to
8 the -- the biggest effects and it's not watered down by -
9 - by endless tables of -- of minor effects which really,
10 you know, we didn't feel had much bearing on the final
11 conclusion.

12 So that's some sort of background on why
13 we chose the approach we did and I'll try and speak to
14 your -- I don't know if we should stop there or if I
15 should try and speak to your second question right away,
16 but why don't we stop there and I'll make sure I've
17 answered your first question before I get to your second
18 question.

19 MR. ALAN EHRLICH: I'll ask -- not only
20 has it answered Petr's question but Anne, I thought I
21 heard a distinction in your question between findings of
22 no significance because of a lack of interaction between
23 a valued component and a part of the project versus no
24 significance because something has been satisfactorily
25 mitigated.

1 Did that answer address your question as
2 well in that respect?

3 MS. ANNE GUNN: Anne Gunn. First of all,
4 let me say that I appreciate the approach you took and
5 the efforts you made, like with the cumulative effects
6 model.

7 However, my question is that I think
8 including pathways where there was likely no encounter
9 between the caribou and the projects, so no effects, is
10 not the same -- should not be in the same category as
11 effects that have been identified, even if minor, and
12 that will be mitigated. I think there -- it's -- you're
13 lumping two (2) very different things.

14 And so I would ask that you go back and
15 look as to whether those -- some of those minor effects,
16 which is to say low probability of happening but some
17 risk if it does happen; the mitigation you're proposing
18 is on the chances of it happening, not what happens if
19 that risk actually took place and so that means there
20 still is the potential for that effect to actually to
21 occur.

22 Have I lost you? No? Okay. So putting
23 those into that same pathway of invalid, I -- I think is
24 a weakness and I would like to see that addressed. So
25 I'll stop there because I've got more points and...

1 MR. ALAN EHRLICH: Anne, how would you
2 like to see that addressed? I mean what are you asking
3 Deze to do?

4 MS. ANNE GUNN: I'm asking them to take -
5 - to re-look at the category of invalid pathways and to
6 see if those ones which are in that category because
7 they're actual effects, even if minor, that depends on
8 mitigation, that they consider putting those into the
9 minor effects pathway.

10 MR. ALAN EHRLICH: Deze, are you able to
11 revisit that before the end of October?

12 MR. DAMIAN PANAYI: Damian Panayi. I'll
13 just give a little bit more of the thinking behind why we
14 did what we did and then I'll follow that up with a
15 question of my own.

16 One (1) of the troubles which you run into
17 when you're thinking about whether a pathway is minor or,
18 you know, invalid or -- or valid is that it becomes very
19 difficult to distinguish the mitigation, you know, the --
20 the -- you know, difference between the mitigation and
21 the project design and the magnitude of the pathway
22 itself. All of these sort of are put into a pot and an
23 answer comes out and it's not the simple one plus one
24 (1+1), you know, it's not a sequential line of logic in
25 most cases.

1 So we look at the potential magnitude of
2 the pathway; we look at the mitigation which we're
3 proposing; we look at the natural variation in the
4 system; and we look at the project which is being
5 proposed and to go back and try and assess pathways for
6 which we're saying mitigation is going to reduce the
7 effect is very difficult because there's so much
8 mitigation which is built into the project.

9 So, for example, we spoke about these
10 gates on the roads, which is a very simple example and
11 you could potent -- you know, conceivably look at whether
12 access would change with or without a gate.

13 Where it gets more complicated is examples
14 where Deze identified right from the beginning that there
15 was to be no new flooding. That's mitigation. And to
16 assess the effects of no new flooding versus a hydro
17 project which did require flooding, it becomes -- it
18 quickly becomes a little theoretical.

19 And so, our -- our focus was on assessing
20 the project which we are proposing and to go back and re-
21 assess the project based on no mitigation, or different
22 mitigation, is to assess a theoretical project which
23 isn't being proposed.

24 That said, if there's any particular lines
25 of inquiry -- sorry, any particular pathways which we --

1 in which we overlooked something, I -- I'd certainly like
2 to hear about those particular instances and -- and then
3 we can revisit those.

4 MR. ALAN EHRLICH: Anne, are there any
5 particular pathways that you would find that revisiting
6 helpful?

7 MS. ANNE GUNN: I guess one (1) example
8 of an invalid pathway that I would question would be:
9 You had the changes of timing in freezeup and breakup,
10 and that was invalid because of the proposed mitigation.
11 I suspect that there's a very low probability that, in
12 fact, the mitigation wouldn't prevent that.

13 So, to me, that is a valid pathway. And
14 that's an example of what I was thinking of. And I'll --
15 can I pass it --

16 MR. ALAN EHRLICH: Please, Petr?

17 MR. PETR KOMERS: Petr Komers. Yeah, I
18 think Anne and I are really united on this one. You
19 know, what we're really asking for, at the end of the day
20 we're trying to protect the ecology of the environment.

21 And you may not want to do an assessment,
22 or we may end up disagreeing of whether there is 3 1/2
23 individuals or 14.5 individuals affected, but at the end
24 of the day we need to know whether your mitigations work.

25 And for that purpose the -- the two (2)

1 scenarios were, a valued component does not interact with
2 the project versus a valued component interacting with
3 the project but the interactions being mitigated, are two
4 (2) very different things.

5 And we need to understand that. We, the
6 reviewers, need to understand what it is that the
7 mitigation suggests and how well the mitigation works in
8 the second case.

9 So, it -- this is -- this is why we need
10 to -- even if you say that the effects after mitigations
11 are really negligible, we need to be convinced that the
12 mitigations actually work.

13 MR. ALAN EHRLICH: Thank you. Linda...?

14 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.
15 I -- I do have to ask for clarification on -- on perhaps
16 some specifics of mitigation that you would like us to
17 look at further.

18 A couple of things. One (1) is, I want --
19 I want to make sure we understand the question.
20 Recognizing that there will be monitoring and adaptive
21 management -- you weren't here for it, there was a fair
22 bit of discussion about that on day one (1) and two (2),
23 and that will be -- monitoring an adaptive management
24 plan will be presented by the end of October for all of
25 the components where we feel -- where the discussion has

1 that clear analysis of the effect mitigation and residual
2 effect; that was not presented as is typical in a lot of
3 documents in the same manner. The reason for that is
4 because of the number of project design criteria that
5 were incorporated in as -- as Damian mentioned into this
6 project and because it is not the normal process to
7 undertake an effect assessment on the effect prior to
8 mitigation.

9 As Damian mentioned, if there are specific
10 mitigation measures where there is a high degree of
11 uncertainty and that your -- have some discomfort with
12 the -- perhaps the uncertainty of it working, we -- I'd
13 like to hear of those specific ones, if possible, and may
14 we can have discussions on those specific mitigation
15 measures and/or address them in the mitiga -- in the
16 monitoring and management plan in terms of ensuring that
17 the mitigation is working how it's supposed to be working
18 and having early indicators to identify if it's not.

19 MR. ALAN EHRLICH: Thank you.

20 Petr, are there specific mitigation
21 measures that you would like more information on so that
22 you can be confident in their effectiveness?

23 MR. PETR KOMERS: Petr Komers. I -- I'm
24 not going to propose any specific mitigation measures at
25 this point. But what I am proposing is to actually get a

1 written response to some of our IRs.

2 And I already mentioned that you will be
3 looking at some of the, you know, the list of the
4 mitigations for access, for example, that's exactly the
5 sort of thing that would help me a lot. And in -- in our
6 IRs on wildlife, we specified some of those very
7 questions. So rather than just flogging this to death,
8 we can go from there.

9 MR. DAMIAN PANAYI: Okay. Thank you for
10 that and we will, you know, specific to that one pathway
11 which -- that Anne mentioned of timing of freeze and
12 breakup, we'll certainly revisit that one and make sure
13 that we give this a little bit more thought in -- in our
14 responses to some of these other pathways that we've --
15 we've discussed today.

16

17 --- COMMITMENT NO. 57: Deze Energy to re-look at the
18 category of invalid pathways
19 and to see if those ones
20 which are in that category
21 because they're actual
22 effects, even if minor, that
23 depends on mitigation, that
24 they consider putting those
25 into the minor effects

1 pathway; specifically timing
2 of freezeup and breakup
3

4 MR. ALAN EHRLICH: Thank you, Damian.
5 Deze's efforts on that would be I think appreciated by
6 our experts.

7 Anne, are you here after lunch?

8 MS. ANNE GUNN: I can be just briefly.

9 MR. ALAN EHRLICH: Okay, I'm just
10 thinking that we haven't yet had an opportunity to hear
11 from the people who have come a long way from
12 communities, the Fort Res. Metis, people came from Lutsel
13 K'e and the North Slave Metis Alliance is also
14 represented here.

15 But I just don't think we've got a lot of
16 time before lunch. So rather than -- than get started
17 there then take a break before we've had a chance to get
18 through it, I think it might be better if -- if we keep
19 going with your questions for now.

20 And then if it's -- if it's all right with
21 everyone who came from communities, can we turn to your
22 questions after lunch?

23 I'm seeing some -- some nodding. Okay,
24 Anne, do you want to continue your questions?

25 MS. ANNE GUNN: Anne Gunn. We just have

1 a couple more questions you'd probably be glad to know.
2 The -- the approach you took to cumulative effects I
3 thought was logical. I have a couple of concerns about
4 it. I would look for more information from you on the
5 assumptions underpinning your choice of the population
6 model.

7 And what I would like to see is a brief
8 account of its strengths and weaknesses relative to the
9 scale of variation in the demographic parameters as they
10 relate to phases of increase and decrease and low numbers
11 in a caribou herd.

12 MR. ALAN EHRLICH: Thank you. Deze...?

13 MR. DAMIAN PANAYI: Yeah, as we know we
14 don't have a full understanding right now of caribou
15 demographics through an entire phase and we're in the
16 process of learning right now I would -- I would guess
17 but we can certainly provide that.

18

19 --- COMMITMENT NO. 58: Deze Energy to provide more
20 information on the
21 assumptions underpinning your
22 choice of the population
23 model, i.e., a brief account
24 of its strengths and
25 weaknesses relative to the

1 scale of variation in the
2 demographic parameters as
3 they relate to phases of
4 increase and decrease and low
5 numbers in a caribou herd.
6

7 MR. ALAN EHRLICH: Thank you. Anne...?

8 MS. ANNE GUNN: I guess by laying out the
9 assumptions and their validity might -- I guess my
10 question to you, you might -- it might be prudent to be
11 open to some changes in -- in the strength of the
12 conclusions from that population model by looking at the
13 critical assumptions and the -- I mean, the particular
14 attributes of the model you selected.

15 MR. ALAN EHRLICH: That's just a
16 clarification on your last question, right? Do you have
17 another question?

18 MS. ANNE GUNN: No.

19 MR. ALAN EHRLICH: Okay. Thank you very
20 much, Anne. Petr, you're -- you are here after lunch, I
21 know that, right?

22 Okay, we have a little bit of time, a
23 quarter hour before we break and I -- I would like to
24 hear more from -- from the people from communities who
25 have come here and -- and very patiently waited through

1 quite a bit of material.

2 Mr. Catholique...?

3 MR. ARCHIE CATHOLIQUE: Good morning. My
4 name is Archie Catholique. I'm from Lutsel K'e. I just
5 want to say thank you for -- for giving me the
6 opportunity here to speak.

7 Just before I begin, I just want to
8 mention the -- the Elder's name that's passed on today.
9 He's one (1) of the individuals, an Elder, that -- that
10 we relied on for traditional knowledge and -- and of his
11 expertise, the skills that he learned that he kind of
12 passed on to people like myself and, you know, his place
13 that he was from was up in the Dahcho T'e (phonetic). In
14 English they call it Artillery Lake but that's where --
15 originally that's where he was from, that's where he --
16 he grew up. There's a village there and one (1) of the
17 things they relied on was that -- Dahcho T'e, I guess
18 what it means is that the crossing of the caribou because
19 back then, you know, that's the migration route where the
20 caribou crossed every year, every fall and that's how
21 they'd -- they lived and -- and got their caribou. And
22 so I just want to -- to mention that just today.

23 I guess one (1) of the things that I
24 wanted to mention was that we'd -- I know on the agenda
25 you have the barren-land caribou. Are we saying that

1 we're just talking about caribou today? Are we -- are we
2 talking about the -- the wildlife, the whole wildlife, is
3 that what we're...?

4 MR. ALAN EHRLICH: Although the agenda
5 makes a split, we've got today to talk about any wildlife
6 or harvesting issues that you'd -- you'd care to bring
7 up.

8 MR. ARCHIE CATHOLIQUE: Okay. All right.
9 I guess -- I guess maybe just getting back to access, I
10 just wanted to just mention just a couple of things there
11 in that area.

12 You know I'd mentioned the other day that
13 I was -- my occupation is interpreter and a translator
14 and that's what I used to do for the government, GNWT. I
15 used to be employed by them and I used to live in the
16 community two (2) weeks and two (2) weeks in my
17 community. I used to rotate like that and every time
18 they had their sitting, you know, the legislative
19 assembly, I did their interpretation for them, and not
20 only me but there's other languages that were involved in
21 that.

22 Usually in the fall we'd come over here
23 and, you know, one (1) fall I'd spent two (2) weeks here
24 and during that time there was the migration of caribou
25 that -- that came close to the city and, you know,

1 thinking that, you know, I would go out there and go get
2 a caribou so that I can, you know, for my own personal
3 use here in -- in the city.

4 So I -- I went out on that road -- that
5 road that they have there, they called it Prelude Lake
6 (phonetic) or Previewed Income Trail or whatever they
7 call it. I -- I went out that way because the caribou
8 was close and jumped in my vehicle and I went and tell
9 you what -- what I saw was something that I've never
10 experienced before. I seen people, you know, had their
11 vehicles every kilometre. There's people standing with
12 their guns. I haven't seen anything like that before.
13 But, you know, I managed to get a caribou, there was a
14 herd there and I stopped and I went into the -- into that
15 lake and I got one.

16 But when that herd passed to another --
17 another lake, you know, there's oh -- I mean there's a --
18 there's an amount of shooting that took place, you know,
19 I had to lay low for about at least five (5) minutes
20 before, you know, I would be able to cut my caribou
21 because there's too many shooting around.

22 And I guess that access we're talking
23 about, you know, that -- that kind of a -- that could
24 happen. You know, the Bathurst, you know, they go
25 further south. They go a long way up in Nonacho Lake

1 and, you know, as I mentioned that there's -- there's a
2 road that comes from Fort Smith.

3 You know, if there is a migration up that
4 way, then there's a possibility that -- that this could
5 happen. Because once you have a road and people know
6 about that road, it's easier for them to -- to jump in
7 their truck, throw on their skidoos and go down that
8 road. And I guarantee that if there's a caribou out
9 there, they're going to see hundreds of trucks over
10 there. And that's going to have impact on -- on the
11 caribou.

12 Probably last year's paper I'm pretty sure
13 some of these probably read that -- that paper, that
14 trail, there was a road, the winter road that goes up to
15 I think Wekweti or Rail Lakes (phonetic) up there area,
16 there's -- there's caribou up that way. There was
17 hundreds of trucks that went up that way and there was a
18 concern about wastage and that's -- that's a possibility
19 that -- that's going to happen.

20 You know, I -- where I'm from, I've --
21 we'd been taught to respect the caribou and how to hunt
22 them and we have trails that, you know, sometimes where
23 there's no trails then we make our own trails. And
24 that's -- that's how we do things. To have -- to jump in
25 a truck and use that -- that road, it's not something

1 that we've been brought up to do things like that.

2 But I won't -- I won't say it's economic,
3 you know, I wouldn't call it that. It's a disaster. I
4 think that's -- that's what's going to happen. I guess
5 the question that I'd ask -- I want to ask is that, you
6 know, you talk about transmission lines is that poss --
7 for sure there's going to be a road alongside that. And
8 what's that going to -- what's that going to create?

9 And, you know, those -- those kind of
10 things that -- that could happen. You know, I have a lot
11 of questions that I want to -- I want to ask. There's up
12 in the barren lands, you know, that's -- that's where I'm
13 from. You know, I'd -- numerous years I had the
14 opportunity to -- to travel. That's how I made my -- my
15 living, you know, and I'd -- there's small games like
16 ptarmigans. You know, ptarmigans they fly low. You
17 know, what kind of a -- whata kind of an impact would
18 that have on them.

19 Is there any area where, you know, where
20 there's such a -- or where there's environmental studies
21 that have taken place on such a ptarmigan or where
22 there's transmission lines?

23 We're talking about jack rabbits here. Is
24 there studies that -- that's been taken into account for
25 the transmission lines that's going to pass through?

1 And there's muskox. The muskox has come
2 back in numbers. And, you know, what -- what kind of
3 impact is that? Is there any -- any studies that -- that
4 relate to muskox? And the moose, you know, we have
5 plenty of moose.

6 You know, I'd -- you know, I just have to
7 mention this because, you know, where I'm from, you know,
8 I'd mentioned earlier a couple of times, you know, that
9 our food is -- is out on the land. We have to go and get
10 it to -- to provide for our families; that's -- that's
11 the way we are.

12 That lifestyle, you know, we practise that
13 today. And our Elders tell us that we want to make sure
14 that we want to pass this on to our children so that them
15 too can -- can have that lifestyle.

16 You know, we'd did our living by -- by
17 trapping, and it's not to say that, you know, we'd send
18 our furs out to the market and -- and that's -- that's
19 not so. We still trap those furs so that we can use it
20 for our own personal use. And that -- that's how we do
21 things. And, you know, our trapping has never declined,
22 that's never gone down.

23 And if you wanna know about our -- the way
24 we do things then come and ask us, we'll tell you. We
25 have the knowledge and we have the -- the expertise to --

1 to make people understand. And this information that,
2 you know, may -- maybe help you make decisions.

3 And so, maybe I would just stop there
4 because -- it's kinda like a number of questions, I
5 guess, that -- that I'm asking you so. Thanks.

6 MR. ALAN EHRLICH: Mashi cho. Yeah,
7 there are definitely a number of important questions
8 inside that. I'd like Deze to ponder them over lunch and
9 get back afterward.

10 Some of the questions that jump to my
11 mind, from what I've just heard, are: Will there be a
12 road along the transmission line; will that increase
13 access along the transmission route; and what is the
14 effect from increased hunting going to be as a result of
15 that, and as a result of the project overall?

16 What kind of impacts on small game from
17 the transmission line are expected? Are there any
18 studies on small game, animals like ptarmigan, with
19 respect to transmission lines?

20 Has anyone looked at how transmission
21 lines will affect muskox? And what kind of impacts are
22 expected from moose? How has Deze looked at this and
23 what are your predictions?

24 Mr. Catholique, does that catch many of
25 the points that you were raising? I mean, I -- I know

1 you've also pointed out that there is traditional
2 knowledge available on how Lutsel K'e uses the land and
3 harvests.

4 And as Mr. Catholique pointed out, if you
5 want to know that, it sounds like there's an invitation
6 to -- to come and -- and hear it. Although I know that
7 in practice sometimes these things are a bit more
8 complicated, but it sounds to me like an offer is made
9 there.

10 And Mr. Catholique, did I get that right?

11 MR. ARCHIE CATHOLIQUE: Yeah. Well, I
12 mean, yeah, that offer, I guess, is -- it won't be coming
13 from me though. I mean, there's people that are probably
14 -- people that I work for, like I said, the leadership
15 would be the one that would make that call. I'm -- but,
16 I'm only saying that we have information that -- that
17 can, you know, help people; that's -- that's what I'm
18 saying.

19 I guess the other thing, you know, just
20 for a thought that, you know, when people go out and eat.
21 The -- the caribou, you know, I'm listening to Anne. I
22 know Anne has been around with the caribou, she's done a
23 lot of studies.

24 I'm also part of that -- a board member
25 that was just been put there on the Beverley Qamanirjuaq

1 herd that I belong to. And so one of the things that,
 2 you know, is quite concern about the caribou is the
 3 migration. The Elders, you know, with -- with their
 4 knowledge about the caribou -- that's the caribou that
 5 once they -- they have this migration route and -- and
 6 the way that I guess they -- their mind, you know, that
 7 how they travel from one to the next.

8 You know, these kind of transmission
 9 lines, you know, they have this kind of like a magnetic
 10 kind of -- that comes out of it might have disturbed the
 11 way that -- that the caribou that migrate. You know,
 12 those things have never been -- I don't think has there
 13 been any studies on these kind of migration of the
 14 caribou.

15 You know, this is -- this is all new I
 16 think, you know, but I know there was a concern that has
 17 been brought forth a few years ago when they had a
 18 hearing I think on Deze Energy, I think when they were up
 19 at the school here. There was a concern I think that was
 20 brought about, you know, the -- if there were -- maybe
 21 they have a similar impact down in Manitoba I think
 22 that's where it was.

23 But that too I just want to -- want to
 24 bring out, thank you.

25 MR. ALAN EHRLICH: Thank you, Mr.

1 Catholique. I believe the -- the electrical fields that
2 you mentioned when it comes to power lines and normally
3 electromagnetic fields, and I -- I suggest again instead
4 of getting an answer from Deze now, again you -- you
5 consider your answer over lunch and when we get back, you
6 answer the items that we've just heard.

7 As well, we'd very much like to hear any
8 questions from other people who've -- who've come to
9 participate, including the North Slave Metis Alliance,
10 Fort Resolution Metis, and anyone else who has questions
11 for Deze.

12 We'll carry over the caribou a bit just to
13 make sure we've heard from everyone and then following
14 that -- I know that our focus has not been exclusively
15 caribou but we're also going to try and make sure we have
16 enough time to look at other wildlife and potential
17 impacts on harvesting as well.

18 So let's get back together again at 1:15
19 here. Have a good lunch and we'll see you then. Thank
20 you.

21

22 --- Upon recessing at 12:02 p.m.

23 --- Upon resuming at 1:17 p.m.

24

25 MR. ALAN EHRLICH: Okay. Everyone please

1 take a seat. We're going to get started.

2 Okay, before we -- you recall when we
3 broke for lunch Deze was going to be considering some
4 responses to the questions that Archie Catholique asked.

5 I look, and I think that a lot of his
6 questions may be of, you know, some interest to other
7 people who've also come in from -- from other places,
8 different communities. And so, I'm going to stall a
9 little bit, take a couple of other questions, and just
10 give people time to get back after lunch before you
11 respond.

12 We'll start with the Review Board's
13 expert, Anne Gunn.

14 MS. ANNE GUNN: Anne Gunn. I just have a
15 supplementary question on the cumulative effects
16 analysis.

17 I would like to see for the cumulative
18 effects analysis when you -- when you give more details,
19 if you would give more details on the assumptions
20 underlying the approach, that you include the accelerated
21 environmental trends that are the likely consequence of
22 human activities.

23 So, in other words, I'm arguing that
24 global warming is a consequence of human activities. And
25 so the implications of the environmental trends following

1 from global warming will be addressed in the population
2 modelling.

3 And I'm asking that you spell out the
4 assumptions that you've included that relate to the
5 environmental trends.

6 MR. ALAN EHRLICH: Deze...?

7 MR. DAMIAN PANAYI: Yeah, we can
8 certainly do that. I don't see any problem with doing
9 that. We've -- I guess we'd have to put some thought
10 into what the assumptions and the trends would be, but
11 that can be done.

12

13 --- COMMITMENT NO. 59: Deze to spell out the
14 assumptions that they
15 included that relate to the
16 environmental trends.

17

18 MR. ALAN EHRLICH: Great. Thank you.
19 Anne?

20 MS. ANNE GUNN: Well, if I could add a
21 suggestion that you might want to talk to the -- to
22 Environment Canada because they have a lot of the
23 relevant scale information that you might find useful.

24 Environment Canada is undertaking an
25 environmental status and trends report that's at the eco-

1 zone scale. So it's -- it's the most useful scale for
2 you to be working at for the -- for the population -- for
3 the cumulative effects model.

4 MR. ALAN EHRLICH: And the next
5 question I'll take is from Parks Canada. Can you say
6 your -- your name before? And Nicole is just bringing a
7 microphone to you.

8 MS. WENDY BOTKIN: It's Wendy Botkin,
9 Parks Canada.

10 As has been presented in the DAR, just a
11 bit of background here, a land withdrawal order has been
12 approved for a study area for a national park reserve on
13 the East Arm of Great Slave Lake.

14 The DAR initially presented as the
15 withdrawal -- as the study area an area that's smaller
16 than the more accurate one, and that information is
17 already in the public record, and has been presented to
18 the Board.

19 Just further to that, one (1) of the
20 things that would help us is to have new maps in a couple
21 of key areas that show the accurate withdrawal area
22 relative to a couple of things that are important to us.
23 One (1) is the view shed analysis receptors throughout
24 the East Arm sector to show which ones and where exactly
25 they are relative to the entire withdrawal area.

1 And a second one (1) would be the figure
2 that -- relative to I think Section 15.5 which is access
3 and staging in the East Arm sector and why that's
4 important to us as it shows the type of clearing methods
5 throughout and where -- where they start and stop with
6 respect to the boundaries.

7 So just -- that would be helpful to us.

8 MR. ALAN EHRLICH: Thank you. Deze...?

9 MS. LINDA ZURKIRCHEN: Yeah, Linda
10 Zurkirchen. I believe we -- have we submitted them to
11 the Board yet? We -- we can do that by October 30th.

12 MR. ALAN EHRLICH: Thank you.

13

14 --- COMMITMENT NO. 60: Deze to provide new maps that
15 show the accurate withdrawal
16 area relative to the view
17 shed analysis receptors
18 throughout the East Arm
19 sector, and the access and
20 staging in the East Arm

21

22 MR. ALAN EHRLICH: Wendy...?

23 MS. WENDY BOTKIN: Thanks. And the other
24 part is again relative to the DAR Section 15.10. There
25 has been an analysis with respect to visual effects and

1 we would like to request -- and that's been presented in
2 a table just to show how far away the towers may be from
3 certain key receptors.

4 What would be helpful to us in address --
5 in assessing the impact of that would be a visual
6 representation of the transmission line, especially in
7 areas of frequent use and areas of cultural or historical
8 importance.

9 And I understand that there's not enough
10 digital elevation data to use that type of methodology
11 but from discussions with Deze I understand there are
12 other options.

13 MR. ALAN EHRLICH: Deze...?

14 MR. DAMIAN PANAYI: Yeah, Damian Panayi.
15 There's two (2) things. First of all, we might be able
16 to do a better job of it now than we could in the past
17 because just a few weeks ago there was an aircraft survey
18 of -- of the entire transmission line route to try and
19 get detailed elevation information.

20 And for the particular area where the
21 transmission line would cross the Lockhart River and go
22 through the East Arm Park or the proposed East Arm Park,
23 Deze significantly has expanded the area to be surveyed
24 so that we do still have the ability to finetune the --
25 the alignment of the transmission line through that

1 particular area.

2 So we'll have better information available
3 to us by next summer when it comes time to actually take
4 the photographs which would be used in creating those
5 photo -- photo montages.

6 And the second point is just a question
7 for you is that we need to speak to make sure that we
8 have used the correct, you know, receptor points for the
9 -- for the view shed analysis. So if you could go
10 through the DAR, make sure we've got the right ones
11 before we begin with that analysis that would be very
12 helpful.

13 MS. WENDY BOTKIN: I wonder, could --
14 could you propose some and then we could use that as a
15 starting point?

16 MR. DAMIAN PANAYI: We've got a bunch
17 proposed within the DAR.

18 MS. WENDY BOTKIN: Yeah.

19 MR. DAMIAN PANAYI: And I personally am
20 familiar with the area and I've spoken to people and
21 that's how we came up with the ones that are in there.
22 If there's any more which Parks Canada knows of that we
23 don't, then, it would be helpful to have those brought to
24 our attention but I can't really suggest any more which -
25 - which add much value from my perspective.

1 MS. WENDY BOTKIN: So basically the ones
2 that are already identified in the DAR, that's the
3 starting point?

4 MR. DAMIAN PANAYI: Yeah, that's the
5 starting point.

6 MS. WENDY BOTKIN: Okay.

7 MR. ALAN EHRLICH: But may I ask Parks
8 Canada to meet with the developer if Parks needs to
9 specify other areas from which you'll -- you'll have a
10 look from a view shed perspective and just work it out
11 between yourselves?

12 MS. WENDY BOTKIN: Sure.

13 MR. ALAN EHRLICH: Would that be okay,
14 Deze?

15 MS. LINDA ZURKIRCHEN: Yes, that'll be
16 fine.

17 MR. ALAN EHRLICH: Thank you.

18 MS. WENDY BOTKIN: And the -- the final
19 question -- well, I think the final question is: We
20 understand that there are tower type alternatives that
21 may be less obtrusive to potential visitor experience and
22 to the wilderness -- wilderness values in a national park
23 and we would like to request analysis of the feasibility
24 and effects of those tower types at -- especially in
25 areas again where -- where there could be a visual impact

1 that -- that could be mitigated further to protect the
2 wilderness values in a proposed national park reserve.

3 MR. ALAN EHRLICH: Deze, can you do that
4 in -- can you provide something like that or would you --
5 would you like to discuss it on the spot or do you prefer
6 to submit it in writing?

7 MS. LINDA ZURKIRCHEN: It's Linda
8 Zurkirchen. Yes, we can provide some information around
9 that. What we would be able to provide by the 30th is
10 information around the different tower types that may --
11 sort of a tool box of what may be used or what --
12 shouldn't say that may be used but what's out there that
13 could be considered.

14 But we likely wouldn't identify the
15 specific tower types for those areas until we finish that
16 first step of identifying from the -- the view scape
17 which towers would -- which sites would be most
18 applicable for those kinds of towers in consideration of
19 how the views might be affected.

20 MS. WENDY BOTKIN: And -- and I think
21 that would be okay with us, as long as we had an -- an
22 agreement that there would be some process for looking at
23 that after.

24 MS. LINDA ZURKIRCHEN: We'll provide that
25 process.

1 --- COMMITMENT NO. 61: Deze Energy to provide
2 information around the
3 different tower types that
4 are out there and could be
5 considered.
6

7 MS. WENDY BOTKIN: Okay. Just maybe if -
8 - if I could go back to my second question just for
9 clarification. The -- the photomontage or view shed, you
10 know, when do you think -- would that be done through the
11 EA process or would it -- would that information not be
12 available until after? At what stage would that
13 information be available?

14 MR. DAMIAN PANAYI: At this stage the
15 limiting factor is that we haven't obtained the
16 photographs yet partly because we were waiting to see if
17 there was going to be changes made to the transmission
18 line alignment.

19 So at this stage it's probably not --
20 there's probably not much value in trying to get those
21 photographs until next summer. So I'm hoping that this
22 isn't dependent on the -- you know, it doesn't become
23 part of the review process. But there is a commitment
24 there to do -- to do that.

25 MS. WENDY BOTKIN: Okay.

1 MR. ALAN EHRLICH: Thanks. I have a
2 question that arises from that. Wendy was talking about
3 different tower types and reduced visual impacts with
4 regard to preserving a wilderness experience in a
5 potential park.

6 I'm wondering whether or not Deze has
7 looked at different tower types with respect to reducing
8 visual stimulus that might be disturbing to caribou.

9 MR. DAN GRABKE: Yeah, because we haven't
10 done final design on the transmission line, we're not
11 married to any particular type of tower. We've got
12 examples in -- in the DAR.

13 There's also just solid steel poles that
14 actually naturally weather. They get an oxidization
15 coating on them. Sorry for the big word. They rust kind
16 of thing and -- and they turn like a greenish red so they
17 blend in quite -- quite well. Pilots don't generally
18 like those because they can't see them so there's the
19 trade-offs there. There's also wood pole structures you
20 can do with this kind of voltage.

21 So we are flexible in -- in what we --
22 what we could do in different areas. You don't want too
23 many variations or else you -- you end up with, you know,
24 a confusing pile of different types. They're hard to
25 erect then. They need different crews for different

1 types of towers. But we could certainly switch to one
2 kind or another through different areas.

3 MR. ALAN EHRLICH: From the caribou side,
4 has there been any consideration on which of those might
5 be preferable?

6 MR. DAMIAN PANAYI: Damian Panayi. It --
7 it sort of runs into a problem which we discussed earlier
8 which is that we don't know what the mechanism is whereby
9 caribou avoid or, you know, select for areas around
10 disturbances and that includes transmission lines.

11 So, I mean, George Marlowe brought up the
12 scenario earlier of noise and that's a possible
13 mechanism. Site might be a possible mechanism.

14 I don't believe we're ever going to find
15 answers to those questions and so I -- you know, yeah,
16 that's the ultimate problem is I -- we can't say that
17 that's going to make a difference for caribou. It's hard
18 to get in their heads for those sort of questions.

19 MR. ALAN EHRLICH: Okay. I was just
20 wondering if that had been thought about. Go back to
21 Wendy for another question from Parks Canada.

22 MS. WENDY BOTKIN: I think that's it. I
23 think it's okay.

24 MR. ALAN EHRLICH: Thank you. Now I'd
25 like to take you back to the questions that Archie

1 Catholique asked before the break.

2 I can just summarize those. Again if --
3 if -- Archie would you like me to just run through the --
4 the six (6) that I mentioned before? He's nodding yes.

5 One of the questions that Archie
6 Catholique asked was: Would there be a road that goes
7 all the way along the transmission line and will there be
8 increased access along the length of the line which could
9 lead to additional hunting?

10 MR. DAMIAN PANAYI: Damian Panayi. Yes,
11 the -- the last contractor that we spoke to in regard --
12 who, you know -- who is coming up with some plans to
13 actually build the transmission line was -- was proposing
14 that within the transmission line right-of-way which is
15 30 metres wide, so -- and within that area there'll be
16 selective, very selective vegetation clearing, that is
17 just removing trees required to make sure that there's no
18 arcing or contact with the transmission line conductors
19 and then inside of that would be a 5 metre wide -- 5 to 8
20 metre wide trail which would be used during construction
21 just to move men and equipment up -- up and down
22 underneath the transmission line.

23 And so those are very different from the
24 haul road which is, you know, proposed to get from Fort
25 Smith up to Nonacho.

1 So there are those and presumably that
2 would be -- that would be snowmobile access after --
3 after construction. But again it's -- it's not
4 continuous, it's not going to be maintained past
5 construction. And in many cases it probably wouldn't
6 even be used for more than one (1) or two (2) years
7 during construction. So I hope that helps to answer the
8 question.

9 MR. ALAN EHRLICH: And the other part of
10 that question was: Have you considered the potential
11 impacts regarding increased hunting along that access?

12 MR. DAMIAN PANAYI: We considered impacts
13 to hunting in the larger sort of scenario of a new road
14 from Twin Gorges northward and we've made some
15 commitments today that we have to, you know, re-evaluate
16 some of our conclusions there and we'll include those
17 temporary construction access trails in that re-analysis.

18
19 --- COMMITMENT NO. 62: Deze to include the temporary
20 construction access trails in
21 the re-evaluation of a new
22 road from Twin Gorges
23 northward.

24
25 MR. ALAN EHRLICH: Okay, thank you. And

1 there was also a question on impacts on small game,
2 ptarmigan we're using as an example. How can they affect
3 ptarmigan and other small game along the route of the
4 transmission line?

5 MR. DAMIAN PANAYI: Damian Panayi. No,
6 we didn't -- we didn't look at ptarmigan. We didn't look
7 at arctic hare. Going back to the original scoping of
8 the project those were two species which weren't
9 mentioned.

10 I can say that we did look at the effects
11 to water fowl. We did look at the effects to marten,
12 lynx, beaver and muskrat, but that's, you know, one (1)
13 of the -- one (1) of the limitations of the environmental
14 assessment process is that you can't assess all effects
15 to every species out there. So no, we didn't look at
16 those animals specifically.

17 MR. ALAN EHRLICH: You're right, we can't
18 assess all effects to everything but we can certainly pay
19 attention to the things that communities have said are
20 important to them.

21 Mr. Catholique, would you like Deze to
22 provide in writing some consideration of potential
23 impacts to ptarmigan and small game along the line?

24 MR. ARCHIE CATHOLIQUE: Yeah, sure,
25 that'd be okay.

1 MR. ALAN EHRLICH: Thank you. Deze, can
2 you do that?

3 MR. DAMIAN PANAYI: Yeah, we can commit
4 to do that.

5 MR. ALAN EHRLICH: Thank you.

6
7 --- COMMITMENT NO. 63: Deze to provide consideration
8 of potential impacts to
9 ptarmigan and small game
10 along the transmission line.

11
12 MR. ALAN EHRLICH: The next question that
13 I heard was: What will the impacts on musk ox be in the
14 area which was used by musk ox? Has Deze considered
15 that?

16 MS. LINDA ZURKIRCHEN: We'll just be a
17 minute.

18
19 (BRIEF PAUSE)

20
21 MR. DAMIAN PANAYI: Yeah, there -- we did
22 assess the impacts to musk ox and to moose and I -- I
23 don't want to reiterate what's in the DAR right now but
24 it's -- it's in chapter 15 and if there's specific
25 questions I can get to those but those two (2) species

1 were included as value components within the -- within
2 the developer's assessment report.

3 MR. ALAN EHRLICH: Mr. Catholique, would
4 you like a very short summary of that here now or are you
5 okay with that?

6 MR. CATHOLIQUE: I'm okay with that.

7 MR. ALAN EHRLICH: Okay, and I noticed
8 you mentioned moose in the answer, as well, so that's the
9 -- the other question.

10 And then the -- the last question that
11 came up there was: How are you going to consider the
12 effects of electromagnetic fields on wildlife or -- or
13 have you done so already?

14 MR. DAMIAN PANAYI: Yeah, Damian Panayi.
15 There was some initial modelling to look at
16 electromagnetic fields and the scenario we have with the
17 Taltson project is that, because the transmission line is
18 so long, there's reasons to upgrade to larger capacity
19 conductor line. And we're actually running that
20 conductor line at something like 18 to 20 percent of it's
21 full capacity and that just gives more efficiency given
22 the long distance involved.

23 But because the line is being used at such
24 a low percentage of it's total capacity, there is a
25 corresponding benefit in that, there's very little corona

1 noise, as it's -- as it's referred to. That's the hum
2 that you can sometimes get from -- from transmission
3 lines. And there's also very little electromagnetic
4 field.

5 So -- and we can put a document -- I've
6 got some numbers here, they don't really mean much to me,
7 but it's -- they're very -- they're very much below some
8 of the -- some of the thresholds for where they're, --
9 you know, for in jurisdictions where they have such
10 thresholds.

11 It doesn't appear as that there's any
12 jurisdiction in Canada that has such thresholds, so we
13 went to the States and to Belgium where they do have
14 thresholds and the anticipated electromagnetic field from
15 Taltson is much below those thresholds.

16 So we can table numbers if -- if people
17 are -- if people are curious but -- and keeping in mind
18 too that this is still early days of the engineering and
19 as the owner's engineer comes along line we'll be able to
20 finetune some of this -- some of this work.

21 MR. ALAN EHRLICH: Okay. And if that
22 material is not already on the public registry could
23 submit it to us to make sure we can get it on there?

24 MR. DAMIAN PANAYI: Yes, I -- I don't
25 think it is on the public registry right now, and just

1 one second.

2

3 (BRIEF PAUSE)

4

5 MR. DAMIAN PANAYI: Yeah, Damian Panayi.
6 We'll take out the relevant numbers from this engineering
7 report and put those on the -- the public record.

8

9 --- COMMITMENT No. 64: Deze to table the relevant
10 numbers from the engineering
11 report regarding corona
12 noise.

13

14 MR. ALAN EHRLICH: Thank you. Okay, I am
15 going to ask right now if there's anyone else who came,
16 you know, a long way from communities -- I see Alan
17 Boucher over there, and then others -- who have not yet
18 asked questions.

19 Now, I -- I know that there's some value
20 just to listening, but if you have questions about
21 information you want from Deze that will help you -- help
22 you work through the potential impacts of this project,
23 this should be a very good time to -- to ask.

24 Okay, I'll say, yeah, Mr. Boucher first,
25 and then Mr. Catholique again.

1 MR. ALBERT BOUCHER: Good morning -- good
2 afternoon. My name's Albert Boucher from Lutsel K'e.
3 Wildlife members from Lutsel K'e, I work with the
4 wildlife, and so I got a lot of question to ask for
5 transmission line and about caribou.

6 I'd like to say a few words on the table
7 for -- just to let you know how I'm thinking, how in my
8 mind right now.

9 So there's the first thing was, this
10 morning I listened about caribou. We got a lot problem
11 with caribou, a lot of problem where I come from.

12 Last few years now, way back, the caribou
13 move slowly, you know. They never come very slowly. Now
14 the couple years now we never see caribou in Lutsel K'e.

15 I'm thinking in my mind, I'm thinking this
16 is the reason why it is. He says caribou, not much
17 caribou now, but I don't know -- there's caribou, lots of
18 caribou. You see once in a while lots of caribou.

19 The reason why I'm asking you this one
20 here, the caribou are really important thing for us,
21 really important thing. Only we live on the caribou from
22 a long time. Elders used to tell us, you know, to a
23 caribou.

24 One (1) caribou we kill, we use everything
25 before, everything. We didn't throw nothing away,

1 nothing. That's -- you know, anything we throw it away.
 2 That blood come out in the snow, freezing, we take it, we
 3 use for dogs, we use it to feed the dogs. We used to do
 4 that before. We don't waste nothing, you know. And also
 5 even the hair we use it, even the skin we use, anything,
 6 that's what the caribou really, really important thing
 7 for us.

8 Now we talk about caribou now. They're
 9 talking about -- I'm talking about caribou gone from my
 10 land, my people, Lutsel K'e.

11 Last two (2), three (3) years ago I said
 12 no caribou. The reason why I'm thinking all this would
 13 tell us too, those mines, you know, mine -- they're --
 14 since they're making mines, no caribou. No caribou go to
 15 Lutsel K'e.

16 And also -- and now they're -- they're
 17 talking about power line goes all the way to the mine.
 18 You guys are just block all the caribou country out
 19 there. That's where the caribou go, the other side, they
 20 don't come to Lutsel K'e. That's why Elders, lots of
 21 Elders talk about it all the time. You know, when
 22 there's no caribou, us people will really cry, really
 23 cry.

24 To see we left on that, we -- every time
 25 we know where the caribou is, we go in there with skidoo

1 or dog team used to be old -- old days was still the
2 same. We still -- we would do that the same.

3 That's why I like to heard you talk about
4 caribou, I like to talk -- I like to put the words on the
5 table for that. And my people, Lutsel K'e, if I say he
6 listen like this, he likes that, you know, really.

7 You see that's now -- now just a while ago
8 they're talking about the transmission line over there.
9 Well, Lustel K'e, we never -- we went there, we talked
10 about it. The people not really happy about it, not
11 really happy.

12 The reason why -- where animals, lot of
13 things, you would -- now they're talking about a line
14 now. You put a line over there, transmission line, you
15 know, the -- the Ptarmigan, geese, ducks, lots, they're
16 travelling at night. That's the really important.
17 Really it's -- you know, it's something right there. You
18 waste a lot of animals right there. Waste a lot of
19 animals.

20 Lutsel K'e now the line right there,
21 ptarmigan come back from the rail lines. They really
22 hurry. I guess they're coming right in there at
23 nighttime, travelling. Next morning you see they lay
24 around on the road. You see, not only -- can't be only
25 there. Maybe there's some place you guys don't look

1 around the land all the time. Maybe like that, you know.

2 So no ptarmigan now, not much ptarmigan.

3 Maybe that's why the geese too don't land now. They're
4 going really high or go over to bur (phonetic) lines.

5 That kind of thing we have to look at good. We have to
6 think about it, we've got to talk about it.

7 Come to think lots of things. That's why
8 I like to mention things like that on the table here.
9 And I go to Lutsel K'e, I talk to my people, my people
10 will -- Elders were telling us that the kind of thing
11 we're suppose to take care really good.

12 That's our food, that's our real food.
13 You know, that's why now they're -- now they're talking
14 about right here right now so we can't really say yes.

15 Remember I told the other day, and when
16 your transmission line that goes there, oh yeah, a lot of
17 work goes to -- to mine and the one place is the only
18 place we were about you guys should know, one (1) place,
19 the really important thing for us right there.

20 We don't want it to cross the river right
21 there. That's why we talk about all the time, we talk
22 about that transmission line. That's what I like to say
23 that to you guys and I want to listen to you again for
24 caribou.

25 I want to -- I'll talk about caribou after

1 before it closes here. Thank you very much.

2 MR. ALAN EHRLICH: Mahsi cho, Mr.
3 Boucher.

4
5 Part of what I just heard involves
6 observations of caribou that have hit lines along roads
7 and a concern that this is the same kind of thing that
8 could happen with the transmission line proposed by Deze.

9 Has that been considered by Deze?

10 Sorry, I -- I totally meant to say
11 ptarmigan. Let me try that again. Part of what I just
12 heard was that ptarmigan have been observed to have hit
13 lines and found dead alongside of roads already and the
14 concern that I heard was that this could happen with the
15 transmission line. Thank you, Lou.

16 MR. DAMIAN PANAYI: Damian Panayi. No,
17 as I -- I mentioned earlier, we didn't look specifically
18 at ptarmigan and again, it's -- when you're doing one (1)
19 of these environmental assessments it's very difficult to
20 assess all effects to all species, to all animals, and so
21 we have to pick which animals we're going to concentrate
22 on. And going back to the things that were discussed
23 early on in this project, the ptarmigan wasn't one (1)
24 which came up very frequently and so it's -- it's not one
25 which we discussed in this -- in this document.

1 That doesn't mean that, you know, we don't
2 care about ptarmigan and it doesn't mean that there
3 aren't necessarily effects to ptarmigan, it's just a
4 limitation of -- of the process. But as I said earlier,
5 we've made a commitment to take -- take a look at how the
6 project may -- may lead to effects to ptarmigan.

7 MR. ALAN EHRLICH: And -- and hopefully
8 considering experiences with ptarmigan on power lines
9 adjacent to roads as Mr. Boucher just raised. Thank you.

10 Mr. Boucher, may I ask for a small
11 clarification on -- on something that -- on something
12 that you mentioned? You pointed out that there were some
13 concerns about the transmission line in general but
14 there's one (1) particular place where -- where people of
15 Lutsel K'e really don't want it to cross the river.

16 And how -- how far from that place -- how
17 far from that place would be far enough to start to bring
18 relief to the people of Lutsel K'e to help address that
19 concern?

20 MR. ALBERT BOUCHER: Well, I mentioned
21 that the other day so not only right now for the people
22 that I talked about before that we -- I'm talking about
23 Lockhart River, Lockhart River. We go there every
24 summer. The really important thing for us we go there
25 every summer on the end of July, first week of August.

1 We stay there one (1) week. We pray there all the time.

2 The reason why that's -- the river really,
3 really -- we take care of the river. It's a long time
4 ago, all these long time, maybe thousand, two (2), three
5 thousand (3,000) years ago, that river there that people
6 they really take care of the -- the river so we get -- we
7 get to heal there.

8 We go there, we pray, we ask the river
9 there so we can get better all the time. That's why we -
10 - we got the lines across there, maybe it's going to go
11 someplace. Maybe something happens to the river, that's
12 why we don't want the line to go across the river.
13 That's what we're talking about all the time.

14 Maybe there's I don't know how many miles
15 from the mouth, mouth of the river from up there. It was
16 about twenty (20), fifteen (15) minutes with a plane,
17 twenty (20), fifteen (15) minutes, that's I don't know
18 how many miles, about twenty (20) -- twenty (20) miles
19 maybe -- maybe -- it's at least twenty (20) miles anyway.

20 That's why the Elders are talking about
21 now they heard about this transmission line now. We
22 talked about it a long time ago, long time ago. So all
23 the time we talk about he says this is a really important
24 thing for us but nobody's going to work here, just the
25 same and now they're worrying about that, we're talking

1 about that, you know, this park. That's the park they're
2 talking about. Us, we -- we try to work on a park, too.
3 We want the park. The reason why -- that's why we take
4 care of the -- the river. We put a park, that's why
5 we're talking about all the time.

6 That's why I'm working with people too
7 myself, staying with people, I work with people. I'm
8 talking about all the time. This is a good -- good way.
9 We talk about it this way. We do it this way. We always
10 say that. The reason why we're going to keep the land,
11 we don't want to spoil that land, that's why.

12 The young people they're talking in Lutsel
13 K'e even that you should have people here to the way
14 they're talk about how they love their land. You know,
15 that's why they're saying that here right now.

16 This is not only me, everybody, the Lutsel
17 K'e people always talk about this, the really important
18 things. Thank you.

19 MR. ALAN EHRLICH: Mahsi cho. I know
20 that it's, you know, when -- when something cultural is
21 that important to you it can be difficult to share with a
22 group of more or less strangers, you know, and we
23 appreciate that you're -- you're speaking from the heart
24 on this.

25 Mr. Archie Catholique had a question he

1 indicated earlier.

2 MR. ARCHIE CATHOLIQUE: Thank you. My
3 name is Archie Catholique from Lutsel K'e. Maybe I'll
4 try to answer Albert's, what you're asking of him to --
5 just to make it a little bit clearer.

6 I guess from the mouth of the Lockhart
7 River then right up to the Artillery Lake, that river
8 that goes down, that -- that is the spiritual area that -
9 - that he's talking about. That's very important to --
10 to our people and we'd like to keep it the way it is, as
11 I mentioned, not only for us but for other people that
12 come to visit and so that -- that's how important that
13 area is.

14 So, you know, it's not -- it's something
15 that's going to be very difficult I guess culturally, I
16 guess, as the importance of that area.

17 One of the things that I was going to
18 mention I'd kind of forgot about is that when we were
19 talking about access.

20 You know, one of the things that we do
21 back home is that in certain season we -- we do things,
22 you know, for our harvesting and gathering. If it's for
23 berry picking or the migration of the -- of the caribou
24 or it's the best time for the moose to be there at a
25 certain area and the fishing area that's at the certain

1 season or the month and we know, you know, when there's
2 going to be a lot of fish at that particular spot. We
3 know there's going to be moose in that particular spot at
4 that time of the year.

5 And I guess what I'm hearing, you know,
6 when I guess we're talking about access and then I'm
7 hearing that let's say there was, you know, where for
8 some reason I guess this has been approved and that
9 there's going to be a transmission line, and what has
10 been proposed here is that there's going to be a barge
11 that's going to I guess be used on -- on the East -- the
12 East Arm probably along the McLeod Bay and Fort Reliance,
13 around that area, and that's an area that -- that I'm
14 talking about when the time of the year that, you know,
15 we hunt and -- and what's the best time, you know, we
16 need to go there.

17 I don't know how much thought has that
18 been put into. They've been asked, you know, when
19 they're going to be making those decisions and those
20 things have been taken into consideration. That would
21 have a -- an impact on -- on my community.

22 I guess the other thing, you know, that
23 probably just to more or less information, I guess, it's
24 regards to the -- the parks, that there's a proposed
25 park.

1 And one (1) of the reasons that there is a
2 proposed park is that our people want to protect some of
3 the ways that, you know, we do things, areas that we just
4 talked about, cultural areas where there's harvesting, a
5 place where people go and -- and get healed. You know,
6 we have places like that.

7 And that was the reason why today that we
8 open up discussions on -- on the parks. And, you know,
9 there's a -- I don't know how much people know that
10 there's a land withdrawn that's taken place outside
11 Thaydene. Even in that propose or the words that were
12 put in that, you know, were never communicated to -- to
13 our Elders because in there, you know, it allows for
14 transmission lines to go through the parks but our Elders
15 were never informed about what has happened here. They
16 were surprised when to find that someone has put that in
17 there.

18 And so, you know, they're saying that
19 we're gonna have a park and there is no development in
20 that park. You know, we want to keep it the way it is
21 today and that's what we want to do.

22 I know earlier when I talked about, you
23 know, how we provide for -- for, you know, for ourselves
24 and we may be hunting and trapping, you know, and that
25 kind of lifestyle is still going on.

1 The reason I -- I mention that is because
2 I know Louie, you know my friend over there, was saying
3 that there's a decline in trapping and -- but, that's not
4 so. We still -- people go out and there's a lot of
5 people that do that where I come from.

6 It's also our neighbours just next door in
7 Fort Resolution, they also do the same thing. They still
8 go out and -- and trap. They still, you know, a lot
9 people they still live that lifestyle. So, I thought,
10 you know, I just want to make that clear.

11 And I don't think we're -- we're going to
12 stop, you know, doing that. It's -- it's our lifestyle
13 and we want to -- want to keep on doing it. Thank you.

14 MR. ALAN EHRLICH: Mahsi cho for your
15 points, Mr. Catholique. Just one (1) second please.

16

17 (BRIEF PAUSE)

18

19 MR. ALAN EHRLICH: I'm going to ask Lloyd
20 Cardinal, who -- who's been very patient with us since
21 Thursday.

22 If -- Mr. Cardinal, if you have any
23 questions for Deze, I mean, you know, I've seen you
24 listening carefully throughout all of the discussions
25 that have been happening here and continue to do that is

1 fine, but if you do have questions for Deze it would be a
2 very good time to ask them for whatever information would
3 help you better understand what they propose and what
4 kind of impacts that may cause.

5 Would you like to ask any?

6 MR. LLOYD CARDINAL: Thank you. My name
7 is Lloyd Cardinal, I'm with the Fort Resolution Metis
8 Council.

9 I just want to -- I want to pick up on
10 what Archie had just mentioned there. One (1) of the
11 consultants this morning said that there was a decline in
12 -- in the hunting and trapping part of our lives.

13 I just want to bring the same message, I
14 guess, as what Archie had brought here. If anything, I
15 think it's -- it's on the upswing rather than -- rather
16 than being less and less hunters and trappers.

17 Now I know that -- that our hunters and
18 our trappers trap on the Slave River and I don't know
19 what effects the dam has on the Slave River, but if you
20 go -- if you go check the -- the renewable records, Fort
21 Resolution has always been the highest community with the
22 highest income of fur brought in to the government, and
23 they have those records.

24 So I just -- I -- I don't know where he's
25 getting his information from and from what I heard in the

1 last days, as well, the previous days, everything is --
2 some -- a lot of information is based on models from
3 other areas and other examples were brought to the table.
4 And it seems to me that this part of the land is
5 certainly not the same areas where other incident or
6 other examples were taken from.

7 So I -- I want to make that clear and I
8 don't know what -- how the water -- the water or the
9 environmental board sees that, whether -- whether
10 everything is based on models rather than actual figures.

11 Now, I -- I just also want to say that --
12 I want to give you a little -- little history on -- on
13 Rocher River. Prior -- prior to the dam -- well, first
14 of all, there's a couple of things here. One (1) was
15 compensation. I was asked to bring that to the table
16 here, compensation. I've heard speakers in the -- in the
17 last couple of days say that, well, our participation in
18 this project is the compensation.

19 Well, our people don't see it from that
20 point of view. We see compensation as a completely
21 different package altogether. We had the Federal
22 Government who initiated the Taltson Dam back in -- in
23 the early sixties. The federal day school was burned
24 down to move the people to Fort Resolution and that's a
25 fact. Had it been one (1) of our people had done that it

1 probably still would have been an open case. People
2 still talk about that today. We were forced to move out
3 of Rocher River.

4 People are now starting to say, To heck
5 with that. The Government moved us out of there just
6 because of the dam. We're going to move back there. So
7 people right now are starting to move back in there and -
8 - and you guys must have the information that there --
9 there are -- there are fishing lodges and other types of
10 lodges that are -- that are springing up in that area.
11 But people are talking about moving -- some people are
12 talking about moving back.

13 So that -- the question -- I know, I know
14 that it is the Federal -- people have said that it's the
15 Federal Government's responsibility on compensation.
16 Without having even talked about compensation we're
17 thrown in with Deze to kind of sort of -- well, you're --
18 you're involved now. You can't be talking against this
19 project because you're involved.

20 But I don't see it that way. Our people
21 don't see it that way, as well. I mean, this is why I
22 was asked to -- to bring that up, that the compensation
23 package is an issue that has to be dealt with. I know it
24 was brought to the table at Deze in one (1) of our board
25 meetings but it was something that was put aside saying,

1 well, it's not really our responsibility.

2 But -- but we're -- we're lumping in with
3 something that we totally were against to begin with and
4 the way the Government moved the people out of Fort
5 Resolution, that's -- that's our land. Our way of life
6 is diminished, our cultural way of life diminished.

7 And you can say -- use the word
8 "assimilate" the Native people, the main stream of
9 society. You now have to buy all your food in the store.
10 Forget about your old way of life. Not so.

11 As I pointed out earlier there's -- we
12 have a lot of people that go out and hunt and trap, same
13 with our -- our relatives in Lutsel K'e and -- and you
14 can -- they can testify that there are a lot of people
15 that go in that area to hunt caribou. Caribou is one (1)
16 of the main sources of -- of food that -- that's brought
17 to our table. I don't do it myself but I do eat caribou.
18 Even though I don't go out and hunt it, people that do go
19 out and hunt it come back and it's given to us.

20 Now talk -- the other -- the other concern
21 was the water on -- on Taltson. There's times of the
22 year when -- when water is so low. I know up in -- up in
23 the first rapids on Rat River you can walk across there,
24 whereas before you couldn't -- you couldn't do it.
25 There's no way.

1 You can -- you can -- I don't know if
2 people had the opportunity to see the Slave River by Fort
3 Smith where all those rocks now are -- are exposed
4 because of the drop of the water. Well, it's in the same
5 condition but just imagine it, a smaller, narrower river.
6 You can jump from rock to rock, rock to rock and get on
7 the other side, that's how low it is.

8 The other thing, too, is when water --
9 water is released, that -- that high water freezes and
10 then when -- when low water occurs, well, you have an air
11 gap between -- I guess I would imagine an air gap between
12 the ice that's frozen above and the water has dropped.
13 When water is released again it breaks up all that ice
14 and -- and it becomes almost impassible with skidoos.

15 You know we don't use dog teams anymore or
16 very few but it almost becomes impassible because of all
17 that -- all the ice jutting out on the river.

18 So just two (2) -- two (2) issues that I -
19 - that I want to bring forth and just to make a statement
20 to correct the consultant that brought up the fact that
21 less and less people are going out to hunt and trap, so
22 thank you.

23 MR. ALAN EHRLICH: Mahsi. So we have
24 live transcription. The points you've just raised, these
25 transcripts will go on our public registry and become

1 part of the body of evidence that is -- is considered for
2 this environmental assessment.

3 As well, I've been glancing over at Deze
4 who I see are listening carefully to the points that you
5 -- you bring to the table.

6 There are two (2) particular things there
7 that I just want to bring back up. Starting from the
8 back there's been a concern raised today and I heard a
9 similar concern raised on Friday having to do with
10 effects of people who are travelling on the land in snow
11 machines related to changes in water height and changes
12 in the ice, the level of the ice where the ice will
13 freeze then the water will drop, ice will freeze below.

14 The point that we heard on Friday is it
15 makes it extremely difficult to get up onto the shore
16 because you get these shelves.

17 The point that we heard just now is that
18 the ice that is suspended can also break up and become
19 impassable and this can be a barrier to movements of
20 people who are on the land harvesting and -- and
21 exercising their rights.

22 Would you like to respond to that?

23 Let me phrase that as a question. Has
24 Deze considered the potential impacts from this?

25 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.

1 We have considered the ice regime that the proposed
2 project will influence. That is contained in the
3 Developer's Assessment Report.

4 We've also engaged and that person is not
5 here, but a person who is familiar with ice regimes and
6 the creation of ice regimes, especially on large northern
7 rivers, to assist us with trying to predict how the
8 project may or may not change the formation and the
9 movement of ice with this project.

10 Part of it -- well, our findings are, is
11 that there -- we recognize that there is processes
12 occurring currently that you've mentioned, overflow ice
13 that we talked of the other day, hanging ice that we've
14 spoken -- that you've spoken of and we recognize that
15 those are currently occurring in different areas of the
16 Taltson watershed.

17 And from the project we under -- what our
18 prediction is that these may continue to occur but won't
19 be exasperated and it won't be -- won't become -- sorry
20 for the words -- won't change significantly from what's
21 currently occurring in the system.

22 We'd also committed to having a -- putting
23 together some form of communication system in place for
24 occurrences when, specifically in the winter, when we
25 have uncontrolled shutdowns and a potential for water on

1 top of ice situation downstream of Twin Gorges, and to
2 create a -- a communication system with downstream water
3 users in those -- those kinds of events, so that we can
4 help to alleviate any potential effects to the users from
5 those kind of -- those -- specifically those kind of
6 events that we would have advance knowledge of.

7 MR. ALAN EHRLICH: Okay, thank you,
8 Linda. And thank you, Mr. Cardinal, for your points and
9 -- and getting those views on -- on the record.

10 We are also dealing with, besides caribou,
11 wildlife and traditional harvesting in general today and
12 we don't have very much more time. So I want to make
13 sure that we have an opportunity to discuss that.
14 Perhaps we could start with Environment Canada on that
15 one.

16 MS. MYRA ROBERTSON: Thank you. Myra
17 Robertson with the Canadian Wildlife Service of
18 Environment Canada.

19 We have a few questions for the developer
20 today, mostly related to migratory birds and species as -
21 - at risk. The first question I have is related to the
22 assessment of horned grebes. For those of you who don't
23 know what a horned grebe is, it's a small water bird
24 about the size of a duck, orange tufts at the side, a
25 long pointy bill.

1 The important thing about horned grebes is
2 that, in April 2009, the population that is here in the
3 Northwest Territories, the western population in Western
4 Canada, was newly assessed by the Committee on the Status
5 of Endangered Wildlife in Canada as being a species of
6 special concern.

7 As such, it is now under consideration for
8 listing on Schedule 1 of the Federal Species At Risk Act.
9 As documented in the developer's report, horned grebes
10 are found in the project area.

11 And because of their new assessment,
12 understandably the developer did not look at them as a
13 species at risk but the terms of reference have outlined
14 that any species at risk, that includes those listed
15 under the Federal Species At Risk Act, as well as any
16 species listed by the Committee on the Status of
17 Endangered Wildlife in Canada should be looked at.

18 So my question for the developer is,
19 first, if you can determined whether the proposed
20 development is likely to affect horned grebe or their
21 habitat.

22 Secondly, identify any adverse effects
23 that it might have on the species and their habitat.

24 Third, suggest mitigation to avoid or
25 lessen any effects.

1 And finally, whether any monitoring might
2 be required, understanding that the monitoring might be
3 coming in your monitoring plan.

4 MR. ALAN EHRLICH: Thank you. Deze, is
5 this something you'd prefer to submit in writing over the
6 time period we specified, or do you want to take a stab
7 at it right away?

8 MR. DAMIAN PANAYI: Damian Panayi. No,
9 it's a little bit more detailed than we can get into
10 right now. But, yes, Myra is absolutely correct. And I
11 can tell you that we did waterfowl surveys during the
12 baseline studies. There were some horned grebe observed,
13 very few, but they were there. And we will be submitting
14 a written response to that -- to that question.

15

16 --- COMMITMENT NO. 65: Deze to determined whether
17 the proposed development is
18 likely to affect horned grebe
19 or their habitat; identify
20 any adverse effects that it
21 might have on the species and
22 their habitat; and advise
23 whether any monitoring might
24 be required.

25

1 MR. ALAN EHRLICH: Thank you. Myra, next
2 question?

3 MS. MYRA ROBERTSON: Thank you. That
4 sounds -- sounds good.

5 The second question I have is related to
6 the impact that your project might have in terms of
7 potential increases in ravens in the project area.

8 Just to provide a little bit of
9 background, predation of eggs and chicks is a key factor
10 that limits the product -- productivity of many species
11 of birds.

12 Although predation is a natural process,
13 artificial increases in predator abundance from human
14 activities can readily alter any existing balance between
15 predators and nesting birds. And this can lead to
16 significant population declines and conservation
17 problems.

18 So ravens are predators of eggs and
19 chicks, and increases in raven populations in development
20 areas elsewhere in the north have resulted in declines in
21 local bird populations.

22 So the DAR did assess the potential
23 impacts of transmission towers providing hunting perches
24 and nesting sites for raptors, but to our knowledge it
25 did not address the issues of ravens nesting and roosting

1 on towers or other project infrastructure.

2 And again, my question has several parts
3 here. So, the first question is to evaluate the degree
4 to which ravens will use the towers and other project
5 infrastructure for nesting; secondly, to assess the
6 probability of increased predation on migratory birds
7 because of increased ravens in the area, and how this
8 might impact the local bird population; third, what
9 potential mitigation measures might be considered; and
10 finally, monitoring measures to evaluate the
11 effectiveness of your mitigation measures, or to
12 determine whether further mitigation might be required.

13 MR. ALAN EHRLICH: Deze would you like to
14 answer those? We can go through them again one (1)
15 question at a time, if you want to try it here, or you
16 can submit an answer in writing, if you prefer.

17 MR. DAMIAN PANAYI: Thank you. Damian
18 Panayi. I'm just debating that one. I can -- the one
19 (1) piece of information I have is that, I mentioned the
20 survey we did of the Snare Line in the winter of 2008,
21 and during that -- during that survey I was recording
22 raven nests and I saw fifteen (15) raven nests between
23 here and Snare Hydro. That's amongst four hundred and
24 fifty (450) towers, and in January, so it's not the best
25 time to be looking for occupancy, but there was -- two of

1 them were occupied on that particular day, so, we're
2 looking at one (1) nest approximately every 9 or 10
3 kilometres.

4 So I -- I didn't feel that that's really,
5 you know, an introduction of new ravens to the
6 environment or a density of ravens which is going to lead
7 to impacts to song birds.

8 And the other consideration there is that
9 it's my understanding that songbird nest predation is
10 really driven by red squirrels and -- and not ravens and
11 so I -- I don't know how much of a -- I don't think this
12 is going to lead to significance.

13 So, that's the two (2) pieces of
14 information I can give you now and I'd like to hear what
15 you have to think about that and...

16 MS. MYRA ROBERTSON: Thank you for that
17 information.

18 MR. ALAN EHRLICH: Can you hold on just
19 one (1) second, please, Myra?

20

21 (BRIEF PAUSE)

22

23 MR. ALAN EHRLICH: Okay, please go ahead.

24 MS. MYRA ROBERTSON: A couple of things
25 is I -- I guess I would like -- we'd like to see more of

1 an in-depth analysis. I mean, a few questions come to
2 mind; first of all, whether the tower type will be the
3 same as you assessed on the -- on the Snare line because
4 the tower structure could influence whether or not you
5 have birds nesting on it. Some towers would -- more
6 likely have areas where ravens are -- are more likely to
7 nest. So that would be a criteria in terms of whether
8 the Snare line comparison is applicable or not.

9 And your comment about a raven every 9
10 kilometres may not be significant or not. I would like
11 to see more details on your analysis of that. Sometimes
12 it doesn't take a whole lot of ravens to have a big
13 impact on the local bird population, so, I would like to
14 see a more in-depth analysis.

15 If you have, from any of your baseline
16 data, what the baseline level of -- of ravens is, perhaps
17 when you collected some of your waterfowl surveys, I
18 don't know if your -- your crew recorded ravens as well,
19 but that could give you an indication whether having a
20 bird nesting every 9 kilometres or not would affect the
21 population.

22 The other thing to keep in mind, towers
23 are one (1) aspect but if you're changing the
24 infrastructure right around the dam site as well that is
25 something else to consider. Certainly, we've seen

1 examples of some of the northern mines where you have
2 ravens nesting right on the building infrastructure. So,
3 we're asking you not only to consider tower design but
4 also changes to the other infrastructure as well.

5 And then finally I will close that -- I
6 mean, certainly, there's very good evidence from the
7 Alaska north slope that increases in ravens there, that
8 was due to a combination not only of increased nesting
9 sites but also very poor waste management but that did
10 have a very significant negative impact on the local bird
11 population. So, we want to avoid anything like that but
12 it's a combination of -- of certainly increasing nesting
13 sites could be a problem.

14 And -- and I think sometimes people do
15 underestimate the predation of ravens because it's not
16 always observed but places where they have done more
17 studies even having a few more pairs in the nest --
18 nesting in the area can have impacts on the local
19 population.

20 So that's kind of a long-winded ans -- to
21 request that we would like that to be looked at in more
22 detail.

23 MR. ALAN EHRLICH: Deze, can you submit a
24 more detailed response in writing, please?

25 MR. DAMIAN PANAYI: Yeah, we can do that.

1 --- COMMITMENT NO. 66: Deze Energy to provide a more
2 in-depth response re the
3 impact that the project might
4 have in terms of potential
5 increases in ravens in the
6 project area
7

8 MR. DAMIAN PANAYI: The one (1) area is
9 that tower design hasn't been finalized yet. There are
10 some pretty good ideas what it's going to look like and
11 the discussion of making sure the tower is designed to
12 discourage birds, that's something which is really sort
13 of built into the engineering already on these things.
14 It's -- it's very much a consideration not only from the
15 bird's perspective but from an engineering and
16 reliability perspective.

17 So it's -- it's part of the mitigation for
18 any transmission line route is to design these things so
19 that birds don't nest on them. The birds find a way to
20 nest on them regardless but, yeah, we can submit
21 something in writing for that.

22 MR. ALAN EHRLICH: Thanks, Damian.

23 Myra, do you have other questions?

24 MS. MYRA ROBERTSON: Thank you. I have
25 one last question and it's related to Yellow Rails. And

1 this is a -- for those of you who don't know what a
 2 Yellow Rail is, it's a small marshland bird that's very
 3 rarely seen. But often the best way to -- to detect them
 4 is through their call which -- they're breeding call
 5 which happens in June and they tend to call in the
 6 breeding season in the -- in the middle of the night is
 7 when they typically call. And it sounds like a couple of
 8 rocks clicking together.

9 The developer did do some Yellow Rail
 10 surveys. We're still assessing the results. Environment
 11 Canada does have some concerns about the timing of the --
 12 raising the fact that there was still ice present.

13 However, we are pleased to know that they
 14 did follow the Canadian Wildlife Service protocol for
 15 Yellow Rail surveys. There is the issue about the timing
 16 may have been off.

17 One thing, though, I -- I'd just like the
 18 -- the developer to clarify and, Damian, I know we've
 19 talked about this. But if you could put, for the record,
 20 in terms of what you thought was the water levels for the
 21 year.

22 The reason why I ask this is that if water
 23 levels are too high, Yellow Rails have been known not to
 24 breed in -- in the area or if the wetlands are completely
 25 dry, they may not be found in the area where they

1 typically are.

2 So my question is for the developer: To
3 provide information as to whether the 2008 year when the
4 surveys were -- was done, was a normal, wet or dry year
5 for water levels in the areas assessed for Yellow Rail?

6 MR. ALAN EHRLICH: Thank you, Deze...?

7 MR. DAMIAN PANAYI: Yeah, Damian Panayi.
8 It was -- 2008 was a slightly drier than average year.
9 So I'm -- we looked at the hydrology and it was something
10 between an average year and a 1-in-5 drought.

11 So probably not what you'd call noticeably
12 dry but certainly a little drier than the average and I'm
13 not quite sure how far back that data goes. But, yeah,
14 slightly drier year.

15 MR. ALAN EHRLICH: Thank you. Myra
16 Robertson...?

17 MS. MYRA ROBERTSON: And then just one
18 followup question to that. Given that it was a slightly
19 drier year than normal, if you would do the surveys
20 again, would that have any bearing on your locations for
21 your surveys in the future?

22 Do you think it was -- like would you
23 change -- change your study design based on that or -- or
24 not?

25 MR. DAMIAN PANAYI: Damian Panayi.

1 Probably not just because of -- I mean assuming that the,
2 you know, the sur -- the site surveyed the first time
3 were correct in terms of the habitat, there is advantage
4 to revisiting the same sites, repeated visits of the same
5 site.

6 So I mean we can talk about that one
7 further but my first instinct would be to go back to the
8 same spots.

9 MS. MYRA ROBERTSON: Thank you. That's
10 all my questions for now.

11 MR. ALAN EHRLICH: Thank you, Myra
12 Robertson.

13 I'm going to ask the Board's expert Petr
14 Komers if he has any additional questions.

15 MR. PETR KOMERS: Petr Komers on behalf
16 of the Review Board. Actually my question is mostly to
17 Environment Canada and there was a line of questions that
18 you may be able to help us out with.

19 And in part you already answered that
20 actually earlier on today and, that is, that you seem to
21 be reasonably happy with the survey effort and at least
22 the methodology and approach that Deze did in -- for the
23 Yellow Rail surveys.

24 So here's a question that probably goes to
25 your expertise and, that is, given that they did not find

1 much of any Yellow Rail in the area, would you find it
2 more likely that they simply did not detect them or that
3 they really do not exist there?

4 MS. MYRA ROBERTSON: Thank you. We did
5 have some discussions with the developer before they did
6 the Yellow Rail surveys and we did provide them with a
7 copy of the Canadian Wildlife Service Standardized
8 Protocol for the survey of Yellow Rail in the prairie and
9 northern region and for anybody who's interested in
10 seeing a copy, I did bring a copy with me today.

11 I think our biggest concerns with the
12 surveys at this point was the timing. Understandably,
13 the Proponent was kind of in a tough spot because there's
14 limited data for the north and it's not as if they can
15 simply drive down the road to survey as is in the case in
16 the southern regions.

17 So our main concern with the surveys is
18 the fact that there were some areas which still had ice.
19 Unfortunately, our -- our Yellow Rail expert, who is
20 based out of Winnipeg, is not with us here today but I'll
21 try and rephrase some of his comments he had on the
22 analysis.

23 One (1) of the things which we do suggest
24 in -- in the final version of the protocol is that we
25 suggest surveying up to three times at each site during

1 the course of the breeding season to increase the maximum
2 -- the likelihood of detecting Yellow Rails if they are
3 present.

4 I think what probably happened here with
5 their surveys is they went in and they did them early
6 and, unfortunately, maybe a little bit of a later spring,
7 maybe that's the normal chronology but it looks like they
8 missed -- because -- the prime breeding time because of
9 the ice present. That's hence the reason why we often
10 recommend three (3) times.

11 Now, that being said, if the timing is
12 right, and you hit the peak breeding season and there is
13 a Yellow Rail present on the wetlands, and basically how
14 the survey works is that you have a call playback. So,
15 you listen for Yellow Rails at the darkest time of night,
16 then you do this call playback and then you listen again
17 to see if there's a response to the call.

18 From what I understand is if Yellow Rails
19 are present and it's the peak breeding season and you do
20 the call playback, there's a very, very high probability
21 that they will respond. So if everything had been
22 perfect and Yellow Rails were there, they probably should
23 have got a response with only one (1) -- one (1) time.

24 The problem, again, seems to be that the
25 surveys may have been done too early and -- and so that's

1 a bit of a concern for us.

2 In terms of habitat that they selected,
3 our expert biologist suggested that the habitats they
4 selected were reasonable and -- both for vegetation and
5 water levels as well as wetland size. The only
6 cautionary point he has said is that not only to focus on
7 the wetland size but also vegetation and water levels.

8 We understand you looked at all of those
9 things but, again, there seemed to be a little bit more
10 focus on wetland size but overall our expert was
11 satisfied on how you'd -- you'd chosen your habitat.

12 You -- you noticed my question about
13 whether it was a wet or dry or normal year and, again, as
14 I mentioned before, that is because Yellow Rails are
15 known to move to other locations if water levels are not
16 sufficient for breeding.

17 And then just a final comment on the
18 coverage. Overall, our expert biology -- biologist
19 thought the coverage was reasonable with increased
20 coverage in areas with greater potential for Yellow
21 Rails; however, a little cautionary note is that neither
22 myself or our expert biologist has been to that area, so,
23 we're looking based on the information provided in the
24 developer's assessment report to come up with our
25 conclusions. We haven't done a ground check ourselves.

1 for this.

2 MR. ALAN EHRLICH: Okay. And any
3 questions for Deze Energy or did we cover --

4 MR. PETR KOMERS: Not on the Yellow Rail,
5 no.

6 MR. ALAN EHRLICH: All right. Does
7 anyone else have any questions for Deze Energy? Still on
8 the subjects of wildlife, I think we covered caribou off
9 pretty well this morning, but other wildlife harvesting
10 issues?

11 Okay, just hold on one second please.

12

13 (BRIEF PAUSE)

14

15 MR. ALAN EHRLICH: Okay. The Board's
16 expert, Petr Komers has got a couple more questions.

17 MR. PETR KOMERS: Okay, we were just
18 talking about, yes, species at risk and rare species and
19 so on.

20 But I would like to return to the
21 harvesting issues, in part, because we had some questions
22 in that regard to begin with and I think we have even
23 more questions now since we have heard from the
24 traditional users.

25 So the question was initially in our IRs.

1 How much information have you gathered to assess the
2 effects on harvesting? And we have heard essentially an
3 effects assessment from Louie earlier today that the
4 creating of the access will contribute positively to
5 local harvesting.

6 The question here is: What information is
7 that assessment based on and I would like to hear whether
8 or not would differentiate between local and traditional
9 harvest?

10 In my mind they are not synonymous. There
11 are traditional users and there are non-traditional users
12 and in my experience at least the two (2) of them are not
13 always compatible.

14 Could you elaborate on that for now?

15 MR. ALAN EHRLICH: Thank you, Petr.
16 Deze....?

17 MR. LOUIE AZZOLINI: Louie Azzolini.
18 Thank you for the question. I could go at length
19 providing information that's in the developer's
20 Assessment Report on the harvesting of wildlife by
21 specifically Aboriginal people. And we can look at it
22 from the standpoint of secondary data that's avai -- that
23 was produced, as well as information that's been
24 generated by the Government of the Northwest Territories.

25 In the late '80s -- mid '80s the CINA

1 study did a detailed examination of -- and that's the
2 Canadian Indigenous Nutrition -- I forget the last word
3 or what the acronym means, but it relates principally to
4 concern about pollutants and the wildlife that's
5 consumed. And what they did was a very detailed study, a
6 scientifically valid study of food consumption in various
7 communities throughout the Northwest Territories and
8 Nunavut.

9 What they did is they documented the
10 quantity of species consumed by season and then analyzed
11 it in terms of the potential human effects. As you can
12 appreciate the -- that data set provides information on
13 food consumption and quantities that would be applicable
14 to this study. So that was one (1) of the data sets that
15 was -- was used in terms of harvesting and consumption.

16 Another of the data sets that was used
17 pertains to the Government of the Northwest Territories
18 fur harvest statistics. Those fur harvest statistics are
19 valuable in that the GNWT acts as a clearinghouse for
20 harvesting by Aboriginal persons and so they have a very
21 good idea of what's being harvested and they have the
22 detailed information right down to the individual. You
23 can appreciate that that information is not released.

24 What they do provide is aggregate
25 information by community, by species harvested, so, we

1 have an idea of the amount of reported fur harvested and
2 sales. So we're beginning to get some triangulation here
3 as you can appreciate. We have data sets with regards to
4 consumption. We have data sets with respect to
5 harvesting.

6 In addition to -- to supplementing these
7 data sets, there was an extensive body of work conducted
8 and prepared by the community of Lutsel K'e and Brenda
9 Parlee (phonetic) or Dr. Brenda Parlee assisted in that.

10 Now, that body of work analyzed community
11 responses to external stressors if you want to call it
12 that and looked at how individuals within communities
13 defined well-being - to use a broad, general term - and
14 then there were a number of indicators, community-
15 generated indicators.

16 As part of that work a number of excellent
17 studies were prepared by the community of Lutsel K'e and
18 those studies documented by season the types of species
19 that were harvested: fish, berries, caribou, et cetera,
20 small game birds. So we're starting to get more
21 triangulation here. We've got the CINA study; we've got
22 the GNWT fur harvest records; we have a body of work
23 that's prepared by the community of Lutsel K'e.

24 To supplement this there was as Ph -- no,
25 a master's study conducted in I think it was the mid-

1 '60s, early '70s which looked at the imputed value of --
2 and imputed is a fancy word for what's the dollar value
3 of food consumed by the community of Fort Resolution and
4 so that data set was examined in light of the CINA study
5 and it was normalized to current price indexes for today.

6 So we -- we had an idea of the level of
7 harvested food from Fort Resolution that occurred at that
8 period in time. We have an idea of how much food is
9 being consumed as a result of the CINA study, land food,
10 and so by bringing this body of evidence, if you want to
11 call it, together an understanding was generated with
12 respect to the potential effects of the project on those
13 -- on those variables. And principally the variables of
14 harvesting, for both income, food consumption, bartering
15 and sharing. As well as potential effects that might
16 occur as a result of, as you would say, access.

17 With respect to the effects of access, one
18 of the, I think principle, or my -- at least from a
19 social perspective, principle elements which hasn't been
20 brought forward, is that Deze's committing to having more
21 than just monitors. It's committed to working with the
22 respective communities to manage the nature and type of
23 access. Concurrently that facilitates monitoring as
24 well.

25 So, really we're trying to build in the

1 users of the land into the management of access to the
2 land; both to enable community-based self-management
3 principles to -- to take place, and to manage, as you had
4 suggested, non-aboriginal individuals, other parties
5 coming into the area in to -- in an attempt to exploit
6 those resources.

7 So rather than raking a regulatory
8 approach and saying that we'll manage it from up here,
9 and we'll put these mitigations into place and we'll have
10 officers going out, the approach has really been to look
11 at local resources, community resources, individuals who
12 use the land, as we've done in the data collection
13 process where we had individuals from Fort Resolution and
14 Fort Smith document all the ice crossings, as I'd spoken
15 to previously, species, et cetera.

16 But, taking that a step further and saying
17 that these individuals, or individuals from these
18 affected communities, would be principle participants in
19 managing both access to the area, and the nature of the
20 access vis-a-vis what the individuals are there to do.

21 Does that answer your question, or does it
22 just -- it probably raises many others if you're a
23 curious individual.

24 MR. PETR KOMERS: Petr Komers. A good
25 answer always raises more questions. No, it does answer

1 a number of the questions that I had, provided that the
2 information that you're saying is -- is there.

3 I have reviewed the harvesting and so on
4 in the DAR, as far as I could anyway, and did not find
5 those answers in the main body. I don't know if there's
6 some appendices, or something you can point me out to.

7 But, in particular, some of the mapping of
8 culturally important areas say for argument -- for lack
9 of better words. I'm not sure if that sort of thing
10 exists, but based on what you are saying that you have
11 done those sort of assessments.

12 What I have seen was an assessment of
13 effects on traditional users across the area, which
14 seemed to have averaged the entire study area as the
15 same, sort of, traditional importance, kind of thing.

16 MR. LOUIE AZZOLINI: I certainly
17 appreciate your -- your attentiveness to detail. I think
18 that's important to the discussion.

19 And, we're really fortunate to have a very
20 detailed information set for Lutsel K'e. Brendan
21 (phonetic), the community, did a really good job, you
22 know, and they detail berries -- different type of berry
23 picking areas, different type of small game areas. And
24 so, we were able to see where those were vis-a-vis the
25 proposed transmission line.

1 That same level of detail does not exist
2 for Fort Resolution principally because there are big
3 diamond mines to pay for the research study to facilitate
4 it and that's my political bias perhaps.

But fortunately, there have been -- has
been past research conducted, masters theses looking at
imputed fur values, food consumptions and so on. There's
something to go on. It's -- it's not a blank page. And
I mean,, you could bring together the elements including
the work that's been done by the fur harvest and
management group with the GNWT.

12 You'd start getting a pretty good idea and
13 what's really valuable here is that because the GNWT does
14 have fur record information down to the individual, if
15 need be I mean, you do -- I presume it would be possible
16 to identify if specific individuals were affected. But
17 at this point no, specific individual harvest data for
18 mitigation management purposes isn't -- is not -- is not
19 made available and I -- and I quite understand why and I
20 think we can all appreciate why.

21 MR. ALAN EHRLICH: Thank you, Louie.

22 MR. LOUIE AZZOLINI: Thank you for the
23 question.

24 MR. ALAN EHRLICH: Petr...?

25 MR. PETR KOMERS: Thanks very much. I

1 guess the answer is, yes, the information is there and
2 there's a lot of detail that you were saying and I think
3 a good next step from my point of view would be if you
4 guys were to answer in writing the IRs in regards to all
5 traditional uses that we had and in regards of the
6 mapping of it.

7 Maybe it's just a matter of pointing me to
8 a certain page if you know.

9 MR. ALAN EHRLICH: May -- may I get a
10 clarification, Louie, from what you just said then? It
11 sounds like the Lutsel K'e work that Brenda Parlee did
12 does describe which areas -- you know, and that she
13 really set up Lutsel K'e to do for itself actually --
14 does describe particular areas and is spacial but it
15 sounds to me like the harvest information and the
16 consumption information you have doesn't relate to
17 particular areas that are of especially high importance
18 to harvesters from Fort Smith and Fort Res, which I think
19 was the question Petr was getting at.

20 Is that right?

21 MR. LOUIE AZZOLINI: Fort Resolution less
22 so, and then Lutsel K'e and Fort Smith, as well. And in
23 part and just by way of comparison is that the work that
24 was conducted by Lutsel K'e occurred over about a ten
25 (10) year period from beginning to end, was a unique

1 methodology in terms of what was conducted which
2 eventually led to -- to Brenda's PhD dissertation.

3 Dedicated people like that who are willing
4 to contribute ten (10) years of their lives aren't easy
5 to come by and, unfortunately, development projects don't
6 usually have the ten (10) years to -- to gather that type
7 of data.

8 I should add that there was an effort made
9 by Deze to solicit this type of information by way of a
10 questionnaire in Fort Resolution and Fort Smith, as well.

11 And as you can appreciate, there are some
12 capacity issues, there are some implementation issues,
13 and it wasn't as successful as I would have liked but the
14 attempt was made and I'm quite happy to -- to document
15 that and provide you evidence of that, as well.

16 MR. ALAN EHRLICH: Thanks, Louie. Any
17 more questions, Petr?

18 MR. PETER KOMERS: No, thank you. I
19 think I'm okay for now.

20 MR. ALAN EHRLICH: Okay, let's take a ten
21 (10) minute break.

22

23 --- Upon recessing at 2:56 p.m.

24 --- Upon resuming at 3:10 p.m.

25

1 MR. ALAN EHRLICH: Okay, we're going to
2 start up again. I'd like to start with Petr Komers who
3 is providing expert services to the Board.

4 After Petr, does anyone else have
5 questions regarding wildlife for Deze? Any outstanding
6 stuff? No? In that case Petr will be our -- our last
7 questioner. I wanted to say interrogator but it sounds
8 so harsh.

9 Petr Komers...?

10 MR. PETR KOMERS: Petr Komers. You know,
11 I'm not so harsh. I would like to get back quickly to
12 the assessment approach and this may or may not be an
13 easy one (1) for you guys to answer.

14 There was a question about -- put it that
15 way: The definition of the magnitude includes natural
16 variation, the range of variation and I think also the
17 talk was of upper and lower limits and quite a number of
18 times in the assess -- effects assessment, the assessment
19 concluded that those limits will not be surpassed.

20 But at the same token I have not seen the
21 range of variation as a number, as an average plus/minus
22 confidence integrals or whatever -- whichever way you
23 want to present the range of natural variation.

24 So would you be able to help us out in
25 pointing to somewhere quantitative assessments of where

1 or how the range of natural variation was not exceeded?

2 MR. ALAN EHRLICH: Thank you. Deze...?

3 MR. DAMIAN PANAYI: Sure. It's Damian
4 Panayi. Yeah, it's -- it's correct what you've said,
5 Petr. The sort of platonic ideal of -- of the impact
6 assessment is that we compare our predicted effects with,
7 you know, the range of baseline values.

8 However, as I'm sure you appreciate, it's
9 -- it's not always easy to find out what those baseline
10 values are from baseline studies or from otherwise.

11 So we used the baseline, you know, the --
12 the limits of baseline values or the range of natural
13 variability wherever we could. When we couldn't, then
14 we'd have to default obviously to the scientific
15 literature, ecological theory, traditional knowledge,
16 personal experience and so on.

17 And in those instances the sources of our
18 information and the logic that we use to arrive at an
19 estimation of magnitude is, I hope, clearly outlined in
20 the DAR.

21 But the thing to keep in mind is that the
22 assessment of magnitude is ultimately being compared back
23 to the assessment end point which is -- which is a broad
24 sort of statement about something like, you know, for an
25 -- in the example of fur bearers again, the assessment

1 end point is, will the project lead to a change in the
2 ability of a trapper to go out and get whatever it is
3 he'd like to trap?

4 Will it lead to a, you know, a change in -
5 - a noticeable change for that person? And that's really
6 the question we were trying to get to.

7 We weren't trying to answer questions
8 about effects to the population as much as we were trying
9 to get to questions about effects to how this is going to
10 affect people who are in the zone of influence of the
11 project.

12 So that's the -- that's the kind of
13 benchmark that we kept coming back to. And -- yeah,
14 again, your question is valid and I hope that we outlined
15 our assumptions as well, you know, well in -- in the DAR
16 and if there's any particular, you know, examples I'd be
17 happy to try and reiterate those or clarify or revisit
18 them.

19 MR. ALAN EHRLICH: Thank you, Damian.

20 Petr...?

21 MR. PETR KOMERS: Petr Komers. Yeah,
22 thanks for this. This partly helps and I -- I can see
23 now that you're aiming at satisfying the questions of
24 communities in terms of the effects on their traditional
25 uses which -- which is perfectly fine and it is an

1 alternative to looking at strict population viability
2 analyses and so on. That's just a different approach.

3 It does raise a few questions though.
4 First of all, have the communities been asked what they
5 think significance is, and what they think higher
6 magnitude is, firstly.

7 And secondly, have the communities, or
8 will they be asked what they think should be measured and
9 how in future -- and how the future effects should be
10 mitigated?

11 MR. ALAN EHRLICH: Deze...?

12 MR. DAMIAN PANAYI: Damian Panayi. There
13 was, yes, there was consultation by Deze directly with
14 the communities leading up to this effects assessment.

15 There was scoping conducted by the Land
16 and Water Board, and by the Impact Review Board, leading
17 up to this effects assessment. And there was discussions
18 with community members regarding some of these specific
19 questions in developing the assessment report.

20 And, I guess, the -- the last part is that
21 we are working on a monitoring plan now which would,
22 obviously, also be run past the communities, both through
23 regular consultation between Deze Energy and the
24 communities and also through the regulatory process to
25 get those -- to get that research permitted through, you

1 know, through the regular processes there.

2 MR. ALAN EHRLICH: Thank you. Petr...?

3 MR. PETR KOMERS: Thank you. So this --
4 just because we are talking about the traditional uses,
5 and I understand that and I think we talked about, before
6 Louie mentioned, that a community based monitoring
7 program is being developed, that would an important step
8 towards answering my questions. So we'll kind of have to
9 wait and see.

10 It would be good for us to -- to see where
11 this community-based monitoring is going and what -- what
12 really the plans are. And we haven't been here on Friday
13 and Thursday, so I don't know if you guys talked about
14 that then.

15 MR. ALAN EHRLICH: It wasn't to my
16 recollection discussed in any time I was here on Friday
17 and Thursday.

18 Damian, do you -- or, Linda do you -- or
19 anyone, do you want to reply to how the community-based
20 monitoring program you described fits into the picture?

21 MR. DAMIAN PANAYI: I'll -- I mean, we're
22 still in the early phases of developing this concept, and
23 I'll take a crack at it, and if anybody else on the team
24 wants to fill in any gaps that I've overlooked, they
25 will.

1 So, what we'd envisioned is that
2 specifically during construction, which is when we're
3 going to have the bulk of the disturbance to wildlife,
4 that's when we're going to have the bulk of the access
5 issues going on, so the three (3) year, you know,
6 construction phase.

7 During that time we have environmental
8 monitors whose job it is to basically patrol the project
9 and they would presumably have trucks and it's their job
10 to do things such as record non-project use of the roads,
11 visit each of the camps and make sure that they're being
12 kept clean and that they're being managed properly and,
13 you know, in terms of the regulatory requirements and
14 also just to make sure that there's, you know, the common
15 sense stuff to avoid any human/wildlife interactions at
16 the camps.

17 They can be monitoring caribou movements,
18 and hopefully give the construction teams some sort of
19 advanced warning if there's potential for caribou
20 interactions in a particular area, and if there is, it's
21 their -- you know, would be their job to communicate that
22 and suggest mitigation link with the government and the
23 communities to make sure that everybody's aware of the
24 situation so that we can deal with these problems as they
25 arise.

1 And obviously, we'd have a whole bunch of
2 monitoring, you know -- that's on the, sort of, you know,
3 dealing with issues as they arrive and preventing issues
4 from arising side.

5 And on the other hand we would also have a
6 bunch of sort of set regular checks for these people to
7 do; taking water quality samples, recording any wildlife
8 deterrent actions, this sort of thing.

9 So, we have a model for this at the
10 diamond mines. As -- as you know there's environmental
11 technicians at all these places and I have found that
12 role to be very valuable. These guys know what's going
13 on around the camp. They know everybody who works at the
14 camp. They are local people so they care, right? They're
15 there representing, in many ways, their communities more
16 than the industry and they -- they genuinely care and
17 they're genuinely making instantaneous decisions which
18 reduce the effects of that mine in -- in some cases to a
19 greater extent than all of our planning does because it's
20 sort of on the ground and right away by somebody who
21 knows what they're talking about.

22 So the model is there. The commitment
23 from Deze is there and, you know, the rough plan is there
24 and we hope to sort of scope out a -- a job description
25 for these -- for these guys as we go forward.

1 So I hope I'm answering your question
2 there.

3 MR. ALAN EHRLICH: Thank you. Petr...?

4 MR. PETR KOMERS: Petr Komers. Yes,
5 we're -- we're heading in the right direction with your
6 lines of answering.

7 And, yeah, you and I were in the workshop
8 on the monitoring and, in particular, caribou but there
9 were other wildlife species that -- that were discussed
10 in the mines and we should probably learn from that
11 experience. There were a few predictions that were,
12 essentially, what they call falsified through monitoring
13 programs.

14 So, that's a very real and current problem
15 is that you make a prediction and then later you find
16 well, oops, we made a mistake. You could say that for
17 the caribou well, oops, we made a mistake of maybe four
18 (4) fold. Now, the zone of influence is, let's say, 15,
19 not 3 or 4 kilometres. Are we simply prepared to accept
20 that?

21 Point here is that now we're at that stage
22 when you're formulating the predictions. The more you
23 know to go into the predictions - which is why we were
24 asking for better and better data wherever possible - the
25 more you know about the baselines and the current

1 conditions including the range of variation, the -- the
2 better a prediction you can make, the less likely you
3 will have to say oops ten (10) years from now.

4 The other thing is also that we can come
5 up with a specific benchmark to measure against any
6 monitoring program. But, all the measuring and
7 monitoring is no use if you don't have a plan that would
8 deal with the monitoring results.

9 And here's the -- the next line of
10 questioning is we -- we talked about mitigation measures
11 to some degree before. We're starting to develop
12 mitigation and monitoring programs and the question is
13 now: How well will you be prepared to adapt to
14 unexpected results from monitoring program? Can you
15 elaborate on that at this point?

16 MR. DAMIAN PANAYI: If I understand that
17 question it's, would we be fine-tuning the monitoring as
18 we -- as we go along or would be -- I mean, there would
19 be obviously an adaptive management program so we'll -- I
20 mean we'll sit down at our -- in our offices and -- and
21 draw up a monitoring program which draws on the
22 experiences from the diamond mines and from other power
23 operations and from the, you know, history of the Taltson
24 project.

25 And obviously that plan has to be -- well,

1 that plan would most likely have to be approved by -- by
2 various government agencies and typically built into
3 those monitoring plans is a commitment to revisit the
4 plan every, you know, so often so those commitments I --
5 I expect would be in there. I hope I'm answering your
6 question there.

7 MR. PETR KOMERS: Petr Komers. Not
8 really. In this case I'm not asking just about adjusting
9 the monitoring programs, I'm asking about adjusting your
10 mitigation practices.

11 So you say that there is no effects from
12 ravens, you know, we have it all under control. Five (5)
13 years later you find oh, geez, there's all these ravens
14 nesting in -- on these places that haven't been there
15 before.

16 Now what do we do? That sort of thing.

17 MR. DAMIAN PANAYI: Yeah, and we're
18 getting into the really interesting stuff now, and -- and
19 again something which we'd have to, you know, discuss
20 further over a coffee some day.

21 But the -- again, we -- I'm speaking again
22 from our experience at the diamond mines. And the
23 experience there has been that there's some issues which
24 you can deal with right away through the -- you know,
25 through the monitors onsite. There's some issues which -

1 - in which management of the mine operation can be
2 tweaked to reduce an effect. And there's some for which
3 there's just not much we can do, and the zone of
4 influence and -- and caribou is a good example. We don't
5 even know why they're avoiding mines. We know that they
6 are, we don't know why. And so -- and it's unlikely
7 we're ever going to find out why. And so it seemed the
8 only mitigation to reduce that effect is to shut down the
9 mine and then wait for the caribou's collective memory to
10 forget that there ever was a mine there.

11 So within -- you know, there are sort of
12 boundaries as to what we can do manage effects from a
13 project. This project will have environmental effects
14 and I hope that we've done a good job of describing those
15 effects in -- in the DAR, in the Developers Assessment
16 Report, but recognizing that not all effects can be
17 mitigated.

18 MR. ALAN EHRLICH: Petr, is there some
19 specific -- you asked a very broad question of Deze,
20 which is, I recall was: How far are they prepared to go
21 if changes in management in the project will help deal
22 with an impact that is identified through monitoring?

23 It -- it is a very broad question. Is
24 there something a little bit more -- I think you're on
25 the same page now -- is there something a little more

1 detailed that -- more detailed information that you need
2 from -- from Deze on this subject?

3 MR. PETR KOMERS: Yes, actually there is,
4 particularly in terms of the timeline of the assessment
5 and the preparation of the plans. I would like to learn
6 more about the plans.

7 Yeah, we have seen the assessment and we
8 have come up with a bunch of IRs, but I would like to
9 know when, to be really specific and when we can put a
10 deadline to that, when can we see a mitigation and
11 monitoring program?

12 MR. ALAN EHRLICH: Thank you. Linda...?

13 MS. LINDA ZURKIRCHEN: Yeah. Linda
14 Zurkirchen. We intend to submit our monitoring program
15 that includes the monitoring and Adaptive Management Plan
16 by October 30th with the written submissions to the IRs,
17 recognizing that -- that that's an important component
18 for parties and the Review Board experts to complete
19 their EA -- their EA review.

20

21 --- COMMITMENT NO. 67: Deze Energy to submit their
22 monitoring program that
23 includes the monitoring and
24 Adaptive Management Plan by
25 October 30th with the written

1 before -- gauges on the -- on the river system. Once we
2 understand a little more about the inflows to the system
3 we may be able to do things such as change the controls
4 from Nonacho, so to minimize ramping effects, if we know
5 when the uncontrolled water is coming into the system.

6 So to learn about the system and change
7 it, and change how the water is managed in order to -- if
8 there aren't negative effects, to mitigate those.

9 So that -- those are some of the examples.
10 We talked about raven nesting. I think there was some --
11 if -- if we notice there to be a negative effect from
12 that, certainly looking at what means there may be to
13 avoid them nesting, and that be maybe adding different --
14 different components. There's, I think, a number of
15 systems that are used on other transmission lines to
16 deter birds from doing certain things around lines. And
17 looking at then where the negative effect is around this
18 line, what that negative effect is, and learning from
19 other processes and maybe adapting those on to the line.

20 So, those are the kind of adaptive
21 managements, sort of, the extreme, from the monitoring to
22 the changing, of how the project may be operated, or some
23 of the adaptive measures on the design that we'd like to
24 incorporate into the monitoring management plan.

25 MR. ALAN EHRLICH: Thanks Linda.

1 Petr, do you have any other questions?

2 MR. PETR KOMERS: Perhaps, I should --

3 MR. ALAN EHRLICH: Okay. We're going to
4 try and move things along fairly quickly. We're going to
5 lose our transcription and therefore have to close down
6 fairly soon. So, I'd like to keep the questions fairly
7 narrow, and concise questions, concise answers would be
8 great.

9 Myra, please take it away.

10 MS. MYRA ROBERTSON: Thank you very much,
11 Alan. Myra Robertson. I just wanted to add, or re-
12 stress some of the points being discussed here.

13 And this isn't a question, it's more a
14 request; is when you do, do your mitigation and
15 monitoring plan, we've talked about adaptive management,
16 and we've talked about thresholds, it's really good if
17 you can spell out what the thresholds are in your plan,
18 and then what your management action is.

19 And I'll give an example from one of the
20 mines in Nunavut. They were concerned about -- because
21 they have an all weather road, and about animals getting
22 killed on the road, and they actually set thresholds. If
23 one (1) caribou is killed a year, that's too much, that
24 triggers further adaptive management. If 'X' number of
25 ptarmigan are killed, that would trigger -- and they did

1 find they triggered their adaptive management, and hence
2 they're going to a more rigorous training program for
3 their drivers.

4 Now, I don't know what their next step is,
5 if that doesn't work. But it was outlined in their plan,
6 and so even though everybody may not agree with the
7 thresholds, at least a threshold is set and then you know
8 what the next step is. And quite often we see other
9 proponents who say, We'll use adaptive management, but
10 nobody is really quite sure what the triggers are for
11 this adaptive management.

12 So, that is not a question, it's just a
13 request for something to consider as you do your
14 mitigation and monitoring. Thank you.

15 MR. ALAN EHRLICH: Deze..?

16 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.
17 Yeah, we would -- we will do so in our adapt -- in our
18 plan.

19 MR. ALAN EHRLICH: Thanks. Any other
20 questions for Deze?

21 Wendy, from Parks Canada.

22 MS. WENDY BOTKIN: Just -- just to
23 highlight again, and request, and maybe a reminder,
24 because it's probably not highest in everybody's
25 priorities, but in the monitoring plans where the

1 environmental monitors are there, please don't forget --
2 and I know it is the -- the DAR, but to emphasise it's
3 not just caribou, it's also cultural sites, and that
4 those need to be identified if there -- if and specific -
5 - if there are sites of ecological importance, Parks
6 Canada would want to know about them as well. So there'd
7 be notification requirements as well.

8 And I -- I believe that's in the DAR, but
9 I just want to emphasise that as well.

10 MR. ALAN EHRLICH: Thank you. Any last
11 questions for Deze?

12 Okay. In that case for closing comments,
13 I'll hand it over to my colleague, Tawanis Testart.

14 MS. TAWANIS TESTART: Thank you everyone
15 for coming and thank you for the productive discussion.
16 And I'm glad that we could all be here today to share our
17 questions. And thank you to Deze for being forthcoming
18 with their answers, and we look forward to the written
19 commitments by the end of October.

20 I think that, perhaps from the parties
21 who've asked questions here today, at some point I'm
22 probably going to be asking you in some form to confirm
23 with the Board that the written responses and -- not the
24 written responses, sorry -- that the answers you heard
25 here today were adequate to answer your questions, or

1 adequate to meet your information requirements. And so,
2 I'm sure we'll be in touch.

3 That being said, I know that some of these
4 discussions have inspired quite a few potential sidebar
5 meetings, where the developer and a party might meet
6 outside of the EA process to resolve some of your issues.
7 And, as Alan mentioned earlier, we have come up with kind
8 of a bit of form for how -- how to report back on -- on
9 those meetings, and that will be available through our
10 website. At the moment, I believe, it's -- it's on the
11 public registry for Taltson, but it may come off of there
12 and be put somewhere else, so I'll keep everyone updated.

13 And other than that, I think we can safely
14 adjourn for the day. Our transcription person, Wendy, is
15 rushing off to get a plane, so we're going to finish up a
16 little bit earlier than the agenda had said.

17 And I'd like to thank Nicole for doing
18 most of the logistical arrangements for this meeting and,
19 yeah, again to everyone who attended and thanks.

20
21 --- Upon adjourning at 3:36 p.m.

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Certified correct,

Wendy Warnock, Ms.