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Ian Cluny
Shaun Keating
PINE CREEK FIRST NATION
Charlie Boucher
Warren Mills
John Stockwell

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No Exhibits marked
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Hydro Panel - rerouting of the final preferred
route
Mr. C. Osler, Mr. J. Dyck, Mr. P. McGarry, Mr. T.
Joyal, Ms. V. Petch, Mr. D. Shindler, Mr. J.
Rettie,
Presentation 5908
Cross-examination by Mr. Mills 6039
Cross-examination by Ms. Whelan Enns 6112
Questions by Panel6141
6 1 4 1

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\begin{tabular}{|c|c|c|}
\hline & Monday March 4, 2013 & Page 5891 \\
\hline 2 & Upon commencing at 9:00 a.m. & \\
\hline 3 & & \\
\hline 4 & THE CHAIRMAN: Good morning everyone, & \\
\hline 5 & welcome back. I hope you all had a productive, & \\
\hline 6 & hard working intercession. I hope that some of & \\
\hline 7 & you were able to get away to some sunnier climes & \\
\hline 8 & to escape this rather nasty winter we have had so & \\
\hline 9 & far. Although it hasn't been much so far, & \\
\hline 10 & apparently we are going to see some more winter & \\
\hline 11 & later today. Although, as Ed Tymofichuk was & \\
\hline 12 & reminding me earlier, this is really nothing & \\
\hline 13 & compared to another March 4th storm that some of & \\
\hline 14 & us in this room are old enough to remember, and & \\
\hline 15 & many of you probably weren't even around that & \\
\hline 16 & particular day. & \\
\hline 17 & As you will notice I'm sure, one of & \\
\hline 18 & our panelists is not here. Wayne Motheral has & \\
\hline 19 & escaped to sunnier climes and is on a long & \\
\hline 20 & previously established vacation, so he will not be & \\
\hline 21 & with us for the next two weeks. & \\
\hline 22 & I would remind all of you about our & \\
\hline 23 & admonitions against cell phones. If you have them & \\
\hline 24 & with you, please turn them off, or turn them on to & \\
\hline 25 & buzzer or vibrate, a silent buzzer, no sound, & \\
\hline
\end{tabular}

in Northern Manitoba, they weren't able to get here.

A third exception is that we allowed
Pine Creek First Nation to postpone their presentation until now, in large part because the rerouting in two particular areas affected or might affect their First Nation.

A fourth exception is that the Wuskwi Sipihk First Nation, which is along the preferred route in Western Manitoba, has asked to make a presentation, and they will be doing so later in this proceedings.

And subsequent to the adjournment, two additional subjects came up, one of which arose out a letter -- arose out of questioning by the panel and a letter that the panel wrote to the proponent in early December, just seeking further information on the suggestion of moving, or terminating Bipole III at Dorsey and moving Bipole II to the Riel station.

And finally -- sorry, not finally, a second matter that has arisen, in early January the Bipole III Coalition filed a motion seeking to introduce further evidence on the matter of routing part of the transmission line, including
running it for a short period underground. This motion was allowed. They will be bringing evidence on this tomorrow.

And then finally, in early November, Manitoba Hydro undertook to provide further information about forest fragmentation in response to queries from panel members. This response has now been received and will be addressed some time during the next eight days.

We have scheduled two four day weeks. We see no reason, and \(I\) want to capitalize and underline and bold the word "no," we see no reason why we cannot complete the public hearing part of this review in that time. I will warn you that if it appears that we might be running short of time, we will sit into the evenings.

A very quick overview of the hearings today. Manitoba Hydro will make presentations and be available for examination on the rerouting to the final preferred route. Tomorrow the Bipole III Coalition will present their evidence. Thursday, Pine Creek First Nations will make their presentation. Thursday -- did I say Thursday, I meant Wednesday. Thursday we will deal with the Commission's letter to Manitoba Hydro about the

Bipole III to Dorsey question, as well as we will hear from York Factory First Nation.

Next week will be Wuskwi Sipihk, the panel members' final questions, proponent rebuttal, final arguments, and adjournment of the hearings.

So any other procedural matters to
deal with at this time?
Okay, Mr. Dawson.
MR. DAWSON: Thank you, Mr. Chairman.
Just very briefly, if I may, just for the sake of creating a record, I would like to convey my client's objection to a number of matters that are ongoing here this morning.

First, I draw to the panel's attention and establish on the record that despite the directions of this board, or this Commission, the proponent has not circulated its supplemental filings within the deadlines that the panel had proposed. More particularly, the TAC comments did not arrive until well into the time distance. This of course has impacted the ability of many parties, I imagine, to make an adequate and full response and to investigate the evidence.

The appropriate remedy my client would
suggest would be not to proceed with these hearings, simply because the proposed deadlines have not been met.
I move on to my next point. I object to the content of some of the material that the proponent has put forward in its purported supplemental filing, as well as what I am guessing to be part of its proposed presentation.
Mr. Chairman, you very accurately have summarized the very limited scope of what we are trying to do in the appendage to the original hearing dates, and some of the material in the supplemental filings, as well as I understand some of the materials that will be included in this morning's presentation, go well beyond that. And I note, for example, an entirely additional chapter that the proponent has put forward relating, for example, to Aboriginal consultations. To the extent that these Aboriginal consultations go beyond the very limited scope that the panel has set for these hearings, we object and argue that they are irrelevant.
THE CHAIRMAN: Sorry, Mr. Dawson, relevant or irrelevant?

MR. DAWSON: We object and say they are irrelevant. If I said relevant, thank you for correcting me.

THE CHAIRMAN: No, I didn't hear you.

MR. DAWSON: I forgot the acoustics, I forgot that we are back in the room that silence reigns.

So I am going to ask that the board simply note this objection. I do not think it is practical, nor do \(I\) think it is appropriate that I, or indeed any other participant, should run to the microphone to object each and every time that Hydro might veer away from the limited scope that the panel has set for these hearings. So if I may to that extent simply say that, to the extent to this morning that \(I\) hear presentations that veer away from what the limited scope is, let me object ahead of time and ask the board to stop Hydro at that point. But simply because, and again \(I\) point out for those who are reading the transcript, that although Hydro, the proponent, has a microphone that may allow it to interrupt the proceedings at any time, all of the participants have to scurry from their desks some distance away from the one and only one microphone that's available to
\begin{tabular}{|c|c|c|}
\hline & participants. So clearly to raise an objection & Page 5898 \\
\hline 2 & after each question would simply be impractical as & \\
\hline 3 & well as, frankly, tiresome for the panel to see & \\
\hline 4 & somebody waddling forward, and by that I & \\
\hline 5 & especially mean me. & \\
\hline 6 & Then my third point relates to what & \\
\hline 7 & you, Mr. Chairman, had referred to as the & \\
\hline 8 & Soprovich cross-examination. Given that the & \\
\hline 9 & proponent is not intending to cross-examine & \\
\hline 10 & Mr. Soprovich, might I point out -- and again & \\
\hline 11 & there was a multitude of voices on behalf of & \\
\hline 12 & Peguis at that particular time, but I suggest that & \\
\hline 13 & an objective reading of what actually happened was & \\
\hline 14 & we had a presentation, we didn't have a witness. & \\
\hline 15 & Any presenter may come forward, and if the & \\
\hline 16 & presenter is so well organized as to bring slides, & \\
\hline 17 & as to bring paperwork, the panel I assume would & \\
\hline 18 & receive this. And we have heard some & \\
\hline 19 & presentations that frankly are off the wall. And & \\
\hline 20 & we have heard other presentations that are & \\
\hline 21 & particularly useful and helpful. But it has never & \\
\hline 22 & been the plan for any of the participants or the & \\
\hline 23 & proponent to especially cross-examine any of those & \\
\hline 24 & presenters. To that extent I'm suggesting that & \\
\hline 25 & Mr. Soprovich and his comments simply be treated & \\
\hline
\end{tabular}
not as a witness, for he was not, but simply as a presenter. I don't think that any of my learned friends or other participants have any questions that it intends to direct to Mr. Soprovich, but on that ground it may simply help the board, rather than worry about cross-examination on those points.

And those are my comments. Thank you, Mr. Chairman.

THE CHAIRMAN: Thank you, Mr. Dawson. Don't run away, I may have a question or two. Let me assure you that we are not worrying about it, but it is a matter for consideration.

Just on your last point and Mr. Soprovich, now \(I\) was under the impression, and you referred to the multitude of representation for Peguis First Nation, I was under the impression that Ms. Whelan-Enns brought Mr. Soprovich as a witness. I mean, if Mr. Soprovich was here as a presenter, then your comments are absolutely correct. But if he was presented as a witness, then he has to be available for cross-examination by other parties.

MR. DAWSON: If I may suggest, Mr. Chairman, I don't recall that. What I do
\begin{tabular}{|c|c|c|}
\hline & remember is Councilor Sutherland coming forward & Page 5900 \\
\hline 2 & and clarifying on the point of whether or not & \\
\hline 3 & Mr. Soprovich spoke in his personal capacity or & \\
\hline 4 & whether he spoke on behalf of Peguis First Nation. & \\
\hline 5 & And in that respect, Councilor Sutherland, who of & \\
\hline 6 & course is a councilor for Peguis, indicated that & \\
\hline 7 & Mr. Soprovich was speaking on behalf of the First & \\
\hline 8 & Nation. It has never been my recollection, & \\
\hline 9 & although I haven't recently reviewed the & \\
\hline 10 & transcript of that particular one, but my & \\
\hline 11 & recollection is that you are quite correct, & \\
\hline 12 & Ms. Whelan-Enns made the arrangements for & \\
\hline 13 & Mr. Soprovich to appear, and I was permitted to & \\
\hline 14 & lounge in the back and watch things unfold. But I & \\
\hline 15 & noted that he spoke in the context of Mr. & \\
\hline 16 & Sinclair, who also gave a lengthy presentation & \\
\hline 17 & with slides, about traditions relating to Peguis & \\
\hline 18 & and other Aboriginal groups. And I always took & \\
\hline 19 & these as presentations that were organized perhaps & \\
\hline 20 & by Ms. Whelan-Enns on behalf of Peguis, but I & \\
\hline 21 & didn't ever think they were intended to be the & \\
\hline 22 & substantive evidence that a witness, in the sense & \\
\hline & of our own witness that we had called in the & \\
\hline & course of these hearings, might have been. & \\
\hline 25 & THE CHAIRMAN: I would note that & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline & although Ms. Whelan-Enns has not received \\
\hline 2 & participant funding for these proceedings, she was \\
\hline 3 & granted status as a participant, so she is \\
\hline 4 & entitled to bring witnesses as witnesses. \\
\hline 5 & MR. DAWSON: If I may correct you on \\
\hline 6 & that, though, Ms. Whelan-Enns is apparently acting \\
\hline 7 & on behalf of a group called Manitoba Wildlands, \\
\hline 8 & not -- she would not have received, she would not \\
\hline 9 & be registered as a participant on behalf of \\
\hline 10 & Peguis, if I may suggest that. But in any event, \\
\hline 11 & we are returning to the multitude of voices as \\
\hline 12 & opposed to the actual topic of Soprovich, and I'm \\
\hline 13 & just offering this in case it helps. \\
\hline 14 & THE CHAIRMAN: Yeah. We don't need to \\
\hline 15 & pursue that very much, if you are correct that \\
\hline 16 & nobody wishes to cross-examine him, then it is \\
\hline 17 & really a moot point and we will accept it as \\
\hline 18 & presentation. \\
\hline 19 & Your point on Aboriginal \\
\hline 20 & consultations, now, correct me if I'm wrong, but \\
\hline 21 & are you saying that there were Aboriginal \\
\hline 22 & consultations beyond the consultations surrounding \\
\hline 23 & the reroutes and the FPR? \\
\hline 24 & MR. DAWSON: Now it is my turn to say \\
\hline 25 & I'm sorry, I didn't hear that? \\
\hline
\end{tabular}

THE CHAIRMAN: You refer to Aboriginal consultations and that Hydro provided an additional chapter on Aboriginal consultations. Now, is your concern that they've engaged in, or at least reported on Aboriginal consultations beyond the area where the reroutes of the FPR are?

MR. DAWSON: Although much of the consultation information that's set out there would relate to the reroutes, I note, for example, that there are some candid letters that have been set out that go well beyond anything relating to the rerouting process. And to the extent that we hear about the Aboriginal consultation process, beyond the specific consultations that were conducted relating to these reroute proposals, it is my submission that that purported evidence would go beyond the scope of what the board has allowed us to put forward. To the extent that the board would allow us to do more, the response of \(I\) think many participants, and I know that standing behind me very likely is the voice of Pine Creek -- they will speak for themselves, I'm not speaking on their behalf -- who also have concerns about the material that's before the board, as it goes beyond the reroutes.
And to the extent that Hydro intends to speak about anything that it should have frankly slipped in before these hearings, these resumed hearings began, it is too late.
To the extent that Hydro thinks that it is going to bolster what it said in the first round, it is too late. Why is it too late? Because correctly, based on what I understand the outline and agenda is this morning, Mr. Chairman, this panel will not allow me, for example, to bring forward my own evidence again, just because I forgot something, or that \(I\) would like to respond in a general way to something that \(I\) might have said earlier. To do otherwise would, of course, open up a vicious circle where everybody would constantly present evidence. So to the extent that Hydro, either in writing or through its witness panel in these supplementary, shall we call it, hearings, purports to go beyond the limited scope that this panel has fixed, my submission is that that purported evidence is simply out of order, it is out of time, it hasn't been put forward in the appropriate way and ought to be simply disregarded, if not absolutely interrupted and stopped.

THE CHAIRMAN: I hear you, and for the most part I agree with you, although I do find a little bit of an irony in that many of us, including people on this panel and many of you participants, have been complaining all along that getting some of this information out of Hydro was like pulling the proverbial hen's teeth.

MR. DAWSON: Certainly, Mr. Chairman, plenty of problems with the way in which the proponent has handled Aboriginal consultations. And indeed my own client has a view that it expressed in the preliminary hearing as to the role of consultation and accommodation in this entire process. And we are not going to revisit that, the board has ruled on that. If we are revisiting that, it is not in this forum. But it is a series of problems, and that brings me to my last housekeeping point.

I note that throughout, and he is not here and he hasn't asked me to make this request, my learned friend, Mr. Madden, on behalf of the Manitoba Metis Federation, has frequently written letters, even going to the pre-hearing stage, to the board setting out objections and concerns. Some of those objections and concerns he has put

\begin{tabular}{|c|c|c|}
\hline & that you believe it is part of the record and, & Page 5906 \\
\hline 2 & therefore, there is nothing more for me to say, & \\
\hline 3 & you have done exactly what I was asking for. & \\
\hline 4 & THE CHAIRMAN: Thank you, Mr. Dawson. & \\
\hline 5 & MR. DAWSON: Those are my comments, & \\
\hline 6 & barring any further questions. & \\
\hline 7 & THE CHAIRMAN: Thank you. I have no & \\
\hline 8 & further questions. & \\
\hline 9 & Any other -- Mr. Mills? & \\
\hline 10 & MR. MILLS: Thank you and good & \\
\hline 11 & morning, Mr. Chairman. We just have a few & \\
\hline 12 & housekeeping points. & \\
\hline 13 & As well we found that some of the & \\
\hline 14 & correspondence post January 28th between Hydro and & \\
\hline 15 & MMF was in fact introducing information that we & \\
\hline 16 & thought was perhaps out of order. & \\
\hline 17 & Second point, we agree with & \\
\hline 18 & Mr. Dawson's concerns with regards to the TAC & \\
\hline 19 & comments, although we do wish to proceed. We were & \\
\hline 20 & expecting an awful lot more from the TAC process. & \\
\hline 21 & We had received Mr. Hannon's assurance back on & \\
\hline 22 & August 16 th that Conservation would take the lead & \\
\hline 23 & and would collect TAC comments. And there have & \\
\hline 24 & been references to MAFRI contributing to that & \\
\hline 25 & process. We observe that Ms. Dagdick sent out 24 & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & TAC requests and received less than eight & Page 5907 \\
\hline 2 & responses, a few of which are observations with no & \\
\hline 3 & comment. So we express our disappointment in TAC, & \\
\hline 4 & but we will carry on. & \\
\hline 5 & Finally, I believe Manitoba Hydro and & \\
\hline 6 & ourselves had asked that Mr. Soprovich return as a & \\
\hline 7 & witness so that we could examine him. On further & \\
\hline 8 & review, we don't need him and don't wish him to be & \\
\hline 9 & here. So if that will help with your timing -- & \\
\hline 10 & and if Hydro, as I understand, may not need him as & \\
\hline 11 & well, we would be pleased if Mr. Soprovich not & \\
\hline 12 & consume time that we would rather have. & \\
\hline 13 & THE CHAIRMAN: Thank you. I believe & \\
\hline 14 & that Mr. Soprovich will be here with the Wuskwi & \\
\hline 15 & Sipihk First Nation, but if no one wishes to & \\
\hline 16 & cross-examine his presentation from the fall, that & \\
\hline 17 & would save us a moment or two. & \\
\hline 18 & MR. MILLS: Okay. & \\
\hline 19 & THE CHAIRMAN: Thank you, Mr. Mills. & \\
\hline 20 & MR. MILLS: Thank you. & \\
\hline 21 & THE CHAIRMAN: Any other housekeeping & \\
\hline 22 & comments before we turn to the presentation? & \\
\hline 23 & Having seen none, I would just like to & \\
\hline & note to the proponent some of the comments that & \\
\hline 25 & have been made and some of the comments that I & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & & Page 5908 \\
\hline 1 & have made in respect of new information that & \\
\hline 2 & what we should be considering today. The only new & \\
\hline 3 & information we should be considering is in respect & \\
\hline 4 & of the reroutes of the FPR. & \\
\hline 5 & Now, I believe, yes, all of you were & \\
\hline 6 & sworn in last fall, so I would note that you still & \\
\hline 7 & remain under your promise to tell only the truth, & \\
\hline 8 & as I'm sure you would anyway. & \\
\hline 9 & So who is taking the lead, & \\
\hline 10 & Mr. McGarry? Mr. Osler? & \\
\hline 11 & MR. OSLER: Good morning, & \\
\hline 12 & Mr. Chairman. Panel, good morning. & \\
\hline 13 & The panel today is focused on the & \\
\hline 14 & Bipole III supplemental environmental assessment & \\
\hline 15 & report on the route adjustments which was filed on & \\
\hline 16 & January 28th, 2013. It assesses the extent to & \\
\hline 17 & which the December 2011 EIS for Bipole III is & \\
\hline 18 & modified by the three route adjustments requested & \\
\hline 19 & by Manitoba Conservation and Water Stewardship to & \\
\hline 20 & the final preferred route for the HVDC & \\
\hline 21 & transmission line component of this project. & \\
\hline 22 & The three route adjustments were & \\
\hline 23 & proposed to address concerns in Western Manitoba & \\
\hline 24 & regarding Woodland caribou in the Wabowden area & \\
\hline 25 & and moose in game hunting areas 14, Moose Meadows & \\
\hline
\end{tabular}
as it is called, and 19A/14A.
This supplemental report relies
throughout on the original EIS filed in
December 2011, and supplements the EIS as required
to reflect changes to potential environmental
effects of the project expected as a result of these three route changes. Except for the route change in the Wabowden area, the route adjustments examined in the supplemental report were not selected after carrying out the same consultation or routing assessment process used to select the final preferred route that was assessed in the December 2011 EIS. And therefore, the assessment for the route changes in game hunting areas 14, Moose Meadows, and 19A/14A has a higher potential than in the original EIS to find adverse residual effects that could have been avoided had the typical site selection environmental assessment routing process been followed.
The final preferred route, as described in the December 2011 EIS, continues to be available in each instance as a default preferred route option that was selected and assessed in the original EIS based on the unmodified site selection environmental assessment
\begin{tabular}{|c|c|c|}
\hline & process. & Page 5910 \\
\hline 2 & The supplemental report assesses the & \\
\hline 3 & extent to which the route adjustments result in & \\
\hline 4 & changes to mitigation and expected residual & \\
\hline 5 & effects for each valued environmental component or & \\
\hline 6 & VEC, including the Woodland caribou and the moose & \\
\hline 7 & VECs. & \\
\hline 8 & In summary, the supplemental report & \\
\hline 9 & concludes that the three route changes are not & \\
\hline 10 & expected to change the assessment conclusions in & \\
\hline 11 & the December 2011 EIS for any VECs except as & \\
\hline 12 & follows: First, the route change in the Wabowden & \\
\hline 13 & area reduces scientific uncertainty and concerns & \\
\hline 14 & regarding potential residual effects of the & \\
\hline 15 & project on the Wabowden boreal Woodland caribou & \\
\hline 16 & valuation range. & \\
\hline 17 & As regards mining industry concerns & \\
\hline 18 & about this route change, Manitoba Hydro will & \\
\hline 19 & discuss with the mining industry potential & \\
\hline 20 & additional mitigation measures to address concerns & \\
\hline 21 & about magnetic fields from operation of the & \\
\hline 22 & project HVDC transmission line interfering with & \\
\hline 23 & the ability of mining companies to conduct & \\
\hline 24 & geophysical mineral exploration in the Thompson & \\
\hline 25 & nickel belt. & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline 1 & Second, the route change in game & Page 5911 \\
\hline 2 & hunting area 14, Moose Meadows, will intersect & \\
\hline 3 & considerably more high quality moose habitat & \\
\hline 4 & within the 4.8 kilometre buffer area adjacent to & \\
\hline & the route, and intersect or come in proximity to & \\
\hline 6 & additional areas of high moose density in & \\
\hline 7 & proximity to existing access that will result in & \\
\hline 8 & more challenging mitigation on the potential & \\
\hline 9 & effects associated with access along the adjusted & \\
\hline 10 & route. & \\
\hline 11 & And finally a third, the route change & \\
\hline 12 & in game hunting areas 19A/14A will result in & \\
\hline 13 & potentially significant adverse residual effects & \\
\hline 14 & on culture of Camperville, Pine Creek First Nation & \\
\hline 15 & and Duck Bay. And uncertainty is noted as to & \\
\hline 16 & whether the ongoing adverse effects in this regard & \\
\hline 17 & will remain moderate in magnitude and medium term & \\
\hline 18 & in duration. & \\
\hline 19 & Now, the panel will review the & \\
\hline 20 & supplemental reports as follows: First, Pat & \\
\hline 21 & McGarry and John Dyck will review the overall & \\
\hline 22 & supplemental report, including the assessment & \\
\hline 23 & process for all VECs, other than caribou, moose, & \\
\hline 24 & culture and heritage, the four which I just & \\
\hline 25 & highlighted, which will be addressed separately & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & and subsequently. & Page 5912 \\
\hline 2 & Trevor Joyal will review the & \\
\hline 3 & environmental assessment consultation program & \\
\hline 4 & carried out regarding these route changes as & \\
\hline 5 & addressed in chapter 3 of the supplemental report. & \\
\hline 6 & Virginia Petch will then address and & \\
\hline 7 & review the assessment regarding the effects of the & \\
\hline 8 & route adjustments on culture and heritage. & \\
\hline 9 & And finally Doug Schindler and Jim & \\
\hline 10 & Rettie will review the assessment regarding the & \\
\hline 11 & effects of the route adjustments on boreal & \\
\hline 12 & woodland caribou and moose. & \\
\hline 13 & Pat? & \\
\hline 14 & MR. McGARRY: Good morning & \\
\hline 15 & Mr. Chairman, Commissioners, it seems like a short & \\
\hline 16 & three and a half months since we last met, but it & \\
\hline 17 & is always a pleasure to be here. I say that now. & \\
\hline 18 & THE CHAIRMAN: It is always a & \\
\hline 19 & pleasure. & \\
\hline 20 & MR. McGARRY: I would like to go over & \\
\hline 21 & the assessment report that was done for the three & \\
\hline 22 & alternative routes that we conducted over the last & \\
\hline 23 & three and a half months since we last met. & \\
\hline 24 & So in our presentation, which I will & \\
\hline 25 & make jointly with John Dyck here, is to go through & \\
\hline
\end{tabular}
\begin{tabular}{|rl}
\hline 1 & a number of items, purpose and objectives, the \\
2 & background and how we got here, overview of the \\
3 & route adjustment areas, the assessment approach, \\
4 & and of course the results of that assessment, and \\
5 & finally I will wrap up with a summary for the \\
6 & entire assessment as well as for each individual \\
7 & section under review. \\
8 & primarily to address concerns related to moose and \\
10 & Woodland caribou, by assessing the alternative \\
11 & routes in three areas, as requested by Manitoba \\
12 & Conservation and Water Stewardship. These three \\
13 & alternatives were developed in conjunction with \\
24 & considered in the original EIS. \\
14 & and agreed to by Conservation and Water \\
15 & Stewardship under the requirements of \\
16 & Environmental Approvals and Wildlife Branches. \\
17 & environmental assessment and the consultation that
\end{tabular}
perspectives on a number of environmental components, biophysical, socioeconomic, land use, technical/cost criteria, as well as the consultation conducted with government, Aboriginal, stakeholder, and other public input. By way of background, the original TAC response to the EIS was provided to Manitoba Hydro May 17th, 2012, which requested at that time a review of routing the Wabowden caribou range, as well as the Mafeking to Birch River segment, commonly known as Moose Meadows. That was followed August 29th, 2012, with a letter from Conservation, again requesting revisions to Moose Meadows and the caribou range, as well as route revision in game hunting area 19. And the fourth area at that time was the Red River to Steeprock Wildlife Management Area. In a previous presentation in the fall, we indicated why that was not pursued, that last one in the Red Deer River area.
On October 29th, we presented three new alternative routes in the areas requested. November 13th, Manitoba Hydro requested a hearing adjournment to conduct the assessment on the alternative routes.

What guided us in our process was the November 9th letter from Manitoba Conservation and Water Stewardship to conduct the assessment on three alternative routes.

So from November through to January, November 2012 through January 2013, we went out and conducted our assessment and public consultation. And this report is a summation of that assessment and period of time.

That report was submitted to
Conservation and Water Stewardship on January 28th, 2013, as originally agreed to at adjournment.

The TAC review was conducted in

February 2013. And the last item I will point out here was there was a letter from Conservation to the Commission, February 20th, indicating that the report submitted was sufficient and TAC comments can be dealt with through licensing conditions.

The approach to this assessment -pardon me, I'm going to outline here, where you see blue lettering in these slides are corrections, so I will put these on the record as we go through, they are relatively minor corrections. But as you see, blue lettering come
up in this presentation, \(I\) will speak to that and correct that information for the record.

So the assessment approach was to
provide sufficient detail of any identified effects to be considered by the Commission, the affected parties and registered participants, as was originally indicated in the November 9th letter to Manitoba Hydro. And I realize primarily on the December 2011 EIS, the slide originally said "as printed November 2011." That's a correction, December. We retained the assessment of effects from that EIS, it is the primary resource document, and it is supplemented as necessary.

The site selection process was modified, as Mr. Osler pointed out, from the original EIS. There was no preliminary assessment for consultation on the adjusted final preferred routes, they were done by a slightly different process.

The assessment considered potential changes and effects to the VECs, as in comparison to what was originally reported in the EIS. And the components were reviewed in environmental, socioeconomic components.
Spatial boundaries were used again, same as the original EIS, local study area, three mile corridor, and a project footprint of 66 metre right-of-way.
The Aboriginal traditional knowledge and traditional land use knowledge studies were reviewed. And this was from existing, there was not new Aboriginal traditional knowledge studies or information collected. There was certainly input from First Nations and others, which Mr. Joyal will go through in the environmental assessment consultation process.
The results have relative comparisons to the FPR, so you will see comparisons between the adjusted final preferred route and the final preferred route in this presentation.
The assessment also identified any new environmentally sensitive sites and/or mitigation measures.
The significance evaluation is based on the whole Bipole III route. It is an important point to consider. There will be constant reference to the original EIS. The assessment or evaluation conclusions are based on the whole route.

The components assessed for this study are outlined here, similar to the original EIS. I don't need to name all of these, but as Mr. Osler pointed out, there will be individual presentations for a number of components. For mammals you will see later a presentation on Woodland caribou and moose. And there will be a separate presentation on heritage and culture by Ms. Petch.

Now I'm going to turn it over to

Dr. Dyck to describe the routes that were reviewed. The three areas, again, are the Wabowden area, game hunting area 14 known as Moose Meadows, and game hunting areas 19A and 14A, two of those were for moose and one for caribou.

MR. DYCK: Thank you, Pat. Good morning Mr. Chairman, Commissioners and participants.

You are already familiar with the three areas under review, we will jump right into them, the first one being the Wabowden area. The issue of primary concern in the area was the Woodland caribou herd and the core winter habitat within the area.

The Google Earth image that you see in
front of you assists you in orienting yourselves to the study area in question. The area in purple here, that's the FPR, the final preferred route that was assessed in the 2011 EIS. The adjusted preferred route is in green. And as you can see, it parallels existing infrastructure, including PR 373, that is also known as the Jenpeg Road or Cross Lake Road. Highway number 6, which is this route here that continues on to the south at Ponton, and there is an existing 230 kV transmission line that runs parallel to Highway 6 to the Ponton Station, as well as the \(H B R\) railway in area. So the adjusted final preferred route very much follows that infrastructure. Noted already is that the AFPR is very similar to the preliminary preferred route that was identified in the initial site selection process by Manitoba Hydro. The dominant land uses in the area are forestry, mineral exploration, mining and resource harvesting.

And very apparent, especially along PR 373, there is a number of harvest areas, especially on the north side of the road, and the routing takes advantage of those.

Already mentioned, the various
infrastructure that it follows, the route revision eliminates approximately 49 kilometres of new right-of-way, paralleling existing infrastructure. It reduces the overall line length by approximately 9 kilometres. It minimizes potential effects on the winter core habitat to Woodland caribou in the area. And you will hear more about that in a follow-up presentation. And it also improves separation between Bipoles I and II, which was a great concern to Manitoba Hydro.

Of concern to the mining sector, as already indicated, the AFPR does traverse through the Thompson nickel belt, through that area. In the map that you see before you, it is just a little bit more apparent where that infrastructure is that the FPR is following.

Going over to game hunting area 14, also know as Moose Meadows, already identified that the major concern there was moose habitat, fragmentation through the area and of the habitat and potential new access development.

Again, with the imagery in front of you, we can orient you to the study area. Highway 10 running north to south through the general area, and of note is that Highway 10 is very much
right at the base of the Porcupine Mountain and Provincial Forest. It is, in particular right through this area here, it is right at the base of the slope, whereas on the west side of the highway, you have some pretty steep hills, but right immediately to the east it becomes relatively flat in comparison. The final preferred route, as it was assessed in the 2011 EIS, the FPR running closer to the existing infrastructure, the Sapotaweyak Road, and the communities of Bellsite and Mafeking.
The lighter areas that you see are agricultural lands, both north of Mafeking, adjacent to Mafeking, and this is in the Bellsite area. The AFPR through this area is approximately 3 kilometres longer than the FPR. It routes closer to the existing linear infrastructure that was already mentioned, the highways. Also included through there is the abandoned railway line. And it passes adjacent to the Bell and Steeprock Canyon's protected area. This is the hatched item, or the land feature that you see right in this area here. So the routing is staying just to the east of it.

It also traverses through the Porcupine Provincial Forest in this area for approximately 6 kilometres.

And along with that, obviously one of the dominant land uses is forestry and some agriculture, as the line is routed through a little bit of agricultural land and along the fringes of that farmland, particularly in the south and southeast of Bellsite.

Moving along to game hunting area
19A/14A, similar to game hunting area 14 , the major concern in the area is moose habitat, fragmentation of that habitat, and the potential development of additional access between highway number 20 and PR 271.

And this, for orientation purposes again, this is Highway 10 east of the Duck Mountain on this side. This is Highway 20 going over to Camperville, Pine Creek and Duck Bay. And this is PR 271 running straight across on the south end here.

North of Highway 20 the terrain is probably wetlands site, much of that is Black Spruce treed wetland sites, and with some sand ridges in between. And you can just vaguely see
some of those sand ridges that occur in that area. South of Highway 20 the terrain is quite different, it is a lot of upland sites. Those are predominantly hardwood forested and some agricultural fields.

Core to the area, particularly the gray shade that you see in here on the screen, is a wetland area. Much of that is a myriad of beaver floods in the area, and that is part of the area that's to concern of Manitoba Conservation.

The AFPR is approximately 4 kilometres longer than the FPR. It traverses approximately 20 kilometres of the Porcupine Provincial Forest versus 15 kilometres for the FPR. The Swan Pelican Provincial Forest on this map is indicated in light green shading that you see there. It intersects north of Highway 20 approximately 14 hectares of the sandy ridges that are also associated with the much talked about blueberry areas within the area.

Of note in the south, in this area here, the aspect is to the east, the land however is relatively flat once you get away from the highway edge here, where you have a bit more slope, and it slopes very gently to the east at
\begin{tabular}{|c|c|c|}
\hline & about 2.8 metres per kilometre. & Page 5924 \\
\hline 2 & The AFPR is routed particularly in & \\
\hline 3 & this area here to traverse along the fringes of & \\
\hline 4 & the agricultural lands that are developed in this & \\
\hline 5 & area and to the east of it. & \\
\hline 6 & Land use in the area north of PTH 20 & \\
\hline 7 & includes forestry and, hence, the Swan Pelican & \\
\hline 8 & Provincial Forest, gathering, and cultural & \\
\hline 9 & activities; while south of PTH 20 it includes & \\
\hline 10 & ranching and forage crop production and cultural & \\
\hline 11 & activities as well. & \\
\hline 12 & Of note is, and again previously & \\
\hline 13 & discussed, a large portion of the area to the & \\
\hline 14 & south includes, is owned and leased under a bison & \\
\hline 15 & ranch operation. & \\
\hline 16 & One other point I wanted to make in & \\
\hline 17 & this area here is that the darker areas, including & \\
\hline 18 & the gray shades that you see here, is largely a & \\
\hline 19 & forested type of environment that is considered & \\
\hline 20 & habitat to wildlife. And of course, we have the & \\
\hline 21 & Duck Mountain which is also a forested & \\
\hline 22 & environment. We have the agricultural lands to & \\
\hline 23 & the north and the agricultural lands between the & \\
\hline 24 & two bodies, and we have one forested or & \\
\hline 25 & primarily -- dominantly forested corridor & \\
\hline
\end{tabular}
connecting the Duck Mountain and that area. So that's a particular concern and should be noted. In terms of the assessment for the biophysical components that \(I\) will be addressing, a couple of things we wanted to point out here, first off is that, again, as Pat already indicated, that the assessment was conducted in the same fashion as the original assessment on the Bipole III project, and that is the use of VECs or valued environmental components. The tables that you will see in the following slides have been taken directly from the supplemental report. They identify the VECs that are pertinent to the project, and they identify all of the VECs that were used for the Bipole III EIS. And they also indicate their applicability or not applicability to the AFPR. In other words, does the VEC -- is it pertinent to the adjusted route areas? For example, if a wildlife species is not, if the range doesn't extend into the AFPR, then it was not considered to be relevant.

So specific to terrain and soils, the potential effects of the project to include erosion, compaction, rutting or terrain stability. The assessment indicated that there are more

\begin{tabular}{|c|c|c|}
\hline & activities and local conditions. And risk of & Page 5927 \\
\hline 2 & effects to these VECs are the same for both the & \\
\hline 3 & AFPRs and the FPRs in all three route adjustment & \\
\hline 4 & areas. & \\
\hline 5 & Sensitive sites such as artesian & \\
\hline 6 & springs or wells were not identified anywhere & \\
\hline 7 & along the AFPR areas. Therefore, the route & \\
\hline 8 & adjustments do not alter the 2011 EIS assessment & \\
\hline 9 & results. & \\
\hline 10 & For the aquatic environment, the VECs & \\
\hline 11 & include surface water quality and fish habitat, & \\
\hline 12 & and again these are applicable to all three AFPR & \\
\hline 13 & areas. & \\
\hline 14 & The potential effects include loss or & \\
\hline 15 & alteration of riparian habitat and potential & \\
\hline 16 & sedimentation in the aquatic environment. These & \\
\hline 17 & effects are similar between AFPR and FPR in all & \\
\hline 18 & cases. & \\
\hline 19 & In the Wabowden area, both routes & \\
\hline 20 & cross four streams. These are distinct streams. & \\
\hline 21 & One of the streams along the AFPR was classified & \\
\hline 22 & as having important fish habitat. And that's & \\
\hline 23 & namely Kiski Creek. & \\
\hline 24 & For game hunting 14, the AFPR has & \\
\hline 25 & eight streams versus 18 streams for the FPR. This & \\
\hline
\end{tabular}
is a function of the terrain that the routes cross through where the AFPR, as I mentioned before, on the toe of the Porcupine Mountain, and where the landscape is a little more defined, and the streams are maintained in very defined channels and not so much in the flatter land out further east where the FPR is located.

Two of the streams which are common to both routes have been classified as having important fish habitat, and these are the Steeprock and Bell Rivers.

In game hunting area 19A and 14A, the AFPR has 14 stream crossings versus 17 along the FPR. This one is a little bit reverse because the AFPR is further to the east from the FPR where some of the streams have merged by the time they get to the location of the FPR.

Six of the AFPRs have been classified as having important fish habitat, and the largest common streams in the area are the North Duck River, the Slater and the Pine Rivers.

The effects can be mitigated by way of applying the Department of Fisheries and Oceans operational statements and by conducting most of the work during the winter months. As a result,
the route adjustments do not alter the 2011 Bipole III EIS effects assessment results.

Specific to the terrestrial ecosystems and vegetation discipline, the VECs are plant species and communities of not sufficient concern, and grassland and prairie areas. The plant species and communities of conservation and concern are applicable to the Wabowden AFPR and also to game hunting area 19A, 14A, whereas the grasslands and prairie areas is not applicable to the Wabowden AFPR. That feature is not found anywhere in that study area.

The potential effects include loss or disturbance of plants or their habitats of conservation concerns. No listed species were identified in the local study area or in the right-of-way, either by MESA or SARA.

The non-listed species of conservation concern were identified, and that includes the oblong-leaved sundew, 33 , in the Wabowden AFPR, but only in the local study area.

The lyre-leaved rock cress and timber oat grass, both of which are \(S 2\) ranked, occur in the game hunting area \(19 A\) and \(14 A\), both in the local study area and also in the right-of-way.
\begin{tabular}{|c|c|c|}
\hline 1 & Native grasslands/prairie areas is & Page 5930 \\
\hline 2 & identified in game hunting area 14, also in game & \\
\hline 3 & hunting area 19A and 14A, are within the local & \\
\hline 4 & study area, but not in the right-of-way itself. & \\
\hline 5 & In all cases, locations, any known & \\
\hline 6 & locations of species of concern or native & \\
\hline 7 & grassland prairie areas that I haven't identified & \\
\hline 8 & are also listed as environmentally sensitive sites & \\
\hline 9 & and included in the environmental protection plan & \\
\hline 10 & for construction and will be addressed with & \\
\hline 11 & mitigation as outlined in chapter 6 of the & \\
\hline 12 & supplemental report. & \\
\hline 13 & By way of mitigation and the & \\
\hline 14 & assessment, the route adjustments do not alter the & \\
\hline 15 & 2011 Bipole III EIS effects assessment results for & \\
\hline 16 & terrestrial ecosystems and vegetation. & \\
\hline 17 & Looking at mammals and habitat, as & \\
\hline 18 & already indicated, we will leave moose and caribou & \\
\hline 19 & to another presentation. I will speak briefly to & \\
\hline 20 & American Martin, beaver, wolverine and elk. & \\
\hline 21 & The coastal and barren ground caribou & \\
\hline 22 & do not overlap with any -- their ranges do not & \\
\hline 23 & overlap with any of the AFPRs and are therefore & \\
\hline 24 & not addressed. & \\
\hline 25 & The effects on mammals and habitat, & \\
\hline
\end{tabular}
including mortality factors, loss and alteration of habitat, fragmentation, and sensory disturbance are not materially altered by the AFPRs. In other words, these effects are similar in all cases between the two routes.

The assessment, therefore, focuses on habitat, high quality habitat within the areas.

Specific to Martin in the Wabowden area, approximately 1.2 per cent of the high quality habitat within the local study area would be affected by the AFPR. Similarly, in game hunting area 14, approximately 2.5 per cent of that high quality habitat would be affected. Whereas in game hunting 19A/14A, there is very little of that high quality habitat available, just because of the difference in habitat types, and none of it is affected by the AFPR.

Of note, though, is that more Martin habitat is affected by the AFPR right-of-way for both Wabowden and game hunting 14 than the FPR in those areas.

THE CHAIRMAN: Can \(I\) just ask a clarification? The bracketed numbers, the 45.7 square kilometres, is that the 1.2 per cent, or is that the whole LSA?
MR. DYCK: That's the LSA, the right-of-way is 1.2 per cent of that.
THE CHAIRMAN: So the LAS in 19A/14A
is only 0.2 square kilometres?
MR. DYCK: That's correct.
The route adjustments do not alter the 2011 Bipole III EIS effects assessment results.
Specific to beaver, and the approach
is in the same format here, the amount of very
affected, 1.7 per cent of the LSA would be
affected; for game hunting area \(14,2.4\) per cent; and in game hunting area, 19A/14A, approximately
2.1 per cent of the high quality habitat is affected within the local study area.
In all three segments the amount of high quality habitat in the right-of-way for the \(A F P R\) is higher than for the FPR. The route adjustments do not alter the 2011 Bipole III effects assessment results.
For wolverine, the approach is
somewhat different just because the wolverine species is a habitat generalist, and obviously they are also very widespread in the area, in the terrain that they inhabit. It is mostly associated with the Wabowden AFPR and very
uncommon in the game hunting areas 14 and 19A/14A.

The risk to the species from project effects would be disturbance of their dens, particularly when they are having their young. And this is considered to be unlikely as the AFPR in the Wabowden area is routed to parallel existing linear infrastructure, as we talked about before. And given the species inherent avoidance of these type of infrastructure and disturbance, the likelihood of disturbing their dens is remote.

Given that information, the route adjustments do not alter the Bipole III EIS effects assessment results of 2011.

Specific to elk in game hunting area 14, I should note that the elk range does not affect -- does not affect the Wabowden AFPR area, that's well outside of the range of the elk. So we look solely at game hunting 14 and 19A/14A. 1.2 per cent in game hunting area 14 of the high quality habitat would be affected by the right-of-way, and 1.1 per cent of the habitat in the LSA of the 19A/14A.

And this is an error here, this is -I'm not quite sure where those figures came from, but it is a reflection of the area in the entire
study area. That is incorrect. The correct numbers in game hunting 14 are 1.2 per cent, and in game hunting area 19A/14A is 1.1 per cent.

You can see that there is a large amount of habitat available within the local study area.

In both the Moose Meadows and game hunting area 19A/14A segments, the amount of high quality elk habitat in the right-of-way for the AFPR is higher than for the FPR. However, habitat is not a limiting factor in these areas.

The majority of the negative effects on elk habitat and their populations in the project study area were mitigated for during the planning and routing process. The AFPRs do not change that outcome. The route adjustments, therefore, do not alter the 2011 Bipole III EIS effects assessment results.

Specific to birds and their habitats, of the 21 bird VECs that were identified for the Bipole III EIS -- yes, sir?

MR. GIBBONS: Also for clarification, on the previous slide for elk, the third bullet currently reads more elk habitat in GHA 14 and 19A/14A than FPR. Does that mean more elk habitat
in the AFPR than --
MR. DYCK: Yes, more elk habitat is affected by the FPR than the AFPR in those areas. The other piece of that information is that there is more habitat available in the study area as well.
MR. GIBBONS: Thank you.
MR. DYCK: 18 of the bird VECs were addressed in the effects assessment for the AFPRs. The three that have been, or do not overlap with the AFPR areas are the Least Bittern, the Ferruginous Hawk and the Burrowing Owl. Other ones that are not affected by the Wabowden AFPR include the Redheaded Woodpecker, the Loggerhead Shrike, the Sprague's Pipit and Golden-winged Warbler and the Canada Warbler, also the Whip-poor-will.
Others excluded for the game hunting
14 include the Bald Eagle, and also the Loggerhead Shrike and Sprague's Pipit, and for game hunting 14 -- 19A/14A, the Bald Eagle is also excluded.
Looking specifically at the habitat then, and again for reasons that the potential project effects, including mortality factors, disruption of movements, and environmentally
sensitive sites are not materially affected by the adjustment of the routes. And again, these effects are similar, whether it is the AFPR or the adjusted route.

The assessment, therefore, focuses on habitat, that are either being lost or altered. In the Wabowden AFPR area, either there is no change or less habitat lost or altered for 16 of the VEC species. More habitat will be affected for five of the VEC species within that areas, and those species include Bald Eagle, Pileated Woodpecker, Yellow Rail, Short-eared Owl and common Night Hawk.

For game hunting area 14 there is either no change or less habitat lost or altered for 14 VEC species, but more habitat will be affected for 7 of the VEC species, including the Great Blue Heron, Ruff Grouse, Pileated Woodpecker, Common Night Hawk, Whip-poor-will, Olive-sided Flycatcher and Canada Warbler.

For game hunting 19A or 14A, there is either no change or less habitat lost or altered for nine VEC species. However more habitat will g3 affected for 12 VECs, including the Mallards, Sandhill Crane, Great Blue Heron, Ruff Grouse,
\begin{tabular}{|c|c|c|}
\hline & & Page 5937 \\
\hline 2 & rail, Redheaded Woodpecker, Common Night Hawk, & \\
\hline 3 & Olive-sided Flycatcher, Canada Warbler and Rusty & \\
\hline 4 & Blackbird. & \\
\hline 5 & With mitigation as outlined in chapter & \\
\hline 6 & 6 of the supplemental report, it is not expected & \\
\hline 7 & that the route adjustments will affect and alter & \\
\hline 8 & the 2011 Bipole III EIS effects assessment & \\
\hline 9 & results. & \\
\hline 10 & For amphibians and reptiles, there are & \\
\hline 11 & two VECs that are applicable to the AFPRs for all & \\
\hline 12 & three of them, and that is the Wood Frog and the & \\
\hline 13 & Northern Leopard Frog. & \\
\hline 14 & Potential project effects include & \\
\hline 15 & habitat alteration, direct mortality, and sensory & \\
\hline 16 & disturbance. Less than 1.5 per cent of the & \\
\hline 17 & available habitat, which are wetlands within the & \\
\hline 18 & local study area will be affected. And this is & \\
\hline 19 & applicable accumulatively for all three AFPRs, as & \\
\hline 20 & well as within each individual AFPRs. & \\
\hline 21 & The Wabowden AFPR affects marginally & \\
\hline 22 & less habitat than FPR, whereas the other two AFPR & \\
\hline 23 & areas affect marginally more. Again, this is & \\
\hline 24 & reflective of the overall availability of habitat & \\
\hline 25 & within the local study area. & \\
\hline
\end{tabular}

The route adjustments do not alter the 2011 Bipole III EIS effects assessment for amphibians and reptiles.

MR. McGARRY: Back to me. We will give Dr. Dyck a rest now and I will complete the presentation. We will go through the socioeconomic effects assessment and then wind up with the summary for each area.

So as previously described, these tables represent the VECs that were actually reviewed as part of the adjusted final preferred route environmental assessment, and they are broken down by a particular segment.

So for socioeconomic overall, the Wabowden area was reviewed again for land use, resource use and cultural and heritage resources, as were actually all three of them, game hunting area 14, and the AFPR for 19A/14A.

These were further broken down. So under land use VECs, you can see in the left-hand column. For the \(A F P R\) in the Wabowden area, there is no overlap, or there is no change in the effects assessment from the original EIS for these parameters for those VECs, and were not considered for Wabowden.
For game hunting area 14, private
forest lands, Aboriginal lands, designated protected areas and Ag productivity were considered. For game hunting area 19A and 14A, designated protected areas were reviewed as well as Ag productivity.
So for private forest lands under land use, the AFPR affects private native forest stands in game hunting area 14, approximately
10 hectares, 9.9. These are not registered as wood lots. The effects assessment is not altered from the original EIS and remains the same, and the outcome not being significant for that particular VEC.
For Aboriginal lands, the Wuskwi Sipihk Reserve and TLE was reviewed in the vicinity of the Bellsite that was shown in previous mapping. We may have a map there coming up. That TLE was avoided, it was in the area along with reserve land for the Wuskwi Sipihk First Nation. The actual right-of-way does not affect these lands and they were avoided. Again, this does not alter the residual effects assessment results from the original 2011 EIS as being not significant.

Here is the map. Green again being AFPR, and there is TLE for Wuskwi Sipihk First Nation here which was avoided. There is an offset between that land boundary and the location, proposed location of the AFPR.

In the Bellsite area as well there is TLE land that was avoided to the east, or pardon me, the west of Highway 10 , so it wasn't interfered with or crossed. And the protective areas of Bell \& Steeprock Canyons, you can see there again the route was located to avoid that protected area.

There is additional land for Wuskwi Sipihk over here on the original FPR.

So, again, under land use for game hunting area 14, the AFPR traverses the Porcupine Provincial Forest for approximately 6 kilometres. That designation as provincial forest does allow for industrial development, including Hydro. We are in proximity to an existing linear structure, being Provincial Trunk Highway 10, and an existing transmission line.

The AFPR is located 100 metres east of Bell Steeprock Canyon protected area. And this was reviewed by Protected Area Initiative staff
\begin{tabular}{|c|c|c|}
\hline & & Page 5941 \\
\hline 2 & For game hunting area 19A/14A, the & \\
\hline 3 & AFPR traverses the Swan Pelican Provincial Forest & \\
\hline 4 & for approximately 21 kilometres. Compatible land & \\
\hline 5 & uses in the forest reserve do include forestry and & \\
\hline 6 & mining. & \\
\hline 7 & Again, the outcome of that review & \\
\hline 8 & related to land use does not alter the residual & \\
\hline 9 & effects assessment as presented in the original & \\
\hline 10 & 2011 EIS. & \\
\hline 11 & This is just a slide again to -- or a & \\
\hline 12 & map to show the location of the particular area in & \\
\hline 13 & this case, and the offset, there is a slight & \\
\hline 14 & Offset there to accommodate the protected area & \\
\hline 15 & interest. & \\
\hline 16 & Again, this slide is to show the route & \\
\hline 17 & through the Swan Pelican Provincial Forest. The & \\
\hline 18 & \(A F P R\) in green here for the game hunting area 14, & \\
\hline 19 & or 19A/14A does pass through a larger portion of & \\
\hline 20 & the Swan Pelican Provincial Forest than the & \\
\hline 21 & original FPR. & \\
\hline 22 & Looking at agriculture productivity as & \\
\hline 23 & a VEC under land use, the AFPR reduces effects to & \\
\hline 24 & lands under crop and livestock production. You & \\
\hline 25 & will note a correction here in the slide from what & \\
\hline
\end{tabular}
was printed in blue. So this bullet now reads AFPR reduces effects to lands under crop and livestock production. The word "annual" is removed and the words "and livestock" added.
For game hunting area 14, so the Ag portion of the length of the FPR was approximately 40 per cent, and for the AFPR in that same area is about 25 per cent. This represents a correction too. That first check mark under that bullet should read "from 40 per cent of length for FPR to 25 per cent for AFPR." The number 13 being removed.
So then under game hunting area 14, the management unit severances, or a division of Ag lands for management is reduced from 16 kilometres on the FPR to 1 kilometre for the AFPR. Under game hunting area 19A/14A, first check mark reads "virtually avoids crop and pasture lands." This is a correction, the word "annual" is removed and "pasture" is added. So it reads "virtually avoids crop and pasture lands."
Reduces management unit severances from 9 kilometres on the FPR to 1 kilometre for the AFPR. This route also traverses a bison ranch area. The lengths that are given here is
\begin{tabular}{|c|c|c|}
\hline & approximately 15 and a half for the AFPR route & Page 5943 \\
\hline 2 & passing through that area versus 13.2 kilometres & \\
\hline 3 & for the FPR through that bison ranch area. & \\
\hline 4 & The outcome under this VEC is it does & \\
\hline 5 & not alter the residual effects assessment result & \\
\hline 6 & for the 2011 EIS, not significant. & \\
\hline 7 & Now moving on to resource use. Again, & \\
\hline 8 & this is a table to indicate which VECs were & \\
\hline 9 & reviewed for which segments. Commercial forestry & \\
\hline 10 & was reviewed for all segments. Mining and & \\
\hline 11 & aggregate was reviewed in the AFPR in Wabowden. & \\
\hline 12 & Rec and tourism came up for Wabowden as well, but & \\
\hline 13 & not the other segments. And domestic resource use & \\
\hline 14 & was reviewed for all three segments. & \\
\hline 15 & Under commercial forestry VEC, the & \\
\hline 16 & AFPR increased the amount of affected forest land & \\
\hline 17 & affected in all three areas. It increases the & \\
\hline 18 & long-standing timber effects in game hunting area & \\
\hline 19 & 14, and game hunting area 19A/14A, and increased & \\
\hline 20 & effects to Provincial forests as linear distances & \\
\hline 21 & through them has increased. The AFPR affects 7 & \\
\hline 22 & new high value forest sites in the Wabowden area & \\
\hline & and one in game hunting area 19A/14A. The outcome & \\
\hline 24 & is the effects assessment is not changed from the & \\
\hline 25 & original EIS and the effect remains not & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline 1 & significant. & Page 5944 \\
\hline 2 & In the Wabowden area mining aggregates & \\
\hline 3 & was reviewed again because the original FPR had & \\
\hline 4 & moved outside the Thompson nickel belt area of & \\
\hline 5 & mineral interest. The revised route, the AFPR was & \\
\hline 6 & back into the Thompson nickel belt. The issue of & \\
\hline 7 & a potential shadow effect from the operation of a & \\
\hline 8 & HVDC line affecting geophysical surveys was & \\
\hline 9 & reviewed. There is certainly a potential for such & \\
\hline 10 & an effect. & \\
\hline 11 & Also in reviewing the number in the & \\
\hline 12 & area of mining claims and exploration leases & \\
\hline 13 & increases for the AFPR over the FPR. & \\
\hline 14 & The mitigation relating to the & \\
\hline 15 & presence or the operation of a HVDC line in the & \\
\hline 16 & Thompson nickel belt area could include & \\
\hline 17 & pre-construction geophysical surveys before & \\
\hline 18 & operation, and some post survey data analysis, and & \\
\hline 19 & perhaps research and development to fine-tune the & \\
\hline 20 & technique for processing of data to eliminate the & \\
\hline 21 & signal from the actual operation of the HVDC line. & \\
\hline 22 & The outcome was, it does not alter the & \\
\hline 23 & residual effects assessment result of the 2011 & \\
\hline 24 & EIS. & \\
\hline 25 & Again, in the Wabowden area there was, & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & & Page 5945 \\
\hline 1 & in relation to recreation and tourism, there is a & \\
\hline 2 & general permit on record for a campground trailer & \\
\hline 3 & court on Kiski Lake on Provincial Highway 10 and & \\
\hline 4 & the HBR line. That to our knowledge has not been & \\
\hline 5 & developed to date. Manitoba Hydro will consult & \\
\hline 6 & with the permit holder to minimize potential & \\
\hline 7 & effects. & \\
\hline 8 & For reference, the AFPR is located & \\
\hline 9 & approximately 367 metres southeast of the HBR & \\
\hline 10 & line. & \\
\hline 11 & The effect, again, the assessment does & \\
\hline 12 & not alter the residual effects assessment from the & \\
\hline 13 & original EIS. & \\
\hline 14 & Going to domestic resource use for the & \\
\hline 15 & Wabowden area, traditional land use and knowledge, & \\
\hline 16 & the FPR overlaps with large animal harvest and & \\
\hline 17 & fishing areas in the Wabowden area. & \\
\hline 18 & The routing of the AFPR adjacent to & \\
\hline 19 & existing linear infrastructure will hopefully & \\
\hline 20 & limit the effects on the large animal harvest and & \\
\hline 21 & the fishing areas, because the access already & \\
\hline 22 & exists moving closer to linear infrastructure. & \\
\hline 23 & In game hunting area 14, Moose & \\
\hline 24 & Meadows, Aboriginal traditional knowledge and & \\
\hline 25 & traditional land use studies were received during & \\
\hline
\end{tabular}
the original process through Wuskwi Sipihk, I believe subsequent to that, and also from Dawson Bay, Barrows, Red Deer and the MMF.

Domestic resource use in the \(A F P R\)
includes travel routes, multiple use areas, gathering, wood, berries, plants, seneca root, hunting, deer, moose, elk, bear, upland game birds and waterfowl. There is one area identified by the MMF for plant gathering that's intersected by the AFPR right-of-way.

In game hunting area 19A/14A, the ATK studies received again from Wuskwi Sipihk and Duck Bay, Pine Creek, Camperville and the MMF were reviewed. Intensive domestic resource use has been identified in areas of the north and south of Provincial Trunk Highway 20. Blueberry and medicinal plant collection in the Swan Pelican Forest Reserve, there is Spruce and Diamond Willow harvesting south of Provincial Highway 20. There is deer, moose and bear harvest between Highway 20 and Pulp River, some farm gardens east of Pulp River.

The environmental assessment consultation process input on the AFPR registered greater concern for negative effects with the AFPR
over the FPR. The outcome does not alter residual effects assessment result of the 2011 EIS. And the cultural values and effects will be discussed in an additional presentation coming up.

So moving to the summaries, one for biophysical and socioeconomic, and then we will go segment to segment.

So overall specifics of biophysical VECs was addressed. Project residual effects are very similar to the AFPR and the FPR. With the prescribed mitigation in chapter 8 of the 2011 EIS, residual effects are not expected to be significant at the AFPR level.

In addition, chapter 6 of the adjusted final preferred route has listed mitigation as well.

The route adjustments do not alter the 2011 Bipole III EIS effects assessment results, with the exception, as Mr. Osler pointed out, of Woodland caribou, where uncertainty is reduced. This is for biophysical.

Project residual effects to terrain, soils, groundwater, aquatic environment, terrestrial ecosystems and vegetation, mammals and habitat, birds and habitat, amphibians and
reptiles remain not significant.

Summary for socioeconomic, potentially
significant effects on culture in game hunting
areas 19A/14A. Uncertainty on magnitude and
duration of those effects. Again, with prescribed mitigation in chapter 8 of the 2011 EIS, residual
effects are not expected to be significant for the AFPR overall. Route adjustments do not alter the 2011 Bipole III effects assessment results.

Now, going section by section, or AFPR by AFPR, we added this hopefully to help sort out by individual area what had changed from -- or what was new in terms of the effects assessment related to these segment changes.

So for Wabowden area, Woodland caribou, the AFPR reduces uncertainty and increases confidence in the effects prediction over the FPR. For moose, reduced fragmentation and parallel to existing infrastructure is the improvement in the area. For Martin, American Martin, slightly more high quality habitat affected in the AFPR compared to the FPR. For birds, unchanged or less habitat affected for 16 species and more for five species. Dr. Dyck listed those species and they are listed in the
\begin{tabular}{|c|c|c|}
\hline & report & Page 5949 \\
\hline 2 & For vegetation, there is no protected & \\
\hline 3 & or regulated listed species found in these areas. & \\
\hline 4 & There is one species of Conservation concern, the & \\
\hline 5 & oblong-leaved Sundew, S3. No residual effects on & \\
\hline 6 & vegetation. & \\
\hline 7 & For aquatics, both the AFPR and the & \\
\hline 8 & FPR cross four creeks in the Wabowden area. & \\
\hline 9 & Sensitivity rating is moderate for all four on & \\
\hline 10 & AFPR, three moderate and one low for the FPR. & \\
\hline 11 & AFPR crosses Kiski Creek which is rated as & \\
\hline 12 & important fish habitat, being the main change & \\
\hline 13 & between the two. & \\
\hline 14 & For culture and heritage, no heritage & \\
\hline 15 & sites along the AFPR. One new environmentally & \\
\hline 16 & sensitive site at Kiski Creek. No change in & \\
\hline 17 & culture assessment from the original EIS. & \\
\hline 18 & For resource use, mining, the AFPR & \\
\hline 19 & crosses several mineral claims in the Thompson & \\
\hline 20 & nickel belt previously avoided by FPR. New & \\
\hline 21 & mitigation has been proposed. & \\
\hline 22 & For domestic resource use, areas of & \\
\hline 23 & traditional fishing and hunting overlap with the & \\
\hline & AFPR, as contained in the MMF ATK report. & \\
\hline 25 & Game hunting area 14 summary, this is & \\
\hline
\end{tabular}

Moose Meadows, for moose there is more high quality habitat in the local study area for the AFPR than the FPR, approximately 28 square
kilometres. Slight increase too for the right-of-way in regards to moose habitat. Mr. Schindler and Dr. Rettie will expand on this.

For American Martin, slightly more
high quality habitat -- habitat affecting the AFPR over the FPR. For birds, unchanged or less habitat affected for 14 species, and more for seven species. Again, to correct the record here, your printed edition does not have "unchanged" in this bullet, so bullet number 3 reads, "birds unchanged or less habitat affected for 14 species and more for seven species."

For vegetation, there is no list of species and no species of Conservation concern.

There is native grassland prairie, which is a flat land community of Conservation concern in the local study area only.

For aquatics, the adjusted final preferred route in game hunting area 14 crosses fewer sites than the FPR routing. The right-of-way for the AFPR crosses 8 water courses, half of which are fish habitat. Two of those were
```

Mr. Schindler and Dr. Rettie will expand on this.

``` -
orvegetation, there is no listof species and no secies of Conservation concern.
\begin{tabular}{|c|c|c|}
\hline & rated as important. & Page 5951 \\
\hline 2 & The culture and heritage, there are & \\
\hline 3 & five registered archeological sites within the & \\
\hline 4 & local study area of the AFPR. There is no change & \\
\hline & in culture assessment from the original EIS in & \\
\hline 6 & game hunting area 14. & \\
\hline 7 & Under land use, AFPR traverses 6 & \\
\hline 8 & kilometres of provincial forest, passes Bell & \\
\hline 9 & Steeprock Canyon protected area. AFPR crosses & \\
\hline 10 & less agricultural land than the FPR. And there is & \\
\hline 11 & one kilometre of management unit severance for the & \\
\hline 12 & AFPR compared to 16 for the FPR. & \\
\hline 13 & For domestic resource use, traditional & \\
\hline 14 & use area for berry picking, medicinal plant & \\
\hline 15 & gathering, Seneca root, all within the local study & \\
\hline 16 & area of the AFPR. & \\
\hline 17 & The next sentence is crossed out as it & \\
\hline 18 & is a duplicate sentence. So to correct the & \\
\hline 19 & record, the third bullet on the slide has removed & \\
\hline 20 & one sentence that was duplicated. & \\
\hline 21 & The final point is the AFPR avoids & \\
\hline 22 & many of the water course crossing compared to the & \\
\hline 23 & FPR, providing somewhat less access for fishing & \\
\hline 24 & than the FPR. & \\
\hline 25 & Moving to game hunting area 19A/14A, & \\
\hline
\end{tabular}
the summary, for moose, there are comparable amounts of moose habitat in the AFPR and the FPR, with slightly more in the local study area in comparison to the original FPR.

Birds, unchanged or less habitat affected for nine species and more habitat affected for 12 species. There is a correction here on the slide from the printed material. The second point has been corrected to read birds unchanged, which is a new word added, or less habitat affected for nine species and more for 12 species.

Under vegetation there are no listed species regulatory wise. There are two species of Conservation concern, Lyre-leaved rock cress and timber oat grass, both rated as S 2 by the Manitoba Conservation data centre. There are no residual effects on the AFPR. The native grassland and prairie areas are in the local study area only.

For aquatics, \(F P R\) crosses 17 water courses while the AFPR crosses only 14 , six which have important fish habitat.

For heritage, 25 registered
archeological sites within the local study area indicating a high likelihood of encountering more
\begin{tabular}{|c|c|c|}
\hline & sites nearby. & Page 5953 \\
\hline 2 & For culture there is expected adverse & \\
\hline 3 & residual effects on the cultural integrity of the & \\
\hline 4 & identified local communities. Increase magnitude & \\
\hline 5 & from small in the EIS to moderate, which should be & \\
\hline 6 & considered potentially significant. The & \\
\hline 7 & conclusion is, not significant with uncertainty & \\
\hline 8 & regarding magnitude and duration. And this will & \\
\hline 9 & be the subject of another presentation. & \\
\hline 10 & Under land use, the AFPR traverses & \\
\hline 11 & part of the Swan Pelican Provincial Forest, it & \\
\hline 12 & crosses less agricultural land than the FPR. & \\
\hline 13 & There is one kilometre of management unit & \\
\hline 14 & severance agriculturally for the AFPR compared to & \\
\hline 15 & nine for the FPR. & \\
\hline 16 & Under domestic resource use, the AFPR & \\
\hline 17 & traditional use areas for berry picking, medicinal & \\
\hline 18 & plant gathering, seneca root, Diamond Willow and & \\
\hline 19 & Spruce all within the local study area of the & \\
\hline 20 & adjusted final preferred route. & \\
\hline 21 & Moose, elk and bear harvesting also & \\
\hline 22 & occur in the general area under domestic & \\
\hline 23 & resources. & \\
\hline 24 & That is the end of this presentation. & \\
\hline 25 & THE CHAIRMAN: Thank you. Can I just & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & seek a little guidance? Do you wish to have the & Page 5954 \\
\hline 2 & cross-examination now or hear the other & \\
\hline 3 & presentations and do all of the cross-examination & \\
\hline 4 & at once? & \\
\hline 5 & MR. McGARRY: I believe we were going & \\
\hline 6 & to go right through. & \\
\hline 7 & THE CHAIRMAN: Do all of the & \\
\hline 8 & presentations? I mean, it occurred to me right & \\
\hline 9 & near the end that, particularly on the cultural & \\
\hline 10 & area, we couldn't get into until we heard the & \\
\hline 11 & final, or heard that presentation. & \\
\hline 12 & Okay. We well take a break now for 15 & \\
\hline 13 & minutes and come back and carry on with further & \\
\hline 14 & presentations from the proponent. & \\
\hline 15 & (Hearing recessed at 10:29 a.m. and & \\
\hline 16 & reconvened at 10:45 a.m.) & \\
\hline 17 & THE CHAIRMAN: Okay. Can we get back & \\
\hline 18 & to work, please? & \\
\hline 19 & MR. McGARRY: Excuse me, Mr. Chairman, & \\
\hline 20 & we just want to put on the record, there is a & \\
\hline 21 & handout at the back of the room that many people & \\
\hline 22 & have now, and that is a comparison table of the & \\
\hline 23 & outcomes of the assessment for each of the three & \\
\hline 24 & sections comparing the AFPR to the FPR. I just & \\
\hline 25 & wanted to let you know it is there, and we have & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & introduced it in into the record. It is not new & Page 5955 \\
\hline 2 & material, it is from -- it is a summary from the & \\
\hline 3 & presentation. & \\
\hline 4 & THE CHAIRMAN: Thank you. & \\
\hline 5 & MR. McGARRY: With that, Mr. Chairman, & \\
\hline 6 & I will turn it over to Mr. Joyal to make his & \\
\hline 7 & presentation on the environmental assessment & \\
\hline 8 & consultation group. & \\
\hline 9 & MR. JOYAL: Thank you, Mr. McGarry, & \\
\hline 10 & Commissioners, participants. Nice to see you all & \\
\hline 11 & again. & \\
\hline 12 & I will be running through our & \\
\hline 13 & consultation program that was undertaken for the & \\
\hline 14 & route adjustments from November to present. So on & \\
\hline 15 & a quick overview, our purpose and objectives and & \\
\hline 16 & the methods we used to notify the methods of & \\
\hline 17 & participation, feedback, incorporation of & \\
\hline 18 & feedback, routing suggestions and continued & \\
\hline 19 & engagement. As a quick note, this is the back & \\
\hline 20 & side of our comment sheet which we utilized to & \\
\hline 21 & receive feedback from participants. & \\
\hline 22 & So to remain consistent with the & \\
\hline & purpose and objectives of the previous EACP & \\
\hline & rounds, we wanted to make sure that we shared & \\
\hline 25 & project information as it became available to & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & & Page 5956 \\
\hline 2 & understand local issues pertinent to the proposed & \\
\hline 3 & adjustments, integrate issues and concerns in the & \\
\hline 4 & assessment process, as well discuss appropriate & \\
\hline 5 & mitigation measures. And this is all outlined in & \\
\hline 6 & section 3.1 and figure 3.1-1 in the supplemental & \\
\hline 7 & report. & \\
\hline 8 & On this slide here starting & \\
\hline 9 & November 2012, our planning process, our & \\
\hline 10 & notification, activities being undertaken, & \\
\hline 11 & incorporation of feedback and report creation & \\
\hline 12 & occurred in January 2013. & \\
\hline 13 & So to begin, our methods of & \\
\hline 14 & notification, direct mailings, postcards, posters, & \\
\hline 15 & radio, newspaper, and the Manitoba Hydro website & \\
\hline 16 & were all utilized. And just as a quick note, this & \\
\hline 17 & is the postcard, or the back side of the postcard. & \\
\hline 18 & The route adjustment postal code notification & \\
\hline 19 & which I will talk about in a bit more detail, and & \\
\hline 20 & this is all in section 3.2 in the adjustment & \\
\hline 21 & report. & \\
\hline 22 & So the direct mailings were used to & \\
\hline & notify the landowners, municipalities, Northern & \\
\hline 24 & Affairs community councils, First Nations, the MMF & \\
\hline & and other interested stakeholder groups. In & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & & Page 5957 \\
\hline 2 & and each one contained a letter outlining the & \\
\hline 3 & current engagement process. For landowners, they & \\
\hline 4 & contained the affected parcels in both the FPR or & \\
\hline 5 & AFPR, and associated 1 to 50,000 scale mapping. & \\
\hline 6 & We utilized localized and study area mapping as & \\
\hline 7 & well, so larger scale. & \\
\hline 8 & Inside they found a regional open & \\
\hline 9 & house and/or landowner information centre & \\
\hline 10 & schedule. And as well the website and toll free & \\
\hline 11 & information line and contact information was & \\
\hline 12 & provided. & \\
\hline 13 & For the posters and postcards, posters & \\
\hline 14 & were placed in 23 locations, usually in areas of & \\
\hline 15 & high traffic such as post offices, grocery and & \\
\hline 16 & convenience stores, community billboards and & \\
\hline 17 & restaurants. & \\
\hline 18 & That's a photo of the poster itself, & \\
\hline 19 & all three adjustments listed, all locations of the & \\
\hline 20 & regional open houses, a quick blurb of why we are & \\
\hline 21 & coming out to speak with everybody. And as well, & \\
\hline 22 & for the postcards we did -- 2,712 postcards were & \\
\hline 23 & distributed. And we kept with an irregular ten by & \\
\hline & six shape so it stuck out from the regular mail & \\
\hline & when you open your mailbox. These are all & \\
\hline
\end{tabular}
discussed in sections 3.2.4 and 3.2.5.

We utilized audio and newspaper consistent with previous rounds of the EACP, utilizing both the local and regional newspapers as well as radio stations. They were either posted or announced for a two-week period prior to any regional open house. In total 12 newspapers and 216 radio spots were utilized to notify the public of Manitoba Hydro's activities.

This is the Swan Valley times
newspaper advert. Due to their location, Birch River, Swan and Cowan were included in this advertisement. Whereas the Free Press contained all five locations, the Opasquia Times would have The Pas and Thompson newspaper.

Our project website was updated
frequently, still the same material that was presented earlier was there as well. The project description, where we were, the process and status. Materials, we posted any reports. We did provide mapping of each of the adjustments, and as well access to all letters, including electromagnetic field brochures and any other brochures that we created.

All locations of regional open houses
were advertised on our website as well. And we still had the complete EIS filing, and when it was filed on January 28th, our website also had the supplemental report placed on it.

The information line and email address remains operational and it is still responding to questions from the general public. These are listed on materials and/or locations, including the posters, newspaper, and in all of the letters.

We also list them on the contact sheet takeaway which we created for open houses. These sheets had the Manitoba Hydro website, the Manitoba Hydro email address, the information line, as well as a website link to the Clean Environment Commission's home page, to understand that process that was being undertaken as well.

There is one correction, 24 calls and 7 emails have been received since November 14th, we got one on Friday. So that's just a quick update. They were all either answered or responded to in a timely manner. And it is staffed by myself, or voice mail is always there in case I'm not. This is discussed in 3.2.7.

So, remaining consistent with previous EACP practices, methods of participation included
\begin{tabular}{|c|c|c|}
\hline & stakeholder meetings and council meetings, & Page 5960 \\
\hline 2 & regional open houses, landowner information & \\
\hline 3 & centres, leadership meetings, community open & \\
\hline 4 & houses, the information line and email address & \\
\hline 5 & were always available. And these are discussed in & \\
\hline 6 & sections 3.2.7 and 3.3. & \\
\hline 7 & Four stakeholder meetings, nine & \\
\hline 8 & meetings were held with 13 entities, municipal & \\
\hline 9 & leadership and stakeholder groups. These include & \\
\hline 10 & Manitoba Lodgers and Outfitters, Protective Areas & \\
\hline 11 & Initiative, RM town of Minitoas, RM of Mountain, & \\
\hline 12 & Ducks Unlimited, IRMT Northeast and Western, the & \\
\hline 13 & Moose Management Committee, and the G7, which is & \\
\hline 14 & seven municipal and town councils that meet & \\
\hline 15 & annually. & \\
\hline 16 & We always give a presentation of all & \\
\hline 17 & three of the route adjustments. We always left & \\
\hline 18 & the floor open for questions and answers. And we & \\
\hline 19 & left all materials, including mapping. And all & \\
\hline 20 & meeting summaries are provided in appendix 3C. & \\
\hline 21 & For landowner information centres and & \\
\hline 22 & regional open houses, we held five landowner & \\
\hline 23 & information centre days and six regional open & \\
\hline & houses. We aimed to minimize travel distance from & \\
\hline 25 & the adjustment areas, but we also included & \\
\hline
\end{tabular}
Winnipeg so interested individuals and resource users that may reside in Winnipeg.
In total 107 attendees signed in to either a LAC or regional open house. This is not including community open houses. So the six communities where they were held were Cowan, Birch River, Swan River, Winnipeg, Thompson and The Pas. This is one of our stations, which I will talk about in just a second. We split them into a station-like setting with a large scale map at each one of the adjustment areas, 50,000 scale mapping, and a justification for each one. And these maps were available to take home or to provide specific site information, and submit with comment forms as well. This is all in section 3.3.3.
So like I said, station set-up for each one, justification for each of the adjustments being looked at, 1 to 50,000 scale mapping, and map books which were created similar to what we had done for round 4, and as well large scale mapping of the entire Bipole route, the lovely map that we dragged with us on the road, the story boards and the tangible pieces, the conductor, the insulator, caribou collar, bird
\begin{tabular}{|c|c|c|}
\hline & diverter. The construction slide show, it is & Page 5962 \\
\hline 2 & about 110 slides, which was well received by all & \\
\hline 3 & individuals who attended the open houses, and & \\
\hline 4 & outlined the construction process for a & \\
\hline 5 & transmission line of this magnitude. & \\
\hline 6 & As well Google Earth was always & \\
\hline 7 & readily available and utilized to show proximity & \\
\hline 8 & to specific landholdings, as well as the terrain & \\
\hline 9 & and landscape that existed in some of these areas. & \\
\hline 10 & For community open houses and & \\
\hline 11 & leadership meetings, they were held with First & \\
\hline 12 & Nation communities. One community open house was & \\
\hline 13 & held with Wuskwi Sipihk First Nation. Leadership & \\
\hline 14 & meetings or meetings with representatives of & \\
\hline 15 & council include Sapotaweyak, Ebb and Flow, Pine & \\
\hline 16 & Creek, and others as well. Northern Affairs & \\
\hline 17 & communities councils, leadership meetings were & \\
\hline 18 & held with four communities, and as well community & \\
\hline 19 & open houses were held with eleven communities. & \\
\hline 20 & Some communities opted for just a community open & \\
\hline 21 & house as opposed to a leadership meeting, or some & \\
\hline 22 & had both. & \\
\hline 23 & All of these were the same format as & \\
\hline 24 & stakeholder meetings and regional open houses. & \\
\hline 25 & The station was set up, as well as materials for & \\
\hline
\end{tabular}
feedback. And as well, as outlined in the report, there is outstanding and ongoing engagement. Unfortunately, due to a death in the community we were unable to get into Pine Creek last week. We are still working with Ebb and Flow, Treaty II, for upcoming meetings. Still trying to get a meeting with Pelican Rapids as well as Ochekwi Sipi. These are all discussed in section 3.4 and 3.4.4.

This is a cut from the report, the red is the regional open houses, the blue is the community open houses. In this, if you do add them up, it is 180. Since filing we did hold the Wuskwi Sipihk First Nation community open house where 17 individuals signed in. A total of 197 participants signed in to either community or regional open house.

Some methods to receive feedback came from comment sheets, landowner information centre forms, the email address, the toll free project line, discussions with open house attendees, as well as stakeholder meetings.

So to go through each one of the adjustment areas, Wabowden will be the first, there was general acceptance by the public for the
proposed route adjustment following existing infrastructure and limiting new access into areas previous undisturbed.
From the phone line as well as the email address, a staging site camp or storage area has been offered by Ponton at the junction of Highway 6, to supply either camp, diesel fuel, they were willing, due to the proximity of the AFPR, FPR in that vicinity.
There was a general concern with regards to access to right-of-way by all-terrain vehicles and snowmobiles.
So the feedback for GHA 14 and Moose Meadows, there was positive and negative views of this route, or of these routes. It was well noted by all participants that wildlife concerns would exist along either route being pursued. On the AFPR migration corridor, it was claimed to exist, population decline overall in the entire area, and that there exists presence of moose on both -there is presence of moose on both routes.
As well, access increase for hunting and snowmobiling viewed both positively and negatively, depending on what you were doing on the landscape.
There were some private land concerns north of Mafeking with regards to use and increased access to privately owned parcels due to the clearing.
Wuskwi Sipihk First Nation noted that they had some Treaty Land Entitlement concerns in their ability to pick treaty land, and this could be on either of the routes picked in the area.
Vegetation management, use of herbicides was brought up substantially in this area, as well as line of sight.
Protected areas, Steeprock Canyon, a meeting with Protected Areas Initiative, in wanting a buffer of 100 metres between the edge of the right-of-way and this protected area.
Going into GHA 14A/19A, many claim this area is berry capital, but the adjusted preferred route was both viewed positively and negatively on berry collection, predominantly based on where you would be harvesting berries. Some people found it affected more of their usual area to harvest and some found it to be much better.
There are moose hunting effects with the AFPR over the final preferred route, Crown
\begin{tabular}{|c|c|c|}
\hline & versus private access Currently the FPR & Page 5966 \\
\hline 2 & traverses private land on Provincial Trunk Highway & \\
\hline 3 & 20, whereas the AFPR traverses Crown land at PTH & \\
\hline 4 & 20. There were concerns that individuals would be & \\
\hline 5 & hunting moose from the roadway and be able to & \\
\hline 6 & easily access the right-of-way off PTH 20 due to & \\
\hline 7 & it being Crown and not having to traverse private & \\
\hline 8 & land to access this right-of-way. & \\
\hline 9 & It was noted that there were heritage & \\
\hline 10 & concerns east of Briggs Spur and in the Pine River & \\
\hline 11 & area. & \\
\hline 12 & Line of sight was also brought up as a & \\
\hline 13 & concern, especially with the AFPR and the ability & \\
\hline 14 & to see down the right-of-way for a lengthy period & \\
\hline 15 & of time. & \\
\hline 16 & THE CHAIRMAN: Sight should be & \\
\hline 17 & S-I-G-H-T, is that correct? & \\
\hline 18 & MR. JOYAL: Sorry, yes. & \\
\hline 19 & Feedback again for GHA 14A/19A, & \\
\hline 20 & vegetation management with regards to pesticide & \\
\hline 21 & use and berries and water streams. Many indicated & \\
\hline 22 & that moose hunting was successful in the past, 20 & \\
\hline & years ago, but very little moose located along the & \\
\hline & final preferred route, based on people's & \\
\hline 25 & observations. And as well individuals noted that & \\
\hline
\end{tabular}

plan meetings.
We did receive routing suggestions, as
I mentioned earlier, the PAI requested that Bell-Steeprock Canyon, a buffer of 100 metres. There were landowners that provided us with a combination of both the \(F P R\) and AFPR, in GHA 14A and 19A, FPR north of 20 and AFPR south of 20.

There was some slight modifications for private land ownership suggested of moving a half mile east, north of Mafeking, or following the half mile line if the AFPR is pursued in the Moose Meadows area. And one route was also provided to us by representatives of Pine Creek for the avoidance of the Bison ranch in GHA 14A/19A. And these are discussed in section 3.5.5.

Once again, ongoing engagement; there is engagement for the environmental protection program and access management plans slated to happen with First Nation and Northern Affairs communities. We are always willing to meet with interested parties, and to continue getting into some of the communities that we were not able to, modifying the process slightly, talking about the findings of the EA, the EPP process, and the
\begin{tabular}{|c|c|c|}
\hline & meetings that will be coming up & Page 5969 \\
\hline 2 & We will leave the email address and & \\
\hline 3 & project phone line operational and manned. And we & \\
\hline 4 & will update the website as new information becomes & \\
\hline 5 & available to the public, and notify the public of & \\
\hline 6 & the outcomes of these hearings. & \\
\hline 7 & So in summation, we utilized a variety & \\
\hline 8 & of notification methods to inform the public of & \\
\hline 9 & Manitoba Hydro's activities. We used a variety of & \\
\hline 10 & engagement mechanisms to receive feedback. We & \\
\hline 11 & believe we provided ample opportunity for & \\
\hline 12 & individuals to participate. All materials that & \\
\hline 13 & were provided were well received by participants & \\
\hline 14 & and we will continue with our engagement processes & \\
\hline 15 & with the public. Thank you. & \\
\hline 16 & MR. OSLER: We will go now to Virginia & \\
\hline 17 & Petch on the culture and heritage. & \\
\hline 18 & MS. PETCH: Mr. Chairman, & \\
\hline 19 & Commissioners, participants, ladies and gentlemen, & \\
\hline 20 & good morning. & \\
\hline 21 & Today I am presenting the results of & \\
\hline 22 & the evaluation of the adjusted final preferred & \\
\hline 23 & route, AFPR, on culture and heritage resources. & \\
\hline 24 & The evaluation was conducted based on methods that & \\
\hline 25 & were used in the December 2011 EIS. & \\
\hline
\end{tabular}

I am going to begin by reviewing table
4.3-6, culture and heritage resources VECs
affected by AFPR changes. This table indicates for each of the three AFPR changes those effects that will be considered further to assess the effects of AFPR changes. These are marked with a X.

VECs marked NA will not be discussed further than a brief overview, as there was no basis to expect that the AFPR changes will have any detectable effect on the VEC.

And here you can note that in terms of culture in the Wabowden and GHA 14 Moose Meadows areas, there is no change in the effects assessment of the December 2011 EIS due to the AFPR changes.

However, the AFPR change in the GHA 14A/19A areas will move the HVDC line construction and ongoing operation into a culturally sensitive area that is avoided by the FPR.

With the existing environment for the AFPR, Wabowden area, just to reiterate, there are no heritage resources currently registered with the Province of Manitoba archeological and heritage inventory, and no sites occur within the
three mile buffer of the Wabowden route adjustment area. As well, an ATK workshop for Wabowden was declined and no other ATK was available.

This is a map of the Wabowden area route adjustment. I have circled an area at Kiski Creek, that this area was not affected in the original EIS, however, we have marked this as an environmentally sensitive site which will be monitored during construction.

This is a map of the Moose Meadows area, and I have a lens just to the right of the slide that shows an inset of heritage resources that have been identified in the Moose Meadows area. These were avoided by the FPR.

In Moose Meadows the AFPR brings the HVDC line closer to registered archeological sites. We have five known sites noted in the vicinity of the Bell River crossing southwest of Bellsite. And these are in close proximity to the AFPR.

Now, recently the historic resources branch through TAC has recommended an HRIA, or heritage resource impact assessment of this AFPR through Moose Meadows if this route is selected. As well the \(H R P P\), which is the heritage resources
protection plan, which is part of the environmental protection plan, will also be implemented.
The archeological record and the ATK
for this area, Moose Meadows, indicates that an important relationship exists between the low lands and the escarpment. This was identified in the Barrows, Camperville, Pine Creek, and Duck Bay ATK workshops and the MMF self-directed study as an area of high resource use. And again just showing the relationship of the archeological sites to the AFPR.
In total we have six archeological sites located within the Moose Meadows AFPR, five of which are in relatively close proximity to the AFPR. This table identifies the sites, provides site type, cultural affiliation, artifact recoveries, site status, site priority as identified by the Provincial inventory, and measures the distance from the centre of the right-of-way to the site.
Now we move into the GHA 14A/19A AFPR, you will notice on this map a large number of registered archeological sites. If you look to the right of the map to the \(A F P R\), shown by the
\begin{tabular}{|ll|}
\hline 1 & green line, you will notice a number of red \\
2 & squares in close proximity to the AFPR. The \\
3 & purple line indicates the FPR that was discussed \\
4 & in the EIS. The red sites in the previous map \\
5 & represent registered archeological sites. This \\
6 & means that the sites have been given a designated \\
7 & number and a site inventory form has been \\
8 & submitted to the historic resources branch of \\
9 & Manitoba Culture, Heritage and Tourism. And again \\
10 & there are 25 registered sites within the AFPR. \\
11 & The cultural occupations include late \\
12 & Palaeo period, about 9,000 years ago, Archaic, \\
23 & indicate intensive, concentrated and extensive \\
13 & about 5,000 years ago, and Woodland, beginning \\
14 & about 2,000 years ago. And here is a table of the \\
15 & archeological sites that have been identified \\
16 & within this particular area, along with their site \\
17 & type, their cultural affiliation, types of
\end{tabular}

AFPR area.

This map is a composite of the total ATK from Pine Creek, Duck Bay and Camperville in the GHA 14A area. The blue lines show

Camperville's ATK for this area. The green lines indicate Duck Bay's ATK, and the purple represents Pine Creek ATK.

The ATK maps from these communities indicate that this is a critical area for supporting cultural activities and knowledge, which is a means of perpetuating traditional knowledge and understanding of the physical and cultural world.

The ATK indicated that this area has been used traditionally for over 100 years by the communities. Medicinal plants are gathered here, berry picking, and the social cohesion arising from extended harvesting periods were all noted by participants of contributing significantly to the practices, traditions, and health and well-being of the three communities.

And this area is the GHA 19A area. And again, we can see traditional land use and ATK occurring, again with the blue being the Camperville, the green being Duck Bay, and the
purple being the Pine Creek areas that were discussed in the ATK workshops.
One thing that came across with all of
the communities and with others is that the
blueberry patch, this is time and again noted as
being one of the most important resource
harvesting and social activities of the
communities in this area.
Blueberry picking provides a critical
source of annual income for many of the members of these three communities, as well as Wuskwi Sipihk and other nearby First Nation and NACC communities.
The GHA 14A/19A areas have been said to produce the best blueberries, and many refer to this as the blueberry capital. But the patch is more than a place for gathering blueberries, it is a place for securing healthy food, healthy fruit to store up for winter. The patch is a place for teaching and reminding young people of their ancestors who did these same activities hundreds of years ago. The blueberry patch is a place where the rhythm of nature plays out, fires renew, winter quiets the land, berries become hardy adjusting to dry and wet seasons.

The area north and south of PTH 20 in particular is one of several areas that are used collectively by both First Nations and Metis. It is accessible by young and old from all three communities and their extended families, and it is an important area for the transmission of knowledge and culture.

Both Metis and First Nations interviewees noted the presence of stone projectile points throughout the GHA 14A and 19A area, and also the presence of burials. One burial has recently been identified 330 metres from the AFPR. Other burials are known to exist in this area. Manitoba historic resources branch has requested that a HRIA, or heritage resource impact assessment, of GHA 14A and 19A area of the AFPR should occur if this route is selected.

As for the effects of the AFPR through GHA 14A/19A on culture and heritage, the AFPR change in the GHA 14A/19A will move the HVDC construction and ongoing operation into a culturally sensitive area that is avoided by the FPR. The area north and south of PTH 20 will be adversely impacted by this AFPR route change. The AFPR will fragment a culturally sensitive area
\begin{tabular}{|c|c|c|}
\hline & resulting in expected adverse effects on the & Page 5977 \\
\hline 2 & cultural integrity of the identified local & \\
\hline 3 & communities due to changed character of the & \\
\hline 4 & fragmented area, the potential for increased & \\
\hline 5 & access by others, and community members' concerns & \\
\hline 6 & about having a high voltage transmission line & \\
\hline 7 & situated over these important traditional berry & \\
\hline 8 & and medicinal plant gathering areas. & \\
\hline 9 & Parts of the AFPR area in GHA 14A/19A & \\
\hline 10 & have been subject to agricultural uses, rural & \\
\hline 11 & development and borrow operation. However, it is & \\
\hline 12 & understood from the Bipole III ATK workshops that & \\
\hline 13 & were conducted at Pine Creek, Camperville and Duck & \\
\hline 14 & Bay, that medicinal plant gathering continues to & \\
\hline & use much of the affected area for gathering & \\
\hline 16 & specific plants not disturbed to date by other & \\
\hline 17 & projects and activities. & \\
\hline 18 & In looking at the residual adverse & \\
\hline 19 & effects, the following table summarizes the & \\
\hline 20 & residual adverse effects of the AFPR on culture & \\
\hline 21 & and heritage. & \\
\hline 22 & For heritage resources, during the & \\
\hline 23 & construction phase there was a potential & \\
\hline & discovery -- potential for discovery of unknown & \\
\hline 25 & heritage resources. However, the overall & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & assessment is not significant. For operation, & Page 5978 \\
\hline 2 & again a residual effect is the potential discovery & \\
\hline 3 & of unknown heritage resources. And again, the & \\
\hline 4 & overall assessment is not significant. This is & \\
\hline 5 & because we have the Heritage Resources Act, we & \\
\hline 6 & have the process of heritage resource impact & \\
\hline 7 & assessment, and the HRPP as part of the & \\
\hline 8 & environmental protection plan protecting heritage & \\
\hline 9 & resources. & \\
\hline 10 & For culture, in construction the & \\
\hline 11 & residual effect considered is that of impairment & \\
\hline 12 & of aboriginal culture. We have a magnitude that's & \\
\hline 13 & considered moderate, and an overall assessment of & \\
\hline 14 & potentially significant. & \\
\hline 15 & This leads into the next phase where & \\
\hline 16 & we look at societal importance, which is & \\
\hline 17 & identified as being moderate. We have frequency & \\
\hline 18 & of high, and reversibility -- it is reversible, & \\
\hline 19 & but with a caveat -- and overall not significant. & \\
\hline 20 & And this is for the whole project, not just for & \\
\hline 21 & this particular area. & \\
\hline 22 & For operations, again we have & \\
\hline 23 & impairment of aboriginal culture. The magnitude & \\
\hline & here again is moderate and the overall is & \\
\hline 25 & potentially significant. The societal importance & \\
\hline
\end{tabular}
is moderate, frequency is high, and reversibility is reversible, but again with a caveat. The overall is not significant, but you will note that underneath that we have uncertainty noted. And this will be discussed in a little bit.

Aside from avoiding this culturally
sensitive area through routing of the HVDC transmission line elsewhere, as was achieved with the \(F P R\) in the original EIS, Manitoba Hydro is not aware of mitigation measures likely to alleviate adequately these expected adverse residual effects on culture from the \(A F P R\) route change in the GHA 14A/19A area.

Manitoba Hydro will carry out the mitigation and the environmental protection plans as described in the EIS to minimize impact on specific resource use by communities in the GHA 14A/19A areas, to review concerns that arise about the project and opportunities for cultural preservation occasioned by the project.

The original EIS assessment of the project's adverse residual effects on culture from the HVDC transmission line component during operation concluded that these effects are expected to extend beyond the local study area and

project, and potentially reversible only upon project decommissioning.
Overall, without an established threshold of acceptable change, the assessment is not able to conclude that the residual adverse effect is significant. However, uncertainty is noted as to whether the ongoing adverse effect will remain moderate in magnitude.
The original EIS assessment of the project's adverse residual effects on heritage resources from the HVDC transmission line component during operation concluded that these effects are expected to be small in magnitude and of no overall significance. The HRPP, as part of the environmental protection plan, will mitigate any adverse residual effects, and as noted, the Provincial resources branch has indicated that a heritage resource impact assessment must take place should the AFPR be selected.
In summary, no residual adverse effects to culture and heritage are expected in the Wabowden AFPR. No residual adverse effects are expected to culture or heritage in the GHA 14 Moose Meadows area. Five registered archeological sites in the Bell River crossing are not within
the transmission line right-of-way. All
archeological resources are protected by
Manitoba's Heritage Resources Act, and any sites
that are discovered during construction and operation are also protected. And as noted earlier, the historic resources branch has requested an HRA should this line be chosen. The GHA 14A/19A AFPR is expected to have detectable adverse residual effects on culture. This will increase the expected magnitude of the residual adverse effect on this VEC from small, as assessed with the FPR, to moderate. It will result in an assessment of a potentially significant adverse effect of the project on culture based on criteria in chapter 4 of the EIS. Again, this area is subject to an HRIA.
And that is the end of my presentation. Thank you.
MR. OSLER: We will now go to the moose and caribou, or caribou and moose, Mr. Schindler and Dr. Rettie.
While they are coming up, I would just note that when we were checking the document, the resources of the report, it seems at the end of
the appendix 1A, the frequently referenced letter from Manitoba Conservation, the number one letter that directed this take place, was not in fact included. So we have copies available today which we can provide, the November 9, 2012 letter from Manitoba Conservation and Water Stewardship. MR. SCHINDLER: Good morning, Mr. Chairman, Commissioners, all participants. My colleague, Dr. Rettie, and I thank you for the opportunity to be back here at the hearings, and we are looking forward to presenting you information on moose and boreal caribou on the adjusted route, as well as our EIS analysis on moose and caribou hunting area 14, Moose Meadows, and the GHA 14A/19A areas.

So please let me start off with boreal caribou. I will get organized here. I'm going to be quite brief in the interest of time, due mainly to the fact that the adjusted routing in the Wabowden area has resulted in a reselection of the preliminary preferred route which was the original preferred alternative for boreal Woodland caribou in the area.

Perhaps some background here. As you may recall, a number of specific activities were
\begin{tabular}{|c|c|c|}
\hline & undertaken as part of the original EIS, and were & Page 5984 \\
\hline 2 & expanded upon in the supplemental caribou report & \\
\hline 3 & provided for these proceedings. The selection of & \\
\hline 4 & the preliminary preferred route, \(P P R\), was based on & \\
\hline 5 & an extensively monitored program that has been & \\
\hline 6 & previously presented in the hearings. & \\
\hline 7 & In summary, we utilized the historical & \\
\hline 8 & and current Woodland caribou collaring data and & \\
\hline 9 & specific analysis to identify core winter and & \\
\hline 10 & summer habitat, as well as known calving areas. & \\
\hline 11 & Habitat modeling was undertaken using & \\
\hline 12 & the collar data to further augment our & \\
\hline 13 & understanding of habitat selection and supply in & \\
\hline 14 & the project study area, and within the Wabowden & \\
\hline 15 & evaluation range. These processes provided the & \\
\hline 16 & basis for selecting the PPR, as well as to provide & \\
\hline 17 & the best possible routing for the FPR after the & \\
\hline 18 & concerns relating to the Thompson nickel belt were & \\
\hline 19 & addressed. & \\
\hline 20 & The supplemental caribou report & \\
\hline 21 & provided detailed analyses of potential calving & \\
\hline 22 & habitat, winter habitat, and the overall & \\
\hline 23 & availability of these habitat types within the & \\
\hline & Wabowden range. We found that these habitat types & \\
\hline 25 & were not limiting. However, avoidance was the & \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|}
\hline & your attention to the various features that we & Page 5986 \\
\hline 2 & have here -- I'm trying to get this arrow to work. & \\
\hline 3 & I think I have it up here. & \\
\hline 4 & You can see the summer core areas that & \\
\hline 5 & were defined through some of the collaring & \\
\hline 6 & activity. And the green areas represent core & \\
\hline 7 & winter habitat that was also identified. Note & \\
\hline 8 & that boreal woodland caribou are more & \\
\hline 9 & concentrated, if you will, during winter, and & \\
\hline 10 & dispersed during the summer months. & \\
\hline 11 & Note that the FPR intersects summer & \\
\hline 12 & core areas near Highway 6, which would be this & \\
\hline 13 & area here. But these areas are in proximity to & \\
\hline 14 & existing linear development, so they are somewhat & \\
\hline 15 & disturbed already. So the areas where they do & \\
\hline 16 & intersect core summer range is within the & \\
\hline 17 & proximity of those features. & \\
\hline 18 & Also note that the FPR, this was & \\
\hline 19 & referred to as the fish hook area, this routing & \\
\hline 20 & was taking advantage of an area that did not have & \\
\hline 21 & as heavy use as these two core areas, but it still & \\
\hline 22 & intersects those two core areas as defined through & \\
\hline 23 & our collaring program. & \\
\hline 24 & I'm going to just briefly go through & \\
\hline 25 & the conclusions that Pat had brought up. But the & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & potential for the AFPR, in terms of the length of & Page 5987 \\
\hline 2 & the transmission line, it eliminates the & \\
\hline 3 & requirement of approximately 49 kilometres of the & \\
\hline 4 & new right-of-way through the Wabowden range. The & \\
\hline 5 & FPR follows existing right-of-ways in disturbed & \\
\hline 6 & areas, as was articulated by Pat as well, & \\
\hline 7 & resulting in no new additional fragmentation or & \\
\hline 8 & access within the area. & \\
\hline 9 & I believe it was also mentioned that & \\
\hline 10 & there are a number of forestry operating areas & \\
\hline 11 & that exist along 373 that also provide areas that & \\
\hline 12 & are previously disturbed where the transmission -- & \\
\hline 13 & the AFPR is being routed. & \\
\hline 14 & Use of those small core areas, those & \\
\hline 15 & summer range areas up towards Buckle Lake, north & \\
\hline 16 & of 373, the use of those areas is not expected to & \\
\hline 17 & change as a result of the AFPR. So these are the & \\
\hline 18 & main points regarding the AFPR and the Wabowden & \\
\hline 19 & area. The reduction in the new right-of-way by & \\
\hline 20 & the Wabowden range by some 49 kilometres, and & \\
\hline 21 & following existing right-of-ways in disturbed & \\
\hline 22 & areas is preferred. & \\
\hline 23 & Also by avoiding the area of core & \\
\hline 24 & winter habitat between those two little areas that & \\
\hline 25 & I have shown you on the map overall reduces the & \\
\hline
\end{tabular}

\begin{tabular}{|ll}
\hline 1 & regarding moose avoidance of disturbed areas, we Page 5989 \\
2 & undertook to verify our model by assessing moose \\
3 & locations relative to various features on the \\
4 & landscape, including high quality moose habitat. \\
5 & We also reviewed information from the \\
6 & environmental assessment consultation process. We \\
7 & looked at that information and undertook to assist \\
8 & us, where possible, where that information would \\
10 & help us with our final conclusions. \\
11 & we took an enhanced assessment of moose \\
12 & populations in the region to determine if moose \\
24 & delineated in light gray. \\
13 & decline could be attributed to increases in linear \\
14 & feature density on the landscape or other habitat \\
15 & factors that may be influencing moose densities \\
16 & and response within the region. We evaluated all \\
17 & potential factors of mortality and undertook moose
\end{tabular}

moose within the area. The purple lines represent a kernel distribution. We did not want to plot the actual locations of moose. It is recommended to us in typical practice not to publish actual point locations of moose. It can potentially provide a hunting map for somebody if they so choose. So if you can imagine within these areas that we are generating producing a kernel estimator similar to what we used for caribou, it is showing the concentration areas of where moose were seen.

And again I relate here, and here is -- the \(F P R\) is in green and the \(A F P R\) is in a shade of purple, and that is the area. If you can notice that the areas that we found moose were concentrated within the areas of game hunting area 13 along the edge, and we also had some concentration areas near Bellsite, near the bottom end of the FPR segment, and at the top end, and also along the AFPR segment near Mafeking.

Now, the results of our surveys. We saw a total 207 moose. Of these, 26 were observed in the actual Moose Meadows area and 86 moose were observed in game hunting area 14, within those areas that I previously identified.

Note that elk observation and data in game hunting area 14 , most of the elk were observed in or near agricultural areas in fringe lands near farms.

Also of interest and to be discussed later is the calves per 100 cows. And Dr. Rettie will be discussing some of the dynamics of the population in terms of the cow/calf ratios observed across the study area.

This is another slide of high quality modern moose habitat relative to the \(F P R\) and AFPR. I would like to reaffirm that the original high quality moose habitat model was developed with the entire project area using the LCCEB, which was considered to be the consistent classification data base that we had available to us that was consistent across the project study area.

It should be understood that there is a scale of habitat quality across the landscape and that there is everything from low, medium to high quality habitat, and that the original model again was developed to identify the best of the best.

Just a summary, and I think you have seen these figures already, but in terms of the
amount of model habitat, you have seen some of these numbers. In the FPR area, relative to the AFPR area, the AFPR area, as you can see, within the three mile buffer, and then within the right-of-way, there is a larger percentage of high quality modelled habitat within the AFPR area versus the FPR.
Now, I'm going to show you some -hopefully you will find these interesting. This is the area that was surveyed, just a bit of a blow up of that zone. We are looking at the FPR and the AFPR area. I'm going to show you some pictures and images of what we observed during our field work.
Three areas in particular, looking at the habitat composition within the area, we have the AFPR area in near the Mafeking zone, we have got some pictures from that particular area. And we will walk our way across the landscape as we proceed with this presentation.
So in the long sections of the AFPR, we find a number of areas similar to this. You will notice the patchy nature and abundance of willow and shrubs in proximity to mature conifer forest. From a moose perspective, this is good
habitat. And that food is proximately covered, and that cover can provide both escape cover and thermal cover.

These areas, in along the AFPR, there is a lot of previously disturbed areas, and appear to be as a result of past small scale forestry operations. Here is a bit of a close up, you will notice the shrub component in the more open forest areas. If you are on the ground in these areas, line of sight would be quite limited, however there is limits of a palatable browse here for moose.

Also we found a number of smaller trails coming in from the west side off agricultural land and other distributors. So there is a fair number of trails that do intersect the AFPR in that particular area.

The second area that I'm going to show you is what we might call the heart of the Moose, main Moose Meadows area, the core of the area. The following slides will illustrate what type of habitat we did see in that area. So maybe I will just jump to that.

In the main area of the Moose Meadows we find -- you will immediately notice large
tracts of natural bogs which are well defined by the LCCEB imagery used for assessing habitat as part of the Bipole III project. These are typical bog and wetlands habitats that are found along the FPR. You will notice stunted live Spruce and Tamarack trees, many of which have since died, likely as a result of age or poor site conditions.

In these areas you will find plant species associated with bog habitats, sphagnum moss, horsetail, and ericaceous shrubs such as Labrador tea. You will also notice that there is shrub cover emerging out -- and also note some of the adjacent heavy spruce areas. And I will show you what those heavy spruce areas look like. Here is examples of some heavy treed conifer. You will find these islands of Black Spruce within these large open bogs. There are dense stands of Black Spruce and Tamarack, and they are found on the better drained soils. So the trees tend to grow a little more robustly on these upper sites.

Again, the understory here is consistent with ericaceous low-lying shrubs, which are considered to be low quality forage for moose. These areas provide very good cover for moose however, particularly during the summer as they
provide a cool damp micro climate during the hot summer days.

And this slide shows a closer view of the understory in those wide open bogs that are found within the Moose Meadows area. And you again see the stunted Black Spruce and Tamarack, they are the trees that appear to not have needles, and this would not be considered typical moose habitat.

And I will show you what is -- what we are referring to as willow areas in the southern part of the Moose Meadows area. And we found there was some -- I apologize for the slide due to the falling snow, however, it does illustrate the extent of willow habitat in this particular area. You can also see from the slide that it is a very open canopy with the occasional taller Spruce and Tamarack tree scattered throughout.

Again, if we look closer at the dense willow shrub layer in this particular area, we did observe a good number of moose that are occupying this particular habitat. So this was a definite area that moose were really liking. So this willow habitat, and I'm showing you -- again, we are not showing you the moose points, but I can
tell that you within those areas identified in red that there was definitely some very good utilization by moose.

So there has been some speculation
regarding the expanse of these willow areas within the Moose Meadows. So we looked more closely and we utilized the forest resource inventory as part of our enhanced analysis. And we did -- we were able to determine the extent of those particular willow habitats.

Okay. Here we go. Based on this enhanced mapping, you can see the extent of the yellow willow areas. Just note that they are adjacent to the Bellsite drain, which is in this particular area here. And that the large willow area, the expanse of it we calculated to be approximately seven and a half to eight kilometres in size.

And just reflecting back, those purple areas reflecting the heart of the Moose Meadows were those other areas that I showed you. So the yellow areas are the extent of those willow habitats.
I'm going to turn our attention to the Bellsite area, which is an area where we do have
another little core observation area of moose, a hot spot, if you will. This picture provides an example where moose are found in the Bellsite area. You will notice the proximity to low intensity agricultural areas, and the patchwork of disturbance throughout the area. You can see the disturbance patterns in proximity to cover being mature spruce, and mixed wood areas and more open areas, providing again some good foraging habitats and proximity to cover.

If you have got a sharp eye, you can see there is a moose actually standing in that particular patch of habitat.

We had some very good data in terms of where these moose were located, so we undertook a bit of an analysis to look at what types of features these moose were being found in relation to. We tested moose observation data against a random data set to detect any statistical significance in any of our observations.

So here you can see that we have observed locations on the left, and random locations which would be a random generated number that was generated in GIS. And you can see in all cases that the features that we measured, compared
to the observed values, compared to the random moose values, in all cases were closer to those features than those random locations that we plotted within the survey area. quality habitat on the bottom. We have a \(P\) value of . 0001 , which represents a very good statistical evaluation of that particular site being closer. And I guess the best way to describe the \(P\) value would be the probability of obtaining a test result at least as extreme as the observation. So what we are assuming is a \(P\) value that is typically . 05 or less gives us a very good indication that that test result is significant. So move on specifically now to game hunting area 19A and 14A. Similar to the Moose Meadows area, we conducted a total count survey within the area defined. We have got PR 20 up here, and PR 217 to the south. So we conducted a total count similar to what was conducted for the Moose Meadows and Porcupine block. And again the contour lines represent the concentrations where moose were observed based on a kernel analysis, and again not showing the specific locations of moose.
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I will draw your attention to the high
I will draw your attention to the high

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So moose were generally thought to be more abundant in the western portion of this area, which is the main part of game hunting area 19A. We also observed a number of trails throughout the area. There were snowmobile trails throughout some of the core areas that are determined by these areas through there. So there is quite a bit of human activity that exists in that particular area. We observed 91 moose within that area.

And this slide illustrates the results of the aerial surveys relative to the high quality habitat.

We did not run the statistics that you saw previously for Moose Meadows using these data, however intuitively one would imagine that we would get very similar results as many of these moose seem to be associated with fringe agricultural lands and disturbed areas.

So, again, this is just reiterating what was already presented, but in terms of the \(A F P R\) and \(F P R\) within the game hunting area 19A/14A segment, the \(F P R\) versus the \(A F P R\) are quite similar in terms of the amount of modelled high quality habitat that's being intersected, both by the
three mile study area and the actual right-of-way. So I'm going to move on to the
enhanced assessment here. The main purpose of the enhanced assessment of the AFPR on moose was to assess historical and current information on moose habitat in Western Manitoba, to identify if possible any relationship between landscape or linear feature density that has occurred in the past, present or future, that could possibly explain moose decline.

Concern has been expressed during
these proceedings that increased linear
development will result in further population decline. Thresholds of disturbance have not been identified for moose as they have been for boreal Woodland caribou, such as we wanted to attempt to see if there was any relationship between some of the linear densities as they relate to population density through time.

So we undertook a number of activities
to assess possible major changes in landscape conditions that include the assessment of fire history, as well as looking at various habitat metrics, or landscape patterns that may have changed through time as a result of past human
\begin{tabular}{|c|c|c|}
\hline & activity We conducted some linear regression & Page 6002 \\
\hline 2 & analyses comparing historical moose densities to & \\
\hline 3 & habitat patterns in linear feature densities. We & \\
\hline 4 & also conducted population modeling, as I indicated & \\
\hline 5 & previously, on moose populations, which Dr. Rettie & \\
\hline 6 & will be discussing shortly. & \\
\hline 7 & So this is our study area. You will & \\
\hline 8 & note the game hunting area boundaries. We have & \\
\hline 9 & the Bipole III transmission line outlined in pink. & \\
\hline 10 & And you will note that within these, there is game & \\
\hline 11 & hunting areas that have been defined by Manitoba & \\
\hline 12 & Conservation and Water Stewardship. And these are & \\
\hline 13 & units by which all wildlife species are managed & \\
\hline 14 & through hunting regulations. These game hunting & \\
\hline 15 & boundaries have remained quite static through & \\
\hline 16 & time. And Manitoba Conservation occasionally & \\
\hline 17 & inventories the moose in these areas and other & \\
\hline 18 & species at the game hunting area level. & \\
\hline 19 & Various land inventory data were & \\
\hline 20 & available for the region and included mainly the & \\
\hline 21 & forest resource inventory. This information is & \\
\hline 22 & not updated that frequently, and as you can see, & \\
\hline 23 & the FPR data that was available for a number of & \\
\hline 24 & game hunting areas in our study area through time & \\
\hline 25 & is quite -- it is not necessarily consistent for & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & & Page 6003 \\
\hline 2 & So we reviewed what data were & \\
\hline 3 & available to us through time in terms of the & \\
\hline 4 & available landscape data. We also looked at other & \\
\hline 5 & sources of data that might help us understand the & \\
\hline 6 & level of fragmentation and level of linear & \\
\hline 7 & development that has occurred on the landscapes & \\
\hline 8 & through time. & \\
\hline 9 & So without getting into detail, these & \\
\hline 10 & are some of the data that we were able to acquire, & \\
\hline 11 & things like old road maps, historical road maps & \\
\hline 12 & from Manitoba Infrastructure and Transportation. & \\
\hline 13 & We also had mining data that we looked at other & \\
\hline 14 & disturbances as well, such as mining. And we got & \\
\hline 15 & that from the Manitoba Mines Branch data set, & \\
\hline 16 & drill holes up to 2008. We had fire history data & \\
\hline 17 & that we had from Manitoba Conservation, and the & \\
\hline 18 & forest resource inventories for those decades that & \\
\hline 19 & I indicated. We had Tolko harvest information & \\
\hline 20 & from 1968 to 2011, as well as more current & \\
\hline 21 & Louisiana Pacific harvest data, and plant harvest & \\
\hline 22 & data up to 2022. So we had the historical & \\
\hline 23 & harvesting information, as well as the current and & \\
\hline 24 & future. & \\
\hline 25 & So we had to create a common land & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & cover data base using all of these different & Page 6004 \\
\hline 2 & types -- not so much different types of forest & \\
\hline 3 & inventories, but different areas of forest & \\
\hline 4 & inventories, some of which have slightly different & \\
\hline 5 & names for the same habitat type. So we created & \\
\hline 6 & habitat classifications that were common through & \\
\hline 7 & all decades using the FRI. And the & \\
\hline 8 & classifications that we keyed in on were, you & \\
\hline 9 & know, contiguous, mature forest, shrublands and & \\
\hline 10 & wetlands were our main habitat types that we & \\
\hline 11 & looked at in terms of their structure and & \\
\hline 12 & composition through time. & \\
\hline 13 & Here is just an example of some FRI & \\
\hline 14 & from the 1980s. As you can see there is a whole & \\
\hline 15 & myriad of different cover types that may have & \\
\hline 16 & different types of classifications or different & \\
\hline 17 & heights, but they are representative of larger & \\
\hline 18 & communities or habitat classifications. And this & \\
\hline 19 & indicates how we stratified our habitat looking at & \\
\hline 20 & the landscapes through time. So we simplified the & \\
\hline 21 & data to show contiguous forest, contiguous & \\
\hline 22 & wetlands and shrublands. & \\
\hline 23 & In a lot of habitat modelling it is & \\
\hline 24 & not uncommon to assess habitat in terms of a & \\
\hline 25 & habitat or patch metrics, which can be generated & \\
\hline
\end{tabular}
in a GIS environment from software using landscape data such as the forest inventory, or LCCEB.

The shape and distribution of habitat patches and other landscape features can affect the use of landscape by wildlife. These are the same metrics that we used in the boreal Woodland caribou resource selection modeling, and all of the patch methods were generated in a commonly used program called Patch Analyst. And here we just have some of the more common metrics that can relate to determining use of a particular species on a landscape, such as a moose. Things like I will just look at edge density, the amount of edge relative to the landscape area, this is essentially a measure of whether it is very round or smooth, or whether it has got a lot of edge associated, which might be an aspect that moose may prefer. The number of patch size might be important. And the number of patches on a landscape might also be a metric that might help us detect what is going on with that landscape through time, with the effects of harvesting, road development, et cetera. So these were the metrics that we looked at.

So if we looked at all of the
available data that we had in terms of the landscape, and we also were limited by the amount of aerial survey data that were available, so ideally it would have been nice to be able to fill in all of these holes in terms of having good moose population estimates by area, by game hunting area. But, however, that was not possible. But we were able to get from Manitoba Conservation all of their historical survey data and we ended up with eight records essentially of events that we could assess on the landscape, the population density relative to the amount of linear feature on the landscape, as well as some of those patch metrics that \(I\) just described. Here is an example of linear disturbance over time. You can see in the purple lines it would have been from the 1980s, which shows up a different colour on my screen, but those purple lines and the more brown lines, pardon me, represent additional access that we would find today. So you can see there has been some additional access associated primarily with forestry operations.
Here is an example of how we were able to look at shrublands. This is the amount of
\begin{tabular}{|c|c|c|}
\hline & shrublands as identified in the 1980s, according & Page 6007 \\
\hline 2 & to the resource inventory. And then if we cast & \\
\hline 3 & ahead into the 1980s, you can see that the shrub & \\
\hline 4 & component has increased again, likely due to & \\
\hline 5 & forestry activities. & \\
\hline 6 & We also looked at fire activity, and & \\
\hline 7 & we were able to plot and look at the differences & \\
\hline 8 & within these landscapes by game hunting area using & \\
\hline 9 & fire as well as, in this case, these would be & \\
\hline 10 & considered shrublands. This is a 1980 fire. So & \\
\hline 11 & that area for that decade would represent a shrub & \\
\hline 12 & land component throughout that ten-year period. & \\
\hline 13 & So in summary, I have talked about & \\
\hline 14 & those eight records, those eight events that we & \\
\hline 15 & were able to conduct some analysis on, looking at & \\
\hline 16 & the amount of productive moose habitat within & \\
\hline 17 & those areas, the area of -- the era of landscape & \\
\hline 18 & data that was available to us, and the years where & \\
\hline 19 & we had population surveys. And we also indicated & \\
\hline 20 & years of major burn. & \\
\hline 21 & For those decades that we had survey & \\
\hline 22 & data, we averaged the densities to reflect the & \\
\hline 23 & landscape conditions that were associated during & \\
\hline 24 & that particular era. & \\
\hline 25 & So you can see we ended up with those & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & eight records that allowed us to conduct some & Page 6008 \\
\hline 2 & linear regression analysis. The analysis was & \\
\hline 3 & conducted using the moose density data to detect & \\
\hline 4 & for any significance along the landscape in linear & \\
\hline 5 & densities metrics that I previously described to & \\
\hline 6 & you. & \\
\hline 7 & The whole point of this was -- do any & \\
\hline 8 & of these variables explain population decline or & \\
\hline 9 & population density? Can we use these variables to & \\
\hline 10 & predict whether a moose population or whether the & \\
\hline 11 & Bipole III line will, in fact, result in the & \\
\hline 12 & tipping of the scale, so to speak, in terms of & \\
\hline 13 & linear density? & \\
\hline 14 & So here is an example of our linear & \\
\hline 15 & regression analysis that we conducted for a number & \\
\hline 16 & of variables across the entire data set. & \\
\hline 17 & If you can note here that the linear & \\
\hline 18 & regression relationship of moose density, as a & \\
\hline 19 & response variable to the percentage of shrub, & \\
\hline 20 & shows that there is perhaps a positive & \\
\hline 21 & relationship. However, the significance -- and & \\
\hline 22 & again I relate back to this P value, being very, & \\
\hline & very high in terms of its \(P\) value, suggesting that & \\
\hline & this is not a significant relationship. & \\
\hline 25 & Here is another example of plotting & \\
\hline
\end{tabular}
moose density to road density, or a linear feature density. And again, you can see these dots represent each of those eight records. And although there is a positive slope, again, the significance does not show up here. And we do not have any relationship significant in terms of -although it says that the higher the road density, the more moose you have, but again this is not significant.

An example of one relationship that we did find significant was the moose density relative to the percentage of wetland on the landscape. And this was perhaps the only significant finding that we did find within our analysis. So that you could see as the amount of wetland on the game hunting area level increases, moose densities do tend to decrease.

And just reflecting here in terms of the Moose Meadows area, there is a great amount of wetland, and I thought I would just display this particular image in terms of the model wetland within the Moose Meadows area.

So, in summary, results of single and multi-regression analysis did not yield any potential threshold value or significant
\begin{tabular}{|c|c|c|}
\hline & correlations that could be related to moose & Page 6010 \\
\hline 2 & density. Higher densities of moose were & \\
\hline 3 & associated with more shrub land or contiguous & \\
\hline 4 & mature forest, higher densities of linear features & \\
\hline 5 & in roads, and higher linear feature of road & \\
\hline 6 & length. However, in all cases these relationships & \\
\hline 7 & were not significant. & \\
\hline 8 & In spite of the fact that we were & \\
\hline 9 & unable to detect any significant relationship & \\
\hline 10 & between disturbance and moose density, we further & \\
\hline 11 & assessed future disturbance in a similar fashion & \\
\hline 12 & to what was done for the boreal Woodland caribou & \\
\hline 13 & supplemental report. We used the data from the & \\
\hline 14 & Louisiana Pacific 20 year forest management plan & \\
\hline 15 & to assist future habitat disturbance. And there & \\
\hline 16 & is also a limited amount of mineral exploration & \\
\hline 17 & that was utilized to assess future disturbance. & \\
\hline 18 & You can see that the contribution of the Bipole & \\
\hline 19 & III transmission line is quite small. & \\
\hline 20 & In comparison to other thresholds that & \\
\hline 21 & had been adapted for ecosystem management and & \\
\hline 22 & cumulative effects assessment, you can see that & \\
\hline 23 & the future linear disturbance as a result, & \\
\hline 24 & including Bipole and the future activities that & \\
\hline 25 & were identified for those game hunting areas, that & \\
\hline
\end{tabular}
compared to these thresholds, if you wish, for ecosystem sustainability and managed forest and industrial environments is still far below, or within the range of some of these targeted critical thresholds that have been identified.
THE CHAIRMAN: Mr. Schindler, would this -- I'm not sure, would this be an opportune time to break for lunch or would you rather plow through?
MR. SCHINDLER: Well, that is good timing, because that was my part and Jim is up next.
THE CHAIRMAN: Okay. We will break for lunch now and then resume with Dr. Rettie after lunch. So come back in an hour at 1:15, please.
(Hearing recessed at 12:15 and reconvened at 1:15 p.m.)
THE CHAIRMAN: Welcome back. I'd like to welcome a number of students from the University of Manitoba Faculty of Engineering, Environmental Studies class, who are here for a bit of a visit to see how this procedure works. I'll let you know, particularly whoever is in the hot seat at the time, they have to leave in about
an hour, so don't take it personally, it's not because of anything you might have said. They have to get back to their campus for yet more classes. So welcome.
And we're continuing with I believe
Dr. Rettie making a presentation on continuing the presentation on moose.
MR. SCHINDLER: If I could,
Mr. Chairman, for the record, there was a correction on slide 51. That's the slide that's on the screen. It makes reference in the text box to the right of the figure that there is an \(R\) squared value of 0.36 and a \(P\) value of 0.11 . I'd like to correct that to reflect what is in the figure, which would be an \(R\) value of 0.16 and \(a \operatorname{l}\) value of 0.33.
I had one other comment to make, which is right at the end of my presentation and I just wanted to make reference, and it's in our report relative to the percentage of future forest harvest area. In our report in terms of future disturbance in game hunting area 19A, we are aware of the bison ranch that exists. The extent of that bison ranch, and the effects that may be associated with, in terms of future habitat loss
or what have you with the moose population in game hunting area 19A, is essentially an unknown at this time. But we are aware of that, and it does have some potential ramifications to moose area 19.

MR. RETTIE: Good afternoon, Mr. Chairman, commissioners, ladies and gentlemen. I'm going to proceed now with some work that we did on population modeling of moose populations in western Manitoba. In the absence of data that support a relationship between regional moose population declines and habitat or landscape features, which was the information that Mr. Schindler presented just prior to lunch, we undertook a population modeling exercise to aid us in narrowing the potential causes and magnitude of moose population declines. We did this to help us understand any potential effects of the Bipole III AFPRs on moose populations in western Manitoba. So our objectives were to consider factors that may limit moose populations in western Manitoba. And for clarification, a limiting factor is any factor that quantifiably reduces a population from maximizing its growth. So particular to the modeling that I'm going to
discuss this afternoon, and in most cases as well, a limiting factor is something that would tend to increase mortality or cause a reduction in reproduction in some way. So, there is a candidate list of factors that I'm going to discuss with you, and we considered all of the factors on this list, and I'm going to go through how we included them in the models.

So the first thing we're going to talk about is diseases and parasites. I'm going to discuss the role of predation or the potential role of predation, the role of licensed hunting, and then a catch-all category of other, which as you will find out plays a large role in our inability to explain exactly what's happening with the moose populations. But there is a large amount of other mortality that must be occurring in order for the populations to be doing what we observed.

So to begin with, for diseases and parasites, we began by looking through the literature for information relative to moose populations in western Manitoba. We consulted with Manitoba Conservation and Water Stewardship. We consulted with the Canadian Cooperative
Wildlife Health Centre in Saskatoon, with Saskatchewan Environment, with veterinarians in MAFRI. And with respect to external parasites, consulted an expert at the University of Manitoba as well.
The first thing on our list here is chronic wasting disease. Chronic wasting disease is a transmissible spongiform encephalopathy. It's similar to BSE, mad cow disease, but it affects servants, so members of the deer family. It has never been detected in any species in Manitoba. So contrary to what Mr. Soprovich argued, there has never been a case of chronic wasting disease from this province. In Canada, it's found in Saskatchewan and Alberta, it has been working its way slowly eastward, but it is still a long way away from the Manitoba border.
The second one on our list is
brainworm, Parelaphostrongylus tenuis, and there has been a single verified case in moose in Manitoba. We got this from the Canadian cooperative wildlife health centre. This was an individual animal that was collected south of the Trans Canada highway, on the western side of the province near Cromer. It was submitted by a
Federal official, rather than somebody from the province here. There have been verified cases of \(P\) Tenuis in deer in the study area, and there are verified cases of \(P\) Tenuis in moose across the border in Saskatchewan, fairly close to the Manitoba border. So they had a fairly good set of records for suspected cases that were submitted, as well as those which were confirmed following investigation.
So our conclusion is that it is likely
that \(P\) Tenuis is present in the study area, and it is likely that at times it may infect a moose. But the prevalence is likely low.
The final one on our list here is winter tick. And it can -- occasional outbreaks of winter tick can yield mass mortality in moose. It is more dependent on environmental conditions rather than on the density of moose populations. And from consultation with individuals with Manitoba Conservation and anecdotal evidence that appears in the literature, there's evidence that suggests that about a third of the moose population in western Manitoba may have died in 2002. And the best piece of information that we have that confirms that is information from moose
population surveys conducted in Riding Mountain National Park, which are conducted annually, and they do show rapid population decline in that interval.

Moving on to predation; predators in the area include black bears and wolves. And a regional study conducted in Riding Mountain

National Park shows that wolves consume
approximately three times as much elk as they do moose. So, when given an option, they prefer to prey on elk as opposed to moose. From other North American studies, wolf and bear predation is highest on moose calves. And additionally to the point on the slide, predation on moose calves occurs mostly before the end of summer. So in western Manitoba, where winter moose surveys show that there are more than 50 moose calves per hundred cows, which is a fairly high recruitment rate, that's long after most predation would have occurred, and that's a high recruitment rate.

So in general, those recruitment rates that we're observing throughout the study area are inconsistent with high levels of predation, either by wolves or by bears, where we would expect to see recruitment levels lower, and predation would
have occurred prior to the time at which surveys are conducted.
So this figure shows moose population densities through time from western Manitoba and from eastern Saskatchewan. So there's potential for disease and parasites in all of these populations. There's also potential for winter tick outbreak. The blue line may not show up clearly as blue. The upper line here that's broken in a couple of places, that is moose populations within Riding Mountain National Park. So this line here is . 6 animals per square kilometre, this is .8, you can see the moose populations in Riding Mountain are relatively high and consistent through time. This goes back to the late 1970s and goes right through to present day.
Now Riding Mountain National Park has a diverse prey base. It has thriving wolf and black bear populations, but it does not have hunting.
The three reddish lines, which may be more clear on your handouts than they are on this slide, these lines here, this is the lower of the three, this is the middle most, and there is a
\begin{tabular}{|c|c|c|}
\hline & third one right here. Those are all from moose & Page 6019 \\
\hline 2 & populations in wildlife management zones in & \\
\hline 3 & eastern Saskatchewan that come close to the & \\
\hline 4 & Manitoba border. And again, those populations are & \\
\hline 5 & subject to predation, as are all of those & \\
\hline 6 & populations and they are also subject to licensed & \\
\hline 7 & hunting. The populations that we see down near & \\
\hline 8 & the bottom here are all Manitoba populations. So & \\
\hline 9 & they are the ones with the lowest densities out of & \\
\hline 10 & all of these. & \\
\hline 11 & To try to demonstrate this somewhat & \\
\hline 12 & graphically, and I don't know how well this is & \\
\hline 13 & showing up, the darker colours here are associated & \\
\hline 14 & with higher densities in moose. And we have & \\
\hline 15 & divided this into two time periods, and these two & \\
\hline 16 & time periods were chosen because we had population & \\
\hline 17 & estimates from more of the area -- more of the & \\
\hline 18 & wildlife management zones in Saskatchewan, and & \\
\hline 19 & game hunting areas in Manitoba than we did for & \\
\hline 20 & other periods. So opportunistically, we had stuff & \\
\hline 21 & from the early to mid '90s and from the late & \\
\hline 22 & 2000s. So if we note here in Riding Mountain & \\
\hline 23 & where the colour is darkest, it's still darkest in & \\
\hline 24 & the later period. In Saskatchewan, we've got one & \\
\hline 25 & moose population here which increases through that & \\
\hline
\end{tabular}
time. Another one that decreases slightly. But the ones in Manitoba, game hunting area 18 here, has shown a decline, game hunting area 14 has shown a decline. The white spaces unfortunately are populations for which we don't have density information for those time periods.

So essentially note that the
populations in the unhunted areas in Riding Mountain stayed high, and in Saskatchewan one increased, one decreased, but in general they compare favourably with the populations of Manitoba.

So in conducting the modeling, where possible, we use empirical data from the study area, that was our first choice. Where we had empirical data to put into the models from our study area, that's what we chose. And what we had was winter survey data from western Manitoba, which showed a cow/calf ratio of 56 calves per 100 cows, and a bull to cow ratio of 66 bulls per 100
cows. In essence for every 100 cow moose
observed, there were 56 calves and 66 bulls. Now
one thing I do need to note here is that the cow/calf ratio presented here of 56 per 100 is slightly higher than that that appeared in the
enhanced assessment of the AFPR document that was submitted on February 25th, discovered a minor area of calculation. In that document, the number that shows up is 52 calves per 100 cows, and the number that \(I\) found that is the correct value to use is 56. The values that I'm going to show in the model outputs here reflect the revised value. The conclusions of the modeling don't change. There is some slight variations in the numbers that the models put out, but the overall conclusions don't change.

So beyond the empirical data that we have for the study area, our next choice of data source is with the literature. And the literature is fairly clear that annual adult female survival is approximately 90 percent. So in a range of 88 to 92 percent per year. And the other thing is that there's a 50/50 sex ratio at birth. So those are the values that were built into our models.

So to look specifically at the input parameters, the key values here are the female survival rates. That's what I want you to focus on for a moment. This column here shows female survival rate, and I want you to look at the survival rate for yearlings and for prime aged
adults, both at 91 percent per year and for older adults it's at 81 percent per year. There is a slight decline in survival as animals get older. And taken together, and accounting for the number of individuals that would be in each one of these age classes, this amounts to 88 percent survival for adult female animals on an annual basis. Now that's the key assumption that we made in this model. These adult female survival rates are the key assumption of the models. We had no empirical data, and so this is an important feature of the models.

The male survival rates that were selected here are values that essentially related to the female survival rates. These are the values that were chosen that generate the 66 bulls per 100 cows that we saw in the survey. So obviously in order to have -- if we have a 50/50 sex ratio at birth and we have fewer males than females in late winter, it tells us that the male survival is lower than female survival. And so by playing with the values proportional to the female values, by reducing them by a fixed amount, I arrived at these numbers as being sufficient to generate the observed sex ratio during the winter
\begin{tabular}{|c|c|c|}
\hline & survey And the calf survival rates I'm going to & Page 6023 \\
\hline 2 & talk about with the next slide. And we had a & \\
\hline 3 & terminal age for animals of each sex. & \\
\hline 4 & So the next slide, the values in this & \\
\hline 5 & slide, again, they are consistent with the & \\
\hline 6 & literature. But the most important thing is when & \\
\hline 7 & we combine the age specific parturition rate, the & \\
\hline 8 & proportion of animals that are giving birth in & \\
\hline 9 & that age class, so yearlings, none of them are & \\
\hline 10 & giving birth. Animals that are two year old at & \\
\hline 11 & the time in which they are having their first & \\
\hline 12 & calf, we allow 30 percent of two year olds to be & \\
\hline 13 & giving birth, and then older than that we were up & \\
\hline 14 & to over 90 percent for prime aged adults, and & \\
\hline 15 & 70 percent for older age adults. Again, twinning & \\
\hline 16 & rates, same thing, there was an age specific & \\
\hline 17 & difference. These values -- we could have chosen & \\
\hline 18 & any values at all to put into these, but the most & \\
\hline 19 & important thing is that when we combine the & \\
\hline 20 & parturition rate and the twinning rate and the & \\
\hline 21 & calf survival rate that we dictated in the & \\
\hline 22 & previous slide, the end result is that -- I will & \\
\hline 23 & come to these points in a moment -- the end result & \\
\hline 24 & is that by choosing these values, we come up with & \\
\hline 25 & the 56 calves per 100 cows in late winter. So it & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & & Page 6024 \\
\hline 2 & the parturition rate should be lower or higher. & \\
\hline 3 & If I changed that, I would have to change the & \\
\hline 4 & twinning rate or 1 would have to change the & \\
\hline 5 & survival rate because collectively they come & \\
\hline 6 & together to specify 56 cows per 100 calves in late & \\
\hline 7 & winter. So it matches the empirical data & \\
\hline 8 & collected by Manitoba Conservation. & \\
\hline 9 & So just for clarification, the & \\
\hline 10 & twinning rate of 30 percent, that's 30 percent of & \\
\hline 11 & the 91 percent would have had twins. & \\
\hline 12 & The next slide that I'm going to put & \\
\hline 13 & up here, ignoring the right-hand column for a & \\
\hline 14 & moment, this is -- the information in the two & \\
\hline 15 & left-hand most columns is information that I & \\
\hline 16 & presented to you on October 31st. At that point, & \\
\hline 17 & I had the parameters listed down the left-hand & \\
\hline 18 & column. I had values for moose populations in the & \\
\hline 19 & centre. I had a comparative column for caribou & \\
\hline 20 & values in the right hand most column. So you may & \\
\hline 21 & recall that slide. So these are the same values & \\
\hline 22 & that I'm showing here for moose as I showed to you & \\
\hline 23 & four months ago. But what I want to do here is & \\
\hline 24 & show you a comparison of the values, the general & \\
\hline 25 & values that are appropriate for moose, and how & \\
\hline
\end{tabular}
they compare to the values that went into our models. So generally two and a half years age of maturity, while in the model we allowed 30 percent of them to be one and a half years old when they became reproductively mature, and the remaining 70 percent at two and a half years. So that's consistent. Up to 90 percent pregnancy rate, you see that we have lower than 90 percent pregnancy rate here. Twinning rates up to 80 percent, typically 25 to 50. We have specified 30 percent for all animals over two years old. And what that does when you combine all of these values in these top three columns, is it gives us a fecundity rate, calves born per female. Again, the comparative value in the literature, it could be as high as almost one and a half. So given the fecundity rate that we've got and calf survival rate we've got, it gives us an annual recruitment rate with these parameters specified, with the survival parameters specified that I gave you earlier, gives us an annual recruitment rate of 0.56 . That's consistent with the observations made in aerial surveys by Manitoba Conservation. The adult female survival rate, as I mentioned earlier, when weighted for
\begin{tabular}{|ll|}
\hline 1 & the different age classes, it is 88 percent \\
2 & survival annually. Again that is consistent with \\
3 & what's found in the literature. And those two \\
4 & things together give us a potential population \\
5 & growth rate, a Lambda rate of \(1.13 . \quad\) So that could \\
6 & be argued to be higher, could be argued to be \\
7 & lower, but that's consistent with the best \\
8 & empirical evidence that we've got, as well as the \\
9 & best information we have from the literature. \\
10 & in 1992 Manitoba Conservation did its next and \\
11 & to our survey data; calf/cow ratio, \(0.56, ~ b u l l ~ t o ~\)
\end{tabular}
moose survey in this game hunting area and it estimated that there were 2,480 animals. So we ran -- I ran a population model excluding licensed hunting and just using the parameters, the base parameters that went into the model, and concluded that the potential population would have been around 4,400 animals, had that population grown freely without any additional limiting factors. When we add in a licensed harvest mortality, and while this is presented as a percentage here, in fact we used the mean number of moose killed per year given to us by Manitoba Conservation. And when we added in licensed harvesting mortality, instead of going up to 2,480, or rather instead of going up to the potential of 4,400 animals, it went up to just over 2,000. So what that suggests is that our model allowed, with 8 percent mortality from hunting, allowed a population to grow to 2,000. And in fact, the estimate from Manitoba Conservation is that that population grew to close to 2,500. So our model may be underestimating the potential growth for these populations, or that could be survey error.
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                        So moving on to the next time period,
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1992 to 2002, again there's 2,480, that's the 1992 estimate. It's our starting population estimate for the next time interval. 494 is the population estimate for 2002, again from Manitoba Conservation Wildlife survey. Running a base model, it suggests that in that 10 year time period, this population could nearly triple from almost 2,500 to almost 7,500 animals. When we account for 12 percent annual licensed harvest mortality, the population would still have had the possibility of increasing to close to 5,900 animals. But in fact, we saw population that declined by 80 percent to just under 500 animals. So I went in and I started adding an additional amount of mortality until I could drive that population estimate, the model population estimate, down to approximately what was observed by Manitoba Conservation. And to do that, I had to add 20 percent of the population succumbing to mortality, each and every year for that 10 year period. So in order to take this population of 2,500 more or less animals from 1992, allowing 12 percent of it to be harvested annually by licensed hunters, another 20 percent of it disappeared somewhere else in order to get us down to the
numbers observed.

So in 2002, you may recall, or you may not, that earlier \(I\) mentioned a winter tick outbreak which was assumed to have happened in 2002, and assumed to have taken out a third of the moose population. Well, this population estimate of 494 made by Manitoba Conservation would have occurred in late winter. Winter tick kills animals in the spring. So to account for that \(I\) took 494, I removed a third of it, and rather than starting my next interval with 494 animals, I started it with 329. So that's two-thirds of the population. So if we allow that winter tick killed a third of the population there, again, we ran a base model, just over 900 animals were possible by 2011, accounting for hunting mortality, which hunting had been seriously curtailed by Manitoba Conservation at this point, the model with licensed hunting still allowed for a population of nearly 900 animals, but in fact the population declined to 148. So again, we have lost more than half the population in that nine year interval. And again, that requires nearly 20 percent of the population to have succumbed to some other source of mortality.

So I did the same thing for the other game hunting areas, and had similar results although the magnitude of other mortality required is somewhat different. So game hunting area 12 during the 1990 s, 12 percent licensed hunting mortality, we were required to add another 6 percent mortality to get to the observed population decline. Game hunting area 13/13A, from '97 to 2007, the additional mortality was 5 percent. In the most recent couple of years in game hunting area 13/13A, 23 percent. These are the two values for game hunting area 14/14A that I just spoke about. Game hunting area 18 to 18C, in the early years in the \(90 s\) and through to 2007, 4 to 6 percent additional mortality, and most recently 20 percent additional mortality. So there is a lot of unexplained mortality required in order to account for the population declines that have been seen here.

So to go back through the limiting factors that we had, and the information that we had available to us, moose recruitment rate is high. Manitoba Conservation and Water Stewardship tell us that. High recruitment rates are associated with low predation rates; that comes
from the literature. Given normal adult survival, the population should be growing. So the normal adult survival is what \(I\) put into the population models and it tells us that the population should be growing, with the amount of observed licensed hunting. But the observed population decline that we have seen, it requires high and persistent additional sources of mortality. And our models again told us that. So in game hunting area 14/14A, there's an unexplained 20 percent of the population annually required to disappear somewhere other than to licensed hunting, other than to the base survival which accounts for normal rates of predation, normal rates of disease. 20 percent per year for a 20 year period to get us from moose population year 2,500 in 1992 to moose population of about 150 in 2011. So our survey data are inconsistent with high predation rates. Recruitment is high. There is no evidence for disease related mortality. The models have accounted for winter tick mortality, and each one of those populations that spanned that 2002 year where winter tick mortality was presumed to have occurred, there was a third of the population removed at the
appropriate time interval. So that's already been accounted for.

The models account for a maximum effect of licensed hunting. So even though most hunting will occur on adult male moose, in the model it was specified that it was non-selective. So basically if there were a hundred moose taken, they were taken out in proportion to their age and sex. And the other unknown mortality rate is very high.

Now the point that I'd like to make is the purpose of modeling is to use existing data to include all of the available information and to make the fewest assumptions required. In this case, the single assumption that was made was that adult female mortality is consistent with that observed in the literature. And the outcome of that is to come up with a working hypothesis that fits the data and requires the fewest assumptions. And by process of elimination, non-licensed hunting is the best working hypothesis. If we have accounted for disease, we have accounted for parasites, we have accounted for licensed hunting, the survey results suggest that it's not predation, the best working hypothesis, and this
\begin{tabular}{|ll|}
\hline 1 & isn't an answer, it is not a conclusion, is that \\
2 & it's non-licensed hunting. \\
3 & So in the end, the plausible additive \\
4 & effect of access related mortality from Bipole III \\
5 & from hunting or predation is insignificant by \\
6 & comparison. There's a large amount of hunting \\
7 & that's gone on there historically, and it's not \\
8 & related to the linear features of Bipole III. And \\
9 & essentially there is a far greater potential for \\
10 & that other mortality to explain decline and the \\
11 & additive effect due to access is very small by \\
12 & comparison, because it is associated with a very \\
13 & small part of the regional moose range. \\
25 & in the eastern region of Manitoba, Crichton 2004
\end{tabular}
did document a positive increase in the Happy Lake area moose population within game hunting area 26 on the east side. That was a positive response following intensive access development, forestry operations, and that positive response was a result of both access management and hunting closures within that area. There was a similar but less dramatic increase that was also observed in another study area as part of a cooperative moose management program in eastern Manitoba, where there was a positive response within an area that was remained open to hunting, but access was controlled only from the perspective of keeping trucks out, and not Aves and snowmobiles. So it was some access restrictions. I spent some time discussing with some of the people in Saskatchewan and unfortunately there's not a lot of published data in terms of moose response after disturbance, but Saskatchewan has monitored the effectiveness of road management in wildlife refugees in forest harvest areas to protected moose from overhunting, and they have documented increases in local moose populations both after large area and corridor game refuges. Large area refuges would be a refuge within quite
\begin{tabular}{|rl|}
\hline 1 & an extent of an area and road refuges or game \\
2 & corridor refuges would be refuges that they have \\
3 & established along roads that there would be no \\
4 & hunting within 300 metres of each side of the \\
5 & road. There was a major study that was done in \\
6 & Ontario, Rempel, 1997, illustrated that moose \\
7 & population rates of increase were positive in \\
8 & unmodified clear-cut areas and remained constant \\
9 & in modified clear cuts. And what they thought, \\
10 & that the modified clear cuts had more access \\
11 & associated and they thought that the response of \\
12 & the modified cuts was a consequence of hunting. \\
13 & increase in linear density that, you know, could \\
24 & to determine a threshold or something that would \\
14 & moose was considered to be the main variable in \\
15 & explaining moose response. And there is no \\
16 & documented effects or concern regarding increased \\
17 & predation by wolves as a result of these increased
\end{tabular}
be attributed to something like Bipole that would result in further effects to those moose populations.

So the increase of linear densities within the game hunting areas that we have described, 12, 14 and 19A, as a result of Bipole are minimal, and well below those linear densities found in the literature for ecosystem management and moose management.

Some quick conclusions on game hunting area 14. The Moose Meadows segment of the AFPR, it has 35 square kilometres, or 21.98 percent of high quality moose habitat within the local study area. Within the 3 -mile corridor, compared to the FPR, the local study area has a 6.59 kilometres, so the AFPR in the Moose Meadows, and we have described that, contains more high quality moose habitat. And based on the results of aerial surveys conducted on December 4th and 6th, the AFPR, compared to the FPR intersects, or comes in proximity to some additional areas of high moose density such as the Bellsite area which are in close proximity to existing access.

The GHA 19A and 14A segment of the AFPR, as we have discussed in our presentation,
the amount of high quality habitat within the local study area and the right-of-way is
comparable. Based on the results of the aerial survey we conducted between February 4th and 5th, 2013, the AFPR compared to the FPR intersect areas, the AFPR intersects less areas of the observed moose. However, we are aware that Manitoba Hydro has indicated some additional specific mitigation measures for approximately eight kilometres of the FPR to further reduce the potential impacts to moose in that game hunting area 19A, 14A.
So overall, based on the results of our enhanced analysis and the proposed and enhanced mitigation that has been recommended, the conclusions in the EIS remain consistent with those predictions in the original Bipole EIS and the Bipole III technical report, and the route adjustment supplemental report for the Bipole III transmission line. The residual effects on moose resulting from the project, whether it be the AFPR or the FPR remain as not significant. Thank you.
MR. OSLER: Mr. Chairman, just to conclude --
THE CHAIRMAN: Mr. Osler.

MR. OSLER: So the panel has reported on and reviewed the supplemental report. The overall conclusions I stated earlier, which were that there were no changes in the EIS assessment from the original December report, except for the ones that we have dealt with today in some detail on caribou with respect to an improvement in the Wabowden area, the extensive concerns and issues examined with respect to moose in both the Moose Meadows area and the game hunting areas 19A and 14A, and the issues which arise in the Wabowden area with respect to mining, which are being addressed through mitigation discussions and the issues which arose out of this examination with respect to culture in 19A and 14A, which Ms. Petch has gone into in some detail.

With respect to the slide 76 of the presentation you just had on moose, there is a reference to additional specific mitigation measures per eight kilometres in the event that the \(F P R\) route was retained in the area, game hunting areas 19A and 14A. Those measures are discussed or summarized in a letter of February 25th of this year, which has been provided on the record to all the participants.

That's all. Thank you.
THE CHAIRMAN: Thank you. We'll now
turn to participants cross-examination. We'll
follow the order of questioning that we used before the break. So TCN, I don't believe there's anybody here from TCN today. Pine Creek is next. Mr. Mills.

MR. MILLS: Thank you, Mr. Chairman, I'd love to give you a sense of how long we'll be, but I suggested to the secretary we're probably an hour. We have received so much information today that is good information, but a lot of it is new to us. And with first blush, I'd just like to observe in advance that we will ask you for a bit of latitude as you may sense we overlap or cross paths with previous lines.

Chief Boucher would have liked to have been here today, but as a result of a tragedy in his community he wasn't able to attend. He sends his regrets. In conversation he did ask, and I'll just get past this point quickly, that he'd like to thank Manitoba Hydro for their commitment to working with us. And those were Chief Boucher's words this morning.

We would like to start with the
\begin{tabular}{|c|c|c|}
\hline & supplementary information that we were provided & Page 6040 \\
\hline 2 & with. It's difficult for us to put it together in & \\
\hline 3 & themes, Mr. Chairman, so I think we'll just & \\
\hline 4 & quickly pass through it and ask our questions. & \\
\hline 5 & THE CHAIRMAN: Thank you. & \\
\hline 6 & MR. MILLS: In wondering what to & \\
\hline 7 & expect from Hydro, we referred to the August 16th & \\
\hline 8 & description of consultation, and we understand & \\
\hline 9 & that what we have been provided with is Hydro's & \\
\hline 10 & position on consultation. And we were reminded of & \\
\hline 11 & the Province of Manitoba's Justice representative, & \\
\hline 12 & Mr. Hannon, confirming that so long as every & \\
\hline 13 & reasonable effort is made to inform and consult, & \\
\hline 14 & such effort would suffice. & \\
\hline 15 & We'll start with the Bipole III & \\
\hline 16 & transmission project route adjustment supplemental & \\
\hline 17 & report. And we'd like to go through it and ask a & \\
\hline 18 & series of questions, and I don't know who to & \\
\hline 19 & direct them to. So I will direct them to the & \\
\hline 20 & panel of Mr. McGarry, Pat, maybe if you can hand & \\
\hline 21 & these off as you see fit. & \\
\hline 22 & Under the executive summary, you & \\
\hline 23 & indicate that the GHA 19A and we will focus all of & \\
\hline & our questions on the 19A portion of your work. & \\
\hline 25 & I'm quoting on the second page. The FPR & \\
\hline
\end{tabular}
\begin{tabular}{|rl|}
\hline 1 & intersects a relatively undisturbed area of moose Page 6041 \\
2 & habitat south of provincial trunk highway 20 and \\
3 & west of Pine Creek, and the AFPR shifts the route \\
4 & to the east. I guess right off the top, Pine \\
5 & Creek First Nation is terribly concerned about the \\
6 & conflict with the very large fenced enclosure that \\
7 & we believe straddles both of these routes. So I \\
8 & guess to quickly cut to the chase, Pat, could you \\
9 & give us an understanding of your understanding of \\
10 & the location, size, potential conflict of that \\
11 & fenced enclosure? \\
12 & potential effect of that on say moose, it is not \\
24 & possible at this time. We don't know the intent \\
23 & Mr. Mills. In terms of the bison ranch enclosure, \\
14 & we are aware of it as you are from the \\
15 & documentation provided to us by Manitoba \\
16 & Conservation. The area is relatively large, as \\
17 & you saw on the map that was circulated. The
\end{tabular}
of the development, how much is going to be fenced, what will be included or excluded. It's all very preliminary information, and we have not been able to assess that to any degree as part of our current review.
MR. MILLS: Thank you. On the next page under GHA 19A and 14A, you make reference to members of Pine Creek First Nation suggested that the AFPR be adopted north of provincial trunk highway 20, and then travel east to an unused road allowance close to the community of Camperville to avoid crossing this bison ranch, that I think we are in agreement we don't know the extent of it. As I read through the community consultations, I find several references to not only Pine Creek, and I'll get to them as we pass through, but at least three other groups or organizations that made reference to a concern of this conflict. Pine Creek attended on two occasions and provided Manitoba Hydro with an alternate to the alternate preferred route, which our client, Pine Creek First Nation, was comfortable would address their concerns. And we find very little, if any, mention of that in the supplementary documents. Could you maybe flush out a bit to us
the extent to which you considered what Pine Creek provided you with in terms of an alternate to the alternate preferred route?

MR. JOYAL: Mr. Mills, on page 3-34 of the supplemental report, bullet number five is a reference to Pine Creek First Nation presenting a route adjustment to Manitoba Hydro on two separate occasions, the Cowan open house and in a meeting with yourself and Manitoba Hydro representatives. This, as you noted, travels north of PTH 20 and moves further east towards the Community of Camperville and Pine Creek. At the point of when we received it, it did fall outside of the area being studied for these adjustments. And as it states in bullet \(A\) of that same page, the adjustment falls outside of the area surrounding the route under review. Currently Manitoba Hydro has noted this modification and will review pending the outcomes of the regulatory process, as no decision has been made in that area.

MR. MILLS: Yes, I read that, pending review and will consider in the future. Is there a mechanism that would allow us to incorporate that minor revision that Pine Creek would like to see after this CEC process and recommendation is
over?
MR. McGARRY: Not in our mind. But it could come through licensing, I suppose. What we have laid out here is what we were requested to do in terms of looking at alternative routing. On another point, we don't necessarily see classing of this bison closure as a conflict as perhaps some of your members do see it that way. We're not on the same page. Putting a transmission line through essentially a pastured environment is compatible use for a transmission line and a livestock operation. So to the degree that you have introduced an alternative route, it is not under consideration. It was noted, and those who feel it's important to review that can make a decision on that. But for now, we were just assessing the AFPR and the FPR.
MR. MILLS: Thank you. Mr. McGarry, I guess, when I go to introduction 1.2.1, background to proposed route adjustments, you described to Manitoba Conservation and Water Stewardship that provided Hydro with a letter that Manitoba Hydro in consultation with Wildife and Ecosystem Protection and Lands Branches provided detailed options, including maps. You don't mention MAFRI

review of agriculture and measurements thereof in terms of the AFPR in relation to the FPR in terms of the amount of land it crosses for agricultural production. So that has been included. We received the same TAC comments as everyone else. I don't have it in front of me but if there is nothing from Mr. Schindler, then we wouldn't have it either.
MR. MILLS: So if we're looking to MAFRI for their information on this bison herd, its size, location, right-of-way, fence lines, orientation, we can't seem to find any
information. And I take it you don't have any either, is that fair to say?
MR. McGARRY: Well, the only information we have is what was provided by Ms. Dagdick, which was a summary of Crown land holdings for two operations for bison ranching.
MR. MILLS: Yes. Okay. Thank you.
In your letter on the 23 rd to Elise Dagdick, under GHA 19, you indicate that the FPR is in a relatively undisturbed area. Yet subsequently, you and \(I\) exchanged some information that seem to indicate that a very large portion of the \(F P R\) passes through those lands that you just
\begin{tabular}{|c|c|c|}
\hline & described Could you and I agree now that & Page 6047 \\
\hline 2 & relatively undisturbed area, based upon the & \\
\hline 3 & information that we now have, is not an accurate & \\
\hline 4 & description of the route through the FPR? & \\
\hline 5 & MR. McGARRY: Not exactly in terms of & \\
\hline 6 & agreement. As you saw in our presentation, what & \\
\hline 7 & we did identify for -- which might remain as & \\
\hline 8 & somewhat undisturbed is an eight kilometre stretch & \\
\hline 9 & where we didn't observe fence lines or other & \\
\hline 10 & relatively easy access to the centre of GHA 19. & \\
\hline 11 & So that central portion of where the FPR passes & \\
\hline 12 & through game hunting area 19, in my mind remains & \\
\hline 13 & relatively undisturbed. But at the north end and & \\
\hline 14 & the south end there is clearly access. & \\
\hline 15 & MR. MILLS: Thank you. Moving along & \\
\hline 16 & on \(1(a) 21\) under the TAC review, we received & \\
\hline 17 & November 9th correspondence from a Ryan Coulter & \\
\hline 18 & with Provincial Highway Planning and Design & \\
\hline 19 & Branch. Pat, are you aware that Pine Creek First & \\
\hline 20 & Nation has raised concerns with Hydro with regard & \\
\hline 21 & to unlit intersections and the possible conflict & \\
\hline 22 & of construction traffic and school buses during & \\
\hline 23 & hours of winter construction? Have you heard any & \\
\hline & of that discussion? & \\
\hline 25 & MR. McGARRY: Yeah, I believe you put & \\
\hline
\end{tabular}
on the record recently those concerns representing your client, regarding construction traffic and intersections.

MR. MILLS: I see. We raised those
similar concerns with the province through our Conservation discussions and yet we find no response or consideration of it anywhere. Are you aware of, or did you receive any, was that matter discussed in meetings that aren't documented? Or are you aware of any consideration or any advice put to you by Conservation that Highway Planning and Hydro should consider this point?

MR. McGARRY: I can't say that I'm aware of any such discussion between us and Manitoba Highways relating to intersection control.

MR. MILLS: So it's fair to say that that serious concern that we raised wasn't discussed between Hydro and Conservation or between Hydro and Transportation?

MR. McGARRY: I can't say with certainty, but I'm not aware. And in terms of the effects, we still have to go through the construction process that will engage the community. Those concerns you and your community
\begin{tabular}{|c|c|c|}
\hline & & Page 6049 \\
\hline 2 & seems to be need to address some of those issues. & \\
\hline 3 & MR. MILLS: Trying to move along, 2.4 & \\
\hline 4 & GHA 19A again, on the last page. The statement is & \\
\hline 5 & made, "The route was selected in consultation with & \\
\hline 6 & wildlife officials from Manitoba Conservation and & \\
\hline 7 & Water Stewardship." Was there any attempt at the & \\
\hline 8 & time that you were consulting with wildlife & \\
\hline 9 & officials to consult with Pine Creek First Nation & \\
\hline 10 & management or governance with regard to this & \\
\hline 11 & revised route prior to it being tabled on October & \\
\hline 12 & 29th? In your memory, was there any discussion or & \\
\hline 13 & consultation with Pine Creek before this alternate & \\
\hline 14 & preferred route was tabled? & \\
\hline 15 & MR. McGARRY: No, the process was that & \\
\hline & we were requested by Manitoba Conservation and & \\
\hline 17 & Water Stewardship to meet and review with Wildife & \\
\hline 18 & branch on alternative routing. And that was done & \\
\hline 19 & through the course of several meetings in & \\
\hline 20 & different regions to come up with that routing. & \\
\hline 21 & And that eventually is what was accepted in the & \\
\hline 22 & process. & \\
\hline 23 & MR. MILLS: Well, you referred to, the & \\
\hline & route was selected in consultation with Wildlife & \\
\hline 25 & officials. And we understood that Pine Creek was & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & & Page 6050 \\
\hline 2 & that the definition of consultation was every & \\
\hline 3 & reasonable effort. & \\
\hline 4 & Would you agree with me that no & \\
\hline 5 & reasonable effort was made to consult with Pine & \\
\hline 6 & Creek First Nation prior to the alternate & \\
\hline 7 & preferred route being presented? & \\
\hline 8 & MR. McGARRY: On that particular & \\
\hline 9 & selection of an adjusted route, no, there wasn't & \\
\hline 10 & consultation. But that is a different process in & \\
\hline 11 & the sense that the consultation followed the & \\
\hline 12 & selection. It's part of the assessment process. & \\
\hline 13 & MR. MILLS: So consultation with Pine & \\
\hline 14 & Creek was after the fact? & \\
\hline 15 & MR. McGARRY: Not after the fact, it & \\
\hline 16 & was after in the sense of chronological time, but & \\
\hline 17 & in a process it was slightly different from say & \\
\hline 18 & selecting an alternative route, as we did in round & \\
\hline 19 & two and three, there was some initial & \\
\hline 20 & consultation, but the movement toward the & \\
\hline 21 & preferred route usually came later in the process. & \\
\hline 22 & In this case, we started with an alternative & \\
\hline 23 & preferred route. So the process was modified, but & \\
\hline 24 & it did allow for input and consultation with First & \\
\hline 25 & Nations. & \\
\hline
\end{tabular}

MR. MILLS: Thank you. Moving along to 3.3.4, stakeholder project meetings, you know, the word stakeholder fascinates me, so I have looked everywhere for a definition. And isn't the Province of Manitoba a stakeholder in Bipole III? MR. JOYAL: Well, yes, in the sense of Conservation, we do meet with Conservation as well, yes.

MR. MILLS: Okay. So you go to great length to provide us with confirmation of all the meetings you held with stakeholders. Yet I continually hear people talk about, well, we met with Conservation on such-and-such a date, or we had a discussion with Conservation on
such-and-such a date. And I look through all of your stakeholder reports that you provide, and I don't find any record of any consultation with the stakeholder, the Province of Manitoba. So clearly in Hydro's opinion, either the Province of Manitoba is not a stakeholder, or you choose to withhold your consultation with that stakeholder. Help me to understand this?

And the reason I ask clearly is we'd like to know what you guys talk about. Because it seems a lot comes out of those conversations, and
we don't get to them. Is the Province a
stakeholder? Are there minutes of your meetings with that stakeholder, and would you undertake to provide us with copies of the minutes of those meetings?
MR. McGARRY: The Province is a
stakeholder. I guess you need to distinguish, one being a licensing body and one providing other conservation information. When it's run through a licensing body such as the environmental approval, a lot of it is done by correspondence, which is all on the record, as to what the input and output of a process was. It's usually process related.
The conversations with Wildlife branch, for instance, were with the presence of environmental approvals branch. So in that regard, I mean, it's transparent because there is correspondence that is provided to the record for everybody to see.
MR. MILLS: Well, Pat, I'm sorry, I
disagree with you on it's transparent. We have some knowledge, it's been referenced verbally by your staff and by an assistant Deputy Minister, that there was a meeting on February 6th, I believe. CEC may have been present. But there
were discussions, and there have been discussions, we're told, that had been held with yourselves and the province with regards to this bison ranch. And we can't seem to gain access to those discussions. So I ask again, and I won't belabour the point, will you undertake to provide us with the minutes of your meetings with Conservation that are not included in the supplementary information you have provided us with?

MR. McGARRY: There were meetings, again, through a process and through a TAC process. I don't believe there were actually meeting minutes recorded because it was a process issue and some initial presentation of material. In terms of bison ranch, the information you have seen, other than we know it's there, we don't know the size or scale of development, has not been part of our assessment. So I'm not sure that there's much to be gleaned there. And I don't believe we do have minutes for that particular meeting.

MR. MILLS: So you hold meetings with
the province to discuss all of this information and minutes aren't taken?

MR. McGARRY: Not officially. I
suppose we all have our notes, but not as such.
But, again, in that case it was preliminary
presentation of material we had regarding the assessment. If the prime concern is bison ranching, it was not a big part of the discussion, other than to acknowledge its presence. MR. MILLS: So I take it I'm not going to get to see anything with regards to your meetings with the province?
MR. McGARRY: That would be correct.
We frankly don't have those minutes because they weren't recorded as such, or become part of any record. It was mainly for information, and to discuss enhancement in that meeting was actually -- a big part of that was enhanced mitigation, which did result in that letter from myself to Ms. Dagdick on that discussion.
MR. MILLS: Thank you. I'd like to move into the appendix 3(c) meeting notes. There is two Pine Creek First Nation meetings referenced, one on December 5th, and the other on December 18th, page 3(c) 6 and \(3(c) 7\).
Trevor, you would probably be best to respond to this. And I apologize, Mr. Chairman, I'm going to very briefly drift back over to a
\begin{tabular}{|c|c|c|}
\hline & previous matter. Bear with me for just a few & Page 6055 \\
\hline 2 & seconds. & \\
\hline 3 & Our records indicate that at the Clean & \\
\hline 4 & Environment Commission hearing in Dauphin, there & \\
\hline 5 & were at least 90 Pine Creek First Nation members & \\
\hline & in attendance. And at the community meeting which & \\
\hline 7 & was held, there were at least 104 Pine Creek First & \\
\hline 8 & Nation members present. Do those numbers come & \\
\hline 9 & close to your sense of the size of those & \\
\hline 10 & representations? & \\
\hline 11 & MR. JOYAL: I don't remember 90, but & \\
\hline 12 & there was a substantial amount of Pine Creek & \\
\hline 13 & members at the CEC hearing in Dauphin. & \\
\hline 14 & MR. MILLS: Okay. & \\
\hline 15 & MR. JOYAL: For your secondary & \\
\hline 16 & meeting, what date was that? & \\
\hline 17 & MR. MILLS: I believe it was & \\
\hline 18 & October 15th, we met at Pine Creek First Nation & \\
\hline 19 & and discussed many of the matters we're talking & \\
\hline 20 & about here. & \\
\hline 21 & MR. JOYAL: I wasn't at that meeting & \\
\hline 22 & but would have to find out. & \\
\hline 23 & MR. MILLS: Okay. I can assure you & \\
\hline 24 & that the log was 104 Pine Creek First Nation & \\
\hline 25 & Members. & \\
\hline
\end{tabular}

Just to put Pine Creek's concerns in perspective with you, would it be fair to say that for one group to have two presentations with you approaching 100 members, that that would be far and away the most significant in terms of size of presentations you received?

MR. JOYAL: I guess it would all be relative. In TCN during round four, we did have 437 attendees at one open house.

MR. MILLS: Did you really?
MR. JOYAL: Yeah.

MR. MILLS: I didn't know that. All
right. We thought we took the prize.

MR. JOYAL: It would be in the round four summary of the previous session.

MR. MILLS: Okay. I didn't know that.

Thank you.

If we carry on to record of meeting
\(3(c) 14\), the meeting was with moose management committee. I note that LP was present, Manitoba Conservation was well represented, Manitoba Trappers Association was well represented, Moose for Tomorrow, MMF and MMF were well represented.

On \(3(c) 16\), pardon me, at the top of \(3(c) 16\) there was a question of whether the GHA 19A
adjustment would go through the bison ranch. Manitoba Hydro indicated that the line would be adjacent to the bison ranch and may go through a corner of the ranch.
Is that information correct as we know it today, Pat?
MR. McGARRY: No, I guess we did not have the information at the time. There was some speculation, I guess, inaccurate on the location of the combined holdings for those bison ranch. And so those comments predated current knowledge.
MR. MILLS: So that statement then is incorrect?
MR. McGARRY: In the sense, yes, because now from our recent estimates and recent information, as we show in the presentation, our line length for either route in that area is 15 and a half kilometres in the AFPR and 13.2 for the FPR.
MR. MILLS: You give us to a decimal point the length of the conflict. Do you know exactly where the fence lies?
MR. McGARRY: Where the fence lies?
MR. MILLS: Yes.
MR. McGARRY: No, not exactly. The
mapping that we have done is on land holdings. We don't know the extent of the fencing.
MR. MILLS: I see. And those are the
land holdings based on the two lists that Elise gave you?
MR. McGARRY: Based on those two lists and the combined information we got from 2011 repro map.
MR. MILLS: Okay. So did you include the numbered company or the -- we understand that there are five corporations that hold, that that range includes. Did you include all five or just the two?
MR. McGARRY: Mr. Dyck compiled it for us and indicated just three.
MR. MILLS: Okay. We'll try and keep moving.
At the Camperville community open
house, summary 3 (c) 28 , the community, 12
attendees, and of the 12 there were multiple
references and concerns over the bison ranch. That was noted on January 9th. That's what I'm reading -- John Dyck was recorded by?
MR. JOYAL: Yes.
MR. MILLS: So we have Pine Creek
raising concerns over the bison ranch, we have the moose group raising concerns over the bison ranch, we have Camperville raising concerns over the bison ranch, we're sharing with you alternative route to avoid the bison ranch. And we come here today not, in fairness, Pat, not even knowing -we come here today with Manitoba Hydro not even knowing really where the fences of the bison ranch sits. Is that fair comment?

MR. McGARRY: In terms of the fencing, yes. But, again, getting back to the idea of conflict, we're trying to build a transmission line. And in terms of compatibility of use between a transmission line and the bison ranch, big, small or in between, is not that big a factor in terms of the overall impact assessment, because we don't see that conflict, and that putting transmission lines through pasture land or other unused land such as in that area doesn't present an impediment to routing.

MR. MILLS: We agree. However, I
think it does affect concerns about moose
management, and I think we'll get to that.
Moving on, 3(f)2, Manitoba Hydro makes the statement that a representative of Pine Creek
First Nation attended the Cowan open house and presented a routing option for consideration to avoid the bison ranch. No specific rationale was provided for avoidance of the bison ranch.
I was present for that discussion and I was present for the concerns expressed about the bison ranch at your offices. Is that a fair statement that Pine Creek has provided Manitoba Hydro with no specific rationale for avoidance of the bison ranch?
MR. JOYAL: From the discussions with the individual in Cowan, who did come, who did state -- prior to your arrival, he did note that we should just be avoiding the bison ranch. No further detail as to why was provided to me during that discussion.
MR. MILLS: Thank you. We'd like to move in to 4.8 and a discussion of the aquatic environment. We retrieved from the original EIS sites 233 to 246 inclusive. We heard in your presentation references to the numbers of waterways that are crossed in the final preferred route and in the alternate final preferred route.
And we seem to agree with you that you're talking about site 233 being the North Duck
\begin{tabular}{|c|c|c|}
\hline & passing through the Slater the Pine the North & Page 6061 \\
\hline 2 & Pine you refer to it, and it is the South Pine, & \\
\hline 3 & some other unnamed waterways. We observed that on & \\
\hline 4 & several of these waterways, I'll take the North & \\
\hline 5 & Duck which is site 233 of your original EIS, fish & \\
\hline 6 & habitat present, yes; DFO Manitoba watershed & \\
\hline 7 & classification, A; fish habitat classification & \\
\hline 8 & important; sensitivity rating high. & \\
\hline 9 & So you now ask us to consider an & \\
\hline 10 & alternate final preferred route that moves a & \\
\hline 11 & significant distance down the Slater, but I guess & \\
\hline 12 & you are telling us that -- pardon me, that's the & \\
\hline 13 & North Duck, I apologize, site 233. The alternate & \\
\hline 14 & final preferred route moves a significant distance & \\
\hline 15 & down all of those watersheds. And it's clear to & \\
\hline 16 & me that because of frozen waterways, you are not & \\
\hline 17 & able to repeat those classification and & \\
\hline 18 & sensitivity studies. But considering the & \\
\hline 19 & importance and sensitivity of those waterways, do & \\
\hline 20 & you think it would be in order for you to go back & \\
\hline & to those in the spring and have a good look at the & \\
\hline & proposed new crossings, if the alternate final & \\
\hline & preferred route or some other route is where you & \\
\hline & choose to cross those waterways? & \\
\hline 25 & In other words, is Hydro confident & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & that we can rely upon those crossing reviews that & Page 6062 \\
\hline 2 & are now not location appropriate? We're talking & \\
\hline 3 & about the same waterways but we're talking about & \\
\hline 4 & different crossing locations. & \\
\hline 5 & MR. McGARRY: Yeah. Well, they are & \\
\hline 6 & location specific. The assessment, though, we had & \\
\hline 7 & our aquatic consultant prepare stream booklets & \\
\hline 8 & which rated the crossings based on known & \\
\hline 9 & measurements, either acquired from other studies & \\
\hline 10 & or from remote sensing and observation. And also & \\
\hline 11 & to make the assessments on suitability, or & \\
\hline 12 & sensitivity and importance of fish habitat. & \\
\hline 13 & Those are reasonable assessment tools, & \\
\hline 14 & in my mind. They will give us a pretty good idea & \\
\hline 15 & of what's there. And considering the type of & \\
\hline 16 & development which is the transmission line & \\
\hline 17 & crossing, and the fact that DFO has agreed by & \\
\hline 18 & creating operational statements that allow a & \\
\hline 19 & developer proponent to work in these environments & \\
\hline 20 & with very little impact on fish habitat, which we & \\
\hline & are confident we can do. And I would say DFO & \\
\hline 22 & agrees with that process. As such, I personally & \\
\hline 23 & don't see the need to go back and survey them, & \\
\hline 24 & except in terms of, if there are slope & \\
\hline 25 & sensitivities or other erosional concerns that & \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|}
\hline & of concern to Pine Creek? In other words, rather & Page 6064 \\
\hline 2 & than doing what perhaps might be expedient, but & \\
\hline 3 & rebalancing the Bipole layout so that the 480 & \\
\hline 4 & metre span pushes the towers 240 metres from the & \\
\hline 5 & centre line of waterways? Is that something that & \\
\hline 6 & you could consider for us? & \\
\hline 7 & MR. McGARRY: I mean, theoretically it & \\
\hline 8 & can be considered, but it depends on the site & \\
\hline 9 & circumstance whether, you know, a 230 metre buffer & \\
\hline 10 & is really needed. & \\
\hline 11 & The current prescription is generally & \\
\hline 12 & 30 metres of riparian buffer for the stream & \\
\hline 13 & crossings. & \\
\hline 14 & All the towers will be above high & \\
\hline 15 & water mark, and they are positioned by the & \\
\hline 16 & construction department to make sure that those & \\
\hline 17 & towers are not in locations where they would & \\
\hline 18 & interfere with the riparian process above the high & \\
\hline 19 & water mark and so on. I mean, we can pose that & \\
\hline 20 & question, but again we would base it on case by & \\
\hline 21 & case and need, environmental need. & \\
\hline 22 & MR. MILLS: I guess just before we & \\
\hline 23 & leave the supplementary, we have included the TAC & \\
\hline & comments with it, and then we'll go into the & \\
\hline 25 & information you have just provided us with. & \\
\hline
\end{tabular}
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On February 20th, or shortly
thereafter, we received the TAC comments that I suspect you did at the same time. In reviewing them, and we haven't been able to get a handle on the full consideration of TAC. The only information we have is that on February 1st, when the TAC requests went out, they were forwarded to 24 individuals. And as we review the TAC response, it seems to have come back from eight individuals.

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Of those eight individuals, I have highlighted some of their observations, and I'd just like to poll you on these and if you can give us some comfort as to how you are addressing them.
Adara Kaita, Crown lands programs and policy manager, indicates that they have -- or she indicates with regard to GHA 19A, that authorization approval from the director of forestry branch is required and that the lands have been coded for hay and grazing, which do not support development, and additional comment from the regional lands manager will be required.
Have you received authorization or approval from the Director of Forestry Branch at this time, or can you give me some sense of when
\begin{tabular}{|c|c|c|}
\hline & you would expect to receive that? & Page 6066 \\
\hline 2 & MR. DYCK: We would expect that that & \\
\hline 3 & would be received as a matter of course of & \\
\hline 4 & licensing of the project, that wouldn't be & \\
\hline 5 & received before that, or as a separate process. & \\
\hline 6 & MR. MILLS: Okay. She indicated that & \\
\hline 7 & additional comments from the regional lands & \\
\hline 8 & manager will be required. Have you received any & \\
\hline 9 & additional comment from the regional lands & \\
\hline 10 & manager? & \\
\hline 11 & MR. McGARRY: No, we haven't. & \\
\hline 12 & MR. MILLS: You haven't. As a result & \\
\hline 13 & of TAC, have you requested those, or have you & \\
\hline 14 & requested the authorization or approval from the & \\
\hline 15 & Director of Forestry as yet? & \\
\hline 16 & MR. McGARRY: No. Again, it's & \\
\hline 17 & contingent on licensing and the selection of the & \\
\hline 18 & final preferred route in that area. & \\
\hline 19 & MR. MILLS: Okay. She also indicated & \\
\hline 20 & that the regional forester, Bruce Holmes, is to be & \\
\hline 21 & contacted. Has he been contacted? & \\
\hline 22 & MR. DYCK: As part of the concerns & \\
\hline 23 & that he raised in regards to the adjusted & \\
\hline & preferred routes, both in game hunting area 14, as & \\
\hline 25 & well as 19A and 14A, I was in contact with him to & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & just clarify some of his concerns and to address & Page 6067 \\
\hline 2 & them, yes. & \\
\hline 3 & MR. MILLS: Okay. We have never seen & \\
\hline 4 & his concerns, and you just indicated that he has & \\
\hline 5 & concerns and that you have clarified them. Could & \\
\hline & we get some information from Hydro in that regard? & \\
\hline 7 & As I had said earlier, there seem to & \\
\hline 8 & be these conversations with Conservation that we & \\
\hline 9 & don't get access to. We'd love to know what his & \\
\hline 10 & concerns are and we'd love to know what your & \\
\hline 11 & mitigation or response to those concerns is. & \\
\hline 12 & Could we have those? & \\
\hline 13 & MR. McGARRY: Well, we'd have to look & \\
\hline 14 & into it. There is some e-mail from John Thorpe on & \\
\hline 15 & that as a result of a TAC comment, I believe. & \\
\hline 16 & So -- and I can't say for sure right now exactly & \\
\hline 17 & what we have our ability to provide. & \\
\hline 18 & MR. MILLS: Mr. Dyck just indicated he & \\
\hline 19 & shared information with Bruce Holmes, and that he & \\
\hline 20 & had offered him some assurances. Could we have & \\
\hline 21 & those assurances? & \\
\hline 22 & MR. DYCK: Did you say Bruce Holmes or & \\
\hline 23 & John Thorpe? & \\
\hline 24 & MR. MILLS: I said Bruce Holmes, the & \\
\hline 25 & regional forester. And you just responded by & \\
\hline
\end{tabular}
describing a conversation you had had, and you provided some of additional assurances.
MR. DYCK: Yes, sir. My understanding was you were talking to me in regards to the area 19A/14A, and the regional forester for that area is John Thorpe out of the Swan River office. Bruce Holmes is the regional forester in the Northeastern region out of Thompson. He would not be involved in the game hunting area of 19A or 14A.
MR. MILLS: Well, with respect to Provincial Conservation, it indicates that you were to contact Bruce Holmes. I'm trying to move along.
Mr. Duncan's memorandum of
February 15th, which I believe you have a copy of, indicates that after considering all available Wildlife information, Wildlife branch notes that moose management concerns would be reduced by adopting the AFPR versus the FPR in GHA 14. And he goes on to indicate that either the FPR or AFPR will create human access and wolf predation challenges in 19A.
We can't really question what he meant as he's not here and not available to us. So I'll
\begin{tabular}{|c|c|c|}
\hline & pass on that & Page 6069 \\
\hline 2 & He does indicate on several occasions & \\
\hline 3 & that he has considered all available Wildlife & \\
\hline 4 & information, and as you know, we dispute that. & \\
\hline 5 & As part of the 8 of 24 TAC comments & \\
\hline 6 & that they at least provided us with, James & \\
\hline 7 & Stibbert on February 14th, it's part of the TAC & \\
\hline 8 & review, he indicates that -- my highlights are: & \\
\hline 9 & As the information provided contained & \\
\hline 10 & no information on drinking water & \\
\hline 11 & sources or systems, ODW cannot comment & \\
\hline 12 & on whether the proposed route changes & \\
\hline 13 & would have any adverse effect on & \\
\hline 14 & public or semi public water systems." & \\
\hline 15 & Would you agree with Mr. Stibbert that & \\
\hline 16 & you provided no information on drinking water & \\
\hline 17 & sources or systems? & \\
\hline 18 & MR. McGARRY: Not for this assessment. & \\
\hline 19 & But, I mean, it was one of our VECs to get water & \\
\hline 20 & and water quality, groundwater. The degree we & \\
\hline 21 & needed for this development was pretty minimal. & \\
\hline 22 & For mobile construction camps, if we need water, & \\
\hline 23 & we'll most likely haul it. And the Office of & \\
\hline 24 & Drinking Water has a higher public need in & \\
\hline 25 & protecting water for users. The type of & \\
\hline
\end{tabular}
development we are talking about here in transmission line, we don't expect to have any effect on drinking water, at least from a groundwater source. That's what we reviewed in our VEC.
MR. MILLS: Of the 8 TAC responses
that Ms. Dagdick was able to receive, Kevin Jacobs, at the behest of Sharon Gurney, responded with regards to water quality management. He indicated that he's reviewed the documents on behalf of Water Quality Management and has no substantive comment at this time.
So I guess water quality wasn't
presented to you as a concern by TAC and, therefore, you don't have any additional comments or information with regard to concerns expressed on water quality?
MR. McGARRY: No, other than what we said in the AFPR report in regards to groundwater quality.
MR. MILLS: Thank you. Gordon Hill, impact assessment archeologist, indicated that the developer, i.e. Manitoba Hydro, must contract a qualified architectural consultant to conduct a heritage resources impact assessment. Have you
\begin{tabular}{|c|c|c|}
\hline & contacted a qualified architectural consultant? & Page 6071 \\
\hline 2 & MR. McGARRY: We're probably going to & \\
\hline 3 & use an archeological consultant but -- & \\
\hline 4 & MR. MILLS: I am sorry, did I say & \\
\hline 5 & architectural? My past creeping in. So thanks, & \\
\hline 6 & Pat. & \\
\hline 7 & MR. McGARRY: We haven't as such, but & \\
\hline 8 & we have noted that TAC comment from Mr. Hill and & \\
\hline 9 & we'll endeavour to fulfil that need. & \\
\hline 10 & MR. MILLS: Okay. As we're crossing & \\
\hline 11 & that point, and it's a bit of a stray, but we & \\
\hline 12 & suspect that there's information that was & \\
\hline 13 & accumulated as part of this process, that's held & \\
\hline 14 & by Triple M, or MMM, or a company of some such & \\
\hline 15 & name. And we have heard rumours that that & \\
\hline 16 & information may not be available as a result of & \\
\hline 17 & disagreements with Hydro. & \\
\hline 18 & Is there information outstanding that & \\
\hline 19 & has been assembled or collected that that & \\
\hline 20 & organization has not provided to you? & \\
\hline 21 & MR. McGARRY: No. Anything we, in our & \\
\hline 22 & relationship with MMM, anything we contracted with & \\
\hline 23 & them was provided. We have the information we & \\
\hline 24 & requested and, in my mind, there's nothing & \\
\hline 25 & outstanding from them. & \\
\hline
\end{tabular}


\begin{tabular}{|ll|}
\hline 1 & have gone through the assessment of the FPR. We Page 6074 \\
2 & have landed on that. We were asked by the \\
3 & province to look at additional routing, which we \\
4 & have done. So I think this process has to \\
5 & conclude on that basis. But respecting that, yes, \\
6 & people may have opinions on where they think the \\
7 & route should go. \\
8 & supplementary once more. Under 1.0 introduction, \\
10 & 1.2.1, your document makes the statement that \\
11 & Manitoba Conservation and Water Stewardship \\
12 & requested that Manitoba Hydro, in consultation \\
13 & with Wildlife and Ecosystem Protection and Lands \\
23 & requested, before the alternate final preferred \\
14 & branches provide detailed options and a through 19A was settled on? \\
15 & recommendation for the most suitable option to \\
16 & relocate the proposed HVDC line. \\
17 & in on and presented for consideration. It seems
\end{tabular}
that were suggested by Wildlife branch. There was three in the Moose Meadows area. I can't say for sure what was put on the table to look at in game hunting area 19 before we landed on the AFPR, but it was held through several meetings to review those alternatives and land on a route that seems to satisfy the primary concern at that time, which was moose.

MR. MILLS: Okay. As you may sense, our client isn't wild about either of the two routes, and they believe there is a hybrid available which would work for them. Could you provide us with the other options that you considered in 19A before you settled on the alternate final preferred route presentation?

MR. McGARRY: Once I know what they are, because my memory is foggy on this because it occurred in September, October last year. I suppose we have some record of it somewhere of what was on the table at that time.

THE CHAIRMAN: Okay. Mr. Mills, isn't that something that you could make in your presentation when you do that on Thursday?

MR. MILLS: Yes. I'll move on.
THE CHAIRMAN: Or Wednesday, whatever
    day it is.
MR. MILLS: So I guess in closing, the only open question is, \(I\) would ask you if you could undertake to provide us with any correspondence you have had with Conservation or the Province that hasn't been provided in the supplementary, so that we could review it. And I didn't hear an answer?
MR. McGARRY: In terms of
correspondence, we'll check. We think the record is reasonably complete, but we can do a check for you to see if any correspondence we have had directly with Environmental Approvals Branch has not been included. But as far as I recall, what's on the record is pretty much all the correspondence we have had, but we'll check.
MR. MILLS: Thank you. Mr. Chairman, that completes our review of the supplemental assessment, and now we'd like to go through the information that was provided this morning.
THE CHAIRMAN: How long do you think you might be?
MR. MILLS: Same time. How far in are we? I don't have a watch.
THE CHAIRMAN: Well, you have done an
hour now.

MR. MILLS: Forty-five minutes.
THE CHAIRMAN: Okay. Let's go for about 15 or 20 minutes, and then we'll take a break and carry on.

MR. MILLS: There are four distinct presentations, and we'll break those off as you see fit.

And I guess, and again I'm not sure who is best, so Mr. McGarry, Pat, I'll ask you.

The Bipole III transmission project supplemental environmental assessments on route adjustments which you provided to us for the first time this morning, we'd like to go through to page 9, where you made the statement -- Mr. Dyck made a reference to some agricultural land and you make the statement in, I don't have a slide number on this, but it's the bottom slide on your page 9, assessment results biophysical, that AFPR avoids agricultural lands.

Our understanding is that any form of livestock enclosure, feed lot, grazing, is managed under MAFRI, and that it is viewed as agricultural lands. Has Hydro slipped up in not considering MAFRI's land issues with regards to livestock when
\begin{tabular}{|c|c|c|}
\hline & you make the statement that AFPR avoids & Page 6078 \\
\hline 2 & agricultural lands? It seems to us that it passes & \\
\hline 3 & right through agricultural lands, that being the & \\
\hline 4 & bison enclosure. If that's just misspeak -- & \\
\hline 5 & MR. McGARRY: Yeah, the AFPR, the & \\
\hline 6 & criteria applied generally to routing, although & \\
\hline 7 & not necessarily in this case, but as a consequence & \\
\hline 8 & of the route chosen, cultivated croplands in & \\
\hline 9 & particular are generally avoided, or more so for & \\
\hline 10 & the AFPR than the FPR. & \\
\hline 11 & MR. MILLS: We'd agree with you. But & \\
\hline 12 & would you agree with me that you do not avoid & \\
\hline 13 & livestock agricultural lands? & \\
\hline 14 & MR. DYCK: If I can just add to that? & \\
\hline 15 & That statement was -- it's unclear in the slide & \\
\hline 16 & that it was specific to the Wabowden AFPR area, & \\
\hline 17 & and there is no agricultural lands in that area. & \\
\hline 18 & MR. MILLS: I see. It's immediately & \\
\hline 19 & below the GHA 19A slides, so I thought it might & \\
\hline 20 & have had some relation. & \\
\hline 21 & MR. DYCK: It's under terrain and & \\
\hline 22 & swallows. & \\
\hline 23 & MR. MILLS: Okay. & \\
\hline 24 & MR. DYCK: And that was the & \\
\hline 25 & biophysical effects assessment on that discipline. & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline 1 & MR. MILLS: You make reference as you & Page 6079 \\
\hline 2 & go on in that presentation to your LSA & \\
\hline 3 & measurements with regard to GHA 1A, and you refer & \\
\hline 4 & to them a couple of times. The numbers you use, & \\
\hline 5 & do they exclude the 70 square miles of bison & \\
\hline 6 & lands, or do they include all of the lands in the & \\
\hline 7 & area? & \\
\hline 8 & MR. DYCK: Are you talking about the & \\
\hline 9 & local study area calculations on habitat? & \\
\hline 10 & MR. MILLS: Yes. & \\
\hline 11 & MR. DYCK: They would be included in & \\
\hline 12 & all of those calculations. Those values are based & \\
\hline 13 & on land cover. They have nothing to do with & \\
\hline 14 & property ownership or the way it's managed. & \\
\hline 15 & MR. MILLS: Okay. So if there's a & \\
\hline 16 & fenced enclosure within those LSA's, you have & \\
\hline 17 & included that land in your calculations? & \\
\hline 18 & MR. DYCK: Yes, that's correct. & \\
\hline 19 & MR. MILLS: If 1 go through page 20 in & \\
\hline 20 & your presentation, socioeconomic, you say that GHA & \\
\hline 21 & 19A virtually avoids annual croplands. Could we & \\
\hline 22 & agree that you're not referring to traditional & \\
\hline 23 & crops when you make that statement? & \\
\hline 24 & Pine Creek First Nation harvests 22 & \\
\hline 25 & different traditional products from those lands. & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & And you make the statement that you avoid annual & Page 6080 \\
\hline 2 & croplands. When you make that statement, have you & \\
\hline 3 & considered any Aboriginal croplands or any & \\
\hline 4 & Aboriginal harvesting areas? & \\
\hline 5 & MR. McGARRY: Not as such. We're & \\
\hline 6 & talking about commercial agriculture in the sense & \\
\hline 7 & of annual cultivated land for crop production. & \\
\hline 8 & MR. MILLS: Okay. So when you are & \\
\hline 9 & doing a socioeconomic assessment of the effect of & \\
\hline 10 & GHA 19A, and when you lead us to believe that & \\
\hline 11 & there's no effect on annual croplands, you are not & \\
\hline 12 & considering Aboriginal crops, are you? & \\
\hline 13 & MR. McGARRY: No, but that is & \\
\hline 14 & considered under culture, as Ms. Petch reviewed & \\
\hline 15 & this morning. & \\
\hline 16 & MR. MILLS: Okay. Have you been to & \\
\hline 17 & the Forks and enjoyed the booth that sells Pine & \\
\hline 18 & Creek First Nations traditional crops? & \\
\hline 19 & MR. McGARRY: No, I haven't. & \\
\hline 20 & MR. MILLS: We'll have lunch there one & \\
\hline 21 & day, Pat. & \\
\hline 22 & MR. McGARRY: I'll put it on my & \\
\hline 23 & agenda. & \\
\hline 24 & MR. MILLS: Great. To pass through to & \\
\hline 25 & page 25 of this report, at that time there was & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & & Page 6081 \\
\hline 2 & some forms of vegetation and the effects. & \\
\hline 3 & Did your process request or obtain any & \\
\hline 4 & information beyond the ATK that has been referred & \\
\hline 5 & to with regards to Pine Creek First Nation's & \\
\hline 6 & traditional crops? & \\
\hline 7 & MR. McGARRY: What we had for ATK or & \\
\hline 8 & traditional land use study, there was not new & \\
\hline 9 & information sought for this assessment, but all & \\
\hline 10 & that information was reviewed. And also through & \\
\hline 11 & the consultation process that is documented here, & \\
\hline 12 & we have had, as you know, discussions with the & \\
\hline 13 & Pine Creek First Nation. And to the degree that & \\
\hline 14 & came up in those discussions, it would have been & \\
\hline 15 & recorded. & \\
\hline 16 & MR. MILLS: The First Nation has & \\
\hline 17 & indicated to both Provincial Conservation and & \\
\hline 18 & Hydro that there are 22 traditional crops that & \\
\hline 19 & they attempt to harvest through both of these & \\
\hline 20 & routes. I'm just asking you when you did your & \\
\hline 21 & "vegetation review" Did you consider those 22 & \\
\hline 22 & types of vegetation? & \\
\hline 23 & MR. McGARRY: I don't have the whole & \\
\hline 24 & list here, but certainly plant species or other -- & \\
\hline & or woody species for that matter that were of & \\
\hline
\end{tabular}
interest, or have been listed to a certain degree in the presentation, the complete list would have to come from our botanical consultant. But, yes, certainly common species of berries were considered. The amount of area was identified along the AFPR and the \(F P R\) as part of the botanical review.

MR. MILLS: You indicated on page 26, bottom slide, that you had concern for two species, the lyre-leaved rock cress and timber oat grass, and we were wondering if you had concern for the conservation of any of the traditional species that are through both of those routes?

MR. McGARRY: Yes, we do. And actually the slide above on page 26 , on domestic resource use, list some of the species that we understand are important to Pine Creek First Nation and others, including, well, areas for berry picking, medicinal plant gathering, seneca root, et cetera, that are considered as part of the review and recognized as important to Pine Creek in this case.

MR. MILLS: Well, just let me be specific, Pat, and then I'll try and move on. Seneca root, is it Hydro's sense that it's --
\begin{tabular}{|c|c|c|}
\hline & & Page 6083 \\
\hline 2 & Creek's First Nations Seneca root harvesting? & \\
\hline 3 & MR. McGARRY: I couldn't say right & \\
\hline 4 & off. I know it was reviewed, I know Ms. Petch & \\
\hline 5 & mentioned it in her presentation of the high value & \\
\hline 6 & along the AFPR in particular for the traditional & \\
\hline 7 & plant harvesting. And that was recorded and & \\
\hline 8 & noted, along with heritage interest, which & \\
\hline 9 & ultimately that information lead to a conclusion & \\
\hline 10 & on culture which includes traditional use of being & \\
\hline 11 & potentially significant effect. & \\
\hline 12 & MR. MILLS: Thank you for that. I & \\
\hline 13 & would like to move on to, Trevor, your & \\
\hline 14 & presentation. Thanks, Pat. & \\
\hline 15 & Trevor, under the direct mailings, you & \\
\hline 16 & indicate all of the manners in which you covered & \\
\hline 17 & the map. Manitoba Hydro is, I'm sure is well & \\
\hline 18 & aware of who the consultants are who represent & \\
\hline 19 & some of the various stakeholders. Did you attempt & \\
\hline 20 & to provide that information directly to myself? & \\
\hline 21 & MR. JOYAL: Sorry, I am just trying to & \\
\hline 22 & find out. You're saying whether or not we sent & \\
\hline 23 & the letter directly to you? No, we did not send & \\
\hline 24 & it to you. We did send it to Chief and Council. & \\
\hline 25 & MR. MILLS: Thank you. Again, and I & \\
\hline
\end{tabular}
think we skated all around this, but page 6, stakeholder, stakeholder meetings, we believe that the Province of Manitoba are significant stakeholders in this. And we observe again that you don't seem to share with us any of the communication, meetings, discussions, sharing of information that you had with that stakeholder. But you, with zeal, share with us details of meetings you held with most all of the other described stakeholders. Was it a conscious decision not to provide your stakeholder consultation with the Province in this process? Again, am I missing something, Trevor?
THE CHAIRMAN: Mr. Mills, I think you made your point in respect of the Province as a stakeholder. I'm not quite sure where you're going with this.
MR. MILLS: It was for emphasis, Mr. Chairman. Thank you. I'll move on.
I think that's all for Trevor's presentation. The culture and moose are going to be quite some time, Mr. Chairman. You wanted to take a break?
THE CHAIRMAN: Okay. We'll take a break now and come back in 15 minutes.
\begin{tabular}{|c|c|c|}
\hline 1 & (Hearing recessed at 3:00 p.m. and & Page 6085 \\
\hline 2 & reconvened at 3:15 p.m.) & \\
\hline 3 & THE CHAIRMAN: Okay. Can we resume, & \\
\hline 4 & please. Mr. Mills still has the floor, continuing & \\
\hline 5 & cross-examination. Go ahead, sir. & \\
\hline 6 & MR. MILLS: Thank you, Mr. Chairman. & \\
\hline 7 & Mr. McGarry, I missed one point and & \\
\hline 8 & I'd just like to step back briefly. The alternate & \\
\hline 9 & final preferred route pushes Bipole into the & \\
\hline 10 & forest reserve to the north. TAC had no comment & \\
\hline 11 & on that and it strikes us as odd that there would & \\
\hline 12 & be no concern about putting Bipole into the & \\
\hline 13 & Swan-Pelican forest reserve. Was there any & \\
\hline 14 & comment or was there any discussion with & \\
\hline 15 & Conservation or Forestry with regards to the & \\
\hline 16 & rationale for doing that? & \\
\hline 17 & MR. DYCK: Mr. Mills, that was the & \\
\hline 18 & correspondence I mentioned to you before that I & \\
\hline 19 & did have and had received from Mr. John Thorpe, & \\
\hline 20 & the regional forester in the Swan River region. & \\
\hline 21 & And he explained his concern about routing through & \\
\hline 22 & the provincial forest both in the Moose Meadows & \\
\hline 23 & area as well as the Swan Pelican provincial & \\
\hline 24 & forest. & \\
\hline 25 & MR. MILLS: Is that correspondence in & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & the supplemental document package? & Page 6086 \\
\hline 2 & MR. DYCK: That I'm not 100 percent & \\
\hline 3 & sure of. & \\
\hline 4 & MR. MILLS: I haven't been able to & \\
\hline 5 & find it. & \\
\hline 6 & MR. DYCK: I'll have to check that. & \\
\hline 7 & MR. MILLS: Would you undertake to & \\
\hline 8 & provide me with that correspondence? & \\
\hline 9 & MR. DYCK: I'll check on that, yes. & \\
\hline 10 & MR. MILLS: Would you undertake to & \\
\hline 11 & provide me with that correspondence if you have & \\
\hline 12 & it? & \\
\hline 13 & MR. DYCK: I'll pass it on to Manitoba & \\
\hline 14 & Hydro. & \\
\hline 15 & MR. McGARRY: Depending on the nature & \\
\hline 16 & of that correspondence, if it's just the e-mails & \\
\hline 17 & or any formal notes, probably not. If it & \\
\hline 18 & represents some official correspondence, we'll & \\
\hline 19 & review that. But the nature of routing through & \\
\hline 20 & provincial forests reserve is more one of a forest & \\
\hline 21 & value and compensation costs for doing so. There & \\
\hline 22 & are some opinions expressed I believe by Forestry & \\
\hline 23 & Branch. To what degree they are official, they & \\
\hline 24 & didn't come through TAC directly or not. In any & \\
\hline 25 & event, it's not an incompatible use necessarily. & \\
\hline
\end{tabular}

I believe that the type of development we're talking about is permissible within a provincial forest.

MR. MILLS: So Mr. Dyck answers a
question advising me that there's correspondence which provides that assurance. But, Pat, you advise me that you're not going to let me read that correspondence. Do I understand this?

MR. McGARRY: Well, it depends what it
is. We're both speculating now on what that discourse was all about and what it involved. If it was simply an e-mail or a discussion, we may not. But \(I\) mean the subject matter, \(I\) have explained to you the nature of it and our perspective on the routing in a provincial forest reserve, I'm not sure the record requires anything further along that line unless it was official correspondence, and I don't believe we have official correspondence. But again we'll check. MR. MILLS: Mr. Dyck, who was the correspondence with?

THE CHAIRMAN: I think he stated that a number of times and it's on the record. MR. MILLS: Okay, great. I'll get it there, thank you.
Virginia, good afternoon.
MS. PETCH: Good afternoon.
MR. MILLS: Thank you for your
presentation. We enjoyed and appreciated it although we have some comments which we'd ask you to help us with.
Your concerns about the archeological sites within the GHA 19A area, as I go to page 7 of your presentation, we observe now and we have observed in the past that the majority of the archeological sites are adjacent to roadways. And we suspect that there are archeological sites all over the region but that the density that you show is not related to where artifacts exist but is related to the accessibility to roadways that allowed those artifacts to be discovered.
MS. PETCH: The sites that you see on that map are sites that had been registered with the Province of Manitoba over time. Most of these sites were found in the 1960 s as part of the glacial Lake Agassiz survey which was the University of Manitoba, University of Winnipeg and with some help from the province on conducting this particular survey. So the sites are those sites only that are registered with the province.
\begin{tabular}{|c|c|c|}
\hline & It does not include all the other sites that or & Page 6089 \\
\hline 2 & other artifacts that had been found by private & \\
\hline 3 & collectors in their fields and other places. It & \\
\hline 4 & is only those sites that had been registered with & \\
\hline 5 & the province and had a designated number that & \\
\hline 6 & identifies them in the provincial registry. & \\
\hline 7 & MR. MILLS: Thank you. Virginia, when & \\
\hline 8 & you undertook the Bipole III ATK workshop in Pine & \\
\hline 9 & Creek First Nation, did that process advise the & \\
\hline 10 & band members you interviewed of the preferred & \\
\hline 11 & route of Bipole III? & \\
\hline 12 & MS. PETCH: At the time that we did & \\
\hline 13 & the ATK studies -- & \\
\hline 14 & MR. MILLS: Yes. & \\
\hline 15 & MS. PETCH: -- we did not use a & \\
\hline 16 & preferred route line, we looked at the areas that & \\
\hline 17 & people discussed as a whole as areas that they & \\
\hline 18 & went into and had knowledge of. & \\
\hline 19 & MR. MILLS: So you did not indicate to & \\
\hline 20 & those people you interviewed, and if I go to page & \\
\hline 21 & 9, the bottom slide, you show a matrix of areas & \\
\hline 22 & which were identified as being of Atk concern. & \\
\hline 23 & When you obtained that information, the people & \\
\hline 24 & providing it were not aware of the Bipole III & \\
\hline 25 & route when they provided you with that? & \\
\hline
\end{tabular}
opening meeting in which Mr. Johnson had provided some very high level maps as to where the route could be. But the NTS, the national topographic maps that we used did not have the lines marked on. They were independent of any artificial barriers. This was strictly what the people knew about the land that they used.
MR. MILLS: So you are assuring me that that map of the areas of concern was generated without the participants knowing the Bipole III route that was being proposed?
MS. PETCH: They may have known approximately where it would have been based on Mr. Johnson's presentation. But during the interviews that we conducted, it was not part of our process. The information that was shared with us from the different communities was unbiased as to any barriers that may be imposed on the land. MR. MILLS: So you're comfortable that that ATK review that you are relying upon is appropriate for considering both the two routes that are under consideration?
MS. PETCH: As far as the amount of data and knowledge that we gathered from the
\begin{tabular}{|c|c|c|}
\hline & communities, it reflected only a few hours of & Page 6091 \\
\hline 2 & interview with the community. It did not reflect & \\
\hline 3 & the totality. And so this area is representative & \\
\hline 4 & of what we know about particular land use by the & \\
\hline 5 & three communities involved. & \\
\hline 6 & MR. MILLS: You just said that it & \\
\hline 7 & reflected the few hours of consultation with the & \\
\hline 8 & community. Are you aware that the current Chief & \\
\hline 9 & and Council of Pine Creek First Nation has refuted & \\
\hline 10 & the ATK that you are relying upon and has & \\
\hline 11 & requested additional work in that regard? & \\
\hline 12 & MS. PETCH: I was not aware that they & \\
\hline 13 & had refuted it. I knew that there was some & \\
\hline 14 & discussion about it. & \\
\hline 15 & MR. MILLS: Have you considered or & \\
\hline 16 & have you been asked by Hydro to consider doing & \\
\hline 17 & additional work on the Pine Creek First Nation ATK & \\
\hline 18 & in light of the concerns that the community has & \\
\hline 19 & and the additional complexity of two routes under & \\
\hline 20 & consideration? & \\
\hline 21 & MS. PETCH: Not at this time. & \\
\hline 22 & MR. MILLS: On page 13, Virginia, & \\
\hline 23 & Signs of the Past, you indicated that one burial & \\
\hline 24 & ground has recently been identified 330 metres & \\
\hline 25 & from the alternate final preferred route. We, as & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & well, recently became aware of a substantial & Page 6092 \\
\hline 2 & burial ground. Are you referring to a site where & \\
\hline 3 & the, it's old age, but where the route turns & \\
\hline 4 & north? I believe it's Birch River? Is that the & \\
\hline 5 & corner where the route divides? Where the & \\
\hline 6 & alternate final preferred route turns due north. & \\
\hline 7 & MS. PETCH: No, it is almost due north & \\
\hline 8 & of Briggs Spur. & \\
\hline 9 & MR. MILLS: Really? We recently & \\
\hline 10 & became aware of six mounds immediately north of & \\
\hline 11 & where the two routes diverge at the southern end & \\
\hline 12 & of the divergence. We'll share that with you just & \\
\hline 13 & as soon as we will be able to confirm it. & \\
\hline 14 & MS. PETCH: Is that in the Briggs Spur & \\
\hline 15 & area that you're talking about? & \\
\hline 16 & MR. MILLS: No, it's at the south end & \\
\hline 17 & of the route, where the green path turns north. & \\
\hline 18 & Immediately adjacent to that, we have just become & \\
\hline 19 & aware of six burial mounds. & \\
\hline 20 & MS. PETCH: I believe in the ATK that & \\
\hline 21 & was gathered back in 2009/2010, that members of & \\
\hline 22 & the different communities mentioned that there & \\
\hline 23 & were burials in these areas and these were noted & \\
\hline & on the map as general areas. We did not have any & \\
\hline 25 & site specific information as to where they were & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & located as a point on the mar & Page 6093 \\
\hline 2 & MR. MILLS: We acknowledge and & \\
\hline 3 & appreciate your professional integrity in the & \\
\hline 4 & statement you make on page 17 that the alternate & \\
\hline 5 & final preferred route will result in an assessment & \\
\hline 6 & of a potentially significant adverse effect of the & \\
\hline 7 & project on the adjacent community. You didn't use & \\
\hline 8 & the words "adjacent community," but I was & \\
\hline 9 & wondering if you could elaborate on your statement & \\
\hline 10 & "Will result in an assessment of a potentially & \\
\hline 11 & significant adverse effect of the project on," & \\
\hline 12 & could we agree on Pine Creek First Nation? & \\
\hline 13 & MS. PETCH: It would be on all the & \\
\hline 14 & communities involved in that area. & \\
\hline 15 & MR. MILLS: Finally at the bottom of & \\
\hline 16 & page 17, you indicate that it's potentially & \\
\hline 17 & reversible. We have heard that Bipole III has a & \\
\hline 18 & life span of 100 years. So are we both talking & \\
\hline 19 & about this potentially being reversible in a & \\
\hline 20 & hundred and some odd years? & \\
\hline 21 & MS. PETCH: Potentially but not & \\
\hline 22 & probable. & \\
\hline 23 & MR. MILLS: You don't say that. So do & \\
\hline 24 & we agree that in fact Bipole III probably has an & \\
\hline 25 & enduring effect on the related communities? & \\
\hline
\end{tabular}

MS. PETCH: For this particular AFPR.

MR. MILLS: Virginia, thank you, those are all of our points.

The last presentation we heard and what we'd like to talk about is the adjusted route assessment for boreal woodland caribou and moose. And I apologize to the two gentlemen, I had forgotten your names.

MR. RETTIE: Jim Rettie, R-E-T-T-I-E.

MR. SCHINDLER: Doug Schindler, \(\mathrm{S}-\mathrm{C}-\mathrm{H}-\mathrm{I}-\mathrm{N}-\mathrm{D}-\mathrm{L}-\mathrm{E}-\mathrm{R}\).

MR. MILLS: I noted the cut-off, Doug and Jim, and I'll try and hand off my questions if I can at those lines.

Our client is just concerned about the GHA 19 area. So although we have read and appreciate all of the other fine work you did, we'd like to talk about your comments on GHA 19A. If you could go to page 16 of your presentation, the top slide, you show 91 moose observed and you seem to indicate the areas where the moose were sighted; is that correct? Page 16 GHA 19A AFPR survey area has a map showing 91 moose observed?

MR. SCHINDLER: Yes, I've got one page.

MR. MILLS: We got shorted, we got the small print.

MR. RETTIE: If you notice actually in the bottom right-hand corner --

MR. MILLS: I'm sorry, slide 31. Sorry, I can be taught.

MR. SCHINDLER: Okay, we're here.
MR. MILLS: As you show the purple areas of where moose were observed, between the two Bipole routes under discussion, there's a small almost circle of approximately I'd suggest two or three miles in diameter. Do you see the area I'm talking about?

MR. SCHINDLER: Yes, I think I know what you are talking about.

MR. MILLS: Well, I believe that that area is currently within a large fenced enclosure of bison-proof mesh. So I'm wondering when you observed moose in that area? Was there a date when those 91 moose were observed?

MR. SCHINDLER: Yes, it was the 4th of February, 4th of February.

MR. MILLS: 2013?

MR. SCHINDLER: Yes. Did you want me to comment on that little circle?
\begin{tabular}{|c|c|c|}
\hline & & Page 6096 \\
\hline 1 & MR. MILLS: Yes. & \\
\hline 2 & MR. SCHINDLER: We did observe fences & \\
\hline 3 & in the area, definitely. It was difficult to & \\
\hline 4 & determine the extent of the fence or where cross & \\
\hline 5 & fences, a number of cross fences. But there were & \\
\hline 6 & some moose that were found inside the enclosures. & \\
\hline 7 & MR. MILLS: Did you advise & \\
\hline 8 & Conservation of that? & \\
\hline 9 & MR. SCHINDLER: I don't believe & \\
\hline 10 & there's a requirement to advise. & \\
\hline 11 & MR. MILLS: Did you share this & \\
\hline 12 & information with Conservation? & \\
\hline 13 & MR. SCHINDLER: Conservation I believe & \\
\hline 14 & through this process has seen these slides. Our & \\
\hline 15 & presentation has been submitted so they had seen & \\
\hline 16 & it. & \\
\hline 17 & MR. MILLS: On slide 39, you listed & \\
\hline 18 & your data sources. There's no list of MAFRI. Did & \\
\hline 19 & you receive any data from provincial lands? & \\
\hline 20 & MR. SCHINDLER: I believe I mentioned & \\
\hline 21 & during my discussion in terms of the bison ranch & \\
\hline 22 & in particular at the time of the writing, our & \\
\hline 23 & knowledge of the extent and expanse of the bison & \\
\hline 24 & ranch were unknown. We did not receive any data & \\
\hline 25 & particularly for this from Crown lands. & \\
\hline
\end{tabular}
right now. Do you have any idea of the size of
the herd within the fenced lands that these two
routes will cross through?
MR. SCHINDLER: We observed the herd, we did not count them, but it is sizeable. And I would not be able to give you a number specifically on the size of the bison herd.
MR. MILLS: We recently had an assistant deputy minister advise us that it's 4,000.
MR. McGARRY: Just for the record, there was mention of a rough population estimate in the AFPR report, page number I'll have to find you.
MR. MILLS: 2000, yes, I saw that, thanks.
In your survey of this area, you indicated that we are aware of the bison farm. Can you give me a better description of how aware you are? Do you know how big it is? Do you know the extent of the fences that criss-cross the Bipole right-of-ways?
MR. SCHINDLER: Yeah.
MR. MILLS: And was that information
considered in this report that you have provided us with? I don't see many references to it.

MR. SCHINDLER: As I indicated when we flew the survey, we did notice the extent of the ranch and there were fences that would, you know, kind of come to an end, cross fences. It was difficult to discern. But \(I\) have since seen a map and I think I indicated in our report that we did not have that data at the time of the report. But just from if you want to call it ballparking in terms of the size of the lands that are identified under disposition of lease, it's a fairly large chunk of our survey area. Probably somewhere in the vicinity of 20 percent of the land area there in the area that we surveyed.

MR. MILLS: You said you didn't have the information at the time. Do you feel you have it now?

MR. SCHINDLER: There still seems to be some question as to, you know, how long the land is going to be leased for, the extent of it. I don't believe we have or we don't have the precise locations of fences or areas that are specifically being grazed.

MR. MILLS: Okay. Well are we making
\begin{tabular}{|c|c|c|}
\hline & something out of nothing? We assume Pine Creek & Page 6099 \\
\hline 2 & First Nation, that a bison-proof fence, a fence & \\
\hline 3 & designed to enclose bison, would be a moose-proof & \\
\hline 4 & fence. Would you agree with me? & \\
\hline 5 & MR. RETTIE: Yeah, I think I'm not & \\
\hline 6 & certain how high the fence is. & \\
\hline 7 & MR. MILLS: Six feet. & \\
\hline 8 & MR. RETTIE: Then, no, I wouldn't & \\
\hline 9 & consider it to be moose proof. It would be at & \\
\hline 10 & least semi-permeable to moose. I know in Alberta, & \\
\hline 11 & in Elk Island National Park which is completely & \\
\hline 12 & fenced to enclose bison, the fence there is at & \\
\hline 13 & least eight feet high and moose can't go over it. & \\
\hline 14 & So a six foot fence, they could cross. Although I & \\
\hline 15 & have no idea how frequently they would do that. & \\
\hline 16 & MR. MILLS: Tragically we have at & \\
\hline 17 & least two confirmed reports of moose hanging up on & \\
\hline 18 & the fence, but we'll get to that. & \\
\hline 19 & So we're concerned about and we have & \\
\hline 20 & put all of this time and effort into studying the & \\
\hline 21 & effect of the Bipole III right-of-way on the moose & \\
\hline 22 & population. And the Bipole III right-of-way, as & \\
\hline & it passes through this region, is about 80 & \\
\hline & kilometres in length I believe. Yet we have made & \\
\hline 25 & no mention or shown no consideration for perhaps a & \\
\hline
\end{tabular}
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greater length of bison-proof fencing which runs down the middle of a 50-foot wide cleared right-of-way. Do you think that it's fair of this process to consider this presentation on moose without fully understanding the extent and the conflict of that fence with the right-of-way? Mr. Schindler?

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MR. SCHINDLER: I believe I mentioned in my presentation and in terms of assessing the cumulative effects of future disturbances on that moose population in game hunting area 19 would certainly be a concern to understand the full effects of perhaps a bison ranch, and to understand what the dynamics of that particular system is.
MR. MILLS: Would you agree with me that we don't understand it today?
MR. SCHINDLER: I agree that we do not have enough information as biologists do to assess that. However in terms of the cumulative effect relative to the Bipole III transmission line, that is the approach we took in terms of our conclusions relative to the Bipole III line.
MR. MILLS: Would you agree with me then that your conclusions are based on incomplete
\begin{tabular}{|c|c|c|}
\hline 1 & information? & Page 6101 \\
\hline 2 & MR. SCHINDLER: Not necessarily. & \\
\hline 3 & MR. MILLS: Do you have the bison & \\
\hline 4 & information? & \\
\hline 5 & MR. SCHINDLER: We do not have all of & \\
\hline 6 & the data on the bison ranch, no. However, by & \\
\hline 7 & looking at the effects that we have looked at in & \\
\hline 8 & terms of linear densities, looking at landscape & \\
\hline 9 & features and what the effects of Bipole III are on & \\
\hline 10 & that particular moose population, would not be & \\
\hline 11 & significant. & \\
\hline 12 & MR. MILLS: Well, you say that, sir, & \\
\hline 13 & and you wake me up, because your slide 44 under & \\
\hline 14 & GHA 19, summary of analysis, you have no & \\
\hline 15 & information for 19. Your slide 49, summary of & \\
\hline 16 & data, you have no information for GHA 19. Your & \\
\hline 17 & information contained in model results other & \\
\hline 18 & mortalities, your slide 69, you have no GHA 19A & \\
\hline 19 & data whatsoever. So you're missing data in every & \\
\hline 20 & presentation you provide me with. You admit that & \\
\hline 21 & you don't know the extent or limits or margins of & \\
\hline 22 & this very large VEC. We have heard 70 square & \\
\hline 23 & miles, we have heard 4,000 animals, we have heard & \\
\hline 24 & 50 miles of moose-proof fencing with respect to & \\
\hline 25 & arguments over how high a moose can jump. And yet & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & you tell me that you are confident in your & Page 6102 \\
\hline 2 & conclusions. Am I missing something? & \\
\hline 3 & MR. SCHINDLER: No. & \\
\hline 4 & MR. MILLS: Thank you. & \\
\hline 5 & MR. SCHINDLER: I should mention the & \\
\hline 6 & fact that Manitoba Conservation has never & \\
\hline 7 & completed a population estimate on moose in game & \\
\hline 8 & hunting area 19. So you are very correct, it was & \\
\hline 9 & challenging to try to include 19, 19A within our & \\
\hline 10 & analysis framework, so I would agree with you & \\
\hline 11 & there. & \\
\hline 12 & MR. MILLS: When this started back on & \\
\hline 13 & August 16 th , we were lead to believe that & \\
\hline 14 & Conservation would take the lead on this process & \\
\hline 15 & but that MAFRI and other provincial departments & \\
\hline 16 & would contribute through there. We know full well & \\
\hline 17 & that MAFRI has an awful lot of information that we & \\
\hline 18 & haven't been able to get to us and it's clear that & \\
\hline 19 & you haven't received. But you have said to me you & \\
\hline 20 & have been able to obtain from Conservation all of & \\
\hline 21 & their available data. Are you comfortable with & \\
\hline 22 & that statement? & \\
\hline 23 & MR. SCHINDLER: Yes, for moose, yes, & \\
\hline 24 & definitely. & \\
\hline 25 & MR. MILLS: Well, we haven't been that & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & successful, so would you undertake to provide us & Page 6103 \\
\hline 2 & with all of the available data that you have been & \\
\hline 3 & able to obtain from Conservation? & \\
\hline 4 & MR. RETTIE: With respect to game & \\
\hline 5 & hunting area 19, all of the available data is & \\
\hline 6 & zero. There is no data. They have never done a & \\
\hline 7 & survey there. & \\
\hline 8 & MR. MILLS: Thank you. It's taken us & \\
\hline 9 & since August 28 th to hear that statement. & \\
\hline 10 & So I'll move on. But to be clear, & \\
\hline 11 & MAFRI, Lands, Conservation has provided you with & \\
\hline 12 & no data on game hunting area 19A. That's what you & \\
\hline 13 & just said. & \\
\hline 14 & MR. RETTIE: I said with respect to & \\
\hline 15 & surveys. I believe that we have information on & \\
\hline 16 & moose hunting in game hunting area 19. Although & \\
\hline 17 & I'm not certain. I can take that as an & \\
\hline 18 & undertaking, and if we have it, I'd be happy to & \\
\hline 19 & provide it to you. & \\
\hline 20 & MR. MILLS: Would you, please, thank & \\
\hline 21 & you. & \\
\hline 22 & MR. McGARRY: Mr. Mills, I'd just like & \\
\hline 23 & to clarify. You mentioned MAFRI, there's & \\
\hline 24 & information from MAFRI, Manitoba Agriculture and & \\
\hline 25 & Food, there's information from Conservation on & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & moose, I believe Dr. Rettie was speaking to & Page 6104 \\
\hline 2 & information relating to moose. The information we & \\
\hline 3 & have from MAFRI was already stated in relation to & \\
\hline 4 & land holdings for bison ranch, just to clarify. & \\
\hline 5 & MR. MILLS: Thanks, Pat. Your slide & \\
\hline 6 & 59, when you were talking about you were doing & \\
\hline 7 & some, starting to take us through an analysis of & \\
\hline 8 & what's happening to the moose. And I forget who & \\
\hline 9 & was at bat at the time. But one of you indicated & \\
\hline 10 & that you had consulted with and provided a long & \\
\hline 11 & list of the consultation that had taken place in & \\
\hline 12 & order to allow you to continue that study. Did & \\
\hline 13 & you consult with any Aboriginal hunters? & \\
\hline 14 & MR. RETTIE: No. & \\
\hline 15 & MR. MILLS: So if I go to slide 74, & \\
\hline 16 & your conclusions, you tell us that you conclude & \\
\hline 17 & that the increase of linear density in 19A as a & \\
\hline 18 & result of Bipole III are minimal and well below & \\
\hline 19 & linear density thresholds. Then you go on to say & \\
\hline 20 & the residual effects on moose resulting from the & \\
\hline 21 & project are not significant. And these are your & \\
\hline 22 & professional stated conclusions. Yet you have & \\
\hline 23 & just told me that there is an arguably massive & \\
\hline 24 & issue in the middle of these two routes that the & \\
\hline 25 & province has provided neither of us with any & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & concrete information on. And we're here today & Page 6105 \\
\hline 2 & being assured that we have all the information or & \\
\hline 3 & that we have sufficient information to consider & \\
\hline 4 & these two routes as they affect moose in this & \\
\hline 5 & region. & \\
\hline 6 & I'm sorry, gentlemen, but it seems to & \\
\hline 7 & me that there's an awful lot missing for us to be & \\
\hline 8 & drawing conclusions. Would you agree with me? & \\
\hline 9 & MR. SCHINDLER: I believe as we went & \\
\hline 10 & through our analysis and, you know, looked for & \\
\hline 11 & some type of a landscape threshold in terms of & \\
\hline 12 & disturbance, linear feature densities, and we & \\
\hline 13 & looked at the entire region, we were not able to & \\
\hline 14 & come up with that threshold. And the work that we & \\
\hline 15 & did on assessing population decline and some of & \\
\hline 16 & the factors in terms of other mortality and & \\
\hline 17 & hunting, that appears to be a factor in those & \\
\hline 18 & populations. And so that's what our conclusions & \\
\hline 19 & were based on, on the regional assessment. We & \\
\hline 20 & have not been able to pinpoint any particular & \\
\hline 21 & metric or landscape disturbance that is driving & \\
\hline 22 & those moose populations. So that is what we based & \\
\hline 23 & our conclusions on. Recognizing that game hunting & \\
\hline 24 & area 19 is a very large area, it is a fairly large & \\
\hline 25 & area. It is somewhat fragmented, and there's & \\
\hline
\end{tabular}
various parts of the game hunting area that are agricultural lands, and others that are contiguous forests. In terms of the entire game hunting area, the bison ranch takes up a relatively small portion of the entire game hunting area.
MR. McGARRY: I'd just like to speak
to that too. Keep in mind the conclusions are based on analysis of the project effect on moose and moose populations. The bison ranch, if it were to be considered with more complete information, would be more of a cumulative effects assessment. But for the conclusion on the effects of Bipole III in area, and on the route as a whole, that's what the conclusion speaks to. MR. OSLER: Well, if I could just add one thing, because you had a slide earlier, 31 from this presentation by these gentlemen.
MR. MILLS: I'm not sure who I'm talking to anymore.
MR. OSLER: Sorry, over here. You had a slide 31 where you were interested in the circle where there were some moose, and you assumed the moose were probably on the other side of the fence inside a bison ranch, if I remember you correctly?
MR. MILLS: That circle I believe lies
\begin{tabular}{|c|c|c|}
\hline & entirely within a moose-proof fence & Page 6107 \\
\hline 2 & MR. OSLER: Right. Well, we can & \\
\hline 3 & debate the ability to be moose proof if there are & \\
\hline 4 & moose in there but effectively for all those & \\
\hline 5 & people in the room, I mean, the bison ranch area & \\
\hline 6 & we are talking about lies south of PH 20, right? & \\
\hline 7 & And it's all in that area that's reflecting both & \\
\hline 8 & of these two route alternatives, south of that & \\
\hline 9 & road. And you have evidence that says that about & \\
\hline 10 & 15 and a half kilometres of it, of the route in & \\
\hline 11 & the AFPR go through the ranch and about 14.2 & \\
\hline 12 & kilometres of the FPR go through the ranch? & \\
\hline 13 & MR. MILLS: Mr. Osler, if I can help & \\
\hline 14 & you? As you look at that slide, the pink line & \\
\hline 15 & that runs vertically north/south -- & \\
\hline 16 & MR. OSLER: Right. & \\
\hline 17 & MR. MILLS: -- which is the alternate & \\
\hline 18 & preferred route. & \\
\hline 19 & MR. OSLER: Right. & \\
\hline 20 & MR. MILLS: If you were to move that & \\
\hline 21 & line three miles to the east, it would fall & \\
\hline 22 & outside of the bison ranch and outside of the & \\
\hline 23 & moose-proof fence. And that would be the route & \\
\hline 24 & that my client offered to Manitoba Hydro that & \\
\hline 25 & wasn't able to gain any traction. & \\
\hline
\end{tabular}

MR. OSLER: Right. But the subject that is in the evidence, and you'll discuss it I'm sure in your presentation, but if you go to the west, you can see where the moose circles to the west of the small one, go vertically, probably somewhere around the line where those moose circles are on the eastern edge there is about where the bison ranch area probably exists in the discussions that people have, without knowing where fences are and everything else at the moment.

The point is, if they are doing an assessment of moose effects, whatever this ranch is, wherever it is, exactly where the fences are and whether they are moose proof or not, is what it is.

The transmission line, the point being made by the experts is the transmission line whether we go with \(\operatorname{FPR}\) or \(A F P R\) is no different and has no effect on the bison. And as far as we can see is having no effect on the moose, if they are being kept out of the area or only a few of them get into it. That's the evidence.

MR. MILLS: Well, the moose experts I think would agree, because it was some of their
earlier testimony, the concern is that the Bipole III right-of-way acts as a lead or a path, and that the moose may or may not follow it. And if it's followed, they may come in conflict with dissecting fence lines.
It's also of concern because the bison
fencing comes with a 50 -foot wide right-of-way which is clear-cut, as Hydro staff are aware, and as you will know having flown over and seen it.
And we just see, or our opinion is
that the concerns that are addressed with the
right-of-way providing additional access are added to the additional access, which the bison fencing is already providing. All of that area can now be walked on foot, or as we have, travelled by snowmobile because of the fence clearing. And we just believe that these two intersecting grids of right-of-way, right-of-way and fencing aren't understood, haven't been considered, and should be. We're not suggesting a right or a wrong, but we believe clearly that Manitoba Hydro's and Clean Environment Commission's moose review has not considered --
THE CHAIRMAN: You're getting argumentative.

MR. MILLS: -- more right-of-ways.
Thank you.

THE CHAIRMAN: Mr. Mills, you're getting argumentative.

MR. MILLS: I appreciate that.
THE CHAIRMAN: And that might be correct in your presentation on Wednesday or your final argument next week.

MR. MILLS: We'll move on. Whoever would have the best sense of moose knowledge, do moose have a keen sense of smell?

MR. SCHINDLER: Yes.
MR. MILLS: When they sensed a very, very, very large herd of an atypical animal, would they be attracted to it or driven from it? 4,000 bison producing 20 tonnes of waste a day, would the moose be attracted to that or would they sense that as difficulty and move away from it?

MR. RETTIE: I have no idea. I know that there's a considerable moose population penned in with bison in Elk Island, the park that I mentioned earlier. And they share the range as well with elk.

MR. MILLS: So in your moose study, you haven't considered the relationship to the
very large herd of bison in terms of smell, or sense of the two animal herds?
MR. RETTIE: Where I have observed them together, they are sharing the range, they are interspersed.
MR. MILLS: So you have considered that in this case?
MR. RETTIE: I haven't thought about it but --
MR. MILLS: Okay. Moose vision, do they have acute vision?
MR. RETTIE: Not as good as their sense of smell.
MR. MILLS: Okay. Would a 6 by 12 welded wire gauged fence, is that something that they would see or discern as they travel? I guess you haven't considered it?
MR. SCHINDLER: We haven't researched or dived into the literature on that particular subject. We do know that they become quite aware of their environment. I know that they are very -- their senses allow them to move through the woods in a very quiet manner, and detect danger, those types of things. So I would imagine they would be able to detect a fence.
\begin{tabular}{|c|c|c|}
\hline 1 & MR. MILLS: Just in closing, we had & Page 6112 \\
\hline 2 & asked for some undertakings. And Pat, you skated & \\
\hline & on me twice. Could I have an undertaking, just & \\
\hline 4 & yes or no, please, save us the time, to have & \\
\hline 5 & copies of all of your correspondence with & \\
\hline 6 & Conservation with regard to this matter? & \\
\hline 7 & MR. McGARRY: I'd prefer to skate a & \\
\hline 8 & third time, but the answer would be no, put to me & \\
\hline 9 & that way. & \\
\hline 10 & MR. MILLS: Thank you. That completes & \\
\hline 11 & our questions. Thank you, Mr. Chairman. & \\
\hline 12 & THE CHAIRMAN: Thank you, Mr. Mills. & \\
\hline 13 & MMF would be next, but Mr. Madden is & \\
\hline 14 & caught somewhere between Yellowknife and Calgary & \\
\hline 15 & and Winnipeg because of snowstorms apparently. & \\
\hline 16 & Bipole, I understand, has no questions. The & \\
\hline 17 & Coalition, Consumers has no questions. Peguis I & \\
\hline 18 & don't believe is here, so Manitoba Wildlands. & \\
\hline 19 & MS. WHELAN ENNS: Gaile Whelan Enns & \\
\hline 20 & here. I am going to be asking questions for & \\
\hline 21 & Manitoba Wildlands specifically, and I'd & \\
\hline 22 & appreciate if the transcript can show that. Thank & \\
\hline 23 & you. & \\
\hline 24 & I have three Powerpoint presentations & \\
\hline 25 & sort of in the order that we have gone through & \\
\hline
\end{tabular}
them today, and notes as we heard from the panel, or panels for Manitoba Hydro. So I'm going to stay in that kind of a linear order.

Starting then I guess with Mr. Dyck. You made a comment that we have heard before with respect to most of the work for these route changes then in the transmission system called Bipole III being done in the winter. I think we should all be able to take that as applying to the whole system, because we have heard it before, and it applies then to these changes?

MR. DYCK: It would apply to most of these adjusted preferred route areas because they are heavily interspersed with wetlands. So it would be almost impossible to work in those environments in the summer.

MS. WHELAN ENNS: Good, thank you.
This is from page 15 in the Powerpoint presentation. I wanted to ask a little bit more about the data sources regarding birds. And I ask whether, for instance, some of the new national databases, including through international bird areas and important bird areas, both those systems were used in preparing this supplementary EIS?

MR. DYCK: As was indicated early on
in the presentation, the same approach was taken. All of the same data sets were used, including and important bird areas and migratory routes and so on that were used for the initial route assessments.

MS. WHELAN ENNS: Thank you. I'm going to try to be a bit more specific in my question then. These databases now are largely contributed to by citizens and by amateurs and by bird watchers across the country. And Canada is much in the lead in terms of the system through the Americas. So I'm going to ask again then, you're using the databases that are being assembled where it is citing this also from these networks of bird watchers and citizens? MR. DYCK: You're referring to the Bird Atlas that's being compiled on an ongoing basis by Canadian citizens and bird watchers? MS. WHELAN ENNS: The Bird Atlases by different Provincial jurisdictions are part of the undertaking in terms of what the databases are being used for. We're not very close at all, though, to the Bird Atlas in Manitoba. They are working on their second iteration or version in Ontario. So it varies across the country.
\begin{tabular}{|c|c|c|}
\hline 1 & MR. DYCK: I believe that information & Page 6115 \\
\hline 2 & has been used as anecdotal information as it would & \\
\hline 3 & apply in terms of the routing. That type of & \\
\hline 4 & information is used to monitor for the most part & \\
\hline 5 & long-term bird populations in different regions. & \\
\hline 6 & So it doesn't necessarily apply on a very & \\
\hline 7 & localized basis to an assessment of a project. & \\
\hline 8 & MS. WHELAN ENNS: Thank you. I think & \\
\hline 9 & the next question is for Mr. McGarry, assuming my & \\
\hline 10 & notes are correct. And it refers to page 17 in & \\
\hline 11 & your presentation. There's fairly specific & \\
\hline 12 & content about avoiding Treaty Land Entitlement & \\
\hline 13 & lands in your presentation. I'd like to know, and & \\
\hline 14 & this is a citizen who is always trying to be able & \\
\hline 15 & to understand things First Nation and Aboriginal & \\
\hline 16 & whether or not there was any accommodation, again & \\
\hline 17 & in this supplementary EIS work, for land & \\
\hline 18 & acquisition that's ongoing, land acquisition that & \\
\hline 19 & may happen, whether there were any discussions by & \\
\hline 20 & the affected first nations? So you've got about & \\
\hline 21 & eight in the cold corridor, and certainly a & \\
\hline 22 & handful of those affected by the changes? This is & \\
\hline 23 & a little bit of a more complex question. But I'd & \\
\hline 24 & like to know whether Manitoba Hydro has taken into & \\
\hline 25 & account the fact that first nations affected by & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & the route changes are still in the midst of & Page 6116 \\
\hline 2 & selecting land, and whether there were any & \\
\hline 3 & discussions with first nations who are still in & \\
\hline 4 & the midst of selecting land with respect to the & \\
\hline 5 & route changes? & \\
\hline 6 & MR. McGARRY: We looked at TLE, Treaty & \\
\hline 7 & Land Entitlement lands. We actually did have that & \\
\hline 8 & discussion with Wuskwi Sipihk. We know they have & \\
\hline 9 & outstanding Treaty land to select. They are aware & \\
\hline 10 & of our project, our proposal, and I believe they & \\
\hline 11 & have their own mechanisms for pursuing that Treaty & \\
\hline 12 & land selection. We went, based on what currently & \\
\hline 13 & occurs, anything further to that process on their & \\
\hline 14 & Treaty land selection is up to them. Our & \\
\hline 15 & information is out there in terms of what our & \\
\hline 16 & intentions are. & \\
\hline 17 & MS. WHELAN ENNS: Thank you. Is it a & \\
\hline 18 & correct assumption that there was no similar & \\
\hline 19 & session with Sapotaweyak Cree Nation? & \\
\hline 20 & MR. McGARRY: I can't say for sure on & \\
\hline 21 & Sapotaweyak. But, again, the process is well & \\
\hline 22 & known for TLE selection and they are aware of our & \\
\hline 23 & intentions. And at this time we are not & \\
\hline & traversing any Treaty Land Entitlement. & \\
\hline 25 & MS. WHELAN ENNS: Thank you. I've got & \\
\hline
\end{tabular}
a note for page 21 that has to do with mining. I'd like to know whether or not Manitoba Hydro specifically, and there's some very interesting recommendations or possible mitigation approaches in your presentation. So I'd like to know whether or not there were meetings with the Manitoba association, Mining Association of Manitoba, excuse me, MAMI, as in MAM Inc., regarding the route changes?

MR. McGARRY: No, there haven't been. There was a letter sent to the association for them to become aware of our adjusted final preferred routes and for them to have opportunity to meet with us and discuss their impressions of the route changes. A meeting was offered and not taken.

MS. WHELAN ENNS: Thank you. My next question is on the same topic, because again you are identifying some specific things in terms of aerial survey and geomagnetic work and so on to do before construction. Okay. And they are good to see, frankly, okay.

What I'd like to know, though, then is whether or not you have sat down and talked to the Geological Survey of Manitoba? They generally set
their work plan spring through fall as much as two years ahead. So has there been any preparation then with the Geological Survey of Manitoba to take these steps you are recommending?

MR. McGARRY: No. Partly because this
is offered by Manitoba Hydro to undertake this
work. The Geological Survey Manitoba has been
involved in earlier discussions we had with MAMI before we submitted the EIS. What's on the table now is for a discussion with the mining industry as potential mitigation to us traversing the Thompson nickel belt.

MS. WHELAN ENNS: Thank you for the clarification that this would be work that Manitoba Hydro is offering to undertake. Have you taken a look then at the requirements in terms of what is public and what is not public, concerning the results of this kind of work under the Mines Act?

MR. McGARRY: We are aware of some privacy concerns. But if we undertook the work, we would attempt to make that public through the Mining Recorder's Office.

MS. WHELAN ENNS: Thank you. I'm now on page 23 of that presentation. It's not
absolutely clear to me but it may be an easy one to answer. And that is, what forms of technical support, assistance, additional ATK studies and so on has Manitoba Hydro offered First Nation communities affected by these route changes? MR. McGARRY: Manitoba Hydro hasn't offered any additional ATK studies at this point to First Nations that we're discussing with. What we have offered is to meet on environmental protection measures, monitoring and mitigation, and other potential site concerns they may have once we get to construction stage. Actually, that process will take place well in advance of construction. It's ongoing right now to discuss with First Nations protection measures and mitigation specific to those communities.

MS. WHELAN ENNS: Thank you. I wanted to ask Mr. Joyal a couple of questions next. You could probably predict what I'm going to ask, but let's do it in pieces.

You were describing, and your presentation is very thorough in terms of all of the steps for notification and access to materials and the meetings that were held with stakeholders and communities regarding these route changes.

What I'd be interested in knowing is whether Manitoba Hydro made a decision, a specific decision not to provide those same materials to the participants in the CEC hearings?

MR. JOYAL: As in you're talking about the materials that we presented? As every participant is an active member in the review of this process, every participant was sent a letter outlining our activities, open houses, and opportunity to meet if there was a request.

MS. WHELAN ENNS: So you referenced map books that were available in these meetings. So are those same map books available to the participants in these proceedings?

MR. JOYAL: If you would like them, I do have them, yes.

MS. WHELAN ENNS: This is an unusual supplementary filing overall, unusual to have an adjournment, and we are all I think doing our level best. I just wanted to acknowledge that in terms of all the parties in the room. On the other hand, it's an exception in my experience over most of two decades for the sets of materials that I just asked about, and the EIS supplementary materials not to be provided to the participants
in the hearings on paper and thumb drives. And it's literally the only exception in the last six months in our office, and there's four others that have arrived from Manitoba Hydro on paper and on thumb drives. That's the reason for my first question.

Now, I want to ask again whether there was a specific decision made not to provide the supplementary EIS binders on paper, and either DVDs or thumb drives regarding this supplemental EIS to the participants.

THE CHAIRMAN: I don't think that's relevant. That's an administrative matter that you should take up with the Commission secretary.

MR. ENNIS: Thank you.
MR. JOYAL: Just as an addition, all
materials, any request, especially the map book or maps were available to all participants at open houses or by phone calls as well.

MS. WHELAN ENNS: Thank you. I don't have a page number here in front of me, but the reference was to section 3.5 , and it has to do with the Bell River Steeprock protected area. The first question would be whether this hundred metres buffer was described by Manitoba

Conservation to Manitoba Hydro as a policy, as a standard usual buffer?

MR. JOYAL: Not generally. During the meeting with protected areas initiative, they had done they're own measurement and believed it was approximately 30 metres away from the edge of the boundary and the edge of the right-of-way.

Through discussion with them at that meeting, they requested a hundred metre buffer if the AFPR was pursued in the GHA 14 area. But by no means saying it was a standard distance. MS. WHELAN ENNS: I'm inclined to ask questions because these are canyons and because none of the uplands are part of the protected area, which overall reduces sustainability and leaves some long-term risks to the protected area. It's just one \(I\) have dealt with for about 10 years. The sort of related question then would be whether you have done any analysis, and I'm now on the right-of-way, whether you have done any analysis in terms of the right-of-way and species then in the hundred metre buffer, and/or in the right-of-way that would move back and forth between these canyons, these waterways, the riparian areas, and whether you did any analyses
of specific species movement, given the right-of-way is still pretty close?
MR. McGARRY: Could you clarify the question, please?
MS. WHELAN ENNS: Yes. And I will
sort of briefly say what I said earlier, and that is this particular protected area was designated where none of the uplands are protected. So you've literally got the waterways, riparian and the sides. That in fact has significant -- on a conservation biology basis, significant potential risk in terms of sustainability over time. So that's why I'm asking questions about the hundred metre buffer. And also wondering whether or not Manitoba Hydro took a look then at species traffic, species activity moving from the protected area in and out of the right-of-way, whether you did any analysis in terms of species at risk? And I'm on plants, so I'm sorry if I wasn't clear.
MR. McGARRY: I don't think it was specific to the species movement. What was looked at was Conservation Data Centre data for plant communities or species of Conservation concern and those were noted in the assessment.
\begin{tabular}{|c|c|c|}
\hline 1 & MS. WHELAN ENNS: Thank you. & Page 6124 \\
\hline 2 & Mr. Joyal is turning pages, I'm just checking. & \\
\hline 3 & MR. JOYAL: I'm just getting the & \\
\hline 4 & meeting notes from that meeting with protected & \\
\hline 5 & areas. & \\
\hline 6 & MS. WHELAN ENNS: Okay. Can I go on & \\
\hline 7 & in the meantime? & \\
\hline 8 & MR. JOYAL: Yes, for sure. & \\
\hline 9 & MS. WHELAN ENNS: All right. Because & \\
\hline 10 & I was going to ask Dr. Petch some questions. & \\
\hline 11 & MR. JOYAL: She's all yours. & \\
\hline 12 & MS. WHELAN ENNS: It's a long panel. & \\
\hline 13 & It's a full table. & \\
\hline 14 & You have provided us with the dates & \\
\hline 15 & for certain path sets of archeological field work & \\
\hline 16 & and information about these sites. I was & \\
\hline 17 & wondering if you can tell us, and I don't know the & \\
\hline 18 & answer myself, whether there has been any & \\
\hline 19 & archeological assessment in the Bell & \\
\hline 20 & River/Steeprock Canyon area and in the protected & \\
\hline 21 & area since the protected area was designated? Do & \\
\hline 22 & we have anything up to date. & \\
\hline 23 & MS. PETCH: I do not believe it's been & \\
\hline 24 & updated. & \\
\hline 25 & MS. WHELAN ENNS: Okay, thank you. & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline 1 & You also mentioned, you made a couple & Page 6125 \\
\hline 2 & of references again to the fieldwork, the & \\
\hline 3 & archeological fieldwork from the '60s, in terms of & \\
\hline & many of the sites that were in evidence in your & \\
\hline 5 & Powerpoint presentation to date. & \\
\hline 6 & Same question then, is that the most & \\
\hline 7 & recent archeological work in terms of the areas & \\
\hline 8 & that we're looking at for the route changes? & \\
\hline 9 & MS. PETCH: That was probably the & \\
\hline 10 & largest study that was done, and it was done at & \\
\hline 11 & the beginning when archaeology was becoming a & \\
\hline 12 & science, and there was this need to understand the & \\
\hline 13 & archeological record of the province. There have & \\
\hline 14 & been a number of smaller studies that had been & \\
\hline 15 & done both by the province and by private & \\
\hline 16 & researchers throughout the area. For myself, when & \\
\hline 17 & I was doing my masters, I did salt making in & \\
\hline 18 & Manitoba. So anywhere that you want to know where & \\
\hline 19 & there is salt making in Manitoba, I know where it & \\
\hline 20 & is. But there have been other studies related to & \\
\hline 21 & different kinds of assessment processes within the & \\
\hline 22 & area, but none quite as large as the one that we & \\
\hline 23 & have right now. & \\
\hline 24 & MS. WHELAN ENNS: What would, in your & \\
\hline 25 & estimation, be required to be sure that we know & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline & what is in there archeologically speaking? & Page 6126 \\
\hline 2 & MS. PETCH: Well, there's two answers. & \\
\hline 3 & It would be wonderful to see all kinds of & \\
\hline 4 & archeological research happening, which is very & \\
\hline 5 & expensive. But we do have the Heritage Resources & \\
\hline 6 & Act which protects all heritage resources, & \\
\hline 7 & regardless of the nature of the resource. And as & \\
\hline 8 & part of the Act, we have section 12.2, which gives & \\
\hline 9 & the Minister the opportunity to call for a & \\
\hline 10 & heritage resource impact assessment should the & \\
\hline 11 & need arise. That is done through the screening & \\
\hline 12 & process with HRB, Historic Resources Branch. And & \\
\hline 13 & so that is the process that's usually followed. & \\
\hline 14 & As well for Manitoba Hydro Bipole III, & \\
\hline 15 & we have the heritage resources protection plan, & \\
\hline 16 & which is part of the environmental protection & \\
\hline 17 & plan, which is going to assist if any sites are & \\
\hline 18 & found while the construction is happening. & \\
\hline 19 & MS. WHELAN ENNS: Thank you. Do you & \\
\hline 20 & think that predictive modeling has a place in & \\
\hline 21 & determining potential risk and potential number of & \\
\hline 22 & archeological sites, again sticking to the areas & \\
\hline 23 & for this supplemental EIS? & \\
\hline 24 & MS. PETCH: Predictive modeling will & \\
\hline 25 & assist in determining where particular sites may & \\
\hline
\end{tabular}
occur based on certain variables that one will choose for a specific landscape. It is a means of looking at particular areas and selecting high, medium and low potential sites, and taking a sample of those sites and going into the field and investigating those areas. But it is not the only tool that we use. We have the historical record. We have the records of Aboriginal traditional knowledge, and a large number of other studies that have been done that all work together to provide us with a good understanding of a particular area. So predictive modeling is only one tool that we use.
MS. WHELAN ENNS: Thank you. Your presentation today is, if \(I\) may from my perspective say somewhat cautionary in terms of the Moose Meadows. And that's part of why my question about predictive modeling.
Are the sites that we know of, are they proportionally mostly Aboriginal?
MS. PETCH: All the sites that we have identified in the EIS are Aboriginal sites. These sites were, you have to understand, were done 50 years ago at a time when there was a thirst for knowledge of things in the ancient past. Whether
or not historic sites were overlooked at that time, I don't know. But I know today, when any archaeologist goes out to do fieldwork, we're looking at the realm of human occupation from deglaciation right up to 50 years ago.
MR. ENNIS: You made a reference to ATK and land use going back a hundred years today. Is that reference because you are working in human memory, you know, as in one lifetime plus?
MS. PETCH: This was the record that
was provided to us by members in the community that their grandparents, they remember their grandparents telling them about their grandparents. So we're going back three generations, at least a hundred years.
MS. WHELAN ENNS: And I'm asking for clarification because that's not even close to Treaty time now, in terms of how far we're going back. And living memory is generally three generations, so I take your point.
I wanted to ask a little bit about polygons on your charts in your Powerpoint presentation. And that is, are the polygons substantiated and supported by data points, or are they drawn based on what you are hearing in
interviews -- where it was drawn in an area versus based on however many data points?
MS. PETCH: The polygons on the maps that \(I\) had up are the product of points, lines and polygons. The information that was put together as a composite map, these would be the outer boundaries of the data that was collected.
MS. WHELAN ENNS: I'm understanding from the earlier answer from Mr. McGarry that you had essentially used the previous surveys,
interviews, and ATK information?
MS. PETCH: That's correct.
MS. WHELAN ENNS: And that means there was no new ATK gathering or interviews or surveys or group sessions with respect to the supplementary EIS?
MS. PETCH: That's correct.
MR. ENNIS: I think I'm going to move to Mr. Schindler and Dr. Rettie now. Small caution in terms of what I'm working with here. I'm going to take a fast run through it, also the PowerPoints at the end. And there may be a little bit of moving back, but I'm doing my best here.
I would like to ask both of our experts with respect to moose about collaring
methods. You all know I'm not a scientist, but I am being briefed about and working on learning about some of the new work for large mammals for sure, but very specifically for all the ungulates, that's going on here in Manitoba, that does not use collaring. So this is mitochrondial DNA work, and it's going on with respect to caribou in Northern Manitoba now. And I wanted to ask you if you could, either or both of you, let me know, let us all know whether you are familiar with these new methods, whether you have used them at all in terms of acquiring data regarding, in this case, moose?

MR. RETTIE: I am familiar with them, though not in their application to moose. I have seen reference in the literature and I'm aware of the work that has gone on with caribou. It's used extensively for grizzley bear work, yeah. So I haven't used it and I'm aware of it.

MR. SCHINDLER: I am in the same position as Dr. Rettie. Typically DNA studies are used at a landscape level, looking at genetic flow in and out of various areas. So, yes, we are familiar with that technique.

MS. WHELAN ENNS: My recollection of
\begin{tabular}{|c|c|c|}
\hline & & Page 6131 \\
\hline 2 & information in it was that you had showed how many & \\
\hline 3 & collars failed. And my understanding is that this & \\
\hline 4 & is one of the reasons why the search for a DNA & \\
\hline 5 & approach. Does this vary a lot or is there a high & \\
\hline 6 & level of collar failure, regardless of the, you & \\
\hline 7 & know, the species or the location? & \\
\hline 8 & MR. RETTIE: Generally, my & \\
\hline 9 & understanding for DNA approaches is not due to & \\
\hline 10 & collar failure, it's used on bears because they & \\
\hline 11 & are very difficult to keep collars on. Their body & \\
\hline 12 & shape is such that they tend to lose their & \\
\hline 13 & collars. And they are also very rare, for & \\
\hline 14 & grizzley bears at least. & \\
\hline 15 & The work that's been applied to & \\
\hline 16 & caribou, again, it's not due to collar failure, or & \\
\hline 17 & even the inability of animals to retain collars, & \\
\hline 18 & but rather it's a preferred method in some areas & \\
\hline 19 & because it's non-invasive. It's seen as a method & \\
\hline 20 & that does not require handing of animals. And & \\
\hline & there are some particularly Aboriginal groups that & \\
\hline & are sensitive to having animals handled. & \\
\hline 23 & MS. WHELAN ENNS: Collaring, though, & \\
\hline & is combined with aerial surveys, which is fairly & \\
\hline 25 & intrusive; is that correct? & \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|}
\hline & variant of tuberculosis. & Page 6133 \\
\hline 2 & MS. WHELAN ENNS: How long then do you & \\
\hline 3 & think, Dr. Rettie, it would take for the instances & \\
\hline 4 & that you referenced that are in Saskatchewan to be & \\
\hline 5 & more evident in Manitoba? & \\
\hline 6 & MR. RETTIE: That's a good question. & \\
\hline 7 & It seems to be moving more slowly eastward than & \\
\hline 8 & westward. In Saskatchewan, it's more commonly & \\
\hline 9 & found, it's most commonly found in elk and in mill & \\
\hline 10 & deer. Mill deer, the distribution eastward from & \\
\hline 11 & central Saskatchewan is not very high. There are & \\
\hline 12 & mill deer that get into Manitoba but their & \\
\hline 13 & densities are not high. I think it's about, going & \\
\hline 14 & east to west across Saskatchewan, I think it's & \\
\hline 15 & about two-thirds of the way eastward from the & \\
\hline 16 & Alberta border towards Manitoba. It is on the & \\
\hline 17 & move and it will travel with animals. So I'm not & \\
\hline 18 & certain what the Provincial Government here has in & \\
\hline 19 & terms of a surveillance program. But chronic & \\
\hline 20 & wasting disease will likely arrive here. & \\
\hline 21 & MS. WHELAN ENNS: Would you recommend, & \\
\hline 22 & in terms of the environmental protection plan and & \\
\hline 23 & the monitoring for Bipole III, specific of course & \\
\hline & to these adjustments in the route, that Manitoba & \\
\hline 25 & Hydro work in, and continue to work with the & \\
\hline
\end{tabular}
province in terms of these wasting diseases?
MR. RETTIE: I think that the
occurrence and the distribution is such that
that's a Provincial Government responsibility, and
they have to set up a broad monitoring network if they want to catch it as it arrives.
MS. WHELAN ENNS: Thank you. On page
36, you appear to have come to a conclusion that
the explanation for the decrease in the moose population and, again, in these GHAs, is
non-licenced hunting. Do you mean that non-licensed hunting is Aboriginal hunting?
MR. RETTIE: That would include Aboriginal hunting, that would include illegal hunting, any rights-based hunting would be in there. And that's, again, as I pointed out in my presentation this morning, that would be my working hypothesis given the evidence at hand.
MS. WHELAN ENNS: Thank you. Because
there's been this additional supplementary EIS work, I'd like to ask whether or not this time the national recovery strategy for Woodland caribou was taken into account, and specific to these herds?
MR. SCHINDLER: You're talking in
regard to the Wabowden Evaluation range?
MS. WHELAN ENNS: Um-hum.
MR. SCHINDLER: The cumulative effects assessment that we did conduct in the supplementary caribou report, that analysis was applied to the AFPR, and there was really no change whatsoever in the results of the looking at future disturbance and the relationship of the transmission line on that landscape threshold that Environment Canada has established. As a matter of fact, it was much less because we were following within existing linear features where the 500 metre buffer of linear disturbance would benefit, reduce the overall impact of Bipole.
MS. WHELAN ENNS: I just want to ask you a quick question in terms of the higher standards in terms of maintaining intact habitat, so look at the number, if I may. It's on the screen.
So Wabowden is in good condition by these new federal recovery standards. The requirement, Mr. Chair, is for 65 percent of the habitat moose are using to stay intact, and this Wabowden herd is below that. So I'm just going to --
\begin{tabular}{|c|c|c|}
\hline 1 & THE CHAIRMAN: Well, I believe this & Page 6136 \\
\hline 2 & was covered before Christmas, but I'm not sure & \\
\hline 3 & about the specific reference to the Wabowden herd. & \\
\hline 4 & Mr. Schindler or Dr. Rettie? & \\
\hline 5 & MR. SCHINDLER: Well, I think we & \\
\hline 6 & discussed the cumulative effects components of & \\
\hline 7 & that. I don't have that information right here & \\
\hline 8 & because that was part of the previous, but the & \\
\hline 9 & level of disturbance, it says the 65 percent & \\
\hline 10 & threshold of the area that should be undisturbed. & \\
\hline 11 & MS. WHELAN ENNS: Thank you now. The & \\
\hline 12 & reason I'm asking it again, of course, is because & \\
\hline 13 & in the previous presentation, you were indicating & \\
\hline 14 & that you had used the new national recovery & \\
\hline 15 & strategy. And it had only just been finalized and & \\
\hline 16 & made public. So that's part of why I'm asking & \\
\hline 17 & today. And the main over-arching question then is & \\
\hline 18 & whether this supplementary EIS for the route & \\
\hline 19 & changes does take into account the new national & \\
\hline 20 & recovery strategy standards for the caribou? And & \\
\hline 21 & I am hearing a yes from you? & \\
\hline 22 & THE CHAIRMAN: He's already answered & \\
\hline 23 & that, yes. & \\
\hline
\end{tabular}

MS. WHELAN ENNS: Thank you.
THE CHAIRMAN: So please don't repeat.
\begin{tabular}{|c|c|c|}
\hline 1 & MS. WHELAN ENNS: I'm going to turn to & Page 6137 \\
\hline 2 & some pages quickly. This page 16, it's & \\
\hline 3 & Mr. McGarry and Mr. Dyck. What is your definition & \\
\hline 4 & of marginally, marginally less habitat? & \\
\hline 5 & MR. DYCK: What page were you & \\
\hline 6 & referring to? & \\
\hline 7 & MS. WHELAN ENNS: Yes, page 16, & \\
\hline 8 & assessment results biophysical, and you're on & \\
\hline 9 & amphibians and reptiles, and you have used & \\
\hline 10 & marginally twice. & \\
\hline 11 & THE CHAIRMAN: I think that's pretty & \\
\hline 12 & self-evident. & \\
\hline 13 & MS. WHELAN ENNS: Well, we can pass, & \\
\hline 14 & Mr. Chair. & \\
\hline 15 & MR. DYCK: The assessment is based on & \\
\hline 16 & the available habitat within the local study area & \\
\hline 17 & and what is affected by the right-of-way, the & \\
\hline 18 & footprint of the project, within that section of & \\
\hline 19 & the right-of-way, or of the adjusted route. And & \\
\hline 20 & in this case for the Wabowden area, there is a & \\
\hline 21 & little bit less of area affected within that & \\
\hline 22 & right-of-way versus the FPR. & \\
\hline 23 & MS. WHELAN ENNS: Thank you. Was & \\
\hline 24 & there a decision taken in terms of the & \\
\hline 25 & supplemental EIS to stay in the GHAs? The reason & \\
\hline
\end{tabular}

I'm asking that, Mr. Dyck, is because some of us think actually in the forest units. And I sort of expected to see the forest management units also in what you're presenting.

MR. DYCK: Are we talking about amphibians?

MS. WHELAN ENNS: No, I'm sorry, I'm on page 21. But it connects to various other things you've got on your presentation, and it's therefore not just one page.

Was the decision taken to use the GHAs as the basis for your analysis, the framework for anything that you were providing, and was a decision not to use the forest management units?

MR. DYCK: It just simplified things in terms of the approach and the perspective on how the area was assessed in terms of the socioeconomic perspectives. Certainly, the forestry, if you're doing the actual calculations, it would be applied at the forest management unit level.

MS. WHELAN ENNS: Thank you.
Dr. Petch, page 17 in your
presentation, again trying to avoid repetition, but I had -- I perhaps didn't fully understand


I was struck by the fact that you were using the FRI from the 1980s. And maybe I don't understand why that point in time, and whether that has to do with specific species. But the FRI in Manitoba has been dramatically changed.

MR. SCHINDLER: The reason we looked at different eras of forest resource inventory was to examine the landscape patterns and the amount of disturbance for those decades and compare. So we had to use those data that related to the era of aerial survey data that we had. So landscape changes through time. The forest inventory is an ideal tool to look at compensation, patch size, amount of linear features, et cetera. So that's why we used whatever data that was available. Historical data was very important.

MS. WHELAN ENNS: You would stay within the elements of the FRI that are continuous throughout in making these comparisons, right? I'm just thinking about the workshops \(I\) have been in about the changes and improvements in the FRI that are in the last decade or so.

MR. SCHINDLER: And I think that we explained our normalization, or creating a common land cover through time essentially simplifying,
\begin{tabular}{|c|c|c|}
\hline & if you will, to some degree the cover types, so & Page 6141 \\
\hline 2 & that we didn't have that confounding confusion & \\
\hline 3 & between different FRIs, but looking at some of the & \\
\hline 4 & basic cover types that exists from one FRI to the & \\
\hline 5 & next. & \\
\hline 6 & MS. WHELAN ENNS: Thank you very much. & \\
\hline 7 & I want to thank the panel, and I'm finished, & \\
\hline 8 & Mr. Chair. & \\
\hline 9 & THE CHAIRMAN: Thank you, Ms. Whelan & \\
\hline 10 & Enns. & \\
\hline 11 & Do any members of the public have & \\
\hline 12 & questions for this panel? Seeing none, the panel & \\
\hline 13 & members have some questions. I'm going to start & \\
\hline 14 & off. & \\
\hline 15 & We have heard an awful lot about this & \\
\hline 16 & bison ranch today. And up until a few weeks ago, & \\
\hline 17 & the only thing I knew about this bison ranch was a & \\
\hline 18 & few references by Mr. Mills complaining about & \\
\hline 19 & 5,000 bison being in the creeks. But now we hear & \\
\hline 20 & that it's somewhat more significant than that. & \\
\hline 21 & Does Manitoba Hydro have a map of this & \\
\hline 22 & bison ranch, where the fencing is? & \\
\hline 23 & MR. McGARRY: Yes, I do. If you'd & \\
\hline 24 & like me to bring it up, I can do so. & \\
\hline 25 & THE CHAIRMAN: We don't need to see it & \\
\hline
\end{tabular}
\begin{tabular}{|ll}
\hline 1 & right now. Perhaps if you could even just make it Page6142 \\
2 & available to all of the participants? I'm not \\
3 & sure, it was in the -- \\
4 & MR. McGARRY: It was provided to \\
5 & Ms. Dagdick at Conservation. It is draft \\
6 & information, this is based on property tables that \\
7 & were given to us from Ms. Dagdick, and our own \\
8 & review of the repro maps. It doesn't represent \\
9 & the entire -- it may not represent, it is draft \\
10 & information is what I'm trying to say. And in \\
11 & terms of the total number of properties, and also \\
12 & we have incomplete information on the fence line. \\
13 & lands on this ranch are Provincial Crown lands? \\
23 & with the local rural municipality or with Manitoba \\
14 & told, and I don't know the degree of accuracy, but \\
15 & I have heard that this operator also has access to \\
16 & other Crown land immediately adjacent that he
\end{tabular}

MR. JOYAL: They are not all Crown
leased lands, there are some privately owned land. We have met with the RM of Mountain, which is the municipality that would house this, and they did not bring any concerns to our attention.

We have notified the individuals, as they have fallen on the \(F P R\) as well as the AFPR, when we do our general notification. So these landowners have been informed but have not participated in any process with us.

THE CHAIRMAN: You haven't heard anything from the landowner in what he or she thinks of it?

MR. JOYAL: They have been notified for round four and this subsequent round, and have not attended an open house landowner information centre or called us.

THE CHAIRMAN: Okay. I mean, I just find it surprising that nobody has a map of the fencing. And so if at all possible, I think it should be made available to all of the parties to this proceeding.

Now, I'm going to bounce all over the
place. I think I have covered the ranch for now. I will likely have some questions for Mr. Mills
when he makes his presentation in a couple of days on behalf of Pine Creek First Nation.

When you are looking at the rerouting in 14A/19A, did you look at running it over on the west side closer to the highway? I realize that there's cultivated farmland in that area, but was that considered at all?

MR. McGARRY: Again, Mr. Chairman, you are probably stretching my memory on this. We did have another route segment in that area originally, the alternative route stage I believe. C19 is the original segment in that area which was not chosen, but it was further west towards Highway 10.

At the time of our review with
Wildlife branch and Manitoba Conservation last
fall, as Mr. Mills had asked about, the alternatives that were reviewed were based on a single criteria at that point, and we landed on the one in the AFPR in relation to moose, and then the assessment followed from that.

THE CHAIRMAN: Bouncing around some more, the blueberry patch, I think it was stated this morning that it's more in the alternative FPR, the AFPR than in the FPR; is that correct?

MR. DYCK: The information wouldn't be definitive in terms of the actual area. There is a rough estimate of area that's affected, that's area of sand ridges where the blueberry patches that are most likely to occur. That results in about 14 hectares that would be affected by the AFPR. I don't have a number for the FPR, but it probably doesn't vary much from that area. Much of the AFPR terrain east and southeast of -- how do I explain this without a map -- it's in the proximity of Cowan is where most of the sand ridges are. Once you move further to the southeast and closer to Highway 20 , we are into an extensive wetland there where it is very unlikely to encounter blueberry patches.

THE CHAIRMAN: Thank you. There is no rhyme nor reason to the order of my question. So medium term duration, I believe somebody this morning said that that was the life of the project, which would be a hundred years; is that correct?

MR. McGARRY: I believe that was
defined. I don't know if Mr. Osler can remember the criteria from chapter 4 of the original EIS, but the term was defined. My recollection, it was
\begin{tabular}{|c|c|c|}
\hline & 50 years for use in significance evaluation & Page 6146 \\
\hline 2 & THE CHAIRMAN: Even 50 years is quite & \\
\hline 3 & a long time. & \\
\hline 4 & MR. OSLER: I've got chapter 4. The & \\
\hline 5 & actual definition at page 4-33 of the original EIS & \\
\hline 6 & was medium level. Medium was effects that extend & \\
\hline 7 & throughout construction and operation phases of & \\
\hline 8 & the project, i.e. up to 50 years. And I think in & \\
\hline 9 & my presentation to the panel, we discussed some of & \\
\hline 10 & the implications of taking that type of a & \\
\hline 11 & definition of medium term versus something that is & \\
\hline 12 & a bit shorter. But the EIS was carried out based & \\
\hline 13 & on that definition. And I think that's all that & \\
\hline 14 & people were talking about earlier. I think the & \\
\hline 15 & question raised the point of about a hundred years & \\
\hline 16 & versus 50 years. & \\
\hline 17 & THE CHAIRMAN: Thank you. And this & \\
\hline 18 & question is probably directed to Mr. Schindler, & \\
\hline 19 & and it's slide number 11 where you're looking at & \\
\hline 20 & GHA 14 and the AFPR at the southern route. Were & \\
\hline 21 & you saying that this goes through high quality & \\
\hline 22 & habitat for moose, that that stretch where it sort & \\
\hline 23 & of turns away from the highway and goes back to & \\
\hline 24 & join the FPR? & \\
\hline 25 & MR. SCHINDLER: South of Bellsite? & \\
\hline
\end{tabular}

THE CHAIRMAN: Yes.
MR. SCHINDLER: Yes. That area is not only high quality habitat, but that area was part of a high density aerial survey block that was identified by Manitoba Conservation in their survey of January 2011. So I mentioned that the areas where we saw concentrations of moose was very similar to what the Conservation had indicated or found within their surveys that were conducted in 2011. So that is essentially, if you will, a bit of a hot spot, or an area where that is considered a high density moose area.

THE CHAIRMAN: Okay. Now, you also spoke about enhanced mitigation involving the FPR. Now, is that something that can be applied in other places? I didn't fully understand your concept of enhanced mitigation.

MR. SCHINDLER: Yeah, I think Cam made mention of a letter that there was some indication that Hydro was looking at some enhanced mitigation in the game hunting area 19A/14A. I think what \(I\) was trying to illustrate there, in terms of the FPR relative to mitigation, and I think if we reflect back to maybe some of the reasons why the FPR was selected in terms of mitigation,
particularly through those Willow areas where the vegetation is quite short in, you know, I have heard Hydro discuss potentially shorter tower spans to lift the conductor higher. Some of the things that have been recommended for area 19 would be access so that maybe you access it from a different area. There is a number of, in my opinion, types of mitigation that certainly could be applied in sensitive areas such as these.

THE CHAIRMAN: Thank you.

MR. McGARRY: I would just add to
that, there was a letter where we provided additional measures that we would consider as enhanced mitigation in game hunting area 19A/14A specific to the FPR, in the event that a decision was made based on our assessment to shift back to the FPR. The Wildlife Branch had made it quite clear that they still believed that area was critical for moose, and as such the discussion evolved to what could be done to enhance mitigation to protect moose in that area, over and above anything else that we had already suggested? MR. OSLER: And just to conclude that, the letter is focused on access related matters and, you know, talks about extra measures for a
particular area to not encourage more access and not to clear anymore trees than absolutely required, like limiting it only to danger trees and trees in excess of 17 metres along the right-of-way, things like that.
That type of an approach is applicable to that type of an area but might not be very applicable if you were talking about an area where you had an open access, one way or the other, and not very many trees, which are some of the other pictures that you had of some of the other areas. So this was very specific to the option of retaining the \(F P R\) in 19A.
THE CHAIRMAN: Thank you. Now, after all these presentations and having gone through the literature that has been provided to us, and today's presentations and discussions, it's not clear to me which of these routes Manitoba Hydro would prefer. I think in the Wabowden area, I get the impression that that one is clear, that it's the AFPR. In 14, the Moose Meadows area, I'm not quite so certain, and I'm quite a bit less certain in 14A/19A.
So is Hydro taking a position on these, and if so, you know, we'd like to know
sometime before next Thursday, or do you want us to toss a coin and make the decision?
MR. McGARRY: Mr. Chairman, we can offer an opinion on what we think might be appropriate in this case, if you would entertain it. And I agree with you, the Wabowden area would seem to make more sense for Bipole III to take the FPR, or AFPR in terms of the final preferred route. For game hunting area 14, Moose Meadows, we believe that either route is probably acceptable in that area based on the review of moose and other factors. For game hunting area 19A/14A, based on the outcome of the assessment, our leanings would be back to the FPR as a solution in that area.
THE CHAIRMAN: Thank you. That's all the questions \(I\) have for now. We will require this panel back again probably on Wednesday for an hour or two. I think out of just a sense of fairness, we'll have to give Mr. Madden an opportunity, and I kind of suspect he'll have a question or two in this regard.
Mr. Mills has indicated to me earlier
that he doesn't think his presentation will take anywhere near the whole day, so we should be able
to slot it in sometime Wednesday afternoon.
Now, panel members. Mr. Gibbons, any
questions?
MR. GIBBONS: Some of these might be short snappers, I'm not sure.

First starting with Mr. McGarry and Mr. Dyck, and I'll let you two decide who should answer what at this stage. I think you have answered this before, but \(I\) am not certain, and if you did I can't remember what the answer was.

On page 7, the lower slide, you are talking here about the route through GHA 14. Could you clarify for me why the existing linear development, the abandoned railway line was not made use of in either of the proposals, the FPR or AFPR?

MR. McGARRY: That suggestion has been made in the past. Generally, we find, and in this case we reviewed in the game hunting area 19A the use of an abandoned rail right-of-way. Generally what we find is, number one, the right-of-way is too narrow, it's usually in the 20 metre range, which means we'll have to get additional property either on one side or both. There also tends to be residential farm developments very near the
\begin{tabular}{|c|c|c|}
\hline & rights-of-way. I guess the third factor is the & Page 6152 \\
\hline 2 & railways go through communities, so like & \\
\hline 3 & Bellsite -- I am not sure about Bellsite -- & \\
\hline 4 & Mafeking certainly. So they are limited in terms & \\
\hline 5 & of opportunity for routing and were so in this & \\
\hline 6 & case as well. & \\
\hline 7 & MR. DYCK: Also the rail line is & \\
\hline 8 & routed through Bellsite as well. The rail line is & \\
\hline 9 & routed through Bellsite, the Community of Bellsite & \\
\hline 10 & as well. & \\
\hline 11 & MR. GIBBONS: Yes, Mafeking as well. & \\
\hline 12 & MR. DYCK: Yes. & \\
\hline 13 & MR. GIBBONS: That's fine. I was just & \\
\hline 14 & looking for a reminder of what that purpose was. & \\
\hline 15 & The second question has to do with & \\
\hline 16 & page 21, the top slide, there is a reference to & \\
\hline 17 & the -- this is under resource use, commercial & \\
\hline 18 & forestry as it affects, i.e, the AFPR affects & \\
\hline 19 & seven new high value forest sites in Wabowden area & \\
\hline 20 & and one in GHA 19A/14A. & \\
\hline 21 & On the surface, that would make it & \\
\hline 22 & appear as though that increases the pressures on & \\
\hline 23 & these forest sites. But I'm wondering, is there & \\
\hline 24 & something unsaid there, that is to say, is this in & \\
\hline 25 & comparison to the FPR, or would the FPR have also & \\
\hline
\end{tabular}
affected new high value forest sites? In other words, is there a trade-off there? If so, there's only one side of the equation indicated.
MR. DYCK: Yes, you are correct.
There are some high value forest sites along the FPR as well in the Wabowden routing area. I don't have an exact number of how many of those are, but they are much advanced in their growth and stage of growth. And they are more difficult to tell from the photography where exactly they exist. And the one area in the game hunting 19A/14A area is a harvested hardwood site that's probably been harvested by Louisiana Pacific in the last decade or so.
MR. GIBBONS: Thank you.
MR. DYCK: The seven sites in the Wabowden area along the AFPR are predominantly right along PR 373.
MR. GIBBONS: Similar question on page 26, lower slide, in the comparison between -- and this is on the aquatics, the FPR crosses 17 water courses, the AFPR crosses 14 , six of which have important habitat.
Can I presume there were some important habitat in the FPR as well? In other
words, it seems again like something might be left out of the comparison, or is it that 17 water courses in the FPR included no important water habitats? I expect not, but just for clarification?

MR. McGARRY: Yes, Mr. Gibbons, if I was quicker, it may be in this chart. Can I defer that to a quick look and get back to you on that information?

MR. GIBBONS: Well, on the surface if,
I mean, the exchange of 17 water courses for 14 seems fine until you find out that six of them are important, whereas in the other case none of them were important as habitats. So if we could get that clarified?

MR. McGARRY: Yes. They would have been rated, it's just we're trying to find it right now.

MR. GIBBONS: They were sort of short snappers. It doesn't necessarily require long explanations.

I think I'll hold off the rest of these then until Wednesday because we are running late. And as you have said earlier, there is perhaps not as long a presentation as we had
expected.
THE CHAIRMAN: Mr. Mills?
MR. MILLS: Yes, we were talking about
the bison fence, and I had some information I
wanted to provide. Mr. Tyson Gilles, the land manager at MAFRI, indicated to us within the last week that he has a complete and accurate plot of the fences around the bison farm. We asked him for that information. He said he had provided his entire file to his ADM and that he can't share it with us. And he wasn't prepared to provide us with any further information other than he knows exactly the extent of the bison fencing. He had forwarded to the MAFRI ADM, and he wasn't at liberty to provide it to us.

As well, a Mr. Dave Yunker at Lands in Dauphin, as a result of a DFO complaint, undertook two inspections, one in 2009, the other in 2011, with regards to the extent of the fencing.

We asked him if we could have that information. He said he had submitted it to his superior, a lady by the name of Jen at Conservation. And I have logged five phone calls to Jen. She won't provide me with the information or return my call.
The information does exist,
Mr. Chairman. Through the section 35 we had encouraged Conservation to obtain this information from MAFRI and Lands. And when the TAC information came out and it was lacking, we were frustrated and sensed that we'd be here today. The information exists, it's current, the Province has it, and they are unwilling or not prepared to provide it to us. They may give it to you, they might give it to Hydro, but they are adamant they will not give it to us.
THE CHAIRMAN: Thank you, Mr. Mills. Mr. McGarry, I don't know if you got those names, but perhaps you might request that information from MAFRI and/or the Lands Branch? MR. McGARRY: To acquire the bison information?
THE CHAIRMAN: Yes.
MR. McGARRY: As it is germane to this process? The information and the issue seems to be --
THE CHAIRMAN: I think the location of the fencing around the ranch is relevant to this process, because your line will be going through the ranch one way or the other.
\begin{tabular}{|ll|}
\hline 1 & MR. McGARRY: We could make the \\
2 & request, as you indicate, Mr. Chairman, although \\
3 & that information may be some time in coming. \\
4 & THE CHAIRMAN: Well, if you could make \\
5 & the request as soon as possible and let us know, \\
6 & and if you are not able to get it, then maybe we \\
7 & will have to -- well, not maybe, we will have to \\
8 & find some other way of getting that information. \\
9 & MR. McGARRY: As you wish. \\
10 & THE CHAIRMAN: Okay. I think we'll \\
11 & adjourn for today. It's been a full day and it's \\
12 & the first of eight. We have a number of documents \\
13 & that need to be placed on the record. So back \\
14 & here tomorrow morning at \(9: 00\) a.m. We'll have \\
15 & Mr. Meronek and his more or less day long \\
16 & presentation. Good evening.
\end{tabular}

OFFICIAL EXAMINER'S CERTIFICATE

Cecelia Reid and Debra Kot, duly appointed Official Examiners in the Province of Manitoba, do hereby certify the foregoing pages are a true and correct transcript of my Stenotype notes as taken by us at the time and place hereinbefore stated to the best of our skill and ability.

Cecelia Reid Official Examiner, Q.B.

Debra Kot
Official Examiner Q.B.
\begin{tabular}{|c|c|c|c|c|}
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