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MACKENZIE VALLEY ENVIRONMENTAL

IMPACT REVIEW BOARD

TALTSON HYDRO EXPANSION

IR SESSION

Facilitators:

Martin Haefele	MVEIRB
Paul Mercredi	MVEIRB

HELD AT:

Yellowknife, NT

October 2, 2009

Day 2 of 3

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1     --- Upon commencing at 9:15 a.m.

2

3                     MR. MARTIN HAEFELE:     Good morning,  
4     everybody, let's start. Welcome back to Day 2 of the  
5     technical sessions, or second round of technical  
6     decisions for the Taltson environmental assessment.

7                     I see it's mostly the same faces around  
8     the table and in the back as well, so I don't think I  
9     need to, you know, go over in every detail again what the  
10    purpose of the session is. But just as a reminder to  
11    everybody we want to do what normally we would do with  
12    written Information Requests and get to the information  
13    that we need to assess this thing properly and the  
14    information that the parties need to, you know, help the  
15    Board with making or forming its views and making its  
16    determination.

17                    Today, the plan is to work on the second  
18    key line of inquiry which is Trudel Creek. Yesterday  
19    we've already heard that there's, you know, quite a bit  
20    of overlap between yesterday's subject and today's  
21    subject, and I, you know, heard on a few occasions, you  
22    know, saying, Okay, well, we'll ask that question  
23    tomorrow, so I suspect there will be some sort of a  
24    repeat of some questions. There may be a specification  
25    of that a question that was already posed yesterday,

1 might need to be treated slightly differently or so for  
2 Trudel Creek, and hopefully there will be some  
3 confirmation that, you know, question may have already  
4 been answered.

5                   Yesterday I started with a quote from  
6 Winston Churchill and I have another one today and that  
7 is, "I have never gotten indigestion by eating my own  
8 words."

9                   And yesterday we found that despite what  
10 our fear was, we actually were on time and ahead of time,  
11 so that was good. We got a lot of answers which was  
12 really good, which I hadn't expected that we'd get as  
13 many answers already off immediately.

14                   And that quote is probably also  
15 appropriate because unlike Tawanis, I'm not as, you know,  
16 I'm not so steeped in the Project and the assessment  
17 process of -- this particular assessment process, and I'm  
18 probably going to say a few wrong things today, and by  
19 all means, you know, point it out and let me know. I  
20 won't be too offended by it.

21                   With that and knowing that we all love  
22 Bruce's voice so much, I would ask DFO maybe if you could  
23 fire the opening salvo again after we hear from Linda.

24                   MS. LINDA ZURKIRCHEN: Linda Zurkirchen.  
25 I was just wondering I had some additional short

1 information to add to one of the Review Board's expert's  
2 questions that was posed yesterday, in regards to  
3 entrainment. There was some specific questions asked  
4 that I coul -- have information on and I'm wondering if I  
5 can provide that.

6 MR. MARTIN HAEFELE: By all means.

7 MS. LINDA ZURKIRCHEN: Okay. The  
8 question was in regards to entrainment and adult  
9 survivability through turbines and potential post-  
10 mortality from injury. And I have some information on  
11 that, that actually I had at hand yesterday but I forgot  
12 I had it here, that we did have -- find one piece of  
13 literature that was in reference to that subject matter.

14 North/South Consultants, 2008, they have  
15 studied survivability through a Kaplan turbine which is -  
16 - we had mentioned yesterday, Kaplan and Francis turbines  
17 are under consideration for this project. Or rather, one  
18 (1) of those two (2) will be used for this project.  
19 Their findings were that a forty-eight (48) hour survival  
20 -- sorry, I'll back up.

21 "Survival rate of adult fish passing  
22 through turbines have forty-eight (48)  
23 hour survival was 87.8 percent for  
24 walleye and 75.5 percent for northern  
25 pike. Additionally acoustic tracking

1                   of pike and walleye indicated no  
2                   evidence of long term effect from  
3                   entrainment on fish mortality or  
4                   movement patterns."

5                   And that was North/South Consultants,  
6     2008.

7                   MR. MARTIN HAEFELE:     And would you -- is  
8     it possible to get that thing on -- on -- that  
9     publication on to the record?

10                  MS. LINDA ZURKIRCHEN:     Yes.   I can -- I  
11     can make that available.

12                  MR. MARTIN HAEFELE:     That would be great.  
13     Okay.   Then without much ado I'd ask Bruce to ask some  
14     questions.   Okay.

15                  MR. SHANE UREN:     Sorry, Shane Uren.   I --  
16     I thought just yesterday we spoke about summarizing some  
17     of the events of yesterday before we started off today.  
18     I don't know if we still -- if that's still the plan  
19     or...

20                  MR. MARTIN HAEFELE:     If -- if you -- if  
21     there is a need -- if people see a need that we should  
22     summarize things from yesterday, then we can certainly do  
23     that.   It is true, I would be eating my own words again,  
24     and I am, I guess, because I said we would.   Or actually  
25     I think it was Tawanis who said that.

1                   But anyways if -- if you think that we  
2   should do that, then we can take a few minutes. But I  
3   thought, you know, watching what happened yesterday, I  
4   think things were fairly clear, so I didn't see a need,  
5   but if -- if people can see a need then I will certainly  
6   be willing to spend some time on that.

7                   MR. SHANE UREN:     Okay. Well, there were  
8   a couple of things, but we're okay with moving forward if  
9   everybody else wants to -- to move forward as well.

10                  MR. MARTIN HAEFELE:   Unless of course  
11   anybody has any, you know, any questions, or if there's  
12   any kind of confusion or if anybody wants any kind of  
13   clarification on anything that was said yesterday, then,  
14   you know, this would be probably a good time.

15                  MS. TAWANIS TESTART:   I would also say  
16   that most -- I see that most of the people who are here  
17   today were here yesterday as well so...

18                  MR. SHANE UREN:     Mm-hm. Well, I guess  
19   from our perspective we were -- we were curious to see  
20   how the discussion went with DFO and some of the  
21   representatives I believe from Lutsel K'e in that  
22   meeting, to see if there's anything that would come our  
23   way from -- from those discussions, or if there's  
24   something that we could be of assistance with.

25                  MR. MARTIN HAEFELE:   DFO, are you in a

1 position to answer that question or --

2 MR. BRUCE HANNA: Yeah. Bruce Hanna,  
3 DFO. There wasn't a lot of discussion around fish  
4 habitat issues. It was more about concerns that have  
5 been raised with compensation issues from previous cases,  
6 I believe. I'm not sure if there's any way to bring that  
7 up now, but that's what we discussed most.

8 MR. MARTIN HAEFELE: And -- and as a  
9 reminder if there's anything that you had in the sidebar  
10 discussion that is relevant, or that both parties think -  
11 - parties think is relevant to the Review Board's  
12 decision in the end, you know, or within the scope of the  
13 assessment obviously, then, you know, we would ask you to  
14 send some sort of a written record of that to -- to the  
15 public registry, ideally, you know, with both parties  
16 signing it or -- or one (1) party doing it and the other  
17 party then sending something in agreeing if -- if there  
18 is any kind of outcome of that nature.

19 Okay. Yes?

20 MR. DAN GRABKE: Yeah, just to add a  
21 little bit to yesterday's discussion, we made quite a bit  
22 of commitment about monitoring programs and that sort of  
23 thing, and I'd just like I guess get it on the record  
24 that I'm going to instruct our consultants -- we're going  
25 to instruct our consultants, in hope that the regulators



1 agree that we -- the whole goal of this project is to  
2 maximize northern participation. We all -- it's northern  
3 owned, Aboriginal owned, and in any of these monitoring  
4 programs we want to utilize the resources that we have,  
5 like George Marlowe and Lutsel K'e trappers in the area,  
6 that sort of thing.

7 And so if -- if these monitoring programs  
8 can be streamlined or set up in a way that we're not  
9 involving helicopters and people from Vancouver, but  
10 using the local resource to gather that information,  
11 that'd be appreciated. Thanks.

12 MR. MARTIN HAEFELE: Thank you. On -- on  
13 the note the subject of commitments, the transcript from  
14 yesterday's sessions are -- is already available, and I  
15 believe we've counted twenty (20) commitments made by the  
16 developer, so we'll see if we can do better today.

17 MS. TAWANIS TESTART: Just before we get  
18 started, as well, I'd like to say that the transcript  
19 from the session that we had in Lutsel K'e on Tuesday is  
20 also available and it's been posted to our website and  
21 it's on the public registry, so if anyone cares to see  
22 what was said there it's been distributed.

23

24 QUESTION PERIOD:

25 MR. MARTIN HAEFELE: Okay, then,

1 Bruce...?

2 MR. BRUCE HANNA: All right. Bruce  
3 Hanna, DFO. Like you were saying there is some overlap  
4 here with questions from the Taltson yesterday. One (1)  
5 provided a detailed quantitative assessment of changes in  
6 flow conditions and ice structure, based on local river  
7 hydraulics and stream morphologies for Zone 5, and  
8 potential impacts to fish and fish habitat.

9 As part of this assessment impacts of  
10 lower flows on water depths and oxygen levels in  
11 downstream overwintering habitat should also be included.  
12 There was other parts to that series of questions that  
13 related to gathering dissolved oxygen information in the  
14 winter -- I think that's been committed to -- and the  
15 importance of that being included in the monitoring  
16 program.

17 MR. MARTIN HAEFELE: Just from -- might  
18 clarify that. Does DFO expect Trudel Creek to be treated  
19 in any different than the rest of the watershed for this  
20 question, or more -- or is that just -- is Trudel Creek  
21 simply included in -- in the overall question and the  
22 overall watershed analysis?

23 MR. BRUCE HANNA: For the ice and the  
24 dissolved oxygen, I think it's along with the entire  
25 watershed, but for Trudel, because the impacts are more

1     severe, potentially, that it would definitely be emphasis  
2     added.

3                     MR. MARTIN HAEFELE:     Okay.     So the  
4     developer -- DFO is asking for a more detailed study, I  
5     guess, on -- on Trudel Creek.

6                     Is that something that you are prepared to  
7     do?

8                     MS. LINDA ZURKIRCHEN:     Linda Zurkirchen.  
9     I'd like to have further discussion or further input from  
10    DFO on -- on what aspects of the assessment that was  
11    provided in the DAR are -- you have discomfort with, and  
12    then be able to identify if we feel more studies are  
13    required and what studies would be required to -- to  
14    negate that discomfort, continuing on with that  
15    commitment from yesterday for additional baseline  
16    dissolved oxygen information in the winter.

17                    MR. MARTIN HAEFELE:     So I take it there  
18    would be a sidebar discussion between the two (2) of you?

19                    Okay, good.     Moving on.

20                    MR. BRUCE HANNA:        Thanks.     Bruce Hanna,  
21    DFO.     Indicate whether the food supply pathway included  
22    items being transported by flowing water to areas of the  
23    water course where there is no or limited access to  
24    shoreline vegetation.     And again, this is -- also applied  
25    yesterday but it would be especially important for

1 Trudel.

2 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.

3 Yes, we -- we recognize that there's some -- some changes  
4 are going to happen in the flow, especially --  
5 particularly in Trudel, having more changes than the  
6 other parts of the system.

7 Trudel will still receive water from the  
8 Forebay over the spillway, a minimum release. Plus, that  
9 minimum release will -- actually it's a minimum release  
10 and it's not going to be maintained at that release every  
11 day, twelve (12) months of the year. There will a hydro  
12 graph that will bring surface water from the Forebay, as  
13 it does now, into the system.

14 So the introduction of food sources from  
15 the flow will still be maintained. Fish will still have  
16 access to the littoral zones and a lot of the  
17 productivity that comes from the -- the lake systems will  
18 also still be maintained, because the lake systems do not  
19 have as considerable an elevation change as some of the  
20 riverine sections.

21 MR. MARTIN HAEFELE: Thank you. Does  
22 that more or less satisfy DFO?

23 MR. BRUCE HANNA: Yes, I think this will  
24 all be in more in sidebar discussions for more details.

25 MR. MARTIN HAEFELE: Okay.

1                   MR. BRUCE HANNA:     Specific to Trudel  
2     Creek, please provide the rationale and approach used to  
3     develop the methods for conducting the assessment of flow  
4     related impacts in Trudel Creek.

5                   MS. LINDA ZURKIRCHEN:     Linda Zurkirchen.  
6     Yeah, the method we used was based on the BC guidelines  
7     for minimum release flow, which is a guideline that's  
8     been established between the BC Government and DFO for --  
9     primarily for power projects where a flow reduction is  
10    occurring if -- in a river system. That guideline was  
11    then coupled with DFO's risk management matrix, which was  
12    used in -- in -- presented in the DAR.

13                   We've been working with DFO for a couple  
14    of years on this methodology, and over, you know, since,  
15    I think '07, we've been meeting and reviewing different  
16    steps along the way. We have recognized that there was a  
17    quest -- IR question about the specific steps that were  
18    used in the BC guidelines and how our methodology  
19    reflected those steps. And we can provide a detailed  
20    step by -- a detailed rationale against -- to those steps  
21    and how we followed them.

22                   So there may be some slight different  
23    terminology that we used. In regards to using terms in  
24    the DAR such as "reaches" opposed to "meso habitats," we  
25    definitely tried to keep the DAR a little less technical

1 recognizing that is a fairly technical document.

2 Already that that may be some of the  
3 differences between identifying ours -- the steps we  
4 reflected in the DAR versus the steps that are in the  
5 guidelines that were followed.

6 MR. BRUCE HANNA: Thank you. Bruce  
7 Hanna, DFO. I think a lot of these will be sidebar  
8 discussions. We have a consultant that's not available  
9 right now that I think this particular question came  
10 from, due to his experience with the BC guidelines.

11 MR. MARTIN HAEFELE: I wasn't going to  
12 ask you whether you're satisfied. I'm just going to ask  
13 whether that is an answer to your question.

14 But if you have another question, please  
15 go -- but can we have a commitment from the Developer to  
16 provide an explanation in writing by October 30th?

17 MS. LINDA ZURKIRCHEN: Yes.

18 MR. MARTIN HAEFELE: Okay.

19

20 --- COMMITMENT NO. 21: Deze Energy to provide the  
21 rationale and approach used  
22 to develop the methods for  
23 conducting the assessment of  
24 flow related impacts in  
25 Trudel Creek by October 31,

2009

MR. BRUCE HANNA: Okay. In relation to that question there's three (3) other parts.

Next, as part of the assessment identify flow sensitive habitats in Trudel Creek and conduct an assessment of flow related impacts to these specific areas. This assessment should be expanded to other water bodies where there are anticipated impacts to fish habitat from construction or operation activities. And that's also in Nonacho Lake, but particularly with Trudel Creek.

MS. LINDA ZURKIRCHEN: Linda Zurkirchen. I think Chapter 14.8, the fish section of the DAR, addresses the first half of that question in regards to the impacts of sensitive fish habitat in Trudel Creek. There is additional information in a supplemental report that was provided to the Review Board and a more detailed effects assessment just for Trudel Creek, with an appendix that does discuss the qualitative assessment between the sensitivity of the fish habitat and the effects.

In regards to other water bodies, the hydrograph, from our perspective and how we presented the information in the DAR, the hydrograph, we felt was not

1 such an extreme change, that when we went through our  
2 effects assessment we felt did not require that same  
3 level of quantitative analysis to the change in habitat,  
4 as we felt was required for Trudel Creek because of the  
5 extreme change in hydro craft in Trudel Creek.

6 MR. MARTIN HAEFELE: So, DFO -- said that  
7 essentially they answered your question, or half of it  
8 anyways in -- in the DAR.

9 And do you have indication of what it is  
10 in that question -- or, that answer in the DAR that --  
11 that you need additional information on, or is that  
12 something that you can deliver?

13 MR. BRUCE HANNA: Bruce Hanna, DFO. I  
14 think for that one I'd like to wait until we discuss it  
15 with our consultant, Barry Chillibeck, because it was his  
16 question and whether it was addressed or not, we haven't  
17 been able to talk to him yet.

18 MR. MARTIN HAEFELE: Okay. So, then if  
19 the question isn't answered, you will bring that up with  
20 the developer on your own? Okay.

21 MR. BRUCE HANNA: Yes. The next one is a  
22 large one, and feel free to say that it would be in the  
23 written response.

24 If a rationale for the current assessment  
25 is not available, then a draft terms of reference for an



1 in-stream flow assessment should be drafted for DFO  
2 review.

3 Terms of reference should address these  
4 key items -- and that's why I'll read the question  
5 because it's got the different points.

6 Watersheds and reaches that will have  
7 flows modified by the proposed project. And the degree  
8 of modification of flows, in terms of magnitude,  
9 frequency, and duration of flows, timing of key hydro  
10 logic events, and duration and frequency of biologically  
11 significant flows, such as temperature based, or open  
12 water flows.

13 As well, a rationale for selection of key  
14 systems, reaches, and the habitats used in the in-stream  
15 flow assessment.

16 Identification and periodicity of key fish  
17 species.

18 And metrics and variables that will be  
19 used to assess impacts to quantify -- to quantity and  
20 quality of fish habitat.

21 That's a -- a lot there, so feel free to  
22 say, we'll get back to this.

23 MR. MARTIN HAEFELE: Do you want a minute  
24 to think?

25 MS. LINDA ZURKIRCHEN: No. My answer's

1 fairly straightforward.

2                   Based on that we feel our methodology did  
3 follow the BC, the guidelines that were presented fairly  
4 -- fairly consistently all the way through and, I think,  
5 from -- once we present that to you, as we said, we would  
6 to the previous question and how we reflected the steps  
7 that these additional terms of reference aren't required,  
8 I think DFO will be satisfied that we did follow the  
9 guidelines that -- as per -- as per how they are laid  
10 out.

11                   So, I -- sorry. To summarize, I think DFO  
12 will probably -- we'll submit our first half of the  
13 information and then you can decide if that satisfied the  
14 second half.

15                   MR. MARTIN HAEFELE: Thank you. You  
16 gotta love it if the answer is shorter than the question.

17                   But, is that an approach that is workable  
18 for DFO?

19                   MR. BRUCE HANNA: Bruce Hanna, DFO.  
20 Yeah, that approach works for us.

21                   MR. MARTIN HAEFELE: Okay.

22                   MR. BRUCE HANNA: There was one (1) other  
23 question in there, but it's specific to those guidelines  
24 so we wont mention it here.

25                   Next, with regards to the reference

1 statement from Section, again, 14.8.6.2.1.1, that the  
2 Deze Energy Corp indicate whether the minimum and maximum  
3 habitat availability values were based on the minimum and  
4 maximum of the mean monthly flows, or the absolute  
5 minimum and maximum monthly flow values during the given  
6 life stage period.

7 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.  
8 I could answer that question, that they were based on the  
9 minimum and maximum of the mean monthly flows.

10 MR. MARTIN HAEFELE: Thank you. Is that  
11 sufficient of an answer or do you need more, or do you  
12 have a follow-up question on that?

13 MR. BRUCE HANNA: I think that addresses  
14 it for now. We'll ask a follow-up question in the -- in  
15 the sidebar discussions.

16 MR. MARTIN HAEFELE: Thank you.

17 MR. BRUCE HANNA: Second part. To better  
18 quantify the potential impact of the proposed four (4)  
19 cubic metres per second minimum flow release on fish  
20 habitat in Trudel Creek, DFO requests that the proponent  
21 develop habitat accedence curves for the various valued  
22 component species and life stages. As part of this  
23 analysis, a summary of the equivalent percent habitant  
24 accedence values corresponding to the 4 cubic metres per  
25 second minimum flow release should be provided.

1 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.  
2 Yes, we will provide that information prior to October  
3 30th.

4 MR. MARTIN HAEFELE: Thank you. That  
5 would be another commitment.

6  
7 --- COMMITMENT NO. 22: Deze Energy to develop  
8 habitat accedence curves for  
9 the various valued component  
10 species and life stages. As  
11 part of this analysis, a  
12 summary of the equivalent  
13 percent habitant accedence  
14 values corresponding to the 4  
15 cubic metres per second  
16 minimum flow release should  
17 be provided

18  
19 MR. MARTIN HAEFELE: Does DFO have any  
20 further questions? I guess they need a minute or so  
21 to...

22 I just want to reiterate here something  
23 because we talk a lot about the sidebar discussions that  
24 are going to happen between DFO and the developer.

25 And I just want to make it very clear that

1 if you have a sidebar discussion that -- just a reminder  
2 that the results need to get on -- on -- on the public  
3 record and they should ideally get on the public record  
4 relatively soon so that the other parties have a chance  
5 at looking those results, and then when we get to  
6 hearings all the parties can be prepared for that. So  
7 that's, I think, quite important.

8 At -- at that time, I think it's also  
9 maybe worth our mentioning that DFO and -- and developer,  
10 or anybody in the developer, or to, you know, government  
11 agencies talking to each other, it's probably quite  
12 natural that DFO is going to ask you a lot of things that  
13 they need for their purposes later on.

14 And DEA may not actually need all that  
15 detail. But by all means, you know, it's okay to put  
16 that stuff on the record and -- and the Board will then  
17 pick and choose out of this and it will consider.

18 But if there is -- you know, if you come  
19 up with a document and it's now fifty (50) or a hundred  
20 (100) pages long, you know, following your sidebar  
21 discussion, it -- it would be very nice if you were to,  
22 you know, point out what the key -- key information is  
23 that -- that you think the Board needs to consider.

24 Thank you.

25 DFO...?

1                   MR. BRUCE HANNA:     Thank you.     Bruce  
2     Hanna, DFO.     This again was Taltson, but more important  
3     for Trudel, I believe, that an assessment is provided at  
4     the potential impacts to fish and benthic invertebrates  
5     should reestablishment of littoral zones not occur in the  
6     best case scenario of one (1) to three (3) years.

7                   There was another followup, as well, to  
8     develop an adaptive management plan if that hadn't worked  
9     as of yet.     Because of yesterday, I think we know that  
10    there is plans for an adaptive management plan but we'd  
11    appreciate a response to the first.

12                  MS. LINDA ZURKIRCHEN:     Linda Zurkirchen.  
13    Yeah, we -- yes, we will conduct an assessment of the --  
14    the habitat and the considerations if the vegetation does  
15    not establish in the time period presented and roll that  
16    into the adaptive management plan.

17                  MR. BRUCE HANNA:     Thank you.     Bruce  
18    Hanna.     Thank you.     Another one that came up yesterday --  
19    Bruce Hanna, DFO -- just for Deze to commit to conducting  
20    additional baseline studies on aquatic resources in zone  
21    5, which is Trudel Creek, in order to better protect  
22    potential impacts to aquatic resources and to form the  
23    basis of future bio-monitoring programs, and timelines  
24    should be provided.

25                  MS. LINDA ZURKIRCHEN:     We discussed this

1 as we -- oh, Linda Zurkirchen. We did discuss the  
2 aquatics briefly yesterday with -- in regards to Trudel  
3 Creek. We feel that we have adequate aquatic information  
4 to conduct this level of the effects assessment as  
5 presented in the DAR, to the level of whether they're  
6 significant level -- significant negative effect.

7 I also -- we recognize that additional  
8 information would be required prior to construction on  
9 the existing environment in order to have a robust  
10 monitoring program. So we commit to picking up that  
11 information in support of the monitoring program.

12 MR. MARTIN HAEFELE: Okay, now I have to  
13 ask DFO if -- if that is a sufficient answer because I  
14 wasn't 100 percent. I first got the impression you were  
15 mostly saying that you have -- haven't answered already,  
16 but then you're making an commitment. So that's my own  
17 inability to follow, I think, but if you could just  
18 clarify that for me. You are making a commitment to pick  
19 up on -- on that information.

20 MS. LINDA ZURKIRCHEN: We're making a  
21 commitment to pick up additional information to support  
22 the monitoring program.

23 MR. MARTIN HAEFELE: Okay, thank you.

24

25 --- COMMITMENT NO. 23: Deze Energy to pick up

1 additional aquatic  
2 information to support the  
3 monitoring program  
4

5 MR. BRUCE HANNA: Bruce Hanna, DFO. I  
6 think that's one we'll have to discuss internally to see  
7 if there is adequate information especially on Trudel and  
8 -- and other parts of the watershed, but we can  
9 definitely get back to you on that.

10 MR. MARTIN HAEFELE: Thank you.

11 MR. BRUCE HANNA: Next question. We'd  
12 ask that Deze indicate whether it would be feasible to  
13 utilize one (1) of the side channels adjacent to the  
14 South Valley spillway as the outlet for the minimum flow  
15 release into Trudel Creek in order to preserve the white  
16 sucker habitat currently found in this area.

17 MS. LINDA ZURKIRCHEN: We've talked to  
18 engineering about that and the indication is that it's  
19 not feasible to have a minimum release through those side  
20 channels to support the habitat.

21 I don't know, Tom, if you wanted to  
22 comment on the details of that?

23 MR. TOM VERNON: Tom Vernon. Yeah, those  
24 side channels have sills, elevations at pretty much  
25 exactly the same elevation as the main spillway.



1                   So they would -- they would start spilling  
2     at exactly the same headpond level. If in the new  
3     operation which we would have to run the headpond at just  
4     below the OG sill on the South Valley spillway, those  
5     channels would be below that -- or above that level and,  
6     therefore, would dry.

7                   We gave this a lot of consideration.  
8     Linda asked this question early in the sort of  
9     alternatives assessment for minimum flow structures  
10    placement there, and we had a good look at it. The  
11    problem with the side channels is they're not accessible  
12    to us from the site.

13                  We have to get across the South Valley  
14    spillway to -- to do anything at either of those channels  
15    and then it's a fairly rugged piece of terrain in between  
16    the South Valley spillway and -- and those two (2)  
17    channels. The one (1) you're probably most concerned  
18    with is the farthest one (1) out.

19                  So we didn't really see a practical way of  
20    incorporating minimum flow release into those -- into  
21    that far channel.

22                  There is a partial OG development on the  
23    far channel which could be removed and then would allow  
24    some flow into that channel and a lower headpond  
25    elevation, but I -- my feeling is that it would still

1 stay within the ice cover range and would probably freeze  
2 up. And so there's, you know, a problem making any  
3 particular commitment to what flow would actually be --  
4 be released and how regulated it would be.

5 So that's what we're struggling with on --  
6 on the side channels.

7 MR. MARTIN HAEFELE: Thank you. I take  
8 it that that is an answer but not necessarily but we will  
9 consider satisfactory in a sense.

10 I just want to point out that if at any  
11 time -- the same goes with the sidebar meetings, you know  
12 -- if there is not agreement reached it's not the end of  
13 the world.

14 I think both sides will, you know, get the  
15 -- the chance to make their case at the public hearing  
16 and then the Board will eventually decide. Obviously, if  
17 the parties can come to an agreement and some kind of a  
18 commitment and -- and work things out between the two  
19 (2), before that time then -- then that's even better.

20 But the Board, you know, has a job to do  
21 at the end and it will do its job. So it's not that, you  
22 know, we have to be in despair if -- if you don't to  
23 agreement today.

24 I have a quick question for you though.  
25 What do you mean is OG development?

1                   MR. BRUCE HANNA:     Okay.   Sorry.  OG is  
2   just a shape -- it's just a hydraulic shape that's a  
3   round -- a curve that --

4                   MR. MARTIN HAEFELE:    Okay.   Thank you.  
5                   Does DFO have more questions?

6                   MR. BRUCE HANNA:     Not that many more but  
7   a few.  Bruce Hanna, DFO.  Identify mitigation measures  
8   that will be implemented to prevent fish from being  
9   stranded in Trudel Creek and the South Gorge spillway as  
10  a result of scheduled and unscheduled ramping events.

11                  MS. LINDA ZURKIRCHEN:   Linda Zurkirchen.  
12  We -- we do have some mitigation measures that we would  
13  like to enhance on.  I can tell you now then what we  
14  presented in the DAR for the bypass spillway.

15                  One (1) item that we've talked to  
16  engineering about is that when the -- they close the flow  
17  to the spillway, that closure can happen slowly.  It  
18  doesn't have to be an abrupt closure which will give fish  
19  indicator and time to remove themselves from the system  
20  and stay within the water and not be stranded.

21                  We also can, coupled with that, do a test  
22  run of that system with biologists in place to identify  
23  if standing is an issue, and take it from there and see  
24  whether additional mitigation is required and work with  
25  DFO on what that mitigation could be, if it is required.

1                   With -- in regards to Trudel Creek, one  
2     (1) of the mitigation measures that we've identified is  
3     that, at a minimum flow, to map potential habitat that  
4     may be more prone to stranding fish, and then during an  
5     initial shut down event do a review or overview of those  
6     sites in situ and see if stranding is an issue, or  
7     whether it's not an issue being that Trudel Creek will --  
8     the flows will be reduced fairly slowly in Trudel as the  
9     entire Forebay also has to drop.

10                   It's more of a natural process that would  
11    take place, or more mimics of a natural process. And  
12    again, fish generally would have time to move with the  
13    water into the -- into the main stem out of the areas  
14    that would become de-watered.

15                   But by mapping those areas -- those higher  
16    risk areas first and having a monitoring program of that,  
17    then we can identify if our mitigation is taking place --  
18    is working. And if it's not, we can use some adaptive  
19    management and talk to DFO about what additional  
20    mitigation might be required.

21                   MR. MARTIN HAEFELE:    Thank you. So, I  
22    take it that it's going to be part of the management  
23    plan?

24                   MS. LINDA ZURKIRCHEN:    Yes.

25                   MR. BRUCE HANNA:       Bruce Hanna, DFO. No,

1 I think that's a -- a good approach. And the follow-up  
2 question to that would be to link that in with the  
3 adaptive management, so it's already answered.

4 Next is: Confirm that the South Gorge  
5 Spillway will be designed with manual or secondary  
6 operating mechanisms to ensure that it may be operated  
7 during complete power outages.

8 MR. TOM VERNON: Tom Vernon. Yeah, we  
9 can confirm that it would have backup systems for opening  
10 and closing the gates.

11 MR. BRUCE HANNA: Bruce Hanna, DFO. That  
12 -- that answer is satisfactory to us. Next, I think  
13 we're in the home stretch here.

14 Address the potential impacts to fish that  
15 spawn in the spring due to the one (1) month delay in the  
16 freshet, and low flow years when no freshet would occur  
17 in Trudel Creek.

18 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.  
19 We're taking that into consideration and we'll get back  
20 to you by October 30th, as we need to conduct some  
21 further analysis into that question.

22 MR. MARTIN HAEFELE: Thank you.

23

24 --- COMMITMENT NO. 24: Deze Energy to address the  
25 potential impacts to fish

1                   that spawn in the spring due  
2                   to the one (1) month delay in  
3                   the freshet, and low flow  
4                   years when no freshet would  
5                   occur in Trudel Creek  
6

7                   MR. BRUCE HANNA:     Bruce Hanna, DFO.  
8     There's two (2) more parts to this question that I think  
9     will be addressed in the same way.

10                  First, it's assess the potential for a  
11     change in fish species composition within the Trudel  
12     system due to the rise in temperature in Trudel Creek  
13     resulting from lowered water levels, and that Deze  
14     clarify whether it is expected that areas of sufficient  
15     depth will remain to provide overwintering habitat.

16                  MS. LINDA ZURKIRCHEN:     Linda Zurkirchen.  
17     I believe the latter two (2) -- those two (2) questions  
18     just posed here are addressed in the DAR.

19                  Change in water temperature is anticipated  
20     to be very low to negligible and, as such, should not  
21     affect fish and responses of fish to changing water  
22     temperatures.

23                  And the overwintering depth I also believe  
24     is address in the DAR in the weighted -- do we have that  
25     in weighted usable areas?

1                   Yeah. It's not -- it's not -- the over --  
2   the quantification of overwintering habitat is not in the  
3   DAR, but is addressed in terms of the rearing habitat of  
4   the fish. And it is addressed in the overall qualitative  
5   review in the DAR.

6                   MR. MARTIN HAEFELE:    Do you have a  
7   follow-up on that, DFO?

8                   MR. BRUCE HANNA:    Not on that. Bruce  
9   Hanna, DFO. We'll just have to discuss that internally  
10  as far as response for in temperature. It just seems  
11  that shallower water, there would be an increase but  
12  we'll look at that internally.

13                  MR. MARTIN HAEFELE:    Thank you.

14                  MR. BRUCE HANNA:    We only have one (1)  
15  more left and I believe it was asked yesterday, as well.  
16  But assessing the possibility that higher flows in the  
17  winter will initiate early spawning by fish species that  
18  normally spawn in the spring in correlation with the  
19  annual freshet.

20                  MS. LINDA ZURKIRCHEN:   And as discussed  
21  with the other similar question, we'll take that into  
22  consideration and provide a response by October 30th.

23                  MR. MARTIN HAEFELE:    Thank you for that  
24  commitment.

25

1     --- COMMITMENT NO. 25:         Deze Energy to access the  
2                                       possibility that higher flows  
3                                       in the winter will initiate  
4                                       early spawning by fish  
5                                       species that normally spawn  
6                                       in the spring in correlation  
7                                       with the annual freshet  
8

9                             MR. MARTIN HAEFELE:     DFO, you have no  
10    more questions then?

11                            MR. BRUCE HANNA:     No more questions for  
12    us.

13                            MR. MARTIN HAEFELE:     Okay. I guess  
14    yesterday we then moved on I think it was INAC as the  
15    next in line and it looks like INAC is prepared to ask a  
16    few questions.

17                            MS. CANDACE ROSS:     It's Candace Ross with  
18    INAC. Just a couple of quick questions.

19                            MR. MARTIN HAEFELE:     No, we have time  
20    so...

21                            MS. CANDACE ROSS:     The first one (1) is  
22    about the Trudel Creek erosion assessment. And it's just  
23    INAC requests that Deze commit to monitoring the erosion  
24    potential along Trudel Creek both pre and post  
25    construction in accordance with the recommendations from



1 the Klohn Crippen Berger report, 2009 report.

2 The purpose of this monitoring would be to  
3 ensure that there is sufficient baseline data available.

4 MR. SHANE UREN: In -- in the -- Shane  
5 Uren. In the DAR, we present an assessment of potential  
6 effects of erosion, and it's stated in there that there  
7 will be a considerable less amount of flow than currently  
8 through the system.

9 There will be times when the flow does get  
10 close to historical levels but not to those peaks and not  
11 on a regular basis.

12 And through our assessment of potential  
13 erosion we -- we deemed that there would be a significant  
14 reduction in erosion through there and we feel that --  
15 that, given the results of our assessment, that no  
16 further work in terms of erosion is required in Trudel  
17 Creek.

18 MR. MARTIN HAEFELE: So I take that as a  
19 non commitment, in a sense, that the -- so the developer  
20 feels that the answer -- the answer to that question is  
21 either provided already or that there is no further need  
22 for information.

23 Is INAC able to respond to that or do you  
24 --

25 MS. CANDACE ROSS: I'll just take that

1 back but --

2 MR. MARTIN HAEFELE: Okay. So if -- if  
3 that answer is not -- well, generally speaking, normally  
4 we would do this in a written exchange so there would  
5 only be one (1) -- one (1) chance, you know, for you to  
6 get an answer.

7 But since we're doing it that way I think  
8 if you feel strongly or if INAC feels that -- or  
9 determines that there is more information needed for  
10 them -- for you to -- to, you know, form your opinion on  
11 -- on the project then you would have to address that in  
12 a sidebar discussion with -- with the developer. Thank  
13 you.

14 MS. CANDACE ROSS: Sure. My next  
15 question is about flood hydrology and INAC noted that  
16 there was no flood hydrology provided in the DAR.

17 The request is that Deze provide the flood  
18 hydrology and that you indicate the source of the inflow  
19 design flood information used for planning the expansion  
20 project.

21 MR. SHANE UREN: Shane Uren. We had  
22 discussions with INAC previously and had some -- received  
23 this question or this request previously, and I believe  
24 we provided that information. I'd have to double check  
25 but if it's not been provided we definitely can do that.

1 MS. CANDACE ROSS: I'll have to confirm.

2 MR. SHANE UREN: Okay.

3 MR. MARTIN HAEFELE: If it has been  
4 provided to INAC it has not been provided to the record.  
5 So I would ask you that that information would be, you  
6 know, submitted to the Review Board, as well, so it can  
7 be put on the record --

8 MR. SHANE UREN: Yeah.

9 MR. MARTIN HAEFELE: -- so all parties  
10 have the same information to look at.

11 MR. SHANE UREN: Shane Uren. My  
12 understanding is that we -- we sent -- after our first  
13 technical session, we sent INAC some responses to some of  
14 their questions that I believe was also sent to the  
15 Board.

16 And so I'd have to check to see but my  
17 understanding is that if we sent something out that it  
18 went to the Board and to INAC, as well, but I will  
19 confirm that.

20 MR. MARTIN HAEFELE: Okay. So maybe we  
21 should at some point then just check our registry briefly  
22 and -- and see if those things are on there. If they're  
23 not on there then they got lost somewhere I guess.

24 And I'm not saying it hadn't -- you know,  
25 it's entirely possible, you know. I mean, we rarely make

1 mistakes but they do happen.

2 Okay, INAC, do you have any more  
3 questions?

4 MS. CANDACE ROSS: No more questions.

5 MR. MARTIN HAEFELE: Okay. Again,  
6 following yesterday's precedent, I guess then Environment  
7 Canada, do you have any questions in relation to Trudel  
8 Creek? I take that as a no.

9 Okay, anybody else from any other parties,  
10 other than our -- the Review Board's own experts? They  
11 will get their chance. But any other parties who have  
12 any questions of the developer or of any of the other  
13 parties, now would be the time.

14 Okay. George has a question or comment.

15 MR. GEORGE MARLOWE: Thank you. A person  
16 like me can't get an answer right away. I got to think  
17 about it at least five (5) days. So next time, if I come  
18 here again, maybe I'll find the answer.

19 Always like that. You can't -- can't just  
20 get -- get it right away, right at this meeting. You  
21 have to think. This is something really important. And  
22 I just listen to you guys, those people there and there,  
23 and I will listen to the people in Lutsel K'e too, and,  
24 also, progress maybe. Then we'll get something there.  
25 Don't worry about today. Thank you.

1                   MR. MARTIN HAEFELE:    Thank you.   And as -  
2   - as we discussed yesterday, this is a session, you know,  
3   to ask questions and get information.   There will be a  
4   time for parties to digest all the information, and then  
5   there will be a public hearing, which is currently -- you  
6   know, we hope to have in -- in January.   And -- and the  
7   Board will certainly not, you know, make any kind of  
8   decisions of -- of any sort until after that has  
9   happened.

10                  So, okay.   If there are no more questions  
11   from the parties right now, you know, we are a little bit  
12   ahead of schedule.   I would say we'll take a bit of a  
13   break now, in part because I really just realized that I  
14   forgot to feed the meter.   So let's take a fifteen (15)  
15   minute break and then we'll get going again.

16  
17   --- Upon recessing at 10:00 a.m.

18   --- Upon resuming at 10:17 a.m.

19

20                  MR. MARTIN HAEFELE:    Okay, everybody, can  
21   we take our seats and get back to work?

22                  Okay.   This morning we had DFO and INAC  
23   ask questions of the developer.   And seeing that there is  
24   no other parties through the assessment that have  
25   questions that are specific to Trudel Creek, so I would

1 now ask the Review Board's own experts if they had any  
2 questions of the developer or, you know, anybody else.

3 Okay. Then we'll start with Bruce. So we  
4 continue with Bruce then, so to speak.

5 MR. BRUCE STEWART: My first question is  
6 just a followup with the aquatic baseline. Really, most  
7 of the questions that were asked on the baseline  
8 yesterday also apply to Trudel Creek, so I won't repeat  
9 them, but ask that you address them in the same way.

10 One (1) question that I do have in  
11 addition is whether Deze can provide an analysis of the  
12 statistical strength of the baseline and whether it's  
13 robust enough to detect whether impacts are occurring and  
14 at what sort of level so that there's a sense of what  
15 sort of sample sizes might be necessary for monitoring  
16 later on.

17 MR. SHANE UREN: So I guess -- it's Shane  
18 Uren. So there is a request for a commitment to complete  
19 a cisco assessment of what would be required, is -- if I  
20 understand correctly?

21 MR. BRUCE STEWART: I -- I was thinking  
22 more a power analysis sort of --

23 MR. SHANE UREN: Yeah.

24 MR. BRUCE STEWART: -- sort of  
25 assessment.

1                   MR. SHANE UREN:     Yeah, I think -- yeah.  
2     I think through our work with our -- our management plan,  
3     that we're going to put forward. I think those details  
4     will be in there. And then we can work with the parties  
5     to ensure that we've got a robust program. So, yes,  
6     there's a commitment to put that through.

7                   I'm not sure that it's going to be, you  
8     know, initially satisfactory to -- to do exactly what  
9     you're looking for, but I think that's why we're putting  
10    that forward as a draft.

11                  And we'll -- we'll work with you and hope  
12    for future comments so that we can make sure we have a  
13    program that can do that because that -- that's our plan,  
14    or that's our objective of that monitoring plan.

15                  That will include additional baseline data  
16    prior to the project being constructed, is that we have a  
17    robust database that we can refer to so that we can do  
18    before or after comparisons before during comparisons.

19                  MR. BRUCE STEWART:   Thank you.

20                  MR. MARTIN HAEFELE:   While you're looking  
21    up your next question, you mentioned the management plan  
22    again, and I think the management plan's been mentioned  
23    quite a number of times, so it's starting to look like  
24    it's going to be a pretty -- pretty important document  
25    for this assessment.

1                   And I was just wondering, maybe I missed  
2     it, but is there an estimated time of arrival or date of  
3     arrival for this management plan?

4                   MR. SHANE UREN:     Shane Uren.   Yeah,  
5     absolutely.   We -- our -- our goal here is to submit that  
6     draft, what we're calling a terms of reference for the --  
7     the management plan, to the Board, along with our  
8     responses to the IRs, which would be the end of this  
9     month, on the 30th.

10                  That's our -- that's our goal, so that the  
11     -- so that the parties and the consultants have that in  
12     hand, so when they see our responses, and they can --  
13     those responses can be supported by the management plan.

14                  MR. MARTIN HAEFELE:   That's a very worthy  
15     goal.   Thank you.   Bruce...?

16                  MR. BRUCE STEWART:     I have a series of  
17     questions now about power outage frequency and ramping in  
18     Trudel Creek.   The frequency of unscheduled power outages  
19     lasting long enough to cause a full ramping event in  
20     Trudel Creek has been estimated at five (5) years on  
21     average.

22                  And I'm wondering how that five (5) year  
23     frequency of occurrence -- not how, but whether it's an  
24     estimate or whether it's based on operating experience at  
25     the existing facility.



1                   MR. SHANE UREN:     Shane Uren.   Yeah, a  
2     very good question.   We spent a lot of time internally  
3     with that -- that estimate of one (1) and five (5) years.  
4     It is based on experience at the snare system.

5                   There's detailed records of the outages,  
6     the -- the lengths of those outages.   I believe the  
7     record expands over twenty (20) years.

8                   We have the statistics and what we'll do  
9     is we will present that formally so that you can see that  
10    -- where we devised that one (1) and five (5) year  
11    frequency.

12                  MR. BRUCE STEWART:   Thank you, that  
13    answered my second question, as well.

14

15    --- COMMITMENT NO. 26:           Deze Energy to present the  
16                                       statistics regarding  
17                                       frequency of unscheduled  
18                                       power outages

19

20                  MR. BRUCE STEWART:   Given that the  
21    frequency of these events and the ability of the system  
22    to recover are both uncertain, does rating these effects  
23    as low represent a precautionary approach to impact  
24    prediction?

25                  MR. SHANE UREN:     Shane Uren.   We rated

1 the effects as low based on assumptions of the frequency.  
2 Now, we -- we take a -- we -- we took the project and the  
3 aspects of the project and rated those aspects.

4 And then, subsequent to that, we looked at  
5 those assumptions, some of the assumptions we used to  
6 make that prediction, and that's where the uncertainty --  
7 under the uncertainty section, we rated that as higher,  
8 whereas we're not 100 percent sure on some of those  
9 assumptions.

10 But we have to devise a set of conditions  
11 to assess. And, based on those conditions we assessed,  
12 we came up with the rating of, I believe, low or  
13 moderate, and then the uncertainty there is high because  
14 of some of the assumptions that we had to make.

15 MR. BRUCE STEWART: Okay. What is the  
16 likelihood that habitat will truly stabilize given the  
17 regular and irregular perturbations of this magnitude?

18 MR. SHANE UREN: Shane Uren. Well, we  
19 looked at the historic flows on the system, and we're  
20 talking here about Trudel Creek during ramping events.  
21 There's going to be a reduction in flow and -- and flows  
22 will fluctuate. They will not fluctuate higher than they  
23 have been over the last twenty (20) years or so.

24 And based on that, that we feel the system  
25 has experienced those flows over a regular basis in the

1 past, that that range of flow will be, in our opinion,  
2 healthy for the system, and won't be a hindrance to the  
3 establishment of the new littoral zones, or the  
4 succession of the transition of the wetlands closer down  
5 to the new average water level.

6 But, at the same time, we recognize that  
7 that's our assumption and through our monitoring plan we  
8 will put together a program that verifies, that puts  
9 checks and balances to see how the system is responding,  
10 and how the system responds particularly to some of the  
11 big changes in flow that will be expected under a ramping  
12 event.

13 MR. BRUCE STEWART: Okay. What further  
14 studies are planned to -- to assess the potential affects  
15 of ramping on fish spawning in Trudel Creek?

16 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.  
17 We found -- based on the frequency, the forecast  
18 frequency of a full ramping outage, we feel the effects  
19 on spawning habits -- spawning fish and spawning habitat  
20 and spawned eggs, is very low, and that no further  
21 additional mitigation is required in that the -- in the  
22 Trudel System, it is a low energy system.

23 Velocity and scour, which are two (2)  
24 components that could effect eggs, we don't -- because of  
25 the low velocity conditions those aren't an effect that

1 would be materialized in -- in the Trudel Creek.

2 In addition with the generally short  
3 duration of the higher flows, and the timing windows of  
4 the spawning fish, we feel that the shallow water  
5 spawners, which spawn in spring and have a fairly short  
6 incubation period, would have a very low potential for us  
7 to have eggs spawned and then become de-watered and, as  
8 well, that that occurrence, that outage would have to  
9 happen within that, basically a -- as an example with  
10 pike, with a fourteen (14) day or so spawning period.

11 So that the potential for those conditions  
12 to come together, to have an outage during the spawning  
13 period that would affect eggs is fairly low and would not  
14 have a significant effect on the population.

15 MR. BRUCE STEWART: I take it then that  
16 you're saying that you're not going to do any further  
17 spawning assessments prior to project development, is  
18 that correct?

19 MS. LINDA ZURKIRCHEN: In consideration  
20 of the effects of ramping, that's correct.

21 MR. BRUCE STEWART: Okay. My last  
22 question related to this is, have -- within the project,  
23 have alternatives that would eliminate ramping in Trudel  
24 Creek been considered? And this -- this, I guess, moves  
25 into design alternatives, different configurations a bit.

1                   But are there ways that the project could  
2     be designed to avoid this ramping and that entire impact  
3     and ,by the same token, stabilize flows downstream from  
4     the power stations, for example?

5                   MS. LINDA ZURKIRCHEN:     Okay.     Linda  
6     Zurkirchen.     We -- we feel that a fair bit of mitigation  
7     has been developed into the project in regards to  
8     reducing the effects of ramping.

9                   Certainly with the scheduled outages,  
10    taking turbines offline only one (1) at a time to  
11    minimize the effect, having the bypass spillway take some  
12    of that flow, that the residual flow that would  
13    materialize in Trudel Creek is relatively low.

14                   Any of the numbers about, you know, 40  
15    cubic metres a second, which over the width of the creek  
16    would not in -- would not materialize in a substantial  
17    rise in the water level, and that information is provided  
18    in the DAR.

19                   Additionally, having the bypass spillway,  
20    additional mitigation measure to help relieve some of the  
21    effects, especially with the scheduled outages.

22                   Unscheduled outages of complete shutdowns,  
23    which is -- is the worst -- worst case scenario, which I  
24    think is -- is primarily what may be at question here,  
25    and that because of the frequency of the outage that --

1 and that the frequency of the outage would have to occur  
2 on a critical timing window that we did not feel that  
3 that level of effect was significant and that we felt our  
4 mitigation measures are appropriate for -- for -- to  
5 mitigate the effect on populations.

6 I think Tom can speak a little bit to some  
7 of the design that went into the bypass spillway and some  
8 of the considerations that were taken into that design  
9 criteria and what's required with that design.

10 MR. TOM VERNON: Tom Vernon. I think the  
11 question was on alternatives, is that right? The current  
12 system of the bypass spillway design of about 30 cumix  
13 (phonetic), that's understood?

14 I think this question came up yesterday.  
15 Can the South Valley Gorge take more water? We have  
16 looked at, in a broad sense, other types of systems.  
17 There's a lot of technical challenges to implementing  
18 effective spillways in projects that are already built.  
19 We settled on this configuration as the best alternative  
20 along with other mitigative measures that Linda has  
21 mentioned.

22 But, yes, it's -- it's a possibility to  
23 enlarge things but everything comes at a cost and with  
24 technical challenges, as well, working with -- with this  
25 system already watered up.

1                   MR. MARTIN HAEFELE:     Could you just  
2     briefly, you know, very briefly sort of outline what  
3     those -- you had alternatives and you settled on this one  
4     and what was sort of your main reason why you settled on  
5     -- on this one?

6                   MR. TOM VERNON:     Yeah, they're -- they're  
7     basically technical considerations to -- to implement  
8     large scale flow releases from the Forebay, would involve  
9     a lot of in-stream works because there isn't a good  
10    position for a large spillway.

11                   And we would have to probably also either  
12    alter the dam. The core in the dam only comes up above  
13    operating levels now a certain amount. And for a  
14    spillway to actually be able to discharge from the  
15    Forebay, you'd have to have elevated water levels in the  
16    Forebay.

17                   And we don't consider that to be a safe  
18    route to proceed. We really can't change the layout of  
19    the dam and we would also have to raise the South Valley  
20    spillway to contain the headpond to do exactly what you'd  
21    like, which would be perhaps maintain a much more  
22    regulated regime in Trudel.

23                   So there is a lot of negatives associated  
24    with trying to release water in some other spot and we  
25    didn't -- we haven't pursued those to a great degree but

1 we recognize they're -- they're there but I will say  
2 they, from my point of view as a design engineer, they --  
3 they present a lot of technical challenges.

4 MR. MARTIN HAEFELE: And that would also  
5 raise the water levels, right?

6 MR. TOM VERNON: It would raise water  
7 levels during a flood condition or --

8 MR. MARTIN HAEFELE: Okay.

9 MR. TOM VERNON: -- or an outage  
10 condition, yes. To just to get the water into the  
11 spillway you've got to raise the headpond level.

12 MR. MARTIN HAEFELE: Okay. Thank you.  
13 That's good.

14 Do you have any more questions, Bruce?

15 MR. BRUCE STEWART: Yes. One (1) -- one  
16 (1) more small set here. Now DFO has -- has covered off  
17 the weighted useable area questions pretty thoroughly I  
18 think.

19 There's a couple of questions that -- that  
20 I would like to add to that and one is whether substrate  
21 -- the -- the data coverage for substrate that were used  
22 in the model weren't complete, and whether this  
23 information gap has serious implications for the  
24 predictive ability of the model itself.

25 MS. LINDA ZURKIRCHEN: Yes, Linda



1 Zurkirchen. There was some information picked up on  
2 substrate. The way the model works is that if we do not  
3 use an input parameter for substrate, that substrate is  
4 assumed to be at a suitable 100 percent suitability, both  
5 during baseline conditions and during project conditions.

6 We felt that was an appropriate assumption  
7 to make because of the, one (1), is the assumption that  
8 the vegetation is coming back even though vegetation does  
9 also come into the cover component of that model.

10 But being that we're looking at one (1) of  
11 the -- one (1) of the valued species is the pike spawning  
12 and the substrate required, it is a substrate that's  
13 supported by vegetation, a fine substrate vegetation  
14 would grow and that we felt we were comfortable. If the  
15 vegetation's coming back then we have a substrate that is  
16 also suitable for that.

17 Other spawning species are currently  
18 spawning now. The deeper-water species are spawning in  
19 the substrate that is there currently and will be there  
20 post-construction.

21 MR. BRUCE STEWART: Are there plans to  
22 collect any additional substrate data?

23 MS. LINDA ZURKIRCHEN: No, not at this  
24 time.

25 MR. BRUCE STEWART: Okay. What further

1 studies will be conducted to verify whether the habitat  
2 use model is accurate? Are there studies of spawning or  
3 larval fish, that sort of thing to -- to verify that?

4 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.  
5 The -- there is a reasonableness test that was conducted  
6 as part of the review of the model. That is in a  
7 supplemental document that was given to the Review Board  
8 and that we can point you in the right direction to  
9 review that. That was taken as a review of the outcome  
10 of the model, based on photography and observations in  
11 the field as to the outcome of the model and the -- the  
12 validity of the model in reference to baseline  
13 conditions. So that's available. And we can commit to  
14 pointing the Review Board to that document.

15

16 --- COMMITMENT NO. 27: Deze Energy to point the  
17 Review Board to document  
18 regarding a reasonableness  
19 test conducted as part of the  
20 review of the model

21

22 MS. LINDA ZURKIRCHEN: And in addition to  
23 that, the outcome on the monitoring program would be --  
24 or the outcome of the model predictions would be part of  
25 the monitoring program and set up in that. MR. BRUCE

1 STEWART: Okay. So there aren't any -- any studies, any  
2 verification studies planned at this point?

3 MS. LINDA ZURKIRCHEN: Not at -- not at  
4 this time but initial data would be picked up pre-  
5 construction for the monitoring program.

6 MR. BRUCE STEWART: Okay. Last question:  
7 What were the rationale for using the weighted usable  
8 area model compared with other models such as DFO's  
9 habitat alteration assessment tool, that sort of thing?

10 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.  
11 The -- the habitat -- I can say that the application of  
12 the model that we used, as I mentioned earlier, has been  
13 developed by BC Provincial Government and DFO in the  
14 Province of BC for use specifically for reduced flows in  
15 riverine systems, primarily associated with hydro power  
16 projects.

17 Another model such as the HATT -- HAAT  
18 model was developed for the Great Lakes and is really  
19 directly applicable for reduced habitat conditions in  
20 large lake systems. I have a couple of references from  
21 DFO in regards to the applicability of that model, in  
22 regard -- and that it's not felt that at this point in  
23 time that model has application to riverine systems, but  
24 should be maintained for large lake systems, such as the  
25 Great Lakes.

1                   And I have that here and I can provide it  
2     for the record afterwards, that document.

3                   MR. BRUCE STEWART:     Thank you.   I'm done.

4                   MR. MARTIN HAEFELE:     Okay, thank you.

5     Thank you, Bruce and thank you to the Developer for  
6     diligently answering all the questions.   That's good.

7                   Louie, you had --

8                   MR. LOUIE AZZOLINI:     My name is Louie  
9     Azzolini, and I work for the Deze Energy Corporation as a  
10    consultant.   And, Martin, Tawanis, I guess a point of  
11    clarification more than anything else.   Trudel Creek  
12    exists and there's a body of rights that currently exist  
13    with the Power Corporation to release water or withhold  
14    water from going into Trudel Creek.

15                   By analogy, the Trudel Creek is a conduit  
16    similar to a road and the Canadian Zinc road recently was  
17    authorized through a legal court case as you know and it  
18    was deemed to be grandfathered.   And in this case,  
19    there's an existing body of rights that enable the Power  
20    Corporation to undertake certain activities with respect  
21    to the South Valley Spillway.

22                   Now, are the -- the key question is -- is  
23    are we infringing on an existing set of rights that were  
24    authorized by DFO and the Water Board at the time that  
25    the application was put forward by the Power Corporation?

1                   And secondly, if the project is  
2   grandfathered and those body of rights exist with respect  
3   to activities that can occur in Trudel Creek, I'm a bit  
4   confused as to whether we are taking away not so much  
5   rights but a set of rules that have already been  
6   established and put in place for another proponent. What  
7   the -- what I understand Deze is doing is operating  
8   within or proposing to operate within the conditions of  
9   an existing licence in terms of releases, what's  
10  permissible in terms of minimum and maximum.

11                   So -- and I get the sense this is almost  
12  being treated like a pristine watershed but it's not.  
13  And so for a point of clarification sort of linking all  
14  those elements together is, are we assessing a pristine  
15  system or are we assessing an existing facility which has  
16  a body of rights which enable maximum and minimum flows  
17  to exist?

18                   MR. MARTIN HAEFELE:   I can answer at  
19  least part of that. You mentioned the Canadian Zinc  
20  access Road. It's a winter road that originally was  
21  built in the '80s or '70s and after a court case was  
22  grandfathered as an existing -- existing right.

23                   However, as you may also know that once  
24  that road was supposed to become part of a much larger  
25  development, that grandfathering actually kind of ceased.

1                   That hasn't been tested in -- in the  
2    courts but the Board has made a very clear decision that,  
3    no, no, you are proposing a much bigger development here  
4    and we will assess all components of that development.

5                   So it's a little bit of a complicating  
6    factor here because in the Canadian Zinc case, Prairie  
7    Creek Mine is the same developer. He have a separate  
8    developer. The Power Corp. has certain, you know,  
9    rights.

10                  So the grandfathering thing in itself is I  
11    don't think necessarily an issue. There's an existing  
12    water licence obviously and the proponent has -- on a  
13    couple of occasions yesterday he pointed out that they  
14    will, you know -- they are proposing to basically operate  
15    within the parameters of that existing water licence.

16                  Water licence conditions can be changed so  
17    if -- if the assessment were to find that there is a  
18    significant impact likely by operating in that -- in --  
19    in that manner, the Board could make as part of their  
20    recommendation to include, you know, a change to those  
21    conditions.

22                  Whether or not the Federal Government, you  
23    know, in the end would then agree and -- and make that  
24    change or advise the Land and Water Board to make that  
25    change is a different matter, but I -- I think it's --

1 it's a consideration and that we need to -- to look at  
2 and I think the Board will look at that and the Board  
3 obviously is going to look at is the development as  
4 proposed likely to cause significant impact, and the  
5 development as proposed would be within the rights or  
6 within the parameters of the existing water licence.

7                   So unless the Board were to find that  
8 development as proposed is like there's significant  
9 impact and that could only be mitigated by changing the  
10 conditions of the existing water licence, I -- it would -  
11 - I don't see no -- as quite as a problem as you might  
12 think, but it would be pure speculation to, you know, to  
13 say what the Board will find in -- in the end.

14                   Does that kind of answer your question?

15                   MR. LOUIE AZZOLINI: It does help a  
16 little bit and I certainly don't intend to -- to debate  
17 it in this forum here because that's not the place for  
18 it.

19                   But I would suggest that if the existing  
20 licence was causing a significant environmental effect,  
21 DFO would have referred it to environmental assessment a  
22 long time ago.

23                   MR. MARTIN HAEFELE: Okay, point taken,  
24 except that, of course, it was put in place before MVEIRB  
25 assessment regime. So, anyways, I got the last word in

1 here, that's good.

2 But you are right, it is -- it is -- we  
3 are not dealing -- you know, it -- it is a special  
4 project in the sense that we're not dealing with an  
5 entirely green field development that we normally do.

6 There is an existing development in place  
7 and that existing development is operated by a different  
8 developer and there are things that need to be  
9 considered.

10 There are things that need to be  
11 considered in the EA and they are probably going to be  
12 also considered later on in more detail by the regulators  
13 and they need to figure out, you know, whose water  
14 licence is going to cover what and whatnot.

15 What our Board's going to do is simply  
16 going to look at the potential impacts of the proposed  
17 development. So our job in that sense is relatively  
18 easy. We don't need to, you know, get into that and I'm  
19 -- unless the Board finds a significant impact then, you  
20 know, there may not be a -- there won't be a problem  
21 unless the Board were to find a significant impact as  
22 proposed.

23 With that, unless there is, you know, you  
24 have an urgent reply.

25 Okay. Then I would see if any of our



1 other experts have any questions. And to shake things a  
2 little bit up, I'm going to look at Richard here first.  
3 Don't take it personally, Aleksey, just doing something  
4 differently.

5 MS. TAWANIS TESTART: Go ahead, Linda.  
6 Just before he talks, Linda, you want to say something?

7 MS. LINDA ZURKIRCHEN: Yes, can I just  
8 finish off that piece of information from a previous  
9 question which I'll make available to the Review Board.

10 The name of the document I was looking for  
11 in reference to the HAAT is by Walks, Fallis and Ming,  
12 2008. And I can -- I can give you -- I'll send it to the  
13 Review Board but the title is "A Research and Goal  
14 Priorities for Fish Habitat Management, Science Support  
15 Requirements for Implementing the Fish Habitat Protection  
16 Provisions of the Fisheries Act," a Canadian manuscript.

17 So -- and I'll send that to the Review  
18 Board.

19 MR. MARTIN HAEFELE: Thank you.

20

21 --- COMMITMENT NO. 28: Deze Energy to provide a copy  
22 of a document, entitled "A  
23 Research and Goal Priorities  
24 for Fish Habitat Management,  
25 Science Support Requirements

1                           for Implementing the Fish  
2                           Habitat Protection Provisions  
3                           of the Fisheries Act"

4

5                   MR. MARTIN HAEFELE:    Go ahead, Richard,  
6   if you have any questions.

7                   MR. RICHARD BROWN:    Yeah, Richard Brown  
8   here.  Yeah, I just want to ask one question following up  
9   on Bruce's discussion primarily with Tom about the  
10  alternatives to the flow down the Trudel Creek.

11                           And Tom has provided some good points on -  
12  - on why perhaps the South Valley Gor -- or the -- yeah,  
13  the South Gorge is not the best option for dealing with  
14  these emergency and planned outages for the flow.

15                           But I wonder if other routes were  
16  considered at all for the flow as an alternative such as,  
17  is it not working with the -- the canal arrangement and  
18  the pen stocks and having a means to basically bypass or  
19  -- or bring the water down that route and discharging in  
20  the event of unit repair or whatever?

21                   MR. TOM VERNON:    Yes, Tom Vernon.  We --  
22  within the context of maintaining flow releases below the  
23  system at about the level we proposed in the DAR 30 cubic  
24  metres per second -- incidentally that number accords  
25  with the water licence requirement for releases below the

1 plant which I believe is 28 cubic metres per second.

2 And looking at historical records it would  
3 appear that the Taltson has in -- in the period of record  
4 actually naturally got that low. So that may be where  
5 the twenty-eight (28) came from in -- in the existing  
6 water licence. So -- but that -- that -- that being  
7 said, that -- that's kind of -- we targeted the water  
8 licence minimum as about the threshold that we'd to like  
9 to pass in a synchronous way, if -- on a plant shutdown.

10 We looked at bypass systems withing the  
11 powerhouse, and bypass systems for 30 cubic metres per  
12 second are feasible in a powerhouse setting through  
13 valves. It complicates the powerhouse, and our economic  
14 assessment said it -- it was probably better to stay on  
15 the South Gorge for that level of discharge.

16 We also looked at the viability of routing  
17 it from the canal to a point just upstream of Elsie  
18 Falls. There's a pool of water there that might contain  
19 such a discharge. The canal's significantly higher than  
20 that, so now we've got an energy dissipation issue with  
21 the bypass flows.

22 And I guess in discussion with Linda's  
23 group, you know, really the -- the South Gorge presents  
24 the most beneficial point of release in that it would  
25 keep that entire South -- entire Taltson River below

1 existing facility watered up should the existing unit go  
2 down.

3 And I know it was a primary driver to  
4 coming -- coming back to that. It's a lot cleaner to  
5 release it through the powerhouse, but then, you know,  
6 we're in a situation where we -- we currently are, where  
7 there isn't any makeup flow in that section of water if  
8 the power plant goes down.

9 So, that's kind of why we -- we settled  
10 the -- but, you know, economically, I'll tell you we're  
11 not fussed one way or the other. We can make any of  
12 those kind of systems work. But, I think it's most  
13 beneficial where -- where we've put it right now, in the  
14 South valley -- or, in the South Gorge, sorry.

15 MR. RICHARD BROWN: Would -- given the  
16 discussions about Trudel Creek and the concerns, would it  
17 make sense to provide some sort of written benefit  
18 document comparing and contrasting the options and, sort  
19 of, more formally presenting why you came to that  
20 conclusion or -- or re-looking at it anyways?

21 MR. TOM VERNON: I can reiterate what --  
22 what I've said here, yes. We -- we did do -- last year  
23 we did do -- do that work. And I don't know that we  
24 would release exact figures, but we could release  
25 comparatives. And I can give you in writing what I've

1     said here, sure.

2                     MR. RICHARD BROWN:     That would be great.

3     Thank you.

4                     MR. MARTIN HAEFELE:     So, that's -- Louie  
5     just mentioned that, you know, what you said is on the  
6     record, but if you could, sort of, not with the exact  
7     figures, but, you know, back it up a little bit -- or,  
8     provide a little bit more information, that would be  
9     great.

10                    The Board, as I -- as I mentioned, is  
11     assessing the development as proposed, but alternatives  
12     to individual components, you know, time and again come  
13     up. And -- and the Board looks at that. And sometimes,  
14     you know, alternatives are being proposed as -- as  
15     measures. And, it's not unusual for developers that --  
16     but we -- we looked at that already, we made that  
17     decision long time ago.

18                    And -- and it's good if -- if the parties  
19     and the Board understand that -- that you had a good  
20     rationale for going one way and not the other.

21                    And if that can be done without, you know,  
22     putting an onerous amount of work on you, then we'd  
23     appreciate it if you could -- could send that by October  
24     30th.

25                    MR. TOM VERNON:     Sure. We can commit to

1     that.

2

3     --- COMMITMENT NO. 29:           In regards to the discussions  
4                                       about Trudel Creek and the  
5                                       concerns, Deze Energy to  
6                                       provide written benefit  
7                                       document comparing and  
8                                       contrasting the options, and  
9                                       more formally, presenting why  
10                                      Deze came to their conclusion

11

12                                      MR. MARTIN HAEFELE:    Thank you.   Any more  
13     questions?

14                                      MR. RICHARD BROWN:    Yes, I just that one  
15     (1) other question.   Richard Brown here again.

16                                      For Trudel Creek, I understand from the  
17     discussions that the -- the flows will be reduced but  
18     then occasional increases will occur.

19                                      I assume that, again I think there's a  
20     fair bit of rock along a lot of it but, obviously, large  
21     flows have occurred in the past, and a certain amount of  
22     erosion, and perhaps slope instability has occurred.

23                                      Are there slopes that remain there that  
24     are just marginal and -- and are of concern to -- to  
25     slump and fail, regardless of whether the, you know, the

1     ramping or however happens, but is it -- are there  
2     marginal conditions on there that could cause a problem  
3     to sedimentation and erosion because of slope failure?

4                     MR. SHANE UREN:     What we did -- Shane  
5     Uren.    So, we did complete an assessment.    There's an --  
6     I believe there's an appendix in the DAR.    And we do have  
7     a photomosaic of the system, so there's some more  
8     information that you can take a look at as well.

9                     But to -- to try to answer your question,  
10    is -- there are sections of the system under the current  
11    flow regime that look to be at, you know, angles of  
12    repose or -- or, I guess, subject to -- to erosion, along  
13    those lines, under big flows.    You know, I was there on  
14    the system in 2002, when it was a pretty big flow year,  
15    and you could see there was quite a -- quite a difference  
16    in terms of the -- the sediment load coming from Trudel  
17    Creek, and that mixing with the flow that comes through  
18    the power facility.

19                    So that's kind of one (1) of the -- we see  
20    as one (1) of the benefits of the project, to keep those  
21    flows down, to help minimize that -- those -- those  
22    impacts, those impacts we were observing all the way down  
23    -- downstream into the lower Taltson River.

24                    So, yeah, there are sections.    They're  
25    quite obvious as well, you know, in the -- we've broken

1 up the -- the river, Trudel Creek, into three (3)  
 2 sections and in reach -- and it's a very low gradient  
 3 system, as -- as you're probably aware, and controlled by  
 4 very distreet -- dis -- discreet bedrock control  
 5 sections, like, so you're getting a lot of energy dis --  
 6 dissipated at key locations. That said, Reach 3, which  
 7 is the upstream reach, is a very -- very low gradient  
 8 system, where we're not seeing a lot of erosion through  
 9 that system, but down from there there are sections where  
 10 you see some pretty steep banks in there that were  
 11 identified in that erosion report.

12 MR. RICHARD BROWN: Okay. So there are -  
 13 - are some slopes that are -- are marginal. And -- and  
 14 is there any intention to do anything further with them  
 15 or it -- it's just part of the erosion conditions that  
 16 will occur?

17 MR. SHANE UREN: Well, I got a little  
 18 backlash from my team here when I said "no" to the  
 19 erosion question earlier. It's -- it's part of our --  
 20 you know, we're -- we're -- as I mentioned before, we're  
 21 developing a management plan, and, you know, we see -- in  
 22 terms of erosion, we see the project having beneficial  
 23 effects. And the limited amount of -- of high flows  
 24 through the system during ramping events, yeah, there's  
 25 potential there for some movement of sediment, but we see



1     them as -- as a much reduced condition compared to what's  
2     there today.

3                     But that -- obviously, that's open for  
4     discussion, wheth -- as we put forward our management  
5     plan and -- and provide some, you know, more information  
6     and we -- we put the erosion issue on the table and have  
7     some back and forth on that. And, you know, we can put  
8     some photos up and show you some of those key areas and  
9     how they may relate to, you know, potential impacts on  
10    the aquatic biology.

11                    MR. RICHARD BROWN:     Okay.    Thank you.

12                    MR. MARTIN HAEFELE:     Okay, thank you very  
13     much. And then, I guess, if you have no more questions,  
14     I'll give the microphone to Aleksey.

15                    MR. ALEKSEY NAUMOV:     Aleksey Naumov, for  
16     DM, Senes, working for the Board. I have a question on  
17     sort of a high level summary of changes in hydrology.  
18     It's a fairly long question. You've probably seen the  
19     writeup. The gist of it is that there's a lot of  
20     information in -- in the DAR on hydrology presented in  
21     most -- in many ways, such as daily time series, the --  
22     the inflow values, the difference between those and the  
23     baseline, between the expansion and the baseline.

24                    What would help and what seems to be  
25     somewhat missing, is a high level summary of changes in

1 hydrology, perhaps even at the mean annual figures. It  
2 would -- it would help -- in several ways it would help  
3 to comprehend the larger -- sort of at a glance  
4 advisicallly (sic) to Trudel Creek, as well as the whole  
5 system, Taltson system.

6 It would, as well, help to communicate  
7 things to people. For example, you've -- you've made it  
8 clear that the total amount of flow is not going to  
9 change, that there's re-allocation of flow in at least  
10 two (2) places in Trudel, versus the gorge, the Twin  
11 Gorges and at -- at the Tronka Chua, versus the Taltson.

12 Just if you could summarize. The question  
13 is then: Would you be able to provide a high level  
14 summary of baseline water quantity conditions and their  
15 expected changes in the two scenarios for some key  
16 locations in the system?

17 MR. SHANE UREN: Shane Uren. So I think  
18 you've seen -- you've seen this here. Yeah. So I guess  
19 to just ask for more clarification, maybe you could  
20 provide for us the specific locations that you're  
21 interested in and we can do that. What I -- what we have  
22 -- like it's just a matter of knowing exactly what you'd  
23 like to see, and if, you know, if -- you know, maybe if  
24 you could write that up specifically, and then we can --  
25 we can do that. It's not a problem.

1                   MR. ALEKSEY NAUMOV:    Yes, something  
2    like that would work.  I've only seen it yesterday, but--

3                   MR. SHANE UREN:       Yeah.

4                   MR. ALEKSEY NAUMOV:    But something  
5    like that perhaps on a map for better visual --

6                   MR. SHANE UREN:       Okay.

7                   MR. MARTIN HAEFELE:    Could -- could you  
8    briefly describe what this -- this is, so the -- the  
9    transcript kind of gives us an indication of what it is  
10   you're talking about?

11                  MR. SHANE UREN:       Sure.  So we had seen  
12   some requests, and through our first technical meeting  
13   there was a desire to have a bit of a visual through the  
14   whole system, given the size of the system, the number of  
15   lakes in the system, and that there's going to be changes  
16   on each of those lakes.  So what we put together is just  
17   a little schematic of some of the key locations, and how  
18   we reference them in the -- in the Developer's Assessment  
19   Report, where's Zone 1 through 5.  And we've applied the  
20   -- we've presented the hydrographs with them, the  
21   baseline hydrograph and the scenario under thirty-six  
22   (36) and fifty-six (56) respectively, and then a little  
23   more flow information to try to -- because we understand  
24   that it's a -- it's a big system with many lakes, and  
25   there will be changes there.

1                   So that's what we presented here today, or  
2     provided at least to some. We've got more copies if some  
3     people would like, to make them available as well.

4                   MR. MARTIN HAEFELE:     Thank you. And  
5     if you could also provide that to us for the record.  
6     And, Aleksey, can I ask you to actually identify those  
7     key locations that you mentioned right now, so that we do  
8     have them on the record, and -- and then the Developer  
9     can then go away and do the work.

10                  MR. ALEKSEY NAUMOV:     I think it -- it  
11     might take some thinking, but off the top of my head,  
12     Nonacho Lake, then where the flow diverges, flow to  
13     Tronka Chua versus flow into Taltson. Then when the flow  
14     is recombined again in -- I think it's Lady Grey, and  
15     then levels in the Forebay, and then again the split of  
16     flow into -- between Gorges versus SVS, and perhaps when  
17     they recombine. And this is a good start.

18                  But I was getting at something even  
19     simpler, and this -- this gives you a -- a sort of an  
20     average annual pattern -- but this is good, but maybe add  
21     to that, like on a mean annual level. For example, you  
22     expect that Nonacho will be lower, just how much lower  
23     for the two (2) scenarios.

24                  And you can get at those numbers by  
25     basically averaging the monthly values that you have in

1 the report. But it's just -- it's -- kind of make it  
2 more explicit. Just how much lower would be flow through  
3 Tronka Chua, and how much higher through Taltson, things  
4 like that.

5 MR. TOM VERNON: Tom Vernon. Are you  
6 speaking about flows, or flows and levels, or --

7 MR. ALEKSEY NAUMOV: Flows and levels.

8 MR. TOM VERNON: Both.

9 MR. SHANE UREN: And, okay -- Shane Uren.  
10 Just to be clear, so you're looking for just the mean  
11 annual?

12 MR. ALEKSEY NAUMOV: Yeah, that and the  
13 pattern that you're providing is good. It's good to have  
14 both.

15 MR. SHANE UREN: Yeah.

16 MR. ALEKSEY NAUMOV: Yes.

17 MR. SHANE UREN: Okay. And we -- we -- we  
18 have now -- right now, that I can provide even later  
19 today, a summary of most of those locations on a -- a  
20 summer average and a winter average right now. So what  
21 we're missing there is a -- is an annual average. So  
22 that -- that won't be hard to do.

23 MR. MARTIN HAEFELE: Thank you.

24

25 --- COMMITMENT NO. 30: Deze Energy to provide flows

1                   and levels of Nonacho Lake,  
2                   then where the flow diverges,  
3                   flow to Tronka Chua versus  
4                   flow into Taltson. Then when  
5                   the flow is recombined again  
6                   in Lady Grey, and then levels  
7                   in the Forebay, and then  
8                   again the split of flow  
9                   between Gorges versus SVS,  
10                  and when they recombine

11

12                   MR. MARTIN HAEFELE:    Okay, Aleksey, you  
13   got more concerns?

14                   MR. ALEKSEY NAUMOV:    Yes, I have a few  
15   more. Thank you. I have a question on calibration --  
16   Sorry, excuse me, a calibration of the hydraulic model  
17   for Trudel Creek. It's described as the model  
18   calibration for -- the steady-state model calibration was  
19   performed using the observed data for flows and -- and  
20   water levels collected in 2006. I just didn't see the --  
21   any further reference to these observed data in the  
22   report. Are they -- are they described somewhere else in  
23   DAR, and if not, where are they described?

24                   MR. SHANE UREN:       Shane Uren. So I  
25   believe there's an appendix to the DAR. Have you seen

1     that appendix?

2                   MR. ALEKSEY NAUMOV:     I've looked through  
3     and wasn't able to see where.

4                   MR. SHANE UREN:     Okay, we're going to  
5     have to check that. My understanding was that it -- it's  
6     in the -- it's in the appendix. It's in the -- you're  
7     talking about the HEC-Res model?

8                   MR. ALEKSEY NAUMOV:     Yes.

9                   MR. SHANE UREN:     Yeah, my understanding  
10    that it's there, but I'd have to check to confirm.

11                  MR. ALEKSEY NAUMOV:     Okay.

12                  MR. MARTIN HAEFELE:     Yeah, if you can get  
13    back to us on say later today or -- or Monday, it would  
14    be great.

15                  MR. SHANE UREN:     Hopefully, yeah.

16                  MR. MARTIN HAEFELE:     Okay. Or else on  
17    October 30th.

18

19    --- COMMITMENT NO. 31:           Deze Energy to show observed  
20                                       data of calibration of the  
21                                       hydraulic model for Trudel  
22                                       Creek

23

24                  MR. MARTIN HAEFELE:     Do you have any  
25    further questions?

1                   MR. ALEKSEY NAUMOV:     Yeah, another quick  
2     question on the calibration of the HEC-Res model.   So --  
3     it's similar to what I was asking yesterday.

4                   Did you use any additional independent  
5     observed data to validate that in any way, or whatever  
6     data you had -- you had observed you put all of that into  
7     calibration?

8                   MS. LINDA ZURKIRCHEN:   Linda Zurkirchen.  
9     I think I can answer a little bit, in that the -- the  
10    calibration or validation, I believe, goes back to the  
11    same discussion that was had on the model, the HEC-  
12    ResSim's model that was used for the -- the Taltson  
13    Basin, and that the -- the data that was collected was  
14    actually used to -- to build the model, and -- and in  
15    doing so has the same constraints and limitations and  
16    outputs that the HEC-ResSim's model would have under --  
17    because it's been used on the same -- the information was  
18    used to build the model.

19                  MR. ALEKSEY NAUMOV:     Okay.   So I think I  
20    understand.   So there's not an independent set of --  
21    independent set of data that the model was verified  
22    against?

23

24                                   (BRIEF PAUSE)

25



1 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.  
2 Actually, just -- I'm just being clarified that we may  
3 have not used the -- all our data as inputs to the model,  
4 but may have used some of our field collected data as a  
5 validation to the model, and we can get that information  
6 and -- and confirm that to the Board whether we used it  
7 for construction of the model or validation of the model.

8 MR. ALEKSEY NAUMOV: Yeah. And -- and  
9 if the validation aspect is described else -- in some  
10 place it would be nice to know where.

11 MR. MARTIN HAEFELE: Okay. I'll take  
12 that as a commitment to provide that information.

13 MS. LINDA ZURKIRCHEN: Yes.

14

15 --- COMMITMENT NO. 32: Deze Energy to advise if they  
16 used any additional  
17 independent observed data to  
18 validate the HEC-Res model,  
19 and was the validation aspect  
20 described elsewhere.

21

22 MR. MARTIN HAEFELE: Okay.

23 MR. ALEKSEY NAUMOV: I have two (2) more  
24 questions. One (1) is on unscheduled outages and -- and  
25 the effect they have on ramping in Trudel Creek. That's

1 fairly similar to what was raised before and then Bruce  
2 was talking about, but some different aspects to it.

3 So the analysis of ramping in Trudel Creek  
4 is based on an extreme ramping scenario which assumes a  
5 full outage with duration of up to one (1) month, and --  
6 and as it was said before such an event is estimated to  
7 have a one (1) in five (5) year average recurrence  
8 frequency.

9 And my question is on the relative  
10 recurrence frequency of outages of shorter duration. It  
11 would seem to be natural to think that durations -- I'm  
12 sorry, outages of shorter duration, perhaps a day,  
13 several days, a week maybe, would have somewhat higher  
14 recurrence frequency, but there's -- it's not covered in  
15 DAR anywhere.

16 Would you be able to provide -- and -- and  
17 you also mentioned that that analysis is based on Snare  
18 data where you had lengths of outages. Would you be able  
19 to provide a summary table of anticipated frequencies of  
20 outages for various lengths of outages? The point is  
21 that it basically could be a short outage but because of  
22 ramping rates it still has an effect on the ecosystem.

23 MS. LINDA ZURKIRCHEN: I -- I can maybe  
24 answer part of that or -- or shed some light on part of  
25 that, not so much the outage frequency but in regards to

1 the potential effect, in that there is a length of time,  
2 depending on the freeboard that is available at this --  
3 and the flow into the South Valley spillway, and the  
4 amount of time that it takes for the flows that aren't  
5 moving through the turbines to materialize in Trudel  
6 Creek, that the full effect of an outage may not be  
7 realized -- the full effect, the full flow that is no  
8 longer going through the -- through to the turbines under  
9 short duration outages, would not necessarily be  
10 materialized in Trudel Creek by the time the turbines  
11 were back online again.

12 And that's why we chose the long duration  
13 full outage as our worst-case scenario, because that's  
14 where we would definitely see a hundred percent of the  
15 water that would be going through the turbines  
16 materialize in Trudel Creek.

17 MR. ALEKSEY NAUMOV: I think I  
18 understand what you're saying. As far as flows, and the  
19 incremental flows, and incremental levels, that would be  
20 the highest, the -- the worst-case scenario.

21 My question is not so much about that but  
22 about the frequency of outages of shorter duration. And  
23 I do understand what you said about the -- some -- some  
24 leeway you have. I think it's about eight (8) hours  
25 before a flow starts to go over SVS. Peak -- yes, the

1 peak flow.

2 But for outages of duration of say several  
3 days, would they not be likely to occur more frequently  
4 than those really long outages after one (1) month that  
5 you base your analysis on?

6 MR. TOM VERNON: That's a good point.  
7 Tom Vernon. Yes, there's other outage scenarios. As --  
8 as Linda's indicated, we necessarily look at kind of some  
9 of the worst case for the assessment, which are the  
10 longer duration ones. There -- there will be more  
11 shorter duration ones looking at -- at operational  
12 records up here. By far, the majority of outages are in  
13 the minutes. They may be just breaker open-and-closure  
14 events cleared relatively quickly.

15 What -- what we've been thinking about for  
16 that kind of thing is a delay in -- in synchronous  
17 operation of the bypass gate, so that we can clear those  
18 -- those outages without doing anything to the system,  
19 because it's not going to recognize anything for, we  
20 anticipate -- you know, perhaps up to a half an hour.  
21 Not -- nothing really should be done. But that -- that  
22 timeframe, still, it could be ten (10) minutes, it could  
23 be a half an hour, but the majority of outages are going  
24 to be cleared in -- in the minute period.

25 Then there's a set of outages which might

1 be in the hours, and you know that -- that might occur  
 2 once a year or once every two (2) years. Okay, now  
 3 that's going to definitely get the bypass gates open to  
 4 maintain flows, some flows starting to go over the South  
 5 Valley spillway but, you know, a quick startup is going  
 6 to put things back into equilibrium, as they were before,  
 7 quite quickly.

8 So a bunch of scenarios. And as you go  
 9 out, the -- the multi-day outages are pretty rare in --  
 10 in the statistics of -- of what we see up here. I guess  
 11 we could -- I think we've committed to some statistical  
 12 delivery for -- for you on -- on outage estimates that  
 13 we've made, so we -- we could probably elaborate a little  
 14 bit on -- on some of the shorter outages and what our  
 15 strategy might -- would be, if that's helpful.

16 MR. ALEKSEY NAUMOV: Yes, thank you, like  
 17 a summary of expected lengths and their recurrence  
 18 probabilities would -- that would be nice. Thank you.

19

20 --- COMMITMENT NO. 33: Deze Energy to provide a  
 21 summary of expected lengths  
 22 and occurrence probabilities  
 23 of outages

24

25

1                   MR. ALEKSEY NAUMOV:    I have just one (1)  
2   more question.  It's a question on -- again it's -- now,  
3   this time it's scheduled outages and their effect on ice  
4   cover in Trudel.  So the timing of -- of scheduled  
5   planned outages would be in April and May.  There still  
6   likely with be ice cover in -- in Trudel.  The flow of --  
7   would ramp from 4 cubic metres per second to a maximum of  
8   57, as -- as per your report.

9                    Could some of this flow -- it's -- it's a  
10  flow on ice, essentially.  Could some of this flow re-  
11  freeze it again and form sort of a rougher and thicker  
12  ice, and what would be -- if that's the case, what would  
13  be the effect of that on potential erosion due to ice  
14  scour in -- in Trudel?

15                   MS. LINDA ZURKIRCHEN:   Linda Zurkirchen.  
16  Yeah, you -- you definitely have a point that, should an  
17  outage occur when there is ice cover, and additional  
18  flows be added to the system, there is a potential for a  
19  water on ice scenario and additional ice being created,  
20  similar to what could occur under present baseline  
21  conditions when there's an outage on the existing  
22  facility and there's ice cover on different parts of --  
23  of Trudel Creek.

24                   The issue of ice scour, in that it's -- as  
25  we've mentioned, Trudel Creek is a very low velocity, low

1 energy system, very, very flat gradient to the three (3)  
2 reaches that -- that make up the system, that we've  
3 identified that make up the system, with a relatively  
4 steep gradient drop between them for very short sections.  
5 Ice scour typically is -- is -- not typically, is -- is  
6 commonly associated with velocity increases that remove  
7 the ice from the banks and can cause the -- the  
8 dislocation of ice wedges from the banks and pull them  
9 downstream.

10                   Because we have a fairly low velocity  
11 system, we don't imagine that -- or we can't predict that  
12 that is going to be increased by that situation.

13                   There may be some natural occurrence, at  
14 this point in time, when ice does form naturally. And as  
15 flows come up in spring, one (1) of the natural processes  
16 with ice is that in low velocity systems that the ice  
17 mats, especially there, adhere to a soft material, such  
18 as a vegetation or su -- or such, could be lifted  
19 vertically in place, and then transported as the water  
20 comes up into the system.

21                   That would occur naturally, similar to the  
22 baseline conditions under the -- the exists -- under the  
23 proposed project conditions. And we don't see any  
24 parameters, such as the velocities or the flows, that  
25 would change that from baseline.

1                   MR. ALEKSEY NAUMOV:    Thank you.  I have  
2   one (1) more.  Sorry, I forgot about that.  It's --

3                   MR. MARTIN HAEFELE:    Even if you had two  
4   (2) it would be okay.

5                   MR. ALEKSEY NAUMOV:    Still just one (1).  
6   It's a question on the riparian vegetation and the effect  
7   of that on erosion, again at Trudel.  I'm just going to  
8   have to read that, it's -- so I pass it on accurately.

9                   In the appendices, 13.7, it's Wetlands  
10  Baseline Study, and the 14.4, Trudel Creek Erosion  
11  Assessment, it's indicated that the presence of riparian  
12  vegetation helps to stabilize shorelines and reduces the  
13  potential for erosion.

14                   Appendix 14.4(a) uses existing shoreline  
15  conditions to identify representative areas of erosion  
16  susceptibility.  However, changes to riparian vegetation  
17  are expected to occur along Trudel Creek, as noted in the  
18  Appendix 13.7.  These changes are do to -- to lower  
19  average water levels resulting from less water passing  
20  over the South Valley spillway.

21                   During wet years, annual peak flows along  
22  Trudel Creek will be of similar magnitude to the flows  
23  experienced on the baseline conditions, especially for  
24  the thirty six (36) megawatt expansion scenario.

25                   The peak flows will be sufficiently



1 powerful to contribute to shoreline erosion. The changes  
2 to riparian vegetation suggested in Appendix 13.7 will  
3 change the susceptibility of Trudel Creek to shoreline  
4 erosion.

5 So the request is: At what locations  
6 along Trudel Creek is the current riparian vegetation  
7 playing a role in mitigating -- mitigating shoreline  
8 erosion?

9 For these locations, what loss or change  
10 of vegetation is expected following the reduction of mid-  
11 annual water levels?

12 Will the loss of change in this -- loss or  
13 change of this vegetation increase the erosion  
14 susceptibility of these locations?

15 MR. SHANE UREN: Shane Uren. I think  
16 there's a few questions there, so I'll try to answer the  
17 first one(1) as I remember it, is what locations has the  
18 current vegetation helped to minimize erosion?

19 I would say all of them. Any vegetation  
20 along the banks would help to minimize erosion, just --  
21 just by they're -- just by it's nature.

22 But I think what you're looking for there  
23 is more along the lines of, once operation occurs, what's  
24 -- what's gonna happen. And, yes, the water levels will  
25 go down and we'll see -- we're expecting to see an

1 exposed -- exposed bank, right. There'll be a --  
2 there'll be a distance from -- from the current emergent  
3 vegetation to the -- the new shoreline.

4 And our effects assessment presents a  
5 transition of the -- a downslope transition along this  
6 newly exposed bank where -- whereby the sedges or -- for  
7 example, in the wetland areas there we're seeing a lot  
8 sedge willow wetland groupings.

9 And this -- our -- our predictions are  
10 based on our understanding of the wetlands in the area,  
11 that they're controlled by flood levels, that the  
12 vegetation is controlled by flood levels.

13 It is our expectation is that the sedge  
14 will transition downslope to the -- the wetter areas that  
15 it prefers, and -- and, therefore, make its way into  
16 those exposed areas and, therefore, support or minimize  
17 erosion of those banks.

18 So our expectation is -- is, I guess,  
19 twofold here, is a -- a successful transition of these  
20 sedges downslope and given the system, given where these  
21 wetlands are at, the low gradient system that -- that we  
22 have, the hydraulic controls that we have that minimize  
23 the force, that minimize the erosional forces, as we've  
24 seen through the velocities, is that we're not expecting  
25 these banks to be subject to erosion events and,

1     therefore, impede the succession or the -- the transition  
2     of the vegetation that will help in the long-run reduce  
3     erosion.

4                     Does that answer all of the questions?

5                     MR. ALEKSEY NAUMOV:     Yeah, more or less,  
6     I guess.   The related aspect, it was only raised before,  
7     is that this transition of vegetation sort of closer to  
8     the new water level is -- you -- I -- I think you noted  
9     that you expect between one (1) and three (3) years for  
10    that to happen.

11                    However there's a -- there's the effects  
12    of the outages on that which will somewhat delay that so  
13    I'm not really sure if you've given thought to that as --  
14    as to just how much longer it might take to stabilize  
15    vegetation along the new waterline?

16                    MR. SHANE UREN:     Shane Uren.   So just to  
17    clarify, our expectations are that the aquatic plants,  
18    the -- the littoral zone, so this is a -- you know, given  
19    ranges and flow, this is not a clear-cut line between  
20    aquatic plants and the sedges, these semi-emerge plants.  
21    So our expectations is that we'll see aquatic plant  
22    growth and, therefore, a -- a robust littoral zone  
23    habitat for -- for invertebrates and -- and -- and pike  
24    spawning and those types of things in -- in a one (1) to  
25    three (3) year period.

1                   Whereas the wetland, the emergent, yeah,  
2   the emergent vegetation, that could take a little bit  
3   longer. These -- and our expectations are based on some  
4   literature that we've reviewed is it could occur between  
5   five (5) and ten (10) years.

6                   So how -- your question is how will -- did  
7   we consider the -- the -- how maybe that -- that  
8   transition process will be impacted or delayed through  
9   ramping events. And again, I go back to the -- the  
10  system itself in that, yes, there will -- there will be  
11  ramping events and the flows will increase. But the  
12  erosional forces of those flows, in our view, given our  
13  understanding of the system, won't impede the succession  
14  of the transition of those.

15                  Now we recognize that that -- that's our -  
16  - that's our opinion, and based on the information that -  
17  - that we -- how we understand the system. But we  
18  recognize there that there's -- there's assumptions that  
19  we're making and there's information we need to gather  
20  first to be able to understand better what's there, to be  
21  able to do before or after comparisons.

22                  And then as part of our management plan  
23  we're -- we're -- we're going to be monitoring the  
24  succession and to see how things actually transition as  
25  we're predicting. And then if they do not, that's where

1 adaptive management strategies will -- will come into  
2 play and I guess we'll -- we'll present more of that,  
3 some more of those details within the month.

4 MR. ALEKSEY NAUMOV: Thank you.

5 MR. MARTIN HAEFELE: Okay, thank you. If  
6 you don't have any -- any further questions then I'll ask  
7 if anybody else in the room, be it anybody who already  
8 asked some questions or any of the other organizations or  
9 the community representatives from Lutsel K'e or Fort Res  
10 have any questions?

11 MR. GEORGE MARLOWE: You said something  
12 about water flowing and it's not freezing, you said.  
13 Where is that at? Just want to ask somebody.

14 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.  
15 I'm not sure if I understand but we -- we -- the question  
16 fully. We -- there is some discussion in the DAR about  
17 icing and the ice process and some reports that indicate  
18 from past studies where we -- the Deze has monitored ice  
19 in winter on the system and where there's open and closed  
20 ice.

21 And part of our discussion was that in the  
22 event that we have water on ice, and that can happen at  
23 sometimes, I think is -- is -- you are aware of, when the  
24 plant does shut down, there can be a water on ice  
25 occurrence and some of the re-freezing that goes on when

1     that happens.

2                   MR. GEORGE MARLOWE:     Because I'm just  
3     thinking during the winter month sometimes minus 30 to 60  
4     and the water flowing -- and the water's got to freeze  
5     somewhere, either at a pipe or canal or something.  
6     Somewhere it's got to freeze, but I don't know if you use  
7     chemicals, anything, to freeze -- to -- to make the water  
8     run because I heard something. A couple of years ago we  
9     used to go to Tar Sand water -- they said they used some  
10    kind of a chemical for Tar Sand, the water flow down to  
11    somewhere in the river I guess. It doesn't freeze.

12                   So when you said something about that I  
13    was thinking about chemical, so I just wanted to know.

14                   MR. DAN GRABKE:        No, there's no -- no  
15    chemicals added to the water at all. The water's moving  
16    quite fast and that's what keeps it from freezing even in  
17    the pipe and -- and in the canal. But then as soon as  
18    the water slows down at the end below the plant, then  
19    that's when it freezes again but there's nothing added to  
20    the water.

21                   MR. MARTIN HAEFELE:    I think the  
22    discussion that we had earlier around something that  
23    commonly up here we call overflow, I think you're going  
24    to be creating a lot of overflow if you have those  
25    ramping events, right? That's pretty much how we can

1 understand it? Thank you.

2 MR. GEORGE MARLOWE: When the -- the  
3 water goes down in the cold winter months it's got to  
4 freeze there in that low -- low water but then overflow,  
5 eh, that's how it goes, eh, the overflow. And that --  
6 that overflow, you know, used to go right in the bush, I  
7 know that someplace like in the river, all the river, the  
8 overflow goes in the bush and then springtime it wash  
9 down to the lake again, all this -- all kind of stuff in  
10 there and it goes down to the lake again.

11 Anyway, I'm just wondering maybe that's  
12 why too much mercury in Nonacho Lake maybe or Taltson  
13 River, I don't know.

14 MR. MARTIN HAEFELE: Does Deze have any -  
15 - any kind of answer or anything to say on -- on that? I  
16 think the question was that is the -- are the mercury  
17 levels in any way related to that whole overflow and  
18 water on ice and change in water levels?

19 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.  
20 Yeah, in -- in the upper watershed in Nonacho and the --  
21 above the twin -- the facility, there's nothing in the  
22 project that would cause any overflow conditions that  
23 wouldn't be occurring naturally under natural conditions.

24 The -- the -- there's no -- because  
25 there's no turbines to shut down and cause the

1 redirection of flow in an alternate location, which is  
2 what can happen in Trudel Creek under certain scenarios,  
3 that occurrence wouldn't happen in the Nonacho Lake area.

4           As for downstream, adding -- understanding  
5 that getting overflows and -- and into the -- the bush  
6 and having the freeze-up and having that migrate, you  
7 know, spring breakup bringing that downstream, because of  
8 the infrequency of, you know, a ramping event, an event  
9 that would cause that to occur, and then that event would  
10 also have to occur in the winter months during that later  
11 winter months when we have -- when the rivers are frozen  
12 that it would be so infrequent that it would not be a  
13 significant effect to the -- the fisheries populations,  
14 recognizing that there could be a short-term effect that  
15 one (1) year that that may -- that -- if that were to  
16 occur on a -- on a -- in an event, but it is unlikely  
17 that it would occur. Does that answer?

18           MR. MARTIN HAEFELE: So I understand.  
19 What you're saying simply then is -- is it's unlikely  
20 that the ramping events in the winter and the water over  
21 ice or overflow conditions would have anything to do with  
22 any kind of mercury levels in the water?

23           MS. LINDA ZURKIRCHEN: Oh, mercury. I  
24 was understanding nutrients.

25           MR. MARTIN HAEFELE: No.



1 MS. LINDA ZURKIRCHEN: But with mercury,

2 no --

3 MR. MARTIN HAEFELE: Okay.

4 MS. LINDA ZURKIRCHEN: -- not at all.

5 MR. MARTIN HAEFELE: Oh, no, then, okay.

6 MS. LINDA ZURKIRCHEN: It was a

7 misunderstanding. I was thinking nutrients.

8 MR. MARTIN HAEFELE: Okay. So it's no,

9 another unlikely? Okay.

10 MS. LINDA ZURKIRCHEN: Yeah.

11 MR. MARTIN HAEFELE: Thank you. Yeah, go

12 ahead.

13 MR. DON BALSILLIE: Don Balsillie, Deze

14 Energy. Just with reference to downstream impacts from

15 this expansion project, I know the -- the community is

16 downstream, such as Fort Resolution residents.

17 There's residents that have lived in the

18 area. There's residents that continue to -- to go out in

19 that particular watershed and -- and harvest, as well as

20 live out there for short durations of time during certain

21 seasons for the purposes of harvesting wildlife, and

22 trapping, as well.

23 And in the community of Fort Resolution

24 it's got to be clear that a project of this nature that

25 is utilizing the water in a capacity by which would be

1    seen as an increased use of water is not going to be a  
2    contributing factor to any further complications, if I  
3    can use that word, with reference to the -- to the ice  
4    conditions, especially in the winter when trappers are  
5    travelling on that particular watershed.

6                   And, in the past, there has been  
7    situations where ramping has caused ice conditions to be  
8    very unsafe, simply because access waters come into  
9    certain locations that, basically, from one (1) week to  
10   the next, there will be ice, and then there wouldn't be  
11   ice because the -- the currents that are created in  
12   certain pools along the river where people travel.

13                   The other thing is, as indicated by  
14   previous speaker Mr. Marlowe, in the winter, if you have  
15   a ramping situation, you have that overflow that freezes  
16   on top of the existing ice that was formed in the fall.

17                   And not only is there concern with ice  
18   conditions in terms of travel being safe, et cetera, but  
19   also that when you do have ice conditions that are -- are  
20   layering on top of each other, that goes into the -- into  
21   the shoreline and has been known to -- to flood out the -  
22   - the denning of many fur bearing animals along the  
23   watershed, such as beaver, muskrat, minks, otters, and  
24   such that -- that have denning and do have access to the  
25   -- to the shoreline.

1                   It's now flooded over, so it does create  
2   hardship and -- for the animals, of course, and thereupon  
3   the trappers aren't -- aren't catching the -- the furs  
4   they expected that winter, so there is some degree of  
5   loss there and concern with that.

6                   The other thing is, when you do have a  
7   ramping situation, generally, with -- with the technology  
8   that's available today, it would be beneficial to make  
9   those -- those occurrences, if we can, in advance,  
10   notable to -- to the persons using that watershed so that  
11   it creates a safe situation for anyone that's wanting to  
12   -- to travel that area.

13                  For our community of Fort Resolution, not  
14   only, as I indicated, do we depend on the -- the fur  
15   bearing animals and the ungulates in that area, but the  
16   fish populations downstream are of a valuable source.

17                  For many years, people depended on the  
18   resource there for sustenance, as well as -- as for  
19   commercial purposes when there was commercial fishing,  
20   which there isn't now, but there is commercial activities  
21   on that watershed, in a nature by which individuals have  
22   established fishing camps, lodges, for the purposes of  
23   sport fishing that depend on -- on that resource.

24                  And the biggest thing, I guess, that one  
25   would be concerned about when looking at this watershed

1 is if there's ramping that occurs and there's sediment  
2 erosion which is possibly a contributing factor, but from  
3 what we understand in -- in our assessment it's minimal.

4 The downstream user group that's now  
5 situated in a manner by which depending on the resource  
6 according to the information I read is going to be  
7 impacted in a very small way.

8 As you're well aware, any time you alter a  
9 particular environment there are going to be changes that  
10 do occur. And one of the things that I was quite  
11 concerned about is that didn't want to see a situation  
12 where the -- the water regime has changed in a manner by  
13 which your spawning habitat is -- is altered and  
14 thereupon your fish migration and activities are then  
15 changing.

16 Like I said earlier there's a resource  
17 which is fish that a number of people depend upon and you  
18 get used to a certain pattern, and at certain seasons  
19 you're expecting a fish population to be at a certain  
20 location doing a certain thing.

21 And I don't know if you're aware of this  
22 but studies have been done on Inconnu species as an  
23 example on Great Slave Lake whereby because they were  
24 target fished for a number of years and had such a  
25 dramatic impact on that population to the point where

1 they were almost considered a endangered species on Great  
2 Slave Lake, measures had to be taken to curb the  
3 commercial taking of the species.

4 And fortunately, I guess, within certain  
5 species they're able to cope and Inconnu stocks I believe  
6 migrate in certain areas and spawn and reach maturity at  
7 the age of six (6) or seven (7) years old. And the  
8 Inconnu stocks that were in existence when there were  
9 very few were actually spawning earlier, starting to  
10 spawn at five (5) years and four (4) years just to adapt  
11 to the change and the pressures that they were -- they  
12 were faced with.

13 So in this particular watershed, it's a  
14 watershed that is quite large in nature and has some very  
15 unique features. And today's population in the area  
16 although aren't engaged as heavily in the -- the trapping  
17 industry, but, nevertheless, it's got to be noted that in  
18 -- in our tribal societies it's proven through history  
19 that certain areas are used for a number of years for a  
20 certain type of activity. And -- and people move on so  
21 they don't deplete the resource in that area and -- and  
22 allow that particular location to re-flourish.

23 So if there isn't as much activity in this  
24 location in this watershed in the last ten (10) years,  
25 doesn't necessarily mean that there won't be in the years

1 to come.

2                   So I just want to make note that through  
3 our hearings and -- and through the research that we've  
4 done through land use, et cetera, that these particulars  
5 have to be -- to be mentioned.

6                   For ourselves I think in -- in around this  
7 area where this proposed development is -- is occurring,  
8 we're in quite a unique situation by which we're partners  
9 in a project that looks at a resource that has been used  
10 for hydro development and we're involved in a project  
11 that's looking at an expansion for an industrial type of  
12 development such as mining where we can hopefully utilize  
13 a resource to minimize the overall footprint of -- of  
14 development, meaning basically that we can curb back on  
15 the -- the utilizations of fossil fuels and minimize the  
16 negative impacts on -- on our environment by development.

17                   So we're being responsible stepping up to  
18 the plate and hopefully, through a process such as this  
19 and ourselves as a corporate entity, take the necessary  
20 steps so that developers that do come behind us are --  
21 are forced to -- to step up to the plate and reach a  
22 benchmark that we've set in a manner by which we've taken  
23 everything into consideration and utilize to our disposal  
24 all the necessary tools that we have to -- to have a very  
25 good product.

1                   And so I -- I basically like to thank  
2   everyone for their patience around this table and  
3   occasionally you hear me speak of this nature in this  
4   manner simply because I guess having been an elected  
5   chief, once a chief always a chief, they say. And -- and  
6   speaking is something that I like to do simply because I  
7   think -- I hope that what I have to say is -- is going to  
8   be positive in the sense where we can -- we can try to  
9   utilize some of the information for this purpose. With  
10  that, mahsi cho.

11                  MR. MARTIN HAEFELE:    Thank you. I -- I  
12  certainly learned or relearned a -- a few things from --  
13  from what he just said. And -- and one (1) thing in  
14  particular that I -- I want to kind of -- kind of follow  
15  up on, and -- and -- and one (1) of the things he  
16  mentioned is that obviously there are users downstream  
17  and there are users that may be affected by -- by ramping  
18  events and -- and obviously the developer is -- is quite  
19  aware of -- of that.

20                  So am I to assume that your management  
21  plan also includes, or will include some sort of a  
22  communications plan, for instance, on -- on how to notify  
23  potential users of the downstream area of -- of -- of a  
24  ramping event?

25                  I -- I see about three (3) or four (4)

1 heads nod so -- so I'll take it as a "yes" and the record  
2 can reflect it as a "yes."

3 MR. DAN GRABKE: Yeah, Dan Grabke. A  
4 couple of the downstream users were in -- in the Lutsel  
5 K'e meeting and participated and -- and spoke there and -  
6 - and, yeah, they'd be very much a -- a part of the  
7 process both as monitors and -- and also as users being  
8 communicated what's going on.

9 MR. MARTIN HAEFELE: Thank you. And Mr.  
10 Catholique...?

11 MR. ARCHIE CATHOLIQUE: Good morning. My  
12 name is Archie Catholique. I'm from Lutsel K'e. I have  
13 a couple questions this morning, as listening to what's -  
14 - what's been discussed this morning.

15 It's -- it's regards to the -- the flow of  
16 the water. I -- I'd -- a few years ago I had the  
17 opportunity to be involved in the -- in the -- the work  
18 that was -- that was done by our community up in the  
19 Nonacho Lake. And the individual that -- that did the  
20 work was Dr. Ellen Bieloswki who had done some research  
21 and I was the interpreter at that time for some of the  
22 Elders that were participating in that -- that event.

23 And I guess during that time there was a  
24 concern that -- from our people that the Nonacho Lake,  
25 the watershed was -- was -- was not safe anymore for some



1 of the -- the users who are people that trap and hunt and  
2 -- and skidoo up that way for caribou. And just as you  
3 hear just a couple days ago that -- or yesterday, that  
4 there was a couple of our people have went through the  
5 ice because the -- the ice is not safe anymore.

6 I guess their trail that, you know,  
7 they're used to, knowing that it's been used numerous  
8 times by our -- our hunters back then, and that trail,  
9 you know, has been safe, but, you know, once the -- once  
10 the -- the power or the dam was put there -- and there  
11 were a lot of things that have changed up in Nonacho  
12 area.

13 There was a over-flood, and when the flood  
14 had occur, I guess there are mercuries that -- and  
15 because of the water that's -- that's overflowed, and  
16 then when you drop it down again, then all that --  
17 whatever is on the ground, you know, that's what the fish  
18 eat.

19 Today when you go to Nonacho Lake you are  
20 probably going to take at look at those fish. When you  
21 compare those fish to where I come from, from Lutsel K'e,  
22 they're not -- they're not the same. Some would have a -  
23 - a narrower tail, some would have a -- a bigger head,  
24 and there's a lot of -- a lot of, kind of like a pus on -  
25 - on the fish. Those are the things that -- that I've

1     seen when I was up there. And the Elders, you know, that  
2     were there at that time, you know, this is something that  
3     -- that's changed from before the dam and what has  
4     happened.

5                     And those are all noted, that information  
6     that we have at -- at home. And this information that we  
7     gathered was geared towards that there was -- talked  
8     about, okay, you know, this is what the Federal  
9     Government has -- has done without the -- the consent of  
10    our community to go ahead and put in a -- a hydro dam  
11    that there is going to be some compensation or what is  
12    going to take place. And that information was gathered  
13    so that we can go ahead and proceed with this.

14                    But now, you know, as this thing is moving  
15    forward, this Deze Energy, numerous times our -- our  
16    community are still the saying, you know, what's --  
17    where's the -- where's the compensation that's -- that  
18    destroyed our land? You know, who's going to be  
19    responsible for that? Where some of our people were  
20    buried, the burial sites there is covered with water.  
21    Who's going to take care of those? Who's going to answer  
22    to that?

23                    That's -- that's the reason why our -- our  
24    people are hesitant to -- to go ahead and support what's  
25    going on here today.

1                   I think as a review board I think it's  
2   your job to -- as I understand how this thing is set up,  
3   is that you listen and -- and take in what might have to  
4   be an impact on our community furthermore. And I don't  
5   think those things have been done yet today.

6                   And, you know, as an individual, as a  
7   negotiator for the Akaitcho process and one (1) of the  
8   things I did learn growing up as a young man is that --  
9   that the land that the people are seeking to -- to work  
10   on is -- is the land that belongs to our community. You  
11   know, we haven't given up that right. We've never  
12   surrendered to anybody to say that regardless we're going  
13   to go ahead and do this. It doesn't work like that  
14   anymore.

15                  And I guess having said that, thinking  
16   about the water flow that you're talking about here today  
17   and I was thinking that if that water downstream is going  
18   to be flooded, it's going to rise again as -- as I think  
19   I'm hearing that. I'm not an expert in, you know, like  
20   some of the technicians that you have here, but I'm  
21   thinking that water flow will take in the -- the mercury  
22   again and that's going to have to have an impact on -- on  
23   the fish.

24                  And how are you going to -- how are you  
25   going to minimize that? I know yesterday you talked

1 about the -- the watershed. You know, where I come from  
2 I'm pretty sure that you've heard probably in Lutsel K'e  
3 that we have a -- we have a place where it means a lot to  
4 -- to our people. We have a spiritual river that -- that  
5 the people that wish to seek help at the -- the doctors  
6 that don't have hope for them anymore, that they go to  
7 this place and that they -- you can see them around some  
8 of those people today that they get well.

9                   And now some of our people are saying  
10 well, you know, these transmission lines that people are  
11 talking about, it's going to cut right across our  
12 territory and it's not going to be the same anymore where  
13 we gather every summer, you know, and we have these  
14 transmission lines going -- cutting right across the  
15 river. And it's going to have a lot of -- it's going to  
16 have a lot of impact on how people -- you know, how about  
17 the -- the site that -- that people gather?

18                   You know, I think the Elders that passed  
19 on those message to me is that, you know, you've got to  
20 protect this area. This area that's been set aside, you  
21 know, has to be protected.

22                   And any kind of -- whatever action that  
23 you may take to protect these things for our children,  
24 not only mine but probably in the future for -- for your  
25 children, you know, this -- those are the kind of, I

1 think, communications have not been out there. It's not  
2 only for our people, but for the people from the outside  
3 that want and -- and live amongst us. And I'm not sure  
4 those were taken into consideration.

5                   And so, I just thought, you know, I  
6 probably had that one (1) question maybe about the -- the  
7 mercury of the overflow of the water. You know, I have  
8 to -- I have to ask this question again because in the  
9 numerous years that, you know, when this thing was  
10 moving, that our people gathered together every year, and  
11 we come up with motions, resolutions, and that our people  
12 are not supporting this -- this Deze Energy because of --  
13 some are -- some of the outstanding issues that needs to  
14 be dealt with.

15                   I guess, first we have -- you know, we're  
16 still negotiating with Canada, implementing the treaties  
17 of the outstanding issues that needs to be dealt with.

18                   And so those resolutions has been brought  
19 forward. And I know yesterday a friend of mine, Mr.  
20 Balsillie, in his opening remarks, I know one of the  
21 things that he did say was that he's working for the  
22 Akaitcho Chiefs.

23                   And so I'm just kind of curious, you know,  
24 what does that mean? I mean, does that mean that the  
25 Chief from Lutsel K'e is also supporting what's going on,

1 or is that -- I probably need to -- to be clear on this  
2 because, you know, our people are not -- has given  
3 direction to our leadership to, you know, that we're not  
4 -- not in favour of this until such time that we feel  
5 comfortable that we'd -- we were dealt fairly with those  
6 outstanding issues. And so I just probably want to relay  
7 that question too also.

8 So, thank you for listening to me.

9 MR. MARTIN HAEFELE: Thank you very much.  
10 I've thrown around Winston Churchill quotes, and just  
11 another one came to my mind right now. And that is,

12 "A fanatic is somebody who can't change  
13 his mind and won't change the subject."

14 But I'm not a fanatic. We are changing  
15 the subject because a lot of the things you -- you  
16 brought up here are the things that are on the agenda --  
17 are on the agenda for this afternoon. And I think it has  
18 to do with the project design, socioeconomic impact and  
19 things like that. But, I think they are valid questions.

20 And so, if I understood you right, the --  
21 the question you are posing to the developer, I think,  
22 right now, is -- is number one (1), again, is there a  
23 connection between mercury and overflow?

24 And also another one (1), I think, had to  
25 do with the Akaitcho Chiefs versus Lutsel K'e, and who is

1 -- is the developer?

2 And I was just wondering, is the developer  
3 prepared to answer those questions now, or do you want to  
4 have a little bit of time?

5 And also, I was going to ask you, Mr.  
6 Catholique, are you gonna be here this afternoon? Okay.  
7 Because there will be other people here this afternoon, I  
8 think, who might be interested in -- in the answer to  
9 that. But if you a quick answer now, I would appreciate  
10 that.

11 And I guess, a two (2) part question. One  
12 (1) is the more --

13 MR. SHANE UREN: I can -- Shane Uren. I  
14 can try to address the -- or I can address the -- the  
15 questions regarding mercury, mercury levels.

16 So as part of Deze's directive to us, and  
17 to the consultants working on the project, and the number  
18 one (1) absolute condition was -- was no new flooding.

19 And Deze is well aware of the -- the  
20 impacts of mercury elevation associated with new  
21 flooding. And that was forthcoming there from -- from  
22 the -- from Deze as their number one (1) priority is to -  
23 - to avoid that.

24 That said, during the -- the operations of  
25 the projects there will be fluctuations in water level

1     that -- that we've identified as potential for mercury  
2     levels to change.

3                     So what we've done is we've included that  
4     into the environmental assessment. We have good  
5     information on the fish that live in Nonacho Lake now in  
6     terms of their mercury levels. We also have good  
7     information on the fish that live in lakes nearby, Sparks  
8     Lake and Rutledge Lake, and I believe there's another one  
9     in the area.

10                    So we've looked at the mercury levels in  
11    the fish from different water -- from different lakes  
12    where -- where Nonacho is subjected to flooding and  
13    Rutledge was not and Sparks was not. Oh, and the other  
14    lake was the Taltson Lake. So we have mercury levels in  
15    fish from those -- I believe those four (4) lakes if not  
16    more.

17                    And what we found, and this is from, I  
18    believe from two (2) years of data from '03 and '04, is  
19    that the mercury levels in -- in the fish in Nonacho Lake  
20    are very slightly higher than they are from Rutledge and  
21    -- and Sparks and Taltson Lake.

22                    Now these levels are very close together  
23    and, given the sample size that we have, we can -- we  
24    can't say statistically that there is a higher level of  
25    mercury in the fish in Nonacho. But what we do know is



1 from other literature is that the levels of the -- of  
2 mercury in the fish is similar for lakes in -- in this  
3 area.

4 Now I'd have to check to see how those  
5 numbers -- I can't remember off the top of my head, is  
6 how those numbers relate to Environment Canada  
7 Guidelines, consumption guidelines, but I believe they do  
8 slightly exceed those levels which Environment Canada  
9 recommends, which would apply to Rutledge Lake and Sparks  
10 Lake and Taltson Lake, as well, so -- so other lakes that  
11 -- that weren't subjected to flooding.

12 Now all that said, through our assessment  
13 of potential increases in mercury, we're -- we're not  
14 finding that there -- there will be an issue associated  
15 with the -- the operations of the project.

16 But through other discussions we've --  
17 we've committed to putting a management plan together  
18 that will -- that we feel will help -- or that will  
19 identify potential changes that would occur down the road  
20 if -- if we're wrong, right, if our predictions are  
21 wrong.

22 So that's how we're addressing the mercury  
23 issue with the project and that's in a nutshell I guess  
24 our understanding of the mercury levels in the fish from  
25 our -- our two (2) years of baseline if not -- I think

1 two (2) or three (3) years of baseline data that we have  
2 on those lakes.

3 MR. MARTIN HAEFELE: Thank you.

4 MR. DON BALSILLIE: Don Balsillie. Yes,  
5 just for -- for the record, with reference to  
6 representing the Akaitcho chiefs, we're -- we're all  
7 aware according to documentation that the Akaitcho Energy  
8 Corporation is a partner in the project and we represent  
9 the community of Yellowknife, the community of Smith's  
10 Landing, Salt River and Deninu K'ue. Those are the First  
11 Nations that are currently involved in the project.

12 And the discussions with -- with Lutsel  
13 K'e between the chiefs are still happening. We're still  
14 providing information from Deze to the community. As you  
15 heard from previous speakers from Lutsel K'e this -- this  
16 project is raising a lot of concerns in the community,  
17 and hopefully, the more information that we can provide  
18 that some of those concerns could be addressed.

19 We don't know how it's going to end up at  
20 the end of the day in terms of the relationship, but  
21 those issues and concerns are well noted and the parties  
22 are attempting to -- to address those issues and  
23 hopefully we can find a -- a resolution that everyone is  
24 -- is happy with.

25 MR. MARTIN HAEFELE: Thank you very much.

1 If there is no -- nobody else has got any questions of  
2 the developer or any other party in regards to Trudel  
3 Creek, then I would say we are one (1) minute ahead of  
4 schedule. I think that's -- that's just about perfect.

5 And with that, I'll call the lunch break  
6 and lunch break, once again you're on your own. We want  
7 to make sure that you get out of the building and get  
8 some fresh air in addition to some food.

9 We need to start up again here at 1:15 and  
10 the subject will be subject of note, project design and  
11 socioeconomic impacts. I want to thank you, all the  
12 parties who have asked questions. I think there were  
13 some -- some really good questions. And I also want to  
14 thank the developer for being very diligent and patient  
15 and sometimes even quick in answering those questions. I  
16 think there was -- from my point of view it was a very  
17 fruitful discussion we had and I think it's going to help  
18 us, you know, in the impact assessment.

19 So set this afternoon, 1:15, we'll change  
20 the subject a little bit and move away from, you know,  
21 biophysical impact on our water, getting more into  
22 project design and socioeconomic things.

23 I personally won't be here because I,  
24 unfortunately, do have a few other things I have to take  
25 care of. I need to talk to my boss who was out of town

1 for a while and he probably has a few choice words to say  
2 upon finding -- finding the office virtually empty when  
3 he got back.

4 But, anyways, with that, I'm going to  
5 close the session for this morning and I hope you're all  
6 going to have a restful and refreshing lunch. Bye.

7

8 --- Upon recessing at 12:00 p.m.

9 --- Upon resuming at 1:21 p.m.

10

11 MR. PAUL MERCREDI: Okay, good afternoon.  
12 Everybody's nice full and from lunch. My name is Paul  
13 Mercredi, I'm a EA officer at the Review Board and will  
14 be facilitating the discussion this afternoon.

15 For anybody who's new to the proceedings  
16 here the goal of this session is just to get information  
17 from the Developer one way or another. And I apologize  
18 if I'm stuffed up. Shane gave me his cold somehow.

19 So again, it's -- hopefully we can get  
20 most of our -- most of the information from the Developer  
21 in the form of questions, either in -- through dialogue,  
22 or if we can formulate a question somehow that we can put  
23 on the public registry and then we can -- the Developer  
24 can address that on or before October 30th. It'll  
25 probably be after.

1                   And because we're taking transcripts for  
2   this meeting, if you could please identify yourself.  
3   We'll be passing around a mic. We have our lovely mic  
4   assistant, Nicole Spencer, right there. And if you could  
5   just again please just identify yourself so we know, and  
6   to the organization you represent that, again so we can  
7   have that for the record.

8                   And I'll pass the mic over to Tawanis.  
9   She'd like that, I think.

10                  MS. TAWANIS TESTART: I just wanted to --  
11   because I'm -- I see a few people in the room that  
12   haven't been here with us as of yet and I just wanted to  
13   go over the format of -- of what we're going to be doing.

14                  This afternoon we're talking about  
15   subjects of note, focussing on socioeconomic issues -- or  
16   impacts, and -- and the impacts related to project  
17   design. So that doesn't mean that we are necessarily  
18   limited to those topics, and if you have another question  
19   related to the subjects of note that you have a burning  
20   desire to ask, please feel free to ask your question. We  
21   ask that you ask your questions to the moderator and that  
22   we will direct the Developer to answer.

23                  And I think that's about all I wanted to  
24   say. And, yes, identify yourself.

25                  And just before we begin because there are

1 a few new people, we'd like to go around the room and do  
2 a round of introductions.

3 MS. CANDACE ROSS: Candace Ross, with  
4 INAC.

5 MS. SOPHIA GARRICK: Sophia Garrick,  
6 Transport Canada.

7 MS. NICOLA JOHNSON: Nicola Johnson,  
8 Fisheries and Oceans.

9 MR. BRUCE HANNA: Bruce Hanna, Fisheries  
10 and Oceans.

11 MS. KRIS JOHNSON: Kris Johnson,  
12 Department of Industry, Tourism and Investment, with the  
13 GNWT.

14 MR. GAVIN MORE: Gavin More, Environment  
15 and Natural Resources GNWT.

16 MS. STACEY LAMBERT: Stacey Lambert,  
17 Environment Canada.

18 MS. BERTHA CATHOLIQUE: Bertha  
19 Catholique, Lutsel K'e.

20 MR. ALBERT BOUCHER: Albert Boucher, from  
21 Lutsel K'e.

22 MR. CHARLIE CATHOLIQUE: Charlie  
23 Catholique, from Lutsel K'e.

24 MR. JAMES ENG: James Eng (phonetic),  
25 from Yellowknife.

1                   MR. ARCHIE CATHOLIQUE:    Archie  
2   Catholique, Lutsel K'e.

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

4                   MR. LLOYD CARDINAL:    Lloyd Cardinal, Fort  
5   Resolution Metis Council.

6                   Ms. BRITTANY SHUWERA:    Brittany Shuwer, a,  
7   North Slave Metis Alliance.

8                   MR. BENJAMIN SCOTT:    Benjamin Scott,  
9   Department of Education, Culture and Employment.

10                  MR. TONY ONDRACK:     Tony Ondrack,  
11   Department of Education, Culture and Employment.

12                  MR. JASON COUTIER:    Jason Coutier  
13   (phonetic), Cambria Gordon.

14                  MR. RAYMOND ESSERY:    Raymond Essery,  
15   observer.

16                  MR. GEORGE MARLOWE:    Lutsel K'e, old man.

17                  MR. SHANE UREN:     Shane Uren, consultant  
18   to Deze Energy.

19                  MR. DON BALSILLIE:    Don Balsillie, Deze  
20   Energy.

21                  MR. DAN GRABKE:     Darren Grabke, Deze  
22   Energy.

23                  MR. LOUIE AZZOLINI:    Louie Azzolini,  
24   consultant to Deze Energy.

25                  MR. ANDREW STEWART:    Andrew Stewart, Deze

1 Energy.

2 MR. DAMIAN PANAYI: Damian Panayi,  
3 consultant to Deze Energy.

4 MS. LINDA ZURKIRCHEN: Linda Zurkirchen,  
5 consultant to Deze Energy.

6 MR. TOM VERNON: Tom Vernon, project  
7 engineer for Deze.

8 MR. RICHARD BROWN: Richard Brown, Senes  
9 DCS, working for the Board.

10 MR. BRUCE STEWART: Bruce Stewart,  
11 consultant to the Board.

12 MR. ALEKSEY NAUMOV: Aleksey Naumov,  
13 consultant to the Board.

14 MR. ALAN EHRLICH: I'm Alan Ehrlich, with  
15 the Review Board.

16 MS. TAWANIS TESTART: And just a further  
17 note. So, we're here -- we are here today to talk about  
18 the information requirements that parties may have.

19 As you direct your questions to the  
20 Developer, I'd just like to make sure that everyone's  
21 aware that we have allowed the Developer to take until  
22 October 30th to respond in writing, if they don't feel  
23 comfortable giving a response here. So, they may choose  
24 to undertake to provide a written response to questions  
25 that are posed to them here.



1                   And now, I'm going to let Paul talk again.

2                   MR. PAUL MERCREDI:    Okay.  I'll open the  
3 floor up to my left, and we'll move from there.

4                   MS. CANDACE ROSS:    Candace Ross, with  
5 INAC.  This question's related to waste management.

6                   So, that the request is that INAC -- or  
7 INAC is requesting that Deze develop a waste management  
8 plan for barge camps, that barge camps be address as part  
9 of the drafts -- Draft Spill Contingency Plan, and that  
10 Deze provide a more detailed description of the potential  
11 sewage lagoon, including location and justification for  
12 it's requirement.

13                  MR. PAUL MERCREDI:    Okay.  Can any Deze  
14 rep's address that?

15                  MS. LINDA ZURKIRCHEN:   Linda Zurkirchen.  
16 Yeah, Deze's definitely committed to any of their waste  
17 water from any of the camps, the barge camps, and any of  
18 the facilities, to make sure that waste water meets any  
19 regulatory criteria for discharge.  It's probably going  
20 to be part of the detail design process when the final  
21 camps' configuration are finalized.  Well, obviously  
22 they're final -- finalized.  With detail design those  
23 design parameters are part of that.

24                  So, that will be done prior to the  
25 regulatory phase, and the -- whatever our discharge

1 criteria quantity and criteria are with that design, we  
2 will submit with permitting. But definitely committed to  
3 making sure that all discharges are -- meet the  
4 regulatory criteria and on permitted.

5 Drafts -- you asked about the Draft Spill  
6 Contingency Plan. Certainly camps and camp facilities  
7 waste management can be part of the -- the final environ  
8 -- environmental management plan that would include  
9 spills.

10 MR. LOUIE AZZOLINI: And if I can add to  
11 that. They're typically required with -- Louie Azzolini,  
12 my apologies.

13 The type of information that you've  
14 requested, Candace, is typically required as part of a  
15 land use permit application for -- no, to obtain the  
16 permit. Spill contingency, emergency response  
17 requirements, et cetera. So thank you very much for your  
18 question but it'll get addressed in regulatory because  
19 they won't get a permit without it.

20 MR. PAUL MERCREDI: Okay. Does that  
21 address your questions?

22 MS. CANDACE ROSS: Yeah, that should be  
23 okay. Well, I did have a question about the sewage  
24 lagoon and if you have the location for that.

25 MR. PAUL MERCREDI: Okay. Deze...?

1 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.  
2 The -- the question of whether we -- that sewage lagoon  
3 has been potentially identified as a potential treatment  
4 system for camp. And I say "potential" because at this  
5 point in time it's not been identified if the -- the  
6 geographic area would enable a sewage lagoon to be put in  
7 place or not, because certain terrain requirements and  
8 soil requirements have to exist in order to facilitate  
9 the operation of a sewage lagoon, and those have not been  
10 looked at or proven yet. So if they're not available, or  
11 the facility -- the terrain does not accommodate a sewage  
12 lagoon, a different system would be in place.

13 So that's still under investigation. I  
14 couldn't address it directly cau -- because I would  
15 include that it is under the waste management of the --  
16 of a camp facility. Wether there be a package -- package  
17 sewage system or a -- a lagoon system is still under  
18 consideration.

19 MS. CANDACE ROSS: Yeah, that's good for  
20 now.

21 MR. PAUL MERCREDI: Okay.

22 MS. STACEY LAMBERT: Stacey Lambert,  
23 Environment Canada. I just had a follow-up question with  
24 that as well, just to get it on the record.

25 Please provide a description of the

1 proposed disposal method for sewage and waste water  
2 generated at the camps, including the barge camps. The  
3 description should include the type of treatment system  
4 proposed, its treatment capacity, effluent quality, and  
5 where the effluent would be discharged.

6 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.  
7 In -- in consideration of the -- the earlier question,  
8 the answer would be similar and that that information  
9 would be part of the detail design, and certainly ensure  
10 that any -- any waste water treatment facility is sized  
11 for the appropriate quantity and appropriate treatment  
12 for permanent discharge, and will be addressed during the  
13 detail design and permitting phase.

14 MS. STACEY LAMBERT: Yeah, we look  
15 forward to reading that.

16

17 (BRIEF PAUSE)

18

19 MS. TAWANIS TESTART: A moment.

20

21 (BRIEF PAUSE)

22

23 MS. TAWANIS TESTART: Just as a -- just  
24 so everyone's aware, Bertha in the back is -- is  
25 translating right now for Albert, so if everyone could

1 speak clearly and into the microphone so that she -- and  
2 she's not wearing any earpiece, so she needs to be able  
3 to hear what you're saying to translate for him. And try  
4 to avoid big words and acronyms and such things.

5 MR. PAUL MERCREDI: Does Environment  
6 Canada have any more follow-up questions?

7 MS. STACEY LAMBERT: Not related to that  
8 topic.

9 MR. PAUL MERCREDI: And does INAC have  
10 any further questions? Okay.

11 MS. SOPHIA GARRICK: Sophia Garrick,  
12 Transport Canada. I just have a comment and then I'll  
13 have some questions following it.

14 There's very little information regarding  
15 navigability in the Developer's assessment report. In  
16 the instances that navigability is identified, it's been  
17 determined that the impact to navigability is negligible.  
18 For clarification purposes the determination of  
19 navigability and the impact -- sorry, sorry about that --  
20 and the impact to navigability sits with our marine  
21 safety division, specifically the Navigable Waters  
22 Protection Program. Further details will be required in  
23 the form of an application to the program and for them to  
24 determine the impacts to navigability. And I can provide  
25 that contact information, if it's required.

1                   So the first question that I do have is:  
2    Could you provide additional details regarding the  
3    upstream and downstream impact to navigability related to  
4    the existing use, during construction and operation of  
5    the facilities? Specifically, who will be impacted, how  
6    and the duration of the impact.

7                   MR. PAUL MERCREDI:    Deze...?

8                   MR. SHANE UREN:    Hi.  Shane Uren.  We can  
9    -- we can give you an answer now, but as -- I think that  
10   we discussed in the Application there to your Marine  
11   Division we're going to -- I -- I'm working on some of  
12   those details now.  But in terms of construction, I'll  
13   try to address some of the question now if I can.

14                  So if I recall the question, the impacts  
15   to navigability during construction, is that correct?

16                  MS. SOPHIA GARRICK:   Specifically, who --  
17   who will be impacted, how they will be impacted during  
18   construction?

19                  MR. SHANE UREN:    Okay.  The potential  
20   users of the area?

21                  MS. SOPHIA GARRICK:   Exactly.

22                  MR. SHANE UREN:    Yeah, I actually know I  
23   don't know that I could answer in detail right now,  
24   because I'd have to look at the construction schedule.  
25   We've got two (2) different locations that there'll be

1 some works that potentially, within the water -- within  
2 water bodies that could have potential impacts on  
3 navigability and people that use the water.

4 So I think it's important that I through  
5 those -- those details first and look at some of those;  
6 the timing windows for example of when the draw-down will  
7 be and cross reference that with our socialec team here  
8 to see what we've got, in terms of using the land during  
9 that time. So it would be kind of premature for me to --  
10 to speak to that.

11 But I will ask Louie if -- if we've -- if  
12 we've got that information in another section of the DAR  
13 that -- in terms of land use of the area, or that may be  
14 related to navigability.

15 MR. LOUIE AZZOLINI: Thank you, Shane.  
16 And is it Sophie? Sophia or Sophie?

17 MS. SOPHIA GARRICK: Sorry, Sophia.

18 MR. LOUIE AZZOLINI: Sophia. The -- the  
19 research that we did was both a literature research and  
20 it involved also the reconnaissance of information from  
21 communities, individuals in communities, who would have  
22 used the area and are using it.

23 The historical body of research indicates  
24 that there was commercial fishing in the area at one  
25 time. So that is no longer the case and it's not going

1 to happen in the foreseeable future, based on looking at  
2 Great Slave Lake and the economics of it.

3 In terms of current use, there is one area  
4 where, and this is up at Nonacho, and Damian can speak  
5 more to it because he flew the site and is familiar with  
6 It.

7 At the Nonacho area there's a portage that  
8 connects Nonacho Lake to the downstream flow, and that  
9 would be temporarily disrupted while the Nonacho Lake  
10 facilities were being constructed. And what Deze has  
11 committed to doing, is to accommodate a passage way, or  
12 to develop a way for people to continue that activity  
13 after the facilities are constructed and the waste rock  
14 piles are overburdened, whatever we want to call them,  
15 are -- are finalized.

16 So there's a recognition that there is  
17 something there, it will be temporarily disrupted, a year  
18 or two, and that -- that path or a path will be provided  
19 to enable that activity to continue.

20 Other than that, the research that we did  
21 found that there's some outdoor enthusiasts, sort of high  
22 energy outdoor enthusiasts, who like to kayak the entire  
23 system on occasion. In terms of how it would affect  
24 them, other than that one (1) passage up at Nonacho, I'm  
25 unaware of how else they would be affected. So that's



1 about what we know in terms of potential effect that  
2 might happen, in the summer obviously because that's when  
3 you can get on the water.

4 Does that answer your question, Sophia?

5 MS. SOPHIA GARRICK: Pretty much. I -- I  
6 guess I was more -- more looking at, I guess traditional  
7 use currently of the -- specifically maybe downstream,  
8 just because we're talking about fluctuations as well.  
9 You said, you know, there's going to be fluctuations in  
10 water levels --

11 MR. LOUIE AZZOLINI: Okay.

12 MS. SOPHIA GARRICK: -- that are more  
13 common and I'm just wondering how that will kind of  
14 impact people who are down -- up -- downstream of it.

15 MR. LOUIE AZZOLINI: Sure. Thank you,  
16 Sophia.

17 That's -- downstream of the Taltson River  
18 where you're going to have the new -- the new plant and  
19 the older plant, the same amount of water is going to be  
20 flowing at that point so there will be no more less -- no  
21 less and no more water than historically has flowed  
22 there, and hence my reference to the staff at the Review  
23 Board as to previous or an existing licence there that's  
24 been in place and renewed since the '60s.

25 Downstream of the Taltson facilities,

1 meaning the expansion component and the existing  
2 component, the water quantity and velocity should not be  
3 different, will not be different, because the same amount  
4 of water will be flowing. As Shane has noted already the  
5 -- the timing of the flows will be different, but it's  
6 not like we're going to be raising or lowering Great  
7 Slave Lake. It's just -- it'll be exactly the same.

8 MS. SOPHIA GARRICK: Okay. Thank you.

9 MR. LOUIE AZZOLINI: You're welcome.

10 MR. PAUL MERCREDI: Does that address --

11 MS. SOPHIA GARRICK: It does. And then  
12 as Shane indicated that he'll have additional information  
13 provided to our Navigable Waters Protection Program that  
14 will address some of the additional information that's  
15 required.

16 MR. PAUL MERCREDI: Okay, perfect. Thank  
17 you.

18 You do have more questions? Okay.

19 MS. SOPHIA GARRICK: Okay. That was --  
20 another question I had is related to stream crossings.  
21 And it was mentioned that there will be transmission  
22 lines again crossing these streams, and as I said,  
23 navigability was determined to be negligible. But again,  
24 that will also be something that you might want to --  
25 that you're going to have to consider when you put it

1     into that -- sorry, when you submit that information to  
2     Navigable Waters. So I just wanted to make that clear.

3                   MR. SHANE UREN:     Yeah, this -- this is  
4     Shane Uren. So yeah, just so it's on the record, yeah,  
5     we recognize that there's -- there's two (2) aspects  
6     really of the project: There's the works within the  
7     Taltson watershed, then there's the transmission line.  
8     Both have ramifications to the Navigable Waters Act and  
9     through our Application, through Sophia's office there,  
10    that we're going to address those issues.

11                  MR. LOUIE AZZOLINI:   It's Louie Azzolini.  
12    From a socioeconomic assumption, we assume that the  
13    towers would be appropriately placed and the transmission  
14    line height would be such that it would meet your  
15    regulatory requirements and therefore there wouldn't be  
16    an effect.

17                  MS. SOPHIA GARRICK:   Okay. Thank you. I  
18    do have another question related to barges. It was  
19    indicated that there's the use of barges for the delivery  
20    of construction material and machinery. And I'm curious  
21    to know if the barges will be used in the transfer of  
22    fuel from water to land, specifically into fuel storage  
23    on land.

24                  MS. LINDA ZURKIRCHEN:   Linda Zurkirchen.  
25    Yes, the barges will be used for fuel transport and there

1 will be transfer from the barges to onsite storage  
2 facilities. And -- and all -- all facilities and  
3 transportation and handling will be done to -- to  
4 standards, to industry regulations and the government  
5 regulations for transport and storage facilities.

6 MS. SOPHIA GARRICK: And I just -- for  
7 the record, if you are going to use them as fuel storage  
8 barges or fuel barges, you will have to submit an oil  
9 pollution -- an emergency plan to our marine safety  
10 division for approval, prior to any use of those vessels.

11 And the other question I had related to  
12 barges, is will you be overwintering these barges? So  
13 will they be at that facility during the winter and  
14 during ice?

15 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.  
16 At present we're not planning on keeping them there over  
17 winter. If a contractor were to be brought into place  
18 that has a construction methodology that would include  
19 that, it would be obviously their responsibility to  
20 obtain permits themselves to ensure that all their --  
21 their construction techniques would adhere to all  
22 regulatory requirements.

23 But it's not currently in the design plan.

24 MS. SOPHIA GARRICK: Okay. Thank you.  
25 Just for reference if it is planned to be used in the

1 future, there are -- you will, again, have to contact  
2 Marine Safety. They do have a -- draft guidelines for  
3 lay up of barges within the ice and that would be of an  
4 interest to you. Okay. Thank you.

5 MR. PAUL MERCREDI: Okay. Thank you.  
6 And we'll move on. Is there anyone to my left?

7 MS. KRIS JOHNSON: Good afternoon, my  
8 name is Kris Johnson. I'm with the Department of  
9 Industry, Tourism and Investment.

10 We're here to talk a bit about the  
11 socioeconomic impacts and benefits of the project. So  
12 just to give some people some context, it's our  
13 experience that explicit predictions regarding local NWT  
14 employment, northern contracting and procurement are  
15 necessary to understand the extent to which the  
16 proponents mitigation measures will benefit communities  
17 and residents and protect them from adverse effects from  
18 the -- for the life of the project.

19 So we had submitted just a few IRs in this  
20 regard. So the first one is, please provide an analysis  
21 on NWT businesses that have the capacity to successfully  
22 compete for opportunities related to the project.

23 MR. PAUL MERCREDI: Deze...?

24 MR. ANDREW STEWART: Andrew Stewart, Deze  
25 Energy. Yes, we're prepared to do that analysis. It's

1 actually underway.

2 We've got an inventory underway of -- of  
3 potential businesses in the South Slave and we'll be  
4 happy to provide that, as well as to give an indication  
5 of what overall percentage we can expect to provide as a  
6 project on the whole.

7 MR. PAUL MERCREDI: If I can just add.  
8 Will that report be available by October 30th?

9 MR. ANDREW STEWART: That was not the  
10 plan, no.

11 MS. KRIS JOHNSON: I think for the GNWT's  
12 purposes that we'd be happy if it was available by the  
13 end of this EA process or by the public hearings.

14 MS. TAWANIS TESTART: So what you're  
15 saying is -- is that you would be satisfied if you were  
16 able to review the report before the public hearings but  
17 do you need time to be able to review it and comment on  
18 it at the public hearings?

19 Like, do you require that information to -  
20 - to do your final submission to the Board in the EA  
21 process?

22 MS. KRIS JOHNSON: I think it would be  
23 very helpful.

24 MS. TAWANIS TESTART: Okay. So when we  
25 say that the deadline is October 30th for information

1     that is kind of the -- the deadline to provide that  
2     information in time for parties to review because final  
3     submissions are going to be completed in November and  
4     then we'll be moving into preparation for -- for the  
5     hearing.

6                     So if Deze is not prepared to provide that  
7     information by October 30th, is there a date soonish  
8     after that they would be able to provide the information  
9     for GNWT?

10

11                     (BRIEF PAUSE)

12

13                     MR. ANDREW STEWART:     Andrew Stewart, Deze  
14     Energy. We're prepared to pull that inventory together.  
15     It's underway now. We can't make a commitment for  
16     October 30th but we'll do our best to have it prior to  
17     the conclusion of the EA process.

18                     Would -- would prior to the public hearing  
19     stage be adequate?

20                     MS. TAWANIS TESTART:     You can't ask me,  
21     you have to ask GNWT because if they require that  
22     information to do their final submission, then they'll  
23     need to let us know what their sort of drop-dead date  
24     would be to be able to prepare for their -- for their  
25     final submission and their presentation at the hearing.

1 MS. KRIS JOHNSON: When are the  
2 submission -- what's the submission deadline for the  
3 hearing?

4 MS. TAWANIS TESTART: I'm sorry, I don't  
5 have the work plan in front of me but we're planning --  
6 our schedule is that we will have -- we will allow,  
7 basically the month of November for parties to prepare  
8 their final submissions.

9 And we're aiming to have a hearing in the  
10 beginning to mid January. And so -- so our deadline for  
11 final submissions will probably be in the first week of  
12 December or so.

13 Obviously there's a -- a gap in there, and  
14 it's to accommodate the Christmas season. And so, yes,  
15 so if you're aiming to prepare something for, say, the  
16 second week in January, when would you need that  
17 information?

18 And if you can't come to that answer right  
19 now, we can have a little meeting, like a sidebar meeting  
20 and talk about the process and nail down a date. And --

21 MS. KRIS JOHNSON: I think that would  
22 probably be more helpful than, you know, if the proponent  
23 isn't prepared by October 30th, then we'd be willing to  
24 work with them to figure out a good date.

25



1        --- COMMITMENT NO. 34:             Deze Energy to provide an  
2     analysis on NWT businesses  
3     that have the capacity to  
4     successfully compete for  
5     opportunities related to the  
6     project. (Submission date to  
7     be determined)

9 MS. TAWANIS TESTART: Right. And -- and  
10 I'll sit down with you guys and -- and we can figure it  
11 out in terms of fitting into our EA schedule at the same  
12 time.

13 Does that work for everyone?

14 MS. KRIS JOHNSON: Yes.

15 MR. ANDREW STEWART: Yes, it does.

16 Thanks.

17 MS. KRIS JOHNSON: So, that actually will  
18 probably apply to the rest of the questions that I have  
19 as well, so we don't have to go over that again.

20 MS. TAWANIS TESTART: Actually, Kris, if  
21 you could ask the questions and then we can get the  
22 questions on the record, that would be helpful.

23 MS. KRIS JOHNSON: Sure, yep. Okay, so  
24 second question.

25 What percentage of procurement will be

1 sourced from NWT businesses? Please explain how this  
2 percentage was calculated, and how much of the total cost  
3 of contracts will be made available to NWT businesses?

4 MR. PAUL MERCREDI: And Deze, if -- if  
5 this fits into the -- the whole sidebar discussion, then  
6 just indicate it just quickly, and then we can move on to  
7 getting the -- getting the other questions on the record.

8 MR. ANDREW STEWART: Sure. Andrew  
9 Stewart, Deze.

10 We're certainly prepared to make that  
11 commitment, the only issue is the deadline or timing of  
12 that -- that detail. Thanks.

13

14 --- COMMITMENT NO. 35: Deze Energy to advise what  
15 percentage of procurement  
16 will be sourced from NWT  
17 businesses. Please explain  
18 how this percentage was  
19 calculated, and how much of  
20 the total cost of contracts  
21 will be made available to NWT  
22 businesses? (Submission date  
23 to be determined

24

25 MR. PAUL MERCREDI: Thank you.

1 MS. KRIS JOHNSON: That satisfies that  
2 question. Thank you very much.

3 So, third question. Please provide  
4 additional information on the efforts that Deze Energy  
5 Corp. will make to ensure that NWT businesses are aware  
6 of business and procurement opportunities.

7 MR. ANDREW STEWART: Andrew Stewart, Deze  
8 Energy.

9 Page 20.5 and 20.6 of the Table of  
10 Commitments in the DAR outline exactly what we're  
11 prepared to do. But, we're pleased to work with the GNWT  
12 to identify any specific efforts that they would like to  
13 see undertaken beyond that.

14 MR. PAUL MERCREDI: Thank you.

15 MS. KRIS JOHNSON: And just for the  
16 record, the GNWT's reviewed those sections of the DAR and  
17 that we're happy with the commitments that the  
18 developer's made.

19 Just to provide a little bit more context  
20 for the last question here. Contracting and procurement  
21 from the NWT owned business provides secondary employment  
22 opportunities for NWT residents and contributes to the  
23 NWT economy.

24 The cost of doing business in the NWT can  
25 be higher because of the lack of economies of scale -

1 I'll slow down a little bit - and distances goods must  
2 travel to market. As a result competitive pricing by NWT  
3 companies can be difficult when competing with southern  
4 companies.

5 It's important that NWT businesses have  
6 the opportunity to compete competitively on contracts and  
7 procurement opportunities.

8 For these reasons it's important that the  
9 Deze Energy Corp. have an NWT business policy that  
10 outlines the developer's intentions towards contracting  
11 and procurement with NWT businesses.

12 So, our last question is: Please provide  
13 details on Deze Energy Corp.'s NWT business policy and  
14 how it will be implemented.

15 MR. PAUL MERCREDI: Deze...?

16 MR. ANDREW STEWART: Andrew Stewart,  
17 Deze.

18 Deze commits to developing a project  
19 procurement policy for business employment and training  
20 prior to awarding construction contracts that would seek  
21 to maximize a recruitment employment of Northern  
22 Aboriginal persons and to provide them with the first  
23 opportunity to fill any available positions.

24 The Akaitcho Territory Government and its  
25 members and the Northwest Territory Metis Nation and its

1 members would be considered on a first-preference basis  
2 under this policy.

3               The project procurement policy would also  
4 provide for and establish a committee of the Deze board  
5 of directors with the authority to assess, implement, and  
6 monitor business employment and training opportunities  
7 offered to Northern Aboriginals and preferred parties, as  
8 it relates to contract and employment targets in the pre-  
9 construction, construction, and operational phases of the  
10 project and training and other mechanisms to meet  
11 contracting and employment targets.

12               The committee would be two-thirds (2/3)  
13 Aboriginal and would also guide the approach to  
14 procurement and the expectations placed upon contractors  
15 and subcontractors. For example, any preferred party  
16 that is qualified and capable would be approached through  
17 direct negotiation or closed competitor -- competitive  
18 tendering for project contracts.

19               So those -- those terms are set out in the  
20 DAR, we just reiterated that for the record.

21               MR. PAUL MERCREDI: Thank you.

22               MS. KRIS JOHNSON: Thank you. Kris  
23 Johnson. The GNWT's reviewed those sections and we're  
24 happy with the project procurement policy as it's laid  
25 out so far.

1                   Do you know when the -- the full -- the  
2     status of the full policy -- is that the...?

3                   MR. PAUL MERCREDI:     Deze...?

4                   MR. ANDREW STEWART:     Andrew Stewart,  
5     Deze.  It's -- it's under way.  We're actually working  
6     with some folks at the GNWT on the business incentive  
7     policy.  We're looking at how best to maximize this  
8     procurement and employment policy.  We need to take --  
9     take time to make sure that we're measuring the best  
10    targets and that we're setting effective targets within  
11    these policies.  So, at this time we're not prepared to  
12    provide those details but we are working on that.  
13    Perhaps that's a sidebar discussion as well about timing  
14    for when that's delivered.

15                   Our -- our viewpoint at this time is that  
16    that sort of detail can be delivered in the permitting  
17    phase of the project and shouldn't be necessarily  
18    required to conclude the EA.

19                   MR. PAUL MERCREDI:     Thank you.  One (1)  
20    question we have is:  Is that sufficient for the GNWT's  
21    purposes?

22                   MS. KRIS JOHNSON:     Yeah.  No, that works  
23    for us and -- yeah, we need to sit down and work out some  
24    of the timing and the details and we're willing to do  
25    that.

1                   MR. PAUL MERCREDI:     Okay, thank you. We  
2     have a question from Alan.

3                   MR. ALAN EHRLICH:     Just to -- to clarify,  
4     my understanding of the regulatory and permitting process  
5     doesn't provide mechanisms for dealing with economic  
6     considerations, the likes of which you're discussing.

7                   If this relates to a matter that may be  
8     significant in terms of this environmental assessment, is  
9     this information that you require before the end of the  
10    environmental assessment?

11                  MS. KRIS JOHNSON:     I think I'm going to  
12    have to take that back to people within my department to  
13    see if they will require it by the end and, you know, we  
14    can provide an update to the Board once I've had that  
15    opportunity.

16                  MR. ALAN EHRLICH:     Do you require any  
17    more written detail on this subject from Deze?

18                  MS. KRIS JOHNSON:     Not at this time.

19                  MR. ALAN EHRLICH:     Thank you.

20                  MR. PAUL MERCREDI:     Thank you, Kris, do  
21    you have any further questions?

22                  MS. KRIS JOHNSON:     No.

23                  MR. PAUL MERCREDI:     Okay, and moving on.

24

25   (BRIEF PAUSE)

1 MS. STACEY LAMBERT: I have a couple  
2 questions -- questions about blasting. Stacey Lambert,  
3 Environment Canada.

4 Given the Department of Fisheries and  
5 Oceans' guidelines and the proposed use of ammonium  
6 nitrate fuel oil pellets for terrestrial blasting, what  
7 will the setback distances be from water bodies and  
8 watercourses for the terrestrial blasting to protect the  
9 aquatic environment from blasting residues?

10 MR. PAUL MERCREDI: Deze...?

11 MS. LINDA ZURKIRCHEN: Thanks. Shane and  
12 I were looking at each other on that one again. Linda  
13 Zurkirchen.

14 Since we've produced the DAR we've looked  
15 into a -- we've worked with engineering and looked into a  
16 little more detail on what blasting products are  
17 available to minimize potential risk of release of  
18 nitrates and, in addition to using setbacks, we're also  
19 looking at the products that are being used, recognizing  
20 that the water-resistant ammonium nitrate fuel oil has a  
21 high -- has -- still retains a -- a risk to having  
22 nitrates come into the water bodies, so, we're also  
23 looking at materials that are emulsion-based products in  
24 a different encasing component which basically means it's  
25 -- the casing that the product is in is not soluble and



1     that the product itself is a chemical component that is  
2     much more stable in and around water and less likely to  
3     release nitrates in the event of an accident or a  
4     malfunction.

5                     So, that's one additional mitigation  
6     measure that we're putting in place, in addition to what  
7     we've said was -- was the water-resistant ammonia nitrate  
8     fuel oil.

9                     The setback distances, we have not  
10    established those. They will be established more at the  
11    detailed design level depending on a number of factors,  
12    the quantity of explosive used, which type it is, the  
13    terrain surrounding the water body as that plays into the  
14    type of product and quantity of product used as in  
15    whether it is solid rock or already partially broken  
16    rock.

17                    As a general guide, we commit to certainly  
18    the riparian zone area and giving a -- a hard number to  
19    what that is per site is difficult but there will be a --  
20    an inland offset. And we would determine that during  
21    detailed design and would be happy to involve the  
22    agencies with finalizing that number.

23                    MR. PAUL MERCREDI:     Before we -- we have  
24    a followup question but we'll make sure that you have  
25    your question answered.

1 MS. STACEY LAMBERT: That does answer the  
2 question but I would like written details about that once  
3 it's finalized.

4 MS. LINDA ZURKIRCHEN: Okay. Did we not  
5 provide that to the Board already in -- in written format  
6 to answer that question? Was that not forwarded to the  
7 Board?

8 MR. PAUL MERCREDI: I don't believe so.

9 MS. LINDA ZURKIRCHEN: I'm pretty sure  
10 it's on record on the public record. It can be re-  
11 forwarded.

12 MR. ALAN EHRLICH: Unless I'm mistaken -  
13 I'm not intimately familiar with this file - but you were  
14 saying you'd like a written response regarding your  
15 question which has to do with minimum setbacks?

16 MS. STACEY LAMBERT: Yes.

17 MR. ALAN EHRLICH: Linda, what I hear you  
18 saying is that the information you have just told us  
19 which includes -- you haven't quite figured out the  
20 minimum setbacks yet is available.

21 But I think that what Environment Canada  
22 is asking for is some additional detail about those  
23 minimum setbacks. Do I have that correct?

24 MS. STACEY LAMBERT: Yeah. Once they're  
25 finalized we'd like to review those.

1 MS. LINDA ZURKIRCHEN: Okay. Do -- do  
2 you -- do you need that to finish your -- is that the  
3 correct terminology, to finish this process prior --  
4 prior -- do you need that prior to October 30th?

5 MS. STACEY LAMBERT: I'll have to confirm  
6 with the expert on that who is reviewing this part of it,  
7 but, I'm not sure yet.

8 MR. ALAN EHRLICH: Deze, if you hear from  
9 Environment Canada that they do need this as part of the  
10 EA process, can you provide it before the end of October?

11 MS. LINDA ZURKIRCHEN: We could provide  
12 some general numbers that you could take back and decide  
13 if that would be satisfactory or not.

14

15 --- COMMITMENT NO. 36: If Deze Energy hears from  
16 Environment Canada that they  
17 do need the information re  
18 minimum setbacks as part of  
19 the EA process, to provide  
20 some general numbers for  
21 Environment Canada to look at  
22 and decide if that is  
23 satisfactory by October 31,  
24 2009.

25

1 MS. STACEY LAMBERT: That sounds good. I  
2 have one other question for blasting before -- I think  
3 INAC has another question related.

4 What are the measures and/or plan to be  
5 employed to prevent blasting residues from entering water  
6 or forming contaminated runoff if the ammonium nitrate  
7 fuel oil explosives used for terrestrial blasting do not  
8 fully vaporize the pond detonation or part of them remain  
9 un-detonated?

10 And how would contaminated water be  
11 collected, stored and treated? And also where would the  
12 proposed settling ponds be located?

13 And I realize some of this was already  
14 answered but just for on record.

15 MS. LINDA ZURKIRCHEN: Sure. Linda  
16 Zurkirchen. As acknowledged, I think we just answered  
17 part of the question and that part does have a written  
18 response with the Board already about the product and  
19 product handling and the product and its potential to  
20 release nitrates.

21 The one was about -- sorry, the second --  
22 the third question was about sediments or water quality.  
23 Sorry, can you repeat the second and third parts?

24 MS. STACEY LAMBERT: How would  
25 contaminated water be collected, stored and treated and

1 also where would the proposed settling ponds be located?

2 MS. LINDA ZURKIRCHEN: And certainly  
3 those components are part of the detailed design. We  
4 talked about that a bit yesterday. That depending on the  
5 configuration, the final configuration, and construction  
6 techniques is where the settling ponds would be located  
7 and the size and configuration of the settling ponds to  
8 collect and treat water would be part of the detail  
9 design process.

10 So, we don't have that information  
11 available at this time.

12 MR. PAUL MERCREDI: Okay. Do you have  
13 any further questions?

14 MS. STACEY LAMBERT: Not related to  
15 blasting.

16 MR. PAUL MERCREDI: Okay. We'll go to --  
17 DFO had a follow-up question I believe.

18 MR. BRUCE HANNA: Bruce Hanna, DFO. I  
19 just thought I'd put a clarification in since the DFO  
20 guidelines for the use of explosives was brought up.

21 Currently it says 100 kilopascals is the  
22 threshold for instantaneous pressure change. In the NWT,  
23 based on our experience, we've been asking companies to  
24 focus on 50 kilopascals and just so you incorporate that  
25 when you're looking at your setback distances. Thanks.

1 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.

2 We've taken note of that and we can commit to  
3 incorporating that into the construction methodology.

4 MR. PAUL MERCREDI: Thank you.

5  
6 --- COMMITMENT NO. 37: Deze Energy commits to  
7 incorporating the 50  
8 kilopascals threshold for  
9 instantaneous pressure change  
10 in the construction  
11 methodology.

12  
13 MR. PAUL MERCREDI: And I believe INAC  
14 had a follow-up question as well.

15 Bruce, actually does that conclude your  
16 follow-up questions?

17 MR. BRUCE HANNA: It does, too.

18 MR. PAUL MERCREDI: Thank you. And  
19 Candace...?

20 MS. CANDACE ROSS: This is Candace Ross  
21 with INAC.

22 I did have questions I guess related to  
23 the vapourizing potential but Deze did submit written  
24 answers to us and we have filed those with the Board on  
25 July 15th, so, I won't ask them again here unless you

1 want them on the record. Okay.

2 MR. PAUL MERCREDI: Okay, thank you, and  
3 I believe Environment Canada had a follow-up question.

4 MR. DAVE FOX: Dave Fox, Environment  
5 Canada. I have a couple of questions regarding waste  
6 management and -- and disposal. My first question's  
7 about open burning.

8 Now, as part of the -- the closure and  
9 restoration of -- of construction camps, the proponent  
10 plans to burn all materials that are approved for  
11 disposal vial -- via open fire burning at an approved on-  
12 site location.

13 Question -- a question or a commitment  
14 that we're seeking is that whether the developer will  
15 follow the GNWT's open burning policy which states that  
16 only open -- or only paper and untreated wood are  
17 suitable for open burning.

18 MR. PAUL MERCREDI: Deze...?

19 MS. LINDA ZURKIRCHEN: It's Linda  
20 Zurkirchen. Yes, Deze will commit to following the --  
21 the GNWT open burning policies.

22

23 --- COMMITMENT NO. 38: Deze Energy commits to  
24 following the GNWT open  
25 burning policies

1                   MR. DAVE FOX:     Okay, a second -- Dave  
2     Fox, Environment Canada.   A second question regarding  
3     open burning or the construction disposals.

4                   Will the developer consider providing any  
5     reusable building materials to local communities rather  
6     than open burning them?

7                   MS. LINDA ZURKIRCHEN:     Linda Zurkirchen,  
8     yeah.   Yes, Deze will commit to making reusable materials  
9     available.

10  
11    --- COMMITMENT NO. 39:           Deze Energy commits to making  
12                                       reusable materials available  
13                                       to local communities.

14  
15                   MR. DAVE FOX:     Okay, my next -- Dave Fox,  
16     Environment Canada.   My next set of questions is --  
17     involves questions on incineration at -- at the camps.

18                   There -- there are two (2) main camps  
19     planned, as well as a number of small working camps along  
20     the transmission corridor.   Each of these camps is  
21     planning to use incineration to dispose of -- of waste.

22                   Now, EC recognizes that timely disposal of  
23     waste, specifically food waste, is critical importance to  
24     minimize safety risks associated with wildlife  
25     attraction, timely disposal usually achieved through



1 burning. However, the burning waste -- of waste products  
2 releases numerous contaminants into the air many of which  
3 are persistent, bioaccumulative and toxic. The main ones  
4 of concern are dioxins and furans.

5               These contaminants can result in serious  
6 impacts to -- to human and wildlife through direct  
7 inhalation and they can be deposited on to the land and  
8 into the water where they bioaccumulate through food  
9 chains affecting wildlife and country foods, therefore,  
10 burning should be considered after all other alternatives  
11 of waste disposals have been explored.

12              Now, because -- because of the concern of  
13 the contaminants released by incineration, the Canadian  
14 Council of Environment Ministers have developed Canada-  
15 wide standards for dioxins and furan emissions and  
16 mercury emissions from waste incineration.

17              My first question is -- is seeking a  
18 commitment by the proponent that they will -- they will  
19 strive to achieve these Canada-wide standards.

20              MS. LINDA ZURKIRCHEN: Linda Zurkirchen.

21              Yes, the project will strive to achieve  
22 these standards. Certainly I think I can carry on to  
23 some of the other comments that you made that recog --  
24 that Deze also recognizes the value in recycling and  
25 having a waste management plan onsite, and ensuring that

1 the contractors onsite have to have that incorporated  
2 into their construction methodologies.

3 And as well, ensuring that incinerators  
4 onsite at the camp strive to meet those objectives but  
5 also meet any regulatory standards at a minimum.

6 MR. DAVE FOX: Dave Fox, Environment  
7 Canada.

8 Environment Canada recently released a  
9 technical document for batch-waste incineration. It's --  
10 it's available on our website. And I've -- I've got a  
11 copy of the executive summary here with the website on  
12 it, which I -- I've got a copy for the Board as -- as  
13 well as -- as well as the proponent.

14 Information within this document is  
15 helpful in it provides information on incineration  
16 equipment selection, best management, and operational  
17 practices for incineration, and monitoring and reporting.

18 All of this is aimed at achieving the Canada-wide  
19 standards, minimizing emissions, optimizing incineration.

20 Along with that, we've -- we've been  
21 encouraging developers to develop an incineration  
22 management plan, and develop it in consultation with  
23 Environment Canada and with the -- the GNWT.

24 The object of -- of the management plan is  
25 to minimize the amount of waste to be incinerated, and to

1 ensure that appropriate incineration equipment is used  
2 and operated properly. This incineration management plan  
3 should be consistent with the -- the technical document  
4 on -- for batch-waste incineration.

5 The incineration management plan should  
6 include purchasing policies that focus on reducing  
7 packaging, onsite diversion and segregation programs, a  
8 waste audit on the type and quantities of waste to be  
9 incinerated, the selection of -- of incineration  
10 equipment suitable to burn these types of waste.

11 And staff training is a crucial part of  
12 this. It doesn't matter what kind of equipment you have,  
13 if it's not being operated properly and the staff isn't  
14 trained properly, it's not gonna be performing very well.

15 So, we're seeking commitment from the  
16 developer to develop -- or to come up with an  
17 incineration management plan.

18 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.

19 I believe Section 7 of the DAR, which is  
20 the Environmental Management Plan, includes a waste  
21 management plan that provides an outline of the waste  
22 management procedures that would be used on the Deze  
23 project.

24 We did not have the document you speak of  
25 when that plan was put together and would certainly -- in

1 order to get that document and make sure the management  
2 plan outline that's been presented reflects that.

3 The plan that you have, that would not be  
4 completed prior to October 30th. You have a commitment  
5 that, that would be conducted, again, as part of the  
6 detail design when further information is known about the  
7 camp facilities, and the exact size, and the details that  
8 have to go into -- the details that are needed to create  
9 that management plan.

10 MR. DAVE FOX: Dave Fox, Environment  
11 Canada.

12 A footnote to that. There have been  
13 incineration management plans developed by other -- other  
14 facilities.

15 I can -- I can send you links to those if  
16 -- if you want an example of -- of how to produce  
17 something like this.

18 Right now, we're just looking for a  
19 commitment that this will be developed, knowing that the  
20 time lines are -- are tight for the -- for the hearing  
21 and -- and submissions.

22 Information that would be helpful to our  
23 intervention would be information on the types and  
24 quantities of waste to be incinerated at each camp and  
25 also the -- the type and model, year of the incinerator

1     that's going to be used at each camp.

2                     So we would request that before we can  
3     finish our final intervention.

4                     MS. LINDA ZURKIRCHEN:     Linda Zurkirchen.  
5     We -- Deze will commit to having an approved incinerator  
6     that meets regulatory guidelines that emissions and the  
7     incinerator itself would be permitted at the regulatory  
8     stage.

9                     We don't have that information at this  
10    time. We don't -- the -- the information you're looking  
11    for in terms of quantity and typing, it's not available  
12    to us and we will commit to making sure that during the  
13    permitting stage we have that information and that all  
14    our facilities are -- meet regulatory requirements and  
15    are permitted.

16

17    --- COMMITMENT NO. 40:           Deze Energy to commit to  
18                                       having an approved  
19                                       incinerator that meets  
20                                       regulatory guidelines that  
21                                       emissions and the incinerator  
22                                       itself would be permitted at  
23                                       the regulatory stage.

24

25                     MR. DAVE FOX:     Thank you.     Dave Fox,

1 Environment Canada.

2 The last thing --

3 MR. ALAN EHRLICH: Dave, hold on. Before  
4 you go to the next question -- Alan Ehrlich, Review  
5 Board.

6 On that subject, in the Northwest  
7 Territories we don't have any regulatory enforcement  
8 mechanism that applies to air quality, so, waiting for  
9 the regulatory stage to provide the information that  
10 Environment Canada just said it needs to determine  
11 potentially significant impacts on this subject is not  
12 likely to be sufficient.

13 I understand you can specify the kind of  
14 incinerator at a later time, can Deze at least commit  
15 that it will use an incinerator that has been designed --  
16 that it will be using an incinerator that has been  
17 designed for the waste stream that you'll be putting into  
18 it?

19 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.  
20 Yes, we can commit to ensuring that we have an  
21 incinerator that's designed for the waste products that  
22 would be used.

23 MR. ALAN EHRLICH: And, Dave Fox from  
24 Environment Canada, does -- I'm -- I'm Alan Ehrlich. I'm  
25 addressing Dave Fox from Environment Canada.

1                   Does that satisfy what you'll need in  
2   terms of identifying the impacts of this project for the  
3   EA process or do you need more before you're ready for  
4   the hearings?

5                   MR. DAVE FOX:     Dave Fox, Environment  
6   Canada.   A commitment to review and follow the technical  
7   document on batch-waste incineration would -- would even  
8   be stronger in -- in my mind to -- to help us through  
9   this and then we can -- we can bring it up again in -- at  
10  the regulatory stage.

11                  Although -- though we haven't had  
12  conditions for this in -- in water licences in the NWT,  
13  we have been -- we have been successful on -- on several  
14  occasions with the Nunavut Water Board who have adopted  
15  it in their water licences.   So now we -- we feel we have  
16  a precedent that we can take to the -- the Land and Water  
17  Board here to -- to move this forward.

18                  MR. ALAN EHRLICH:   Well, improvements in  
19  regulation regarding air quality impacts would be quite  
20  appreciated by the Board.   We know there's a regulatory  
21  hole there.

22                  Can you spell out again at the beginning  
23  what you just said?   There's a commitment that you said  
24  you would like to see and I didn't write down the exact  
25  words.

1                   MR. DAVE FOX:     Dave Fox, Environment  
2     Canada.   You're unlikely to get the exact words again  
3     here.

4                   MR. ALAN EHRLICH:    You said you would be  
5     more comforted by a commitment from Deze to...and then we  
6     went onto other things.

7                   MR. DAVE FOX:     To -- to commit to  
8     following the -- the information provided in the  
9     technical document for batch-waste incinerators.

10                  MR. ALAN EHRLICH:    Okay, and so, Deze,  
11     will you   commit to following the information provided in  
12     the technical document for batch-waste incinerators?  
13     Will you do it here -- commit here?

14                  MS. LINDA ZURKIRCHEN:   I will commit to  
15     reviewing it and once I review it I would -- I think  
16     we'll commit to it but I'd like to see it first.

17                  MR. ALAN EHRLICH:    Okay, before --

18                  MS. LINDA ZURKIRCHEN:   I'd like to review  
19     it first and -- and then I'll let you know if we commit  
20     to it or not.

21                  MR. ALAN EHRLICH:    Sure.   Before the end  
22     of the month then, can you please provide, in writing,  
23     clarity on whether or not Deze commits to that?

24                  MS. LINDA ZURKIRCHEN:    Yes, we will do  
25     that.



1 MR. ALAN EHRLICH: Thank you.

2 MS. LINDA ZURKIRCHEN: And can I get that  
3 document directly from Environment Canada and -- does  
4 that -- that process?

5 MR. ALAN EHRLICH: Please.

6 MS. LINDA ZURKIRCHEN: Yeah.

7

8 --- COMMITMENT NO. 41: Deze Energy to provide, in  
9 writing by October 30, 2009,  
10 clarity on whether or not  
11 Deze commits to follow the  
12 information provided in the  
13 technical document for batch-  
14 waste incinerators

15

16 MR. DAVE FOX: Okay, thank you. It's  
17 Dave Fox, Environment, and my -- my final -- final  
18 comment or issue is regarding incineration ash.

19 The ash can be contaminated with -- with  
20 byproducts of incineration such as dioxins and furans or  
21 -- or metals or other nasties - if you excuse the  
22 technical terms.

23 Will the proponent commit to testing this  
24 ash prior to -- or to ensure that the ash is -- is  
25 suitable for the landfill and if it isn't, to come up

1 with a more appropriate disposal option for that?

2 MR. PAUL MERCREDI: Deze...?

3 MS. LINDA ZURKIRCHEN: Linda Zurkirchen.

4 We have to review what the -- we have to review what the  
5 incinerator stacks would be releasing.

6 I think we have enough information that we  
7 can look at a number of incinerators that may be used by  
8 various contractors, look at those discharge criteria or  
9 specifications that the manufacturers are saying as being  
10 discharged. And then identify if that discharge would be  
11 applicable for a waste disposal permit or whether  
12 additional information is required in order to get a  
13 waste disposal permit for that.

14 MR. DAVE FOX: Dave Fox, Environment  
15 Canada. That would be acceptable. That's all the  
16 questions I have.

17 MR. PAUL MERCREDI: Thank you.

18 MR. ALAN EHRLICH: Before we keep going  
19 around the table, I -- I notice that we have a lot of  
20 people who have come a long ways from communities to --  
21 to -- well, to listen and -- and perhaps to take part in  
22 what's happening here today.

23 I -- I just want to make sure that  
24 everyone realizes that there's an opportunity here for  
25 any information you need from the developer about what

1 they're proposing and how it affects social and economic  
2 matters.

3 How it affects social issues in  
4 communities, how it affects jobs and anything that you  
5 need more clarity about from Deze, you have an  
6 opportunity now to -- to get this question on the record  
7 and get a -- the detailed response that you need.

8 Is there any information that -- that you  
9 would like to know from Deze? Are there any questions  
10 that you have for them because this would be a good time.

11 MR. ALBERT BOUCHER: My name's Albert  
12 Boucher from Lutsel K'e. I don't see any Wildlife  
13 members. I'd like to ask question, then a few things  
14 I've got to say something for our land, when do we work  
15 on it. That's a really important thing for us that the  
16 land, when you guys talk about right now. So I'd like to  
17 ask a few questions and a few -- put a word on the table  
18 too.

19 For this one here is really that's pretty  
20 hard to, you know, to -- to understand what they're talk  
21 about and what we need, what do we want. Like you guys  
22 are talking about barge, the work on the barge, it's that  
23 kind of things I want to know. Where they're going to  
24 put the barge, where are you guys going to work on the  
25 barge; on the river, on the Great Slave lake? That's

1     what I want to know.

2                     Can, like, I ask question, can you answer,  
3     where are you going to work on the barge?

4                     MR. PAUL MERCREDI:     Can someone from Deze  
5     address that?

6                     MR. TOM VERNON:     Okay.   Tom Vernon with  
7     Deze.   Barges are proposed to help us construct part of  
8     the transmission line which cannot be reached practically  
9     by any other means.

10                    Barges would be sourced in Hay River.  
11     They would likely be the standard type of barges that are  
12     used on Great Slave Lake for transporting materials out -  
13     - out your way and other places on the lake.

14                    We anticipate in the current schedule that  
15     it would just be one season of -- of delivery through the  
16     barge with -- with camp, fuels and transmission --  
17     transmission line components being delivered, unloaded  
18     from the barges on to land-based facilities.   Barges  
19     returning to Hay River.   The work being done in the  
20     following year around the -- around that area, Charlton  
21     Bay and McLeod Bay and the barges returning the following  
22     summer and taking everything away.

23                    And that's our idea of and our -- our  
24     consultant's idea of how we could feasibly construct this  
25     portion of line and it would seem to be fairly practical

1 but contractors may have slightly different schedules or  
2 ideas about that, but that's what we're proposing at the  
3 moment.

4 Does that help at all?

5 MR. ALBERT BOUCHER: Okay, I just want to  
6 say a few words here. I've got my translator right here  
7 so they're -- I'll talk my language and they're going to  
8 say what I'm talking about.

9

10 (INTERPRETED FROM THE CHIPEWYAN LANGUAGE INTO ENGLISH)

11

12 ELDER ALBERT BOUCHER: Albert Boucher  
13 from Lutsel K'e. It seems like the way you guys are  
14 developing that Deze Energy, it looks like it's going to  
15 be a big operation. It's going to take a while and  
16 they've been operating on that river for a long time.

17 He said it's very good that we're having  
18 this opportunity to sit here in this technical session  
19 because there's all kinds of different people asking  
20 questions and scientists and it's good to know what kind  
21 of an operation, what's going -- what kind of work is  
22 going to take place.

23 He said that it seems like we just only  
24 have until the end of the month to put all the submission  
25 application in before this goes ahead and before that --

1     that public hearing in January and for us community, it  
2     seems like we don't have enough time because we don't  
3     know exactly how the environment and how everything is  
4     going to take place on our land because we don't have a  
5     really good understanding of how those -- these things  
6     work because they're just new, like.

7                     And the reason that we're really concerned  
8     is because this is our livelihood and this is on our  
9     land. This is a place where we hunt and trap and we use  
10    the land and the land is very, very important to us and  
11    also the waters and the wildlife because we're all  
12    connected, so, this is concerning us. So this is why we  
13    want to know exactly how it's going to be done and if  
14    there's going to be effects in the future or even when  
15    the construction phase is taking place.

16                    And so this is all the information that  
17    I'm hearing and I have a better understanding but when we  
18    first started talking about this, this proposed energy,  
19    we didn't really know but now that I have a better -- a  
20    little bit better understanding but if I get back home  
21    then I'll be talking to the public at home and then from  
22    there us, too, we're going to have to put some kind -- we  
23    have to put some kind of a submission in, too, because  
24    we're going to be talking about our land which is very  
25    important to us.



1 session's gonna be until Monday, so I'll be back here on  
2 Monday and then maybe I'll ask questions again, but I'll  
3 be listening and taking any information.

4 Also, that our -- Nonacho Lake to another  
5 river very well and I'll probably making comments on the  
6 river as well. Thank you.

7

8 (INTERPRETATION CONCLUDED)

9

10 MR. PAUL MERCREDI: Mahsi cho, Mr.  
11 Boucher, for coming, for your comments, and for your  
12 patience with us nerds up here.

13 Is there anyone else from Lutsel K'e that  
14 would like to add to Mr. Boucher's comments?

15 MR. ARCHIE CATHOLIQUE: Good Afternoon.  
16 Thank you for giving me the opportunity to -- to ask  
17 questions and to be able to speak. My name is Archie  
18 Catholique. I'm from Lutsel K'e.

19 I guess the first question that I probably  
20 wanna ask is that, I guess, there's been some research  
21 that's taken place. I'm hearing that Mr. Azzolini has  
22 indicated that you have talked to land users, people that  
23 use the land. I'm just wondering, you know, where I come  
24 from, I was wondering who -- who he talked to?

25 This morning I've kinda give you the



1 history throughout the Nonola K'ue (phonetic), the  
2 impacts and what happened. And I guess that the  
3 environment that, you know, I was told it has been  
4 destroyed by the flooding of that Nonola K'ue.

5                   And today, you know, there's been no --  
6 nothing has been done about that. You know, there's  
7 still an outstanding issue of who is going to take the  
8 responsibility and clean up that -- clean up that lake.  
9 And here we're talking about expansion of the Taltson.  
10 It doesn't seem to me that there's going to -- there's  
11 gonna be any -- any cleanup or any, you know, the fish  
12 that I've talked about, you know, they're still feeding  
13 off the -- this high level mercury. It doesn't seem that  
14 that's going to -- worked on, or anything like that.

15                   And so, it's not very clear to -- I guess,  
16 to -- for my community to, you know, down the road that  
17 this is going to, once again, be the lake that it used to  
18 be way back before even the Taltson dam was put in. Is  
19 that going to -- by putting in this new hydro, does that  
20 mean that -- that water level that once was, is going to  
21 be back to normal? And is that what the Deze Energy  
22 people are looking at?

23                   Again, you know, I'd -- and I spend a lot  
24 of time on -- on -- on the land providing for my family.  
25 Not only me but there's people out there that also

1 practise the trapping and hunting. We still do that.

2 I think we're one of the -- the  
3 communities within the Akaitcho that still practise that  
4 lifestyle. And we want to keep on doing that. We want  
5 to pass it on to our children so that them too can be  
6 able to -- to live off the land, and to make sure that --  
7 that everything will be okay at the end of the day, that  
8 -- that if we are going to be working with any developers  
9 or any people that's going to come onto our territory  
10 that our community is satisfied with -- with the people  
11 that are going to do the work.

12 And you know, as I said that, you know, I  
13 still wanted to continue to live off the land. I'm sure  
14 there's uncertainty that -- that there are questions that  
15 need to be clear.

16 I know you talked about the -- the  
17 transmission line. That transmission line that you -- is  
18 a proposed transmission line that if they were to go  
19 ahead it would come on our traditional territory.

20 And one of the things that they're  
21 proposing is that there is going to go right across the -  
22 - where our people gather. Our people when they need  
23 help, they need to -- to go to that place. It's a big  
24 thing to us, a place like that. I'm sure like in other  
25 countries I hear there's places like that. And our --

1 and our Elders tell us that we -- we have to protect this  
2 place.

3 And, you know, that area we just want to  
4 keep it the way it is. And so if that transmission line  
5 is -- is not going to happen there, then where is it  
6 going to -- where is it going to be the next area that's  
7 going -- going to -- where are they going to try to -- to  
8 line that to the mine?

9 So there's a lot of, I guess, uncertainty  
10 about -- you know, you talk about jobs but we don't think  
11 that this is -- is going to create a lot of jobs for a  
12 long time. You're probably going to have a big bone -- I  
13 don't know how long that's going to take place but it's  
14 not -- I don't think it's going to -- it's going to have  
15 people, you know, having -- having a job for a long time.  
16 After it's all done then you probably just need a couple  
17 of people, that's -- that's about it.

18 And -- and I guess the most concern that  
19 we do have is also is the caribou. You know, I know just  
20 looking at that picture there there's a photograph of a  
21 transmission line and there's caribou tracks under, you  
22 know, but that -- that can just only be just at a one (1)  
23 time.

24 But I'm hearing that, you know, the sound  
25 of the lines that are going to be put there is probably

1 going to be impact by -- it's going to have an impact on  
2 the caribou, not only the caribou but the muskox, the  
3 moose. You know, we have plenty of muskox now, you know,  
4 that's come back in numbers, but that's come -- you know,  
5 it's come to the community quite close.

6 You know, these lines may have some --  
7 some impact on it. The way that we do things, it's going  
8 to have a lot of impact on that.

9 And so I guess, you know, the -- probably  
10 the Board or the Deze Energy people, you know, how to --  
11 what's in -- what's in their guidelines to protect  
12 cultural areas? What's -- what's their take on it? You  
13 know, we need to -- we need to understand that, we need  
14 to know that.

15 You know, as I said, you know, we as  
16 indigenous people from -- from where I come from, you  
17 know, we'd want to protect our land. We want to keep it  
18 for as long as we can and share it with other people and  
19 make sure we have, you know, the environment and make  
20 sure it's -- it's going to be okay for -- for our  
21 children.

22 And so I think, you know, as -- as a  
23 landowner from the -- from the east side, I am concerned  
24 as to what might happen down the road.

25 I know for a fact that the way that this

1 thing is going is that I don't think there's going to be  
2 any cleanup in Nonacho Lake. I don't think that fish is  
3 going to be back to normal as it -- you know, our people  
4 used to tell me. You know, when I used to -- to go over  
5 here, this is where I used to hunt for -- for moose and  
6 this is the island that I used to go to and you can't see  
7 that anymore. They're not there. Is there going to be -  
8 - are these things ever going to be put back in normal?  
9 I don't think that's going to happen.

10                               And I guess, you know, the compensation is  
11   another issue that has never been dealt with. You know,  
12   they -- they tell us they're going to deal with it but  
13   how good is it after the fact? That should be up front.

14                               And so I -- I -- I guess, you know, this  
15       is some of the things that I'm just going to bring  
16       forward to this -- this forum. And I guess there's a lot  
17       of -- lot of issues that I guess that needs to be taken  
18       care of.

19 I guess the other thing too, you know,  
20 that I want to -- I want to say is there are some of  
21 those Elders that are back there are -- it's very hard.  
22 I'm a certified interpreter also and some of the words  
23 that -- that is used here, you know, like in the  
24 technical sessions like this, it's very hard to explain.

25 It's very hard to -- for our people to

1 understand that and I think they need to know that. They  
2 need to understand the communication that -- that comes  
3 out. They need to understand that very clearly.

4 And by doing that I think, you know, they  
5 will have their input. It's much easier for them to talk  
6 and -- but it's very difficult if you -- you know, I  
7 guess we call those big thousand dollar words that --  
8 sometimes it's very hard for us. Thank you.

9 MR. ALAN ERHLICH: Mahsi cho, Mr.  
10 Catholique. So I heard a number of different questions  
11 that were just directed to Deze.

12 So for clarity and because this is all  
13 evidence, it's going to be on the record, I'd like to try  
14 and sort of ask them to Deze one at a time and as I go  
15 I'm just going to ask you, Mr. Catholique, if I got the  
16 question right? I think you make your point very  
17 powerfully. It's an area where the land is still  
18 extremely important to people in a real day-to-day way  
19 and in a big cultural way, and it's a place that has been  
20 affected in the past in a way that still matters very  
21 much to the people of Lutsel K'e, and I think you've made  
22 that very clear.

23 Now, the Review Board, at the beginning of  
24 an assessment, defines what is the project that the  
25 application is for because that's the project that the

1 Review Board is allowed to look at. We're not allowed to  
2 look at things that are outside of that.

3 And so part of that is figuring out where  
4 are we now? What's the starting point? What is it that  
5 they propose to do and what is it that others have  
6 already done? And it's -- it's not within the Board's  
7 mandate to look at things that are outside of what the  
8 group has been proposed for.

9 That said, I mean, I still hear clearly  
10 that some changes to the land that have happened around  
11 Nonacho Lake in the past and flooding related to it still  
12 brings out strong feelings and ideas of -- of  
13 compensation are still important.

14 I think one (1) of the things we have to  
15 think about here is, you know, what of this can -- can  
16 Deze answer for because we're here to get information  
17 from Deze? And one (1) of the things, the first  
18 question that I heard asked, was in terms of cleanup  
19 after Deze has done its work, how -- what kind of  
20 condition will the place be left in?

21 Are you planning to clean up to reflect  
22 the natural background conditions that were there a long  
23 time ago? Are you planning to clean up to the baseline  
24 conditions meaning the conditions that you're in now,  
25 that -- that exist before this -- this project is built?

1 Would you care to respond, please, Deze?

2 MR. LOUIE AZZOLINI: For clarification,  
3 when you say "clean up" are you -- Louie Azzolini, my  
4 apologies.

5 When you say "clean up" are you referring  
6 to Nonacho Lake?

7 MR. ALAN EHRLICH: Archie, were you  
8 referring to Nonacho Lake?

9 MR. ARCHIE CATHOLIQUE: Yeah, Nonacho  
10 Lake.

11 MR. ALAN EHRLICH: Thank you.

12 MR. LOUIE AZZOLINI: In the socioeconomic  
13 assessment, Mr. Catholique, Nonacho Lake, the water in  
14 there was assumed to be water where it had reached a  
15 stabilized condition or a new condition. In other words,  
16 by example, at one (1) point you -- you had a house and  
17 you could go downstairs in the basement, and someone came  
18 along and put some water in your basement and you can't  
19 go there anymore.

20 Is someone going to remove that water? I  
21 can't speak for that and neither can Deze because it's  
22 really out of their control. Can -- is the water  
23 unacceptable? The scientists are saying that the water  
24 is acceptable, that after about thirty (30) years of the  
25 change that most of the changes in the environment, if



1 not all, have happened.

2 And you asked about Nonacho, about  
3 compensation, and this project is compensation in many  
4 respects. It's compensation because the Akaitcho are  
5 partners in the project and you will be a beneficiary of  
6 the project. It's compensation because it's taking an  
7 existing problem, a wrong perhaps in your eyes, Mr.  
8 Catholique, and it's trying to take something that maybe  
9 wasn't right and make the best of it.

10 So what Deze wants to do is not to disturb  
11 the land or the water more than is currently being  
12 disturbed yet produce or provide an opportunity for the  
13 Akaitcho and for the South Slave Metis to secure a good  
14 long-term income. And when I say the Akaitcho, the  
15 Akaitcho company that's participating in this has people  
16 that it answers to and those are Akaitcho members and  
17 they are the ones who will benefit.

18 So, just with respect to Nonacho, just to  
19 conclude, you asked, you know, will it be cleaned up?  
20 Well, after thirty (30) years it's basically a different  
21 lake. You're right. It's not the same lake.

22 Is there going to be a reclamation of the  
23 lake? Currently that's not being proposed by this  
24 project. Is there compensation? Well the compensation  
25 you speak of is -- is a matter between yourself and

1 Canada, I believe.

2 I think that from a socioeconomic  
3 standpoint the compensation that's being derived -- the  
4 amount of compensation that's possible both in terms of  
5 employment and in income, with almost a negligible  
6 increase in impacts on the environment is -- is  
7 compensation in itself.

8 MR. PAUL MERCREDI: If I may, Mr.  
9 Catholique, the Mackenzie Valley Review Board exists as a  
10 result of tragic events like that. You take certain  
11 mines across the north and the impacts that -- that have  
12 come from them, the very negative impacts that have come  
13 from them, and -- and something has to be done  
14 beforehand, before those -- those impacts happen.

15 And if you look at the legislation that  
16 creates the Review Board and the Water Board, it was crea  
17 -- that legislation was created to prevent those types of  
18 tragic consequences from -- from happening again.

19 And we are all here today to discuss ways  
20 of preventing that from happening. Unfortunately, the  
21 project that Deze proposes, it does not involve cleaning  
22 up Nonacho Lake but, at the very least, we are here to  
23 prevent Nonacho from every happening again.

24 Just as far as -- and as far as cultural  
25 impacts that -- that Act, that legislation also addresses

1 cultural impacts, as well. The -- the Review Board has  
2 to look at what kind of impacts that a development will  
3 have on -- on the communities that -- that surround the  
4 development.

5 So that is something that we wanted to --  
6 to communicate to -- to any of the -- any community  
7 representatives, is that it is to prevent those types of  
8 things from happening in the future, and that we do look  
9 -- we do look at those types of -- your -- your concerns  
10 as far as impacts to culture.

11 I don't know if Alan had something to  
12 follow.

13 MR. ALAN EHRLICH: Yeah. Just to follow  
14 up some of the -- the questions that Mr. Catholique has  
15 asked and just to -- to flesh out where information can  
16 be available for that, one (1) of the points had to do  
17 with certain particularly important cultural areas that  
18 the transmission line passes through. I know that in  
19 Lutsel K'e there was a lot of talk of Our Lady of the  
20 Falls. And Mr. Catholique has asked what kind of things  
21 Deze is considering for that.

22 Can we start off with -- with physical  
23 mitigations? What kind of physical mitigations is Deze  
24 looking at to avoid cultural impacts from the  
25 transmission line around Our Lady of the Falls?

1                   MR. DAN GRABKE:     Dan Grabke, Deze.   We're  
2     -- we're very much aware of the significance of the area  
3     that the transmission line has to cross.   It's very  
4     difficult to get around a big area like that.

5                   And although the maps show a line going  
6     across at a certain location, that is yet to be  
7     determined.   We're asking for Lutsel K'e's advice and  
8     guidance as to where the best location would be for that.

9                   We've taken a couple of guesses and that's  
10    why there's a line there but it can certainly be  
11    adjusted.   Right now it's I believe 7 kilometres away  
12    from the Old Lady in the Falls.

13                  It's in between Torel Falls (phonetic) and  
14    -- and Perry Falls (phonetic), and so it's not easy to  
15    navigate that section, I believe.   Again, this is just  
16    our guesses.   We have made some adjustments to the line  
17    to -- to move it farther away from Pike's Portage, so  
18    it's not so visible.

19                  But, there's other things that we could  
20    do.   As far as tower heights, you can some towers that  
21    are painted so they're not so visible, those sort of  
22    things.

23                  But, we do have to cross that area in some  
24    manner, and we're just awaiting some -- some better  
25    guidance and wisdom as to where that could be.

1                   MR. ALAN EHRLICH:     Thank you, Dan.   Alan  
2   Ehrlich again.

3                   With -- so, you've indicted there's some  
4   flexibility within routing.   How far away, following the  
5   general alternative that you're looking at now, how far  
6   away from Our Lady of the Falls could the transmission  
7   line go?

8                   What's the maximum distance from Our Lady  
9   of the Falls that you would be able to do it, if you do  
10  this alternative?

11                  MR. DAN GRABKE:     There's -- there's some  
12  other constraints that have to be considered, as well,  
13  and -- and they're not financial constraints.   There's  
14  Artillery Lake at one end, and Great Slave Lake at the  
15  other.

16                  Then you have to consider a bit, that as  
17  you move farther up -- up from the Falls, you get into  
18  less and less trees.   And so then the -- the towers and  
19  the line become more and more visible.

20                  And so, like I said, we -- we tried to  
21  choose an area that was fairly, I guess, benign, just not  
22  on any real portage route, other than it does cross  
23  Pike's Portage, but not visible from Fort Reliance, from  
24  Great Slave Lake, or from Old Lady -- the Old Lady in the  
25  Falls.

1                   And so that's where it -- that's why the  
2     line is there. We just had Lidard (phonetic) flown,  
3     which is a 3-D mapping plane, a specialized plane.

4                   And we did most of the route in a fairly  
5     narrow corridor, because we think we have a pretty good  
6     route. But where we cross the Lockhart, we went, I  
7     believe, 20 kilometres wide because, again, we're saying  
8     we don't have the -- the wisdom yet as to -- to put it in  
9     a certain place.

10                  And so, again, at quite a bit of expense  
11     we -- we covered off that whole area, so later on we'd  
12     have the data to -- to do the engineering. But we're not  
13     being presumptuous enough to -- to have all the answers.  
14     We've taken some guesses.

15                  MR. ALAN EHRLICH:     So, I -- and I hear  
16     this as part of what Deze is saying is some of the  
17     physical ways they're trying to intrude less into  
18     culturally important places.

19                  I will ask Deze to submit, preferably in  
20     writing, how it may be considering any offsite cultural  
21     mitigations to bigger cumulative impacts that are not  
22     physical mitigations that deal directly with how close  
23     you are to Our Lady of the Falls, sometime within the  
24     next month.

25                  I think there's an opportunity there.

1     There's a larger cultural issue that Mr. Catholique has  
2     spoken to, and one that -- that Deze is no doubt familiar  
3     with from some of the Review Board's previous  
4     environmental assessments, as well.

5                     But, I -- I'd rather we don't get into it  
6     off the top of your heads here. If you can put in  
7     writing different ways that you may be considering other  
8     kinds of cultural mitigations, I think it would be  
9     helpful.

10                    Can you do that?

11                    MR. LOUIE AZZOLINI:     Thank is fine. No,  
12     that's great.

13                    MR. ALAN EHRLICH:     Thank you.

14

15     --- COMMITMENT NO. 42:             Deze Energy to advise in  
16   writing how it may be  
17   considering any offsite  
18   cultural mitigations to  
19   bigger cumulative impacts  
20   that are not physical  
21   mitigations that deal  
22   directly with how close they  
23   are to Our Lady of the Falls.

24

25                    MR. ALAN EHRLICH:     As well, I heard Mr.

1 Catholic ask about jobs, not just jobs, but  
2 specifically long-term jobs.

3 I assume, Mr. Catholique, you're talking  
4 about within the community of Lutsel K'e. Is that -- is  
5 that correct?

6 MR. ARCHIE CATHOLIQUE: Yeah. I guess --  
7 I guess, you know, how much -- how much jobs is this  
8 going to bring to the communities.

9 And so I guess the other question too, I  
10 asked to Mr. Azzolini is that I asked him, he did a  
11 research on the traditional users, he talked to some  
12 people. I guess, I just - I asked, you know, who he  
13 talked to from my community?

14 MR. ALAN EHRLICH: Perhaps we can deal  
15 with that second question first.

16 So, Mr. Azzolini, Deze Energy.

17 MR. LOUIE AZZOLINI: Louie Azzolini.  
18 Archie, just call me Louie, please. I'm not that old  
19 yet.

20 I'm really glad you asked that question  
21 because I think it's one (1) aspect of the work that Deze  
22 did that deserves some recognition.

23 What Deze did is it provided funding,  
24 equipment, to individuals, representatives of the NWT  
25 Metis Nation, and residents of Fort Smith, Akaitcho



1 residents, that use the Taltson area. They were provided  
2 cameras, GPS, their time was paid for, their gas was paid  
3 for. And what was essentially done is, at every water  
4 crossing that they normally encountered on their travels,  
5 normal travels, hunting travels, recreational travels,  
6 they stopped, they took a picture, they noted ice  
7 conditions, they noted habitat, and they gave us GPS  
8 points.

9                   And they -- this was done from -- leaving  
10 from Fort Resolution going up into the Taltson area. It  
11 was also done from Fort Smith going up into the Taltson  
12 area. And we've provided sort of a snapshot of the  
13 results in the developer's assessment report which is, in  
14 fact, a KML file which includes all the relevant data  
15 behind every point.

16                   So we've tried to take a proactive or Deze  
17 has taken a proactive approach to working with  
18 communities and trying to be innovative in how  
19 information is -- is gathered and presented.

20                   In terms of Lutsel K'e's participation,  
21 this is -- you know, the door is never closed on these  
22 things and if there was an opportunity to do that, I'm  
23 certain that Deze would -- would more than welcome it.  
24 We found that the information was really valuable, the  
25 individuals who participated found it really valuable

1 and, you know, their communities now have that  
2 information, as well. So it's a resource to them that  
3 they can use.

4 So, Archie, when you sort of -- when you  
5 ask, you know, like, who did I speak with, it wasn't me  
6 directly. The people who did the work out in the field  
7 were the people who live there and -- and actively use  
8 the area.

9 MR. ALAN EHRLICH: Thanks, Louie. There  
10 -- there are other questions that I also don't want to  
11 lose here. You asked a question about how caribou will  
12 respond to lines, as well as moose and muskox. However,  
13 I -- I was wondering if you would permit us to deal with  
14 that question in detail on Monday because we're going to  
15 be having a wildlife session then and I think that there  
16 are going to be many people in the room who will be able  
17 to benefit from hearing the answer to that question who  
18 aren't here in this session today.

19 If it's all right with you, Mr.  
20 Catholique, I really would prefer to wait, to take that  
21 same question and just carry it over till Monday which is  
22 the next day we're convening. Is that okay?

23 MR. ARCHIE CATHOLIQUE: Yeah.

24 MR. ALAN EHRLICH: Thank you. And then  
25 the last question that I've heard in what you said, and

1 correct me if I'm wrong, but it is the question of long-  
2 term jobs. Does Deze wish to respond?

3 MR. DON BALSILLIE: Don Balsillie, Deze  
4 Energy. Just before we move on to that question, just to  
5 maybe -- for -- for the record and to -- to clarify for  
6 everyone in the room, we did attempt to -- to get as much  
7 interviews from traditional users in the Akaitcho  
8 territory with reference to the land use in the proposed  
9 corridor of the -- of the transmission lines.

10 Unfortunately, we weren't able to  
11 interview individuals from Lutsel K'e. Because Archie  
12 asked, well, who did we interview there? We didn't  
13 interview anyone from Lutsel K'e simply because the  
14 community took the position to not involve themselves in  
15 the project. So to try and interview individuals, it  
16 just wasn't possible.

17 And the individuals that were interviewed,  
18 as pointed out by Mr. Azzolini, came from the communities  
19 south of that area that had some knowledge of -- of this  
20 area but weren't particularly knowledgeable in some of  
21 the key areas that Mr. Catholique made reference to in  
22 terms of culturally sensitive areas, et cetera.

23 So as stated earlier, that doesn't  
24 prohibit Deze and Lutsel K'e from at some point going  
25 back and taking a look at what was done and what's

1 missing in those gaps, if they so choose to do so.

2 There's -- there's still flexibility there to continue to  
3 do that work.

4 And as indicated by Mr. Grabke from Deze,  
5 the line that's being proposed does have -- we do have  
6 some flexibility in -- in making some -- some changes,  
7 not dramatic, of course, because of the water bodies, et  
8 cetera, but nevertheless we do have some flexibility that  
9 exists.

10 Just in terms of -- in terms of  
11 employment, as you've heard and will continue to hear  
12 this project does create an enormous amount of work at  
13 the front end in the construction phases of this project.  
14 The long-term employment we -- we know that projects of  
15 this nature, infrastructure of this nature, requires a  
16 small workforce to keep it functioning.

17 And where the benefits really accrue for  
18 the partners that are involved is the -- is the profits  
19 that you're going to see generated from this type of  
20 development that would accrue at the First Nation level  
21 and those financial benefits can be utilized to create  
22 other opportunities in the community, create other jobs.  
23 That employment there will stimulate their local  
24 economies.

25 And if you look around us today,

1 especially in the last number of hours, we've had a large  
2 contingent of people gathered in Yellowknife to -- to  
3 deal with a very sensitive issue which is caribou. The  
4 depleting caribou herds that -- that the people of this  
5 particular territory depend upon for a food source is  
6 under a lot of scrutiny and a lot of discussion and hard  
7 decisions have to be made as to -- as to how that issue  
8 should be dealt with.

9                   And -- and here we are in this room  
10 proposing a project in some people's eyes may further  
11 impact that -- that particular herd that is currently  
12 dwindling in numbers.

13                   In this particular part of the world I  
14 guess, we still have the ability, as peoples of the  
15 north, all of us sitting here, who have a -- a genuine  
16 interest in -- in terms of how we -- we deal with our  
17 ecosystem, how we deal with ourselves as people and how  
18 we communicate with each other, we still have the ability  
19 to sit in rooms like this and -- and really understand  
20 where our interests lie and to try to find homemade  
21 solutions that we can put in place that hopefully the  
22 rest of Canada, the rest of the world can look at and  
23 say, look, these people actually live in a situation  
24 where they actually -- I'm looking for a word here that  
25 comes out of the treaty -- they co-exist.

1                   To co-exist is a term that's encompassed  
2   in the language of treaties. Like, we have a treaty  
3   that's in place. It's very important for all of us here  
4   in the room I think to understand that when we deal with  
5   -- with wildlife, when we deal with issues that may  
6   impede the ability of -- of people to exercise a certain  
7   right, even if it's a right to pick a berry, a right to  
8   harvest a large animal, that there's a necessity and a  
9   process that we have to go through.

10                  Because we're involved in the project of  
11   this magnitude in the north as -- as aboriginal people  
12   does not remove us from that responsibility, I mean, more  
13   so I think because we're in a position of the developer.  
14   We want to ensure that we take a very close look and deal  
15   with those issues with a lot of sensitivity and a lot of  
16   common sense.

17                  One (1) thing I noticed in the room today  
18   is when we're talking back and forth from the various  
19   departments and government representatives to our  
20   consultants and we're using jargon of a nature that's  
21   technical, people were very comfortable, very quick to  
22   answer, had the documentation on paper, but when an Elder  
23   such as Mr. Boucher, Albert Boucher, asked a question,  
24   everyone started fidgeting.

25                  You notice that? Like, it's almost like

1 we don't understand this guy. What is he asking? How do  
2 we answer him?

3                   Because you -- you fall out of the element  
4 of their world. His world as he sees it is very much  
5 different than ours around this table. Imagine this:  
6 There's an Elder back in Lutsel K'e, Maurice Lockhart.  
7 He's almost coming up to a hundred years old. He came to  
8 our meeting the other day and listened in and he gave us  
9 words of wisdom, but to see through his eyes from living  
10 a very traditional nomadic life to one by which he can  
11 travel by looking at the screen of a computer to the  
12 other side of the world in a matter of seconds is  
13 unbelievable. Try to comprehend what goes through his  
14 person.

15                   So when we go in the back yard of our  
16 people, the aboriginal people, and we go into the back  
17 yard of the people in Lutsel K'e, there are a lot of  
18 issues that are very sensitive in nature. Sometimes  
19 these issues, people may see them as barriers. I see  
20 them more as challenges in which we should be able, as  
21 smart as we are, as smart as we say we are, should be  
22 able to come up with solutions pretty -- pretty quickly,  
23 don't you think?

24                   So when we're faced with a lot of these  
25 questions, from all of us around the table, like, look

1 around the table at the wealth of knowledge that we have.  
2 And we ask ourselves the one (1) simple question: Are we  
3 doing the right thing? Are we doing the right thing  
4 here?

5                   Myself, as an aboriginal person, as a  
6 person that represents a certain segment of the  
7 population in our territory, I want to ensure that every  
8 question that we ask of each other is -- is valid and  
9 everything that we do in this process is something that  
10 hopefully at the end of the day that we can all look at  
11 each other in the eye and say, "You know what? We dealt  
12 with your issues. We -- we tried the utmost to ensure  
13 that everything we've done, we've done with integrity and  
14 we've done with transparency and we've done it in a  
15 manner of trusting each other, that we're doing the  
16 utmost to -- to protect the rights, to protect the  
17 waters, to protect the animals."

18                   And most of all, hopefully at the end of  
19 the day, as I said earlier, that we've allowed everyone  
20 who's got a concern out there to -- to bring those  
21 concerns, no matter how small they are, to this -- to  
22 this circle and hopefully by having this wealth of  
23 knowledge around the table that collectively we can come  
24 up with the appropriate answers.

25                   The questions that are being asked are



1     probably going to be questions that -- that are going to  
2     come up as we travel forward in this process by more than  
3     just Mr. Catholique or Mr. Boucher. They're going to be  
4     brought up by other individuals.

5                     Just to -- to summarize on -- on one (1)  
6     of the questions you have, compensation. It's  
7     unfortunate that past developers didn't take -- take up  
8     such a process. There wasn't -- it wasn't available to  
9     them.

10                    Today it's much different. The issues of  
11     past compensation, hopefully, they can be addressed in  
12     other circles, but I can assure you that any future  
13     issues pertaining to compensation that may arise because  
14     of this particular development that Deze is pursuing, we  
15     will be dealing with.

16                    And as aboriginal partners in this  
17     particular process we do have language encompassed in our  
18     internal agreements that do address this issue because it  
19     was such a -- a major issue that was left on the table  
20     that wasn't addressed, and is still being pursued in a  
21     manner that sometimes frustrates people, that hopefully  
22     ourselves, we can deal with it in a much -- much  
23     healthier manner. Thank you.

24                    MR. ALAN EHRLICH:     Thank you very much,  
25     Don.

1                   Okay so, Mr. Catholique, of course, this  
2   is just an information gathering session, it's not a  
3   hearing. The Board members, who are the decision makers  
4   of our organization, are not here. There will be  
5   hearings where they will hear directly from parties and  
6   people who are interested in this. They're coming up.

7                   I hope that -- that I -- I fished out  
8   clearly enough for the record the different questions  
9   that you're asking. I'm glad you're okay on waiting a  
10  little bit for the wildlife answers.

11                  We're going to be having a break now  
12  because our schedule says there's a break. I say mahsi  
13  cho for your -- your comment.

14                  And there are other people who have come  
15  in from other communities who will have a chance to ask  
16  questions after the break. We haven't forgotten you.  
17  As well, we have the Review Board experts, as well.

18                  And just before the break, Mr. Catholique  
19  has one more comment.

20                  MR. ARCHIE CATHOLIQUE: I guess the  
21  other, just kind of thinking about the -- I guess, you  
22  know, where I come from as a Dene individual and, you  
23  know, as things that -- that go with it and that --  
24  that's who I am.

25                  And, you know, there's things that -- that

1 I've been taught as a -- when I was a young man, and what  
2 the -- what the Elders, you know, what they -- what they  
3 tell me.

4 And, you know, when I said I would provide  
5 it for my family, you know, when I -- when I go out, it's  
6 either for caribou, moose, or muskox. Or -- or whenever  
7 the time that I take time to -- to -- I guess most of  
8 you, I guess, I think everybody, you know, have their own  
9 way of communicating with -- with the higher power,  
10 church. Or -- but I too was taught, you know, when I go  
11 out on the land and when -- when there's places where I  
12 go to that are there today, I guess it's good to  
13 understand the people that are -- that are there, the  
14 people who are the users of that land are more  
15 knowledgeable as to what's going on over there.

16 They -- they have the knowledge of the  
17 understanding that people need to -- to understand, to --  
18 and these are the people that -- that needs to -- to be  
19 talked with.

20 And -- and that's why I think it's very  
21 important that the people that -- that are the users --  
22 and, for instance, I talk about the Falls. You know,  
23 there is an understanding on my part that these -- these  
24 areas are -- are very important to us. And when I say  
25 they're very important, that we want to keep, not only

1     for our children as I said, but for other -- as, you  
2     know, Don talked about co-existence in the Treaties  
3     meaning that we live together and respect each other's  
4     territory, tradition or whatever.

5                     And I think that understanding that's what  
6     I'm saying is that it has to be taken into consideration  
7     and whoever's going to make that decision has to be to  
8     understand, you know.

9                     I know, you know, they talk about, well,  
10    you know, maybe we'll be flexible. Well, we'll just move  
11    it down 7 kilometres down the river. It's not like that.  
12    It's -- that's not how it is and I'm sure these Elders  
13    will tell you they're -- you know, we're going to have a  
14    time that they want to talk about it.

15                    But those -- those things you -- you got  
16    to understand it. And that's -- that's what I wanted to  
17    say so thanks.

18                    MR. ALAN EHRLICH:     Mahsi cho. And what  
19    I've heard from Deze is that they sound open to trying to  
20    do things to avoid causing impacts in areas that are very  
21    important to people of Lutsel K'e but the more  
22    information they have, the more of an understanding they  
23    have of which particular areas are most important, the  
24    better understanding they have of how far away is far  
25    away enough, the more they can still do to make sure

1     their project doesn't cause impacts that -- that can be  
2     avoided.

3                     And so I would encourage anyone who is  
4     here now or as we go through the environmental assessment  
5     to try and take this opportunity to let Deze know, you  
6     know, what areas if they -- particularly if there are  
7     particular areas where they might be able to design  
8     around and avoid a problem that is still -- it's still  
9     early enough on so that there's some -- some ways of  
10    addressing these things that may not exist later.

11                    So with that, again, mahsi cho. We'll  
12    take a break, we'll come back in. We'll make it a little  
13    shorter, ten (10) minutes. Thank you.

14

15    --- Upon recessing at 3:21 p.m.

16    --- Upon resuming at 3:41 p.m.

17

18                    MR. PAUL MERCREDI:     Okay. Moving along  
19    here. We'll be hearing from the North Slave Metis  
20    Alliance, the Fort Resolution Metis Council, and the  
21    Review Board experts.

22                    If you could introduce yourself, as well,  
23    before you pose your questions.

24                    MS. BRITTANY SHUWERA:   Brittany Shuwera  
25    with the North Slave Metis Alliance. I'm here on behalf

1 of Sheryl Grieve and the Alliance.

2 The traditional territory of the  
3 indigenous North Slave Metis overlap in the South --  
4 South Slave Region, pardon me. Please explain the  
5 methodology for identifying and soliciting input from  
6 potentially interested parties and persons in the North  
7 Slave region.

8 MR. PAUL MERCREDI: Deze?

9 MR. LOUIE AZZOLINI: Brittany, thank you  
10 for the question. In -- now you said soliciting  
11 information as opposed to consulting.

12 MS. BRITTANY SHUWERA: Soliciting input.

13 MR. LOUIE AZZOLINI: Okay. Soliciting  
14 input. Okay. A bit of context -- a bit of context and -  
15 - and background on what's been done since 1993 and I  
16 won't take six (6) years to tell you what happened.

17 But initial work started in 1993 with the  
18 groups in the South Slave, the aboriginal groups in the  
19 South Slave. And at this point, the most important thing  
20 was -- to find out was: Can something happen? Can the -  
21 - is the expansion possible?

22 Once that was determined, we were probably  
23 now about 2005, 2006. Initial discussions occurred with  
24 representatives, aboriginal representatives north of the  
25 lake. The methodology for establishing it, to be quite

1     frank, having worked up here all my life, the methodology  
2     is pretty simple because we know who all the groups are  
3     and we -- the -- the groups were contacted and meetings  
4     were requested.

5                     And where people wanted to meet, Deze met  
6     with them, and provided them information on the project  
7     at that point in time because the project is not  
8     something that was fixed in stone. Originally, it was a  
9     concept. We have this idea, what do you think? As that  
10    became -- the concept became more firmed up, the groups  
11    again were contacted and information presented.

12                    So when you speak of methodology -- I  
13    mean, I can go into detail about different research  
14    methodologies that I could use, but it's kind of  
15    redundant when you've been here all your life and you  
16    know who's involved. So unless I've missed someone I'm -  
17    - does that answer your question?

18                    MS. BRITTANY SHUWERA:     To the best of my  
19    knowledge, yes, but Sheryl is going to have to review the  
20    information and she'll get back to Amber if she has any  
21    further questions on that.

22                    MS. TAWANIS TESTART:     For -- just to  
23    clarify, Brittany's here representing the North Slave  
24    Metis Alliance but the Information Requests themselves I  
25    believe were prepared by Sheryl Grieve, who wasn't able

1 to be here today. So Brittany is going to ask the  
2 questions so they're on the record and Deze is able to  
3 respond so the response is on the record, but Brittany's  
4 going to have to take those responses back to her  
5 organization before she can clarify whether the  
6 information requirements have been satisfied.

7 MR. LOUIE AZZOLINI: Just one (1) -- one  
8 (1) additional thing, Brittany. I'm just guessing at  
9 this point that you're referring to aboriginal groups  
10 because more than aboriginal groups were contacted. So  
11 I'm just limiting my response to aboriginal groups at  
12 this point.

13 MS. BRITTANY SHUWERA: Thank you. I have  
14 a few more questions.

15 Please report on community engagement  
16 efforts and results with the North Slave Metis Alliance  
17 including mitigation commitments and unresolved issues,  
18 and discuss the community engagement plan for the North  
19 Slave Metis.

20 MR. LOUIE AZZOLINI: Thank you for that  
21 question, as well, Brittany.

22 The work with respect to engaging -- and  
23 engaging is -- is more than just sitting down and having  
24 a coffee. I mean, it's a two (2) way flow of  
25 information.



1                   In 2006, 2007, a presentation was made to  
2     the North Slave Metis Alliance Board of Directors. And  
3     I've got a copy of the meeting notes which I'd be happy  
4     to put on the record. A number of questions came up  
5     about the project and they were subsequently answered.

6                   Through the course of obtaining regulatory  
7     authorizations -- and by this I mean Fisheries research  
8     licences, research licences, permits, wildlife research  
9     permits, we were also in contact with the North Slave  
10    Metis. So it wasn't just discreet points where we would  
11    come in, say this is where we're at. There was an  
12    ongoing communication, part of it completely voluntary,  
13    part of it prescribed by government.

14                  Subsequent meetings were held with the  
15    North Slave Metis Alliance, with Sheryl, to discuss  
16    ongoing work of the project, where it was at, the status  
17    of the project, and questions were raised about  
18    participation and involvement of the North Slave Metis.

19                  Opportunities were made available during  
20    the archaeological component of the work for  
21    participation engagement, as well, I believe, during the  
22    wildlife components of -- but I'm not a hundred percent  
23    sure on that.

24                  Subsequent to that, I've attempted to  
25    engage or Deze has attempted to engage with your Board of

1 Directors again through President Bill Ingy (phonetic).

2 A number of phone calls were made and we  
3 got one (1) phone call and Mr. Ingy asked if -- you know,  
4 the purpose of getting together and again it's purpose of  
5 engaging, communicating. And no meeting occurred.

6 With respect to a plan of action that's a  
7 pretty prescriptive way of doing things and it works, I  
8 think, at a sort of a macro level when you're dealing  
9 with a number of different groups and you only have so  
10 much time for management purposes.

11 With respect to an engagement or a  
12 communication strategy with the North Slave Metis  
13 Alliance, I haven't sat down, provided my client any such  
14 document. I think that the approach has been one of  
15 keeping an open door, open window, open phone, open  
16 email, open anything and really being open to receiving  
17 inquiries and to also wanting to provide information.

18 So not program, per se, but very much I  
19 think probably a northern approach which is, call me,  
20 it's a small town.

21 MR. PAUL MERCREDI: Okay, thank you. And  
22 is that something you can bring back to your  
23 organization?

24 MS. BRITTANY SHUWERA: Thank you. That  
25 response will be directed toward Sheryl and she'll

1     respond accordingly.   And I have a couple more if there's  
2     time.

3                     MR. PAUL MERCREDI:     For sure.

4                     MS. BRITTANY SHUWERA:   Please provide an  
5     assessment of the socioeconomic impacts of this proposed  
6     project on the North Slave Metis people including the  
7     impact of reduced trucking jobs on the NSMA.

8                     MR. LOUIE AZZOLINI:    Okay.   During the  
9     course of preparing the social component of the  
10    developer's assessment report, existing documents that  
11    have been provided by the North Slave Metis on other  
12    environmental assessments were reviewed.

13                    And as a discreet group, the challenge  
14    that exists is that the North Slave Metis don't have a  
15    discreet identified population group, in other words just  
16    fifty (50), or a hundred or two hundred (200) people that  
17    we can say may or may not be impacted.

18                    So defining the boundaries of the  
19    analysis, we were unable to do that.   And the research  
20    that we'd obtained from -- from secondary sources was  
21    almost exclusively historical accounts of individuals and  
22    events in space which overlap over the last two hundred  
23    (200) years with every other aboriginal group.

24                    So in terms of identifying specific  
25    attributes of the North Slave Metis Alliance social space

1 and the effect of this project on that social space,  
2 there's simply inadequate information to be able to do  
3 that.

4                   The challenge and -- that's the challenge.  
5 So I welcome if the North Slave Metis could provide some  
6 additional information in terms of number of individuals,  
7 age, sex, distributions, employment characteristics,  
8 information that one would probably be able to, or can  
9 obtain from Statistics Canada, or from the Bureau of  
10 Statistics, or often community organizations will have  
11 that. If I go to Lutsel K'e, they'll have a list of all  
12 the people in the community. So, we'll have an idea of,  
13 you know, who's living there and who's doing what.

14                   With respect to -- to reduced trucking. I  
15 think there's a presumption there that there will be  
16 reduced trucking.

17                   The key critical -- or the critical  
18 factor, in this case, similar to the challenge that  
19 exists with identifying, quantifying, and elaborating on  
20 the socioeconomic effects on the North Slave Metis, is  
21 trying to disaggregate the income generated by the North  
22 Slave Metis Alliance by trucking. That information is  
23 proprietary to, you know, your -- your companies, and  
24 trying to figure out how many trucks belong to the North  
25 Slave Metis or are subcontracted to other parties, and

1 then figuring if or if not they're affected, we can't do  
2 that.

3 And again, the -- the question about there  
4 being reduced trucking, it's not necessarily a hypothesis  
5 that we concluded, okay. It's not a conclusion that we  
6 arrived at.

7 MR. PAUL MERCREDI: Okay. Thank you,  
8 Deze.

9 And is that also something you can bring  
10 back to your organization?

11 MS. BRITTANY SHUWERA: Yes, that will be  
12 put towards Sheryl, again. Thank you for the response.  
13 And I have one (1) more really quick one (1).

14 MR. LOUIE AZZOLINI: No, take your time.

15 MS. BRITTANY SHUWERA: Please indicate  
16 whether socioeconomic impact mitigation will occur by  
17 adding the NSMA to the ownership structure of the  
18 project, or through the creation of an impact benefit  
19 agreement.

20 MR. PAUL MERCREDI: Deze?

21 MR. LOUIE AZZOLINI: My name is Louie  
22 Azzolini. That's a speculative question, and I think in  
23 environmental assessments -- and it's also a politically  
24 charged question. It's not something I can answer.

25 The project currently under environmental

1 assessment involves the parties that have brought it  
2 forward. If the North Slave want to pursue that, that's  
3 an independent business deal.

4 MR. PAUL MERCREDI: Okay.

5 MS. BRITTANY SHUWERA: Thank you.  
6 They'll all be put towards Sheryl.

7 MR. PAUL MERCREDI: Thank you. And if we  
8 don't have any follow-up questions for that, we will hand  
9 to the Fort Resolution Metis Counsel representative.

10 Do we have a representative here from the  
11 Fort Resolution Metis Counsel?

12 MS. TAWANIS TESTART: No, he left.

13 MR. PAUL MERCREDI: Okay. And if we  
14 don't have any other questions then we will hand the mic  
15 to the Review Board experts.

16 MS. TAWANIS TESTART: So, are there any  
17 parties who have any more questions related to the  
18 subjects of note that relate to project design, or  
19 socioec, or any other questions at all related to the  
20 subjects of note?

21 In that case we're going to move to our  
22 internal experts who have some questions.

23 MR. BRUCE STEWART: Bruce Stewart. This  
24 one (1) is short and sweet. It pertains to the release  
25 of nitrogen compounds, the aquatic environment.

1                   And I wondered if you could tell us what  
2   amount of explosives will be used and how much nitrogen  
3   will be residual afterwards that may enter the aquatic  
4   environment?

5                   MS. LINDA ZURKIRCHEN:   Linda Zurkirchen.  
6   And I am going to put Tom on the spot, and say, do you  
7   recall if we quantified the amount of explosives in the  
8   DAR?   I believe we did.

9                   MR. TOM VERNON:   Tom Vernon.   I think we  
10  made an estimate based on rock volumes but I -- I don't  
11  have it at my fingertips, Bruce, but it's easily obtained  
12  in the DAR if we need one though.

13                  MS. LINDA ZURKIRCHEN:   I'm quite certain  
14  we did put an estimate of the explosive quantity in the  
15  DAR.   We can confirm that.   And if not -- if it's not in  
16  there we can certainly make that -- get that available.

17

18   --- COMMITMENT NO. 43:           Deze Energy to indicate the  
19                                       amount of explosives that  
20                                       will be used and how much  
21                                       nitrogen will be residual  
22                                       afterwards that may enter the  
23                                       aquatic environment.

24

25                  MS. LINDA ZURKIRCHEN:   And in regards to

1 the -- the quantity of nitrates, what we have submitted  
2 to the Review Board is a discussion of additional  
3 mitigation over what is presented in the DAR to minimize  
4 the potential for nitrates to enter the water bodies and  
5 it does not quantify the nitrates because the product  
6 that we would be using in and around the in-stream works  
7 would be one that would potentially negate nitrates  
8 entering the water body.

9 Perhaps I can direct you to that document  
10 that was submitted already and see if that answers  
11 sufficiently the question you're asking.

12 Does that work for the Review Board to  
13 make that document available?

14 MR. PAUL MERCREDI: Yes.

15 MR. BRUCE STEWART: That would be good  
16 and if you could tell me where in the DAR those numbers  
17 show up? Thank you.

18 MS. LINDA ZURKIRCHEN: We will do that.

19 MR. PAUL MERCREDI: Thank you. Oh, just  
20 before you start, Aleksey. Yeah, Linda...?

21 MS. LINDA ZURKIRCHEN: If we can just  
22 have a couple of minutes we'll actually get that number  
23 right now or we can get it after the next question, the  
24 quantity of explosives.

25 MR. PAUL MERCREDI: Yeah, we'll go with



1     Aleksey and then get back to that.

2                     MR. ALEKSEY NAUMOV:     Aleksey Naumov, for  
3     DM Senes, advising the Board. We have a question on the  
4     greenhouse gas reduction calculations.

5                     As you know, reduction of greenhouse gases  
6     is an important environmental consideration of the  
7     project. The calculation of the reduction is undertaken  
8     in Section 15.9.6.3(3) and it's estimated for each of the  
9     development scenarios. The calculation for the reduction  
10    of the greenhouse gases includes the replacement of fuel  
11    transported to the mine sites by the proposed  
12    hydroelectric power generation.

13                    What we're wondering if -- if it's  
14    possible to have a -- a more complete sort of balance or  
15    budget of greenhouse emissions, greenhouse gases  
16    emissions. On one (1) side you have reduction from the  
17    fuel that's not going to be transported and -- and used  
18    at the mine. On the other hand, you have -- have you  
19    considered the -- in the calculation the reduction of  
20    truck -- truck traffic as a result of transporting less  
21    fuel to the mines, the emissions from the trucks  
22    themselves? Can you quantify that?

23                    MR. PAUL MERCREDI:     Deze...?

24                    MR. ANDREW STEWART:     Andrew Stewart,  
25    Deze. The DAR calculations that you've -- you've been

1 over, do not include those numbers but we went ahead  
2 after that question was posed and -- and pulled those  
3 out.

4 It's in the range of between 3 and 4,000  
5 tonnes of GHG emissions annually based on about 625 to  
6 750 litres per return trip on vehicles. However, we'd  
7 like to caution that number does presume that those  
8 trucks aren't replaced with other product on the road and  
9 -- and given that the winter road will likely operate at  
10 capacity or has the potential to that might not be  
11 realized in the long term.

12 MR. ALEKSEY NAUMOV: I have two (2) more  
13 questions on -- on the same matter. It's just that  
14 ideally would it be possible to get those estimates in --  
15 in writing in some form because I didn't catch...

16

17 --- COMMITMENT NO. 44: Deze Energy to provide in  
18 writing the estimates of the  
19 emissions from truck traffic,  
20 as a result of transporting  
21 less fuel to the mines

22

23 MR. ALEKSEY NAUMOV: Another aspect of --  
24 of the same sort of greenhouse gas budgeting is -- are  
25 the emissions during the construction itself. Have you

1     been able to quantify those?

2                   MR. ANDREW STEWART:     Andrew Stewart.

3     Yes, yes, we have. We took a life cycle approach to the  
4     project after hearing the questions from some of the  
5     experts. We've done some basic numbers, they're actually  
6     laid out on the poster behind us. We're happy to provide  
7     the methodology that arrived at those numbers.

8                   I can give you a basic -- it's looking  
9     about 169,000 tonnes of GHG emissions would be equated to  
10    construction over the three (3) year construction period  
11    and over twenty (20) years of operation we'd be looking  
12    at approximately 3.3 million tonnes in emission offsets  
13    for the project.

14                  MR. ALEKSEY NAUMOV:     Okay, thank you.  
15     Last question is -- comes from Bruce, as well as -- it's  
16     basically the same.

17                  Another aspect of that is quantifying the  
18     amount of production from perhaps new materials used in  
19     the project, such as basically converting the -- whatever  
20     materials the project needs such as the -- the, I guess,  
21     transmission line, yeah, into emissions again.

22                  MR. ANDREW STEWART:     Andrew Stewart.  
23     Indeed our life cycle assessment does include those  
24     numbers, the production of new materials for transmission  
25     lines specifically, tree harvesting and fuel consumption,

1 as well, throughout construction. And we're happy to  
2 share that methodology and the results with -- with  
3 everyone.

4 MR. ALEKSEY NAUMOV: Okay. So that's  
5 something you could provide as sort of by October 30th,  
6 okay. Thank you.

7  
8 --- COMMITMENT NO. 45: Deze Energy to provide the  
9 numbers for the production of  
10 new materials for  
11 transmission lines, tree  
12 harvesting, fuel consumption  
13 throughout construction,  
14 contained in life cycle  
15 assessment  
16

17 MR. PAUL MERCREDI: Just to follow up  
18 with that, Deze is committing to putting that on the  
19 record. The first one, Aleksey, you had -- you had a  
20 question that you -- if you can get back to your first  
21 question there.

22 Did you -- did that answer your question  
23 or did you need that in writing on the record as well?

24 MR. ALEKSEY NAUMOV: No, I think it's all  
25 the same question. It's the same -- basically the

1 budget, complete budget of the greenhouse gasses. I  
2 think it's really three (3) sub questions will be covered  
3 by this commitment that that makes.

4 MR. PAUL MERCREDI: Okay. Perfect. And  
5 Deze can commit to that as well.

6 MR. ANDREW STEWART: We can. The first  
7 question actually wasn't covered in our methodology but  
8 we'll add that as those details, as well.

9 MR. PAUL MERCREDI: Thank you.  
10

11 --- COMMITMENT NO. 46: Deze Energy to provide a more  
12 complete sort of balance or  
13 budget of greenhouse gases  
14 emissions.  
15

16 MR. PAUL MERCREDI: And are there any  
17 follow-up questions? Linda...?

18 MS. LINDA ZURKIRCHEN: I can just add the  
19 -- answer the question of the quantity of explosives and  
20 the location. It's in Section 6.5.4.5 of the DAR and in  
21 Table 6.5.5.

22 Explosive quantity material approximately  
23 160,000 kilos of ANFO, ammonia, nitrate fuel oil, 1,000  
24 kilos of stick. That's in the document.

25 MR. PAUL MERCREDI: Thank you. And are

1     there any follow-up questions after that?   Yes.

2

3                                 (BRIEF PAUSE)

4

5                         MR. RICHARD BROWN:     Okay I have no excuse  
6     but to talk now, I guess.

7                         My name is Richard Brown with SENES DCS  
8     and I had some questions about the project design and I  
9     guess the perhaps operation of the proposed facilities.

10                        The first issue I'd like to raise is -- is  
11     one (1) that's probably familiar and I just want to talk  
12     briefly about the spillway discharge issue again which we  
13     discussed this morning to do with Trudel Creek but,  
14     obviously, it -- it relates very much to the Taltson  
15     power facility.

16                        And we talked about alternatives to the  
17     discharge whether it be possibly down the South Gorge or  
18     the pen stock area with some bypass or perhaps there's  
19     some other alternatives that you may have given thought  
20     to which we haven't mentioned today.

21                        So I -- I just want to articulate, I  
22     guess, the information that we were looking to get from  
23     you in a bit more detail.

24                        And I guess what we're really interested  
25     in receiving is some -- the advantages and disadvantages

1 to the -- the various options that are -- were considered  
2 in making the decision probably to come to the conclusion  
3 that Trudel Creek was the best route for discharge, and  
4 whether that's the best option or whether some  
5 combination of some of the other possibilities  
6 alternatives is -- is something worth considering.

7 And so if there was a way that you could  
8 perhaps put together a matrix or list these different  
9 options and -- and provide some weighting as to, let's  
10 say, the dam safety significance of them, maybe the cost  
11 and the environmental impacts, and -- and show us how you  
12 sort of came to the conclusion that you did as to how to  
13 deal best with this issue.

14 And I guess there was ultimately some sort  
15 of ranking that we could see what the number 1 option was  
16 and the second and third option, that would be very  
17 helpful.

18 MR. PAUL MERCREDI: Did Deze understand  
19 the question?

20 MS. LINDA ZURKIRCHEN: Yeah. Linda  
21 Zurkirchen. We understood. I think we're just  
22 processing the information and -- and trying to figure  
23 the best approach to that question. If we can just have  
24 a minute?

25 MR. PAUL MERCREDI: Very well, yeah.

1 (BRIEF PAUSE)

2

3 MR. TOM VERNON: Tom Vernon. Yeah, I  
4 think I understand the question. We committed this  
5 morning to provide information on the bypass alternatives  
6 that we looked at that -- that could be combined with  
7 some environmental pros and cons for -- for those  
8 facilities. Are -- are you suggesting that we move into  
9 some other assessment here?

10 I'm -- I'm a bit puzzled exactly how far -  
11 - how broad we're talking about here. I don't think you  
12 were here this morning, but we did commit to giving the  
13 alternatives and reasoning for the -- the bypass, the 30  
14 cumix (phonetic) kind of bypass facility. That's what we  
15 would have available.

16 MR. RICHARD BROWN: Yeah, Richard Brown  
17 here. When you say you're -- you're considering -- or  
18 you're going to provide information on the -- the bypass,  
19 you're referring to what exactly? Just the -- the Trudel  
20 option or -- or the spillway, the -- the emergency  
21 spillway?

22 So would you be able to provide more --  
23 like more of a matrix or some help in understanding the  
24 decision making process that came to that, and -- and in  
25 relative ranking if -- if some of the other options are -



1 - let's say, they weren't first, but they were really not  
2 too far off as -- as alternatives?

3 MR. LOUIE AZZOLINI: There's an -- Louie  
4 Azzolini. There's an inherent difficulty in the question  
5 that you're asking because the current rights to going  
6 down Trudel Creek rest with another proponent, and in  
7 essence you're asking another proponent to change what  
8 they're doing. And so there -- there are some  
9 limitations in the analysis which are inherent because of  
10 the very nature of the project. And what you're asking  
11 for, it bumps up against a lot of those because we're  
12 dealing with a licenced regulated facility that currently  
13 exists.

14 MR. RICHARD BROWN: Okay. Richard Brown.  
15 I guess if you could do your best to work together and  
16 provide as much information as you can, it would be  
17 appreciated.

18 MS. LINDA ZURKIRCHEN: Linda Zurkirchen  
19 because Tom doesn't have a mic. We can commit to  
20 providing the information that we can in terms of the  
21 alternatives that we looked at and why -- why the one (1)  
22 that's in the design now has been selected.

23 MS. TAWANIS TESTART: I think that's what  
24 Richard's looking for, and just in response to what Louie  
25 said, I think that there is another proponent that is

1 operating a facility in the exact location that this  
2 project is proposed. But I -- from what I understand  
3 from Richard's question, he's at -- he's asking you to  
4 more fully explain how you considered the alternatives  
5 within your project design and not the activities that  
6 are currently happening on the ground at that location.

7 And that should be something that is  
8 reasonably feasible within the context of the EA, because  
9 I'm --- I'm assuming that you put some thought into your  
10 project design.

11 MR. TOM VERNON: Thank you, Tawanis. We  
12 did put some thought into it, a little bit. Yeah, I --  
13 I'm just -- I'm -- I'm not hedging here. I'm only  
14 hedging because, you know, we can -- in the timeframe  
15 that -- that we're talking about here, we can only  
16 provide, obviously, things on which we have knowledge,  
17 and which we did previous study. We -- we certainly  
18 don't have time to launch into a full scale new  
19 assessment of alternatives in that kind of timeframe.

20 So I'm hoping -- sure, we'll do what we  
21 can, we'll do our best with the information that we have  
22 available, but there's a thousand other alternatives that  
23 one could look at, but we -- we wouldn't be able to  
24 supply that kind of information.

25 MS. TAWANIS TESTART: Perhaps I can

1 suggest that maybe during break, or just after the  
2 session, the -- Richard, you can explain -- the engineers  
3 can talk and you can explain what you're looking for a  
4 little bit more completely to Tom, and you can speak in  
5 the language of engineers.

6 MR. RICHARD BROWN: Sounds good. Thank  
7 you.

8

9 --- COMMITMENT NO. 47: Deze Energy to provide  
10 information in terms of the  
11 alternatives they looked at  
12 and why the one in the design  
13 was selected re bypass

14

15 MR. RICHARD BROWN: Okay, next question.

16 Okay. Richard Brown, I have a -- a few more questions.

17 The question I have here is with respect  
18 to dam safety implementation. I had the opportunity to  
19 take a look at a -- a dam safety review report that was  
20 done for the Northwest Territories Power Corporation for  
21 -- or by Klohn Crippen, and that was done in 2006.

22 And I was just trying to get an  
23 understanding of where situations may be with respect to  
24 dam safety requirements being met for the existing  
25 facility, which -- and then would lead into how things

1 would be handled for the proposed facility.

2 So, there's some recommendations made by  
3 Klohn Crippen and -- and one (1) of the -- some of them  
4 involved an Operations, Maintenance and Surveillance  
5 Plan, a Emergency Preparedness Plan, appointing an  
6 engineer to be responsible for the dam safety, and I  
7 think there's also a dam seepage -- Seepage Inspection  
8 Instrumentation and Monitoring Plan to be prepared.

9 And I wondered if -- if those have been  
10 developed since 2006?

11 MR. TOM VERNON: Tom Vernon. Yeah, Dan,  
12 I might get you to say a few words on that. That work is  
13 funded and undertaken by the NTPC, which is a different  
14 company and owner and operator. The -- the facilities  
15 has very little to do, I'm afraid to say, with -- with  
16 what we're -- we're doing, and I don't have an update on  
17 where they've got to with that particular report. And,  
18 you know, I'm -- I'm not sure it's appropriate for us to  
19 even comment on it. It -- it -- its -- its existing  
20 facilities continue to be owned and operated by the Power  
21 Corporation which we're -- we -- we're not speaking for.

22 MR. DAN GRABKE: One (1) thing I do know  
23 is the -- the NWTC Power Corp has to file annual reports  
24 to the Water Board, where they would state where they are  
25 in -- in those processes. I believe they're under way.

1 I'm not sure where -- whether they're complete or not,  
2 but I -- I think they filed last year's. So that's  
3 public record. We could -- somebody could look into it,  
4 I guess.

5 MR. RICHARD BROWN: Okay -- okay.  
6 Richard Brown. Thank you.

7 I guess following from that the -- the new  
8 facility would be designed and I -- I was just wondering  
9 what -- to what safety standards Deze anticipates the  
10 detail design would be done to?

11 Would it be sort of following the -- the  
12 Canadian Dam Association Dam Safety Guidelines for the  
13 powerhouse, the intake areas, the raising of the small  
14 dams and other structures throughout the watershed, or if  
15 there's other standards that one would be -- guidelines  
16 that they would be using?

17 MR. TOM VERNON: Tom Vernon. Yeah, I  
18 don't see any reason why Canadian Dam Safety Guidelines  
19 wouldn't be used to -- I mean a good design will get you  
20 there. A lot of that -- their -- their guidelines are  
21 follow-on inspections, aren't they, and reporting and  
22 whatnot. I -- that hopefully would be undertaken by the  
23 -- by the operator and owner, but I -- I think, yes, we  
24 could -- we could say certainly the guidelines would be  
25 followed in design, m-hm.

1                   MR. RICHARD BROWN:     Richard Brown.   Thank  
2   you.   I guess sort of following along the initial  
3   question with Klohn Crippen's inspection, obviously, the  
4   new facility would require inspections and -- and  
5   different maintenance and surveillance plans and this  
6   type of thing, so, that would be followed as well, I  
7   assume?

8                   MR. TOM VERNON:     That's far out there for  
9   me to say but I don't -- I don't see why that commitment  
10  couldn't -- you know wouldn't be a logical -- logical  
11  one.

12                  MR. RICHARD BROWN:     Okay, that's good.  
13  Thanks.

14                  Another question that I -- and I don't  
15  know if you're -- I assume you're probably aware of it  
16  but the Klohn Crippen report talked about the North  
17  Valley dam embankment and there's one (1) thing that I  
18  found a little puzzling or concerning and they -- they  
19  talked about an area of settlement on that dam that was,  
20  they thought, associated with I guess the -- the loss or  
21  deterioration of the permafrost in that area.

22                  Is that something Deze's familiar with and  
23  in -- taking into account in terms of the -- whatever  
24  modifications and upgrades they're making to these -- the  
25  structure and is permafrost an issue to be considered at

1 some of the other facilities?

2 MR. TOM VERNON: I'm not all that  
3 familiar with that issue, Richard, so if that's of --  
4 obviously, it -- it needs consideration, so, I -- I don't  
5 have an answer.

6 The answer is going to get considered in  
7 the overall condition assessment of the -- of the site  
8 facilities. And as part of the project there's a plan  
9 for upgrades and rehabilitation work to -- to bring Twin  
10 Gorges to, you know, extend its lifespan perhaps another  
11 forty (40) years and that's an issue that would certainly  
12 fall under consideration in that overall review process.  
13 So, I -- I can't say anything further on it right now.

14 MR. RICHARD BROWN: Okay, Richard. I  
15 assume that it would be part of detail design and it will  
16 be considered at that point.

17 MR. TOM VERNON: The report will be  
18 reviewed and -- and certainly followed up on, yep.

19 MR. RICHARD BROWN: Okay, and I guess the  
20 last question along that similar line is ice pressures  
21 are, obviously, a significant concern in -- in dam  
22 structures in terms of overturning and -- and safety.

23 And I assume that there are some areas of  
24 these facilities that ice pressures will be of concern  
25 and that will be needed to be taken care of in detail

1 design?

2 MR. TOM VERNON: Yeah, point noted,  
3 that's for sure. Ice is a key component of the winter  
4 design, for sure.

5 MR. RICHARD BROWN: Thank you. Yeah, the  
6 next couple of questions are to do with the detailed --  
7 detailed geotechnical information.

8 And a drilling program was taken --  
9 undertaken by Klohn Crippen in 2006 at -- at the Twin  
10 Gorges' facility and from reviewing that, I gathered they  
11 had some difficult weather conditions and -- and other  
12 problems and they managed -- managed to complete a couple  
13 of -- two (2) bore holes I think of -- although they had  
14 hoped to do more.

15 I think the program mostly focussed on the  
16 bedrock conditions and they didn't do much in terms of  
17 testing of the -- the soil conditions so that there  
18 weren't any standard penetration tests or shelby tubes in  
19 the clay soils for further testing and I don't think  
20 there was actually any compressive strength testing of  
21 the bedrock. So, it sort of appears that the  
22 investigation was fairly preliminary in nature.

23 I guess my question is: Could you perhaps  
24 give me an idea of what sort of detailed geotechnical  
25 investigations will be done at -- at the Twin Gorges'



1 facility and -- and some of the other facilities to  
2 proceed with the -- the program?

3 MR. TOM VERNON: You are a geotechnical  
4 engineer, are you?

5 MR. RICHARD BROWN: From background, yes.  
6 You got that.

7 MR. TOM VERNON: You're correct, 2006  
8 drilling program was specifically aimed at proving out  
9 bedrock depth. The powerhouse was located in a -- an  
10 area where there is -- there was evidence -- evident  
11 overburden, seismic refraction work.

12 I apologize for the thousand dollar  
13 (\$1,000) words here, but seismic rea -- work indicated  
14 significant depths of overburden at the site, and this  
15 has a -- an impact both in terms of how the spoil  
16 management program would be developed, where the spoil  
17 piles can be and on costs in terms of excavation  
18 quantities of rock versus overburden.

19 And that was really all the Klohn Crippen  
20 study of 2006 was directed at was to basically prove out  
21 volumes, not particularly assess the specifics of the --  
22 of the overburden.

23 But, I think once the, you know, exact  
24 location and depth and excavation requirements for the  
25 powerhouse are set by the design group then, yes,

1 sampling and probably some more drilling and compression  
2 strength tests for rock and lineament mapping and the  
3 full scale of -- of assessment that you need for detail  
4 design would take place. Yes.

5 MR. RICHARD BROWN: Okay. Thank you.

6 I guess the -- another point was that I'm  
7 of the understanding the rock excavated for the canal may  
8 be used for aggregate for concrete crush for rock -- for  
9 road surfaces and -- and other methods like that, and I  
10 think the last time we were here we -- we briefly talked  
11 about, you know, is there a possibility of a -- any  
12 alkali aggregate concerns or are there any other issues  
13 to do with the durability of the rock that might make --  
14 not make it suitable for -- for future use.

15 Has any further thought been given to that  
16 or is that going to be part of the future detailed  
17 investigations?

18 MR. TOM VERNON: Yeah. That's a good  
19 question. I think the DAR probably separates rock use at  
20 Twin Gorges and rock use at Nonacho, and Nonacho Lake  
21 there is the possibility that excavated rock would be  
22 used and crushed for concrete aggregates because we want  
23 to minimize any other sourcing of materials in that -- in  
24 that area.

25 At Twin Gorges, I don't believe that the



1 pretty -- pretty benign. It's -- we're not even -- I  
2 think the borrow pits are all on existing road, so,  
3 there's -- there's really no incremental activity  
4 required.

5 MR. RICHARD BROWN: Okay. Thank you.  
6 Yeah, the next question I have is to do with the  
7 overburden at -- at the Taltson's facility. The bore  
8 holes that were done indicated there was up to 10/16  
9 metres of -- of silty clay and whatnot to be excavated.

10 And then, I guess there's no -- there's  
11 limited use for that material from along the canal and --  
12 and the powerhouse area and it's going to be stockpiled  
13 at a particular location.

14 I just wondered if you could elaborate on  
15 -- on how that stockpile of excess material is going to  
16 be treated in terms of keeping it from eroding and how  
17 it's  
18 re-vegetated and how it will keep out of the canal and  
19 the waterways.

20 MR. TOM VERNON: Yeah, Tom Vernon.  
21 That's a topic I've been thinking about a little bit. I  
22 -- I know that our initial design group considered  
23 basically burying that material below -- beneath rock  
24 because it is the overburden. There is the potential to  
25 put that material into piles and then cover it with

1 excavated rock so that it's not exposed to precipitation  
2 directly.

3                   And there are areas on the site where  
4 that's  
5 -- containment like that is entirely feasible. But I  
6 guess, you know, between the team here and further  
7 discussions, I mean, is that material going to be  
8 valuable for reclamation purposes and if so, then that's  
9 probably not what one wants to do with it.

10                   So I think -- I think that answer needs to  
11 be developed through the design process here and -- and a  
12 fuller understanding on my part anyway what -- what the  
13 best thing to do with -- with that material is.

14                   But it -- it will be a sensitive material  
15 and we do have to take care in where we put it either  
16 temporarily or -- or on a permanent basis for sure, yes.

17                   MR. RICHARD BROWN: Okay, and so it will  
18 be dealt with in further design is my understanding.

19                   The next question I have is to do with the  
20 -- the blast rock that's from the canal and there'll be a  
21 substantial quantity of material. I believe there's a  
22 couple of areas presently thought of -- of where to place  
23 this material.

24                   I was wondering to what height these rock  
25 -- waste rock piles will be built and -- and what

1 inclination the rock will be placed at? Will it be  
2 placed just at an angle of repose or will be placed at a  
3 -- a flatter angle that would ensure that the waste rock  
4 piles are stable if there's seismic event or -- or  
5 whatever?

6 MR. TOM VERNON: Tom Vernon. Yeah. I  
7 believe we said 6 metres for a spoil pile height on this  
8 site, rings a bell to me. There's a fair bit of real  
9 estate available there. I mean, I guess that's some  
10 negotiable aspect of the -- of the overall waste  
11 management and in terms of slopes well they'll have to be  
12 -- they will be left stable.

13 I take your point, seismic, it's not a --  
14 a seismic zone but yeah, it's -- it'll be designed for  
15 that for sure. But we're open to some discussion on  
16 spoil pile height for sure. It's a trade off with area.

17 MR. RICHARD BROWN: I guess on the same  
18 issue, the waste rock could be placed where there's  
19 existing bedrock or could be placed where there's  
20 substantial overburden thickness.

21 And I don't think there's a lot of  
22 information on the -- the strength of the silty clay and  
23 clay silt that's there, so without that information it's  
24 hard to -- to determine whether -- how high you could  
25 place it and how safe it would be.

1                   Will there be further studies to consider  
2     the condition of the overburden and then the whole -- the  
3     whole issue of the waste rock piles and their stability  
4     and safety of both the rock and the overburden?

5                   MR. TOM VERNON:     Yeah, good point.   The -  
6     - the main spoil area alongside the canal is bedrock base  
7     there's no doubt about that.   The other proposed spoil  
8     area down by the powerhouse is on -- is on overburdened  
9     materials.

10                  And that's definitely something that  
11     would require a little bit further design effort, and  
12     like I say, form part of our geo-technical investigation  
13     program to make -- make sure that it can take those loads  
14     and not slump or move.   And, you know, there are  
15     alternatives available as well, if -- if that isn't going  
16     to work down there, so...

17                  MR. RICHARD BROWN :    Okay.   Thank you.   I  
18     have another question about the detailed structural  
19     geology of the -- the Twin Gorges facility, I guess, and  
20     perhaps some of the other areas as well.

21                  My understanding, from reading, is that  
22     there isn't a lot of detail about what was done in terms  
23     of design, the investigations, and thought process done  
24     when the original dam was -- dam and powerhouse was built  
25     in 1960.

1                   And so, therefore, there's somewhat  
2   limited information on -- on the specifics of the geology  
3   of some of these sites.

4                   Reading the Klohn Crippen Dam Safety  
5   Reviews they focus on the -- the specific structure so  
6   much, but they don't really get back to that, sort of,  
7   fundamental issue of whether the sites are really well  
8   suited for dam installation and -- and if there's more  
9   structural geology issues that might be of concern.

10                  So, I was wondering, has someone from Deze  
11   taken a look as a -- as an engineering geologist into the  
12   specific geology of this particular location, or these  
13   dam locations? And if they haven't, will they be  
14   providing that work and providing a professional opinion  
15   on the suitability of those locations for -- for their  
16   development improvement?

17                  MR. TOM VERNON:    Yeah, I guess I noted  
18   that question. Also the work we've had done on our site  
19   has been undertaken by fairly senior geo-technical  
20   engineers from Klohn Crippen, and I've never heard that  
21   issue broached as -- as an issue or something suggested  
22   by them to study.

23                  But, it's -- I take your point. No doubt  
24   that kind of information was amassed in the original  
25   design, which we have very limited information on,



1 correct? So, it's -- it's a fair point.

2 I -- I would just offer at this point to  
3 take it up with our design group, in an early phase here,  
4 and make sure that, you know, there's -- there's total  
5 confidence that -- that there isn't any issues with  
6 overall structural geology on the site. I very much  
7 doubt there is, but I -- you're right, waterfalls are  
8 often in linear features and faults or tier zones. So, I  
9 can commit to having the question investigated.

10

11 --- COMMITMENT NO. 48: Deze Energy to indicate if  
12 someone has taken a look, as  
13 an engineering geologist into  
14 the specific geology of this  
15 particular location, or these  
16 dam locations? And if they  
17 haven't, will they be  
18 providing that work and  
19 providing a professional  
20 opinion on the suitability of  
21 those locations for their  
22 development improvement?

23

24 MR. RICHARD BROWN: All right, that's  
25 great,

1     thanks.  Yeah, I guess I had another doubt here about, is  
2     there any thought to having to do any grouting, or any  
3     rock bolting, or any of those kinds of issues associated  
4     with the powerhouse and these installations?

5                     I may be premature to ask that question,  
6     but if you can answer it, that would be great.

7                     MR. TOM VERNON:  Are you speaking about  
8     the existing one (1), or the new one (1)?

9                     MR. RICHARD BROWN:  The new one (1).

10                    MR. TOM VERNON:  Okay.  I'd offer that  
11     we'll probably be doing some on the old one.

12                    MR. RICHARD BROWN:  Okay.

13                    MR. TOM VERNON:  I can't speak for the  
14     new one (1).  I think there's certainly be an allowance  
15     in the canal rock excavations and support for -- for some  
16     -- for some geo-technical re-enforcement, bolting.

17                    But, I did -- did discuss the other day  
18     with -- we had some engineers onsite that perhaps, you  
19     know, we'll have to augment some of the existing rock  
20     support downstream in the existing power plant.  There's  
21     a very -- there's a very high rock cut there.  Anyway  
22     that's -- that remains to be seen whether it's required,  
23     but it's something on my radar.

24                    MR. RICHARD BROWN:  Okay.  That's great.  
25     So, I guess eventually we'll hear some more on that, but

1 not by the end of October, I assume.

2 I have one (1) question that has more to  
3 do with the environment and it's -- it simply, does the  
4 existing sub-station at Twin Gorges contain PCBs and when  
5 the transformers are removed, is there a PCB management  
6 program necessary there?

7 MR. DAN GRABKE: I know, in my previous  
8 job I worked for the -- the Power Corp, and about ten  
9 (10) years ago I think they declared themselves PCB free.  
10 So that would have been all their facilities, and they  
11 had quite an aggressive effort in -- in flushing all  
12 their transformers, and replacing them with non-PCB  
13 material.

14 MR. RICHARD BROWN: Okay, thanks, Dan.  
15 Back to more of a geo-technical question to do with the  
16 Nonacho Lake control structure. It's understood that  
17 there's three (3) timber under sluices -- under sluices  
18 associated with this facility, and they need to be  
19 decommissioned, but there seems to be very little  
20 information regarding the design and construction of  
21 these -- these under sluices.

22 It, therefore, probably makes it hard to -  
23 - it's indicated it's very hard to inspect these and --  
24 and repair them. As the under sluices will need to be  
25 decommissioned in such a manner that they are permanently

1 sealed, I guess, further information is requested as how  
2 this is actually going to be done, and what assurances  
3 can be given that they will be decommissioned and -- and  
4 not leak, and be safe and not fill for over the long-  
5 term.

6 MR. TOM VERNON: Yes, three (3) under  
7 sluices need to be sealed. It's a topic of some  
8 discussion with the design folks. It's a difficult job,  
9 but I have to rely on further design to -- to give you  
10 details on exactly how -- how that would be accomplished.  
11 Obviously, it would need to be a permanent solution where  
12 there was no chance that the dam was, you know,  
13 compromised by -- by leakage or sub -- substantial  
14 leakage or failure of one (1) of those gates, but I can't  
15 -- can't presuppose exactly what that solution will be.

16 There is an upstream blanket going on --  
17 on the dam as -- as an overall leakage. It could be  
18 enhanced in the area of the sluice gates. The sluice  
19 gates themselves would be permanently closed. We could  
20 possibly concrete or even excavate behind part of the dam  
21 and block the sluices with a -- with a membrane of some  
22 sort. A -- a number of solutions, but I -- I won't  
23 presuppose what the design group will ultimately come up  
24 with.

25

1 (BRIEF PAUSE)

2

3 MR. RICHARD BROWN: I -- I believe they -  
4 - the under sluices are partly timber structures and --  
5 yeah, right. I wondered, if it would be possible to talk  
6 to some of your design people in the -- between now and  
7 the end of the month, and -- and get a better idea of  
8 what it is they intend to do? Yeah, you -- nobody else  
9 is going to answer this one (1).

10 MR. TOM VERNON: I want to make it clear  
11 in some of these -- these topics, I've said, that there  
12 would be further information on, I mean, I didn't say  
13 October 30th. This is -- you're talking -- many of these  
14 questions are detail design questions. We haven't even  
15 started detail design yet.

16 Detail design probably won't advance  
17 significantly until the EA process is largely complete.  
18 If there are very specific details of -- of components  
19 that are key to an EA assessment, I -- we can consider  
20 those. But, I hope you realize I didn't -- I'm not --  
21 I'm saying the work will be done, but I'm -- not by  
22 October 30th. We don't even have a design engineer.

23 MS. TAWANIS TESTART: If I could just  
24 break into the -- the flow here. We don't anticipate  
25 that you would have detailed design -- detailed

1     engineering design completed before the completion of the  
2     environmental assessment but, perhaps, we can come to  
3     some sort of agreement on targets in the sense that this  
4     is what we'll work towards in our detail design to ensure  
5     that there is no leakage of structures; to ensure that,  
6     you know, perhaps there can be commitments made, that  
7     there will be further geotechnical work done on the --  
8     the stability issues that you've raised and things like  
9     that and that's something that -- that maybe you would  
10    consider looking at.

11                   I'm not saying that we will have, you  
12    know, a full engineering design by the end of October,  
13    which I don't think is reasonable but that there'll be  
14    some more thought through the process.

15                   And as these are internal questions, it  
16    doesn't need to be something that's prepared for the  
17    hearing, it can be something that we, as staff, advise  
18    the Review Board on internally. So maybe that's a  
19    conversation we can have a little bit further and in  
20    between. It can be a sidebar discussion with staff and  
21    we'll report on it for the record.

22                   And before you start in on your questions  
23    again, Richard, it's quarter to and our agenda says that  
24    we would be adjourning at this time, so, I'm just  
25    wondering if maybe we can hold some more of your

1 questions in reserve for tomorrow if that's all right --  
2 Monday, sorry, not tomorrow, Day 3.

3 MR. RICHARD BROWN: I'm not going to be  
4 here.

5 MS. TAWANIS TESTART: Oh, you're not  
6 going to be here, that's right. Let me talk to -- do you  
7 have any further questions, Bruce and Aleksey?

8 Okay, well then why don't I talk to you  
9 and we can maybe work something out where we can do this  
10 in writing because I'm sensing that people are -- are  
11 fleeing, so, does that work for you?

12 MR. RICHARD BROWN: Yeah, that's fine. I  
13 think the other questions I had were more to do with --  
14 not to do with the dams but just to do with sort of the  
15 transmission lines and the sort of the maintenance issues  
16 associated with them, so, I think they can be handled by  
17 -- by correspondence.

18 MS. TAWANIS TESTART: Okay, yes. All  
19 right? So with that does anyone else in the room have  
20 anything they'd like to say further before we call it  
21 quits for today? No?

22 Okay, well again, thank you, everyone, for  
23 coming and participating and for those few brave souls  
24 who've remained right to the bitter end today,  
25 congratulations. We'll have a door prize next time and

1 I'll see you all -- well, I guess I won't see some of you  
2 but some of you will be back for Monday. Thanks.

3

4 --- Upon adjourning at 4:46 p.m.

5

6

7

8 Certified Correct,

9

10

11

12

13 -----

14 Wendy Warnock, Ms.

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