1	YUKON UTILITIES BOARD
2	
3	CARMACKS-STEWART TRANSMISSION PROJECT
4	PART 3 REVIEW
5	
6	
7	Held at High Country Inn Convention Centre
8	Whitehorse, Yukon
9	May 16th, 2007
10	Volume 3 - Afternoon Session
11	Page 186 - 297
12	
13	BEFORE BOARD MEMBERS:
14	Wendy Shanks Chairperson
15	Malcolm Florence Vice-Chairperson
16	Richard Hancock Member
17	Jody Woodland Member
18	
19	BOARD COUNSEL:
20	Renee Marx
21	
22	BOARD STAFF:
23	Shawn Allen &
24	Dwayne Ward Technical Consultants
25	Deana Lemke Executive Secretary
26	

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2	APPEARANCES:	
3		
4	Yukon Energy Corporation	John Landry
5		David Morrison
6		Cam Osler
7		
8	Utilities Consumers' Group	Michael Buonaguro
9		
10	The Yukon Electrical Company	
11	Limited	Doug Tenney
12		
13	Peter Percival	Peter Percival
14		
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20		
21	TRANSCRIBER:	
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23	Doug Ayers Reporting Services	
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Preliminary Matters

1	(PROCEEDINGS RESUMED AT 1:27 P.M.
2	ON MAY 16TH, 2007)
3	THE CHAIRPERSON: Good afternoon. Just
4	with respect to some preliminary matters, we will
5	look to adjourn today around 4:30, depending on how
6	the preliminary argument and reply is going, and
7	perhaps aim for a break around 2:45 or three
8	o'clock.
9	Mr. Landry, I understand that you have some
10	comments you would like to make.
11	MR. LANDRY: Thank you,
12	Madam Chair. There is a clarification that
13	Mr. Osler would like to make in relation to an item
14	that he read in the transcript last evening, and it
15	relates to one of the questions from Board counsel,
16	so I will let Mr. Osler and he does have a
17	document, Madam Chair, and I have given a copy to
18	the Registrar, and I will hand out copies here, and
19	I guess it would be the next exhibit, which would
20	be B-9.
21	THE CHAIRPERSON: B-9, so marked.
22	EXHIBIT NO. B-9:
23	SUMMARY OF AISHIHIK THIRD TURBINE
24	ASSESSMENT CASES, UPDATE TO
25	APPENDIX C ANALYSIS
26	MR. OSLER: Yesterday, I was being

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- 1 asked questions by Ms. Marx, at around page 170 and
- 2 following, on the matter of Aishihik third turbine
- 3 and what happens when you bring it on earlier, what
- 4 might happen to the volume of diesel if we now have
- 5 the Minto Mine, what happens if the Carmacks Copper
- 6 Mine comes along, how does it interconnect with the
- 7 Carmacks-Stewart Project; and, later on, a question
- 8 about how it ties into rates. At page 172, lines 8
- 9 to 9, I talked about the earlier analysis we had --
- 10 MR. MORRISON: Madam Chair, Mr. Osler
- is referring to the transcript, so that everybody
- 12 is clear.
- 13 MR. OSLER: Of the transcript, page
- 14 172, lines 8 and 9. I was referencing an answer
- that we had given to YUB-YEC 1-3, and I started
- 16 talking about some numbers, and I talked about the
- 17 example from the earlier analysis that we had done
- in the Resource Plan in Appendix C, about base load
- 19 diesel with the two mines, at that time, on the
- 20 system, and with Aishihik third turbine. And
- 21 I misspoke and said, talked about we had 64 million
- 22 kilowatt hours a year of base load diesel under
- 23 that analysis.
- 24 If you read the actual answer, it is talking
- about of 64 million kilowatt hours of mine load,
- 26 which leads to a certain level of diesel somewhere

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between 37 and 32 million kilowatt hours, depending 1 2 on whether you got Aishihik on. So that is just a 3 correction that I wanted to make sure was made. 4 And later on on page 183 at line 7, I talked about the Aishihik third turbine having a life of 5 50 years, and our analysis had assumed earlier it 6 7 was 65 years. 8 But the point that came out of those questions 9 was that we had done some analysis back in January 10 of 2006, which we keep referring back to, and then 11 saying, but it isn't really reflecting the 12 assumptions we have today. And I know that 13 internally we had done some work, so I pulled it 14 together and put it in this Exhibit B-9, so that 15 everybody in the room is looking at this update to 16 the Appendix C analysis that we did back way back 17 in January of 2006, but using the assumptions we are using today, so that I can stop saying the 18 earlier analysis is all you have got on the record 19 20 but it is not quite accurate. 21 So what this exhibit shows is a summary table similar to what was in Appendix C of the earlier 22 23 Resource Plan analysis. The focus of Appendix C 24 was to assess the Aishihik third turbine, so the 25 project that is being talked about here is the 26 Aishihik third turbine, but it does inform this

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1 hearing in terms of the relationship between that

- 2 project and the Carmacks-Stewart project.
- 3 The summary table talks about four cases, and
- 4 I will come to them in a minute, where the Aishihik
- 5 third turbine would be developed under different
- 6 assumptions but, in each case, it assumes it is
- 7 available by the end of 2009, to answer the
- 8 question I was given yesterday. So that is the
- 9 earliest we could do it, so the assumptions looked
- 10 at the impact starting at the beginning of 2010.
- 11 The first table is looking at it without any
- 12 mines. The second table is looking at it with the
- 13 Minto Mine that we now assume -- with an assumed
- load of 32 million kilowatt hours, 32 and a half,
- rather than the assumed load of only 14 million,
- 16 which was in the earlier appendix in January of
- 17 2006.
- 18 The third table looks at the combination of
- 19 the Aishihik third turbine, Minto at the load
- 20 I just talked about, and the Carmacks Copper Mine
- 21 at the load we assumed back in January 2006,
- 22 roughly, 48 million kilowatt hours. And Table 4
- 23 shows all of those things combined with the
- 24 Carmacks-Stewart Stage Two Project, not the full
- 25 Carmacks-Stewart interconnection.
- 26 All of these things were -- Table 1 is the

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1 equivalent to what was tabled, Section C.2 in the

- 2 initial analysis, Table 3 is the equivalent of
- 3 Section C.3 in the initial analysis, and Table 4 is
- 4 the equivalent of Section C.7 in the initial
- 5 analysis. We never did an analysis, before, in
- 6 that table, of just looking at the Minto Mine
- 7 itself, which is Table 2 here.
- 8 The summary shows the IRR or internal rate of
- 9 return over the lifetime of the project. In these
- 10 cases, they are all brought back to 2005 dollars,
- and all of these dollars in this table are in
- 12 thousands of dollars. So there's pretty good IRR,
- 13 17 and a half percent internal rate of return,
- 14 climbing all the way up to the 60s depending upon
- 15 which case you are looking at.
- The second column looks at ratepayer costs, or
- savings if it is in brackets, net present value
- over the lifetime of the project. The third column
- 19 is just over the 20 years of the Resource Plan. In
- 20 each case, with the new funding of the \$5 million
- 21 by government, which is in this analysis, they are
- 22 all showing positive savings even in 20 years, let
- 23 alone over the full lifetime. Even the base case
- is showing it.
- 25 The second-last column is showing how many
- years until the rate impact is positive; in other

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1 words, you can have a project where the present 2 value of the savings is material over its life, but 3 it takes several years before the costs impact are 4 offset by revenue impacts or benefits. In this 5 case, the benefits are saving diesel. So in the initial analysis of the base case, 6 7 we had shown that it took about eight years before 8 the diesel savings offset the annual costs that 9 went into revenue requirement. Here it says six 10 years because of the reduced costs. If we had 11 Table 2 with a third turbine and 2010 in Minto, it 12 shows it takes two years, and I will talk about 13 that in a minute. If we had Carmacks Copper on the 14 system, you are saving diesel all the way through, 15 and it is beneficial to the ratepayer, in terms of 16 saving costs, right from the get-go. 17 This analysis assumes the Aishihik third turbine cost at \$7 million, escalated at 2 percent 18 a year to 2010, which is 7.7 million, and reduced 19 20 that amount by \$5 million, which is the minimum 21 government contribution announced to date. So the net amount that is in here for the 22 23 costs that would go into rate base, in 2010, is 24 \$2.7 million.

This analysis is consistent with Attachment B

to the PPA application in terms of the assumptions

25

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1 used, in terms of systems analysis, secondary 2 sales, et cetera. In each of these cases, the first table, the 3 4 first page that is shown in landscape like that, in terms of the A table, 1A or 2A or 3A, will show 5 you, in the columns in the details, the base load 6 7 diesel or the peaking diesel requirements, year by 8 year, with and without the Aishihik third turbine. 9 So in the first Table 1A, you see peaking 10 diesel requirements climbing from about 22 megawatt 11 hours, without this project, all the way up to, by 12 2020, in the realm of 5600 megawatt hours. And to 13 refresh everybody's memory, this is the case 14 without any mines, and it says that the surplus on 15 the WAF system will be used up by about 2020; in 16 other words, we will start running base load diesel. We have said it all before, and it is the 17 18 same thing again. So peaking diesel stops being used about 2020 19 20 without any mines, and you start running base load 21 diesel, and it starts off at about 700 megawatt hours and climbs to about 27, 28 by 2025, the end 22

24 Bringing the Aishihik third turbine on has 25 peaking diesel benefits, it reduces the amount of 26 peaking diesel, and eventually, when the peaking

of the Resource Plan period.

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diesel is no longer relevant, it saves 5.4 million

- 2 kilowatt hours a years, on average, of base load
- 3 diesel requirements. All of this we showed
- 4 earlier, it is just updated in terms of the
- 5 economics, because now we are showing the Aishihik
- 6 third turbine only costs 2.7 million in rate base
- 7 rather than 7.7 million.
- 8 That table is the one you should look at for
- 9 each one of the other cases, to see what is
- 10 happening to the diesel requirement. And I am not
- 11 going to walk through it in detail, but when you
- 12 get to the Minto case, you have seen all of this in
- 13 Attachment B to the PPA application, but we have
- some peaking diesel requirements with the mine,
- under Table 2A, but they are reduced materially by
- 16 the Aishihik third turbine.
- We have some base load diesel by 2016, the
- 18 last year of the mine, about 7 million kilowatt
- 19 hours. It is reduced to about 1.8 million kilowatt
- 20 hours by the Aishihik third turbine.
- 21 If you go to Table 3A, and you add in Carmacks
- 22 Copper at the assumption that we used back then,
- 23 base load diesel is being used all of the way
- through the mine's life, and that is the point
- 25 I was making yesterday. And the Aishihik third
- turbine reduces it by 5.4 million kilowatt hours

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1 but there is still 20 million kilowatt hours of

- 2 base load diesel.
- 3 And Table 4A shows the effect of having Stage
- 4 Two of this project that is before us in this
- 5 hearing, and it reduces the base load diesel. The
- 6 base case there is the Carmacks-Stewart Project,
- 7 and the effect of the Aishihik third turbine is
- 8 still having a positive effect because there is
- 9 still base load diesel in the system.
- 10 I would just say, for anybody that reads Table
- 11 4A in detail, it also starts to show combined
- 12 effects of the two systems in later years.
- 13 So that should provide up-to-date information
- on diesel use with the Aishihik third turbine, with
- the Minto Mine, with the Carmacks Copper Mine, and
- with the Carmacks-Stewart connection with the
- 17 Carmacks Copper Mine in place.
- The second table, in each case, shows
- 19 ratepayer impacts, year by year, of the Aishihik
- 20 third turbine. And I said yesterday, I thought
- 21 I wouldn't be surprised if it turns out to be
- 22 positive pretty quickly, and that is what it is
- 23 showing.
- 24 Table 2B is the key one for Stage One
- 25 development of the Carmacks-Stewart project, and it
- shows that, in the first year of the Aishihik third

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turbine, there might be -- the analysis says 1 2 \$106,000 net increase in costs, in a revenue requirement assessment, that would fall to 46,000, 3 4 and then turn around and become savings every year 5 thereafter, so revenue requirement would go down. I would caution anybody from -- this is an 6 7 update to the numbers earlier, but I do not think 8 that that number, those two years, would end up 9 actually being negative, for a couple of reasons: 10 one, I suspect that by the time we are finished all 11 the analysis and the funding, it won't be 2.7 12 million. 13 The second reason is that costs for the 14 project -- the second reason is that our diesel 15 price assumptions, in all of this earlier analysis, 16 were 65 cents a litre. The current price for diesel in the Territory, that we have filed in 17 answer to a question, is in the 80, 88 cents 18 range. So the benefits from diesel saving are 19 20 bigger in practice than this sort of basic analysis 21 shows. 22 So read all of this with caution in that 23 sense, but at least we are using updated numbers 24 that show why Stage Two is important if you have a 25 Carmacks Copper or an extra mine load, and 26 secondly, why the Aishihik third turbine is

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1 economical without waiting, given the government

- 2 money.
- 3 Thank you.
- 4 THE CHAIRPERSON: Thank you, Mr. Osler.
- 5 Do you have any follow-up questions,
- 6 Ms. Marx?
- 7 MS. MARX: No, I do not.
- 8 THE CHAIRPERSON: At this time, I would
- 9 like to give the Board members any opportunity to
- 10 ask any questions of the panel that they might
- 11 have. Are there many questions for them?
- 12 MR. FLORENCE: I have one question.
- 13 YEC PANEL EXAMINED BY THE BOARD:
- 14 Q MR. FLORENCE: In YEC's opening, it
- 15 was stated that the Stage One development is
- 16 projected to cost 22.6 million, and that all of
- these projected costs are to be paid by parties
- 18 other than Yukon residential and commercial
- 19 ratepayers.
- 20 Could Yukon Energy confirm the Board's
- 21 understanding that Yukon Energy will not be
- 22 proceeding with Stage One if the project costs are
- 23 such that there is a net cost to
- 24 residential/commercial ratepayers?
- 25 A MR. MORRISON: Madam Chair, I just
- 26 wanted to confer around the choice of words. And

- 1 Mr. Florence's question relates to -- if I heard it
- 2 collectively, is, if there is any cost to
- 3 ratepayers. And I believe what the terminology
- 4 that we have used prior to this is "no adverse
- 5 impact to ratepayers", and I want to be clear about
- 6 the difference.
- 7 If the project costs, using the \$22.6 million,
- 8 go from -- let's just say they go up by a million
- 9 dollars, to 23, as mentioned yesterday in response
- 10 to another question, we would come back to the
- 11 Board at an appropriate time, in a GRA or a revenue
- 12 requirement hearing, and ask for that million
- dollars to be put into rates. In other words, into
- 14 our costs. Does that mean there is an adverse
- impact to ratepayers, no, because we have
- 16 substantially more revenue coming in than that
- 17 cost.
- In regulatory principles, there is a balance
- 19 of risk. How much risk should the ratepayer take
- in regards to potential revenues, and how much
- 21 potential revenues are there available. In this
- 22 case, there is no ratepayer contribution until we
- reach a point that is greater than \$22.6 million.
- 24 So that the million dollars, let's say if it
- 25 happens to be this, comes back and goes into rates
- over time, the way that it is calculated in the

- 1 revenue requirement would be such a minuscule
- amount as compared to the revenue we are getting,
- of three-and-a-half to 4 million dollars a year.
- 4 So what we have consistently said is, there will be
- 5 no adverse effect to ratepayers. So that my point
- 6 here being that the benefits will be larger than
- 7 any costs. I do not know if Mr. Osler wants to add
- 8 anything?
- 9 A MR. OSLER: That is the essence of
- 10 the point. The answer is that any increase beyond
- 11 the government funding of up to 10 million, so 9.9,
- if it is more than \$100,000, according to what we
- now have, the rest of it would have to be borne by
- 14 the utility. The utility would have to come before
- the Board, when it has its costs, in the next rate
- 16 application and apply to have it included in
- 17 revenue requirement. Otherwise we would be saying
- 18 that the project couldn't go forward if it had
- 19 anything like a \$100,000 cost increase or something
- over the midpoint cost estimate, and that wouldn't
- 21 be the proposition that we are putting out.
- The key thing is that it doesn't have an
- 23 adverse effect on ratepayers, and our PPA
- 24 application, way back before we had \$10 million,
- our submission was that it would not have an
- 26 adverse effect on ratepayers. It would be

1 beneficial during the time period that the mine was

- 2 operating and, when the mine was finished, the mine
- 3 revenue account would pay off the balance of the
- 4 capital cost. The government has paid off the
- 5 balance of the capital costs up to 10 million,
- 6 anyway, up front. So it is still a good
- 7 proposition from the point of view of ratepayers,
- 8 it is just a lot better.
- 9 And secondly, the risks of the financing, at
- 10 least, are now being borne by the government
- 11 through the Yukon Development Corporation, which
- wasn't in the initial application. So we are
- 13 saying the same thing, and it is a very important
- 14 point.
- 15 A MR. MORRISON: If I may, just an added
- 16 point. I think it is very important here, I am
- 17 concerned that we are getting -- we, and I do not
- mean we, everybody in the room, we, Yukon
- 19 Electric (sic), are getting ourselves into a
- 20 situation where we -- it's almost like if there is
- any cost to ratepayers, we can't build the project,
- and ratepayers have to assume some risk.
- 23 As I said, it is a balance. We have to make
- sure that the balance, and as much of the risk as
- possible, is mitigated, but it is really important,
- from our perspective, to approach this from the

- 1 most practical point of view, and I am going to
- 2 divert a little bit to the Aishihik third turbine
- 3 project.
- 4 As you have just seen on the tables, the
- 5 Aishihik third turbine project would be a -- over
- 6 time, is beneficial to ratepayers. We can't -- I
- 7 don't think -- I think we would be -- it would be
- 8 very limiting for us, if we were building
- 9 infrastructure projects or capacity or generation
- 10 projects, where we had to have all of the costs
- 11 covered so that ratepayers had no risk.
- 12 I think there is a real fundamental issue
- 13 there with that. And I hope, as Mr. Osler pointed
- out, everyone understands clearly that this
- project, even with a \$10 million ratepayer
- investment, was a good investment for ratepayers.
- 17 Q Just for clarification, so there is the possibility
- that costs in excess of \$22.6 million would be paid
- by residential ratepayers, retail ratepayers?
- 20 A Yes, I believe there is, and as I said earlier,
- 21 that would be subject to us getting approval from
- 22 the Board to add that to our revenue requirement.
- 23 Q Thank you. I just wanted to clarify your opening,
- 24 because it seemed fairly definite in your opening,
- 25 and I didn't think it wasn't actually quite that
- definite.

- 1 Q THE CHAIRPERSON: I have a question.
- 2 Mr. Morrison, based on everything that you know to
- date, at what point does the project no longer
- 4 become financially viable?
- 5 A MR. MORRISON: I would have to do a
- 6 calculation of that, but it's quite -- well, it's
- 7 quite a bit more than what the current cost is, and
- 8 I don't have the number in front of me, I guess is
- 9 what I am saying to you. But at some point there
- is a crossover, is what you are asking, where is
- 11 that crossover point, and I don't have that number
- 12 at my fingertips, but it's several million dollars
- higher than 22.6, and "several" would be -- I don't
- even know if I should guess, but it has to be 10.
- 15 It has to be more than 10.
- 16 A MR. OSLER: If the Board is looking for
- 17 a number that is in the evidence, that isn't quite
- 18 the same as trying to answer the question, but it's
- 19 20 million -- \$19.7 million, in Schedule 1, is the
- 20 present value of the benefits over the costs. So
- if you just did the math, the costs have got to go
- up a long way before they don't match the benefits
- 23 that are in this table.
- 24 Whether anybody would do the project -- at
- 25 what point would the Board of Directors say, no, if
- there are any contractors out there, this is not an

- 1 invitation to increase one's costs, and that is a
- 2 serious concern in terms of trying to discuss at
- 3 what point would the Board of Directors say, no, we
- 4 are not proceeding with this project.
- 5 So we have answered -- mathematically, I can
- 6 give you a number from a table. It is not the same
- 7 thing as saying at what point would the Board of
- 8 Directors say we are not prepared to go forward
- 9 with the project. It would be somewhat less than
- 10 that number, that would give serious concerns,
- obviously.
- 12 Q So I assume that balancing the number would be the
- 13 financial viability with concerns to some net cost
- 14 to ratepayer?
- 15 A MR. MORRISON: Yes, that would be
- 16 right.
- 17 THE CHAIRPERSON: Is there any other
- inquiries from the Board.
- 19 Q MR. WOODLAND: I have some questions
- 20 regarding the long-term benefits of connecting the
- 21 grids, the WAF and MD grids.
- 22 In response to some questions from Ms. Marx
- 23 yesterday, Mr. Morrison mentioned benefits such as
- 24 increased flexibility in terms of choices as to
- where to generate and how to transmit power, and I
- think you mentioned, very briefly, general economic

- 1 benefits to other stakeholders along the corridor.
- 2 And what I am trying to do is understand if there
- 3 has been any work done to try to estimate those, in
- 4 a quantified way, on an a stand-alone basis?
- 5 A MR. MORRISON: Thank you.
- 6 Madam Chair, no, that's what I was saying
- 7 yesterday, we haven't tried to quantify those. Our
- 8 difficulty is trying to find a scenario that we can
- 9 work with. We know a lot of different things, but
- 10 the stages of that information is, in my
- 11 estimation, very preliminary. So it's difficult to
- 12 kind of sit down and say, well, you know, there is
- 13 some relevance.
- 14 What I was trying -- the point I was trying to
- 15 convey yesterday, and it's a bit of maybe my
- 16 personal enthusiasm for trying to look forward a
- 17 little more than we have been, is that there are
- 18 benefits that are there. I can't come back to you
- today and say, okay, what's the benefit of the
- 20 utility being able to connect a hydro project at
- 21 Drury Creek to serve customers in Mayo? Well, it's
- 22 a huge benefit if that's the best project that
- 23 I have got. And I don't know how to quantify
- 24 whether or not it's the best project I have at the
- 25 moment because I haven't done that analysis. So
- I haven't done that comparative, I guess is what I

- 1 am saying.
- 2 Q I quess I wasn't so much interested in comparisons
- 3 to other possible projects, as whether or not you
- 4 had, say, looked at scenarios where you projected
- 5 the possibility for load, and then the different
- 6 possibilities for how you would generate and
- 7 deliver that load, and then what the difference in
- 8 capital and operating costs would be under a
- 9 scenario where the grids were already connected as
- 10 opposed to ones where they weren't. Because you
- 11 mentioned yesterday that, you know, if your load
- 12 was localized in the north and you basically end up
- having to build diesel generating power in order to
- 14 deliver that load.
- 15 A Thank you for that clarification. No, we haven't
- 16 done that.
- 17 Q Okay.
- 18 A And part of our difficulty has been trying to get
- information that I believe has enough substance.
- You know, we have a lot -- you know, there's a lot
- of things going on out there, but how much
- 22 substance they have is really difficult. And, you
- 23 know, it's hard for us to kind of nail down some of
- this information. We really haven't done very much
- on that.
- 26 Q I think I can appreciate your position. I come

from the Telecom world where, in the work that we 1 2 do, there are a lot of projects and builds that we 3 would like to undertake that have long-term and 4 tangible benefits, but we end up not being able to do them when we might like to because of that, that 5 lack of hard economic justification. 6 7 So just finally then, one thing I wanted to be 8 clear on, it strikes me from the map that the 9 Carmacks Copper Mine could be added to the grid, 10 presuming Stage One proceeds, without any need to 11 move forward on Stage Two; is that correct? 12 A Logistically it could be, yes, on a straight 13 logistics basis. But where we are coming back to, 14 and part of the reason for needing to get to 15 Stage Two is related to this issue that we just 16 talked about on Aishihik, we need to maximize the 17 use of our hydro resource. And the benefit to completing Stage Two, when we have Carmacks Copper, 18 is that there is surplus hydro in the Mayo-Dawson 19 20 system that can be moved down to help supply the 21 load to Carmacks Copper, on a hydro-related basis versus a mix of hydro and diesel. That's the 22 23 benefit. And that's the primary benefit of 24 finishing Stage Two along with -- that's why it's 25 linked to Carmacks Copper. Because the loads are

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getting to a point, as you heard earlier, that we

- 1 are going to be burning diesel. So if we can
- 2 maximize that use of the hydro resource and move it
- 3 back down, and that is in the calculations that we
- 4 did through the Resource Plan and the tables that
- 5 we presented, to show the benefit of that, and how
- 6 many gigawatt hours -- you are not going to get it
- 7 out of this that we have shown you today, but it
- 8 certainly is in the Resource Plan, and if the Board
- 9 would like a little further clarification around
- 10 that, we can point you to some of these
- 11 references. But that's part of the calculation we
- 12 did on the benefits of Stage One and Stage Two,
- showing that there's a very significant benefit of
- those, and I think it's 6 gigawatt hours -- 5 or 6,
- 15 from Mayo back down?
- 16 A MR. OSLER: 14.
- 17 A MR. MORRISON: 14 gigawatt hours of
- 18 potential hydro that we could move back down. Now,
- 19 that assumes that nothing happens at Keno Hill.
- 20 And this is our dilemma in trying to get people to
- 21 give us concrete information on what their plans
- 22 are. So we are trying to get that information, but
- 23 it's really pretty difficult because those people
- 24 won't make any commitments in terms of what they
- 25 are doing either. So we see that that is a very
- 26 substantive benefit. We have outlined that

- 1 information to the Board in other presentations,
- 2 but that's why we want to link it. And you are
- 3 right, if we just wanted to hook them to the grid
- 4 and turn some hydro on and turn some diesel on, we
- 5 could do that, but we need that extra diesel.
- 6 A MR. OSLER: Just maybe give you one
- 7 other image of the same thing. The objective of
- 8 linking the two grids has been around for a long
- 9 time. The issue of how to finance it and do it, I
- 10 think you can appreciate, given your background,
- 11 that it is quite challenging. Because if there is
- 12 surplus on both grids, there's no need to build a
- line to connect the two surpluses. And if there's
- 14 diesel on both grids, we don't need the connection
- in order to move diesel back and forth. So in
- order to meet this challenge, we have to come up
- 17 with some strategic opportunities that work. And
- 18 that's what everybody has been racking their brains
- on for the last couple of years.
- The Minto Mine really helps. It gets us a
- 21 definition of a Stage One. The Northern Tutchone
- insist that we go to Pelly, so, fine, we get to go
- 23 to Pelly as part of Stage One, and we get it paid
- for, which is nice.
- 25 Carmacks Copper certainly creates an
- opportunity to complete Stage Two at no long-term

1 costs to ratepayers, because Carmacks Copper, 2 according to our rules, have to put up a certain amount of money, 8 and a half million, just like 3 4 Minto did, and the government initially, in terms of a broad commitment, without saying they've 5 committed to any specific numbers, has said they 6 7 will be at the table for Stage Two if there's 8 industry there, so there would be no long-term cost 9 to ratepayers at least under midpoint cost 10 estimates. 11 So that's one scenario that has been 12 identified, that is not completely ridiculous, that 13 could get the job done, get the thing paid for, and 14 get the connection done. Once the connection is 15 done, everybody knows what the long-term benefits 16 are to the people in the area and to both systems and to long-term planning. But how do you get it 17 paid for so it isn't hanging over your head? 18 There probably are other scenarios that, if 19 20 Carmacks Copper didn't come along but United 21 Keno Hill or other developments happened up there, 22 and they needed some of the surplus hydro from the 23 WAF system, we could perhaps see that. But once 24 the surplus hydro vanishes, the opportunities change or the difficulty of doing the job gets more 25 26 difficult. So we have about ten years to come up

- 1 with one or more strategies that allow you to go
- 2 through Stage Two. But looking at the last several
- 3 weeks and months, I am happy we have got Stage One
- 4 where it's at.
- 5 A MR. MORRISON: If I might take another
- 6 minute, because all of this planning and trying to
- 7 be strategic is a very difficult issue for, as
- 8 I said yesterday, for regulated utilities. Trying
- 9 to balance this, how much money can I invest on
- 10 behalf of the ratepayer, but making sure that
- 11 I have customers at the end of that that won't
- 12 provide -- you know, so there won't be any
- 13 adverse -- you know, there won't be a substantial
- 14 adverse impact on ratepayers? We are at a
- 15 crossover point here, that we are about the end of
- 16 the line in terms of maximizing the resources that
- 17 we have, and we are going to have to spend some
- 18 money. The risk, and it's difficult, this risk, is
- 19 Minto is the perfect customer. From a utility
- 20 point of view, we couldn't get a better customer.
- 21 They had permits, so we knew they could mine. They
- got financing, so we knew they had the money to
- 23 mine. And they got started, they started, and will
- 24 be in production ahead of us being there. So we
- know that there's a solid customer there.
- 26 Everything else is in a different stage of

1	development. And we said to Minto that certain
2	things had to be in place before we considered
3	them that we would consider having a serious
4	discussion with them. Because how do I have
5	serious discussion with somebody I don't know
6	whether they are going to mine or they are not
7	going to mine? I have to spend money in order to
8	get prepared and get plans developed, and permits
9	and all of that kind of stuff. So I need some
10	sense of seriousness, something substantive that
11	I can hold on to if I am going to spend money,
12	because I am going to have to come here and justify
13	to you why I have spent that money. And it can be
14	a very difficult situation when we are like this.
14	a very difficult situation when we are like this. We said to Western Copper, we don't even want
15	We said to Western Copper, we don't even want
15 16	We said to Western Copper, we don't even want to talk until you file a YESAB application. File a
15 16 17	We said to Western Copper, we don't even want to talk until you file a YESAB application. File a YESAB application, and we will come and talk to
15 16 17 18	We said to Western Copper, we don't even want to talk until you file a YESAB application. File a YESAB application, and we will come and talk to you, because now we know you are serious. You are
15 16 17 18 19	We said to Western Copper, we don't even want to talk until you file a YESAB application. File a YESAB application, and we will come and talk to you, because now we know you are serious. You are at least spending some money. You are going to
15 16 17 18 19	We said to Western Copper, we don't even want to talk until you file a YESAB application. File a YESAB application, and we will come and talk to you, because now we know you are serious. You are at least spending some money. You are going to permit this mine. We have used those kind of
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- 1 system, more than what we are getting now.
- 2 Q Would it be fair to say, then, that the need for
- 3 another industrial or mine-type load, in order to
- 4 help justify Stage Two, its location isn't really
- 5 that important; basically, as long as it's close to
- 6 somewhere on around one of the grids --
- 7 A Grids.
- 8 Q -- then that would be part of your building a case
- 9 to justify Stage Two transmission, the
- 10 interconnection?
- 11 A That would be absolutely correct, yes.
- 12 A MR. OSLER: The only caveat I would say
- is that it's sure nice if they are somewhere along
- 14 the line so we can get a justification for the
- extra capital contribution. The further away they
- are, we may see system benefits that would help
- swing it while we still have some surplus, but we
- 18 may have more and more difficulty getting any
- 19 capital contribution out of the customer. So that
- 20 would be the only material difference that I would
- 21 make.
- 22 And, secondly, it takes -- we have a time
- 23 window here, I am suggesting, so it's not like
- somebody is going to come along that we don't even
- 25 know about, but they have to come along to a
- 26 certain level that's further along than most of

- 1 them are.
- 2 Q Thank you.
- 3 Q THE CHAIRPERSON: I just have one further
- 4 question. In the 20-Year Resource Plan, I remember
- 5 a reference to discussions that you had had, I
- 6 think at that time, with United Keno Hill.
- 7 I wonder if you've had any discussions since then?
- 8 A MR. MORRISON: No. I haven't had any
- 9 further discussions with them, but only to be in
- 10 touch with them to say we would really like to
- 11 have -- we would like to get an update, we would
- 12 like to know where they are in their plans. This
- is the Alexco Group that have the Keno Hill Mine.
- 14 And I can only tell you that they called and said
- 15 they wanted to have a meeting yesterday, and I said
- I was a little busy. But we are trying to schedule
- something with them, but nothing on an update.
- 18 Q Your scheduling is certainly interesting.
- 19 A Yes, it is.
- 20 Q I don't know who does it for you.
- 21 THE CHAIRPERSON: I think that's the
- 22 extent of our questioning.
- Mr. Landry, would you have any re-examination
- 24 you would like to do?
- 25 MR. LANDRY: None for me,
- thank you.

- 1 THE CHAIRPERSON: Are there any other
- 2 matters anybody would like to bring before the
- 3 Board before we move on to the preliminary oral
- 4 argument and reply?
- 5 There doesn't appear to be any other matters.
- I think we will push on, and put the break off
- 7 until later. Mr. Landry, would you like to proceed
- 8 with your -- I have asked parties to try and keep
- 9 their presentations within the 20-minute time frame
- if possible.
- 11 MR. LANDRY: Thank you, Madam
- 12 Chair, I will try to keep it within the
- 13 20-minute time frame. I will do my best. I
- 14 cannot promise.
- But, Madam Chair, what I would like to do, if
- possible, would be to have the Members of the Board
- 17 have before them two documents that I will be
- 18 referring to. Both should be relatively close at
- 19 hand. One is the opening statement of Yukon
- 20 Energy, which is Exhibit B-6, and the other is the
- 21 terms of reference that we have talked about in
- 22 relation to this Part 3 review.
- 23 THE CHAIRPERSON: You can proceed,
- 24 please.
- 25 MR. LANDRY: Thank you, Madam
- 26 Chair.

1	VEC ODAL CUDMICCIONS DV MD LANDDV
1	YEC ORAL SUBMISSIONS BY MR. LANDRY:
2	MR. LANDRY: Now, Madam Chair, the
3	structure of my argument will basically follow
4	three parts. The first part will be effectively
5	some preliminary observations, and I just want to
6	make a couple of overall points regarding the
7	nature of the review that this project has seen,
8	and why, given the new amended PPA, and the recent
9	announcements by government, it's such as
10	extraordinarily good project for Yukon ratepayers
11	and Yukon generally.
12	The second part of my argument will go to
13	Section 5 of the Terms of Reference, which you
14	referred to, Madam Chair, in your opening statement
15	yesterday, and I will go through the items listed
16	there, and provide some of YEC's positions in
17	relation to those specific items in Section 5 of
18	the Terms of Reference.
19	And then finally, I will quickly review the
20	amended PPA and the recent announcements in a way
21	which will demonstrate how the parties responded to
22	the Board Order 2007-5, which really will
23	encapsulate, in my view, issues arising out of
24	Section 4 of the terms of reference. So that's
25	effectively the structure of my oral argument.
26	I would like to begin by stating something

1	which is abundantly clear, from a regulatory
2	perspective, in terms of the scrutiny with which
3	the Carmacks-Stewart Project has received before
4	you as a regulator. Once the Part 3 is completed,
5	this project, and probably more specifically Stage
6	One, will have been reviewed more extensively by
7	the Board than any other capital project ever
8	committed in the Yukon, and that is in a
9	jurisdiction where there is no general legal
10	requirement, outside of government direction, for a
11	project to receive endorsement of the regulator
12	before construction.
13	For those people who work in other
14	jurisdictions or other regulatory forums, where
15	certificates of public convenience and necessity
16	are required, such as British Columbia, in my
17	experience, this project, through the three
18	regulatory reviews, has received more scrutiny than
19	any project that I am aware of.
20	It's in that context that it's important to
21	emphasize that many of the issues relevant to this
22	review, and that will be relevant to the report the
23	Board is required to make to government, have
24	already been extensively canvassed and decided upor
25	by the Board. There is no need to redo the work,
26	that has been done, for the purposes of your

1	report.
2	Now, if we go back to where the odyssey began
3	in the Resource Plan review, all of the relevant
4	issues relating to the Carmacks-Stewart Project,
5	including need, benefits, risks, and costs, were
6	debated extensively through a comprehensive IR
7	process, a full public hearing, and lengthy final
8	argument. As a result of that, the Board
9	recommended, in effect, that Stage One of the
10	Carmacks-Stewart Project proceed as long as an
11	appropriate PPA with Minto could be negotiated.
12	Now, the appropriateness of the PPA with Minto
13	was then extensively dealt with in the PPA
14	application that was brought forward by Yukon
15	Energy. And once again, after that extensive
16	review, although the Board did not approve the
17	proposed PPA, it set out, in very clear terms, the
18	guidelines of what the PPA would have to look like
19	if it was to be approved.
20	Now, the witnesses for Yukon Energy have gone
21	through, in some detail, how the parties responded
22	to the directions of the Board, and I will come
23	back to them in more detail in the third part of my
24	argument, but safe it to say, Yukon Energy believes
25	that the amended PPA, and recent announcements,
26	deal with all material issues raised by the Board,

and therefore there are no remaining impediments to

- 2 the endorsement of the project by the Board.
- Now, in a preliminary way it's also important
- 4 to keep in mind a couple of fundamental realities,
- one of which was discussed today in response to
- 6 questions from the Board. The first one is that
- 7 the Minto Mine is going ahead with or without
- 8 interconnection. And without interconnection, it
- 9 will run on diesel at a level that exceeds the
- 10 amount of diesel now being used by both utilities
- in the Yukon. This is a one-time opportunity which
- is not waiting for Yukon Energy to interconnect.
- 13 And the second fundamental reality is, given
- 14 the latest announcements and the amended PPA, at
- 15 forecast costs, there are no capital costs that
- will be borne by ratepayers. There is absolutely
- 17 no material risk left.
- 18 At a simple level, the project will bring 3 to
- 19 \$4 million in additional revenues with absolutely
- 20 no capital costs and insignificant operating
- 21 costs. From a regulatory perspective, in my
- 22 experience, I have never seen such an opportunity.
- 23 From a ratepayers' perspective, it is understated
- 24 to say it is an incredible opportunity that should
- 25 not be missed.
- Now, Madam Chair, I would like to go to

1	Section 5 of the Terms of Reference if you have
2	that before you, and I am going to actually go
3	through each of the items listed there, and it
4	might be a little clipped, and there might be some
5	overlap, but for the purposes of your report, in my
6	submission, it's better that I provide some
7	comments under each heading. So I apologize for
8	some of the overlap that may occur, but it's the
9	nature of the items that are listed in the Terms of
10	Reference.
11	And the first one, obviously, is sub item (a)
12	on Section 5, which deals effectively with the need
13	and the load forecast, et cetera. And there are
14	certain specific items that are asked to be dealt
15	with, and I will come to the specific items, but
16	just as an overview, here are a few of my
17	comments.
18	At its essence, the Carmacks-Stewart Project
19	is an opportunity project being pursued to displace
20	diesel generation at Pelly Crossing and the Minto
21	Mine using surplus WAF hydro. And thereby, it
22	provides both short-term and long-term ratepayer
23	benefits. As we know, the project is proceeding in
24	two stages; each stage will be pursued only when
25	and if positive rate benefits can be secured. And
26	these rate benefits are obviously greatly enhanced

by commitments of the Yukon Government in their 1 2 commitment to funding in each stage of the 3 project. 4 Now, Stage One obviously, as I have indicated, 5 Madam Chair, given the amended PPA and the latest announcements of the issues raised by YUB in its 6 7 recent decision on the PPA application, we say it 8 have now been resolved, and therefore there is no 9 reason not to support Stage One of the project. 10 Stage Two of the project, which will proceed 11 when justified by additional industrial customer 12 loads, will complete the connection of the two 13 grids, as you know, and provide long-term benefits 14 and better ongoing utilization of available 15 hydroelectric facilities; it will encourage 16 economic development along the corridor; and 17 enhance/overhaul Yukon power system reliability and flexibility. 18 Now, in relation to Stage One, the Resource 19 20 Plan hearing provided information which confirmed 21 the technical, economic and financial feasibility of proceeding with Stage One, and, of course, that 22 23 was subject to the negotiation of a PPA. And the 24 only issue raised by the Board in the review of 25 Stage One at that time was the PPA issue. No other 26 outstanding issues were identified as regards to

- 1 need, technical, economic or financial feasibility,
- 2 or with regard to options or risks.
- Now, in terms of the benefits, again,
- 4 realizing that we are under section (a) of
- 5 Section 5 of the Terms of Reference, not only will
- 6 Stage One materially utilize surplus hydro, it will
- 7 not adversely affect the current WAF system's
- 8 ability to service non-industrial loads. And as
- 9 I have indicated a couple of times, and as you have
- 10 heard in evidence, it will significantly reduce the
- 11 amount of diesel generated in the Yukon by
- 12 approximately 34 gigawatt hours, a very substantial
- amount. And as reviewed even as late as today by
- the YEC witnesses, benefits arising from the
- 15 project also include tax and royalties for
- 16 government, and employment and other business
- opportunities for local businesses.
- 18 And I would just note for the record,
- 19 Madam Chair, and for your consideration, that
- 20 detailed information on job and business
- 21 opportunities relating to the project is provided
- 22 in the project proposal submission to the YESAB
- 23 committee and dated September 20th, 2006,
- Chapter 5, Sections 5.8 and 5.9, and Chapter 8,
- 25 Section 8.3.2, all of which has been made part of
- the record in this proceeding.

1	And as we indicated, obviously Stage One
2	provides very substantial financial benefits which
3	has been estimated to be approximately \$250,000 a
4	month, and that obviously is an important
5	consideration when looking at the timing that we
6	have all discussed ad nauseam at these hearings and
7	these reviews.
8	Going to the second item listed in Section 5,
9	Madam Chair, which is the item (b), which is the
10	capability of the existing transmission and
11	generation facilities to provide electrical power
12	generation to meet the forecast load requirements,
13	taking into account the new planning criteria as
14	proposed by the YEC and recommended by the YUB.
15	Now, as noted in YEC's application, the full
16	analysis of the expected capacity and load
17	requirements, and that means demand and energy, of
18	the Yukon systems, under the various load scenarios
19	is discussed, for the record, in Chapters 4 and 5
20	of the Resource Plan, and these were fully reviewed
21	by the YUB at that time.
22	The impact that the Minto Mine would have on
23	the WAF system was discussed in, again for the
24	record, Attachment (b) of the PPA application, and
25	that is that this mine would use up the surplus
26	energy on the WAF grid and is forecast to require,

1	in 2015 or '16, 1.8 gigawatt hours of base load
2	diesel under 32.5 gigawatt hour per year Minto
3	sales and 6.6 gigawatt hour per year under the 42
4	gigawatt hour per year Minto sales.
5	Now, Chapter 3 of the Resource Plan, again
6	which was made part of the record, reviewed the
7	capability of the key Yukon assets to meet capacity
8	and energy requirements of the various systems, and
9	indicated that the generating assets and service
10	are required to meet both capacity and energy of
11	the individual systems, that would be both WAF and
12	Mayo-Dawson.
13	Now the capacity planning criteria adopted by
14	YEC, and I would say in absence of the inclusion of
15	industrial loads and calculation of the LOLE, which
16	I will come to in a moment, which was supported in
17	the Board's January 2007 report, provides that the
18	WAF and Mayo-Dawson systems each will plan not to
19	exceed a loss of load expectation of 2 hours per
20	year. In Yukon Energy's case, they did include
21	industrial loads in that calculation.
22	In addition, each grid system will be planned
23	to be able to carry the forecast peak winter loads
24	under the largest single contingency, known as the
25	N-1, that you have heard about. The N-1 criteria
26	determines system capability assuming the loss of

1	the system's single largest generating or
2	transmission related generation source.
3	Now, in the Resource Plan hearing, Yukon
4	Energy indicated, with the new criteria, there was
5	a need to have WAF generation peak winter capacity
6	additions occurring in 2007. However, as long as
7	the WAF system with the current Aishihik line,
8	i.e., no twinning of the line, can meet the
9	wholesale and retail peak under the N-1 criteria,
10	up to 6 to 7 megawatts of major industrial loads
11	can be served without driving new generation
12	investment for capacity reasons. And also in the
13	Resource Plan, in terms of energy, it was confirmed
14	that the forecast WAF and Mayo-Dawson energy
15	requirements can be supplied from existing
16	facilities for the next 20 years under each of the
17	four load cases.
18	And using 2005 as a base, surplus hydro
19	generation under normal flow conditions was
20	approximated at 90 gigawatt hours on WAF and 17
21	gigawatt hours on the Mayo-Dawson system. And
22	I repeat these items, although it's a bit lengthy,
23	really to respond to the specific item that was
24	raised in the Terms of Reference under item 5(b).
25	Now, there is three items listed under 5(b) of
26	the Terms of Reference that were specifically to be

dealt with by the Board in its report, and I will 1 2 go through each of those. 3 The first one is the implications of the 4 relationship between Stage One of the Carmacks-Stewart Project, and the need for and 5 timing of the Aishihik third turbine. Now, we went 6 7 through this a little bit in quite a bit detail 8 actually today, but I would like to repeat some of 9 the items that we have gone through. First of all, obviously, the Aishihik third 10 11 turbine is an opportunity project being pursued to 12 displace diesel generation and provide near-term 13 and long-term ratepayer benefits. It's an economic 14 opportunity project, not a capacity-driven project, 15 and reflects ongoing diesel displacement benefits 16 both in the short term -- and you heard the 17 short-term being peaking diesel use -- and in the long-term when the surplus hydro generation is no 18 longer available. 19 20 Now, we have talked a little bit about the 21 ability to accelerate that project, including as a 22 result of the government funding, and I won't go 23 through that in any great detail. 24 There was a debate, both in the Resource Plan 25 and here, in terms of timing, and I would only 26 point out that Part 3 of the application, and

that's, more specifically again for the record, 1 2 page 15, states that bringing the Aishihik third turbine on earlier, that is earlier than the 2013, 3 4 in conjunction with Stage One of the Carmacks-Stewart Project, results in less diesel 5 usage and slightly increased savings. And those 6 7 things are outlined there, including, again for the 8 record, footnote 23, where it deals with this 9 issue. The issues surrounding timing, that we had 10 11 before the announcement of the government funding 12 under the eco-trust for the Aishihik third turbine, 13 have now basically been, to a certain extent, set 14 aside. The funding will allow, in Yukon Energy's 15 submission, and in the evidence that you had 16 presented before you, allow the project to proceed 17 basically as soon as reasonably possible. That's what the numbers are showing in the numbers that 18 Mr. Osler reviewed earlier today. 19 20 Now, the second item, under Section 5 of the 21 Terms of Reference, that specifically had to be dealt with was the implications of the relationship 22 23 between Stage One of the Carmacks-Stewart Project 24 and the need and timing for Stage Two. Obviously Stage One provides over half of the full 25

development of the Carmacks-Stewart full project

Submissions (Landry)

and marks a major step, obviously, towards 2 interconnection. 3 But, again, Stage One does not necessitate or 4 set the timing for Stage Two of the project, as has 5 been talked about at some length here. The opportunity, as I said earlier, or need for the 6 7 timing of Stage Two, will be determined by the 8 timing, as we just went through, of an additional new industrial and development and/or government 9 10 funding, so that there is no adverse ratepayer 11 impact that comes from Stage Two. 12 The Board actually agreed with Yukon Energy's 13 strategy in its Resource Plan report, and I quote 14 from that report where it said, and I quote: "With 15 respect to the second stage of the Carmacks-Stewart 16 line, the Board concurs with YEC's strategy not to 17 pursue this project unless there is a firm commitment to connect the Carmacks Copper Mine if 18 and when the mine is built, and under the same 19 20 condition that ratepayers will not be adversely 21 affected." 22 Now, the application references the Carmacks 23 Copper Mine, as we have talked about earlier, and 24 the contributions expected from that, and I would note, for the record, the information provided in 25 26 that regard. And, first of all, the Board report,

1	at page 32, is where the Carmacks-Stewart Project
2	was dealt with, at Stage Two, and it's also
3	reviewed at page 14 of the Part 3 application.
4	In Yukon Energy's view, the Board should
5	continue to consider this information that is
6	provided in the application when assessing the
7	terms and conditions to be recommended to the
8	Minister for proceeding with Stage Two.
9	Now, going to the third item that is
10	referenced in Section 5, which is the implications
11	of the ongoing use of diesel generation at Minto
12	and other locations that could receive grid service
13	from Stage One of the project, just a couple of
14	comments under that. I have reviewed with you,
15	earlier, the reductions in diesel generation that
16	would occur once Stage One is completed in relation
17	to both the Minto Mine and Pelly Crossing, and that
18	is approximately, as I said earlier, 34 gigawatt
19	hours.
20	Just turning to the issue of the Minto diesel
21	units, it's also worth noting that the purchase of
22	the diesel units at Minto would also allow YEC to
23	reduce its need to rely on Whitehorse diesel
24	generation at times when WAF loads require use of
25	base load diesel generation. I say that because,
26	when diesel generation is required, YEC's

operation, and this is in the evidence, of at least 1 2 two of the diesel units at the mine site, 3 especially for base load operation, is expected to 4 be cost-effective due to the minimization of line 5 losses, and related additional diesel generation requirements, as between two and three of the 6 7 diesel units at the mine site, would rank next to 8 the top of the WAF diesel generation stacking 9 order, reflecting their capacity to supply expected 10 mine load levels at efficient fuel operation 11 levels. 12 And I would note in relation to the diesel 13 units at Minto, once again, that the Board, in the 14 PPA application order, noted that Yukon Energy was 15 free to purchase the units, but the Board could not 16 assure YEC that the units would be approved to be addition in rate base. 17 So the Board has left open the possibility for 18 Yukon Energy to develop a business case that 19 20 supports the diesel units, and that is what, as you 21 have heard in the opening statement, that's what Yukon Energy intends to do, and it intends to bring 22 23 that forward, obviously, at the next General Rate 24 Application.

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Section 5 was risks facing the Carmacks-Stewart

Now, Madam Chair, the next main item under the

25

1	Project. And, again, under that section, it's
2	section (c), and under that section there was four
3	different subheadings which were dealt with there.
4	And I would only point out, Madam Chair, that the
5	Part 3 application, more specifically, again for
6	the record, Section 4.2, pages 15 to 19, address
7	the range of risks relating to the Carmacks-Stewart
8	Project, and specific risks relating to each of the
9	two stages, and also Yukon Energy's strategies to
10	mitigate the risks. And they considered the
11	plan had considered all of the potential risks, and
12	the major regulatory risks for at least Stage One
13	remain, at this time, material delays, as we have
14	indicated, in the scheduling, which could adversely
15	affect the project costs and benefits.
16	And in your Board Order 2007-5, on the PPA
17	application, obviously the risk relating to the
18	development funding, provided by Yukon Energy under
19	that original PPA to Minto, was something raised,
20	and the Board determined, that that type of a
21	funding arrangement imposed an additional risk on
22	ratepayers that the Board is not prepared to
23	accept. And, as you know, and as was indicated in
24	the opening presentation, and in the amended PPA,
25	that issue has been dealt with, and that risk is no
26	longer the risk of ratepayers. That risk is being

1	picked up, in effect, by Yukon Development
2	Corporation.
3	Sub item 2 of part (c) deals with the
4	potential modifications to design or schedule
5	resulting from environmental and socio-economic
6	review and regulatory approvals. And, Madam chair
7	based on the evidence, and you have heard the
8	evidence, YEC does not anticipate material risks of
9	major design modifications resulting from
10	regulatory approvals and review. As I just noted,
11	the major regulatory risks remain just the delays
12	in schedule which will affect costs and benefits.
13	The third item in relation to sub item (c),
14	which I have generally described as the risk
15	section, concerns the time lines contained in
16	Part 3 of the PPA. And I guess, in relation to the
17	time lines in Part 3 of the PPA, even as amended by
18	the amended PPA, the conditions, particularly as
19	regards to securing the needed permits and
20	approvals by various dates, are generally provided
21	for the benefit of Yukon Energy and Yukon
22	ratepayers, and protect Yukon Energy from any
23	obligation to proceed with construction if such
24	permits and approvals are unduly delayed. And YEC
25	has indicated to the Board, in evidence, that if
26	necessary, and if it is in the best interests of

1	Yukon Energy and the ratepayers, those time lines
2	can be extended will be extended by YEC, as long
3	as, obviously, the extensions don't seriously
4	undermine the viability of the project.
5	The last item, Madam Chair, under Section 5,
6	relates to bankruptcy, and I quote, "bankruptcy or
7	other failure of the Minto Mine". And I would say
8	to that, Madam Chair, that given the terms of the
9	amended PPA and the announcements of the
10	government, this risk is no longer relevant to
11	ratepayers. YDC is bearing the risk of losses
12	relating to the capital cost contributions, and in
13	addition to that, there are protections under the
14	PPA in relating to the provision of electricity on
15	an ongoing basis, on a monthly basis. They will
16	have the normal protections in a circumstance like
17	this, the most important of which would be
18	protection under the Miners' Lien Act.
19	Now, Madam Chair, the last section in
20	Section 5 relates to what alternatives there are to
21	the Carmacks-Stewart Project, and I would just say
22	that Part 3 of the application reviewed the
23	alternatives that were considered in the Resource
24	Plan hearing, which were, obviously, a 35 kV
25	transmission line to service Minto; or another
26	alternative was not proceeding with Stage One

1	project at all. And I think simply put, given the
2	amended PPA and the YTG funding, there's no real
3	alternative now. And as I said earlier, not acting
4	would result in not only the loss of a significant
5	revenue source opportunity for ratepayers, the
6	Yukon will have lost the opportunity to
7	significantly reduce greenhouse gas emissions.
8	Sub item (i) under part (d) of Section 5 deals
9	with, effectively, talking about possible
10	alternative configurations to timing, and the
11	structure that has been put in place, of a
12	two-staged approach proposed by YEC. In YEC's
13	submission, the two-stage approach, which has been
14	adopted and, in our submission, approved by the
15	Board in the January '07 report, is the most
16	prudent course of action in the circumstances. And
17	this is especially so, I would submit to you,
18	because of the amended PPA and the recent
19	government announcements with respect to both Stage
20	One and Stage Two.
21	The second item under sub item (d) dealt with
22	the prudency to extend the line from Minto to Pelly
23	Crossing at this time. And I would only say that,
24	by connecting Pelly Crossing at this time, given
25	the funding that is in place now under the amended
26	PPA and the recent government announcement, there

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will be a benefit to all ratepayers in the Yukon by 1 2 connecting Pelly Crossing, because there will be a 3 reduced amount of diesel generation required in 4 that village. So I guess on that point, Madam Chair, for the 5 purposes of your report, in Yukon Energy's view, 6 7 there's no doubt that it is prudent to extend the 8 line from Minto to Pelly Crossing when Stage One is 9 constructed. 10 So those are the specific items that were 11 referenced in Section 5 of the Terms of Reference, 12 Madam Chair, and that is a summary of some of the points under each one of those. I would like to 13 14 just quickly turn to, effectively, the issues 15 surrounding Section 4 of the Terms of Reference and 16 the amended PPA. And really, Madam Chair, it's 17 nothing more than to go back over, in argument, what we started with in the opening presentation, 18 which is how the parties actually responded to the 19 20 Board's directions, and what had to be changed in 21 the original PPA, in order to obtain the Board's 22 approval of the PPA. And as I said in my opening 23 comments, that the Board's conclusions had made it 24 abundantly clear that the YTG had to play a more substantive role in the issues relating to Minto 25 26 Mine. And the parties effectively accepted that

1	determination, and negotiated an amended PPA, and
2	from that, there is obviously the government's
3	announcement.
4	But if I may, Madam Chair, take you to the
5	opening statement, which is Exhibit B-6, page 7,
6	and just reference, for the record, exactly the
7	type of responses that were made to the directions
8	of the YUB, and they are highlighted, Madam Chair,
9	starting about a third of the way down under the
10	heading "Highlights of the Revised PPA Include".
11	And each one of these items, starting from the
12	first one, which effectively dealt with the
13	requirement that the capital cost contribution for
14	the main line be indexed, which was dealt with in
15	the amended PPA, and is now being effectively
16	assumed by YDC, and each one of the other items in
17	there is listed, and for the record, Mr. Morrison
18	reviewed them in detail, but from the perspective
19	of the implications from the PPA decision, which is
20	what Section 4 of the Terms of Reference deal with
21	each one of those items should be reviewed by the
22	Board in that context.
23	So in conclusion, Madam Chair, Yukon Energy,
24	Minto, and the government, believe that the new
25	PPA, and the government's announcements, have
26	clearly and appropriately responded to the issues

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page 5.

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identified in the Board's PPA decision. Given the 1 2 previous findings of the Board, combined with the 3 response of the parties to the PPA decision, this 4 means that all of the issues identified by the 5 Board have now been appropriately dealt with, and YEC believes that the Board is now in a position to 6 7 strongly endorse Stage One of the project, and 8 recommend to the Minister in its report, to be 9 filed later this month, that it proceed as quickly 10 as possible with that project. 11 In relation to Stage Two, YEC believes that it 12 should also be endorsed in a way that is consistent 13 with the Board's recommendation in its January 2007 14 report; that is that Stage Two not be pursued 15 unless there is a firm commitment from a 16 substantive industrial customer, such as Carmacks 17 Copper, and there's no adverse impact on ratepayers rising from the project. 18 And, Madam Chair, I want to conclude by 19 20 speaking of one thing that was raised by 21 Mr. Morrison in the opening statement which did 22 not receive, to my knowledge, any 23 cross-examination, and that is the issue relating to LOLE. Madam Chair, it is dealt with in 24

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the written summary of the opening statement at

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Although this issue will not have an impact on 1 2 the PPA which has been negotiated between the 3 parties, on the assumption that it's ultimately 4 approved by the Board it won't have an impact on 5 this project, this issue is of fundamental importance to Yukon Energy, and I would only ask 6 7 the Board to look at, once again, the issues raised 8 by Mr. Morrison on page 5 of the opening, going 9 over on to page 6 near to the end of the bottom, 10 and to take those positions into account when it 11 turns its mind to making recommendations to the 12 Minister. 13 And, Madam Chair, those are the submissions of 14 Yukon Energy. 15 THE CHAIRPERSON: Thank you, Mr. Landry. 16 We will take a short break for the 17 court reporter and return at 10 to 3:00. (PROCEEDINGS ADJOURNED AT 2:45 P.M.) 18 (PROCEEDINGS RESUMED AT 3:10 P.M.) 19 THE CHAIRPERSON: 20 I can feel the 21 anticipation in the room that we are near the end 22 of the day. 23 Ms. Marx, could you please call the next 24 intervenor up. MS. MARX: YECL will be the first 25

intervenor to present argument.

1	YECL ORAL SUBMISSIONS BY MR. TENNEY:
2	MR. TENNEY: Thank you, good
3	afternoon, Madam Chair and Members of the Board.
4	There are a number of issues that arise as a result
5	of the April 2nd, 2007 application by YEC, and the
6	subsequent revised PPA involving Minto, YEC, YDC
7	and YTG. YECL submits that the following issues
8	must be addressed by the Board in its
9	recommendations to the Minister. YECL will address
10	each of the matters of concern to it separately as
11	follows:
12	Number 1, is the LOLE and N-1 planning
13	criteria. YECL was quite interested to hear YEC's
14	panel describe yesterday that it continues to
15	include industrial load in its LOLE calculations,
16	despite the Board's desire to do otherwise, as
17	detailed in its recommendations to the Minister,
18	and confirmed in the Reasons for Decision included
19	with Order 2007-5. While it was thought that this
20	matter was resolved in Order 2007-5, it is clear
21	that this is an issue that continues to be
22	unresolved.
23	Number 2, the impact of capital cost overruns
24	on the financial viability of Stage 1. To ensure
25	that electrical ratepayers in the Yukon are not

unduly burdened, it must be determined at what

1	capital cost level the Carmacks-Stewart
2	transmission project is no longer viable.
3	In YECL-YEC-1-11 of the PPA hearing, YECL asks
4	YEC at what project capital cost does the
5	transmission project become uneconomic. YEC
6	responded on March 8th, 2007 saying, and I quote,
7	"At this time, analysis the application suggests
8	that the project remains economic within the range
9	of costs considered to date, and YEC has not
10	determined at what capital cost the transmission
11	project would become uneconomic. YEC will continue
12	to review this matter during the coming months."
13	In YUB-YEC-1-4(b) of this proceeding, the YUB
14	asked at what cost estimate would YEC determine
15	that the project was no longer financially viable.
16	YEC responded on April 27th, 2007 stating, and I
17	quote, "The \$10 million Government of Yukon funding
18	materially enhances the project economics such that
19	the project could remain feasible even if the costs
20	exceed \$25.9 million. YEC has not determined the
21	specific cost level where the Stage One project was
22	no longer financially viable. Project feasibility
23	may be affected by many factors aside from capital
24	costs, including timing for development and the
25	assumed level and duration of industrial loads
26	expected to be served."

1	In yesterday's proceeding, Board counsel once
2	again asked a question on project economics for
3	Stage One and why YEC hadn't established a stop
4	point. YEC responded by stating, and this is at
5	transcript Volume 2, page 174, lines 1 and 2,
6	"we don't have an answer." And
7	further, "trying to tell you what that number
8	would be today is not a challenge that we have been
9	allowed to undertake today."
10	Given that the Board is of the view that there
11	are other options available to ensure reliability
12	of supply beyond the Carmacks-Stewart transmission
13	line, as noted on page 55 of its January 15th, 2007
14	recommendations to the Minister, YECL believes it
15	is important for YEC to clearly determine at what
16	cost estimate the Carmacks-Stewart transmission
17	line project is no longer financially viable,
18	assuming that the project timing and the duration
19	of the expected load remain constant.
20	To date, YEC has not answered the above
21	question on three separate occasions. They have,
22	today, given an answer that the capital costs could
23	go up by about \$19.7 million but, of course, that
24	assumes that the revenues from Minto occur for a
25	number of years, which may or may not happen.
26	In its response to YEC-YUB-1-4(b), YEC does,

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however, say that the project could remain feasible 1 2 even if the costs exceed \$25.9 million. 3 While this statement suggests YEC has 4 completed some sort of an analysis, it does not 5 explain why this is the case or how this conclusion was reached. The Yukon Utilities Board, on behalf 6 7 of ratepayers, should not issue a blank cheque to 8 YEC for construction of the Carmacks-Stewart 9 transmission project. 10 Yesterday, the YEC panel stated at transcript 11 Volume 1, page 98, lines 13 to 15, and I quote, 12 "...my Board reserves the right to not go forward 13 with this project if the costs are too high." 14 Surely the Yukon utilities Board should have the 15 same right. 16 Given that, number one, YEC has yet to provide reasonable evidence on this issue, and number two, 17 that more accurate cost estimates will be available 18 once the preliminary engineering is completed by 19 20 May 18th, 2007, and that was a response in 21 YEC-YUB-1-4(a) and UCG-YEC-1-22(d), YECL recommends 22 that if YEC's updated cost estimate from its 23 engineering consultant's report exceeds \$25.9 24 million, that YEC be directed to submit the revised

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capital cost estimate to the YUB, along with

reasons as to how and why the project remains

financially viable, prior to the Board issuing its 1 2 recommendations to the Minister. 3 As well, YEC should be prepared to defend the 4 prudence of any expenditure over the \$25.9 million 5 amount at its next General Rate Application. Number 3, WAF customer power quality and the 6 7 need for YEC to adopt dynamic system power quality 8 standards. YECL believes that YEC has an 9 obligation to existing customers connected to the 10 grid to ensure that new, as well as existing 11 customer loads, do not negatively impact the power 12 quality of other customers. 13 YECL is concerned that Minto's processes may 14 cause unacceptable voltage fluctuations on the grid 15 that will seen by other customers. 16 In its response to YEC-YECL-1-7(c), YEC states 17 and I quote, "Yukon Energy's engineers are currently conducting a dynamic system modeling 18 study that will identify power quality issues and 19 20 ensure that their design addresses the need for 21 acceptable power quality for all other electrical 22 customers connected to the grid. The PPA also 23 includes provision, Section 4.6, regarding Minto 24 standards for usage of electricity supplied by YEC, 25 so as to limit the disturbances that are permitted 26 and to confirm Minto's responsibility, at its cost,

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1 to operate its equipment so as not to have 2 unacceptable disturbance impacts on the grid 3 system." 4 In reviewing Section 4.6 of the PPA, the 5 following is stated with respect to standards of operation, quote, "Minto will operate its equipment 6 7 and use the grid electricity at the mine site so as 8 not to endanger any of YEC's plant or equipment or 9 cause any unacceptable fluctuations of YEC's 10 electrical system. Minto will comply with 11 reasonable standards of operation, as provided by 12 YEC to Minto, by written notice from time to time. 13 If Minto fails to comply with these requirements or 14 standards of operation so as to endanger any of 15 YEC's plant or equipment, or cause any unacceptable 16 fluctuations of YEC's electrical system, YEC may, by written notice to Minto, require that Minto 17 remedy the situation." 18 The above response in Section 4.6 of the PPA 19 20 clearly shows that both the customer, Minto, and 21 the supplier, YEC, have to design and operate their respective systems to meet and maintain particular 22 23 standards. 24 In reviewing YEC's answers to YEC-YECL-1-7(a) 25 and (b), YECL accepts the fact that YEC does not 26 own the International Electro-technical Commission,

IEC, Standards 1003-7 and 1004-15. They are a 1 2 public domain standard similar to the steady state voltage standard CAN-3-C235-83 referenced and used 3 4 by YEC. The key unresolved issue is that YEC has not provided or disclosed the standards it intends 5 to follow in a dynamic voltage situation that will 6 arise as a result of the interconnection of a mine, 7 8 such as Minto, that utilizes large motors for their 9 processes. The starting and stopping of these 10 motors, together with their characteristics when 11 the motor currents rise above running currents and 12 approach locked rotor currents, gives rise to a 13 potential impact on the power quality for the 14 entire electrical grid. 15 YECL notes that YE's response to 16 YEC-YECL-1-7(c) include statements like, in 17 quotes, "limit the disturbances that are permitted; and unacceptable disturbance impacts on the grid 18 system". 19 20 As well, Section 4.6 of the PPA includes 21 wording such as "Minto will comply with reasonable 22 standards of operation as provided by YEC" and "If 23 Minto fails to comply with these requirements or standards". YEC is clearly concerned about the 24 potential power quality impacts of serving an 25 industrial customer like Minto. YECL would have 26

1	thought that the standards would have already been
2	adopted by YEC and clearly communicated to Minto
3	and all other Yukon Electrical customers.
4	Regardless of the status of Wardrop
5	Engineering's dynamic modelling exercise and
6	whether it is completed on or before May 18th,
7	2007, the dynamic power quality standards YEC
8	intends to use should already be known.
9	This information will be used to determine
10	whether particular transmission facility's designs
11	are acceptable or not and whether there will be
12	limits on the size and type of motors allowed to be
13	operated at the customer's site.
14	Yukon Electrical is of the opinion that the
15	standards should have been known up front, so that
16	the capital cost of the facilities required to meet
17	those standards was also known prior to the
18	customer contribution being determined. Yukon
19	Electrical encourages the Board to require YEC to
20	provide these proposed standards, as they will not
21	only determine the power quality that all the
22	customers can expect on the grid, but also the
23	impact on the ultimate design and resultant
24	estimated cost of the proposed system.
25	Further to the above, Yukon Electrical also
26	would expect the Board to attain a copy of Wardrop

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1 Engineering's preliminary engineering study once it 2 is available, as well as YEC's comments, as to 3 whether the results of the study indicate whether 4 there will be an impact on power quality for the 5 grid. Detailed explanations should also be provided in this regard. The impact should address 6 7 what additional infrastructure is required to serve Minto, and the associated costs; or conversely, 8 whether Minto will have to limit motor sizes or 9 10 adjust its operations. 11 If there is an adjustment to capital cost, YEC 12 should explain how this impacts the economic 13 viability of the project, as discussed in Section 2 14 of this argument. 15 Number 4, the need for Stage Two of the 16 Carmacks-Stewart Transmission Project. Although there has been limited detailed discussion of Stage 17 Two of the Carmacks-Stewart Transmission Project in 18 the other two proceedings, the Justice Minister's 19 20 April 2nd, 2007 Terms of Reference set out certain 21 fundamental principals that all parties need to be 22 mindful, including, and I quote, "Stage Two (to be 23 built subsequently when and if market conditions so permit) involves...", and "The Yukon Government has 24 also committed to working with YEC and industry to 25

ensure that Stage Two can also be constructed

1	without any direct cost to other ratepayers."
2	YEC has even stated previously, in its March
3	13, 2007 letter to the Board, that Stage Two would
4	not proceed until a PPA was concluded with Western
5	Copper, and I quote, "The Board's January 15th,
6	2007 report on the resource plan addressed the
7	Carmacks-Stewart project by stage and recommended
8	that Stage Two only proceed after YEC has a firm
9	commitment to connect the Carmacks Copper Mine,
10	which implies a power purchase agreement as well,
11	and then comes back to the Board for a review of
12	specific proposals to develop Stage Two. YEC is
13	currently not in a position to proceed with Stage
14	Two as recommended by the YUB."
15	At this time, it is not known what these
16	market conditions need to be or when they will
17	occur. YECL submits that it is premature for the
18	Board to recommend that YEC receive a project
19	energy certificate or an energy operation
20	certificate for Stage Two of the Carmacks-Stewart
21	Transmission Project at this time.
22	Granting of these certificates should wait
23	until such time as YEC submits an executed PPA with
24	Western Copper for Board approval, and provides
25	detailed capital cost estimates, and government
26	contribution agreements are submitted.

1	Should the Board recommend otherwise, then
2	certain terms or conditions should be imposed prior
3	to the commencement of construction of Stage Two.
4	These conditions should include a requirement that
5	the capital costs for Stage Two should be fully
6	offset by the capital contributions provided by
7	Western Copper, YDC and YTG to ensure that the
8	Minister's intentions are met.
9	As well, until the LOLE issue is resolved, no
10	diesel fuel savings as a result of the
11	interconnection to the Mayo-Dawson grid, caused as
12	a result of serving industrial load, should be
13	counted as a reduction of direct costs to other
14	ratepayers, as the Board has indicated that no new
15	generation is to be planned for industrial
16	customers.
17	Finally, Number 5, the timing of the Aishihik
18	third turbine. As discussed previously, the
19	inclusion or exclusion of industrial load in the
20	LOLE calculations is an issue that appears to be
21	unresolved. It is YECL's understanding that the
22	tables in both Attachment B in the PPA, and
23	Exhibit B-9, excluding Table 1, the exhibit that
24	was handed out today by YEC's panel, support the
25	need for and timing of the third turbine as soon as
26	reasonably practical.

- 1 These tables were all predicated on the
- 2 inclusion of industrial load in the LOLE
- 3 calculations and, thus, the generation planning
- 4 process to serve that load. It is YECL's
- 5 understanding that Decision 2007-5 indicated
- 6 otherwise, and the result was that no generation is
- 7 to be planned for industrial load and that any
- 8 incremental costs to serve this industrial load,
- 9 including incremental diesel fuel, is to be charged
- 10 directly to that industrial load.
- 11 Installing the third turbine would not result
- in any substantive fuel savings to all other
- 13 customers, only that of industrials. As such, the
- 14 resolution of the treatment of industrial load in
- the planning process is critical to the need for
- and the timing of the third turbine at Aishihik.
- 17 Thank you.
- 18 THE CHAIRPERSON: Thank you, Mr. Tenney,
- 19 and you are within the 20 minutes, I thank you for
- 20 that.
- 21 Ms. Marx, can you call the next intervenor,
- 22 please.
- 23 MS. MARX: Yes, I will call
- 24 Mr. Percival next.
- 25 ORAL SUBMISSIONS BY MR. PERCIVAL:
- 26 MR. PERCIVAL: I thank the Board for

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the opportunity to make a very brief, more of a 1 2 statement rather than argument. 3 I support the YUB recommending to the Minister 4 that the third wheel at Aishihik proceed as soon as practical. I think it will lead to a better 5 management of the water regime, and increase the 6 7 security of supply as well, and displace diesel. 8 So I am in favour of that, and I hope the Board will recommend that to the Minister. 9 10 I support the YUB recommending that Stage One 11 of the Carmacks-Stewart Transmission Project 12 proceed and the certificates granted, but at this 13 time the certificate should not include the Stage 14 Two. 15 However, while I recognize that the capital 16 funding structure now in place for the -- through 17 the PPA and through the government's announcements, protects the electrical ratepayers, it does so at 18 the largess and risks of the Canadian and Yukon 19 20 taxpayers. 21 In my opinion, the funding arrangement 22 provides a sizeable subsidy to the mining company 23 for whom the first stage of the transmission 24 project is primarily being constructed. Until the second stage is constructed, the security of supply 25 it will afford, by interconnecting the two grids,

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- 1 will not accrue to any of the ratepayers on either
- 2 system.
- 3 The Minto Mine, in my opinion, will not pay
- 4 its fair share of the capital costs of this
- 5 project, nor will it shoulder its fair share of the
- 6 risks. Nevertheless, if the mine is successful,
- 7 and as by all appearances it should be, there will
- 8 be both short and long-term benefits to all
- 9 ratepayers and taxpayers; therefore, providing a
- 10 subsidy to a winner is far superior to providing a
- 11 subsidy to a loser.
- 12 So let's get on with the first stage of the
- 13 Carmacks-Stewart project and get it moving. That's
- it, thank you very much.
- 15 THE CHAIRPERSON: Thank you,
- 16 Mr. Percival. That would leave Mr. Buonaguro.
- 17 UCG ORAL SUBMISSIONS BY MR. BUONAGURO:
- 18 MR. BUONAGURO: Thank you.
- 19 On behalf of the UCG, I thank the Board for
- this opportunity to provide submissions.
- In general, the UCG supports the concept
- 22 behind the project. Taking the opportunity to use
- 23 capital contributions from a mine to pay for an
- infrastructure project of this nature, in order to
- 25 capture several system-wide benefits, is a good
- idea and worth pursuing.

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1	However, the UCG, as a ratepayer group, finds
2	itself in the same position as the YEC Board of
3	Directors, it appears; namely, we do not feel that
4	we have enough information concerning the project
5	costs, benefits and risks to conclude as a final
6	recommendation, from our perspective as an
7	intervenor group, that the project should either
8	proceed or stop. What we can do, in what is
9	admittedly an expedited proceeding, is put our
10	concerns on the record through cross-examination
11	and argument and, where possible, make some
12	recommendations to the Board.
13	As a second general comment, the UCG believes
14	that the Board should consider the relationship
15	between the YEC, the YDC and the Yukon Government
16	funding, when assessing the project. While it may
17	be that Yukon Government contributions negate
18	ratepayer impact, there will be a corresponding
19	taxpayer impact, direct or otherwise.
20	Similarly, commitments by the YDC, to
21	subsidize the responsibilities of Minto under the
22	PPA, Purchase Power Agreement, impact on the funds
23	available to the YDC to benefit other ratepayers.
24	The result, it may be argued, is that the programs
25	benefiting existing ratepayers, like the Rate
26	Stabilization Fund, are depleted or discontinued,

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offsetting the benefits, to some degree, of adding 1 2 the industrial customer to the system in the first 3 place. 4 I would like to speak generally about costs of the project and specifically costs to ratepayers. 5 It is UCG's submission that one of the main issues 6 7 for the Board to consider is the fact that total 8 costs to ratepayers as a result of the project, and 9 the other projects that it triggers, is not known 10 at this time. 11 YEC admits the final costs have not yet been 12 determined for the project, given that there has 13 been no bids submitted on the construction 14 contract, the final costs of regulatory reviews, 15 namely Yukon Utilities Board and YESAB Board, have 16 not yet been determined, and negotiations are 17 ongoing with Yukon First Nations regarding route selection, access management, trap line mitigation, 18 socio-economic agreements, training, sole source 19 20 contracts and rights of first refusal on 21 construction employment. YEC was clear in its oral testimony that its 22 23 Board of Directors has, itself, not made a final 24 decision to proceed with the project, based, in

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part, on the fact that the final projected costs

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are not known.

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1	The total costs of the project, submitted by
2	YEC for this Part 3 review, do not include costs
3	for any distribution facilities to connect new
4	customers in the Minto Landing area to the
5	project. While these facilities will be required,
6	YEC has not consulted with the distribution
7	utility, YECL, to determine the costs to ratepayers
8	for this distribution activity.
9	YEC indicates that the connection of the new
10	substation facilities at Carmacks, to the
11	distribution facilities serving Carmacks, will
12	require a new distribution line connected by YECL,
13	and the decommissioning/removal of the existing
14	Carmacks substation. However, the cost to
15	ratepayers of the new distribution line connection
16	by YECL, and the decommissioning/removal of the
17	existing Carmacks substation by YEC, have not been
18	developed by YEC and so have not been submitted as
19	part of the project currently under review in this
20	proceeding.
21	YEC indicates the connection of the new
22	substation facilities at Pelly Crossing, on Selkirk
23	First Nation settlement land, to distribution
24	facilities and the diesel plant at Pelly Crossing,
25	will require a new distribution line connection;
26	however, the costs to ratepayers of the new

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1	distribution line connection required at Pelly
2	Crossing have not been provided by YEC as part of
3	the project being reviewed in this proceeding.
4	Cost estimates and Yukon Government funding or
5	the proposed Stage Two of this project are even
6	more preliminary, with no current negotiations for
7	the mine to anchor Stage Two, similar to how Minto
8	anchors the proposal for Stage One. Accordingly,
9	the UCG considers this process to relate only to
10	the licensing of Stage One and expects that,
11	presumably once an anchor mine becomes apparent, a
12	certificate would be required and applied for Stage
13	Two, including a review of any Purchase Power
14	Agreement with the required mine.
15	YEC indicated through UCG-YEC-1-23 that there
16	are no estimates available at this time for any
17	costs associated with addressing expected
18	environmental and socio-economic impacts of the
19	project.
20	Additionally, YEC has not provided details
21	with regard to annual operation of maintenance
22	costs, beyond a rough estimate of \$100,000, which
23	they say may vary over the life of the facilities,
24	annual costs to provide electricity to Minto,
25	annual personnel-related costs, new and current,
26	associated with the operation and maintenance of

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1	the proposed facilities, and estimated annual
2	mitigation costs or other annual mitigation costs
3	of the environmental protection plan.
4	From a Yukon ratepayer perspective, the Board
5	should be given a better understanding of all
6	direct costs, and costs resulting from the
7	construction of the project, so that it knows the
8	short and long-term impacts of its recommendations
9	If actual Stage One project capital costs
10	exceed the contributed funds by YTG, YDC and Minto
11	the net resulting capital cost would go into
12	regulated rate base at the project's inservice
13	date, and earn an annual debt and equity return.
14	The UCG submits that the Board's
15	recommendations should include confirmation that
16	none of the cost overruns, resulting in projected
17	rate base additions, should be included in YEC's
18	rate base until after the YUB, and perhaps the
19	Auditor General, has had an opportunity to review
20	the prudency of the expenditures, and I think this
21	is a position that YEC doesn't necessarily dispute
22	and I think they confirmed earlier today that
23	that's what would happen; there would be a YUB
24	review before additions to rate base were made.
25	Under the circumstances, the UCG recommends
26	that if the Board is persuaded to recommend

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approval of the project, that it do so on the basis 1 2 that the recovery of project-related costs, in rate base, be capped to the high level cost estimate 3 4 provided by YEC in its application; namely, \$25.9 million pursuant to Schedule 1 of its filing, or a 5 maximum of \$3.22 million in rate base. 6 7 The February 2005 Auditor General's report on 8 the Mayo-Dawson Transmission Line Project made 9 several recommendations with respect to the 10 handling of projects, like the current one, by YEC, 11 including the recommendation, for example, that YEC 12 establish and follow a contracting policy and clear 13 contracting procedures that provide for 14 transparency, completion and ensure best value (and 15 that is from paragraph 59 of that report). 16 It is in the spirit and intention of that report that the UCG respectfully submits that the 17 YUB recommend to the Yukon Government that it 18 establish, as a condition of any certificate, a 19 20 reporting scheme, between YEC and the Yukon 21 Government, directly or through the YUB and 22 stakeholders, on an ongoing basis through a 23 qualified intermediary, as a measure that will help 24 avoid a project result in the nature of the Mayo-Dawson line. In this way, information 25 26 relating to the project, including the costing as

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it becomes firm, will be made available to the 1 2 appropriate parties in a transparent, ongoing 3 manner. Rather than assuming the project audit 4 after the fact, the appropriate parties will have 5 the opportunity to make informed recommendations to the YEC, through the intermediary, as issues 6 7 arise. 8 The UCG contemplates that the YEC would still 9 retain its authority over decision-making. The 10 process is not envisaged as a mechanism to usurp 11 the YEC. Rather, it is simply a mechanism to make 12 the project process accessible to those with 13 legitimate interests in it, in a transparent and 14 useful way, allowing those parties to provide input 15 to the YEC when issues arise. The YEC assumes that 16 the YTG would employ its own auditor at its own 17 cost. With respect to the topic of benefits to 18 ratepayers, the Purchase Power Agreement, IR YUB to 19 20 YEC 1-4, sets out that timely completion of the 21 project will yield material ratepayer benefits equal to at least \$250,000 per month of avoided 22 23 delay, reflecting expected minimum Minto payments. As was confirmed by YEC, this \$250,000 figure 24

is a gross revenue amount that ignores the avoided

costs of any delay (and that is from

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1	UCG-YEC-1-39). Given that total costs to
2	ratepayers resulting from the project are unknown,
3	UCG submits that it is premature for YEC to be able
4	to identify the financial benefits to ratepayers.
5	UCG submits that once you start to track in the
6	incremental diesel generation used per year, with
7	Minto on the grid, costs associated with the fixed
8	term note, costs to run mine diesels mine site
9	diesels, costs of regulatory proceedings and the
10	costs of all resulting distribution and
11	transmission facilities, the proposed financial
12	benefits to ratepayers could become net
13	liabilities.
14	Given the Yukon Government's recently
14 15	Given the Yukon Government's recently announced proposed directive setting industrial
15	announced proposed directive setting industrial
15 16	announced proposed directive setting industrial customer rates over the next four years, outside
15 16 17	announced proposed directive setting industrial customer rates over the next four years, outside the consideration of the total cost of service as
15 16 17 18	announced proposed directive setting industrial customer rates over the next four years, outside the consideration of the total cost of service as outlined by the Board in its PPA decision, there is
15 16 17 18	announced proposed directive setting industrial customer rates over the next four years, outside the consideration of the total cost of service as outlined by the Board in its PPA decision, there is no clear picture where non-industrial electricity
15 16 17 18 19	announced proposed directive setting industrial customer rates over the next four years, outside the consideration of the total cost of service as outlined by the Board in its PPA decision, there is no clear picture where non-industrial electricity rates will end up after a full review of the next
15 16 17 18 19 20 21	announced proposed directive setting industrial customer rates over the next four years, outside the consideration of the total cost of service as outlined by the Board in its PPA decision, there is no clear picture where non-industrial electricity rates will end up after a full review of the next General Rate Application. With this rate
15 16 17 18 19 20 21	announced proposed directive setting industrial customer rates over the next four years, outside the consideration of the total cost of service as outlined by the Board in its PPA decision, there is no clear picture where non-industrial electricity rates will end up after a full review of the next General Rate Application. With this rate uncertainty, it is premature to suggest, as the
15 16 17 18 19 20 21 22 23	announced proposed directive setting industrial customer rates over the next four years, outside the consideration of the total cost of service as outlined by the Board in its PPA decision, there is no clear picture where non-industrial electricity rates will end up after a full review of the next General Rate Application. With this rate uncertainty, it is premature to suggest, as the Yukon Government has done in press releases, that

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Stabilization Fund, particularly since YEC has not, 1 2 as of yet, calculated the forecast rate impact of 3 the project. 4 With respect to the topic of the public need 5 for the project, the YUB has been directed by the Minister to report on and make recommendations 6 7 about the necessity for the project and its timely 8 design, with particular regard to the public need 9 for the project under various reasonable electric 10 load forecasts, including requirements related to 11 both the Minto Mine and to other potential major 12 industrial customers. 13 UCG submits that given the lack of coordinated 14 effort between the two electricity utilities, there 15 has been very little in the area of reliable load 16 forecast scenarios entered into evidence upon which 17 to test the public need for this project. In its Reasons for Decision in the Purchase 18 Power Agreement review, the Boards's view is that 19 20 the project was a project to supply new load, and a 21 project to serve system requirements (and that is from Board Order 2007-5 Reasons, page 13). 22 23 In its report of recommendations regarding the 24 20-Year Resource Plan, the Board said, quote, "Where cost of service and rate design issues 25 26 apply, the shortcomings of not including YECL load

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forecast information needs to be addressed at the 1 2 next General Rate Application"; and also, 3 quote, "For rate design and cost of service 4 purposes, applications cannot properly proceed 5 without load forecasts jointly prepared by YEC and YECL documented at the rate class level." 6 7 UCG submits that it is impossible to 8 accurately predict system needs for facilities 9 without establishing an accurate and robust load forecast. Given the continued lack of involvement 10 11 of YECL, the Yukon Government, the Energy Solutions 12 Centre and other stakeholders, the YEC load forecasts remain deficient to establish a true 13 14 public need for the project. 15 It is the UCG's understanding that, however, 16 quite apart from the issues of the reliability of YEC load forecasts, that the project is not so much 17 related to customer need, but rather is an 18 opportunity-based project related to the ability of 19 20 the YEC to use the capital contribution from the 21 mine to partially fund the project in order to capture what could be generally described as 22 23 interconnection benefits, including the sharing of 24 generation resources between both grids, diesel 25 fuel displacement, et cetera. And I think we got a 26 good summary of that in today's redirect.

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1	That the project is opportunity-based, rather
2	than need-based, is highlighted by the candid
3	position of the YEC, that the project would not go
4	ahead without the involvement of the Minto Mine and
5	the injection of capital by the Yukon Government to
6	protect ratepayers from the cost of the project.
7	The YUB has also been directed to report on
8	and make recommendations about the necessity for
9	the project, and its timing and design, with
10	particular regard to the implications of the
11	relationship between Stage One of the project and
12	the need for and timing of the Aishihik third
13	turbine.
14	YEC has submitted that the need to build the
15	Aishihik third turbine, while there is surplus
16	generation on the system, is to displace peaking
17	diesel generation that is expected to increase
18	under the base case load forecast, without mine
19	loads, as reviewed in the resource plan hearing.
20	YEC classified the third turbine as an economic
21	opportunity project, not a capacity-driven project,
22	and reflects ongoing diesel displacement benefits
23	in both the short term and the long term when the
24	surplus hydro generation is no longer available
25	(and that is from UCG-YEC-1-26).
26	The Board recommended Aishihik third turbine

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1	proceed in 2013 unless the actual load turns out
2	higher or lower than the load under the base case
3	forecasts, i.e., the forecasts with no mine loads
4	(and that is from the YUB report to commissioner
5	regarding the 20-Year Resource Plan, page 30).
6	Now, as a result of further funding of what
7	the UCG understands to be at least \$5 million, the
8	reasons and timing for the Aishihik project, in our
9	view, have changed from the time of the Resource
10	Plan. Again, as a result of YTG policy and
11	funding, the project will proceed at sometime in
12	the near future, at the behest of the Yukon
13	Government. The precise rate impact is not known,
14	although presumably largely defrayed by the
15	funding.
16	With respect to project alternatives, when
17	asked to provide construction costs per kilometre
18	for power line facilities in other jurisdictions,
19	and to provide updated engineering costs per
20	kilometre by Wardrop Engineering for the proposed
21	138 kilovolt line, YEC indicated the comparable
22	costing information from other jurisdictions is not
23	available for these voltage ranges, as different
24	utilities allocate and report costs differently, in
25	particular with respect to owner's costs. The
26	update engineering costs per kilometre are not yet

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completed by Wardrop and so are not available to 2 the Board. And YEC has provided no details on the 3 4 alternative of not building the Carmacks project, and building the 35 kilovolt line with facilities 5 between Carmacks and the Minto Mine to serve this 6 7 customer, although I think they have presented it 8 in concept, and the obvious choice or the obvious 9 alternative would be to build a spur line, at the 10 sole expense of Minto, to the grid. 11 This alternative would enable the YEC to 12 capture all of the energy consumption from Minto, 13 without the corresponding risks to the ratepayer, 14 or the Yukon Government to the extent it is funding 15 the project, assuming that Minto would not be 16 financed under that scenario. 17 Granted, the opportunity to interconnect the grids, with the corresponding benefits, would not 18 be realized; however, in assessing the project, it 19 20 is important for the Board and the now major 21 investor in the project, the Yukon Government, to 22 consider this option as it weighs the risks of the 23 project. 24 Now, with respect to the amended Power 25 Purchase Agreement that was submitted to the Board

a few days ago, it is UCG's understanding that the

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elements for the Board's consideration, relating to 1 2 unresolved issues surrounding the amended Purchase 3 Power Agreement, to the extent that the amended PPA 4 does not strictly reflect the recommendations of 5 the Board, are the Rate 39 proposal, the reduction of the minimum take-or-pay amount, and the payment 6 7 of capital cost escalation amounts by YDC rather 8 than Minto. The Rate 39 proposal, and the capital 9 cost escalation YDC payments, result, in our view, from the intervention of the Yukon Government in 10 11 the negotiation. 12 The Yukon Government, it appears, has made a 13 policy decision to set industrial mine rates 14 without a full cost of service study. This begs 15 the question of how, for example, additions to rate 16 base will be treated in the next four years. 17 Should the Aishihik third turbine be completed prior to 2012, as an example, whatever capital 18 spending in excess of the Yukon Government 19 20 contribution, that makes it into the rate base, can 21 only, it appears, be allocated to non-industrial customers. And this would be true for any rate 22 23 base addition proposed over the next four years. 24 UCG recognizes that YEC has presented the 25 Firm A proposal, directed as it is by the YTG, as 26 necessary to secure the Minto Mine and take

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- 1 advantage of its capital contribution, and its
- 2 business to fund the project, and benefit existing

- 3 customers.
- 4 The UCG also believes, however, that it is
- 5 necessary to recognize that such policies may have
- 6 consequences to the regulation of the utility.
- 7 Insofar as the Board is required to account for
- 8 rates, they are not governed by regulation, and as
- 9 such, do not necessarily fit into the overall
- 10 principles of rate design that the Board would
- 11 otherwise apply.
- 12 Likewise, that the Yukon Government would
- 13 protect Minto from cost overruns, suggests to the
- 14 UCG that ratepayers, too, should be protected,
- which is, in part, the reason we have really
- 16 recommended a cap to the addition of rate base,
- 17 based on YEC's high level estimate, the overage
- 18 being assumed by the YDC.
- On behalf of the UCG, we thank the Board for
- 20 the opportunity to participate in this proceeding
- and hope that our efforts in the IR process, the
- oral hearing, and our argument are helpful to the
- 23 Board when it makes its decision in this matter.
- 24 Subject to any questions, those are our
- 25 submissions.
- 26 THE CHAIRPERSON: Thank you for your

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- 1 submission, Mr. Buonaguro.
- 2 Mr. Landry, that brings us to your reply.
- 3 Would you be in need of a little bit of time?
- 4 MR. LANDRY: Madam Chair, I would
- 5 appreciate a bit of time to, you know, focus in on
- 6 the required elements of the reply. So I see it is
- 7 20 to four, so I don't suspect the reply will be
- 8 long but I would like to have a few minutes to
- 9 confer.
- 10 THE CHAIRPERSON: 15 minutes, 20
- 11 minutes?
- 12 MR. LANDRY: That's fine.
- 13 THE CHAIRPERSON: We will reconvene at
- 14 four.
- 15 MR. LANDRY: Thank you.
- 16 (PROCEEDINGS ADJOURNED AT 3:40 P.M.)
- 17 (PROCEEDINGS RESUMED AT 4:05 P.M.)
- 18 THE CHAIRPERSON: It appears like
- 19 everybody is having way too much fun out here
- 20 without us. So I am glad we are back to control
- 21 that.
- Mr. Landry, would you like to proceed.
- 23 YEC REPLY SUBMISSIONS BY MR. LANDRY:
- 24 MR. LANDRY: I will, Madam Chair. I
- 25 must say that that is the first time I ever had
- 26 music to introduce my reply argument.

1	THE CHAIRPERSON: A lot of firsts here.
2	MR. LANDRY: And Madam Chair, I will
3	try to deal with the key issues that arose in the
4	arguments of the intervenors, and not necessarily
5	in any particular order.
6	The first issue I would like to talk about,
7	which was raised by two of the intervenors, is the
8	cap issue on the \$25.9 million, the high cost
9	estimate, and it was pushed both by, I guess, YECL
10	and UCG. The way it was pushed was, I guess from
11	the perspective of UCG, there would be a cap on it,
12	you couldn't go any higher than that. In other
13	words, effectively, that would put the cap on the
14	amount of money that could be put in rate base, the
15	difference between 22.6 and 25.9. Whereas YECL
16	suggested that the way to deal with the issue was
17	that YEC should be required to report to the Board
18	if, indeed, the high estimate was exceeded.
19	Madam Chair, not only does YEC not cannot
20	accept either of those propositions, in my
21	submission, it is not good regulatory practice to
22	do it. And let me just explain a little bit why.
23	At the moment, as you heard in great detail,
24	there are preliminary estimates that have been
25	provided. You have also heard of the very, very
26	significant benefits that go to ratepayers if,

1	indeed, this project goes ahead based on those
2	estimates. You have also heard that they could go
3	well beyond, well beyond, the present estimates,
4	and it would still be a benefit to ratepayers.
5	Now, to put a cap on the amount that would be
6	allowed, in order to go forward with this project,
7	would, in my submission, not be in the best
8	interests of not only YEC but ratepayers. And I
9	say that because if, for example, a cap was put at
10	\$25.9 million, what that means is if, for example,
11	the costs come in, in the environment
12	construction environment we are in, in western
13	Canada and in the North, at say \$30 million, why
14	would any prudently operated utility go forward
15	with that proposal, notwithstanding the fact that
16	it may be \$30 million and those \$30 million, if
17	expended, would be prudently incurred under any
18	regulatory test that might be out there?
19	So, effectively, you have put a disincentive
20	into the situation, such that the management the
21	Board of Directors, why would they ever go ahead?
22	I say that in this context, Madam Chair. You
23	always, as you did in Mayo-Dawson the Board
24	always has the capability, and that's what the
25	regulatory contract is all about, has the
26	capability, at the time that costs are put into

1 or tried to be put into rate base, to test those 2 costs on the basis of prudency. It was done in 3 Mayo-Dawson, it will be done in all capital 4 projects going forward from this day. 5 It is at that point in time that you can test the decisions made by the corporation, as to 6 7 whether or not they went ahead at \$28 million or 8 \$30 million if, indeed, that ever happens. And if 9 you determine that it was not a prudent decision, 10 then those amounts will not go into rate case, 11 period. That is the way all utilities that are in 12 a similar rate base regulated environment deal with 13 issues like this, it is the way this Board should 14 deal with issues like this. There is just 15 absolutely, in my submission, no reason to follow 16 either the recommendation of YECL or UCG in that 17 regard. The second issue I would like to deal with, 18 Madam Chair, dealt with the issue of standards 19 raised by YECL. And I guess I would refer, for the 20 21 record, Madam Chair, to two information responses. 22 One is YEC-YECL-7(b), as in Bob, the other one is 23 YEC-YECL-8, and that would be (a), (b) and (c). 24 Fundamentally, contrary to the submissions made to you by YECL, there are standards, and those 25

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standard are outlined in those information

responses. I would only say, Madam Chair, that the 1 2 Utility Board is there to regulate, the utility is there to manage its systems, which it is required 3 4 to do. YEC has extensive experience in dealing with mine loads and what effect they have on system 5 reliability; much, much larger mine loads than what 6 7 is being contemplated in the situation of Minto. 8 And the perfect example being Faro. 9 YEC has the experience, there are standards, 10 and there is no conceivable reason, in my 11 submission, that the type of conditions suggested 12 by YECL should be put on YEC, in this case, in your 13 recommendations to the Minister. 14 And I would only say this, Madam Chair, not to 15 be overly critical of the YECL representative, but 16 if you go through the submissions he made, his submission depends on many opinions that he 17 presented to you in terms of these standards. What 18 the YECL representative said was nothing more than 19 submissions. YEC does not accept those opinions 20 21 and, quite frankly, from the perspective of natural 22 justice, if they wanted to rely on those opinions 23 in order to suggest to you that conditions should 24 be put on the certificate that is ultimately put out by the Minister, it should have brought those 25

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opinions forward so they could be tested as YEC's

witnesses were tested over the last couple of 1 2 days. You cannot rely on submissions which contain, in effect, an attempt to put in evidence 3 4 in order to come to the conclusions that YECL 5 suggested. Madam Chair, YECL also indicated to you that 6 7 it was premature to grant a certificate for 8 Stage Two, realizing that it is the Minister who 9 grants this certificate, but that you should say so 10 in your recommendations to the Minister. 11 And the representative also said that you 12 should put a condition, if you decided that you 13 would recommend that the certificate go forward, a 14 condition that would suggest that the requirement 15 that the capital cost of Stage Two be completely 16 offset by government funding and/or an industrial 17 contribution. Again, I say, with respect, that it just doesn't make good sound regulatory sense to 18 suggest such a thing. 19 20 If, indeed, from the beginning, and Mr. 21 Morrison explained the point again today in 22 evidence, the position of Yukon Energy has been, 23 and the YUB put in its report in the quote that I 24 gave to you earlier, that the concept of Stage Two, although conditional on an industrial coming 25 26 forward, such as Carmacks Copper, would always have

1 no adverse impact on ratepayers, that doesn't mean

- 2 there might not be costs that would have to be
- incurred in order to get benefits for ratepayers.
- 4 And to put a condition, again, on this stage of the
- 5 project, such that it could not go ahead unless
- 6 there was -- the full costs are picked up by
- 7 government and industry, again doesn't make sense.
- 8 That is not, in my submission, in the best
- 9 interests of ratepayers, because there could be
- 10 substantive benefits that would, once again, be
- 11 realized by the interconnection with the funding
- 12 from both industry an government.
- 13 So in our submission, not only should the
- 14 certificate be -- you should recommend that the
- certificate be issued in respect of Stage Two, no
- such condition should be put on it.
- 17 And I would say to you, Madam Chair, there is
- 18 no need for another hearing. This is, effectively,
- 19 the third lengthy legal process that has been put
- 20 in place to deal with this project. If there are
- 21 still issues that the Board has, as regulator, in
- 22 relation to Stage Two, then you should put them as
- 23 recommendations for conditions to be put to the
- 24 certificate.
- 25 Madam Chair, the next item is the issue raised
- by UCG, and I am using my words a little bit here,

that the representative of UCG was suggesting that 1 2 there should be some sort of audit or monitoring process involving stakeholders and/or the Board. 3 4 I guess the first thing I would say in response to that is, as Mr. Morrison indicated, 5 that that, from Yukon Energy's perspective, would 6 7 be totally unacceptable. Obviously, it would add 8 significant costs, in my submission, to the project, added involvement of parties and, at the 9 10 very core of what is being suggested, it would 11 usurp Yukon Energy's role as the manager of the 12 assets. 13 You, as regulator, always have the capability, 14 in this case it would be in terms of the costs that 15 were being tried to put into rate base, to see 16 whether or not what was done was prudently done. 17 But it is the utility's role, in a rate base regulated environment, to manage the system, not 18 the regulator or the stakeholders. And it would 19 20 be, in my submission, just contrary to normal 21 regulatory practice to put either the Board and/or 22 stakeholders into the middle of the management of a 23 project like this because it would also be an 24 incredible precedent to put in place. 25 Would that mean that any decision that 26 stakeholders thought was a difficult decision, that

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- 1 there would be a monitor put in place to see
- whether or not Mr. Morrison and other people within
- 3 Yukon Energy were doing it according to what is
- 4 right in the stakeholders' mind? It just would not
- 5 work and it is why it is not, in my submission, at
- 6 least in my experience, utilized in other
- 7 jurisdictions.
- 8 The next item, Madam Chair, was an item raised
- 9 again by UCG, and there was reference to the
- 10 \$250,000 a month lost revenue concept. And UCG --
- 11 again I am summarizing here without a transcript,
- 12 but UCG was taking the position that you had to be
- 13 careful because it did not include potential
- 14 liabilities such as diesel and issues relating to
- 15 flex term note, et cetera.
- I would only ask the Board to look at
- 17 Attachment C to the application, where you will see
- 18 all of those issues were dealt with, and what you
- 19 will see in the first year of operation, first full
- 20 year of operation, there is a net benefit to
- 21 ratepayers of two and a half million dollars.
- The final point, Madam Chair, that I would
- 23 like to deal with, is with respect to LOLE and
- 24 YECL's comments in that respect.
- 25 Now, as I understood YECL's comments, they
- said that, because of the LOLE and the Board's

recommendation, that no generation should be built 1 2 for industrials. And they take that proposition and they leap to, effectively, conclude that you 3 4 should not include diesel fuel savings, when 5 serving industry, when you are trying to assess projects like the Aishihik third turbine. 6 7 I just want to say, Madam Chair, that Yukon 8 Energy fundamentally disagrees with that 9 proposition. LOLE is only for capacity planning, 10 not energy planning. If you use hydro to displace 11 diesel fuel generation, that should be accounted 12 for, in the circumstances that we are talking 13 about. 14 And I guess I would only pause there to say 15 this, Madam Chair; I would ask once again for the 16 Board to consider the positions or the evidence of 17 Mr. Morrison in relation to LOLE, and that I pointed out to you earlier, because this is one 18 good example where it is clearly, in our 19 submission, what YECL said is incorrect, but the 20 21 confusion created by the situation around LOLE is just one indication of that type of confusion. 22 23 so I would again ask the Board to look very 24 carefully at the evidence of Mr. Morrison in that 25 regard.

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Madam Chair, those are my submissions.

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1	ישי	CHAIRPERSON:	Thank	37011	Mъ	Tandra
Τ.	TUP	CHAIRPERSON.	Illalik	you,	IVIL .	Landry.

- 2 That brings us to the conclusion of our preliminary
- 3 argument and reply.
- 4 Are there any other matters that anybody
- 5 wishes to bring before the Board at this time? In
- 6 which case, as parties are aware, we will reconvene
- 7 for a public input session at five o'clock this
- 8 evening, and following that we will have final
- 9 argument and reply, which will be oral as well.
- 10 Thank you.
- 11 (PROCEEDINGS ADJOURNED AT 4:20 P.M.)
- 12 (PROCEEDINGS RESUMED AT 5:05 P.M.)
- 13 THE CHAIRPERSON: I am sorry, I forgot to
- 14 excuse the panel.
- 15 (YEC PANEL EXCUSED)
- 16 THE CHAIRPERSON: We are in the public
- input session now.
- I don't see any new faces in the room, so
- 19 I won't introduce counsel and the Board again.
- 20 Welcome to the public input session, and thanks for
- 21 coming back in so short a time.
- Ms. Marx, could you please have the first
- 23 person come forward that would like to have some
- input into the Board's public input session.
- 25 MS. MARX: Yes. I understand
- Mr. Rondeau has a submission to make on behalf of

- 1 another party.
- 2 SUBMISSION BY MR. R. RONDEAU ON BEHALF OF
- 3 MR. CHARLES EGLI:
- 4 MR. RONDEAU: Thank you. My name is

- 5 Roger Rondeau. I just want to indicate up front
- 6 that this submission is not on behalf of the
- 7 Utilities Consumers' Group. I am just representing
- 8 a group of private citizens that live on the Haines
- 9 Highway, between Haines Junction and Haines,
- 10 Alaska.
- 11 It comes from Mr. Charles Egli, who is a
- 12 Haines Road resident and general contractor.
- 13 However, there is a petition in the back with 20
- some odd names, and I will present a copy of this
- to the Board so that you will have this on file.
- 16 Mr. Egli writes:
- 17 Greetings from beautiful Kluane! I would
- 18 like to comment on two issues that have
- 19 come before the Yukon Utilities Board
- 20 recently that my neighbours and I felt
- 21 should be taken into consideration for
- 22 your future deliberations.
- 23 The first issue relates to the
- 24 Board's review of the agreement between
- 25 Yukon Energy Corp. and Sherwood Copper
- 26 Corporation with respect to the proposed

1	Carmacks-Stewart Transmission Project.
2	We have a concern as to whether the YUB
3	is absolutely certain that this project's
4	diversion of surplus grid capacity from
5	Kluane's Aishihik generation station
6	(AGS) may not eventually leave Kluane
7	somewhat deprived of usable capacity just
8	at the time when the district is
9	preparing modest growth plans of its
10	own.
11	The second issue is frankly more
12	self-serving and arose from our concern
13	that the map (page 2-2) and text of the
14	YEC's recent 20-Year Resource Plan
15	(approved by the Board) fail to demark
16	the Haines Road as one of the favourite
17	future grid extensions. It is our desire
18	to see the Haines Road corridor
19	designated as a territorial
20	infrastructure improvement area, and as
21	such, absolve the pioneering
22	entrepreneurs on this artery from the
23	conventional treatment under the Rural
24	Electrification and Telecommunications
25	Program.
26	And he elaborates:

1	Reserving surplus capacity for Kluane
2	growth: While many Yukoners believe that
3	everyone on our main arterial roads and
4	highways enjoys electrical service and
5	high speed internet, there is, in fact, a
6	group of regions that are still wanting.
7	One of these is a 102-kilometre stretch
8	of highway from Haines Junction to the
9	B.C. border, which they call the
10	Haines Road corridor. The snow packed
11	peaks, lakes and creeks are a natural
12	magnet, and the forested right-of-way
13	shields travellers from most of the
14	approximately 25 developed commercial and
15	residential tracts. These homes, cabins
16	and motels, lodge about 100 citizens,
17	year-round and seasonal residents. As
18	well, this artery is the home of the
19	Champagne and Aishihik First Nation's
20	Klukshu Village, with its new community
21	centre. It has, within its boundaries,
22	the Kluane National Park, Lake Kathleen
23	Campground, NorthwesTel relay towers and
24	the Blanchard River grader station at the
25	southern terminus. In all, the artery
26	has hunger pains for sustained

1	development and dependable electrical
2	power; and new enterprises are appearing
3	on this corridor every year.
4	Being off-grid has its own set of
5	hardships and issues: It is estimated
6	that the environment could benefit from a
7	savings of 900 tonnes of CO2 emissions by
8	the phase-out of the current diesel and
9	gasoline generator plants that this grid
10	extension would get rid of.
11	Batteries and/or generators must be
12	replaced approximately every three to ten
13	years.
14	Number 3, resale of homes and
15	businesses is hampered. The caveat on
16	the MLS form, where realtors forewarn of
17	the need to maintain a power plant and
18	solar panels, make many purchasers wary.
19	Number 4, residents, their children,
20	employees and business patrons must
21	endure the incessant drone of these
22	generators.
23	Financing becomes a chore as well,
24	Number 5. Lenders prefer to lend on
25	grid, knowing that the resale will be
26	difficult in case of sale or foreclosure

1	proceedings. Fiduciary role requires
2	lenders-in-possession to be vigilant
3	guardians of vacant premises in case of a
4	power plant failure and very real hazard
5	of freezing and bursting of the pipes.
6	Number 6, 95 percent of all Yukoners
7	enjoy high speed internet; but on the
8	Haines Road, it's dial-up, going without,
9	or paying \$95 a month for the satellite
10	provider.
11	Number 7, even taking a vacation,
12	attending trade shows or travelling for
13	outside hospital care, can be a trying
14	experience, as one must search for
15	responsible caretakers to maintain the
16	plant and facilities.
17	A chicken and egg phenomenon
18	surrounds most linear development grid
19	extensions. Premature constructions by a
20	utility provider ensures a financial loss
21	situation in the early years. On the
22	other hand, there comes a time when lack
23	of grid threatens both the
24	expansion/existence of present activities
25	and impedes the potential new
26	development.

1	My plea today to you, the Board
2	Members, is to ascertain that this
3	project, the CSTP, will not hamper the
4	future electrical needs of the residents
5	and the businesses in Kluane's watershed
6	area from whence the hydro is generated.
7	Diversification of the Yukon's economy
8	will be better served when commerce of
9	all types has yet another venue within to
10	flourish. The jewel known as the
11	Haines Road corridor is such an
12	opportunity, in our mind.
13	He outlines some activity and planning that is
14	occurring in this area:
15	Number 1, current facilities that would
16	likely benefit from grid extension
17	include the Kathleen Lake Lodge, the
18	Kathleen Lake Retreat, the Cabins Bed and
19	Breakfast, Dalton Trail Lodge,
20	NorthwesTel relay towers, Klukshu Village
21	and the Blanchard River grader station.
22	Number 2, the First Nation, CAFN, has
23	the beginnings of a traditional village
24	re-creation in Klukshu. To the north,
25	they have plans on the shelf for a
26	lakeside hotel and convention centre. It

1	is but one of a plethora of economic
2	development proposals to augment their
3	financial sustainability. All parties
4	are cognizant that the 15-year funding
5	under the Land Claim Agreement incurs in
6	its final agreement in 2008. CAFN also
7	has developable residential tracts at
8	Quill Creek and Lower Kathleen.
9	That is on the Haines, towards closer towards
10	Haines.
11	At both the recent Municipal Election
12	All-candidates Night and the Haines
13	Junction Economic Study Open House, it
14	was clear from the public feedback that
15	Haines Junction residents have come to
16	the realization that continuance of
17	certain services, and feasibility of
18	desired new facilities, is likely
19	dependent on growth of their
20	jurisdiction, to ultimate population of
21	1500 or more, is the prudent economics of
22	scales. The addition of 700 residents by
23	2016 will impose significant direct and
24	indirect demand requirements on the AGS.
25	YTG and Forestry are funding harvest
26	strategy plans dealing with the Spruce

1	Beetles - damaged tracts of land, which
2	may impact favourably with greater local
3	milling volumes. One example, Dimok
4	Timber at Canyon Creek.
5	Another local demand growth component
6	will be the eventual and equidistant
7	122-kilometre grid extension to
8	Burwash Landing and Destruction Bay, to
9	extinguish the financial burden of CO2
10	emissions of their diesel-generated local
11	grids.
12	Number 6, the Rural Secretariat and
13	Tourism are funding roundtable and Alaska
14	Highway economic development strategy
15	efforts in the Haines Junction region.
16	In the broader context, it would be
17	extremely consoling to Kluane
18	policy/decision makers if they could
19	entrust the Board to be on the watch that
20	sufficient reserve was in place, on the
21	AGS, for the eventuality when growth
22	plans for Kluane come to fruition. While
23	the CSTP itself may not deprive future
24	Kluane developmental plans, the
25	cumulative effect of these reallocations
26	of the AGS capacities is somewhat of a

Τ	worry to us.
2	The Aishihik watershed has a wealth
3	of power generation potential; enough to
4	be shared. There has been no visible
5	political or media dialogue with respect
6	to Kluane's future electrical needs. It
7	seems an oversight that a major diversion
8	of our watershed's power availability is
9	being considered without addressing
10	Kluane's medium term situation, and
11	acknowledgment of the growing needs of
12	our vicinity.
13	Will decisions in May of 2007, by
14	your Board, impact negatively on the
15	aforementioned Kluane electrical demand
16	needs from 2008 to 2028? Will Kluane
17	proponents be told, sorry, the well is
18	dry, when they are ready to tap on to
19	this Aishihik extension?
20	The Board has approved Yukon Energy's
21	20-Year Resource Plan, albeit there is
22	not a mention of the various Kluane
23	growth nodes that I have discussed above,
24	let alone my own personal concern for the
25	Haines Road grid extension. Absence from
26	the Resource Plan gives the impression to

1	the southwestern observers that this
2	extension will not be granted, without
3	full contribution by the affected
4	landowners, within a 20-year time frame.
5	I hereby request that approval of any
6	agreement between YEC and SCC be deferred
7	until YEC presents broad time lines that
8	illustrates it is prepared to address the
9	aforementioned Kluane growth nodes; in
10	particular, that YEC's natural growth in
11	the 20-Year Resource Plan includes demand
12	requirements of also the
13	Burwash/Destruction grid extension,
14	Haines Junction's desired 700 residents
15	by 2016 expansion and, more pointedly,
16	the Haines Road grid extension.
17	Classifying the Haines Road as an
18	infrastructure project: While I write
19	today solely on my own behalf, I enclose
20	an informal petition signed on
21	October 25th, 2005, by 16 other
22	Haines Road residents, businesses,
23	including the CAFN, as an expression of
24	interest to purchase electrical power
25	from Yukon Electrical. The follow-up
26	response correspondence is also attached

1	from Yukon Electrical Corporation
2	Limited. It indicates that a grid
3	extension was immediately available,
4	provided YTG, Indian and Northern Affairs
5	Canada, and any other cooperating
6	stakeholders, ante up the approximately
7	\$36,000 per kilometre.
8	I should add that it is inconceivable
9	that the Haines Road participating
10	stakeholders should bear the total of
11	these construction costs. Haines Road is
12	a major link from the tidewater to
13	central Alaska. During 60 years of life,
14	this area has been slow to flourish,
15	mainly due to the Kluane National Park
16	and Reserve occupying much of its western
17	frontage, and the domination of Dezadeash
18	Lake on the east. While the Rural
19	Electrification Program assists in
20	bringing power to hamlets, this corridor
21	is a lengthy linear corridor of sparse
22	density. There seems to be a case for it
23	being treated as an infrastructure
24	situation, much like the stretch between
25	Pelly Crossing and Stewart Crossing.
26	Current facilities, that would likely

1	benefit from grid extension, includes the
2	Kluane Lake Lodge, Kathleen Lake Retreat,
3	the Cabins B&B, Dalton Trail Lodge, the
4	NorthwesTel relay towers and Klukshu
5	Village and Blanchard River grader
6	station.
7	I mentioned that earlier. It is repeated here
8	We live today in the world of
9	environmental concerns. Just Dalton
10	Trail Lodge and the grading station,
11	together, burn approximately 600 litres
12	of diesel per day. That accumulates
13	4,200 litres per week, approximately
14	18,000 litres per month. They also have
15	the yearly figures, 216,000 litres. It
16	is quite easy to imagine that the total
17	consumption for all of the premises on
18	the route in this vicinity, of
19	approximately 300,000 litres annually,
20	that is about 900 tonnes of CO2
21	emissions. It is in the interest of both
22	the environment and family/employees, who
23	live here, to have health and to see the
24	time in the future when the exhaust from
25	these generators are gone.
26	To give some perspective of

1	residential or small enterprise fuel
2	usage, the 7/24 operation of an
3	8-kilowatt 40-amp generator requires
4	about 15,000 litres of diesel annually,
5	at a cost of approximately \$14,000. The
6	power plant cost of \$9,000 is re-incurred
7	every three to five years.
8	Alternatively, a substantial investment,
9	of \$28,000, can be made in 40-amp service
10	solar collectors, inverter and storage
11	battery, which lasts approximately four
12	to ten years.
13	If one examines the RETP, the Rural
14	Electrification Program, it does not work
15	well in a sparse-density linear
16	development. To illustrate: By
17	conventional application of simple
18	averaging, the estimated 3.6 million cost
19	of a 102-kilometre grid extension would
20	result in a levy of approximately \$60,000
21	for each of the 60 landowners.
22	An alternative optional agreement is
23	the grouping of the larger users and
24	owners, Parks Canada, Kathleen Lake
25	Campground, the lodges, NorthwesTel, the
26	CAFN First Nations, the lodges at

1	Kathleen and Blanchard River grading
2	station, where they share 50 percent of
3	the cost, which would be approximately
4	\$250,000 each.
5	If not, a far superior strategy is
6	for the federal government and YTG to
7	deem the Haines Road corridor an
8	infrastructure project, similar to the
9	\$10 million contribution for the Pelly
10	Crossing-Stewart Crossing link, and based
11	on our sparse density. A YTG/Fed
12	contribution of say 50 percent,
13	approximately 1.8 million, would reduce
14	the above levies to a more reasonable
15	129,000 for the larger shareholders, and
16	17,000 for the individuals,
17	respectively. This would bring down the
18	payback period tremendously and present a
19	justified business plan for many of us.
20	I conclude that the new grid
21	infrastructure may be subject and
22	corresponded to limited federal annual
23	funding to the territory or via municipal
24	GST rebates. To that end, it would be
25	envisioned that the Haines Road grid be
26	implemented in three stages: the

1	Junction to Dalton Trail Lodge; then
2	extended to Klukshu; and finally extended
3	to the Blanchard River grader station. A
4	fringe benefit for YTG's designation of
5	the Haines Road as somewhat of a broader
6	infrastructure project would be
7	eventually enhanced, and the subsequent
8	increased property taxes that should
9	inflate the newly gridded land parcels.
10	In closing, approval of Yukon
11	Energy's request to divert spare capacity
12	from the Aishihik generating station, for
13	the Stewart Crossing grid extension,
14	should be incumbent on such approval not
15	conflicting with the local watershed
16	energy requirements. Meanwhile, it must
17	be remembered that the Haines Road
18	pioneer stakeholders have been patient.
19	60 years. Please take caution that,
20	should the current agreement under
21	negotiation be approved without
22	satisfactory time line proposals for our
23	own grid extensions, and safeguards of
24	reserve capacity, it is intended to
25	pursue the available resources with full
26	vigour.

1	Thank you for your consideration,
2	Board. Regards, Charles Egli.
3	His addressed letter has been or will be copied to
4	Premier Dennis Fentie and Cabinet Ministers and
5	also YTG Tourism Department.
6	I have a copy of the petition and the Yukon
7	Electric letter, as well, that I will give to
8	Ms. Lemke. And anyone who wishes a copy, I can
9	e-mail a copy of this. Thank you.
10	THE CHAIRPERSON: Thank you, Mr. Rondeau
11	for taking time out to deliver that for Mr. Egli,
12	and I trust you can pass on the Board's thanks to
13	Mr. Egli, as well, for preparing such a detailed
14	submission for this hearing.
15	Do any parties have any comments they wish to
16	make on the submission?
17	In which case I would like to thank all
18	participants to the oral public hearing, that we
19	have had, to the Carmacks-Stewart Transmission
20	Line, and this hearing is thereby adjourned.
21	(PROCEEDINGS ADJOURNED AT 5:25 P.M.)
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4	REPORTER'S CERTIFICATION
5	
6	I, the undersigned, hereby state that
7	the foregoing pages 1 through 294 were taken down
8	by shorthand and transcribed to the best of our
9	skill and ability.
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11	DATED at the City of Whitehorse, Yukon
12	Territory, this 16th day of May, A.D., 2007.
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18	Doug Ayers,
19	Court Reporter
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