JOINT REVIEW PANEL PUBLIC HEARING

IN THE MATTER OF Application Nos. 1844520, 1902073,
001-00403427, 001-00403428, 001-00403429, 001-00403430,
001-00403431, MSL160757, MSL160758, and LOC160842
to the Alberta Energy Regulator

GRASSY MOUNTAIN COAL PROJECT - BENGA MINING LIMITED VOLUME 7

VIA REMOTE VIDEO

November 4, 2020

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3	November 4, 2020	Morning Session
4		
5	A. Bolton	The Chair
б	D. O'Gorman	Hearing Commissioner
7	H. Matthews	Hearing Commissioner
8		
9	M. LaCasse	AER Counsel
10	B. Kapel Holden	AER Counsel
11		
12	K. Lambrecht, QC	Joint Review Panel Secretariat
13		Counsel
14		
15	T. Utting	AER Staff
16	E. Arruda	AER Staff
17	D. Campbell	AER Staff
18	T. Turner	AER Staff
19	T. Wheaton	AER Staff
20	A. Shukalkina	AER Staff
21		
22	M. Ignasiak	For Benga Mining Limited
23	C. Brinker	
24		
25	R. Warden	For Ktunaxa Nation
26		

1	K. Poitras	For Métis Nation of Alberta
2		Region 3
3		
4	Chief B. Cote	For Shuswap Indian Band
5		
6	B. Snow	For Stoney Nakoda Nations
7		
8	R. Drummond	For Government of Canada
9	S. McHugh	
10		
11	A. Gulamhusein	For Municipality of Crowsnest
12		Pass
13		
14	M. Niven, QC	For MD of Ranchland No. 66
15	R. Barata	
16	J. Nijjer	
17		
18	B. McGillivray	For Town of Pincher Creek
19		
20	D. Yewchuk	For Canadian Parks and
21		Wilderness Society, Southern
22		Alberta Chapter
23		
24	R. Secord	For Coalition of Alberta
25	I. Okoye	Wilderness Association, Grassy
26		Mountain Group, Berdina Farms

1		Ltd., Donkersgoed Feeder
2		Limited, Sun Cured Alfalfa
3		Cubes Inc., and Vern Emard
4		
5	R. Cooke	For Crowsnest Conservation
6		Society
7		
8	G. Fitch, QC	For Livingstone Landowners
9	C. Agudelo	Group
10		
11	M. Sawyer	For Timberwolf Wilderness
12		Society and Mike Judd
13		
14	(No Counsel)	For Barbara Janusz
15		
16	(No Counsel)	For Jim Rennie
17		
18	S. Elmeligi	For Alberta Chapter of the
19	A. Morehouse	Wildlife Society and the
20	S. Milligan	Canadian Section of the
21	M. Boyce	Wilderness Society
22		
23	J. Gourlay-Vallance	For Eco-Elders for Climate
24		Action
25		
26	L. Peterson	For Trout Unlimited Canada
1		

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1	R. Campbell	For Coal Association of Canada
2		
3	(No Counsel)	For Alistair Des Moulins
4		
5	(No Counsel)	For David McIntyre
6		
7	(No Counsel)	For Fred Bradley
8		
9	(No Counsel)	For Gail Des Moulins
10		
11	(No Counsel)	For Ken Allred
12	(Not Present)	
13		
14	(No Counsel)	For Monica Field
15		
16	S. Frank	For Oldman Watershed Council
17	A. Hurly	
18		
19	C. Forster, CSR(A)	Official Court Reporters
20	S. Howden, CSR(A)	
21		
22		
23		
24		
25		
26		

- 1 (PROCEEDINGS COMMENCED AT 9:04 AM)
- 2 Discussion
- 3 THE CHAIR: Good morning, everyone. Just
- 4 a reminder that live audio and video streams and video
- 5 recordings of this proceeding are available to the
- 6 public.
- 7 MR. COOKE: (UNREPORTABLE SOUND)
- 8 THE CHAIR: Mr. Cooke, maybe you could
- 9 mute your microphone.
- 10 MR. COOKE: Yeah. My apologies.
- 11 THE CHAIR: Just a reminder that live
- 12 audio and video streams and video recordings of this
- 13 proceeding are available to the public through the
- 14 AER's website and YouTube. Anyone in the virtual
- 15 hearing room with the camera and microphone turned on
- 16 will be captured, and images of you and your
- 17 surroundings will be broadcast to the publicly
- 18 available YouTube video.
- 19 If you have concerns about this, please contact
- 20 counsel well in advance of the time you are scheduled
- 21 to participate to explain your concerns. We will try
- 22 to accommodate your concerns concerning the need for an
- 23 open and transparent public process.
- 24 Before we start, are there any preliminary matters
- 25 that we need to deal with? Okay. Hearing none,
- 26 Mr. Cooke, Crowsnest Conservation Society is up for

- 1 their direct evidence on this topic.
- 2 Direct Evidence of Crowsnest Conservation Society
- 3 (Purpose of Project, Visual Aesthetics, Alternative
- 4 Means, Land and Resources Use, Socioeconomic Effects,
- 5 Historic Resources)
- 6 MR. COOKE: Thank you, Mr. Chairman. If
- 7 we can bring into the room our two witnesses, I think
- 8 they need to be sworn first. That's Heather Davis and
- 9 Stephanie Duarte-Pedrosa.
- 10 THE CHAIR: Okay. If we can highlight
- 11 them and have the court reporter swear them.
- 12 HEATHER DAVIS AND STEPHANIE DUARTE-PEDROSA, Affirmed
- 13 RICHARD JOSEPH COOKE, Previously Affirmed
- 14 THE CHAIR: Go ahead, Mr. Cooke.
- 15 MR. COOKE: Okay. I think perhaps we --
- 16 we have a presentation that we will be speaking to. At
- 17 one point, we'll turn it off, but I would ask the Zoom
- 18 coordinator to put that up on the screen if -- if
- 19 that's possible now.
- 20 Again, we introduced ourselves in the opening
- 21 statements. We're a local Crowsnest Pass-based
- 22 environmental conservation group, and in our
- 23 presentation -- and perhaps I could have the next
- 24 slide. Next page. Thank you. We will attempt to --
- 25 our advocacy has been to this point in the process --
- 26 and our involvement goes back, really, to -- to the

- 1 inception of this project -- is to facilitate community
- 2 involvement in the consideration of this project.
- 3 And at this point, we would -- so our evidence is
- 4 really to identify what the key issues in -- what key
- 5 issues and concern impact the CNC, the Crowsnest Pass
- 6 Community, in this topic area and -- and to make
- 7 recommendations to the Panel on how they might be
- 8 addressed in its -- in its decisions. We're going to
- 9 present some information on what we have been able to
- 10 determine relate to community issues and concerns. The
- 11 three of us will make brief presentations just on why
- 12 we're here -- why we live here and our views on the
- 13 project.
- 14 As you can see by the distribution, we have the
- 15 future, and we have the past, and, in a sense, in
- 16 Heather, we have the present, and that may, you know,
- 17 provide some perspective. Heather will carry on and --
- 18 and make a presentation related to recreation and
- 19 tourism. We have asked leave to very briefly mention
- 20 what our priority environmental issues are and some
- 21 recommendations in that area, and this avoids us making
- 22 appearances later. And we'll address socioeconomic
- 23 issues and project sustainability and viability issues
- 24 and -- and provide a summary.
- 25 Next slide. Thank you. CCS -- and this is -- I
- 26 should have mentioned, generally, our presentation does

- 1 track our -- our submission, which is Registry
- 2 Document 551, I believe. And so we're not going to
- 3 elaborate on -- on text in that but try to highlight
- 4 what comes out of it.
- 5 One of the things we undertook to do in that
- 6 submission or we outlined was what is an informal
- 7 survey of our members and supporters, and that involves
- 8 an email sent out to 233 people. We have a membership
- 9 base of around 130. I would comment that the interest
- 10 in these video -- the video hearing in the
- 11 Crowsnest Pass has added some members, so we thank the
- 12 Panel for that. We asked three questions, essentially,
- in -- in this informal survey. One was people's
- 14 position on the project. The choices were "opposed" or
- 15 "qualified or conditional support" or "full support".
- 16 We included "other", but no one responded to that.
- 17 The results generally were -- and I don't think
- 18 this is surprising, given the nature of, you know, our
- 19 network -- was very strong opposition to the project,
- 20 85 -- roughly 85 percent; 10 percent offering
- 21 potentially qualified support, depending on the
- 22 conditionality and associated with -- with the
- 23 permitting and the conditions under which it might go
- 24 ahead; and -- but certainly we have members that --
- 25 that do support the project.
- 26 The main messages that come out of this -- and

- 1 I'll -- if I could have the next slide. This is just
- 2 illustrative. It's taken out of our -- our submission.
- 3 That -- that's information that people who are
- 4 passionately interested can get a sense, but these are
- 5 the kinds of comments we'd get.
- 6 Could I return to the previous slide, please?
- 7 Thank you. The next message is -- we've taken out of
- 8 this is certainly a strong message that economic
- 9 development in the Pass is desperately needed for a
- 10 viable future. We -- we have been a community that has
- 11 been struggling, and -- certainly in the 40-odd years
- 12 I've been hanging around permanently or otherwise, and
- 13 that's certainly been reflected. I think, Fred
- 14 Bradley's evidence as perhaps best illustrative of
- 15 that. People, you know, question in a sense the
- 16 limited and short-term project direct/indirect economic
- 17 benefits, and, basically, the message is: Are we
- 18 getting some short-term gain for long-term pain? And
- 19 that's a common theme, I think, in people's views.
- 20 Everyone -- or, generally, people view the Pass as
- 21 the poor sister in terms of the beneficiaries in the
- 22 region for the project. But, I mean, I think it is
- 23 clear -- it's clear in Benga's evidence and certainly
- 24 would be our experience in the area that the
- 25 neighbouring communities are better positioned to
- 26 capitalize on project benefits, the MD and Town of

- 1 Pincher Creek to the east and Sparwood and Fernie to
- 2 the west. The -- the dominant theme that has come out,
- 3 I think -- I would suggest, dominant theme is concern
- 4 about the degraded attractiveness of the Pass for
- 5 outdoor lifestyle, recreation, and -- and tourism
- 6 opportunities. And that has been the -- the primary
- 7 economic driver, certainly, for the last 20 years
- 8 and -- and particularly most recently, where -- where
- 9 gains have been made in this, and the community has
- 10 been moving forward in that direction. The concern is
- 11 that -- that this economic development route will
- 12 decline and -- as a result of a return of, you know,
- 13 visual industrialization.
- 14 There are messages that I personally find quite
- 15 disturbing, but -- as people in surveys who write their
- 16 comments are fairly free with their words, and there
- 17 were certainly strong words that we received. I might
- 18 add, though, we're keeping all of this, obviously,
- 19 confidential in terms of who says what. The message is
- 20 that people who have come to the Pass would not have
- 21 had they known there was a prospect of future coal
- 22 mining. People who are here now have suggested they
- 23 would leave -- and I know -- I personally know people
- 24 that are in the process -- and that people who might be
- 25 considering coming aren't coming. The -- certainly a
- 26 message that tourists won't come, that they won't stop,

- 1 and they're going through a pit town; that is a -- is a
- 2 message and that, you know, the embryonic but growing
- 3 business base associated with lifestyle, with
- 4 recreation and tourism will tend to relocate.
- 5 So there's -- a basic question is: Are we
- 6 foreclosing on that -- that economic path? There's
- 7 certainly fears related to project viability, timing
- 8 uncertainty. This is a long-historical mining
- 9 community, and even in recent experience, some of which
- 10 was referenced yesterday, people are sensitive to
- 11 things being proposed and not happening or things
- 12 starting and stopping.
- And, finally, a very strong message, and I would
- 14 identify it as the elephant in the room in this
- 15 socioeconomic discussion, is very strong opposition to
- 16 other proposed coal projects going forward.
- 17 Could I go down two slides, please? Thank you.
- 18 The other piece of factual information that may be
- 19 pertinent to how people feel about this project -- and
- 20 I again underline, none of this is definitive. It's
- 21 just nobody else seems to have done it. The proponent
- 22 hasn't -- have actually surveyed what people think in
- 23 the community, but this is just information --
- 24 available information you -- Mr. Chairman, you kindly
- 25 let us enter this as evidence when we came across it
- 26 just a couple of weeks ago. The Municipality, as part

- 1 of its municipal plan development, did a survey. My --
- 2 I personally filled it out. It was done last June,
- 3 June 2020. And there's some instructive messages, we
- 4 think, in that, and these are our interpretations of --
- of those messages, and others may have other
- 6 interpretations, and that's entirely legitimate.
- 7 But one key question was -- asked respondents:
- 8 What characteristics of the community do they identify
- 9 with? And 93 percent said the natural environment,
- 10 dominant. The least -- the one they least identified
- 11 with was industry. You know, where do people place
- 12 value in terms of -- of being in the community? And
- the highest is natural landscape, small-town
- 14 environment, and outdoor recreation. And these are
- 15 subjective numbers as opposed to absolute percentages
- 16 as expressed in the survey.
- 17 The challenges the community has, economy is -- is
- 18 Number 1. Aging infrastructure is Number 2.
- 19 Interestingly enough, environment is -- is quite low on
- 20 the list, which really suggests that, you know, the
- 21 environment's pretty good, and there's some other
- 22 things that need to be addressed. Service
- 23 improvements, really high rating given to
- 24 attractiveness and to indoor/outdoor recreation.
- 25 And, finally, the last -- and this is a subjective
- 26 question that was in the survey, but we -- I think

- 1 quite -- quite instructive is people were asked
- 2 directly what their opinion of achieving a balance
- 3 between what the Municipality defined as "tourism" -- I
- 4 would define more broadly as "lifestyle, recreation,
- 5 and tourism". What balance should exist? The highest
- 6 rating was given to -- people would like to see a
- 7 balance with -- with both prioritized, but following
- 8 behind that was balance with tourism and environment
- 9 prioritized, and close behind that was balance with
- 10 industry prioritized. So there is a range of -- this
- 11 just tells us there's a range of views collectively in
- 12 the community. We simply offer that as information.
- 13 We would have liked the Municipality and the proponent,
- 14 perhaps, to have presented this kind of information in
- 15 their analysis.
- 16 Could I go on to the next slide? Okay. We now
- 17 would -- we can take -- these are the three of us who
- 18 will speak briefly in who we are and why we're here.
- 19 We can take the slide presentation down. And it would
- 20 probably be useful if the three of us appeared in
- 21 parallel. I'll speak first, then Stephanie, and then
- 22 Heather. Heather will go on and discuss and make her
- 23 presentation on recreation.
- I'm the past of the three of us, as -- as I think
- 25 everyone can see. My wife and I have been associated
- 26 with the Pass on a part-time or full-time basis for the

- 1 last 40 years, have lived full-time in the pass for the
- 2 last 20 years. We are, what has been said in a recent
- 3 letter to the editor in the local paper, part of that
- 4 evil group that are amenity migrants that have
- 5 theoretically made their fortunes elsewhere, probably
- 6 in the resource development industry and other
- 7 business, and come to the Pass to get away from it.
- 8 I'm not sure that's a fair characterization, but there
- 9 is that sentiment. We are amenity migrants in that
- 10 context. Although, I think, ones -- we invested in the
- 11 Pass a long time ago in terms of we bought land a long
- 12 time ago and have since built a house on it. We live
- on one mountain to the west, Saskatoon Mountain -- one
- 14 mountain to the west of Grassy. And I -- and I don't
- 15 say that as in the context of having an objection to
- 16 living one mountain to the west of Grassy. My wife is
- 17 a health care professional, and she -- we came to the
- 18 Pass, basically, when our kids left home. We were
- 19 living in Winnipeg at the time. We first lived in
- 20 Calgary and then lived in -- in Winnipeg. Our kids
- 21 left home, and we always planned to come back here, and
- 22 we did. And my wife worked as a health care
- 23 professional in the Pass until she retired.
- 24 But I'm another kind of migrant in that sense, in
- 25 that I've run, at least what's been to me, a satisfying
- 26 and lucrative business as an international

- 1 environmental consultant. I -- my CV is in evidence,
- 2 and I won't elaborate any more on that. But, in
- 3 effect, I'm an example of a virtual business operating
- 4 out of the Pass, and I think that is a new trend. I --
- 5 we know of a lot of people younger than us that have
- 6 come to the Pass, young professionals who have very
- 7 successful careers here, but there's successful careers
- 8 that operate in other parts of the country and other
- 9 parts of the world as well, and they do that from the
- 10 Crowsnest Pass. That is a major source, in my view of
- 11 in-migration to this kind of community, specifically
- 12 for the amenities. That's the future, if you -- if you
- 13 like.
- I'll conclude just by saying: My own view is I'm
- 15 part of the 10 percent, in that I certainly have
- 16 concerns about the development, but I -- there is
- 17 perhaps some ways to make it work with having
- 18 industrial -- or having industrial development of this
- 19 type in parallel with the priority that people like
- 20 ourselves would attach to living in this community,
- 21 which is the lifestyle, recreation, and -- you know,
- 22 associated with that, perhaps tourism.
- 23 So with that, I'll conclude, turn it over to
- 24 Stephanie, who is the future and has, I think, a very
- 25 interesting background. Thank you.
- 26 THE CHAIR: Yeah. You're still on mute.

1 Don't worry. It's happened to all of us. 2 I'm Stephanie, and I'm MS. DUARTE-PEDROSA: Okay. 20 years -- 21 years old. My -- so my connection with 3 4 Crowsnest -- I grew up here. I -- my parents are from Edmonton, and they married and then they moved to the 5 6 United States. So my brother and I, we were both born 7 in Seattle, and as we were growing up, my mom and my 8 dad were like, Oh, my goodness, my children are 9 identifying as American. Oh, my goodness, we need to 10 change this. And so they came to Crowsnest when I was 11 9 years old, specifically to live in a small town in 12 the Canadian Rocky Mountains. That was their goal. 13 And I remember, as a kid, like, them, like, small-town 14 shopping, visiting Nelson, visiting Kimberley, visiting 15 these different towns, and finally coming to Crowsnest. Maybe the Albertan bias; I'm not really sure. 16 17 grateful for it. And so I'd kind of consider myself, like, a 18 half-local. Depends on who I talk to. If I talk to 19 20 people out of town, I'm a loud-and-proud Crowsnest resident. 21 If I talk to someone in Crowsnest who has, 22 like, multiple generations here, then I'm still kind of 23 a city slicker. I left Crowsnest four years ago for 24 school, and I've been back each summer to work. 25 year, I worked at the Alberta Tourism Office. That was 26 on the west end of Crowsnest, right by Crowsnest Lake.

- 1 So I got to help people driving through, gave them
- 2 maps, gave them advice on hiking trails. And that was
- 3 really, really fun and really, really -- I guess it was
- 4 very influential on how I -- how I viewed Crowsnest
- 5 since leaving, and getting to see it through visitors'
- 6 eyes was super exciting. And their -- to see their
- 7 excitement about our mountains and all of the hidden
- 8 gems and restaurants we have, that was really
- 9 beautiful, and it was -- it made my heart super -- kind
- 10 of grow a bit for my -- in relation to my town.
- I came back to Crowsnest in March. As soon as
- 12 university was shut down because of COVID, I moved out
- of my apartment. I didn't want to be stuck in a city
- or in an apartment building. I wanted to be in my
- 15 parents' house in Blairmore, which happens to be right
- 16 next to the forest, because I knew whatever would
- 17 happen, I would have access to hiking trails and to the
- 18 wild, which I think I -- yeah, I knew I needed in light
- 19 of COVID.
- 20 I think that's something that is kind of this --
- 21 like, the collective lifestyle of Crowsnest. One of
- 22 the -- I think the defining pieces is our connection to
- 23 the public lands that we have, regardless of your
- 24 political beliefs, your age, your background. Like,
- 25 you use the public lands hiking, running, mountain
- 26 biking, skiing, hunting, quadding, dirt biking. My

- 1 younger brother, he literally camped every single
- 2 weekend north of -- north of Crowsnest in the Crown
- 3 land, like, Highway 40 and Atlas Road, like, with
- 4 his -- with his old friends from high school, dirt
- 5 biking, camping. It's -- that's, for the locals, so
- 6 important to us.
- 7 And I remember, like -- I remember the first time
- 8 looking at the map where -- to see the exploratory
- 9 rights that different mining projects have, especially
- 10 up Highway 40 and Livingstone and then down kind of
- 11 towards Castle Provincial Park. That made me so
- 12 uncomfortable to see and -- and the thought of having
- 13 so much of our public lands restricted for mining and
- 14 the effect that will have on our collective identity,
- 15 it -- it kind of made my gut clench a bit. So I think
- 16 that's something really important looking forward, and
- 17 I know that's out of the scope of this specific
- 18 hearing, is, like, how our collective identity will
- 19 change as land use becomes limited.
- 20 I've -- something else I wanted to talk about is
- 21 kind of my family's formula that we have when friends
- 22 from out of town or family from out of town visit. We
- 23 always spend one day at Waterton National Park. We
- 24 always go to the Frank Slide Interpretive Centre to
- 25 show them Canada's deadliest mining disaster, and we
- 26 try to do the hike up Turtle Mountain. And then we

- 1 always go to Fernie, and we go and enjoy the main
- 2 street and the small shops and the restaurants in
- 3 Fernie. And it's kind of -- since moving away and
- 4 thinking and reflecting upon it, it's kind of a weird
- 5 thought that, like, when we have people visit us in our
- 6 town, we only spend one day in our town. Everything
- 7 else we do is in neighbouring places.
- But in the last few years, like, I've witnessed
- 9 kind of the momentum shift, and I think there's more
- 10 and more things to show in Crowsnest. And there's more
- 11 and more things that I'm proud to show in -- show of
- 12 our town, such as, like, the community market that I --
- 13 that I remember as a -- like, it started when I was a
- 14 kid, and every year it becomes more lively. There's
- 15 more shops, more locals really excited to show off
- 16 their products and their services.
- 17 And to see the growth of and the success
- 18 of Sinister 7, the ultra -- ultramarathon that happens
- in July every year, and then all of the races that have
- 20 developed since Sinister 7, to see all the
- 21 mountain-biking trails with UROC that they've put in
- 22 with their volunteers. Working at restaurants and
- 23 having people from Calgary come down and say, Yeah, I
- 24 just went mountain biking, and I'm never going to tell
- 25 my friends in Calgary. No. It's going to be my little
- 26 secret. No one can have these trails except me; it's

- 1 so beautiful and so uncrowded. And to hear that kind
- 2 of excitement and that loyalty to our town and the
- 3 trails that we have now that we didn't have when I was
- 4 a little kid, that's super cool to see too.
- 5 And, like, all those really good things, it was --
- 6 my dad told me not to use this word, but I kind of
- 7 found it insulting to read the socioeconomic impact
- 8 assessment and to see all those recent things in our
- 9 town that I love and makes me so proud -- to not see
- 10 those represented in the impact assessment, it really
- 11 kind of ground my gears because there's so many people
- 12 in our town giving so many hours to the tourism and
- 13 recreation industry, and that kind of seemed to be
- 14 ignored. And I think it really needs to be addressed
- 15 going forward that they do exist and that there is a
- 16 lot of potential in that.
- 17 And something else that I remember reading in
- 18 preparation for the hearing is a letter from the
- 19 Municipality, I think, in -- for the most part, it was
- 20 in support of the mining project. And I remember
- 21 clearly them using the adjective of "thriving" to
- 22 describe Fernie, Elkford, and Sparwood. And in some
- 23 ways, that's true. You know, they do benefit from
- 24 Teck. But to me, the only town that's thriving of
- 25 those three is Fernie, and I urge everyone in the Panel
- 26 to take a little road trip to the Elk Valley and drive

- 1 through Sparwood and Elkford and through Fernie, and
- 2 you'll see the liveliness and the spirit is so strong
- 3 in Fernie because of the small businesses that are
- 4 nurtured from the tourism and recreation industry.
- 5 And I don't -- in my opinion, in Sparwood and
- 6 Elkford, that's not the same thing. And I see
- 7 Crowsnest right now kind of at this crossroads, and
- 8 there's a lot of pressure on the Panel to -- in kind of
- 9 determining the economic future of our town for the
- 10 next two decades and maybe even longer. And so I kind
- 11 of see us going down either one road of, kind of,
- 12 Sparwood and Elkford or the other road of Fernie. And,
- obviously, like, I guess that's kind of an
- 14 oversimplified look at it, but I think I -- that's how
- 15 I feel, and I know there's many people in the town that
- 16 feel that way as well, that -- a fear of this Panel's
- 17 decision kind of forcing us to become "a Sparwood" as
- 18 opposed to "a Fernie".
- 19 And I know there's also lots of people that kind
- 20 of have expressed this idea of parallel economies and
- 21 having the tourism/recreation industry working
- 22 alongside the mining -- like, the mining industry in
- 23 our town, and I don't think that's possible. I don't
- 24 think we can get the best of both worlds in that
- 25 situation. And speaking as a younger person and having
- 26 lots of friends from the city and -- I really don't see

- 1 my friends in their 30s investing their time and their
- 2 travel in Crowsnest because I think as a -- as a Gen Z,
- 3 we don't -- we don't want to see mining, like, face to
- 4 face. We don't want to look at the tar sands. We're
- 5 not going up to Fort McMurray to vacation. We're not
- 6 going to Sparwood to vacation. We want -- we want the
- 7 oasis and the wilderness. And I see those trends, and
- 8 I think it's really important with the impact
- 9 assessment to look to the future and those trends and
- 10 how our generation will be spending our money as
- 11 opposed to previous generations.
- 12 And, yeah, I guess another thing too. Like,
- 13 personally, as a local, like, it's crazy to think that,
- 14 like, as -- I could be in my mid-40s, and I could
- 15 return to my hometown, and I could see the coal loadout
- 16 still active on the opposite side of the highway from
- 17 our hospital, and that breaks my heart. And to me,
- 18 that's the most unforgiveable piece of this whole
- 19 application, is the location of the coal -- the coal
- 20 loadout being so central in our community.
- 21 And even -- even Sparwood doesn't have their coal
- 22 loadout right in their community. They're -- like, you
- 23 know, the coal loadout -- the closest coal loadout and
- 24 their Tim Hortons are kilometres apart. Our Tim
- 25 Hortons will be, like, 300 metres from the coal
- 26 loadout. And any small-town Canadian knows that Tim

1		Hortons is a central part of our community, and that
2		makes me so mad to to think that, I guess I mean,
3		I'm not I wasn't obviously in the room for any of
4		these discussions on where the coal loadout would be
5		placed, but from what I've heard around town, this coal
6		loadout is kind of the best location for the proponent,
7		but I don't it's not the best location for our town,
8		and I think there are alternatives that need to be
9		reevaluated. And if this mine goes through, like, it
10		will break my heart to know that the coal loadout is in
11		kind of the central, central location of our town, and
12		I think that will really confirm the as Rick said,
13		kind of the foreclosure of our tourism and recreation
14		industry.
15		And that's yeah. So I have so I guess
16		okay. So that's that's it. I'm done. Yeah. Thank
17		you. And now Heather.
18	A	MS. DAVIS: Thank you, Stephanie. You're
19		very passionate. I love it.
20		Good morning, Chairperson and Panel attendees. I
21		typically greet people with a big, giant "Hello, my
22		friends" on social media and in virtual tours, but
23		today, I think, is serious and represents the potential
24		future for Crowsnest Pass and the eastern slopes of the
25		Canadian Rockies.
26		I moved to Crowsnest Pass the summer of 2014 to

- 1 work for Alberta Environment and Parks, leading their
- 2 south portion of the Backcountry Trails Flood
- 3 Rehabilitation Program where our team reconstructed
- 4 backcountry trails and riparian areas.
- 5 Prior to moving to the mountains, I worked in oil
- 6 and gas and in conventional gas, completing reclamation
- 7 and remediation projects as a professional agrologist.
- 8 I would spend my spare time travelling to mountains and
- 9 even tour-guided for a ski and snowboard company,
- 10 taking people to mountains in both Canada and the US.
- 11 The mountains are special to me and hold a place for
- 12 recreation, healing, and sustainability for now and in
- 13 the future. Crowsnest Pass is very much a part of
- 14 this.
- 15 In March 2018, after winning a provincial Growing
- 16 Rural Tourism award, I started my own business called
- 17 Uplift Adventures. I hold several titles, including an
- 18 environmental scientist, professional guide with two
- 19 highly recognized organizations, and an entrepreneur.
- 20 I'm also a board member with the Crowsnest Conservation
- 21 Society, and I'm here today to provide the perspective
- 22 of outdoor recreation and how it is a growing -- and
- 23 how it is growing in the community of Crowsnest Pass.
- 24 And I see my perspective as being valuable as I'm so
- 25 intertwined and -- and connected in this industry as
- 26 it's my livelihood.

I started my own business for several reasons, and 1 2 one of those reasons was I saw an opportunity to grow a 3 sustainable, economic driver in a community that I 4 I want to be able to provide employment and quality jobs for residents within my community. 5 6 started this grassroots business in a community where I 7 was the first professional quide with the Association of Canadian Mountain Guides and know that I can be 8 instrumental in growing a professional career for 9 10 myself and others in guiding. 11 And I -- I only add this next part is because of 12 this -- the talk of not having high-paying jobs in 13 And there are several high-paying jobs in 14 tourism if you ask the tourism industry. So depending on the level of guiding and experience, there's guite a 15 range in how much a quide gets paid, but a professional 16 17 quide can make between \$175 a day to \$600 a day, and then they usually get tips on top of that. 18 really depends on the level of guiding. 19 Just like any 20 other industry, there's several different levels. 21 I currently employ one person, which is myself, 22 and I contract three guides and instructors for other -- for other things and have several business 23 24 To express how this industry is growing and 25 even during the pandemic and being shut down for three 26 months, my business grew by 125 percent over the spring

- 1 and summer. And I'm not alone, as there are other --
- 2 several other businesses who have started up ventures
- 3 in this area and provide employment in the community
- 4 for this growing industry.
- 5 So I cannot speak on the opinions of other groups
- 6 and business owners, but I am going to speak on what is
- 7 currently occurring in our community regarding outdoor
- 8 recreation. I acknowledge that Kerri and John briefly
- 9 spoke on this yesterday. But as someone who is deeply
- 10 integrated in this industry, I want to provide more
- 11 perspective.
- 12 So here are a few things that are currently
- 13 happening in our community. It's been talked about
- 14 with mountain buying. The United Riders of Crowsnest
- 15 Pass, a local mountain-bike club, surfaced around ten
- 16 years ago and has built world-recognized sustainable
- 17 mountain-bike trails. The momentum for mountain biking
- 18 in the Crowsnest Pass has increased substantially over
- 19 the last five years, and in 2020, their trail counters
- 20 showed a 100 percent increase on their mountain-bike
- 21 trails.
- To add value behind the economic driver of
- 23 mountain biking, there are currently three local
- 24 businesses through retail, mechanics, coaching, and
- 25 tours that exist in Crowsnest Pass. Events have
- 26 surfaced, which is a result of these trails, which

- 1 brings tourists to town. In 2019, four mountain-bike
- 2 races came to Crowsnest Pass that attract people across
- 3 Canada, if not internationally.
- 4 Trail running has contributed -- has contributed
- 5 significantly to the economics of Crowsnest Pass and to
- 6 the mountain culture of this area. A big driver for
- 7 this community of runners stems from the largest
- 8 ultramarathon in Canada. This race is
- 9 162 kilometres -- yeah, crazy -- which intertwines
- 10 throughout the backcountry around Crowsnest. While
- 11 this isn't the only race this company directs, the
- 12 company is based in Crowsnest Pass and provides
- 13 full-time employment for staff and several seasonal
- 14 jobs locally. The race brings racers and their race
- 15 supporters, such as friends and family, to this
- 16 community. And on the weekend of the big race, it is
- 17 almost nearly impossible to find a room at any local
- 18 hotel or B&B. These events attract more people to this
- 19 community, and some of them buy homes afterwards as
- 20 either full-time or part-time residents. And myself, I
- 21 can say that I ran the race in 2012 and then moved here
- 22 in 2014.
- 23 To add value behind the economic driver of trail
- 24 running, there are currently two local businesses
- 25 through retail and distribution that exist in Crowsnest
- 26 Pass. Events and businesses have surfaced as a result,

1		including a race that is the only North American stop
2		on the SkyRace series. So this attracts international
3		attention. There there are three main races that
4		attract visitors to Crowsnest Pass in terms of running,
5		and there are several small races that foster the
6		culture in this community.
7		Can I ask for the presentation to be brought up
8		and Slide 7?
9		MR. COOKE: Heather, just I think ask
10		the slide coordinator to put up continue the slide
11		presentation and take down take down our faces at
12		this point.
13	A	MS. DAVIS: Take down my face.
14		MR. COOKE: Not your face.
15	A	MS. DAVIS: Okay. My face doesn't need to
16		be shown, but I guess it has to be. All right. So
17		here is Slide 7. And what I wanted to show here is
18		sorry. I'm just trying to find where my notes are.
19		So I want to talk about this slide, and here
20		I've sorry. It's little distorted, but you can see
21		the Grassy Mountain Coal Project and where that's going
22		to go, the loadout, the highway, where Blairmore is,
23		and you can see Coleman in the back, kind of just
24		underneath Crowsnest Mountain to the to the left
25		there. And then you see Pass Powderkeg. So this is
26		the view on top of Turtle Mountain. We heard Stephanie
1		

- 1 say that this is one -- one hike that she does. And I
- 2 would say that it is one of the most popular, if not
- 3 the most popular, hike in the area. And the second one
- 4 is Crowsnest Mountain. It's an easy hike -- sorry, a
- 5 difficult hike, easy scramble. So these are the two
- 6 most popular hikes in the area. And from both of them
- 7 you will see the Grassy Mountain Coal Project and an
- 8 active open-pit mine.
- 9 So we'll just leave this slide up for a little bit
- 10 as I continue to talk. So hiking and backpacking is a
- 11 growing -- a growing activity in the region. In 2019,
- 12 the local hiking club had to start capping the number
- of people who came on their trips to manage the size of
- 14 local participants. The Great Divide Trail, a
- 15 long-distance hiking trail from Waterton to north of
- 16 Jasper, has recently been rerouted and -- the north
- 17 section has been rerouted, so the north section of
- 18 Crowsnest Pass. And they rerouted it from BC to put it
- 19 into Alberta so they can get further away from the coal
- 20 mines in BC. In 2020, the Great Divide Trail saw
- 21 around a 225 percent increase of through-hikers using
- 22 their trail.
- 23 And to add value behind the economic driver of
- 24 hiking, there are currently at least two -- I think
- 25 there might be three, but I'm not positive -- at least
- 26 two local business providing guiding and outdoor --

- 1 sorry, outdoor education -- and this includes things
- 2 like wilderness first aid and avalanche safety
- 3 training -- that exist in Crowsnest Pass.
- 4 The next things I want to talk about are kids
- 5 camps. There are quite a few outdoor kids camps in the
- 6 region. But there is one local one, and that's the
- 7 Crowsnest Pass Bible Camp, and they have two locations
- 8 within the Municipality of Crowsnest Pass, and they've
- 9 hosted several youth and kids over the decades. And so
- 10 they're not a new establishment. They've been around
- 11 for a very long time. I believe their busiest day in
- 12 2019 was 178 kids in the backcountry on one day. They
- 13 have thousands of kids at the Bible camp in a regular
- 14 year, and they utilize the public lands in the area.
- We've also talked about the world-class fly
- 16 fishing that exists in Crowsnest Pass, and one thing
- 17 that hasn't been brought up is that the regulation in
- 18 BC has become guite strict for fly fishing, and even
- 19 fly-fishing quides from Fernie will come over to
- 20 Alberta to fly fish. And a large reason for this is
- 21 also that there are less and less fish in the Elk
- 22 Valley, and this is largely due to the -- to coal
- 23 mining, their decline. So fly-fishing guides come down
- 24 from Calgary to fish as well, and we have several local
- 25 fly-fishing guides and two local fly shops who provide
- 26 added economic drivers to this area.

- Other activities that I want to include and are
- 2 part of outdoor recreation and tourism: We heard Kari
- 3 briefly talk about bouldering, so bouldering on the
- 4 Frank Slide, which now has over 2,000 problems. I
- 5 believe that that's doubled in the last five years.
- 6 The Slide is now one of the biggest single bouldering
- 7 areas in Canada, with problems of all grades and
- 8 styles. There's talk of a guidebook that's going to be
- 9 released shortly, and the local club, which is based in
- 10 Lethbridge, hosts an annual event called Tour -- sorry,
- 11 Tour de Frank Bouldering Festival, and that brings
- 12 people to this area.
- 13 Crowsnest Pass has world-class caves as well.
- 14 This hasn't been super popular, likely due -- likely to
- 15 do with the technical skills needed to access several
- 16 caves. Historically, caving tours has been offered
- 17 through businesses located outside of Crowsnest Pass,
- 18 and next year, tours will start up again in partnership
- 19 with a local business.
- 20 Ski and snowboarding. So a brief description: As
- 21 you can see on this picture, you see where Pass
- 22 Powderkeg is. So that's our local ski hill, and this
- 23 is a small ski hill that is managed by our
- 24 Municipality. It offers skiing and snowboarding, and
- 25 even at nighttime, it's quite nice. The local ski hill
- 26 is also a major trail network for mountain-bike trails

- 1 in the summer. And then in the winter, those trails
- 2 turn into fat-biking and snow-shoeing trails.
- From the ski hill, we will look directly across at
- 4 the proposed Grassy Mountain Mine. So anyone that's
- 5 participating in outdoor recreation will have -- on
- 6 Pass Powderkeg will get a nice view of the mine.
- 7 In addition, backcountry skiing, ski touring, and
- 8 snowboarding is also growing in the area.
- 9 Paddling is more popular in the spring, when the
- 10 rivers and creeks are higher. There is a local club
- 11 that exists in the area of Pincher Creek that provides
- 12 summer camps and hosts a kayaking festival called Three
- 13 Rivers Rendezvous.
- Nordic skiing is incredible in the area, and there
- 15 is also a local club that exists. And climbing is
- 16 growing in popularity as I noticed more routes being
- 17 set in the region. We also have a local distributor
- 18 company in the area that distributes climbing gear
- 19 throughout Canada.
- 20 And, of course, there is golfing, which we have
- 21 already heard how they have received a new clubhouse,
- 22 and the golf course was moved around to make room for
- 23 Riversdale's loadout. The golf course does not
- 24 encompass the entirety of outdoor recreation in
- 25 Crowsnest Pass.
- As our global trends change again, I strongly

- 1 believe we -- we will see a shift in people working
- 2 remotely and more people moving to places for a
- 3 lifestyle. I suspect, and I have heard from people
- 4 saying, that by having an open-pit mine this close to
- 5 town, it will negatively impact the way people feel
- 6 about moving to a mountain town for its lifestyle and
- 7 are visiting a community for its adventure- and
- 8 nature-based activities. It is difficult to say
- 9 whether or not these businesses and clubs with
- 10 volunteers will even stay in Crowsnest Pass once the
- 11 mine is in operation or if they will leave this
- 12 community.
- I have heard several times that people do not plan
- 14 to stay once the mine opens up or if several mines open
- 15 up. Outdoor recreation is a big part of tourism in
- 16 Crowsnest Pass, and tourism does not revolve around
- 17 hotels and restaurants, which we actually have quite a
- 18 few of. People must have something to do in order to
- 19 visit an area, like a quality ski hill, a race, great
- 20 trails, or events and courses. The environmental
- 21 impact assessment and its socioeconomic section lacks
- 22 consultation with the local tourism and outdoor
- 23 recreation community. It appears that the consultant
- 24 who prepared the report left a gap regarding what is
- 25 going on in the community. A cost-benefit analysis
- 26 should include the assessment of outdoor recreation.

- 1 lifestyle, and tourism prior to the mine approval.
- 2 As a visitor and outdoor recreationalist to
- 3 mountain communities, I do not visit or recreate at a
- 4 mountain town with an active open-pit mine that's
- 5 visible from its own town, not to mention several
- 6 open-pit coal mines.
- 7 Can we go to the next slide, please. And when
- 8 large-scale open-pit mines come into an area, one of
- 9 the first things they do is limit access for
- 10 recreation.
- 11 As I hear others speak about this community
- 12 declining in population and this must mean it is a
- dying community, I see it differently. I see it as a
- 14 community that is transforming as people remove the
- 15 stigma of Crowsnest Pass as being a coal-mining town
- 16 and seeing it as part of the Canadian Rockies. We are
- 17 seeing more entrepreneurs and people being creative to
- 18 build an economy, and if we give people the support and
- 19 encouragement to do this, this will only grow.
- 20 As we saw in the past, the Crowsnest Pass
- 21 struggled after the last coal mine closed down. I
- 22 don't want to see this again because people
- 23 are eager -- eager to make a quick but short-lived
- 24 economic boost.
- 25 I'll finish with a letter that Frederick Godsal
- 26 wrote in 1893, prior to the first coal mines to exist

1	in Crowsnest Pass. So here's the quote: (as read)		
2	The Crowsnest Pass and Waterton Lakes have		
3	been for years a common resort for the		
4	surrounding neighbourhood for camping and		
5	holiday-making, and there being but few such		
6	places in the country, I think they should be		
7	reserved forever for the use of the public.		
8	Otherwise, a comparatively small number of		
9	settlers can control and spoil these public		
10	resorts. Every day that it is delayed		
11	increases the probability of friction between		
12	the government and settlers that may build in		
13	these spots.		
14	Remember, this was written in 1893.		
15	Thank you. I'm going to turn this back over to		
16	Rick.		
17	THE COURT REPORTER: Sorry. Could I please ask you		
18	the name of the person who said that?		
19	MS. DAVIS: Frederick Godsal.		
20	THE COURT REPORTER: Can you spell the last name,		
21	please?		
22	MS. DAVIS: G-O-D-S-A-L.		
23	THE COURT REPORTER: Thank you.		
24	MS. DAVIS: You're welcome.		
25	MR. COOKE: Could we go on to the next		
26	slide?		

- 1 I'm the next slides, and I recognize,
 2 Mr. Chairman, that we are taking a little more time
 3 than we probably hoped. I'm going to go fairly
 4 quickly.
 5 The material that I'm -- I'm presenting general
- The material that I'm -- I'm presenting generally is -- is in our submission. What's on the slides is extracted generally from the submission. I had hoped to address environmental issues. I -- I won't do that to save time but recommend and hope the Panel would
- 10 read the next two slides and also read the submission.
- 11 The main message in both this slide and the next 12 slide is that transparent processes -- and this could
- 13 be driven by conditionality that would be applied --
- 14 need to be applied to the subsequent conditioning
- 15 process and -- and to the actions of the proponent.
- 16 And I think the main issue is -- is aquatic, and that
- 17 issue -- that will be well dealt with, obviously, in
- 18 this hearing. We would like to see some definition of
- 19 the process and -- and -- but going in, the application
- 20 of a precautionary principle -- principle to assume
- 21 damage to two very valued watercourses and -- but
- 22 underlining very transparent disclosure is required.
- Could I have the next slide? The same applies to
- 24 air and noise. These are real or perceived
- 25 environmental impacts, and I'm not saying "perceived"
- 26 in a pejorative way. My own experience with projects

- 1 is perception is reality when it comes to the public
- 2 and the community, so that needs to be addressed. So,
- 3 again, a transparent process reporting what is
- 4 happening with respect to these two issues is required.
- 5 And there needs to be some discussion. I recognize the
- 6 Municipality has addressed it in their evidence. I
- 7 think people like us might suggest some expansion of
- 8 monitoring and introduction of real-time monitoring and
- 9 the -- and there's certainly acknowledgement of the
- 10 need for a creditable complaint process.
- 11 And there are international standards in terms of
- 12 international safeguards that are adopted by
- 13 international -- by -- by my client, if you like, UN
- 14 organizations and development banks, and those would be
- 15 useful references that I'm sure the consultants, given
- 16 their practices, should be aware of.
- 17 And, finally, the land -- in terms of land
- 18 reclamation, our primary recommendation -- and I
- 19 think -- I think this would be -- has been addressed,
- 20 and Benga can confirm this in the hearing. We were
- 21 advocating that the whole of the conserved area of
- 22 Grassy Mountain be subject to reclamation. My
- 23 understanding is that the application and the
- 24 submissions, I think, are unclear on that point. My
- 25 understanding of the evidence that we've heard today
- 26 from Benga is the intent is to do reclamation on the

- 1 whole historical footprint of -- of impact. If that
- 2 assumption is incorrect, perhaps that could be
- 3 clarified.
- 4 Next slide. I'm going to go through some of the
- 5 socioeconomic issues and the recommendations we're
- 6 making in those regards. And the issue that's been
- 7 well illustrated, I think, by Stephanie and Heather and
- 8 certainly in the concerns expressed to CCS is: Can
- 9 this kind of development -- is it compatible with the
- 10 direction in terms of economic development that the
- 11 community is taking? And we would suggest strongly
- 12 that a golf course that was certainly appreciated, it
- 13 was built basically as a deal. If that convenience --
- 14 that land was acquired and used by the coal mine, the
- 15 community would get a new golf course and that the
- other condition was they'd never stop golfing.
- Benga is to be commended for doing that, but that
- 18 was a business transaction to facilitate the project.
- 19 What we would suggest is that the proponent be asked to
- 20 provide, you know, as part of its conditioning, some
- 21 concrete proposals in advance of approval as to how it
- 22 will materially support and stimulate the
- 23 attractiveness and the continued development of the
- 24 Crowsnest Pass with respect to lifestyle, in-migration,
- 25 tourism, and related business development.
- We've made a point related to municipal finance.

- 1 There's obviously an inequity, the Pass as the
- 2 community that gets the cost, but it doesn't get equal
- 3 benefit. And that's not a criticism of the -- of
- 4 Ranchlands in any way. Ranchlands has made its views
- 5 very clear. But there needs to be some process before
- 6 everything's in place to expedite the redistribution of
- 7 property tax revenue or other offsetting compensation
- 8 to give the Crowsnest Pass the financial capacity to
- 9 address its deficits so that it, in reality, can
- 10 capitalize on -- on the positive economic benefits from
- 11 the -- from the project. Otherwise, quite frankly,
- 12 they will go to Sparwood, and they will go to Pincher
- 13 Creek. We will still be the poor sister. That needs
- 14 to be done in advance and now.
- 15 Next slide. The elephant in the room, as I
- 16 mentioned before, is future projects. I fully
- 17 recognize that this Panel cannot make any decisions
- 18 respecting those, but a directional recommendation
- 19 going forward out of this Panel that the actual
- 20 socioeconomic impacts that I think we're illustrating
- 21 are understood before future projects are considered
- 22 and that a higher regulatory bar be recommended for
- 23 them, recognizing cumulative impacts, which they will
- 24 obviously bring. And I think Heather has illustrated,
- 25 in particular, as soon as you move into the backcountry
- 26 out of the Pass, there's very significant impacts.

- 1 Next slide. The last piece relates to what
- 2 I've -- we've headed "Project Sustainability and
- 3 Viability". And there's certainly been much discussion
- 4 already, and there will be more. What we're advocating
- 5 essentially -- I have seriously -- serious conditions,
- 6 you know, technically and -- and economically, just
- 7 from my own background, respecting the viability of the
- 8 project. If you asked me as an investor, would you --
- 9 would I invest in this -- I tend to look at things in
- 10 that regard -- I would not and for quite a number of
- 11 reasons. There's a lot of risks upfront associated
- 12 with it.
- 13 From the community's perspective, what we would
- 14 like to see ensured and I think is absolutely necessary
- is that there is a -- a demonstrated and fully -- fully
- 16 transparent documentation from the outset on what is
- 17 going on. Now, in terms of -- predominant issue
- 18 clearly is closure reclamation liabilities. Again, I'm
- 19 in that business dealing with environmental legacies
- 20 and financing them, other -- not -- not related to coal
- 21 but in -- in other areas. And a global observation I
- 22 would make and an observation as a citizen of the
- 23 province of Alberta is we've really done a bad job
- 24 dealing with that. I think the Coal Association
- 25 certainly illustrated that a good job can be done, but
- 26 the reality is there's no guarantee it will be.

So I've listed here -- and I won't go through them 1 2 in detail -- some principles that I think need to be in 3 place, basically, to protect the community from not 4 ending up with a long-term liability and the taxpayer from not ending up with a long-term financial liability 5 6 associated with the projects. And I say all those 7 things not as critical of Benga in any way, as I think every intention probably exists in the beginning, but 8 it is -- the enterprise is going to be ring-fenced in 9 10 terms of those liabilities by its owners. It's the way 11 I set up my company and many other people do, that --12 and in the end, whoever owns it, whoever's operating 13 it, there needs to be the financial resources secured 14 external from that in some way to deal with current and future liabilities. I won't -- won't elaborate any 15 more on that. 16 The final point in this area really 17 Next slide. relates to the project life uncertainty. We had some 18 We've already had discussion on that. 19 discussion. 20 reality is we don't know when construction's going to There's a lot of variables that exist, not the 21 start. least of which, in fact, is when final decisions will 22 Recommendations from this Panel, that goes on 23 be made. 24 to two governments who will have to, I'm assuming, at 25 the cabinet level approve the project. They are two 26 governments that don't necessarily get along all the

- 1 way, all the time, and I'm sure there will be some
- 2 discussion between them. My only point is all that
- 3 takes time as do all of the business -- business
- 4 activities that are needed to press the button
- 5 somewhere, probably in a boardroom in Perth, Australia,
- 6 to whether the money is going to be there. And there
- 7 will be some lenders involved and all of that. There's
- 8 a range of technical and market variables that will
- 9 affect that decision-making, and there's -- I won't
- 10 discuss those any -- any further.
- 11 Once permitted and going ahead, project -- I --
- 12 let me address the second point. The point here, from
- the community's point of view, is having the community
- 14 sitting in limbo, waiting, will have some very strong
- 15 effects on this parallel direction that the community
- 16 might take. Everybody will sit and wait or go
- 17 elsewhere during that period. So we are recommending
- 18 that the consideration be given to some sort of fixed
- 19 term for an approval. Five years would be suggested
- 20 notionally and that some kind of public review process
- 21 be applied to see if it -- if continuance should occur,
- 22 if the date -- a date certain for completion of
- 23 construction and the completion of that pre-commitment
- 24 process is not in place.
- 25 All of this continues onward during operation,
- 26 again, with many risks, and I -- and I won't elaborate.

- 1 There's some words in our -- our submission related to
- 2 technology risk. I, again, am in that world, to some
- 3 degree, and strongly believe that we will have to deal
- 4 with carbon. We'll have to deal with it sooner rather
- 5 than later, or a lot of what we do is academic, given
- 6 the approaching tipping point for climate -- for the
- 7 planet on climate, and the drivers will be how we cost
- 8 carbon.
- 9 That process is now occurring. It's driving
- 10 technology in Europe. It was said, I think, yesterday
- 11 that all of this is just pie -- pie in the sky. As
- 12 much as I respect Mr. Houston, I strongly disagree.
- 13 It's not pie. We have major European steelmakers
- 14 converting glass furnaces at this point in time in
- 15 Scandinavia and ThyssenKrupp, Germany's largest
- 16 steelmaker. That's being driven by carbon costing,
- 17 which the Europeans are much more advanced, in fact,
- 18 than we are. I see it in China, certainly in Japan,
- 19 and also see -- it is a driver of the increased and the
- 20 expansion of electric arc furnace development,
- 21 particularly in developing -- industrializing
- 22 developing countries. I work in Colombia. I work in
- 23 Turkey, and I see it there and actively involved in
- 24 projects that way.
- 25 So this whole uncertainty process continues
- through the whole life, from the community's

- 1 perspective. The mechanisms that we get that give some
- 2 transparency for all this to the community are
- 3 important to consider.
- 4 A comment, the Crows -- the beginning of the end
- 5 of -- of coal mining in the Crowsnest Pass started with
- 6 technology change generation -- or manufacture of coke
- 7 in the Crowsnest Pass, which was widespread, was used
- 8 to -- one of the -- the big market were steam engines.
- 9 The CPR was the customer. Conversion to diesel in
- 10 the -- after the war and through the '50s
- 11 started --started the decline of underground coal
- 12 mining in the Crowsnest Pass. We could go through all
- 13 that again with technology change in -- related to
- 14 steelmaking.
- 15 Could I have the --
- 16 THE CHAIR: Mr. --
- 17 MR. COOKE: I've just got the last
- 18 slide.
- 19 THE CHAIR: Okay.
- 20 MR. COOKE: Okay. This is really a quick
- 21 summary. You've heard all this before.
- We're choosing between a return to a resource
- 23 economy or continuing development of lifestyle,
- 24 recreation, and tourist destination. We're not sure
- 25 whether they can live together, and are we trading, you
- 26 know, modest near-term benefits for, you know,

- 1 significant economic and social costs in the long term?
- 2 CCS is requesting the Panel to consider this basic
- 3 cost-benefit issue, which is unaddressed at this point
- 4 in the -- in the submissions by -- by the proponent.
- 5 We specifically request the Panel to recommend -- or to
- 6 look at our recommendations respecting mitigation and
- 7 those costs to the community and its conditionality.
- 8 The particular ones we flag are having term
- 9 restrictions and reconsideration at the front end and
- 10 the issue of future coal-mining development.
- 11 Could I have the last slide? So I would like to
- 12 thank you for your attention and just return to a
- 13 theme. This is a picture of -- the good-looking fellow
- 14 at the forefront of the picture is -- Keith Bott. The
- 15 other two are a couple of Pass residents. Sadly, one
- 16 of them now -- now has recently passed. All of which
- 17 had a passionate interest on what's going to happen on
- 18 Grassy Mountain and differing interests. Another old
- 19 guy took the picture, and that would have been me. My
- 20 suggestion is -- and you -- you've heard -- you've
- 21 obviously seen in testimony that this is creating
- 22 stress in the community. I would just simply suggest
- 23 that we can work this thing out and work together and
- 24 this -- this picture perhaps in a small way symbolizes
- 25 that.
- 26 So with that, I'll finish, Mr. Chairman.

- 1 THE CHAIR: Thank you, Mr. Cooke.
- 2 So I will just turn to the participants for
- 3 questions.
- 4 Ms. Janusz, I did say yesterday that if you had
- 5 some questions about -- about the survey that was added
- 6 to the record that you could ask some questions about
- 7 that. Do you have any questions?
- 8 MS. JANUSZ: I do not, Mr. Chairman. Thank
- 9 you very much.
- 10 THE CHAIR: Okay. Thank you, Ms. Janusz.
- 11 Any other participants who consider themselves
- 12 adverse in interest have any questions?
- Hearing none, Mr. Ignasiak, does Benga have any
- 14 questions?
- 15 MR. BRINKER: Good morning, Mr. Chair. It's
- 16 Coleman Brinker calling -- or speaking here. I'm a
- 17 lawyer with Osler working with Martin -- Mr. Ignasiak.
- 18 I can advise that Benga has no questions for the panel.
- 19 THE CHAIR: Okay. Thank you, Mr. Brinker.
- 20 Ms. LaCasse, Ms. Kapel Holden, any questions from
- 21 AER Staff?
- 22 MS. LACASSE: We don't have any questions,
- 23 Mr. Chair.
- 24 THE CHAIR: Thank you. Mr. Lambrecht?
- 25 MR. LAMBRECHT: Sir, there are no questions of
- 26 this panel, and I thank them for their participation.

1		THE CHAIR: Thank you.
2		Mr. O'Gorman?
3		Alberta Energy Regulator Panel Questions Crowsnest
4		Conservation Society
5		MR. O'GORMAN: Thank you, Mr. Chair. I do
6		have just a couple of questions. And I wonder if we
7		can I thought it was a useful illustration, so could
8		we haul back up, please, the presentation that we saw
9		and go to Slide 7? I can tell you the CIAR number if
10		you need me to, but I'm assuming it was the last thing
11		you had on display. Great. Thanks.
12	Q	MR. O'GORMAN: So I've got a question for
13		you, Ms. Davis. I thought this was quite a nice
14		picture, illustrated some of the local layout. We've
15		seen other striking pictures displayed through the
16		hearing so far. You talked a lot about some of the
17		nearby trails, mountain biking, some of the
18		recreational tourism opportunities that exist.
19		So I'm curious to know I have two questions.
20		One is: Were there to be an operating mine on Grassy
21		Mountain, what do you see as the biggest potential
22		negative impact on the experience of folks that wanted
23		to do these use these trails or or do hiking,
24		mountain biking, that sort of thing?
25	A	MS. DAVIS: Well, I believe Stephanie
26		alluded to it already, where how a lot of people

don't want to see this kind of activity when they're 1 2 out recreating. A lot of people, I believe, including 3 myself, when we go out recreating, we want to get away from, you know, stresses in life or be on vacation. 4 5 And some people might even come from industry, and 6 they're seeking vacation somewhere else to get away 7 So I think the biggest impact is that people 8 stop -- or the biggest potential negative impact would 9 be that people stop visiting Crowsnest Pass and people 10 stop wanting to come to Crowsnest Pass because they see 11 it as not the oasis that currently exists here. 12 Okay. Thank you. 0 13 And so then the follow-up to that is, you know, we 14 get a good sense of the visuals of it here, but in your 15 experience as someone engaged in hiking, mountain biking, running ultramarathons, the -- what sort of 16 17 percentage of all of that recreational backcountry trail experience would be -- 'cause you -- you 18 mentioned visibility; people don't want to see it. 19 20 how much, roughly speaking, of the trails and the, you

percentage of all of that recreational backcountry
trail experience would be -- 'cause you -- you
mentioned visibility; people don't want to see it. So
how much, roughly speaking, of the trails and the, you
know, experience would be impacted by being able to see
the mine on Grassy Mountain versus are there lots of
other areas people could go where they would not see
the mine? And, I mean, obviously, you didn't calculate
any strict percentage, and I'm not asking for that.
Sort of your sense of that.

You know, I think a part of my concern and the Α Yeah. concern from others is that that hasn't been acknowledged, and it hasn't been studied in any sense or communicated with the outdoor community on how it will be impacted. So that's a big gap in the socioeconomic section, and that's -- that's one of our We do not know because there's no big concerns. evidence to say either way.

So in terms of trails and what's in the area, we saw some pictures by Alistair earlier in this Panel review, and he was taking pictures from, actually, quite north of Crowsnest Pass, looking at Grassy Mountain. So there's several places that you're going to see Grassy Mountain, especially in the public land-use zone and then right outside of town. So I think that's one of the biggest concerns is that -- for me, anyways, is that it's visible right from town and right from high spots of recreation and tourism; it's going to be visible from those spots.

So Pass Powderkeg is a hot spot. I mean, I don't have the information up or in evidence, but there is -Strava does this -- this heat map, and it shows where people go. I mean, Strava is an app, and on Strava, people have to be using the app, so there are some -some restrictions to it. But on that app and that heat map, it will show Pass Powderkeg as being a hot spot

1		for recreation in this area. So how that's going to be
2		impacted, because now people mountain bike on that
3		on those trails, and they're looking out across an
4		open-pit mine, I think, is severely going to impact
5		recreation in the area and why people come to the area.
6	Q	Okay. Thanks, Ms. Davis. I appreciate that, a little
7		bit of extra clarity there.
8		I have one other question, and it's for you,
9		Mr. Cooke, and we'll simply have let's slide it down
10		to Slide 13, please. 13. All right.
11		Mr. Cooke, thank you for your suggestions on this
12		front, and you spoke to it, and I didn't hear you
13		address in your comments on this slide the extent to
14		which you think or, you know, your views on your
15		clarity on the Mine Financial Security Program in
16		operation in the province and to which, if Benga
17		complied with the requirements of that program, these
18		remain concerns and issues for you, or do you think
19		that these concerns would be alleviated?
20	A	MR. COOKE: I guess my answer to that,
21		without being intimately familiar with it, with with
22		coal mining, I was basically addressing the principle
23		as there is a history, and certainly a very specific
24		history in Alberta, of thinking that we're covering
25		accumulating liabilities and finding out at the end of
26		the piece that we haven't. There's an obvious example
1		

- 1 with orphan wells, which AER -- it's a problem I know
- 2 AER's working on. There's certainly good illustrations
- 3 of this being done well that Mr. Campbell illustrated,
- 4 but they're all associated with very large --
- 5 generally, very large companies with ongoing
- 6 operations. They're not new companies; they're not new
- 7 ventures. Or they're with utility-related coal mines,
- 8 which, again, I think is a -- is a different structure.
- 9 So I -- my comments are simply, again, from a
- 10 community perspective. We need to understand how that
- 11 works, not just referencing a program administered by
- 12 bureaucrats. All due respect to bureaucrats. Fred
- 13 Bradley had an interesting illustration of this. Fred,
- 14 who's a man of -- a close friend and -- and a man of
- 15 substantial vision, he's referencing a program that he
- 16 pushed as a cabinet minister during the Lougheed
- 17 government, you know, the use of the Heritage Trust
- 18 Fund to emulate what Superfund is in the US. And I --
- 19 the two are not -- I'm much more familiar with
- 20 Superfund and how it's administered, which evolves, is
- 21 the money has to be there when you need it, and these
- 22 recommendations that I'm -- that we've put together
- 23 here are really directed at that being assured and
- 24 assuring to the public and to the taxpayer.
- 25 So the proof is in the pudding. There's a long
- 26 history in the Crowsnest Pass. You see it in the

Crowsnest Pass of what happened historically, which, I 1 2 think, apart from the last mine to close in -- in the 3 Pass, in Coleman, nobody did much historically in coal. That's our experience, so providing that surety through 4 whatever mechanisms is probably important in your 5 6 decision-making. 7 So in summary, no, I'm not sure I would rely on I know worldwide, where I --8 what's on the books now. I do environmental liability, legacy cleanups -- I'm 9 10 doing about three of them right now in various parts of 11 Any system that was in place wasn't looking the world. 12 after them, and now, you know, international funding or 13 borrowing by developing countries is trying to address what are serious health and environmental risks long 14 after the fact. 15 So my -- my cynicism generally about processes 16 17 governments establish and then rely on 25 years later is -- is mixed. I hope that answers your question. 18 I just wanted to hear your views on that. 19 Thank you, 0 20 Mr. Cooke. That's my last question. 21 I'll thank the both of you, and I'll throw in a 22 final comment to Ms. Duarte-Pedrosa that I think you will, at the end of this process, I'm speculating, have 23 24 been the youngest person to present to us with your 25 views. So for what it's worth, I -- I always 26 appreciate seeing young people get engaged in processes

1		like this that will impact their lives and their		
2		future. And you spoke quite well. You let us know		
3		your passion for this issue. So I just wanted to add		
4		an extra thank-you. I appreciate you speaking with us.		
5		That's it for me.		
6		THE CHAIR: Thank you, Mr. O'Gorman.		
7		Mr. Matthews, any questions?		
8	Q	MR. MATTHEWS: Yeah. Thanks, panel, for your		
9		thoughts and sharing your experiences.		
10		I have a question for Ms. Duarte-Pedrosa and		
11		Ms. Davis. It's interesting and, like my colleague,		
12		Mr. O'Gorman, was saying, it's nice to hear the youth		
13		perspective, and I'm just wondering if you could help		
14		me understand the importance of youth and tourism to		
15		Crowsnest Pass. Like, do you have a sense of how		
16		many let's say, for employment, what the direct,		
17		indirect, and perhaps induced businesses or		
18		opportunities and employment have been created through		
19		your clubs, or do you have any sense of those numbers?		
20	A	MS. DAVIS: I think that was directed at		
21		both Stephanie and I. I was thinking about that 'cause		
22		I was wondering if that question would arise. And, I		
23		mean, without actually doing a thorough assessment,		
24		it's hard to determine exactly. I would say, though,		
25		in outdoor recreation, it does fluctuate because it		
26		can there's seasonal times that it's busier than		

- 1 others. I mean, summer is obviously a very busy time
- 2 in tourism here. Winter, I would say, is becoming more
- 3 popular. So there are also people that live in
- 4 Crowsnest Pass that work at Castle Mountain Resort, for
- 5 example. So there is still -- still those seasonal
- 6 jobs available in the non-busy side of the year.
- 7 So, for example, when I worked for Alberta
- 8 Environment and Parks, I ran a trail crew. Several
- 9 people that were on the trail crew would work with me
- 10 in the summer, and then they would transition over to
- 11 ski patrol at Castle Mountain in the wintertime.
- 12 And in terms of employment, it's hard to say. I
- 13 was trying to think about it 'cause I was thinking it
- 14 might come up. And there's outdoor recreation, and
- 15 then there's tourism. So in the outdoor recreation
- 16 sector, I would say maybe about between 50 and 100
- 17 people, but that could be full-time seasonal as -- as
- 18 well, and -- and there could be some of those -- you
- 19 know, work for a certain organization in the summer and
- 20 then switch to a different one in the wintertime.
- 21 But then in tourism, I mean, we talked about --
- 22 you know, there's the Frank Slide Interpretive Centre
- 23 that's tourism based. That's not really outdoor
- 24 recreation focused on the same level. There's the
- 25 Bellevue Underground Mine. There's what Stephanie did.
- 26 I mean, the visitor centre's currently not open this

1		year as some of those cuts came provincially. So there
2		are other I mean there are, obviously, the hotel and
3		restaurant sector as well, which I do not think that
4		that's the entirety of tourism in Crowsnest Pass, which
5		I want to kind of get away from that stigma. I mean,
6		they they do definitely benefit from tourism, but
7		you don't need to have a restaurant and tourism, or you
8		don't need to have I think my point is is
9		accepted there.
10		So, yeah, in the outdoor recreation, probably 50
11		to 100 is what I'm thinking, but I think that there's
12		more assessment that needs to be done on that to come
13		up with actual numbers.
14	А	MS. DUARTE-PEDROSA: I also know, like, Spry
14 15	A	MS. DUARTE-PEDROSA: I also know, like, Spry and Alpenland in Blairmore, they're two
	A	
15	A	and Alpenland in Blairmore, they're two
15 16	A	and Alpenland in Blairmore, they're two relatively recent businesses, and they often employ
15 16 17	A	and Alpenland in Blairmore, they're two relatively recent businesses, and they often employ younger people for retail. I know Karey out of Sweet
15 16 17 18	A	and Alpenland in Blairmore, they're two relatively recent businesses, and they often employ younger people for retail. I know Karey out of Sweet Riders, which is like, she does the mountain-biking
15 16 17 18 19	A	and Alpenland in Blairmore, they're two relatively recent businesses, and they often employ younger people for retail. I know Karey out of Sweet Riders, which is like, she does the mountain-biking clinics. She I used to work for her when I worked
15 16 17 18 19 20	A	and Alpenland in Blairmore, they're two relatively recent businesses, and they often employ younger people for retail. I know Karey out of Sweet Riders, which is like, she does the mountain-biking clinics. She I used to work for her when I worked for Boys and Girls Clubs as a teenager, and I know
15 16 17 18 19 20 21	A	and Alpenland in Blairmore, they're two relatively recent businesses, and they often employ younger people for retail. I know Karey out of Sweet Riders, which is like, she does the mountain-biking clinics. She I used to work for her when I worked for Boys and Girls Clubs as a teenager, and I know she's expressed like, she has kind of her proteges.
15 16 17 18 19 20 21 22	A	and Alpenland in Blairmore, they're two relatively recent businesses, and they often employ younger people for retail. I know Karey out of Sweet Riders, which is like, she does the mountain-biking clinics. She I used to work for her when I worked for Boys and Girls Clubs as a teenager, and I know she's expressed like, she has kind of her proteges. Like, she has youth that she's identified as really
15 16 17 18 19 20 21 22 23	A	and Alpenland in Blairmore, they're two relatively recent businesses, and they often employ younger people for retail. I know Karey out of Sweet Riders, which is like, she does the mountain-biking clinics. She I used to work for her when I worked for Boys and Girls Clubs as a teenager, and I know she's expressed like, she has kind of her proteges. Like, she has youth that she's identified as really good mountain bikers that she wants to train to become
15 16 17 18 19 20 21 22 23 24	A	and Alpenland in Blairmore, they're two relatively recent businesses, and they often employ younger people for retail. I know Karey out of Sweet Riders, which is like, she does the mountain-biking clinics. She I used to work for her when I worked for Boys and Girls Clubs as a teenager, and I know she's expressed like, she has kind of her proteges. Like, she has youth that she's identified as really good mountain bikers that she wants to train to become instructors as well. So I think as Crowsnest evolves

1		that we have had up until the last few years, I think
2		there really is, career-wise, some potential for young
3		people growing up here and developing their mountain
4		biking and also skiing with the like, the
5		Livingstone Ski Academy. It's a public high it's a
6		public school, but they also have evolved to be, like,
7		an outdoor school. So they go skiing, like, I think,
8		two to three times a week, like, during the school
9		week, at Castle, and there's also training and stuff at
10		Pass Powderkeg. So there's potential for young people
11		to work with that as well.
12	A	MS. DAVIS: And if I could add a little
13		bit to that sorry, Stephanie you know, it was
14		actually for me to become accredited through the
15		Association of Canadian Mountain Guides was quite
16		difficult because there were no other guides here. So
17		I had to do all of my mentorship and supervision in
18		mountain communities at a distance from here. And
19		since then, there since I've been able to get my
20		accreditation, now I can supervise other people to grow
21		in that industry.
22		And I there's already one girl that I have been
23		supervising and mentoring, and I have several people
24		that are interested in going into the program to go
25		into guiding. And the girl that I have mentored, she
26		will be writing her exam next year, and she's already

1		started her own business. So, like, that just shows			
2		kind of the the snowball effect that happens once			
3		you start bringing that industry in. It starts being			
4		created, and then it gets bigger and grows. So I my			
5		business hasn't been around that long, but it's already			
6		started to trickle in and inspire other people to start			
7		their businesses so that they can promote the area, and			
8		then they'll be hiring well, maybe hiring other			
9		people as well.			
10	Q	That's great. And it's nice; it's exciting to hear of			
11		youth initiatives coming in a community a small			
12		community, and I commend you both on your work?			
13		And thank you, Mr. Cooke, for your presentation as			
14		well. I have no more questions.			
15		THE CHAIR: Thank you, Mr. Matthews.			
16		I have no further questions.			
17		Mr. Cooke, is there any final clarifications that			
18		you want to make? I think your evidence has been			
19		pretty clear, so I'm not sure I see the need. But any			
20		final words?			
21		MR. COOKE: No, no. Just to thank you,			
22		Mr. Chairman, and thank the Panel for your tolerance of			
23		us and and your attention, and I certainly wish you			
24		the best in your deliberations from here forward.			
25		Thank you again.			
26		THE CHAIR: Okay. Yeah. So thank you,			

- 1 Mr. Cooke, Ms. Davis, and Ms. Duarte-Pedrosa, for your
- 2 participation and sharing your perspectives with us.
- 3 Very helpful to the Panel. So thank you.
- 4 (WITNESSES STAND DOWN)
- 5 Discussion
- 6 THE CHAIR: Okay. It's about 10:30, so
- 7 time for our break. Just before we do, I just wanted
- 8 to ask if Ms. Gulamhusein is here. We do have in the
- 9 schedule, Municipality of Crowsnest Pass, a short time
- 10 for direct, and I just wondered if that is still the
- 11 intention of the Municipality, to seat some witnesses.
- 12 MS. GULAMHUSEIN: Good morning, Mr. Chair. This
- 13 is Ms. Gulamhusein. It is, in fact, our intention to
- 14 make a very short comment and to provide no witnesses
- in light of the developments that have happened in the
- 16 hearing. And so I could do that right now -- it is
- 17 literally going to be a minute -- or certainly I'm
- 18 prepared to do that after the break, but we do not plan
- 19 to have any witnesses.
- 20 THE CHAIR: And what about the session
- 21 starting tomorrow on geology? I think we also had you
- 22 scheduled there. The reason I'm asking is I'm just
- 23 wondering if any of the participants have questions for
- 24 the Municipality, you know, when there might be an
- 25 opportunity to ask those questions.
- 26 MS. GULAMHUSEIN: Right. Our witness is

- 1 available, the expert that we had to provide a report
- 2 that's been submitted. He is available, and he is
- 3 available this morning, and he can be made available at
- 4 the other times. I don't have instructions yet with
- 5 respect to whether we will be doing direct on the next
- 6 topic block, so unfortunately I can't say, but our
- 7 witness is available this morning, and I do understand
- 8 that there may be some other parties that wanted to
- 9 question him.
- 10 THE CHAIR: Okay. So I'll just do a quick
- 11 poll to get a sense of whether people have guestions.
- 12 So participants other then Benga who may be
- directly and adversely affected, are there people who
- 14 have questions for the Municipality of Crowsnest Pass?
- 15 MS. JANUSZ: Barbara Janusz. Yes, I do
- 16 have some questions prepared for the expert witness
- 17 that the Municipality or Brownlee had intended to call
- 18 earlier.
- 19 THE CHAIR: Okay. Thank you.
- 20 And who else?
- 21 MR. COOKE: Mr. Chairman, it's Rick Cooke
- 22 from Crowsnest Conservation. We would probably like to
- 23 ask a few questions very briefly of the Municipality.
- 24 THE CHAIR: Okay. And, Mr. Brinker, do
- 25 you know if Benga has any questions?
- 26 MR. BRINKER: I think, Mr. Chair, we're

- 1 actually a little bit confused. I'm wondering if
- 2 Ms. Gulamhusein can clarify for us. She mentioned that
- 3 she would like to make a statement on this topic rather
- 4 than their witness or their expert. We're wondering if
- 5 that might be better -- her statement might be better
- 6 suited for final argument rather than evidence on this
- 7 topic block.
- 8 THE CHAIR: Yeah. Can you clarify,
- 9 Ms. Gulamhusein, what your intent was?
- 10 MS. GULAMHUSEIN: Certainly, I can. Thank you.
- 11 Actually, it was simply just to say that we would
- 12 not be making any submissions in light of Benga -- the
- 13 two topics that we wanted to speak about, Benga has
- 14 already committed to adopting, which were the
- 15 socio-community economics advisory committee and the
- 16 principles. We were going to speak about those. In
- 17 lights of Benga's acknowledgment, we don't feel that
- 18 there -- we need to speak about them other than to say
- 19 we hope that they would be conditions if this project
- 20 was approved. Beyond that, that's -- that's actually
- 21 all I was going to say.
- I was also going to clarify an error that I had
- 23 made earlier about distances from the hospital to the
- 24 access of the mine, but that's a very minor point.
- 25 MR. FITCH: Mr. Chair, it's Gavin Fitch
- 26 for Livingstone Landowners Group.

1 THE CHAIR: Yeah.

2 MR. FITCH: We also intended to have --

- 3 ask a few questions of the expert witness for the
- 4 Municipality. We're not wedded to doing it today. It
- 5 doesn't matter to us, but we did intend on
- 6 cross-examining that witness.
- 7 THE CHAIR: Okay. And any other
- 8 participants?
- 9 MS. OKOYE: Good morning, Mr. Chair. It's
- 10 Ms. Okoye.
- 11 THE CHAIR: Yes?
- 12 MS. OKOYE: I did have questions for the
- 13 Municipality of Crowsnest Pass, but it doesn't seem
- 14 that Ms. Gulamhusein will be calling any of the
- 15 councillors. My question is actually directed to them.
- 16 I don't have questions for her expert witness. So I
- 17 don't know at what point she will be calling them, if
- 18 at all, on any of the topics.
- 19 THE CHAIR: Okay. And Ms. LaCasse or
- 20 Ms. Kapel Holden, any questions for the Municipality?
- 21 MS. KAPEL HOLDEN: Good morning, sir. Staff did
- 22 have a couple of questions in regards to some of the
- 23 recommended conditions that the MD was looking for.
- 24 I'm not sure if someone will be available to speak to
- 25 that.
- 26 THE CHAIR: Okay. Thanks, Ms. Kapel

- 1 Holden.
- 2 Mr. Lambrecht?
- 3 MR. LAMBRECHT: Yes, sir. I did have one
- 4 question of the Municipality. It would relate to -- it
- 5 would fall generally under the accidents and
- 6 malfunctions topic area. I would hope that the expert
- 7 witness might be able to answer them, but a municipal
- 8 official familiar with zoning and emergency planning
- 9 might be helpful.
- 10 THE CHAIR: Okay. So it sounds like there
- is a number of participants as well as counsel for the
- 12 Panel that have some questions for the Municipality, so
- 13 Ms. Gulamhusein, maybe what I can ask is on the break,
- 14 if you have the opportunity, if you could confer with
- 15 your client and see when they might be available to
- 16 answer questions if they're not providing direct. It
- 17 sounds like we probably could do this today or,
- 18 alternately, in the next session, which starts
- 19 tomorrow. I don't think there's probably a strong
- 20 preference, from what I'm hearing. So if you could get
- 21 back to us after the break, that would be appreciated.
- 22 MR. FITCH: Sorry, Mr. Chair. It's
- 23 Gavin Fitch again. We have our witnesses ready to go,
- 24 so what I'm thinking might work is if we skip over the
- 25 Municipality of Crowsnest. LLG can begin its direct
- 26 evidence, and then potentially we could do the

- 1 Municipality at the end of the day or, as you say,
- 2 potentially tomorrow.
- 3 THE CHAIR: Okay. I think that would work
- 4 for the Panel.
- 5 That would give you a bit more time,
- 6 Ms. Gulamhusein, but I think you wanted to say
- 7 something. Is there anything you want to add?
- 8 MS. GULAMHUSEIN: I just wanted to clarify. The
- 9 only witness that we planned to call at any point was
- 10 our expert, and he is available now, but we're
- 11 certainly willing to accommodate the Panel as they --
- 12 as they see fit, and he can be made available tomorrow
- 13 as well. There is no intention to call any of the
- 14 municipality's councillors.
- 15 THE CHAIR: Okay. Let's leave that for
- 16 now, and we'll revisit it after the break. But in
- 17 terms of your expert, if he is available right after
- 18 the break, we could do that or after the Livingstone
- 19 Landowners Group. Do you have a preference?
- 20 MS. GULAMHUSEIN: No, we don't have a
- 21 preference. It's fine whichever way the Panel sees
- 22 fit.
- 23 THE CHAIR: Okay. Mr. Fitch, do you have
- 24 a preference?
- 25 MR. FITCH: Sorry, Mr. Chair. I just had
- 26 to unmute. Well, you know, we are ready to proceed

- 1 with cross-examining the expert, but on the other hand,
- 2 we would be just as happy to get going on our own
- 3 evidence. So I guess if I had to express a preference,
- 4 it would be for us to go with our evidence now. But I
- 5 recognize that would be not following the established
- 6 order, so we're fine with just following the regular
- 7 order.
- 8 THE CHAIR: Okay. Well, Ms. Gulamhusein,
- 9 let's put your witness up after the break if he's
- 10 available. If he's not, we'll do what Mr. Fitch
- 11 suggested and go to Livingstone and try and slot him in
- 12 later. And then if there are questions that the
- 13 witness isn't able to answer, then I quess we'll have
- 14 to think about what, if anything, we need to do about
- 15 that later.
- 16 MS. GULAMHUSEIN: He will be available. He's on
- 17 the call already.
- 18 THE CHAIR: Okay. So it's 20 to 11. So
- 19 let's take 15 minutes and return at 5 to 11. Thank
- 20 you.
- 21 (ADJOURNMENT)
- 22 THE CHAIR: Ms. Gulamhusein, I just wanted
- 23 to kind of revisit something with you. So I guess
- 24 there's a question in my mind about whether your expert
- 25 is going to be able to answer some of the kinds of
- 26 questions I'm anticipating participants may have. You

- 1 know, when the Municipality provided its opening
- 2 statement, you read that statement. You didn't provide
- 3 any witnesses to speak to it. You weren't sworn as a
- 4 witness, so, you know, I don't consider you a witness;
- 5 I consider you counsel at this point in time.
- If the Municipality doesn't put up somebody who
- 7 can respond to questions about the written submission,
- 8 there may be a limit to what the Panel can do with some
- 9 of those recommendations or parts of it. And so I just
- 10 want to make you aware of that and whether that might
- 11 change the Municipality's view as to whether it wants
- 12 to put somebody up to speak to its written submissions,
- 13 other than your consultant.
- 14 MS. GULAMHUSEIN: Mr. Chair, I appreciate that.
- 15 Thank you very much.
- I will convey that message to the Municipality,
- 17 and I know that we are scheduled for two more possible
- 18 direct, and I'll have to -- I'll have to find out from
- 19 them whether they -- how they propose to deal with
- 20 that. I think at this point, the Municipality was not
- 21 planning to put anyone forward, and maybe they'll have
- 22 to rethink that. But at this point, that is -- that's
- 23 where we stand on that.
- 24 Part of that is informed by some of the
- 25 developments, particularly as with respect to this
- 26 topic block, Benga has, on the record, said that they

- 1 would adopt the recommendations that the Municipality
- 2 was concerned about, and so there was a feeling that
- 3 there was no need to give any direct on that basis.
- 4 THE CHAIR: Okay. So there may be other
- 5 participants who have questions, and I think staff
- 6 supporting the Panel may have some questions. So,
- 7 again, I think your client just needs to be aware of
- 8 what the risks are if they don't put somebody up.
- 9 MS. GULAMHUSEIN: I will convey that to my
- 10 client and advise the Panel as soon as possible.
- 11 THE CHAIR: Okay. Maybe I'll just kind of
- 12 circle back. In terms of the participants who
- indicated they had questions, I'm now curious about
- 14 whether those questions are for representatives of the
- 15 Municipality or whether they might be for the expert
- 16 witness 'cause I think we were expecting that the
- 17 environmental issues would be dealt with in the other
- 18 topic areas. That's where I'm now a little uncertain
- 19 about whether putting up your expert witness right now
- 20 is going to be helpful.
- 21 So, Mr. Fitch, any comments on that?
- 22 MR. FITCH: Yes, Mr. Chair. As I say, we
- 23 don't really have a preference as to when we
- 24 cross-examine this witness. I can tell you the
- 25 intention in doing so is not to get into any great
- 26 detail on environmental effects. We'll be exploring

- 1 really just what did this witness do, like, what's
- 2 this -- what is this report and the witness's, you
- 3 know, qualifications in certain of the subject-matter
- 4 areas. You know, so we expect it would be 10 to
- 5 15 minutes.
- 6 THE CHAIR: Okay. Well, just based on
- 7 that alone, let's put up your expert witness,
- 8 Ms. Gulamhusein, and we'll see who has questions for
- 9 him, and then any questions that are for the
- 10 Municipality will have to wait until we hear back from
- 11 you on whether or not there may be additional
- 12 witnesses.
- 13 MS. GULAMHUSEIN: Okay.
- 14 THE CHAIR: So if you could introduce your
- 15 witness, and then we'll get him sworn.
- 16 MS. GULAMHUSEIN: Great.
- 17 So the witness for the Municipality is
- 18 Mr. Mark Wittrup, and he should be on the screen.
- 19 MR. WITTRUP: I am.
- 20 MS. GULAMHUSEIN: Okay. Great. And Mr. Wittrup
- 21 wrote -- you can confirm that you wrote the report that
- 22 was appended -- that is appended to the Municipality's
- 23 submission, CIAR Number 545. Can you confirm that you
- 24 prepared this report?
- 25 MR. WITTRUP: I did prepare that report,
- 26 yes.

1		MS. GULAMHUSEIN: O	kay. And
2		THE COURT REPORTER: E	excuse me.
3		MS. GULAMHUSEIN: -	- is that report accurate, to
4		the best of your knowledge	??
5		MR. WITTRUP: Y	es.
6		THE COURT REPORTER: E	excuse me.
7		MS. GULAMHUSEIN: A	and do you have any
8		corrections or modificatio	ons to that report?
9		MR. WITTRUP: N	Not at this time, no.
10		MS. GULAMHUSEIN: A	and you adopt that as part of
11		the submissions you're goi	ng to make?
12		MR. WITTRUP:	do.
13		MS. GULAMHUSEIN: O	kay.
14		THE COURT REPORTER: E	excuse me. The witness hasn't
15		been sworn in.	
16		MS. GULAMHUSEIN: O	h, pardon me. Go ahead. I
17		apologize, Madam Clerk [si	c].
18		MARK WITTRUP, Sworn	
19		Direct Evidence by Municip	ality of Crowsnest Pass
20		(Purpose of Project, Visua	l Aesthetics, Alternative
21		Means, Land and Resources	Use, Socioeconomic Effects,
22		Historic Resources)	
23		THE CHAIR: M	Is. Gulamhusein, maybe you
24		should just start again no	w that he's sworn.
25		MS. GULAMHUSEIN: S	ure. I apologize.
26	Q	MS. GULAMHUSEIN: Mr.	Wittrup, can you confirm

- that the expert report appended to the Municipality's
- 2 submissions which are marked CIAR Document Number 545
- 3 that they were prepared -- that this report was
- 4 prepared by you?
- 5 A Yes, it was prepared -- prepared by me.
- 6 Q And do you have any corrections or modifications to
- 7 this report that you wish to make?
- 8 A I do not.
- 9 Q And this evidence is accurate, to the best of your
- 10 knowledge and belief?
- 11 A It is.
- 12 Q And you adopt that as your direct evidence in this
- 13 proceeding?
- 14 A I do.
- 15 Q Thank you.
- 16 THE CHAIR: Mr. Fitch, if you are prepared
- to go, we'll start with you, if you have guestions for
- 18 this witness.
- 19 MR. FITCH: Thank you, Mr. Chair. I am
- 20 going to turn this cross-examination over to my
- 21 associate Mr. Agudelo.
- 22 MR. AGUDELO: Good morning, Mr. Chair,
- 23 Panel. Thank you for having me here.
- 24 Madam Court Reporter, my name is Cesar Aqudelo.
- 25 I'll spell that out for you. C-E-S-A-R for my first
- 26 name, and my last name is Aqudelo, A-G-U-D -- as in

"delta" -- 'E' -- as in "echo" -- L-O, Agudelo. 1 And 2 I'm an associate with the LLG. 3 Mr. Aqudelo Cross-examines Municipality of Crowsnest 4 Pass 5 MR. AGUDELO: Mr. Wittrup, are you 0 Okay. 6 there with us? 7 Tam. Α 8 MR. AGUDELO: If we can please have CIAR 705 9 pulled up. Zoom Host, if we -- we're only seeing one 10 camera at the moment, so ... 11 MR. FITCH: The Chair. 12 MR. AGUDELO: The Chair, yeah. 13 THE CHAIR: Can you see the witness? 14 MR. AGUDELO: I can't see the witness. 15 see the document now, though. Oh, there we are. Everybody is back in. 16 17 MR. AGUDELO: All right, Mr. Wittrup. This document that I -- that we've pulled up, is this your 18 curriculum vitae? 19 20 It's my short form. Α Yes. 21 Short form. And would you say it accurately represents 0 22 your academic and professional experience? Yes, it does. 23 Α 24 Thank you. 0 25 In your education, it says that you graduated with 26 an honours bachelor's in science and geology?

- 1 A That's correct.
- 2 Q And you went on to get a master's in geology?
- 3 A Correct.
- 4 Q Thank you.
- 5 And you're a registered engineer and geologist in
- 6 Alberta?
- 7 A Yes, I am, and the C provinces.
- 8 Q Thank you.
- 9 If we turn to the last page of that document,
- 10 PDF 3, at the very bottom there's a section there
- 11 called "Selected Technical Publications". I take it
- these are publications that you've published?
- 13 A Yes, they are. And if there's a coauthor or a
- contributor, they've been noted as well.
- 15 Q Thank you.
- There's a publication there called "Small Modular
- 17 Reactors Application and Opportunity"?
- 18 A Correct.
- 19 Q Is this a publication, or was it a presentation?
- 20 A That was a presentation.
- 21 Q Thank you.
- 22 And there's another one, the third one down,
- 23 called "Small Modular Reactors: Application to
- Mining and the North", October 17, 2019. Is that a
- 25 presentation or a publication?
- 26 A That was a presentation.

1 Thank you. 0 2 Zoom Host, if we can pull up MR. AGUDELO: 3 aid to cross -- I think I titled it LLG A2X, Number 2 with our PowerPoint presentation. 4 5 Thank you. 6 And if we can scroll just to the next slide there. 7 MR. AGUDELO: Would this be the document 0 8 that you're referring to in your third point? 9 Α Correct. 10 Thank you. 0 11 And if we turn to the very last slide -- or the 12 second-to-last, I believe. "SMRs", that's a type of nuclear reactor; am I correct? 13 14 Α Correct. SMR as in "small modular reactor", reactors 15 generally under 300 megawatts. 16 Thank you. 0 17 And was this a presentation for -- to encourage industry to get into the, for lack of a better term, 18 19 SMR game? 20 It's -- it was a presentation to -- in this case, to Α 21 the Saskatchewan Mining Association conference, and, 22 yes, it's to introduce the -- the concept in order to 23 promote -- at least promote the -- the thinking of 24 using. 25 Thank you.

Zoom Host, can we move on to

26

MR. AGUDELO:

- aid to cross -- A2X Number 3, Bill C-69. Thank you.
- 2 Q MR. AGUDELO: Mr. Wittrup, this is an
- 3 article that you wrote for the Canadian Mining Journal;
- 4 is that correct?
- 5 A Correct.
- 6 Q And it is -- is it fair to characterize it as an
- 7 opinion piece on the regulatory process?
- 8 A Yes, it is.
- 9 Q And it was published in a magazine that was aimed at
- 10 industry; correct?
- 11 A Correct.
- 12 Q If we can go back to CIAR 705, please. And the first
- page, PDF 1. At the bottom of the page, under "Key
- 14 Project Experience".
- 15 Mr. Wittrup, it says there that you're
- vice president, environmental and regulatory affairs
- 17 with Clifton. That's your current position?
- 18 A Correct.
- 19 Q And in the description of your position there, you say:
- 20 (as read)
- 21 Focus on pragmatic regulatory solutions for
- large projects to ensure timely and
- 23 predictable development.
- 24 A Correct.
- 25 Q Is that a way of saying that you're an expert in
- 26 getting -- or helping projects get through the

1 environmental regulatory system? 2 It's one of the things I do, yes. 3 Thank you. 0 So you help industry navigate that system? 4 Well, actually, I help any client navigate that system. 5 Α 6 Thank you. 0 Can we pull Aid to Cross A2X Number 1, called "Fission". 8 9 Mr. Wittrup, were you recently retained by the 10 company Fission Uranium Corp. to oversee that company's 11 regulatory environmental permitting process? 12 I was, but not recently. I've actually been doing this Α 13 for over three years now, and this was just a -- a 14 press release to demonstrate the -- that Fission was active in those areas. 15 I would add one correction to this, since this was 16 17 issued in July, in that I am no longer a special advisor to their board. 18 19 Okay. Thank you. 20 There is something that -- in that news release in 21 the second paragraph, the first sentence. It says: 22 (as read) 23 Fission's regulatory and environmental 24 permitting process is overseen by 25 Mr. Mark Wittrup [being yourself] -- has 26 40 years of experience in the uranium sector

and specializes in environmental and 1 2 regulatory work. 3 Would you say that's a fair description of your experience, Mr. Wittrup? 4 I actually started May 1st, 1980, in the uranium 5 Α 6 business in La Ronge, Saskatchewan, so yes. 7 Thank you, Mr. Wittrup. 0 Let's move on to the submission by the 8 9 Municipality, CIAR 545, please. And if we can go 10 to PDF 36. Let's enlarge that a little bit if we can, 11 please. Thank you. 12 In that first paragraph, the last sentence, it 13 says that the intent of your report was to provide the 14 Municipality, your clients, a general assessment of the 15 proposed mitigations presented in the proponent's, Benga's, and their likely effectiveness; is that 16 17 correct? Yes. 18 Α And you reviewed the proposed mitigations in eight 19 20 different areas; am I right? 21 Correct. Α 22 And if you scroll down a little bit in that same page, 23 And the eight areas that we see there listed, 24 are those the areas that you reviewed for -- from the 25 proponent's EIA?

26

Α

Correct.

1 0 Thank you. And just for the record, those areas are noise, 2 3 air pollution, light pollution, health concerns, visual impacts, protection of watershed, weed control, and 4 increase in traffic; is that correct? 5 6 Α Yes. 7 Thank you. 0 And let's go to page 37. 8 That's PDF 37. Let's 9 scroll down a little bit. That first full paragraph. 10 In the first sentence that starts: (as read) 11 With respect to the Municipality's concerns, 12 the limits and the potential effects and 13 mitigation have been well-tested within the 14 EIA process, and proposed mitigations appear 15 reasonable. So your conclusion there in your executive summary is 16 17 that the proponent's concluded -- conclusions on potential effects of mitigations appear reasonable? 18 19 Correct. Α 20 And when you say "well-tested" in the process, you mean 0 21 that in the back-and-forth between interveners, 22 government agencies, the JRP, the -- Benga's 23 proposed -- position has been tested and scrutinized 24 and come out on the other end reasonably? 25 Α Through 12 addendums, yes. 26 0 Thank you.

- 1 Please tell me, Mr. Wittrup, are you a health
- 2 expert?
- 3 A I'm not a health expert per se, no.
- 4 Q And are you an air pollution expert?
- 5 A I'm not an air pollution expert per se, no.
- 6 Q Are you a wind expert that can assess wind patterns and
- 7 the effect on air particulate and pollutants?
- 8 A I'm not an air pollution modeller, no.
- 9 Q And fair to say, also, that you're not a noise expert?
- 10 A I'm not a noise expert, no, and --
- 11 O And ...
- 12 A No. Go ahead.
- 13 O And you've never conducted a noise-impact assessment?
- 14 A No, but I have directed noise-impact assessments be
- done, and I'm the one that has to ultimately arbitrate
- whether they were done properly and -- and would be
- 17 useful for conclusion in environmental studies. And
- that would be the same for the other topic areas you've
- 19 mentioned.
- 20 O So the other topic areas that you're not an expert in,
- 21 you just direct are, for example, aquatic life and
- 22 environmental toxicology?
- 23 A Yes. I would hire experts in those areas and then
- 24 review their -- their conclusions.
- 25 Q So it is fair to say that you're -- you accept the
- 26 reasonableness of mitigations and testing on areas --

1		on eight areas that you are not an expert in and for
2		which you provided no direction or hired the experts?
3	А	So I've reviewed them on the same basis that I would
4		have done for an environmental impact assessment that I
5		was charged with organizing and developing and
6		following through the whole process. So as a as
7		a as an experienced environmental generalist, I've
8		reviewed those what I would've expected to see in a
9		mine and what was proposed and believe that they put
10		reasonable mitigations in place based on that
11		experience.
12	Q	As a generalist
13	A	M-hm.
14	Q	you also did not review the socioeconomic impacts
15		because that was outside your area of expertise; am I
16		correct?
17	А	It wasn't part of what I was requested to look at, no.
18	Q	But if we turn to PDF 43 of that document there in
19		front of you, that skinny little paragraph in the
20		middle that starts with, "the areas of public
21		consultation". Second sentence there, it states:
22		(as read)
23		Also, the socioeconomic impacts were not
24		examined, as they are outside the expertise
25		of the reviewer and the scope of the
26		assignment.

- So it is fair to say you're not -- you did not review
- this because it was not within your area of expertise?
- 3 A It was both. And I would have reviewed it as a
- 4 generalist if that had been part of my assignment.
- 5 0 Thank you.
- I want to turn to PDF 0 -- 42, actually. The
- 7 section called "Methodology". Do you have a paragraph
- 8 there that's --
- 9 Oh, sorry. I was not looking at the screen.
- 10 The -- if we scroll down in that same page. Oh, no,
- 11 that's not the page. You are still on page 43. You
- need to go to page 42. Sorry. And towards the bottom.
- 13 The bottom half. There we go. Thank you.
- So the paragraph that starts, "Given the time
- restrictions", it says there: (as read)
- 16 There was no exhaustive look at calculations
- and the minutia of the work.
- 18 Is that correct?
- 19 A That's right.
- 20 O It was an overall look at the methodology and
- 21 conclusions; correct?
- 22 A Correct.
- 23 Q And in the next paragraph, the second sentence that
- 24 starts, "This review" -- it goes into the next page,
- 25 43 -- you state that: (as read)
- 26 It is not an audit or a deep technical review

1 but a general review. 2 Is that correct? 3 Correct. Α 4 Thank you. Can you turn to PDF 49, please. And I need 5 6 that -- scroll down a little bit. Actually, towards The bottom half, actually. Thank you. 8 The last sentence before Section 3.5, it says 9 there that: (as read) 10 Benga basically predicted that it can be 11 managed --12 That's not the sentence I meant to -- I meant Sorry. to talk about. All right. 13 I apologize. 14 Let's go to the "Discussion" part. In that second sentence of the "Discussion" part says -- it says: 15 16 (as read) 17 Benga has essentially predicted no impacts from the mine to the Municipality's air 18 19 quality with all the mitigation in place. Is that correct? 20 21 Yeah. Α 22 Is it fair to say that you accepted the Okay. predictions of Benga and Benga's air-quality models? 23 24 I accepted the mitigations as being ones I would expect Α 25 to see in a -- in a similar situation. 26 But you would agree with me that those mitigations are 0

- 1 based on the models that Benga used; correct?
- 2 A Yeah. Absolutely. And I would note that -- that the
- 3 only real way to test this is to build the facility and
- 4 put the monitoring in place.
- 5 Q This is your evidence, that the only way to test this
- is going ahead with the project, even though we go
- 7 through a lengthy process of creating models and hiring
- 8 scientists and experts?
- 9 A So -- so modelling is as good as the inputs and -- and
- the -- the methodologies, but, in the end, they're
- 11 still simply just models. And they can be accurate;
- 12 they can be inaccurate. And -- and they can be skewed
- by the perception of the modellers as well. I mean,
- all I'm saying is that the only proof that the models
- are accurate would be to test that with real-world
- 16 data.
- 17 O And this was based on a review that had no exhaustive
- look at calculations, no audit, and no technical
- 19 review; correct?
- 20 A That's correct. Yeah.
- 21 Q Benga made many predictions about the effects of air
- 22 quality, for example -- that's one of the topics -- and
- 23 you did not assess those predictions were accurate;
- 24 correct?
- 25 A No.
- 26 O Thank you.

- 1 A That wasn't part of my -- the scope of my assignment.
- 2 Q So your scope of the assignment was basically to accept
- Benga's predictions and, based on that, assess the
- 4 mitigations?
- 5 A No. My assignment was to review the -- the material
- 6 provided in the full environmental impact assessment
- 7 with particular regard to the -- the nine areas that
- 8 were of particular concern to the Municipality of
- 9 Crowsnest Pass and -- with my experience in mining, and
- 10 look at -- at what was proposed as mitigations in those
- 11 particular areas, and to see whether, on balance, I
- 12 would reasonably -- reasonably have expected to see
- those mitigations in a project.
- 14 Q There's a sentence quite interesting in your discussion
- 15 there that -- the third sentence in the discussion
- 16 starts: (as read)
- 17 This, of course, is the results of predictive
- 18 modelling, and the reality may not exactly be
- 19 as predicted.
- 20 Correct?
- 21 A Second sentence, but yes.
- 22 O Third sentence.
- 23 A Third sentence. You're correct. Sorry
- 24 Q Thank you.
- 25 A Yeah.
- 26 O And your recommendation on this discussion point was

- to -- that Benga put in place a monitoring system near the hospital; was that not -- is that not right?

 Xes.
- 4 Q And tell me, Mr. Wittrup, does monitoring prevent 5 pollution or detect when pollution happens?

you always need to monitor.

- A Well, monitoring is used to detect what the air quality
 would be like, and that was one of the discussions
 about if mitigations are effective, and that was the
 general tone of this, was if they're effective, then
 they would likely prevent any significant impacts, but
- 12 And the monitoring location chosen was also of 13 particular concern to the Municipality in that it lies, 14 I believe, 650 metres from the turnoff to the road, and so it's close to the loadout facilities and was of 15 particular concern because there would be members of 16 17 the community that were -- that were in a vulnerable 18 condition there. So it was the likely spot to -- in my 19 mind, to put a permanent monitoring station.
- 20 Q So the answer to my question is basically "yes", it's 21 there to detect whether there's pollution in the air?
- 22 A Correct.

11

- 23 O Thank you.
- Let's move on to the next topic that I'd like to discuss in your report, and it's on PDF 52, please.
- 26 It's close to the bottom half of it. "Health

- 1 Concerns", I believe. Thank you.
- 2 In the second sentence of the first paragraph of
- 3 "Health Concerns", you say: (as read)
- 4 For health affects [and I assume you meant
- 5 "effects"] to occur, a source pathway and
- 6 receptor are required.
- 7 Is that correct?
- 8 A Correct.
- 9 Q And remind me, you're not an epidemiologist or a
- 10 toxicologist; correct?
- 11 A No.
- 12 Q And in this Section 5 of "Health Concerns", you
- discussed the air-pathway pollutants; correct?
- 14 A I did.
- 15 Q So you talked about inhalation, chronic inhalation, air
- 16 contaminants; correct?
- 17 A I'm sorry. Repeat the question.
- 18 Q You talked about inhalation, chronic inhalation, air
- 19 contaminants. That was the discussion of your health
- 20 concerns?
- 21 A Focused mostly on dust.
- 22 O Focused mostly on dust. Yes. Thank you.
- 23 And this section did not discuss water pathways or
- 24 pollutants; am I right?
- 25 A It did not.
- 26 O And are water pathways or pollutants not an important

- 1 consideration for the towns that are going to be
- 2 drinking the water?
- 3 A They are, but it was, you know, not part of the scope.
- 4 Q Not part of the scope. But I thought --
- 5 A Of my scope.
- 6 Q Of your scope. But I thought, sir, your scope was to
- 7 review the addenda, the EIA. That was your scope;
- 8 right?
- 9 A Yeah.
- 10 Q So are you aware that Benga had been asked to review
- their human health risk assessment, or was that outside
- 12 your scope, even though it was within the addenda?
- 13 A Sorry. I'm not following your question. Could you
- 14 repeat that, please?
- 15 Q The question was: Were you aware that Benga was asked
- 16 to reassess their human health risk assessment to
- include water pollutants?
- 18 A Yes. That was done in one of the other addendas, if I
- 19 recall correctly.
- 20 O You did not discuss that point in your health concerns?
- 21 A No, but there is a section on water quality.
- 22 O There's also a section on air quality. So you made a
- 23 section on health concerns on air and a section for air
- 24 quality, but you did not discuss the health concerns of
- 25 water in your "Health Concerns" section; is that
- 26 correct?

I did not. 1 Α 2 Thank you. 3 I have two more topics to discuss with you, 4 Mr. Wittrup. 5 Α M-hm. 6 I would like to turn to PDF 57, please. This time it's 0 7 the top half for a change. The first full paragraph, it states: 8 (as read) 9 While not stated explicitly, the EIA leaves 10 the impression that the overall mitigation 11 strategy is to protect the western slopes 12 cutthroat trout, and if the species is 13 protected, then all other valued components 14 of the environment will be protected as well. 15 Was that your impression, Mr. Wittrup? That was my impression, and it's -- a fairly common 16 Α 17 methodology is if you're protecting the most sensitive species, you're protecting all of the other species. 18 And that's an impression based on a review that 19 0 included no exhaustive look at calculations, no audit, 20 and no technical review; correct? 21 I reviewed the -- the document as a -- as an expert in 22 Α 23 the environmental effects of mining, and in that 24 regard, the statement is -- is correct, in my opinion. 25 You already talked about the level of methodology that 26 you applied; correct?

- 1 A Well -- well, but -- yeah. Anyways, go ahead.
- 2 Q Did this section of water protection -- "Protection of
- Watersheds", did it receive the same level of depth as
- 4 your health concerns?
- 5 A I would say yes.
- 6 O Thank you.
- 7 Mr. Wittrup, on PDF 73 -- if we turn to that page,
- 8 please. Bottom half of that page, please. The first
- 9 paragraph, the second-to-last sentence,
- 10 the -- actually, kind of towards the middle. The
- sentence that says, "The EIA appears, on balance".
- Do you see that sentence, Mr. Wittrup?
- 13 A I do.
- 14 Q And it says: (as read)
- 15 ... appears to be, on balance, to be a
- reasonable estimate and if so, the actual
- 17 environmental impacts to the Municipality
- 18 will be negligible after mitigations while
- 19 the socioeconomic impacts should be largely
- 20 tangible and positive over the life of the
- 21 project.
- 22 A M-hm.
- 23 Q That's your conclusion; correct?
- 24 A It's part of my discussion, but yes.
- 25 Q I'm going to put it to you, Mr. Wittrup, that you
- 26 actually do not know or have a basis for that

- 1 conclusion. Correct?
- 2 A Which part of it?
- 3 Q That's actually a good question, Mr. Wittrup. Let's
- 4 walk through it.
- 5 Let's talk about the environmental impacts. For
- 6 example, you're not aware if Benga's using the right
- 7 guideline for its water models; correct?
- 8 A I was leaving the -- the discussion to the experts in
- 9 that regard.
- 10 Q You were leaving the discussion of the experts -- of
- 11 whose experts? Benga's experts?
- 12 A No. There's experts on both sides in this process, and
- 13 the -- the JRP has the -- the unenviable task of -- of
- 14 working through all of that discussion and -- and
- 15 coming to a conclusion.
- 16 Q The unenviable but very necessary task, wouldn't you
- 17 say?
- 18 A Absolutely. Yes.
- 19 Q Also, Mr. Wittrup, you simply got an impression that
- they were protecting the west coast -- westslope
- 21 cutthroat trout; correct?
- 22 A Yes. It was my -- from my reading, I didn't find it
- 23 explicitly stated.
- 24 Q You have no expertise in wind patterns specifically for
- 25 the Crowsnest Pass; correct?
- 26 A No.

1 So you base your conclusions on the environmental 0 2 impacts on the Municipality to be negligible on an 3 assessment that involved no substantive look at 4 calculations, no audit, and no deep technical review; 5 correct? 6 Α That's correct. It wasn't part of the scope of my 7 work, and so I reviewed it on a -- an overview basis using my experience in mining to look at all of the 8 9 mitigations that were proposed through the different 10 mechanisms and related to the nine areas that were of 11 concern to the Municipality. 12 There's another part of that conclusion, since you ask 13 which part, that talks about the socioeconomic impacts. 14 That was also outside your scope; correct? 15 It was. Α 16 And outside your expertise; correct? 17 Α Specific expertise, yes. So you really have no basis to say that the 18 19 environmental impacts are minimal and the socioeconomic 20 impacts are positive; correct? 21 So on reading all of that documentation, that was Α 22 my -- my belief that that would be the case. So while 23 I'm not --Based on all the documentation, I was under the 24 0 25 impression that, given the time constraints, you didn't 26 read all of it?

- 1 A I didn't read all of it. So -- so walking through it, 2 I did a high-level review of -- of all of the
- 3 documentation except for a few that I didn't
- 4 specifically look at. Started with executive summaries
- 5 and conclusions, worked through the concordance tables
- 6 and -- and noted responses and completeness discussions
- 7 and the information that was added and the questions
- 8 posed in 12 addendums. And then I reviewed all of the
- 9 commitments, even as modified through to the tables in
- 10 Addendum 12.
- 11 Q That's why we got a health concerns discussion that did
- not talk about air pollutants, even though it was one
- of the specific --
- 14 A We talked about dust. I think -- I think your comment
- previously is it didn't talk about water quality.
- 16 Q Well, Mr. Wittrup, they're talking off the top of the
- mountain and putting the rocks next to the water, and
- 18 you did not test the assumptions into -- that went into
- 19 the modelling --
- 20 A So --
- 21 Q -- that were used for the mitigation. How is
- 22 that -- is that a good basis to conclude that the
- 23 Municipality should support this?
- 24 A Well, actually, I don't say anywhere here in this
- document that the Municipality should support this one
- 26 way or the other.

1	Q	Thank you, Mr. Wittrup. Those are all my questions.
2		THE CHAIR: Thank you, Mr. Agudelo.
3		Sorry. Ms. Okoye, I probably should have started
4		with you. Did you have questions for this witness, or
5		were your questions for the Municipality?
6		MS. JANUSZ: I'm sorry. Are you referring
7		to myself?
8		THE CHAIR: No. I was actually asking
9		MS. JANUSZ: Sorry.
10		THE CHAIR: Ms. Okoye.
11		MS. JANUSZ: Okay. Sorry about that.
12		THE CHAIR: Yeah. No worries.
13		Ms. Okoye, are you in the room? Do you have any
14		questions for this witness?
15		Okay. I don't see Ms. Okoye.
16		Mr. Cooke, I think you indicated you had questions
17		for the Municipality, but I wasn't sure whether they
18		were for this witness or not.
19		MR. COOKE: Yes. Thank you. Our
20		questions are primarily be with representatives
21		directly with the Municipality, but I have a couple of
22		short questions that I'd like to ask this witness.
23		THE CHAIR: Okay. Go ahead.
24		Mr. Cooke Cross-examines Municipality of Crowsnest Pass
25	Q	MR. COOKE: Mr. Wittrup, you your
26		recommendation is the creation of a community advisory

1		committee, and I if I recall I don't want to
2		necessarily have this called up, but it was in the
3		previous one of the previous aids to cross. You
4		basically suggested or the words implied to me, at
5		any rate that Benga should develop a relationship
6		with the Municipality that would create that that
7		body; is that correct?
8	A	Mr. Chair, that's correct. The Municipality itself had
9		one of their one of the things they wanted to
10		explore was the type of committee, the the social
11		community and economic effects advisory committee that
12		was made a commission that condition of the
13		environmental assessment certificate for the recent
14		Teck expansion at Sparwood. And the concept of that
15		committee appealed to them greatly, and and so we
16		had a a closer look at that and and brought it
17		forward as one of the recommendations.
18	Q	Okay. In your experience, a broader experience, you
19		know, projects often do sort of some of us have
20		experience with them set up such committees.
21		In your experience, does the proponent then, in
22		effect, delegate that responsibility to some other
23		body in this case, the Municipality and then you
24		have a committee, or is it more common for the
25		proponent to identify the stakeholders, one of which is
26		the Municipality, but also involves, you know, many

1 other interests in a community, to set it up on that 2 basis? 3 Well, the Teck model -- the Teck and District of Α 4 Sparwood model really talks to having significant 5 representation from the Municipality. I believe it's 6 three councillors and five to seven members of the 7 community. And those members of the community have to sort of pass a -- a bit of a means test in terms of 8 9 interest and ability to contribute. And then there 10 would be senior management members from the mine 11 itself. 12 So if I understand your question correctly, it's 13 kind of a hybrid of the two -- two end points you had. 14 I guess I might, in principle, from experience 0 disagree, but I won't explore that now. 15 I'm just trying to get an idea whether it is 16 17 better that a proponent deals directly with 18 stakeholders, one of which is the Municipality, or that 19 you kind of launder this responsibility through a 20 government institution and then to the public. And it would seem to me that there are two models that might 21 22 be pursued. 23 To -- to be clear, this was the -- the Teck 24 Sparwood model is directly between the Municipality and 25 the -- the mine, not -- but I -- I don't want to -- one 26 of the other things we know is that there needs to be a

direct complaint/feedback mechanism with the mine 1 2 itself as well and -- so that you're not doing sort of 3 what you're talking to, which is laundering complaints 4 through a broader committee unless they're unresolvable. 5 6 No, I wasn't doing that. Quite separate from this. Ι 0 7 think there's complaint mechanisms --8 Α M-hm. 9 -- and if you are familiar with our evidence, we are 10 one of the peoples -- people that, from the outset, has 11 suggested a complaint mechanism and perhaps looking at international models for doing that. 12 13 Yeah. Α 14 But, no, I'm talking about the broader so-called advisory committee and how it might be structured in 15 terms of its relationship with the community and 16 17 specific stakeholders. 18 Maybe just to conclude that is that you would agree that there are the two models that one could use 19 20 or that a proponent could use, in effect, as to -- to 21 inform the community; one direct, one through a 22 municipality? 23 Correct. And -- and, you know, I -- I -- I hesitated all the way along by using the title from the 24 25 Teck Sparwood community because it -- it starts to 26 presuppose the shape of what that committee or that

- 1 relationship might look like. And I really think it's
- 2 up to the two entities to sort that out.
- 3 Q Meaning? The two entities are who? The Municipality
- 4 and the proponent, or the -- or the proponent and the
- 5 community? And they're different.
- 6 A Well, in this case, the Municipality and the proponent.
- 7 I think the bridge there is having the five to seven
- 8 community members.
- 9 Q Which are selected by an entity and, obviously, with
- 10 whatever interest -- a government agency or a
- 11 government entity, albeit elected, with their interests
- 12 and biases going into that selection?
- 13 A Was there a --
- 14 Q We all know how it works.
- 15 THE CHAIR: Do you have any more
- 16 questions, Mr. Cooke?
- 17 Q MR. COOKE: No. Just one very brief one,
- and that's just related to air monitoring.
- 19 Are you familiar with air-monitoring systems that
- 20 would have the capability of providing, basically,
- 21 realtime transparency in the information that it is
- 22 generating? And I'm thinking specifically both air and
- 23 noise and specifically of the critical parameters.
- 24 A I do know there are realtime systems available. In
- 25 fact, when I was ADM, we were investigating using some
- 26 interesting technology from Israel that allowed for

monitoring to be put up fairly inexpensively in --1 in -- in a number of locations for looking at 2 3 everything from emissions from old abandoned oil and gas sites to areas where there was dust involved. 4 5 I'm pretty sure that technology's out there. 6 I quess I would certainly agree with it's widely used 7 in various parts of the world for ambient monitoring of industrial facilities and --8 9 Α Yeah. 10 -- might have application in this case. 11 MR. COOKE: Thank you very much, Chairman. 12 That goes to all the questions I have. THE CHAIR: 13 Thank you, Mr. Cooke. 14 Ms. Janusz, do you have any questions for this 15 witness, or are your questions more for representatives 16 for the Municipality? 17 MS. JANUSZ: I do not have any questions of this witness, and I may have some to the councillors of 18 the Municipality should they decide to make themselves 19 20 available. Thank you very much. 21 THE CHAIR: Okay. Thank you. 22 I'll just circle back. Ms. Okoye, if you're listening, do you have any questions for this witness 23 24 before I move on? 25 MS. OKOYE: No, sir, I don't have 26 questions for him. I have for the representatives of

1		the Municipality.
2		THE CHAIR: Okay. Thank you, Ms. Okoye.
3		Does Benga have any questions for this witness?
4		MR. BRINKER: No, Mr. Chair, Benga has no
5		questions for Mr. Wittrup.
6		THE CHAIR: Okay. Thank you.
7		Ms. LaCasse or Ms. Kapel Holden, any questions?
8		MS. LACASSE: I believe Ms. Kapel Holden
9		doesn't have any questions for this witness.
10		I have a question with regard to air monitoring,
11		but I think it is more appropriately asked of the
12		Municipality as opposed to Mr. Wittrup. I could try
13		him out on it, but I am not certain he'll be able to
14		answer.
15		Should I proceed, Mr. Chair?
16		THE CHAIR: Sure. You can put it to the
17		witness. But, Mr. Wittrup, if you don't feel it's an
18		appropriate question for you, just let us know.
19		Alberta Energy Regulator Staff Questions Municipality
20		of Crowsnest Pass
21	Q	MS. LACASSE: So if the Zoom host, or
22		someone related to the Zoom host, could pull up
23		Document Number 544, which I believe is the
24		Municipality's submission, and if they could go to page
25		PDF 11.
26		So that section of the submission is not

Mr. Wittrup's report, but it's the submission for the

Municipality with regard to air pollution. And in

paragraph 51, the Municipality says that it is

satisfied that if Benga implements mitigation measures

as outlined, they will effectively mitigate concerns

about air quality, including pollution and dust,

particularly at the loadout.

Α

Then in the same document, if you could go to page PDF 14. And here we're into the submissions on health, and in particular the Municipality's recommendation that Benga install a permanent air-quality monitoring station at the Crowsnest Pass Health Centre and the Crowsnest Pass Medical Clinic, or other suitable approximate locations.

So I'm aware, Mr. Wittrup, of a statement you made with regard to a hospital receptor being of concern on page 50 of that document, which is, I think, 10 -- page 10 of your report.

In any event, what I want to know is does the Municipality feel that the proposed monitoring station in Blairmore near the loadout facility, and proposed by Benga, is sufficient or insufficient? And, again, I'm looking for the Municipality's position on this. So I don't know if you are able to do -- provide that. I'm not able to provide that, Mr. Chair, as I was

retained by counsel, not by the Municipality.

- 1 had no communication with the Municipality.
- 2 Q Okay. Well, based on Mr. Wittrup's answer, I believe I
- 3 need to get an answer from someone speaking on behalf
- 4 of the Municipality. Thank you.
- 5 A Okay.
- 6 Q Those are my questions.
- 7 THE CHAIR: Thank you.
- Thank you, Ms. LaCasse.
- 9 Mr. Lambrecht, do you have any questions for this
- 10 witness or more for representatives of the
- 11 Municipality?
- 12 MR. LAMBRECHT: Sir, I would like to proceed
- to question this witness and see if he is in a position
- to provide informed evidence on matters I would put to
- 15 him.
- 16 THE CHAIR: Okay. Go ahead.
- 17 The Joint Review Panel Secretariat Staff Questions
- 18 Municipality of Crowsnest Pass
- 19 Q MR. LAMBRECHT: Mr. Wittrup, welcome to these
- 20 proceedings. I have a couple of introductory questions
- 21 for you.
- 22 First, have you observed the proceedings since
- 23 they began, or reviewed the transcripts for those
- 24 passages you may not have been able to observe?
- 25 A I have done both, and -- but I would say my coverage
- has probably been about 80 percent.

1 0 All right. 2 I'm going to ask you -- I'm going to ask the Zoom 3 host to present a number of documents by way of 4 preamble to this question, and then I will pose my 5 question to you at the end. And I would ask you to 6 indicate -- if you feel you are not in a position to 7 provide informed opinion, please let us know. Okay. 8 Α 9 0 All right. 10 Now, your report is PDF page 545 -- or CIAR 545. 11 And if we go to PDF page 22 there, you can see there's 12 a heading dealing with the emergency management plan --13 M-hm. Α 14 -- in the submission itself. 15 If you go to PDF 73, in the third paragraph there, and especially the first sentence, you also discuss 16 17 emergency preparedness and response in your report? M-hm. 18 Α So you will know from either observing the proceedings 19 20 or reading what you have of the transcript that --21 You can take that down, Zoom Host, thank you. 22 Mr. Wittrup, you will know that --Zoom Host, could you please pull up PDF -- CIAR 23 24 564 at PDF 24. And can you scroll down, please. All

Now, Mr. Wittrup, I'm going to direct your

25

26

right.

- 1 attention in this one to the last paragraph on this
- 2 page under the bolded heading "Potential For Large
- 3 Scale Slope Failure". This is a submission of one of
- 4 the Indigenous groups here.
- 5 A M-hm.
- 6 Q And there have been other participants who have
- 7 expressed a concern about rockfall from
- 8 Turtle Mountain.
- 9 So I'm going to ask next the Zoom host to present
- 10 CIAR 208, please. All right.
- Mr. Wittrup, have you had a chance to look at this
- 12 document at all?
- 13 A I can't -- can't read it very well. Oh, there we go.
- 14 I have not.
- 15 Q All right.
- 16 Could I go to PDF page 2 of this document, please.
- 17 All right.
- 18 The general scope of this letter is that the
- 19 Alberta Geological Survey monitors Turtle Mountain?
- 20 A M-hm.
- 21 O And assesses risk of rockfall.
- 22 And you will see in the second paragraph there
- 23 that there are large areas of low displacement rate
- 24 block movement on both south and north peaks and that
- 25 the survey is monitoring this movement.
- 26 And you'll indicate there that -- in the next

1 paragraph that the AGS assesses Turtle Mountain as 2 having a low risk of large block displacement, but in 3 the next paragraph that there is a risk of larger rockfalls from the top edge of the mountain. 4 5 Do you see that, sir? 6 Α M-hm. 7 All right. Now, I'd like to ask the Zoom host to present 8 9 PDF -- or CIAR 686, please, at PDF 37. All right. 10 Sir, this is a -- one of the slides from the 11 presentation of a prior participant, Mr. McIntyre. 12 Would you agree that it is a representative depiction of the rockfall from Turtle Mountain? 13 It looks like the Frank Slide. 14 Α I've actually 15 been through that several times by rail. 16 All right. 0 17 Sir, I want to ask you to undertake to produce a 18 map of the municipal boundaries of the Municipality of Crowsnest Pass; and within that, to show if there is 19 20 any restricted development area associated with Turtle Mountain. 21 22 Are you in a position to make that undertaking, 23 sir? Not without any full geotechnical assessment behind me. 24 Α 25 You are not in a position to undertake a produce a map

of the municipal boundaries of Crowsnest Pass, sir?

26

1 Α I can do that. I can do that on this diagram, yes. 2 That's not what I'm asking, sir. 3 It appears to be, from the record --4 M-hm. Α -- we do not have a map of the municipal boundaries of 5 6 the Municipality of Crowsnest Pass. I'm thinking that it would be prudent to have such 8 a map within the area, and I'm wondering if you could 9 undertake to produce such a map. I'm thinking the 10 Municipality must have one. 11 MS. GULAMHUSEIN: Mr. Chair, if I may step in? 12 THE CHAIR: Go ahead, Ms. Gulamhusein. 13 MS. GULAMHUSEIN: Thank you. 14 I don't think Mr. Wittrup is in a position 15 to -- to produce the map. The Municipality can provide 16 a map of its municipal boundaries. 17 And to be clear, are you asking for the zoning within the Municipality? 18 19 MR. LAMBRECHT: I'm asking for two things. 20 But firstly, if there is a -- if you -- if the 21 Municipality could produce a map showing its municipal 22 boundaries so that we have that on the record. And then within that, if the Municipality has 23 exercised -- within that, if there is any restricted 24 25 development area associated with Turtle Mountain, either the front side or the back side, and what that 26

- 1 may be.
- 2 Q MR. LAMBRECHT: Mr. Wittrup, are you in a
- 3 position to know whether there might be any restricted
- 4 development associated with the rockfall areas of
- 5 Turtle Mountain?
- 6 A Mr. Chair, I am not in a position to outline such
- 7 areas.
- 8 Q All right.
- 9 Do you know as a matter of emergency planning how
- 10 the Municipality may have organized itself to address
- any response to risk of rockfall from Turtle Mountain?
- 12 A Mr. Chair, I do not have that information, and -- or
- 13 knowledge of it.
- 14 Q Do you know if the Municipality has communicated with
- 15 the proponent or any other public or private entity
- 16 concerning the potential for rockfall at
- 17 Turtle Mountain?
- 18 A I do not know that information.
- 19 Q All right.
- 20 And do you know how the Municipality may have
- 21 exercised its municipal zoning powers in relation to
- 22 the rockfall zone associated with Turtle Mountain?
- 23 A Mr. Chair, I do not.
- 24 Q All right.
- 25 Sir, I think I've gone as far as I can with you.
- 26 I appreciate your patience in responding to my

1		questions, and I don't have anything further for you.	
2		Thank you for your participation.	
3	A	You're welcome.	
	A		
4		THE CHAIR: Okay. Mr. Matthews, any	
5		questions?	
6		MR. MATTHEWS: Thank you, Mr. Wittrup. I	
7		don't have any questions.	
8		THE CHAIR: Mr. O'Gorman?	
9		MR. O'GORMAN: No, I don't have any questions	
10		either.	
11		Thank you, Mr. Wittrup, for your presentation and	
12		appearing today.	
13		THE CHAIR: I don't have any questions for	
14		you either, Mr. Wittrup.	
15		Ms. Gulamhusein, do you want to do any re-direct?	
16		MS. GULAMHUSEIN: No, Mr. Chair, we're fine.	
17		Thank you.	
18		THE CHAIR: Okay. Thank you.	
19		Okay. It is 12:00, so I guess we're at lunchtime.	
20		And so 12:00. Let's take 45 minutes and resume at	
21		12:45, and at that point we'll start with the	
22		Livingstone Landowners Group direct evidence.	
23		Thank you.	
24			
25		PROCEEDINGS ADJOURNED UNTIL 12:45 PM	
26			

1 2	Proceedings Taken via Re	emote Video
3	November 4, 2020	Afternoon Session
4		
5	A. Bolton	The Chair
6	D. O'Gorman	Hearing Commissioner
7	H. Matthews	Hearing Commissioner
8		
9	M. LaCasse	AER Counsel
10	B. Kapel Holden	AER Counsel
11		
12	K. Lambrecht, QC	Joint Review Panel Secretariat
13		Counsel
14		
15	T. Utting	AER Staff
16	E. Arruda	AER Staff
17	D. Campbell	AER Staff
18	T. Turner	AER Staff
19	T. Wheaton	AER Staff
20	A. Shukalkina	AER Staff
21		
22	M. Ignasiak	For Benga Mining Limited
23	C. Brinker	
24		
25	R. Warden	For Ktunaxa Nation
26		

-			1500
	1	K. Poitras	For Métis Nation of Alberta
	2		Region 3
	3		
	4	Chief B. Cote	For Shuswap Indian Band
	5		-
	6	B. Snow	For Stoney Nakoda Nations
	7		-
	8	R. Drummond	For Government of Canada
	9	S. McHugh	
	10		
	11	A. Gulamhusein	For Municipality of Crowsnest
	12		Pass
	13		
	14	M. Niven, QC	For MD of Ranchland No. 66
	15	R. Barata	
	16	J. Nijjer	
	17		
	18	B. McGillivray	For Town of Pincher Creek
	19		
	20	D. Yewchuk	For Canadian Parks and
	21		Wilderness Society, Southern
	22		Alberta Chapter
	23		
	24	R. Secord	For Coalition of Alberta
	25	I. Okoye	Wilderness Association, Grassy
	26		Mountain Group, Berdina Farms

1		Ltd., Donkersgoed Feeder
2		Limited, Sun Cured Alfalfa
3		Cubes Inc., and Vern Emard
4		
5	R. Cooke	For Crowsnest Conservation
6		Society
7		
8	G. Fitch, QC	For Livingstone Landowners
9	C. Agudelo	Group
10		
11	M. Sawyer	For Timberwolf Wilderness
12		Society and Mike Judd
13		
14	(No Counsel)	For Barbara Janusz
15		
16	(No Counsel)	For Jim Rennie
17		
18	S. Elmeligi	For Alberta Chapter of the
19	A. Morehouse	Wildlife Society and the
20	S. Milligan	Canadian Section of the
21	M. Boyce	Wilderness Society
22		
23	J. Gourlay-Vallance	For Eco-Elders for Climate
24		Action
25		
26	L. Peterson	For Trout Unlimited Canada

```
For Coal Association of Canada
 1
     R. Campbell
 2
     (No Counsel)
 3
                               For Alistair Des Moulins
 4
     (No Counsel)
 5
                              For David McIntyre
 6
     (No Counsel)
                               For Fred Bradley
 8
                               For Gail Des Moulins
 9
     (No Counsel)
10
                              For Ken Allred
11
     (No Counsel)
12
     (Not Present)
13
14
     (No Counsel)
                               For Monica Field
15
     S. Frank
                               For Oldman Watershed Council
16
17
     A. Hurly
18
     C. Forster, CSR(A) Official Court Reporters
19
20
     S. Howden, CSR(A)
21
22
     (PROCEEDINGS COMMENCED AT 12:46 PM)
23
     THE CHAIR:
                               Okay. Mr. Fitch, are you
24
     ready to proceed?
          You are ready to proceed, Mr. Fitch?
25
26
     MR. FITCH:
                               Yes, I am.
                                           Thank you,
```

- 1 Mr. Chair.
- 2 So just to lay the groundwork for the Panel, this
- 3 afternoon the Livingstone Landowners Group will have
- 4 five witnesses. The first four are members of the LLG.
- 5 They're local landowners, and they will be sitting as
- 6 our first panel, effectively, our landowner panel.
- 7 And then once they're done, our second panel is a
- 8 panel of one, Dr. Chris Joseph, who is the
- 9 socioeconomic impact assessment expert that the LLG
- 10 retained and who has filed a report in this proceeding.
- 11 So we're going to start with our landowners, and
- 12 then we're going to go to Dr. Joseph.
- 13 In terms of how it will work, we have three
- 14 members of the LLG in our boardroom here in Calgary.
- 15 One member, Mr. Sid Marty, couldn't travel to Calgary
- 16 today so -- but he's on Zoom.
- 17 Do we know that, actually?
- 18 MR. AGUDELO: He was going -- I will just
- 19 find out.
- 20 MR. FITCH: He's the last one to speak, so
- 21 we'll get that sorted out.
- 22 So we have three here, one on Zoom. They have
- 23 each got remarks that they prepared. We'll run through
- 24 those. And then when we're done with the landowners,
- 25 we'll move on to Dr. Joseph, if that's acceptable to
- 26 the Panel.

1		THE CHAIR: So are	e you thinking that
2		questions for the landowner par	nel would be after
3		Dr. Joseph or before?	
4		MR. FITCH: I was	thinking before.
5		THE CHAIR: Okay.	That's fine.
6		MR. FITCH: We're	flexible.
7		THE CHAIR: Yeah.	No. That makes sense.
8		MR. FITCH: Okay.	So just by way of
9		introduction, Mr. Chair, we have	ve three members of the
10		Livingstone Landowners Group he	ere with us in Calgary;
11		firstly, Mr. Bill Trafford, who	o Mr. Trafford is the
12		current president of the LLG; v	we have Mr. John Lawson;
13		and we have Ms. Bobbi Lambright	; and as I said, by
14		Zoom, we have Mr. Sid Marty.	
15		So perhaps I can have the	court reporter affirm or
16		swear our four witnesses, or at	least three of them, to
17		start.	
18		BILL TRAFFORD, JOHN LAWSON, BOR	BBI LAMBRIGHT, Affirmed
19		MR. FITCH: Sid, a	are you on the line?
20		We'll work on Sid, but in	the interest of getting
21		things moving, I'm just going t	to begin.
22		Direct Evidence by Livingstone	Landowners Group
23		(Purpose of Project, Visual Aes	sthetics, Alternative
24		Means, Land and Resources Use,	Socioeconomic Effects,
25		Historic Resources)	
26	Q	MR. FITCH: Mr. Trai	fford, we'll start with

1		you. You can confirm that you are the current
2		president of the Livingstone Landowners Group?
3	А	Yeah, I can confirm that.
4	Q	Thank you.
5		And I understand you've prepared some remarks that
6		you would like to present to the Panel?
7	А	I have.
8	Q	Would you please do that?
9	А	Yes.
10		First I'd like to thank the Chair and the Panel
11		for allowing us to participate in these proceedings.
12		As background, my parents came to Alberta in the
13		1940s after stints in Egypt, Romania, and Venezuela.
14		My father, an only child after his brother was killed
15		in the war, was exempted from military service because
16		of his unique ability to find and develop oil fields.
17		They made Alberta their home and thoroughly
18		enjoyed every aspect of the outdoor life in the
19		southwest Rockies.
20		They had seven children, six boys and one girl,
21		and I now have over 40 direct family members in
22		Alberta, and all of them recreate in the area we're
23		talking about. I also have two brothers who have homes
24		in the area, as I do.
25		I've spent many years riding and hiking along the
26		Eastern Slopes. Notably, three of my brothers and I

- 1 rode a stretch of the Great Divide Trail along the top
- 2 of the Eastern Slopes from Etherington Creek near
- 3 Longview to Coleman over the course of two summers
- 4 somewhat successfully and not without several mishaps.
- 5 As an extended family, we're all attached to the
- 6 area and sincerely hope that now all of our
- 7 grandchildren can enjoy -- enjoy it as we do and as
- 8 their great-grandparents did. Having spent many --
- 9 time in many parts of the world, this is a special
- 10 place.
- 11 All of my extended family asked me to express
- 12 their concern and hope that this area is protected from
- irreparable damage.
- 14 We all recognize the difficulty Alberta is facing.
- 15 All of the 40-plus members of my family are committed
- 16 to living, working, and raising families in Alberta.
- 17 We know how important growing our economy and creating
- 18 jobs is to all of our futures, and we all want to help.
- 19 I can commit to you that not one single one of them
- 20 believe that mountaintop removal to mine for coal is
- 21 beneficial to the future of Alberta.
- 22 My volunteer role as president of the Livingstone
- 23 Landowner Group is largely driven by the same
- 24 motivation as Peter Lougheed and other great Albertans,
- 25 like Charlie Fischer, a prominent businessman who spent
- 26 a great deal of his -- his wealth acquiring and

- 1 protecting land in the area, saw the importance of this
- 2 unique environment and the need to protect it for the
- 3 people of Alberta.
- 4 LLG is a not-for-profit association of landowners
- 5 and residents in the area east of the Livingstone Range
- 6 to the Porcupine Hills and north of the Oldman River
- 7 Reservoir. We have over 125 members ranging from
- 8 third-generation ranchers to a number of landowners who
- 9 make their homes in the area, with careers spanning
- 10 professions from law, the arts, educators, health care
- 11 professionals, and business owners and leaders. All
- 12 are highly concerned with the impact this mine will
- 13 have. All have made significant time and financial
- 14 contributions to ensure that everything possible is
- done to avoid damaging the air, water, and precious
- 16 ecosystems along the Eastern Slopes.
- Our mandate since LLG was established in 2004 has
- 18 been to work with industries interested in investing --
- 19 investing in the area to ensure their plans are
- 20 sustainable and respect the unique environmental
- 21 aspects of the area. We have worked successfully with
- 22 oil and gas initiatives, logging, wind, and -- and
- 23 transmission development activities. We are not
- 24 against development but believe development in this
- 25 area should be done in a way that is sustainable and
- 26 does not damage the environment.

- 1 This corner of Alberta has been classified by the
- 2 Nature Conservancy of Canada as the last 5 percent of
- 3 the Great Northern Plains. It is a crucial habitat for
- 4 many species that depend on the unique combination of
- 5 mountain or plains or montane in this area.
- 6 A critical thing to understand is that this land,
- 7 particularly the native fescue, cannot be successfully
- 8 reclaimed. Significant long-term efforts by many
- 9 experts over the years have tried after pipelines,
- 10 drilling sites, and transmission lines have disturbed
- 11 the native fescue grass, all of it completely
- 12 unsuccessful. It is now recognized that it can't be
- 13 done.
- 14 That is the primary reason the Nature Conservancy
- of Canada acquired an easement on the largest track of
- 16 undisturbed native fescue in Southern Alberta, what's
- 17 called the Waldron Ranch. This is the largest
- 18 conservation easement in Canadian history. They
- 19 understood the damage to this area cannot be corrected
- 20 through any means of restoration or remediation. A
- 21 very large strip mine in close proximity poses a known
- 22 risk to the essential air and water needed to sustain
- 23 this environment that cannot be mitigated, reclaimed,
- 24 or repaired. When it's gone, it's gone.
- 25 In addition to the direct work we have done with
- 26 developers -- developers, our members are and continue

- 1 to be significant contributors to the creation and
- 2 development of the South Saskatchewan Regional Plan as
- 3 well as the efforts to ensure the sustainability of
- 4 Crown land in the Livingstone and Porcupine Hill areas.
- 5 Many of our volunteers -- many -- many of our members
- 6 volunteer their time in the summer to -- to maintain
- 7 trails and creek crossings damaged by OHE -- OHV
- 8 traffic.
- 9 We've involved -- we have been involved in many
- 10 other similar efforts. These have taken enumerable
- 11 person years of effort by our members and others in the
- 12 community and is a testament to the concern Southern
- 13 Albertans have for the environment and, importantly,
- 14 the watershed from the Eastern Slopes.
- Our members are highly concerned about the
- 16 potential impacts this mine will have on the future of
- 17 Alberta. Many of them have spent their careers in some
- 18 way involved in the oil and gas industry in the
- 19 province. Many of our members and the companies in
- 20 Alberta that employ them have worked very hard and
- 21 diligently to become, as Premier Kenney has proudly
- 22 proclaimed on many occasions: (as read)
- The world leader in the environmentally safe
- and ethical production of oil and gas.
- 25 This is a reputation and brand that will be incredibly
- 26 valuable in the years ahead, as the concern over

- 1 production in countries without regard for environment
- 2 or human rights will make our oil and gas the preferred
- 3 choice.
- 4 It would be shortsighted and hypocritical to allow
- 5 a known environmental risk like mountaintop-removal
- 6 coal mining to tarnish that hard-earned reputation.
- 7 An Australian coal miner from the Montem company,
- 8 who also have interests in the area, by the name of
- 9 Rod Tindall stated that Alberta's regulatory regime for
- 10 coal was highly favourable. These are companies that
- 11 can and do operate around the globe, and the fact that
- 12 Alberta's regulations are more favourable than
- 13 countries like Indonesia and Malaysia should be cause
- 14 for concern to the Panel. Albertans should not be so
- 15 shortsighted that we need to accept lower standards
- 16 than other countries and the significant environmental
- 17 risk for small returns and potentially large
- 18 remediation cost.
- 19 We understand that the purpose of this hearing is
- 20 to determine whether the proposed mine is in the best
- 21 interests of Albertans and Canadians and understand
- 22 this is a complex question. Do the economic benefits
- 23 outweigh the environmental risks?
- 24 You will hear from a number of experts on the
- 25 environmental risks and -- and on the very poor
- 26 valuation of the socioeconomic benefits. That, alone,

should make your job easier. 1 My background is in business, primarily in 2 3 valuating and delivering very large-scale transformational projects in North America, Europe, and 4 here in Alberta, essentially determining if the risk is 5 6 worth the reward. For me, this is an easy one. Benga presents an economic picture that assumes metallurgical coal will stay at US 140 a tonne. 8 main market for this type of coal is China. 9 10 reported by Alex Turnbull, a noted fund manager based 11 in Singapore, that was published in The Guardian 12 earlier -- earlier this month, stated: (as read) 13 The market dynamics are changing for China's 14 coal purchases. Coal imports have dropped sharply from all countries in 2020. 15 Initially this was contributed to COVID, but 16 17 as China's economy has resumed growth and certainly growth in its energy-intensive 18

23 Mr. Turnbull goes on to say: (as read)
24 China's plans for slower but more
25 self-sufficient growth will slow their energy
26 demand.

on year in September.

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22

sectors, coal imports have dropped sharply

Indonesia exports were down 30 percent year

from all countries, not just Australia.

- 1 China represents 51.7 percent of the metallurgical coal
- 2 market. India represents 11.8. China is the largest
- 3 importer, by far, of metallurgical coal.
- 4 Mr. Youl's comments on Monday that India could
- 5 replace this significant drop in Chinese demand through
- 6 India is a stretch. Clearly China controls the demand
- 7 and, therefore, the price.
- 8 The current price -- the impact on this -- on the
- 9 price of coal production produced from this proposed
- 10 mine is obvious: downward. The current price is at or
- 11 near a hundred dollars a tonne. Benga's own estimate
- 12 [sic] state that at US a hundred dollars a tonne, the
- 13 provincial tax and royalties would amount to a paltry
- 14 \$9 million per year, at best.
- 15 Clearly there is a significant risk, the mine
- 16 being uneconomic and the cleanup costs then falls on
- 17 Albertans. As Benga would not directly answer the
- 18 question whether its owner would have any liability in
- 19 the event of its insolvency can only be assumed that
- 20 they would not, and the remediation costs would fall to
- 21 the Mine Financial Security Program, as -- as Benga
- 22 mentioned on Monday.
- 23 As the Alberta Wilderness Association has
- 24 documented and the auditor general has pointed out in
- 25 2015, there is a significant liability gap with the
- 26 program. There is every reason to believe that this

- 1 mine will not generate the economic value that
- 2 proponents assume and that Albertans will be left on
- 3 the hook once again, as we've seen from other debacles
- 4 in the past, including orphan wells.
- 5 We in Alberta have been sorely impacted by the
- 6 boom-bust effect of commodities. For more than two
- 7 decades, we have known that reliance on volatile
- 8 commodity prices is not a good strategy for the
- 9 province. We have seen what OPEC can do to oil prices.
- 10 Is it really wise for Alberta to tie our economic wagon
- 11 to another commodity at the mercy of the much more
- 12 one-sided Chinese economic and trade policies?
- 13 And it should be noted that over the last few
- 14 days, there have been persistent rumours that China
- 15 will stop the majority of imports, including coal, from
- 16 Australia with minimal or no notice. So one can
- 17 imagine that would -- what that would do to this mine.
- 18 The Panel should also recognize that the
- 19 Royal Bank of Canada has recently instituted policy
- 20 that they will decline to finance any endeavour related
- 21 to the practice of mountaintop removal to mine coal.
- 22 The shareholders of the Royal Bank of Canada,
- 23 predominantly Canadians, have made the thoughtful
- 24 determination that this is a bad investment, both
- 25 because of the environmental risk and the financial
- 26 risks. It would seem to be very challenging to argue

in this setting that it's in the best interests of 1 2 Albertans and Canadians. 3 Using -- using the vernacular, I'll leave you with the answer to the question: Is the juice worth the 4 5 squeeze? No. 6 Thank you for your time. 7 Thank you, Mr. Trafford. 0 Just one point of clarification. You mentioned 8 9 that many LLG members volunteer their time in the 10 summer to maintain trails and creek crossings damaged 11 by OHV traffic. Just for the record, what does "OHV" 12 stand for? 13 Off-highway vehicles. Α 14 Thank you. 0 15 MR. FITCH: All right. Mr. Chair, we're 16 going to move on to the next member of the LLG panel, and that is Mr. John Lawson. 17 18 MR. LAWSON: Thank you. Α 19 Good afternoon, Panel Members, hearing 20 participants, and others. I appreciate the opportunity 21 to speak today. 22 I will also acknowledge the land rights of the 23 Treaty 7 people, particularly my most immediate neighbours, the Piikani. 24 25 My name is John Lawson. I was born and raised in

Southern Alberta. Since the early 1990s, I have owned

26

- property, lived, and ranched in the nearby Porcupine

 Hills. I have also been a member of Livingstone

 Landowners Group, or LLG, since its formation, and for

 the past two years, I've worked on behalf of the group

 in this process.

 I am not here to present detailed and extensive
- I am not here to present detailed and extensive

 evidence on the issues identified. I will leave that

 to the subject experts and legal counsel. I am a

 citizen who has lived and been active in the area

 community, the economy, and environment for many years,

 observing and caring deeply about its future.
- In a sort of parallel existence, I have also spent
 much time -- much of the past four years involved in
 public policy and governance in Canada as a senior
 official and consultant in other provinces and Northern
 territories, working for governments, as an advisor to
 governments, and as a consultant advisor to
- 18 First Nations and other clients.
- 19 Q MR. FITCH: Mr. Lawson, in fact, you were
- the deputy minister of justice in Yukon, were you not?
- 21 A Yes, that's -- that's correct.
- 22 Q And deputy minister of the executive council in Yukon?
- 23 A Yes, that's -- that's also correct. I've had the good
- fortune to hold a number of positions of that nature in
- 25 the Yukon over a number of years.
- 26 O Right.

I was asked to speak first today to the interests and Α concerns of the Livingstone group and its membership. So I will, inescapably, I guess, repeat a bit of Mr. Trafford's comments, but I will try to keep those as minimal as possible. And then offer some comments from a more personal perspective and put forward a few questions and considerations that I believe essential to be considered by the Panel and, subsequently, the provincial and federal governments.

As Mr. Trafford noted, the LLG was formed in 2004 as an entirely volunteer nonpartisan and distinctly nonprofit organization of local residents, landowners, and others concerned about the present and future of the region and the natural qualities of the environment that attracted so many of us to come here and have sustained so many more.

LLG has not and does not now take positions simply against development or industry. It has consistently been receptive to new ventures and opportunities, provided that those are suitable and compatible with existing interests and values of the area and that proposed developments can take place in ways not just economically but also socially and environmentally responsible and sustainable.

And lastly, neither -- neither LLG nor, to my knowledge, anyone else concerned about Grassy Mountain

- 1 and opposed to this application is opposed to economic
- 2 opportunities or employment in the area. We understand
- 3 that there are people who would seek such
- 4 opportunities, and we have no quarrel with those
- 5 people. But for mine benefits to be of value, they
- 6 need to be stable and lasting, not just one more round
- 7 in the boom-and-bust cycles so common in resource
- 8 extraction. They must add to the existing economy and
- 9 the community, not substitute or detract from them, and
- 10 promises made must be real and maintained in the
- 11 future.
- 12 These factors underlie LLG's concerns with
- 13 Grassy Mountain and participation in these hearings.
- 14 Succinctly stated, the LLG does not believe that the
- 15 Grassy Mountain Project, as it was envisioned, or
- 16 additional mines not subject to these hearings but
- 17 being proposed, is or in their current form, can be
- 18 made appropriate, safe, or compatible with the primary
- 19 and long-enduring values and needs of this area.
- The LLG submitted a number of letters of
- 21 state -- or statements of concern going back to 2017,
- 22 raising the following issues, which I'll note very
- 23 briefly: Retention of the natural beauty and
- 24 international claim of the Crown of the Continent
- 25 landscape; protection of sensitive and fragile local
- 26 animal and plant species; proximity of the mine to

- 1 recognized environmentally sensitive areas and
- 2 irreplaceable ecosystems; lack of attention to
- 3 reclamation and associated difficulties accentuated by
- 4 harsh, dry, and highly variable climatic conditions;
- 5 use of public lands for water capture, collection, and
- 6 treatment; possible diversion of streamflows and
- 7 conversion to industrial use; downstream degradation of
- 8 water quality in the Crowsnest and Oldman River
- 9 systems, particularly selenium contamination with
- 10 long-term or permanent damage to fish and other
- 11 species; detraction and degradation of recently
- 12 established area parklands from visual impacts, noise,
- and downwind dust; and, finally, impacts on health and
- 14 well-being of the local population.
- I note each of those to illustrate that the list
- 16 of concerns and problems associated with this mine is
- 17 extensive. It is long. The issues are serious, and
- 18 they're not unique to LLG. They are shared by many in
- 19 the surrounding area, some participating here in their
- 20 own right, others not.
- 21 Longstanding and prevailing priorities and values
- 22 to people throughout the area are well-reflected by
- 23 multiple opinion -- public-opinion surveys and
- 24 exercises that are being conducted over the past
- 25 several years.
- 26 Mr. Chair, I would note that I have not included

1		those here, but I can certainly provide references to
2		those and any other documents if the Panel or Benga
3		would like me to do so.
4	Q	Sorry. And just for the record, Mr. Lawson, you're
5		referring to the fact that all of the concerns that you
6		just enunciated have been previously set forth in
7		letters filed by the LLG, and we can refer to those
8		document
9	A	Correct.
10	Q	numbers if you want to, but for the sake of
11	А	Yes. And I was also referring to the a the
12		number, I believe, is five different public opinion
13		surveys conducted over the past, roughly, five to seven
14		years that have, each of them, confirmed the same
15		prevailing values and so of the population, much
16		broader than LLG.
17		In early 2019, the LLG established a working
18		committee to follow mine development and the impact
19		assessment process more closely, and the board and
20		committee have worked to coordinate efforts within LLG
21		and also with other people in organizations having
22		complementary objectives and expressing the same or
23		similar concerns about Grassy Mountain.
24		Throughout, LLG and our legal counsel have worked
25		continuously and closely with the Canadian Parks and
26		Wilderness Society; we have communicated and cooperated

- 1 regularly and actively with the Alberta Wilderness
- 2 Association and Grassy Mountain Coalition and, more
- 3 recently, with the Municipal District of Ranchlands,
- 4 the Pekisko group, and their respective counsel. All
- 5 have worked to avoid unnecessary duplication of efforts
- 6 or costs to focus on key issues and to maximize our
- 7 efficiency and resources, and to assist the Panel to do
- 8 the same.
- 9 The important issues and legal roles on each have
- 10 been identified and allocated among the groups, and
- 11 expert resources have been engaged as needed. LLG has
- 12 focused primarily on four major issues from the much
- 13 longer list: mine engineering and design; human health
- 14 impacts, including associated local wind conditions and
- 15 economic impacts.
- The shorter list does not imply a less importance
- 17 or resolution of concerns with respect to other issues
- 18 that we are not specifically addressing. Those are
- 19 vitally important but will be fully addressed by
- 20 others.
- 21 As mentioned, witnesses will present evidence on
- 22 each of the four issues. I will comment on only a few
- 23 general but, we think, critical points or questions.
- With regard to mine design and engineering, it is
- 25 not at all clear that Benga has the knowledge or means
- 26 to adequately protect creeks and surface water flows or

- 1 to adequately capture and treat water that is
- 2 contaminated.
- 3 Selenium, in particular, is an obvious and serious
- 4 concern to residents, recreation and ecotourism
- 5 interests, agriculture, and anyone else dependent on
- 6 the Crowsnest and Oldman systems. That's over
- 7 1 million people across Alberta and beyond.
- 8 We need only look across the border into
- 9 British Columbia to see how elusive solutions for
- 10 selenium capturing and treatment have been,
- 11 notwithstanding many years and millions of dollars
- 12 spent to find them. Yet we have here in this
- 13 application rather bland assurances absent evidence to
- 14 show that it can be effectively contained or treated in
- 15 this environment and on the scale of the proposed mine.
- 16 We are asked to simply believe.
- 17 There are promises of reclamation but lack of
- 18 detail and up-front financial or other commitments to
- 19 ensure that such reclamation really will happen, and
- 20 history shows us that it commonly does not.
- 21 What is in the Grassy Mountain commitments and
- 22 plans that will make them different? And who will pick
- 23 up the cost if Benga cannot or does not meet its
- 24 obligations?
- 25 Here and elsewhere in the environmental impact
- 26 assessment, a number of issues requiring mitigation and

- 1 future remedy are insufficiently addressed. Concerns
- 2 are discounted as being not significant; undertakings
- 3 are offered to monitor and assess further, as
- 4 necessary; and, finally, to do something undefined to
- 5 remedy them if they really do prove to be serious.
- I suggest there is nothing in such a vague and
- 7 undefined approach to reassure the public or that
- 8 should satisfy the Panel or governments.
- 9 With respect to human health effects, wind
- 10 patterns in the area are extreme, sporadic, and unique.
- 11 We live in an area where small gravel can be picked up
- 12 and blow horizontally. Burning embers can travel
- 13 miles. Roofs and windows are blown off or other
- 14 buildings. It beggars belief to present a view where
- 15 winds across the mine site are dramatically less than
- 16 all around it.
- 17 We do not believe that modelling and projections
- 18 by the proponents are sufficient or adequately take
- 19 into account Chinook and inversion patterns affecting
- 20 dispersion of dust and other fine-particulate matter.
- 21 And importantly, an understatement of wind effects will
- 22 cause understatement of related potential health
- 23 effects.
- 24 Second, modelling an -- assessment methods for
- 25 health effects are also limited and inadequate. Using
- one methodology, and apparently not looking further,

- the proponent concludes the increased health risks will
 be minimal or insignificant. Those conclusions are
- 3 seriously at odds with on-the-ground studies and
- 4 emerging science showing very significant and increased
- 5 risks directly associated with mountaintop-removal
- 6 mining. Higher cancer rates; higher heart, lung, and
- 7 kidney disease rates; higher rates of birth defects;
- 8 and higher levels of impaired functioning. Recent
- 9 studies indicate growing evidence of brain atrophy and
- 10 impairment and depression attributable to small-matter
- 11 particulate matter crossing of the blood-brain barrier.
- 12 Selenium effects may be best known in relation to
- 13 fish, but we should not take comfort from that. I
- 14 spoke to a doctor friend recently about impacts on
- 15 people, and his response to a question I asked was
- 16 that: (as read)
- 17 We may not -- we may know less because
- 18 studies are fewer and more difficult for
- 19 human populations, but we can be quite sure
- that if we are poisoning fish, we are also
- 21 poisoning people.
- 22 How many residents and other people is industry
- 23 prepared to put at that increased risk? How many will
- 24 government permit? And for what in return? Some
- 25 short-term jobs, some community donations or Australia
- 26 Day celebrations, or 1 percent royalties? We suggest

- 1 it isn't working; it's not a good equation.
- 2 Federal requirements are clear. Government
- 3 agencies and authorities are to apply the precautionary
- 4 principle in the exercise of their powers and
- 5 responsibilities with respect to these applications.
- 6 To do that, and after careful review of the evidence
- 7 emerging on health effects of mountaintop-removal
- 8 mining, I would argue that neither the Panel nor Canada
- 9 can reasonably recommend or approve the Grassy Mountain
- 10 Mine as it is proposed.
- 11 Knowing what we do, watching evidence emerge, and
- 12 recognizing that long-term health and even lives of
- 13 employees and area residents alike could be seriously
- 14 jeopardized, what higher standard or principle could
- 15 possibly justify approval?
- 16 Lastly, with respect to economic impacts, we
- 17 believe that the benefits have been overstated or
- 18 unsupported by evidence and that offsetting costs have
- 19 been largely ignored. A valid case has not been made
- 20 that economic benefits will outweigh adverse
- 21 environmental or other effects and support a conclusion
- 22 that the project is in the public interest.
- 23 Mine life and production are estimated and
- 24 averaged over the projected mine life. Revenues are
- 25 estimated based on projected coal prices over the same
- 26 period. But in real life, interruptions, shutdowns,

- 1 and market fluctuations are common in the industry.
- 2 They can greatly affect revenues, public employment,
- 3 and infrastructure. They do not appear to be fully
- 4 considered in company projections.
- 5 Alternative fuels and means of steam production
- 6 are becoming more feasible, some forecasts predicting
- 7 that they will occupy 50 percent of world markets
- 8 within as little as ten years. If those projections
- 9 are at all accurate, what will be the effect on
- 10 Grassy Mountain markets and viability?
- 11 Third, company employment forecasts were
- 12 questioned, and we understand those have recently been
- 13 revised downward, but questions remain. Automation of
- 14 jobs in the industry is proceeding rapidly in other
- 15 mines and other places. With plans for camp housing
- 16 for as many as 300 workers, how does that match
- 17 municipal government expectations of new-housing demand
- 18 or resident expectations of getting hundreds of new
- 19 jobs? And what, if any, assurances exist that promised
- 20 employment opportunities here will be valid for more
- 21 than a few years in initial operation or even by the
- 22 time the mine might come into production?
- 23 Little attention is paid by Benga to economic
- 24 opportunities and employment losses in other sectors if
- 25 the mine is approved. There will be losses. To
- 26 consider only a few examples: Nature-based tourism

- does not look to mine sites for hiking and outdoor
- 2 travel. Fly fishing, a major recreation and tourism
- 3 attraction to the Crowsnest and area, will be severely
- 4 impacted if selenium or other water contaminants start
- 5 to affect fish populations.
- 6 As adverse human and animal health effects
- 7 emerge -- or if they do, as predicted and found in
- 8 other mining regions, what pressures will they put on
- 9 health care and infrastructure? And how much will that
- 10 cost both affected individuals and governments?
- 11 The last on this list: If selenium starts to
- 12 adversely affect crops and livestock health, as they've
- 13 been found to do, how does Benga propose that those
- industries will respond or be compensated?
- Beyond those key issues, in our view, Benga have
- inadequately addressed in their work to date several
- 17 aspects of a comprehensive environmental impact
- 18 assessment that are essential to full consideration and
- 19 required by both levels of government. Provincial
- 20 legislation requires safe and environmentally
- 21 responsible development, protection of the environment,
- 22 and conservation-wise allocation and use of water.
- 23 Federal legislation and Panel terms of reference
- 24 go further, outlining a number of specific requirements
- 25 of the impact assessment, and as noted above, the
- 26 obligation exists to apply the precautionary principle

- 1 in the exercise of the Panel's duties.
- 2 The onus, then, is clearly on Benga to show that
- 3 it meets all federal and provincial requirements. In
- 4 several respects, we do not believe they've done so.
- 5 Environmental effects of malfunctions are
- 6 accidents. Grassy Mountain, by any definition, is a
- 7 massive, long-term project with -- with multiple
- 8 opportunities for system failure, accident, and other
- 9 unforeseen events or circumstances across all aspects
- 10 of its operation. Damages from some failures could be
- 11 catastrophic and long-lasting, but there is little
- 12 evidence that these possibilities or the immediate
- 13 responses necessary to each of them have been seriously
- 14 addressed.
- 15 For weather-extreme precipitation events, how
- 16 robust and able to handle them are current designs? If
- 17 we instead or also have prolonged winds, heat, and
- 18 drought, how will Benga operate without creek flows or
- 19 prevent or respond to forest fires erupting from the
- 20 mine or nearby? What specific and effective
- 21 contingencies, what detailed plans are in place to deal
- 22 with any such events within the range of even what we
- 23 know today?
- 24 Comments from the public. Comments critical of
- 25 the mine proposals have been frequently ignored or left
- 26 unanswered in various rounds of information requests

- 1 and responses. Benga has enthusiastically worked with
- 2 supportive individuals, community organizations, and
- 3 events, and quite assiduously -- yet, perhaps,
- 4 unsatisfactorily -- responded to issues raised by
- 5 federal and provincial officials and participating
- 6 First Nations.
- 7 But how many offers to meet and really consider
- 8 issues and options with LLG or CPAWS or AWA or
- 9 individuals vocal about mine risks and advantages?
- 10 Benga has been noticeably silent and nonresponsive to
- 11 critical citizen and NGO complaints. Does that meet
- 12 regulator or government requirements to show that such
- 13 comments have even been seriously considered?
- 14 Mitigation measures. Some aspects of current mine
- 15 design are obviously intended to mitigate expected
- 16 impacts from operations in expected conditions. But
- 17 what about the unexpected? Again, it seems that
- 18 accidents or unforeseen circumstances have been
- 19 addressed not with developed solutions but too often by
- 20 discounting the risk and then simply undertaking to
- 21 monitor and take some kind of undetermined adaptive or
- 22 corrective action if that becomes necessary. Where are
- 23 the assessment of options, the specifics of contingency
- 24 plans?
- 25 Requirements of a follow-up program. There is
- 26 recognition of a probable need in some circumstances,

- 1 but commitments to making a program comprehensive and
- 2 effective are not apparent. We expect the regulator to
- 3 address this in great detail if it and governments
- 4 conclude that the mine should proceed. But where are
- 5 the proposals and commitments now from Benga itself?
- 6 As to alternative means of carrying out the
- 7 project, we believe that assessment of those has been
- 8 limited and superficial. Wherever it might occur,
- 9 mountaintop removal is, perhaps, the crudest approach
- 10 possible. It's a favoured industry approach, no doubt
- 11 cheaper and more productive than other means. But in
- 12 the location proposed here, given the conditions that
- 13 exist and the critical water, land, and other values of
- 14 this landscape, it should be rejected out of hand.
- 15 There is no evidence that coal mining of any kind is
- 16 somehow essential here. But even if it were, it should
- 17 be mandatory for the proponent to first consider and
- 18 submit serious evaluation of other possible and less
- 19 damaging approaches.
- 20 Changes caused by the environment. We do not
- 21 accept that Benga -- the Benga claims that their
- 22 operations will be largely unaffected by these. We
- 23 disagree. Climate change is occurring. We will almost
- 24 certainly face water shortages periodically in the
- 25 future. Extreme parts -- precipitation, wind, and
- 26 other events are also forecast to increase. How will

- 1 this mine adapt to such changes over the next 25 years?
- 2 Does Benga imagine that its replanting and regrowth
- 3 strategies will work in locations and soils that are
- 4 already problematic or in places simply without soil?
- 5 And if it can't, how or by whom is the area ever to be
- 6 reclaimed?
- 7 Finally, consideration of all incremental air
- 8 pollutant and GH -- GHG emissions is a requirement. We
- 9 do not see that this has been done. I note here one
- 10 example to illustrate the problem. Recent research and
- 11 International Energy Agency reports indicate much
- 12 larger than previously estimated leakage of methane gas
- 13 from coal-mining activities, each type of methane being
- 14 a climate equivalent of 30 tonnes of CO2 and bringing
- 15 GHG emissions or contributions from mining to levels
- 16 comparable to the world aviation and shipping
- 17 industries combined.
- 18 What levels of methane emissions from total
- 19 mountaintop removal, excavation, and subsequent
- 20 recontouring work are expected? What can or is planned
- 21 by Benga to reduce or contain such emissions? And how
- 22 will it adapt to meet more restrictive GHG emission
- 23 limits likely to be imposed in future, or will it plan
- 24 to simply oppose them and perhaps sue for damages?
- 25 And what value or importance are regulators and
- 26 government going to attach to such fundamental

- 1 questions?
- 2 Mr. Chair, I'd like to turn for a few minutes to a
- 3 more personal perspective. As noted at the outset,
- 4 since 1993, my wife and I have owned our residence in
- 5 Ranch (AUDIO FEED LOST) -- in the Porcupine Hills
- 6 adjacent to Livingstone Ranch, the Oldman River, and
- 7 perhaps 15 miles from the Grassy Mountain proposed
- 8 project.
- 9 My family first came to Southwest Alberta about
- 10 120 years ago, many of them making their living from
- 11 farming and ranching for most of that time. I spent
- 12 vacation and recreation time in the Southern Eastern
- 13 Slopes for over 60 years, first on trips to picnic,
- 14 pick berries, sometimes fish, ride, or often just
- 15 wander.
- Not so long ago, the landscape was relatively
- 17 intact, quiet, and undisturbed, much as it had been for
- 18 centuries. Certainly there was economic activity:
- 19 logging, some very early oil and gas, farming and
- 20 grazing in some areas, trapping and hunting, and, yes,
- 21 it was scattered activities and remnants of an older
- 22 mining industry, including coal. But there was nothing
- 23 on a scale or of a nature comparable or -- to or even
- 24 approaching what is being proposed now.
- 25 Glaciers and year-round pack ice were scattered
- 26 along higher ridges and in valleys throughout the year.

- 1 One could drink from virtually any stream without
- 2 serious worry of contamination, other than possibly
- 3 beaver fever or other natural runoff.
- 4 As far back as the Palliser expedition in the
- 5 1850s, the unique values of this area were recognized.
- 6 In nineteen eighty -- 1881, I'm sorry, it was described
- 7 by a Scottish journalist, Dr. Jim McGregor as:
- 8 (as read)
- 9 So favourable are the conditions, climate and
- 10 other of the country we have now traversed
- that men hear about speak of it as God's
- 12 country.
- 13 In the following year, by John Macoun, a biologist and
- 14 scientific expedition leader, who said: (as read)
- 15 As a stock-raising country, the district is
- 16 the best in America.
- 17 Sources of clean water, surviving natural grasslands,
- 18 and healthy forests can still be found, and we still
- 19 have ranching, farming, recreational use, nature-based
- 20 tourism, and other pursuits, but in a relatively short
- 21 time, we have seen we have largely caused most of the
- 22 natural areas of this -- natural values of this area to
- 23 decline.
- 24 Grassy Mountain, if it is approved, will be
- 25 another very large step in that direction, not just
- 26 risking and degrading the precious water resources

- 1 remaining but now the very mountains from where those
- 2 originate.
- 3 And we're beginning to see clearly the effects of
- 4 climate change on the landscape -- disappearing
- 5 glaciers, less snowpack, smaller streamflows, hotter
- 6 summers, higher fire risk -- all coming at us and all
- 7 forecast to be more serious in the years ahead. We
- 8 cannot afford -- Alberta cannot afford to jeopardize
- 9 the future of this unique and sustaining landscape for
- 10 the sake of short-term industrial ambitions and profit
- 11 for relatively few jobs and the probability of a
- 12 gigantic mess left behind.
- 13 My wife, Jillian, made a number of submissions to
- 14 the Panel from January 2019 and forward. They largely
- 15 echo the issues raised by LLG and others, but I note a
- 16 few of very particular concern to us.
- 17 First -- and I know I'm repeating this point -- we
- 18 believe the extreme nature and variability of wind and
- 19 water effects are not well-understood or reflected in
- 20 the proponent's assessments.
- The entire area is subject to persistent and
- 22 extreme wind conditions. We know it from empirical
- 23 studies, and we know it from living here. Strong
- 24 Chinooks and inversions exaggerate the effects arching
- 25 the countryside, sucking the moisture out of the
- 26 ground, and dramatically affecting dispersion patterns

- 1 and distribution of small particulates. We have heard
- 2 expert testimony to this in previous sour gas hearings
- 3 in this area. But how did the proponents study these
- 4 unique patterns, or did they? And what is proposed to
- 5 deal with them?
- 6 We have seen years when springs and small creeks
- 7 shrivelled and went underground or just dried up and
- 8 disappeared. All of them are used by people or
- 9 livestock or wildlife, sometimes all three. What
- 10 effects will large mines requiring large amounts of
- 11 water have on supplies that are already so tenuous?
- 12 And if systems or assumptions fail and those sources
- are contaminated or lost, what does Benga propose to do
- 14 to replace or mediate -- remediate? I think the answer
- is simple: They will not be able to do so.
- Serious health effects from mountaintop removal
- 17 are now becoming much better known than they were just
- 18 a few years ago. Not to repeat the list from above,
- 19 but brain impairment and chronic heart and lung disease
- 20 associate are these -- are both long-term and more
- 21 immediate. While health care expenditures are
- 22 considered by many to be excessive or out of control
- 23 and the Province is busily announcing major reductions
- 24 in service and funding, what sense can it make now, and
- 25 how can it be justified, that we would give large mine
- 26 owners and developers approval to proceed with

- 1 developments that will affect and incapacitate some,
- 2 place more strain on health and other social services,
- 3 and cost all of us more?
- 4 And third, mining may be a long-term industry for
- 5 those who own and control, but it is often a
- 6 boom-and-bust industry for everyone else and for the
- 7 communities nearby it. We can see this from earlier
- 8 cycles in the Crowsnest. We can look to Tumbler Ridge,
- 9 Grande Cache; we can look across Northern Canada or
- 10 internationally, including Australia, from where our
- 11 new mine investors are coming.
- 12 The history is much the same: large promises,
- 13 larger expectations, frequent failures and shutdowns,
- 14 unemployment, business closures, and unreclaimed damage
- 15 left behind.
- Optimism may be a great thing to have, but those
- 17 who simply believe that this time will be different
- 18 should look and read very carefully what has happened
- 19 so commonly in the past.
- The concept of solastalgia was raised by a speaker
- 21 last week. It is important enough to expand on
- 22 briefly. I was going to raise this in my comments
- 23 earlier. Glenn Albrecht, an Australian philosopher who
- 24 originally researched the phenomenon, states that:
- 25 (as read)
- 26 Solastalgia is when your endemic sense of

- 1 place is being violated.
- 2 It is the homesickness you feel when you are still at
- 3 home.
- 4 Used now with respect to wildfire, volcanos, and
- 5 widespread effects of climate change, it was first used
- 6 to describe the effects of persistent drought and
- 7 open-cut coal mining in New South Wales.
- Research shows that solastalgia is a worldwide
- 9 phenomenon. There is an increase in ecosystem distress
- 10 syndromes matched by a corresponding increase in human
- 11 distress syndromes.
- 12 (as read)
- 13 Solastalgia [Albrecht wrote] is the pain or
- sickness caused by the loss of or inability
- to derive solace from the present state of
- one's home environment. It exists where
- 17 there is recognition that the beloved place
- in which one resides is under assault.
- 19 I would submit that if Grassy Mountain and other mines
- 20 are approved, we can expect solastalgia to follow.
- 21 Mr. Chair, we believe that full understanding and
- 22 consideration of all the issues and evidence to be
- 23 presented in these hearings will provide reasons enough
- 24 to reject the Grassy Mountain application. But I would
- 25 like to conclude my comments with two additional
- 26 points, perhaps not so specifically addressed in the

- 1 hearings, but arguably more important and overlaying
- 2 this entire process and decisions to be made.
- 3 Provincial and federal governments have recognized
- 4 and made promises to protect the Eastern Slopes and our
- 5 headwaters for over a hundred years. Watershed
- 6 protection has been designated as the highest priority
- 7 from management. In fairly recent years,
- 8 Peter Lougheed's Conservative government implemented
- 9 the coal policy in 1976 to protect the Eastern Slopes.
- 10 The oil and gas regulator in 1993 issued IL --
- 11 Information Letter 93-9 providing specific direction on
- 12 limitations on industry operations along the Eastern
- 13 Slopes for similar reasons.
- 14 This application is different from many others,
- 15 and it should be considered as such. It and other
- 16 current mining proposals recently described by one
- 17 writer as "the Australian invasion" -- Grassy Mountain
- 18 being only the first -- are of a scale and nature that,
- 19 if approved, will irreversibly alter and degrade the
- 20 Southern Eastern Slopes.
- 21 Grassy Mountain is not just another project. It
- 22 is not even just another large mine project. It is an
- 23 assault on the region and the heart of the Eastern
- 24 Slopes, an assault that will change -- that is, in
- 25 fact, designed to change the very nature of the slopes
- 26 and how they are regarded going forward.

- 1 I submit that that transformation cannot be
- 2 allowed to happen, not just because the mines are
- 3 Australian -- although for those looking to economic
- 4 benefits, foreign ownership will almost certainly mean
- 5 more revenue leaving Canada and going offshore -- and
- 6 not just because we do need to transition off coal, but
- 7 precisely because these projects are on the Eastern
- 8 Slopes, a precious, unique, irreplaceable
- 9 world-recognized treasure to be maintained and
- 10 protected. The Eastern Slopes are not and they must
- 11 not be treated as a collection of gravel pits or
- 12 sandboxes interchangeable to be moved about and dug up
- 13 by big toys for private enrichment.
- 14 But all (INDISCERNIBLE BACKGROUND NOISE) and
- 15 wishful thinking aside, it is accepted science around
- 16 the world that climate change, global warming is
- 17 happening. It is a real phenomenon. It is
- 18 accelerating. We are moving rapidly towards dangerous
- 19 and irreversible levels of GHG emissions, and we,
- 20 humans and heavily industrialized societies, are
- 21 primarily responsible.
- 22 Panel terms of reference state what is required to
- 23 be considered in this respect, in this application.
- 24 But common-sense, federal government and international
- 25 commitments to further reduction of greenhouse gas
- 26 emissions, not just slower increases, but real

- 1 decreases; an acknowledgement of pending crises all
- 2 demand more. I believe that the Panel and both levels
- 3 of government have a right and a responsibility to go
- 4 there. Public interest, protection of the environment,
- 5 and the precautionary principle, all broad and somewhat
- 6 subjective terms, can and should be used to go beyond
- 7 technical or legal minimums to make the wisest
- 8 decisions possible.
- 9 I noted earlier a number of public opinion surveys
- 10 completed here over the past decade, all coming to very
- 11 similar conclusions: Reinforcing the priorities of
- 12 protection of our environment, water resources, fish
- and wildlife populations; of low-impact uses; and
- 14 setting aside undisturbed land for future generations.
- 15 The majority of respondents in every case were not
- 16 swayed or convinced otherwise by the chance for profits
- 17 and short-term benefits.
- 18 And it's abundantly clear around the world that
- 19 local people, local communities, and local environments
- 20 are often disproportionately and adversely affected by
- 21 major industrial developments. The same local people,
- 22 communities, and environments are often failed by
- 23 assessment processes and regulatory decisions relating
- 24 to large-scale developments that focus more on
- 25 statistics and numbers than promised revenues that
- 26 function more comfortably within a business-as-usual

1 framework.

I believe we are collectively and seriously overdue in making decisions that recognize business as usual, merely meeting the legal minimums, and perhaps making safe and small incremental shifts are no longer enough. They can no longer be a default or a defensible approach to ever larger and more complex problems.

I have some understanding and appreciation of the responsibilities facing the Chair and Panel. Your task is enormous and decisions will be difficult. Perhaps, unfortunately, made difficult by some recent private consultations and decisions taken by the Government of Alberta to advance coal industry interests. But those are for another discussion.

All challenges and difficulties notwithstanding, we look to you to make the wisest long-term recommendations and decisions possible to protect long-prevailing and sustainable values of the people and natural values of this region, to recognize much larger and pressing climate and environmental needs, and to reject and recommend rejection of the Grassy Mountain application.

I thank the Panel for your time, and I'd be happy to respond to any questions.

26 O Thank you, Mr. Lawson.

1 I am now going to ask Ms. Lambright to deliver her 2 remarks. 3 MS. LAMBRIGHT: Sorry for the -- the movement. Α 4 I like to be able to look people in the eyes when I'm 5 talking to them, and we -- the setup with these 6 meetings is a little bit challenging because the 7 camera's off to the side, and I wanted to be able to look at least as directly as -- as possible at each of 8 9 you. 10 So, first of all, thank you very much for the opportunity to -- to be here today and to share some of 11 12 both my personal perspectives and perspectives of the 13 Livingstone Landowners Group in terms of the 14 Grassy Mountain Mine project. So just to give you a little bit of background 15 around who is talking to you, I'm a landowner. 16 resident. 17 We live -- my husband and I have a -- a ranch property, about 400 acres, pretty much 15 to 18 20 kilometres due east of Grassy Mountain. Most of our 19 20 land is native prairie, and we also are privileged to 21 have a small permanent creek that boasts a few of our 22 native fish. I'm also a member of the Livingstone Landowners 23 24 I've been a member of this group for something 25 in the order of ten years. I'm currently on the board, 26 and as John -- or, sorry, Mr. Lawson and Mr. Trafford

- 1 have mentioned, we all have many volunteer roles, and I
- 2 have the role of secretary as well as -- as other
- 3 opportunities as they arise.
- 4 I also am a former senior executive in the energy
- 5 industry. I was in that industry for over 30 years,
- 6 mostly in senior executive roles, predominantly here in
- 7 Canada, in Alberta, the Yukon, Northwest Territories,
- 8 and the last few years of my career, I was actually
- 9 based in Perth, Australia, and had overall
- 10 accountability for our company's infrastructure,
- 11 assets, and operations in that country while I was
- 12 there.
- So I have some experience in regulatory
- 14 proceedings. I've certainly had my share of dealing
- 15 with very large and complex technical documents,
- 16 usually with some accountability for protecting my
- 17 country -- or my company's interests in dealing with
- 18 those documents.
- 19 So I think it would be fair to say that I come
- 20 here with multiple perspectives. You know, that of
- 21 someone who lives and loves the land where I live,
- 22 somebody who understands the business drivers and the
- 23 needs for economic growth, and certainly over the years
- 24 with Livingstone Landowners, I think I've had an
- 25 opportunity to gain a deep appreciation of the area
- 26 where we live both -- environmentally, culturally,

- 1 historically, and its uniqueness and significance, not
- 2 just to the province, but to Canada and to the world.
- One of the things I don't think that's been
- 4 mentioned specifically here is that the area we're
- 5 discussing is one of the most endangered ecosystems in
- 6 the world. You know, a lot of people talk about things
- 7 like the Amazon rainforest, but the -- the grasslands
- 8 and the grasslands where they meet the mountains truly
- 9 is one of the most endangered ecosystems anywhere. We
- 10 have -- we are part of the last 1 percent of Canada's
- 11 grasslands. And as I'm sure you observed in the -- the
- 12 Benga application, you know, some of the area directly
- in -- where they're placing their mine is fescue
- 14 grassland, which -- rough fescue grassland, which is
- 15 some of the most difficult grasslands to remediate.
- And I know that not just because of reading about
- 17 it, but because we have actually attempted on our
- 18 property, because there is past scarring from pipelines
- 19 and -- and other activities in the past, to restore
- 20 some of that grassland, purchasing the -- the
- 21 appropriate seeds and nurturing them, and I can tell
- 22 you it is extremely difficult, even on a very, very
- 23 small parcel of land. So I can only begin to imagine
- 24 how difficult it would be to actually reclaim with
- 25 native grass in that -- in that critical area.
- And just a comment on that, because one of the

- 1 reasons those grassland ecosystems are so incredibly
- 2 important is because they sustain a wide variety of
- 3 birds and wildlife that really don't live anywhere
- 4 else. If we lose the grasslands, we lose them.
- 5 So one of the points, I think, that's really important
- 6 to me and to our members is that what is going to be
- 7 lost with the proposed Grassy Mountain Mine will not be
- 8 able to be replaced. There will be reclamation; of
- 9 that, I have no doubt, but it will not replace what has
- 10 been lost.
- 11 The land -- the land that we're talking about, a
- 12 few people have mentioned, I think, in Benga
- 13 particularly, you know, that there's been a lot
- of -- of scarring, there's, you know, old mine sites
- 15 that have not been reclaimed. And that's all true. I
- 16 mean, we -- we took a look at that land when we had a
- 17 tour. I think Mr. Fitch might have mentioned it in one
- 18 of his -- his comments. We did a tour up to make sure
- 19 that we understood what we were talking about. It's
- 20 one thing to read things, you know, online or in -- in
- 21 reports; it's quite another to physically be on the
- 22 ground and see what you're talking about.
- 23 So, yes, there are scars on that land. There's
- 24 scars from logging, even scars from careless users.
- 25 But a lot of the land is still supporting a tremendous
- 26 diversity of plant and animal life, many of which is

- 1 rare and endangered. And we certainly do not think
- 2 there is any excuse for destroying that remaining
- 3 legacy just because there are a few scars in a small
- 4 area.
- 5 Another thing that has been mentioned -- and --
- 6 and I won't spend a lot of time on this -- is the
- 7 importance of the Eastern Slopes and -- and the fact
- 8 that that importance has been readily captured in
- 9 numerous land-use plans, environmental frameworks,
- 10 designations, environmentally sensitive designations,
- 11 proposed recovery plans. All of those things are there
- 12 because decades and decades of work have been done to
- identify the importance of this area and the need to
- 14 maintain it in a natural state.
- 15 You had two very dynamic young ladies presenting
- 16 to you this morning who talked about the importance of
- 17 that area, not just for wildlife, but for tourism, you
- 18 know, for recreation. And there is definitely an
- increasing draw to our natural spaces, perhaps because
- 20 there's so few of them left.
- 21 But my husband and I love to -- to get out. And
- 22 when we first came down here, we were drawn because of
- 23 this beautiful landscape. And my husband's a fly
- 24 fisherman; we like to ride horses; we kayak; we hike.
- 25 This summer we took our horses out to an area called
- 26 The Gap, just not that far from Grassy Mountain, and we

- 1 were absolutely overwhelmed by the volume of people
- 2 that were recreating in that area and the amount of
- 3 traffic on that backwoods gravel road, and I think it
- 4 is just indicative of the hunger that people have, you
- 5 know, for these special places and the consequence to
- 6 all of us when those places get destroyed. And the
- 7 reality -- and I think you've heard it in spades from
- 8 almost every resident that has spoken to you -- is that
- 9 coal mining is simply not compatible with most of these
- 10 other land uses.
- I mean, one of the things today is that most of
- 12 the land uses that are occurring are complementary.
- 13 There's ranching; there's tourism; there's recreation
- 14 downstream; there's agriculture; there's -- even
- 15 logging to some extent is compatible because the trees
- 16 will regrow. Coal mining is not. And, you know, that
- 17 is -- is the heart of the concern, I think, that all of
- 18 us are bringing to the table in these discussions.
- 19 So just a little bit more maybe about our LLG
- 20 members' concerns. Both Mr. Trafford and Mr. Lawson
- 21 talked a bit about that. We do have a very diverse
- 22 membership. It's quite interesting, actually, because
- 23 we range from the third-generation ranchers to business
- 24 leaders, physicians, geophysicists. And one of the
- 25 things that has happened with this Grassy Mountain Mine
- 26 application is that we have been contacted more than we

- 1 ever have in our history by people not just in our
- 2 members but outside of our membership who are deeply
- 3 concerned about what they -- what they believe is the
- 4 risk of the coal mining in the Southern Eastern Slopes,
- 5 and have been reaching out to us to share information
- 6 that they have, research that they have done on a
- 7 completely volunteer basis to say, You need to know
- 8 this. You need to take this into consideration. And
- 9 it has been very helpful. I think it's also very
- 10 telling in terms of -- of how important this issue is,
- 11 not just to the small group of us who live in that area
- 12 but to all of Alberta.
- I know that -- that within our group, we have
- 14 invested -- and I personally have invested -- literally
- 15 thousands of hours in understanding the details of the
- 16 application that Grassy Mountain has put forward and in
- 17 trying to understand both the risks that are faced and
- 18 the mitigations, and it has been a disillusioning
- 19 exercise.
- 20 You know, I think there's been -- been quite a few
- 21 comments made about the quality of the evidence that
- 22 is -- is being presented, and -- and I'll -- I want to
- 23 talk a little bit more about that in a minute.
- 24 But I just want to start by reinforcing something I
- 25 think you figured out with all of the applications so
- 26 far, is that we believe strongly that this application

- 1 needs to be denied outright. It's one thing to talk
- 2 about other potential mitigations that could be applied
- 3 or maybe more monitoring that could be done, but the
- 4 risks are extreme, and the rewards are uncertain.
- 5 And as Mr. Lawson mentioned to you, in the terms
- 6 of reference, the -- the whole thing around the
- 7 precautionary principle -- and there are many legal
- 8 people here who could speak to that much more
- 9 eloquently than I, but in layman's terms, it seems
- 10 pretty simple: You're asked to ensure that the
- 11 decision that is made protects people; in other words,
- 12 it is better to be safe in what you decide than to be
- 13 sorry afterwards, particularly when you consider that
- 14 the consequences are irreversible.
- 15 I'd like to move on to sort of three major
- 16 concerns that LLG has identified with the evidence
- 17 that's been presented by Benga. The first one -- and
- 18 this has been reiterated in almost every submission by
- 19 the export -- expert witnesses, by people opposing the
- 20 project, and that is that the evidence that they have
- 21 submitted lacks scientific rigour and reliability,
- 22 contains serious gaps and inconsistencies.
- 23 And I don't intend, you'll be grateful to hear, to
- 24 go through every report or every piece of evidence that
- 25 uses those words, but everyone from some of the
- 26 impacted federal departments to individual groups has

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included in their evidence statements such as:
 1
 2
     (as read)
 3
          Benga has not adequately described the risks;
          Benga's assessment, you know, of -- of
 4
 5
          potential future changes in the severity and
 6
          frequency and duration -- of short-term
          extreme precipitation are not scientifically
          robust; the EIE -- EIA would not pass a
 8
 9
          standard peer-review process among wildlife
10
          professionals; the EIA presents overly
          optimistic goals that will be hard to
11
12
          achieve; the design is deficient; the
13
          existing base design does not adequately
14
          address the environmental risks.
     These are not isolated by one or two.
15
                                             These are
     statements by people with decades of experience in the
16
17
     industry and in analyzing aspects of these reports.
     that is of huge concern to our organization.
18
          Here we are, five years and multiple rounds of
19
20
     questions and filings, and we still lack robust
21
     evidence-based and scientifically sound EIA documents
22
     with comprehensive and reliable mitigations.
23
          How can we as a group with the concerns that we
24
     have trust that the risks are even fully understood,
25
     let alone mitigated in that circumstance?
26
          The second thing that we are deeply concerned
```

- 1 about is the consequence of error if a decision is made
- 2 to approve the project. Those consequences would be
- 3 devastating, they would be long term, and largely
- 4 irreversible. You know, as I was reading Benga's
- 5 application and looking at just the environmental
- 6 component, there's many that -- that I could talk
- 7 to -- you know, they fairly lightly use terms like, The
- 8 impacts are not significant. Yet you will see that in
- 9 preparing the mine site, they will be destroying, you
- 10 know, I think it's 27 different rare plants. That
- 11 includes the whitebark pine, the limber pines, the --
- 12 the grasslands that I mentioned. There will be --
- 13 their words -- direct mortality, you know, of multiple
- 14 animals and plants. There will be loss of habitat,
- 15 loss of food sources, loss of movement corridors.
- 16 These are not insignificant things. And, yes, at some
- 17 point, there will be some type of reclamation. Will
- 18 that reclamation restore what we've had? Will it bring
- 19 back the -- the plants and the animals that were there
- 20 before? We think not, based on past experience.
- 21 I guess another deep concern around this is that
- 22 the risk -- and several people have mentioned this as
- 23 well, but the risk is magnified by the terrain in which
- 24 they are proposing to build this mine. It's mountain
- 25 terrain. It is extreme in terms of the climate
- 26 conditions or the -- sorry, the climate conditions.

- 1 You know, just -- just to give you an example on
- 2 that, within the last two weeks at our home, we have
- 3 had extreme temperature swings. One day we went out,
- 4 it was minus 24 degrees, and we had over a foot of
- 5 snow, and that had been the case for several days.
- 6 Within a matter, literally, of days, the wind had
- 7 ripped through. And I use that word advisedly. It
- 8 ripped through. The snow was gone, and the temperature
- 9 was plus 16. We have had I don't know how many wind
- 10 warnings or alerts in the last two weeks, and we don't
- 11 get a wind warning or an alert unless the wind speed is
- 12 expected to be in excess of 100 kilometres per hour.
- And various people have talked about, you know,
- 14 how -- how damaging that could be, but I think just to
- 15 make it real for you, we have driven out of our yard
- onto the main Highway 22, which goes near our place, to
- 17 find not one but multiple semitrucks overturned in the
- 18 ditch, large motor homes overturned in the ditch.
- 19 That's why they have those wind warning signs,
- 20 including the one that Mr. McIntyre showed you that
- 21 broke when the wind speed hit 180 kilometres an hour.
- 22 Those aren't freak storms. That's life in that area.
- 23 And we all put up with it because it's so incredibly
- 24 beautiful when the weather is behaving, and that's most
- 25 likely in the summertime.
- There's a small gas plant just down the road from

- 1 our home. The roof of that gas plant at one point was
- 2 peeled back like a can opener and had to be completely
- 3 replaced. A large metal hay shed not too far from
- 4 where we live, the entire front of that shed was ripped
- 5 off and blown several kilometres into a power line,
- 6 which then created a wildfire. These winds are nothing
- 7 to trifle with, and it certainly has been repeated in
- 8 these hearings that that does not appear to have been
- 9 adequately considered in a lot of the promises and
- 10 comments that have been domain -- are made.
- 11 So, I mean, just to kind of sum up this section,
- 12 what we're saying is that the consequence of making a
- 13 mistake and approving this plant and having
- 14 something -- or this mine and having something go wrong
- is -- is extreme, and it's very important that that be
- 16 understood and taken into consideration.
- 17 The third major concern that we have related to
- 18 the application -- and I had to prioritize because
- 19 there's many -- is the cumulative impact, and that
- 20 received very little, if any, attention. And
- 21 cumulative impact really takes place in two different
- 22 ways. I think one of the groups that has presented
- 23 evidence already indicated that this area has already
- 24 been subject to a lot of activity that has been
- 25 damaging, whether that's the old mining, which was
- 26 never cleaned up, and there's still elevated levels of

- 1 selenium in the water systems because of that; whether
- 2 it's the much-higher-than-desirable linear footprint
- 3 that has occurred in the area. There are impacts on
- 4 this environment, and if Grassy Mountain is approved,
- 5 what that will do is make a bad situation a thousand
- 6 times worse.
- 7 The next aspect of the cumulative impact is that
- 8 if Grassy is approved, it will be a catalyst for even
- 9 greater levels of mining in that same area. And it's
- 10 not just those of us who are opposing the mine who are
- 11 saying that. I mean, I'm sure you recall the testimony
- 12 from Robin Campbell with the Coal Association, you
- 13 know, who answered, I believe, one of the Panel
- 14 questions, that, yes, he believes those projects are
- 15 going to occur, and there are a lot of people,
- 16 including the Coal Association, that are working very
- 17 hard to make sure that happens.
- 18 In fact, there's been multiple documents on the
- 19 public record since 2018 from companies like Atrum
- 20 and -- Atrum Elan, Montem, Cabin Ridge that have
- 21 indicated their intention to proceed with additional
- 22 mining in that area. They have been extremely
- 23 aggressive in exploration activity. In fact, Atrum
- 24 just announced the results of their latest, you know,
- 25 fairly extensive exploratory work. And they have also
- 26 been public with the actions that have been taken by

- 1 the Alberta Government to open the door to mining in
- 2 those areas.
- I know from our own research, when we looked at
- 4 the coal leases that had been approved on former
- 5 Category 2 lands, it's well in excess of 600 square
- 6 kilometres of land. Almost all of that is north of the
- 7 Crowsnest. And the way these mines are proposing to be
- 8 built, you're looking at huge industrial swaths that
- 9 would be in excess of 50 kilometres long of -- of mine,
- 10 just open mine -- open-pit mines in some -- even more
- 11 sensitive area than what we're talking about with
- 12 Grassy. And although I know that's not specifically
- 13 within the scope of this discussion, I think it's
- 14 something that people need awareness of because it will
- 15 certainly exaggerate the consequences that we are
- 16 concerned about.
- 17 I'd like to move on now to some specific concerns
- 18 about different aspects of the impacts that we are
- 19 anticipating if the Grassy Mountain Project is
- approved.
- 21 The first one is specific to the water and the
- 22 sensitive species. And you will be thankful to know
- 23 I'm not going to spend a great deal of time on this one
- 24 because it has been so thoroughly covered and will be
- 25 covered in more depth. But certainly all of us that
- 26 live in this area -- and I would include the proponents

- 1 and supporters of the mine in this. They have all
- 2 talked about the importance of making sure that our
- 3 water and our air and our land is protected.
- 4 I guess the difference is that many of them are
- 5 looking to the mine to provide them with the
- 6 information that they need and have accepted Benga's
- 7 assurances that those problems will not occur. We have
- 8 done a lot of research, as I mentioned, both as
- 9 individual members and through our expert witnesses,
- 10 and we don't share that confidence. Certainly with
- 11 respect to selenium reaching into the water, there is a
- 12 huge body of research that demonstrates the concern,
- 13 and there is no field-proven decis -- or solution at
- 14 this point.
- 15 You know, I mentioned that we get a lot of calls
- 16 from people who are concerned, and a lot have supported
- 17 us in fighting this mine. And some of the -- I wish I
- 18 had brought some of these, but some of the pictures
- 19 that we have been sent are from guides who work in the
- 20 Elk River system. And you've heard about the massive
- 21 fish kills that have occurred, particularly in
- 22 the -- in the Fording River because of the high levels
- 23 of selenium. What you may not be aware of is the
- 24 impact on the new fish, because the way I understand
- 25 it, selenium affects the reproductive system of these
- 26 fish. So every now and then, the guides are pulling

- 1 out of the rivers these fish that are missing gill
- 2 plates, that have deformed heads. This is evidence of
- 3 the impact of the selenium poisoning. So it's not just
- 4 a case of it killing the fish. It also creates these
- 5 deformities; evidence that the water system is not
- 6 healthy.
- 7 Teck Resources has, I think, been trying extremely
- 8 hard to address this concern, and certainly it's been
- 9 getting a lot of attention because of the application
- 10 by Grassy Mountain to go ahead with the mine in
- 11 Alberta. But they are on track to spend \$1.6 billion
- 12 on water-quality improvements. This is after having
- 13 built the mines and put in place what were presumed at
- 14 the time to be adequate water-quality control
- 15 measurements.
- According to their website, they will
- 17 spend -- have spent an additional \$800 million by the
- 18 end of this year. And just last week -- and I'm
- 19 presuming the Panel is probably aware of
- 20 this -- Environment and Climate Change Canada had given
- 21 them another order for an additional 350 to \$400
- 22 million in improvements that they need to make to their
- 23 water-management system, and that's on top of probably
- 24 400 million that they're still planning to spend as
- 25 part of the plan that they had published. So that is a
- 26 huge investment in water-quality improvement, and those

- 1 measures certainly far exceed what the Benga proposal
- 2 includes. And even with that level of spending, the
- 3 protections have not been proven.
- 4 We've talked also, when it comes to water, about
- 5 the challenges with the water flow and the extreme
- 6 variability in water flows at different times of year
- 7 and between years, depending on whether it's a wet year
- 8 or a dry year.
- 9 One of the things that -- if you haven't been to
- 10 our area, you probably haven't noticed, but if you
- 11 drive down Highway 3 between Pincher Creek and the
- 12 Crowsnest Pass, there is a large body of water in the
- 13 spring that represents the Old Man River Dam overflow
- 14 area. In the spring, it is very, very high. Lots of
- 15 water in it. By fall, it's a dust bowl. If you have
- 16 selenium contamination or other contaminations in the
- 17 silt, that will be blown all over Southern Alberta
- 18 because it is literally just dust. And if you drive
- 19 down that road, you can see the great clouds of dust
- 20 coming up from that area every fall because the water
- 21 is low at that time and there is no overflow.
- 22 So I've talked about the devastating impact on
- 23 wildlife. That, of course, includes the cutthroat
- 24 trout. So those are obviously areas of extreme concern
- 25 to everyone in -- in this region.
- Human health is another one. And, of course, all

- 1 the things I've talked about with respect to the
- 2 temperature, the wind speeds, the weather would suggest
- 3 that no matter what mitigations Benga is intending to
- 4 put in place, there will be coal dust and particulates,
- 5 and they will be broadly dispersed. And we are again
- 6 aware, through extensive literature and expert reports,
- 7 that that dust and those particulates cause human
- 8 health impacts.
- 9 One of the other things I wanted to share here is
- 10 that I believe Benga has said on a number of occasions
- 11 that they are confident in their mitigations and
- 12 there's not going to be, you know, dust into the
- 13 communities, and they'll be responsive if there's
- 14 complaints.
- I came across a document, and it hasn't been
- 16 filed, but it's publicly available, and it's called the
- 17 "Sparwood Liveability Assessment", which was produced
- 18 in 2019. And that document is a very detailed report
- 19 that was actually -- and I'm just looking here for my
- 20 reference so that I can make sure I tell you this
- 21 correctly. The report was part of -- the requirement
- 22 for the report was part of the environmental approval
- 23 for the Baldy Ridge extension. The Province of
- 24 Alberta's environmental assessment office required
- 25 spar -- or the district of Sparwood to do this report
- 26 with support from Teck, and it's a very detailed

- 1 document. They put a tremendous amount of effort into
- 2 it. It took the head consultants -- it took them three
- 3 months to do the -- to do the research and to compile
- 4 the report.
- 5 The consultant was actually embedded in the
- 6 community, and they had multiple mechanisms for
- 7 collecting community feedback, everything from
- 8 interviews to in-person meetings with people to survey
- 9 documents, multiple meetings to get information about
- 10 different aspects of life in Sparwood, with the goal,
- 11 obviously, of identifying those things that were
- 12 positive, those things that were negative, and looking
- 13 for solutions.
- 14 And I raise it here because one of the aspects
- 15 that the report considered was the impact of
- 16 mine-related dust. And what the report found was that
- 17 74 percent of the respondents agreed or strongly agreed
- 18 that mine-related dust in Sparwood was affecting their
- 19 quality of life.
- They also made sure that they included not just
- 21 public opinion, but they sought to collect actual data
- 22 to see if that aligned with public opinion, and there
- 23 are in excess of a hundred dust-related Teck feedback
- 24 complaints in 2018. And Sparwood does not experience
- 25 the same level of winds that we are known for in -- in
- 26 the Crowsnest Pass and in this area. So that is

- 1 obviously, you know, a concern.
- 2 And I think it's something that has been missing
- 3 in this process and particularly in the material that
- 4 Benga has produced, is there has been very little
- 5 evidence of real-life application of some of the
- 6 mitigations that they are proposing to use, which makes
- 7 it very difficult to know if they'll be effective if
- 8 all you're -- all you're relying on is modelling.
- 9 This takes me to the last and, in my opinion, the
- 10 most critical area for more detailed examination, and
- 11 that is the economic impacts and risks. What has
- 12 happened -- or what I observe so far in the hearing is
- 13 that the people who have stood up as proponents of the
- 14 Grassy Mountain Project are largely driven by the
- 15 expectation of significant positive economic impact.
- 16 In fact, I think that there have been multiple
- 17 presentations to the Panel from groups that has said,
- 18 you know, here's why economic growth and development is
- 19 needed in our community; we're suffering; we don't have
- 20 enough money. You know, we want sustainable economy,
- 21 and we are in favour of it subject to you, the Panel,
- 22 ensuring that there are no adverse environmental and
- 23 human health risks.
- So I thought it would be helpful if we could look
- 25 at what maybe some real-life experience has been
- 26 elsewhere in terms of the economic impacts and risks.

- 1 And I think one of the key points is that the
- 2 evidence that Benga has brought forward did not address
- 3 the downside economic risks and, in our view, is -- is,
- 4 like many pieces of the evidence, incomplete and
- 5 inadequate to paint that picture.
- 6 So let me just share a couple of -- of areas where
- 7 there could be adverse economic impact.
- 8 The first one relates to water. You've had, I
- 9 think, a number of pieces of evidence supplied about
- 10 the importance of the Oldman River headwaters to all of
- 11 Southern Alberta. It supplies somewhere in the order
- of 200,000 people with freshwater. It's also
- 13 absolutely critical to supporting the agricultural
- 14 industry through irrigation. Something like 45 percent
- of the water used in irrigation comes from the Oldman
- 16 River water system. So there is a significant risk to
- 17 irrigators both in terms of water availability,
- 18 particularly in low-flow years, and also the impact of
- 19 contamination. And that risk only gets greater if
- 20 there are more mines in the future.
- 21 So there was a report developed in 2015 by
- 22 Paterson Earth & Water Consulting out of Lethbridge,
- 23 and the report was done for the Alberta Irrigation
- 24 Projects Association. And it found that the irrigation
- 25 industry contributed about \$3.6 billion to the
- 26 provincial growth domestic product and that 89 percent

- of the irrigation-related benefits accrued to the
- 2 region and the province and only 11 percent to the
- 3 irrigation producers; so a very significant and perhaps
- 4 overlooked economic driver that is directly related to
- 5 Grassy Mountain because it is tied to the headwaters of
- 6 the Oldman River system.
- 7 Those irrigation activities, according to the
- 8 report, employed 35,000 people. They also noted that
- 9 the irrigated agriculture industry provided very
- 10 critical support to the livestock industry and to
- 11 value-added food processing. And I don't have the
- 12 numbers on those industries, but I'm sure you can
- 13 appreciate the magnitude of impact in Alberta if we
- 14 were to see negative impacts on irrigation, which then
- 15 resulted in negative impacts on those industries.
- Another one, which has already been quite ably
- 17 spoken to at the local level by Heather and Stephanie
- 18 from the Crowsnest Pass Conservation Society, is
- 19 tourism and recreation. So they addressed the numbers
- in the local community, which is good, because I don't
- 21 have those numbers. What I do have is sort of a big
- 22 picture from Travel Alberta in 2017, and that's, I
- 23 think, probably indicative of what the tourism industry
- 24 normally contributes. I'm sure the numbers are much
- lower in 2020. But in 2017, Alberta's tourism economy
- 26 was more than \$8.9 billion, supported 22,000 operators,

- 1 and employed 72,000 people.
- 2 So from a potential downside of this mine, you
- 3 have very real threats to agriculture, food processing,
- 4 ranching, recreation, and tourism that have not been
- 5 accounted for in the material that certainly I have
- 6 reviewed in the filings.
- 7 The next thing that I think the community and
- 8 others are counting for -- counting on, having listened
- 9 to Benga's assumptions, is a significant surge in jobs
- 10 and drawing new people into the community. In fact, I
- 11 believe in testimony earlier this week, Mr. Houston
- 12 stated that Benga will have 400 direct mining jobs
- during operations, and 120 direct employees on average
- 14 during construction. And he said those jobs would be
- 15 split, I think, it was 70/30 between Alberta and
- 16 British Columbia.
- 17 He further stated that Benga is forecasting
- in-migration to the area of 660 people, so that's to
- 19 the Crowsnest Pass area in Alberta and a further 430 to
- 20 BC. So, I mean, those are big numbers and I'm sure are
- 21 extremely attractive when you're looking at a community
- 22 that has been struggling with growth.
- 23 So the core assumption, as I understood it from
- 24 Benga, is that approving Grassy Mountain Mine will lead
- 25 to the influx of permanent, highly paid, young workers
- 26 and development of new service industries and community

- 1 amenities. So that's the assumption, I think, many of
- 2 the proponents are working from.
- 3 Unfortunately, that assumption is very much at
- 4 odds with the reality of the communities in the
- 5 Elk Valley. So that study that I referred to earlier,
- 6 the Sparwood Liveability Assessment, they described
- 7 Sparwood as the central location for mining operations
- 8 and mining staff in the Elk Valley, and it is probably
- 9 the largest community there. There's smaller ones like
- 10 Elkford. So certainly the assumption would be that
- 11 they will be the centre for the operations and mining
- 12 staff and, presumably, that they would live there. So
- 13 Sparwood has, I think, a population of about 3,700
- 14 people.
- In 2009, according to the study, Teck Coal
- 16 employed 400 -- or, sorry, 4,457 employees at coal
- 17 mines in the Elk Valley. Only 18 percent of those
- 18 employees lived in Sparwood.
- 19 For the Elkview mine -- and the Elkview Mine, much
- 20 like Grassy Mountain, is really close to the community.
- 21 It's only 2 kilometres from Sparwood, and they -- Teck
- 22 employs over 1,100 people -- 1,139 people in that mine
- 23 at the time they did the survey. Of those people,
- 24 22.8 percent live in Sparwood, so 260. So
- 25 proportionately, they are not getting a significant
- 26 number of employees living in those communities as a

- 1 result of the mine.
- What I found equally or perhaps even more
- 3 interesting is that most of these highly paid mine
- 4 workers -- and Benga certainly has emphasized the value
- 5 of these workers getting higher paid than, say, the
- 6 tourism industry. Most of these workers choose to
- 7 spend their salaries somewhere else. So they -- they
- 8 looked at two groups, the people who worked regular day
- 9 shifts in the mine, and they determined that 83 percent
- 10 spend less than 50 percent of their salaries locally.
- 11 Of the respondents on what they call their "4x4"
- 12 shift", which is four days in and four days out, 63
- 13 percent spend less than half of their income locally.
- 14 So much of the money is actually going outside of the
- 15 communities that are experiencing the direct negative
- 16 impact of the mines.
- 17 The other thing that has been talked about -- and,
- 18 again, I think the impression, certainly, that I've
- 19 gotten in listening and reading the Benga material is
- 20 that they will provide a somewhat stable economic base
- 21 for these communities and that other things
- 22 will -- will grow around those.
- 23 Unfortunately, as I think many others have stated,
- 24 coal companies have very much a boom-and-bust track
- 25 record. They frequently shut down. There's frequently
- 26 layoffs, and then there's rehires. When things go

- 1 really off the rails, the mines get shut down
- 2 completely with no cleanup and no reclamation. And if
- 3 you go through the history of mines in BC and Alberta,
- 4 you can see this pattern recurring over and over again.
- 5 So I think Mr. Lawson mentioned Grande Cache.
- 6 That's a classic example of a mine that has gone
- 7 through multiple ownerships. You know, as one owner
- 8 goes bankrupt, somebody else comes to the table, picks
- 9 it up, runs it for a few years, shuts it down when
- 10 commodity prices go down. That mine is currently
- 11 closed. Initially, they said they were closing due to
- 12 COVID, but they have not reopened, apparently because
- 13 of low commodity prices.
- 14 So it seemed worth taking a look at what has
- 15 happened in the neighbouring community, Sparwood, with
- 16 Teck Coal. And I should say here, I'm not trying to
- 17 pick on Teck Coal. I think as a mining company, they
- 18 have actually put tremendous effort into trying to do
- 19 some of the right things. It is the nature of the
- 20 industry.
- 21 So I was unable to get information all the way
- 22 back to when Teck first purchased the mines in the
- 23 1990s, but in more recent years -- in 2009, they cut
- 24 13 percent of their workforce -- that was 1,400 jobs --
- 25 because of decline in the global steel demand.
- Then a few years later, in 2014 and 2015, they

- 1 laid off 2,000 workers over an 18-month period, again
- 2 because of a dip in commodity prices.
- 3 Then in 2019 -- and this was pre COVID, so it was
- 4 in October -- they announced that they were cutting
- 5 500 jobs immediately due to unprecedented loss of
- 6 80 percent of its profit margins in four months due to
- 7 lower commodity prices. This was in a letter written
- 8 to employees from Teck.
- 9 Then in March of this year, they reduced their
- 10 Elk Valley workforce about by 50 percent at the time,
- 11 presumably because of COVID. And I don't honestly know
- 12 what their workforce is now. And I use these examples
- 13 simply to illustrate that this is an industry that goes
- 14 up and down a lot, and that is something you can
- 15 weather if you're a large corporation, as long as it
- 16 doesn't go too far down, but it is extremely traumatic
- 17 for the workers and for the communities.
- 18 And if you read any of the news articles -- and I
- 19 haven't brought them today -- you -- that talk to the
- 20 miners and to the families and to the communities that
- 21 have been become dependent, you know, on mine revenue,
- 22 it is devastating every time one of these instances
- 23 occurs. And as I've just shown, it occurs fairly
- 24 frequently. It is that type of industry.
- 25 So that was the information that I wanted to share
- 26 with the Panel today. I'm sure there's much more we

could talk about, but I wanted to thank you for the 1 2 opportunity to speak with you today, and to 3 acknowledge, as others have, that you have a 4 challenging task in front of you. The record is huge. 5 It's becoming more daunting by the day. And the 6 considerations are complex. But I think, most critically, everyone in this 8 process, whether they have spoken to you as a proponent 9 or an opponent, are looking to you to ensure that the 10 environment and the people are appropriately protected. 11 And, really, the only rationale that has been given for 12 why this could conceivably be in the public interest is 13 if there is extraordinary economic benefit. And while 14 I disagree with that philosophically, it is also, I think, fair to say that the economic benefits have been 15 dramatically overstated, and there has not been 16 reasonable consideration of the downsides. 17 So given all of that information, given great 18 19 risk, you know, to our water, to our health, to the 20 environment, all of the major gaps and deficiencies 21 that are noted in these plans in evidence by very 22 credible, very experienced expert witnesses, we urge you not to allow this project to proceed. 23 24 Thank you very much for your time. 25 Thank you, Ms. Lambright. Mr. Chair, the final member of 26 MR. FITCH:

	1		this witness panel is Mr. Sid Marty. As I've
	2		indicated, Mr. Marty is joining us from his home via
	3		Zoom.
	4		Mr. Marty, can you hear me?
	5	A	MR. MARTY: Hello. Can you hear me?
	6	Q	MR. FITCH: I can hear you. So it looks
	7		like we're good to go. Mr. Marty, do you want to
	8		provide your thoughts and remarks to the Panel?
	9		THE COURT REPORTER: Excuse me. The witness hasn't
	10		been sworn in.
	11		MR. FITCH: You're right. He has not.
	12		So, Mr. Marty, you're going to have to affirm or
	13		swear. Which one would you like? Which one would you
	14		like?
	15		MR. MARTY: I'll swear at Jason Kenney and
	16		affirm for you.
	17		SID MARTY, Affirmed
	18		THE COURT REPORTER: Can I get you to speak up,
	19		please?
	20		MR. MARTY: Okay. I'll try that. I will
	21		probably talk (INDISCERNIBLE - BACKGROUND NOISE)
	22		THE COURT REPORTER: I'm sorry. I can't hear you.
	23		MR. MARTY: You can't hear me? I will
	24		stop it, then. I'm not sure what I can do to provide
	25		more volume.
	26		THE CHAIR: He is a little hard to hear.
- 1			

1		MS. ARRUDA: We're getting a lot of
2		background noise from the breakout or from the
3		boardroom there.
4		MR. FITCH: We will mute ourselves while
5		Mr. Marty speaks.
6		MR. MARTY: Okay. Can you hear me now?
7		THE COURT REPORTER: Yes.
8	А	MR. MARTY: I'm trying to stay close to
9		microphone, so I will have to stick my face right in
10		the screen, I guess. My name is Sid Marty. I'm part
11		of a family that's been in Alberta since 1903. My wife
12		and I are farming members of the Livingstone Landowners
13		Group and we're ratepayers in MD 9 since 1980, and have
14		two boys we raised here at the foot of the Livingstone
15		Range. My wife is a retired restaurant owner in
16		Pincher Creek.
17		I am a journalist. I've written many feature
18		articles about natural history and human history,
19		subject of the West, and published a number of books,
20		including one that is specifically Leaning on the Wind:
21		Under the Spell of the Great Chinook. It was published
22		by HarperCollins in 1995.
23		Before turning to full-time writing, I worked as a
24		national park warden. Later on, I worked for the
25		Alberta Forest Service as a patrolman. So I have some
26		experience with tourists and visitors and locals

travelling in the mountains, with environmental 1 2 monitoring, public safety, wildfire suppression, and 3 law enforcement. My family and I have camped, hiked, and really loved this area ever since we came here. 4 5 And so I believe the open-pit mine situated in the 6 scenic Rocky Mountains close to a pretty mountain town 7 with a vibrant cultural life that's very attractive to 8 visiting tourists, young families, and retirees is a jarring, inappropriate industrial intrusion, completely 9 10 out of place in the era of shrinking mountain rivers, threatened species, and climate change. 11 12 Can you hear me all right now? 13 THE COURT REPORTER: It's not too bad. 14 It's not too bad? Okav. Now, there's a long history of mining tragedies in 15 the Crowsnest Pass. You no doubt are aware of the 16 17 Hillcrest Mine disaster of 1914, Canada's worst, which took 189 lives. There is a persistent theory that 18 19 mining played a role in the Frank Slide. And, frankly, 20 I think coal mining in this area belongs in the past. 21 Tying the area to the boom-and-bust cycle of coal 22 mining would be yet another coal-mining disaster since it shuts down opportunities in other sectors, as you 23 24 have already heard. So I won't belabour the point 25 except to add that in the fast-moving internet age,

there is going to be creation of local businesses here

26

1		that we can't even imagine at this time.
2		I note Benga's part of Riversdale Resources, an
3		Australian company owned by Hancock Prospecting, I
4		believe, of which Gina Rinehart is the principal. Coal
5		mines in Australia are not always met with public
6		approval. On February 8, 2019, the proposal for an
7		open-cut mine, the Gloucester Resources Mine, New South
8		Wales, whose location shared many unique
9		characteristics with the Crowsnest Pass, was refused,
10		and a judge decided that cited the significant
11		adverse impacts on the town of Gloucester as well as
12		greenhouse gas emissions in his ruling. The judge
13		determined that: (as read)
14		The cost of this open-cut coal mine in a
15		scenic valley close to town exceed the
16		benefits of the mine which are primarily
17		economic and (INDISCERNIBLE).
18		THE COURT REPORTER: I'm sorry. "Economic"?
19	A	Yeah.
20		THE COURT REPORTER: You said something after.
21		"Economic" and then something?
22	А	(as read)
23		exceed the benefits of the mine, which are
24		primarily economic and social.
25		So I'm suggesting, Mr. Chair, what would not be
26		provenanced in the proponent's home country should not
Ī		

- 1 be allowed here.
- 2 I live approximately 7 kilometres downwind from
- 3 the Grassy Mountain Project. My family and I have some
- 4 quality-of-life concerns. I am asthmatic, so I'm
- 5 concerned about air pollution and in the shortcomings
- 6 in the air-modelling part of the proponent's EIA
- 7 described in our consultant's report.
- 8 It's been pointed out the challenge of the
- 9 validity of the dispersion models used to predict
- 10 pollution dispersion. He points out that the modelling
- 11 does not account for the effect of the Chinook winds,
- 12 which you've heard about from a previous witness.
- 13 And he says these winds are concluded to likely
- 14 result in higher-than-predicted dust concentrations
- downwind of the proposed facility, and he predicts dust
- 16 concentrations 37 percent higher than what the
- 17 proponent shows in their model.
- 18 Mr. Chair, the landowners have been down this road
- 19 before. In 2003, Polaris Resources applied to the AEUB
- 20 to drill a sour gas well near the Oldman River gap in
- 21 complex mountain terrain. That's not far from the
- 22 Grassy Mountain Project as the crow flies or as the
- 23 coal dust applies.
- Our witness then, Professor Lawrence Nkemdirim, a
- 25 climatologist at the University of Calgary, is an
- 26 expert on Chinook winds. He pointed out that the air

- 1 dispersion modelling for that proposed sour gas well in
- 2 a valley at the foot of the Livingstone Range did not
- 3 take account of the complex terrain or the effect of
- 4 the Chinook winds on dispersion of pollutants, and that
- 5 finding was a factor in the Board's decision to deny
- 6 the application. And I hope that it will be a factor
- 7 that you will take into consideration.
- 8 We are also concerned about noise from the mine
- 9 and light pollution. We moved to the area to get away
- 10 from industrial intrusions, and, like other people in
- 11 MD 9, we pay a lot of money in taxes for the privilege
- 12 of living in a beautiful, scenic location in a rural
- 13 setting, and we contribute a lot to the local economy
- 14 by those taxes and by the money that we all spend
- 15 locally.
- Now, you've heard about -- concerns about selenium
- 17 pollution of the watershed, so I won't bother going
- 18 there to belabour that point. It's been well made
- 19 already.
- 20 But one question I do have is: Since all the
- 21 water in the South Saskatchewan River Basin is already
- 22 allocated to 1.8 million people and assorted
- 23 businesses, including ir -- irrigation, which you have
- 24 heard about, I'd like to know where the proponent would
- 25 obtain the water for its project, and, like your last
- 26 witness, I would like to know what the effect of that

Mr. Chair, I'd like to see a cost-benefit analysis on the value of the water for those downstream of the mine that was hinted at also by the last witness including the costs of cleaning up chemical pollutants downstream. The analysis of this project would include a value placed on good-quality raw water to municipalities downstream of the mine prior to treatment. It may be	
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7 The analysis of this project would include a valu 8 placed on good-quality raw water to municipalities	е
8 placed on good-quality raw water to municipalities	e
9 downstream of the mine prior to treatment. It may be	
hard to put a value on a tonne of water, but if we did	,
11 I'm very sure we would find it many times more than the	e
value of a tonne of coal.	
Are you hearing me okay so far?	
14 THE COURT REPORTER: Fine.	
15 A All right?	
16 THE CHAIR: Yes.	
17 A Okay. Thank you.	
Our witness, Dr. John Dennis, includes references	
19 to health studies in Appalachia because that was the	
only place he could find a comparable comparison, and	
it used the same mountaintop-removal processes Benga	
22 proposes.	
Now, I think it's been mentioned before about how	
studies have shown higher cancer rates and other healt	h
effects, so I won't belabour that point, in Appalachia	
due to the proximity to strip mines.	

- Mining proponents always extol the economic
 benefits of their projects, naturally. But concerning
- 3 the Appalachia, our witness will tell you that reports
- 4 show that the economic costs of health problems in
- 5 Appalachian coal-mining areas are more than five times
- 6 greater than the economic benefits of mining. Quite a
- 7 stunning finding, I think, when we're talking about the
- 8 economics of this mine.
- 9 This mine also has cast a bit of a shadow over our
- 10 democratic process in Alberta, in my opinion. There's
- 11 a sequence of events that's discouraging for citizens
- 12 participating in the process. Gina Rinehart is
- 13 well-known, as well as being the richest woman in
- 14 Australia and one of the richest in the world, but
- she's also very well-known for her From Red Tape to Red
- 16 Carpet, which can be downloaded on Amazon Books for
- 17 \$9.99, I saw. In her book, she complains ad nauseam
- 18 about regulations that govern mining in Australia. The
- 19 suggestion is the government she deals with should roll
- 20 up the red tape -- and that is environmental protection
- 21 regulations -- and roll out the red carpet of
- 22 welcoming -- of welcome to incoming capitalists.
- The current Alberta Government seems far too eager
- 24 to roll out the red carpet to mining. Atrum Coal, for
- 25 example, has described the Alberta Government as:
- 26 (as read)

1		Engaged and supportive in their efforts to
2		develop mining here.
3		And here I'm also referring to meetings between
4		politicians, the environment and the tourism minister,
5		of all people, with Australian miners in February 2019,
6		the warm reception given to them by our government,
7		then sudden overturning on June of this 6th of this
8		year, I believe it was, of the government's
9		(INDISCERNIBLE).
10		THE COURT REPORTER: I'm sorry. Can you repeat
11		that? "The government's"?
12	A	The sudden overturning in June of this year of the
13		government's East Slope coal policy, which was
14		originally enacted, as you probably know, under Premier
15		Lougheed. I should add that in 1895, the minister of
16		the interior then responsible for this part of the
17		world stated for the public record that the primary
18		value of the East Slope mountains here is a generation
19		of water to be used by the incoming settlements on the
20		plains, and the secondary feature was the timber
21		resources here, which would be used also by the
22		settlers.
23		So this is goes back a long ways. And Premier
24		Lougheed, I think, was carrying on that tradition of
25		conservation of our water resources with his coal
26		policy.
I		

- 1 Now, this was overturned by the current government
- 2 without any public consultation or previous notice,
- 3 compounded in proving the regulations, I believe.
- 4 So with all the greatest respect to the Panel,
- 5 this does not -- this does inspire a somewhat jaundiced
- 6 view of proceedings because it's pretty clear to me
- 7 that the UC government has already made up its mind
- 8 about the outcome of -- of the proposal for the mine,
- 9 the Grassy Mountain Mine, I mean.
- 10 I'm getting close to the end of this, you'll be
- 11 happy to know.
- 12 Finally, the elephant in the room. As has been
- 13 pointed out, this is only one of several mines
- 14 proposed, and I believe if it is approved -- approved,
- 15 it will be near to impossible for a regulator to deny
- 16 the others.
- 17 In December 2018, Steve Mallyon, a former CEO of
- 18 Riverdale [sic] Resources, told the Sydney Mining Club
- 19 that: (as read)
- The long-term strategy for us is to really
- 21 become a multi-mine producer in that region
- of Alberta.
- 23 Aligned with that, for example, our government has
- 24 permitted Atrum Coal to build 30 kilometres of roads
- 25 and construct 400 drill sites this past summer on prime
- 26 grizzly bear habitat.

- 1 So, Mr. Chair, without a mandate to change an
- 2 entire region of our province, this government would
- 3 potentially preside over basically a gigantic
- 4 Fort McMurray of open-pit coal mines stretching just
- 5 about all the way from the Livingstone Range to the BC
- 6 border and the contiguous mines there and from the
- 7 Crowsnest Pass all the way to the latitude of
- 8 Chain Lakes.
- 9 As we've heard, the other potentialities in this
- 10 region will be shut down, and the reward, as I
- 11 understand it, could be as low as a 1 percent royalty
- 12 after expenses. If that's the case, I suggest Alberta
- 13 will never see a penny because as mines keep expanding
- 14 northward, all expenses keep growing.
- 15 Frankly, in my opinion, the project is an
- irrational proposal in the extreme, and I hope the
- 17 Panel will rule against it.
- 18 As you may know, a group of ranchers have demanded
- 19 a judicial review of the rescinded coal policy, and
- 20 there is to be a hearing, I understand, on the matter
- 21 in January 2021. I respectfully suggest that you
- 22 consider that and that you even consider postponing any
- 23 decision on this project until that hearing is made.
- 24 I think the proposed Grassy Mountain Mine is the
- 25 wrong development, in the wrong location, in the wrong
- 26 century. And like the other witnesses, I do appreciate

the complex and difficult task you have undertaken, and 1 2 I thank you for the opportunity to speak to you today. 3 Thank you very much. MR. FITCH: Thank you, Mr. Marty. 4 Mr. Chair, that concludes the 5 MR. FITCH 6 direct evidence of this witness panel. They're open for questions from other participants. 8 THE CHAIR: Okay, Mr. Fitch. I'm just 9 wondering -- we've been going about two hours --10 whether we should take a quick break before we turn to 11 Would that be okay? questions. 12 MR. FITCH: Yes, that would be fine. THE CHAIR: 13 Okav. It's ten to 3. 14 let's come back at five after 3, and we will see if 15 there are any questions for this panel. MR. FITCH: 16 Thank you. 17 (ADJOURNMENT) THE CHAIR: Now, I just want to 18 Okay. 19 check with, first, the participants other than Benga 20 who think they might be directly and adversely affected if there's any questions for this witness panel. 21 22 Hearing none, Mr. Brinker or Mr. Ignasiak, any questions from Benga for this panel? 23 24 MR. BRINKER: Yes, Mr. Chair, this is 25 Coleman Brinker speaking for Benga. We do have just a 26 few questions for the landowners panel.

1		THE CHAIR: Okay. Please go ahead.
2		Mr. Brinker Cross-examines Livingstone Landowners Group
3	Q	MR. BRINKER: Mr. Trafford, can you hear me
4		okay?
5	A	MR. TRAFFORD: Yes, I can.
6	Q	Okay. You spoke a little bit to your background at the
7		start of your evidence, and I thank you for that. I
8		don't see your CV in the Livingstone Landowners
9		submission, and it may be that I just overlooked it.
10		Do you know if you and the other witnesses on your
11		panel have already provided their CVs to the Joint
12		Review Panel?
13	А	I did not, but I'm more than happy to.
14	Q	Sure. Can you undertake to provide CVs for each of
15		your the four witnesses on your landowner panel?
16		MR. FITCH: Yes.
17		Sid, are you do you have a CV? Sid, can you
18		hear me?
19		UNIDENTIFIED SPEAKER: He's muted.
20		MR. FITCH: We will give that undertaking.
21		THE CHAIR: And can we get an undertaking
22		number from staff for that?
23	A	MR. MARTY: Can you hear me now? I can
24		provide that.
25		MR. FITCH: Thank you.
26	А	Yeah.

1		MS. ARRUDA: That will be Undertaking
2		Number 6.
3		THE CHAIR: Okay. Thank you.
4	Q	MR. BRINKER: Thank you for that.
5		Mr. Trafford, I'm hoping you can provide just a
6		little bit more insight into your background at this
7		time as well. The CV will definitely fill in any gaps,
8		but just to ask you right now: Who do you currently
9		work for?
10	А	I'm a private consultant now.
11	Q	"Private consultant", is that what you said?
12	A	Yes.
13	Q	Okay.
14	A	Happy to give a little history if you want to know how
15		I got there.
16	Q	That would be helpful. Please do.
17	A	Simple. I worked as a technical person for a
18		consulting company in Canada, and then I took over the
19		responsibility of building their managed services
20		business in North America, so took that and built it up
21		to somewhere north of \$2 billion.
22		Ultimately, we were acquired, and I worked for the
23		acquirer, a company called MCI in the US, a big telco.
24		And MCI went through an was acquired, and acquired
25		by a company that I didn't have a lot of didn't want
26		me, basically, so I retired, moved back to Calgary. I

- worked for TransAlta for a couple of years and then
- went to work for the Calgary Health Region as an
- 3 executive responsible for doing major development
- 4 projects. And then when it was rolled up into
- 5 Alberta Health Services, I went with Alberta Health
- 6 Services and, after a couple of years, became the
- 7 person responsible for all the integration efforts of
- 8 integrating all the health organizations across the
- 9 province into one. And then I've been in consulting
- 10 since.
- 11 Q Thank you for that.
- 12 What is your education?
- 13 A I have a degree from the Southern Alberta Institute of
- 14 Technology in electronics technology.
- 15 Q Okay. Sorry. Where did you say you live in relation
- 16 to the project location?
- 17 A I have two homes. I have one in Calgary and one in the
- 18 Porcupine Hills. So directly west, I can look -- I can
- 19 see Grassy Mountain from my house.
- 20 O Okay. That house in the Porcupine Hills, is
- 21 that -- what municipality is that in?
- 22 A MD of Pincher Creek.
- 23 O Okay. Okay. Thank you for that.
- I do have a couple of questions now
- for Mr. Lawson. Mr. Lawson, can you hear me okay?
- 26 A MR. LAWSON: Yes, I can.

- 1 Q Okay. Now, I believe you mentioned in your evidence
- 2 that you previously held a position in the Yukon
- 3 Government; is that right?
- 4 A That's correct.
- 5 Q Did I hear that correctly? Okay.
- 6 A Yes.
- 7 Q What other positions have you held in industry or in
- 8 government in the past?
- 9 A I -- well, I spent about 20 years with the Yukon
- 10 Government, you know, a large number of -- of positions
- 11 there. After leaving the Yukon Government, I worked on
- 12 a contract consulting basis with the federal government
- in the creation of Nunavut in the Eastern Arctic, and
- from that point, then I operated as a private
- 15 consultant, my own company, for about 15 years, largely
- with First Nation clients but not exclusively. I did
- some work for both the Yukon and federal governments
- 18 over that period. And then from 2013 to 2016, I was
- 19 engaged as a part-time hearing commissioner with the
- 20 Alberta Energy Regulator. From 2016, then I went back
- 21 to consulting until last year, when I retired.
- 22 Q And where did you say that you live in relation to the
- 23 project location?
- 24 A Straight east. In the Porcupine Hills, again, on the
- 25 west side of the hills, about 15 miles from the
- 26 Grassy Mountain site and about 5 miles, more or less,

- due north of Mr. Trafford.
- 2 Q Okay. So is that in the MD of Pincher Creek as well?
- 3 A Yes, it is.
- 4 Q Okay. Thank you for that.
- 5 Ms. Lambright, can you hear me okay?
- 6 A MS. LAMBRIGHT: Yes, I can.
- 7 Q Great.
- 8 You provided some information on your background
- 9 as well in your evidence, so thank you for that. I'm
- 10 just hoping you can elaborate a little bit for me. Can
- 11 you tell me what your education is?
- 12 A Yes. I went to the Southern Alberta Institute of
- 13 Technology as well in journalism.
- 14 Q Okay. Now, I believe you said you worked out of Perth,
- 15 Australia, at some point in the past. Did I hear that
- 16 correctly?
- 17 A Yes, you did.
- 18 O Okay. Who were you working for while you were in
- 19 Perth?
- 20 A I worked for ATCO Group. I was responsible for our
- 21 business operations in Australia.
- 22 Q Okay. What other companies in industry have you worked
- 23 for over your career?
- 24 A My career has largely been with ATCO but in multiple
- 25 different companies. ATCO has a fairly diverse
- 26 portfolio of companies, so I've worked in a number of

- different ATCO companies.
- 2 Q Okay. And any other companies aside from the ATCO
- 3 Group?
- 4 A No. They were all companies within the ATCO Group.
- 5 Q Okay. Okay. Where did you say you live in relation to
- 6 the project location?
- 7 A About 15 to 20 kilometres due east.
- 8 Q Okay. And what municipality is that in?
- 9 A It's in the MD of Pincher Creek.
- 10 Q Okay. As well. Great. Okay. Thank you for that.
- 11 Now, lastly, I just have a couple of questions for
- 12 Mr. Marty. Mr. Marty, can you hear me okay?
- 13 A MR. MARTY: I can.
- 14 Q Okay. Great.
- 15 A Can you hear me?
- 16 Q I can hear you.
- 17 A All right. Good.
- 18 O Okay. You said you're currently a journalist. Is that
- 19 right?
- 20 A Yes. Since 1978.
- 21 Q Okay. And you said previous to that, you were a forest
- 22 warden at one point. Did I hear that right?
- 23 A I worked for the National Parks in Banff, Yoho, and
- Jasper as a park warden GT2, and when I left that
- 25 position, I -- to take up full-time writing, I worked
- 26 seasonally for the Alberta Forest Service as a

- 1 patrolman in the Porcupine Hills-Livingstone area.
- 2 Q Okay.
- 3 A Aside from that, I work full-time at writing, and I'm
- 4 also a part-time musician.
- 5 Q What is your education, Mr. Marty?
- 6 A I have an honours degree, BA, 1967, honours equivalent,
- 7 1969, and did a year of graduate studies and dropped
- 8 out of academia.
- 9 Q What was your honours degree in?
- 10 A The honours degree is in English lit.
- 11 Q Okay. And what municipality do you live in, Mr. Marty?
- 12 A I'm in MD 9 Pincher Creek.
- 13 O Okay. Great.
- 14 Those are all the questions for Benga at this
- 15 time. Thank you very much to the Livingstone
- 16 Landowners panel.
- 17 THE CHAIR: The --
- 18 MR. BRINKER: Sorry, Mr. Chair.
- 19 THE CHAIR: That's okay.
- 20 Ms. LaCasse or Ms. Kapel Holden, any questions for
- 21 this panel?
- 22 MS. LACASSE: No, we have no questions,
- 23 Mr. Chair.
- 24 THE CHAIR: Okay. Mr. Lambrecht?
- 25 MR. LAMBRECHT: Mr. Chair, I have no questions
- 26 for this panel, and I thank them for their

1		participation in the process and their evidence today.
2		THE CHAIR: Thank you.
3		Mr. Matthews, any questions?
4		Alberta Energy Regulator Panel Questions Livingstone
5		Landowners Group
6	Q	MR. MATTHEWS: Thank you all for your
7		presentations. I just have a couple of questions.
8		It's a combination between Mr. Lawson and
9		Ms. Lambright.
10		You mentioned that's a new term that I've
11		not familiar with, solace nostalgia [sic]. Is that
12		something that is related to, in your mind related
13		to mental health? Is that a function of mental health?
14	A	MR. LAWSON: Yes, it is. And I to be
	A	MR. LAWSON: 1es, It is. And I to be
15	A	clear, I don't pretend to be an expert on the
	A	
15	A	clear, I don't pretend to be an expert on the
15 16	A	clear, I don't pretend to be an expert on the solastalgia, but I have done some reading on it. It
15 16 17	A	clear, I don't pretend to be an expert on the solastalgia, but I have done some reading on it. It was first mentioned last week by another witness. But
15 16 17 18	A	clear, I don't pretend to be an expert on the solastalgia, but I have done some reading on it. It was first mentioned last week by another witness. But it was the term originated, I understand, in
15 16 17 18 19	A	clear, I don't pretend to be an expert on the solastalgia, but I have done some reading on it. It was first mentioned last week by another witness. But it was the term originated, I understand, in Australia, as I mentioned, to deal with the effect of
15 16 17 18 19 20	A	clear, I don't pretend to be an expert on the solastalgia, but I have done some reading on it. It was first mentioned last week by another witness. But it was the term originated, I understand, in Australia, as I mentioned, to deal with the effect of people feeling quite hopeless about their situation and
15 16 17 18 19 20 21	A	clear, I don't pretend to be an expert on the solastalgia, but I have done some reading on it. It was first mentioned last week by another witness. But it was the term originated, I understand, in Australia, as I mentioned, to deal with the effect of people feeling quite hopeless about their situation and their environment and having no control over traumatic
15 16 17 18 19 20 21 22	A	clear, I don't pretend to be an expert on the solastalgia, but I have done some reading on it. It was first mentioned last week by another witness. But it was the term originated, I understand, in Australia, as I mentioned, to deal with the effect of people feeling quite hopeless about their situation and their environment and having no control over traumatic changes that were happening. It's been studied more
15 16 17 18 19 20 21 22 23	A	clear, I don't pretend to be an expert on the solastalgia, but I have done some reading on it. It was first mentioned last week by another witness. But it was the term originated, I understand, in Australia, as I mentioned, to deal with the effect of people feeling quite hopeless about their situation and their environment and having no control over traumatic changes that were happening. It's been studied more since. I believe I read just the other day that it is
15 16 17 18 19 20 21 22 23 24	A	clear, I don't pretend to be an expert on the solastalgia, but I have done some reading on it. It was first mentioned last week by another witness. But it was the term originated, I understand, in Australia, as I mentioned, to deal with the effect of people feeling quite hopeless about their situation and their environment and having no control over traumatic changes that were happening. It's been studied more since. I believe I read just the other day that it is now recognized by the American Medical Association or

information. But it's very much tied -- it is mental 1 2 It's tied to depression and similar feelings. 3 Okay. Because I'm just wondering, with the Teck 0 4 liveability study that was done in -- I believe it was 2019, was that ever mentioned in that report about the 5 6 mental health of the community and, in particular, if 7 I don't know if it would be used. that term was used? MS. LAMBRIGHT: I'm really not a hundred 8 Α 9 percent sure. I was quite focused in going through the 10 study in terms of looking at specific aspects, because 11 I only became the -- aware of that study fairly 12 recently. 13 I don't recall the use of that particular term, 14 but it is a fairly comprehensive study, and I -- as I 15 say, I'm not a hundred percent sure whether they addressed mental health. 16 17 And a final question: Mr. Lawson, you mentioned briefly about selenium levels in -- obviously in the 18 19 water, and you mentioned livestock. So I'm just 20 wondering, are you aware of any studies that have been done on studying the levels of selenium in livestock in 21 22 the area? 23 MR. LAWSON: I'm not -- certainly not aware 24 enough to quote those to you. Again, I can undertake 25 to look further into that. I believe there have been 26 some, but they're, again, more minimal, like human

- 1 studies, than, for example, on fish populations.
- 2 Q Because I'm just curious because of the -- as you know,
- 3 we've had several witnesses who have explained to us
- 4 how the important -- the importance of the ranching
- 5 industry is in the area, and so I was just curious to
- 6 see if we had background levels or if there were any
- 7 studies on that.
- 8 A I believe there are, but I -- I won't state that
- 9 authoritatively. I'll go back and look, though.
- 10 I -- I took that from -- from a reference, but I
- 11 couldn't tell you offhand what that reference was. I
- didn't bring all the documentation with me.
- 13 O Okay. That's fine. Great.
- Well, thanks a lot for your answers, and thanks
- for presenting to the Panel.
- 16 THE CHAIR: Mr. O'Gorman?
- 17 MR. O'GORMAN: Thank you, Mr. Chair.
- 18 O MR. O'GORMAN: I will repeat what my
- 19 colleague said. Thank you to all of you for appearing
- 20 before us today. Those were some interesting
- 21 presentations. I do have a few questions. I'll keep
- them fairly brief.
- 23 But I just wanted to follow up on a couple of
- items that some of you mentioned. So I will start with
- 25 you, Mr. Trafford.
- 26 At one point when you were speaking, you made

1		reference to something that we haven't seen. You	
2		talked about an RBC Royal Bank of Canada, I	
3		assume announcement related to their financing of	
4		mountaintop-removal mining projects. So we don't know	
5		anything about that. But I am curious, since you	
6		raised it, whether you have any knowledge about RBC	
7		potentially financing this project. I I will let	
8		you answer that, and then I'll follow up with I	
9		assume the answer to that is "no", but	
10	A	MR. TRAFFORD: So just the announcement by	
11		the Royal Bank was published in The Globe and Mail	
12		about two weeks ago two or three weeks ago.	
13	Q	Okay.	
14	A	And while they didn't make any specific reference to	
15		this mine, I think it's the only mountaintop-removal	
16		mine in in the plans right now in Canada.	
17	Q	Okay. So my more substantive question, because I	
18		assume none of us really understand Benga's financing	
19		plans or how they're doing that, would be: I wonder	
20		why you would think that would be relevant?	
21	A	It likely I don't know Benga's financing either, but	
22		I assume that Riversdale is financing the direct costs,	
23		but if you think about all of the third parties that	
24		are involved, contractors, subcontractors, who all need	
25		financing to acquire the equipment they need, the	
26		people they need, they would be impacted by this	
1			

1		directly.
2	Q	Okay. Okay. Thanks for that, Mr. Trafford.
3		Next, Mr. Lawson. So I'm going to shoot a similar
4		question to you and ask you about something that you
5		raised in your in your comments. So you talked
6		about a recent International Energy Agency report that,
7		my note said, show much larger methane emissions from
8		coal mines than perhaps previously thought. Again, I
9		don't think we have that report on the record.
10		So I am curious, since you raised it, if you could
11		clarify whether you know so two subquestions, and
12		I'll ask them both at the same time: Whether you know
13		if such a report dealt both with thermal and
14		metallurgical coal mines or was focused on just one
15		type of those; but then even more so, whether
16		you what you see as the potential relevance of that
17		to this project and so your why you raised it today.
18	A	MR. LAWSON: To the first part of the
19		question, I I don't know off offhand. There's a
20		report which, coincidently, I was looking for amongst
21		my stack of papers this morning and I did not find, but
22		there is a report out of Quebec to that.
23		But I think as to the relevance, there is
24		reference to open-cut or open-pit or mountaintop
25		removal mining. The disturbance of the ground itself
26		can apparently release methane that's been trapped

below at some point. So we'll -- what are the levels 1 2 of selenium sort of latent here? I don't know. 3 wasn't anything with respect specifically to this mine, 4 but it's the question that's been asked because they've raised the concern about the effects of these kinds of 5 6 mining operations around the world. 7 Okay. That's good. Thanks. 0 And I do want to clarify for both you and 8 9 Mr. Trafford, because I use the word "relevance", and I 10 didn't mean that in the strict legal definition of --11 No. That's fine. Α 12 More the layman's definition of: Why -- why are you 13 bringing that to our attention? Just to clarify. 14 So my final question, Ms. Lambright, I was 15 interested in something you raised that I don't think, unless I missed it, I've seen. And that was you 16 17 said -- and I -- you know, I may have written this down incorrectly. If so, I apologize. You made reference 18 19 to, last week, Environment and Climate Change Canada, I 20 wrote, gave Teck a 300, \$400 million order related to 21 water management, I believe. So I wonder if you can 22 tell us a little something about that. Tell us how you 23 think we -- is that something that we should be 24 thinking about in this project? And what does it mean 25 for -- yeah. What does it mean for this project? 26 MS. LAMBRIGHT: Α I quess the context in which I

1		was raising that, Mr. O'Gorman, is that there has been
2		ongoing concern with the water quality coming out of
3		the Teck Elk Valley coal mines for a number of years.
4		So there's been studies done by Environment Canada.
5		There has been fines issued. There has been orders put
6		forward by the Department of Environment and Climate
7		Change trying to resolve the ongoing issues with
8		selenium.
9		So when I saw the announcement last week that the
10		Department of Environment and Climate Change had issued
11		yet another order requiring Teck to spend I believe
12		it's 350 to 400 million, that seemed very relevant to
13		me, given that Grassy Mountain has indicated they want
14		to do something similar to Teck with the saturated
15		backfill, and Teck is still working to resolve their
16		issues. And the ultimate cost is something like
17		\$1.6 million. But I do think it's something that
18		THE COURT REPORTER: I'm sorry. I'm sorry. Can
19		you repeat the figure? Sorry.
20	А	MS. LAMBRIGHT: (INDISCERNIBLE -
21		OVERLAPPING SPEAKERS) to the attention to it's
22		probably the Number 1 concern that's been raised in
23		this hearing, is the risk associated with the water.
24		And a lot of that has to do with the way in which
25		Grassy Mountain is proposing to manage it. That's both
26		in terms of how they're proposing to collect and gather

1		the water as well as how they're planning to treat it.
2		And it's my recollection that the order that was issued
3		last week to Teck addressed the water gathering as well
4		as the water treatment.
5		So I do think it's relevant because it's obviously
6		a concern on the part of the department that there is
7		not a robust-enough system in place to manage selenium,
8		and it's, from a layperson person's understanding, much
9		more robust than what appears to have been put forward
10		by Grassy Mountain.
11	Q	Okay. Thank you, Ms. Lambright, and everyone. I
12		appreciate all of your time today.
13		I have no other questions.
14		THE CHAIR: Thank you, Mr. O'Gorman.
15		Panel, I have no questions for you. I did find
16		your testimony very clear today, so I don't have any
17		questions.
18		So, Mr. Trafford, Mr. Lawson, Ms. Lambright, and
19		Mr. Marty, thank you very much for attending today and
20		your oral and your written submissions.
21		(PANEL STANDS DOWN)
22		MR. FITCH: Mr. Chair, I have no redirect,
23		but given that it was raised by Panel Member O'Gorman,
24		we would be happy to provide the Panel with a copy of
25		The Globe and Mail article that Mr. Trafford referred
26		to as the source for his information about RBC. We

- 1 would be happy to provide the International Energy
- 2 Agency methane study, the ECCC order that was issued to
- 3 Teck, the Sparwood liveability study, if the Panel
- 4 would find it helpful.
- 5 And I should say, you know, we're not -- we
- 6 weren't trying to sandbag anyone by having the
- 7 witnesses refer to documents that weren't -- that
- 8 aren't in the record. The reality is, is that as lay
- 9 witnesses prepare to give testimony, they revise and
- 10 they revise and they revise, and they add stuff right
- 11 to the eleventh hour, so -- so some of this stuff I
- 12 wasn't aware of either.
- So, in any event, I just wanted to be clear that
- 14 we weren't trying to subvert the process by referring
- 15 to articles or anything that aren't in the record, and
- 16 we would be happy to provide them if the Panel would
- 17 find that to be of assistance.
- 18 THE CHAIR: Mr. O'Gorman, do you feel that
- 19 you need any of those documents?
- 20 MR. O'GORMAN: Mr. Bolton and Mr. Fitch, I am
- 21 not going to ask you to drop new information, sort of
- 22 new reports on the record at this point in time. So my
- 23 questions were, you know, reacting to things that we
- 24 don't know, and you used them as parts of your argument
- 25 today, and I wanted to understand better how you saw
- 26 them as being useful or how they applied to this

- 1 project. So it's not -- you know, it may have been
- 2 better for them to have been filed on the record
- 3 earlier, but given that you raised them today, I just
- 4 wanted to explore them a little bit. But I'm not going
- 5 to ask you to put them on the record.
- 6 MR. FITCH: Very good. Thank you.
- 7 THE CHAIR: Okay. So, Mr. Fitch, I think
- 8 the plan now is to seat Mr. Joseph. Is that next?
- 9 MR. FITCH: Yes, it is.
- I should say that I have had some communication
- 11 with Ms. Okoye for the Coalition, who you may -- well,
- 12 you know --
- 13 THE CHAIR: Yeah.
- 14 MR. FITCH: -- also have a socioeconomic
- 15 expert, Mr. Thompson from Watrecon, who was not able to
- 16 testify yesterday with the rest of the Coalition
- 17 witnesses. So Ms. Okoye and I were thinking that we
- 18 could potentially put both of these gentlemen up,
- 19 essentially as a single intervener, socioeconomic
- 20 panel, so that way Mr. Brinker can just have -- you
- 21 know, he can have a shot at both of them in one go if
- 22 that would be of assistance. I mean, they're both
- 23 supposed to be giving evidence this afternoon, so we
- 24 just thought we might perhaps -- it would facilitate
- 25 the rest of the day if we put them up at the same time.
- 26 But we're totally in the Panel's hands.

1	THE CHAIR:	Okay. I did test this briefly	
2	with Mr. Ignasiak yesterday, and I don't believe he had		
3	a concern.		
4	Is that right, Mr.	Brinker?	
5	MR. BRINKER:	That's right. We have	
6	no we have no issue	with that.	
7	THE CHAIR:	All right.	
8	MR. FITCH:	Well, why don't we start with	
9	Dr. Joseph.		
10	Dr. Joseph, can yo	u hear me?	
11	THE COURT REPORTER:	I'm sorry?	
12	MR. FITCH:	I'm sorry. I didn't hear you.	
13	DR. JOSEPH:	Yes, I can.	
14	MR. FITCH:	Okay. Are you ready to	
15	proceed?		
16	DR. JOSEPH:	Yeah.	
17	MR. FITCH:	All right.	
18	THE CHAIR:	Volume might be a little bit	
19	of an issue. We're having a little hard time, I		
20	think, hearing Mr		
21	DR. JOSEPH:	Okay. If I speak a little	
22	louder, how is this?		
23	THE COURT REPORTER:	It's not good.	
24	DR. JOSEPH:	(INDISCERNIBLE) I'm afraid	
25	today on the		

THE COURT REPORTER: I'm sorry. I don't understand

26

1	what	you're	saying.
---	------	--------	---------

2	DR.	JOSEPH:	How's	this	now?

3 THE CHAIR: Kind of the same.

4 DR. JOSEPH: Okay. I thought we did a

5 sound test earlier and got the okay. But there's only

6 two options, this or without the headset.

7 THE CHAIR: Do you know if your mic volume

8 is turned up?

9 DR. JOSEPH: Mic volume.

10 THE CHAIR: If you go to the mute button

11 on Zoom.

12 DR. JOSEPH: Yeah.

13 THE CHAIR: Click on the little arrow.

14 And then at the bottom, there's audio settings.

15 DR. JOSEPH: Oh, here we are.

16 THE CHAIR: And you should be able to turn

17 up the volume.

18 UNIDENTIFIED SPEAKER: Wow, is he good.

19 DR. JOSEPH: How's that?

20 THE CHAIR: That's good.

21 MR. FITCH: Much better.

22 DR. JOSEPH: Okay. Can I just test it

23 without the headset? It would be -- it's a lot easier.

24 If I don't use the headset, how is that?

25 THE CHAIR: I think it's okay, but you'll

26 have to make sure you speak closely to the mic.

	1		DR. JOSEPH:	Okay. Please let me know. As	
	2		I was saying, I apologize	. Today on the West Coast,	
	3		we're having one of those days that gives us the		
	4		reputation of the "wet co	ast". It's raining, so that	
	5		might be some of the sound.		
	6	Q	MR. FITCH: Al	l right. Thank you,	
	7		Dr. Joseph.		
	8		To begin, can you confirm		
	9		THE COURT REPORTER:	Sorry. He hasn't been sworn	
	10		in yet.		
	11		MR. FITCH:	Oh, yeah. Sorry.	
	12		Would you like to be	affirmed or sworn?	
	13		DR. JOSEPH:	Affirmed.	
	14		CHRIS JOSEPH, Affirmed		
	15		Direct Evidence by Livingstone Landowners Group		
	16		THE CHAIR:	Apologies, Mr. Joseph, but we	
	17		did lose some volume here. I'm just wondering if you		
	18		need to go back to the headset.		
	19		DR. JOSEPH:	How's that?	
	20		THE CHAIR:	Kind of so-so again.	
	21		DR. JOSEPH:	Okay. Sorry. I think I'm on	
	22		now.		
	23		THE CHAIR:	That's better.	
	24		DR. JOSEPH:	Okay, I'll stick with the	
	25		headset.		
	26	Q	MR. FITCH: Ok	ay. Dr. Joseph, can you	
1					

- 1 confirm that you were retained by the Livingstone
- 2 Landowners Group to review the proponent's 2016
- 3 socioeconomic impact assessment of the Grassy Mountain
- 4 Project and other information filed by the proponent
- 5 relative -- sorry, relevant to the assessment of the
- 6 social and economic effects of the project?
- 7 A DR. JOSEPH: Yes, I was.
- 8 Q And, sir, you can confirm that you prepared a report
- 9 titled "Review of Grassy Mountain Coal Mine Economic
- 10 Impact Assessment"?
- 11 A No. That's the title of the presentation I put
- 12 together. I know --
- 13 O I think it's the same.
- 14 A Okay. I have seen it now. Yes.
- 15 Q Okay. And for the record, that's CIAR Registry
- Document 552 at PDF page 129.
- 17 Dr. Joseph, can you confirm that the report was
- 18 prepared by you or under your direction?
- 19 A Yes.
- 20 O And, sir, do you have any changes you would like to
- 21 make to that report?
- 22 A No.
- 23 Q And, sir, do you adopt your report as your -- part of
- 24 your evidence in this proceeding?
- 25 A Yes, I do.
- 26 Q And, sir, you prepared a PowerPoint presentation

summarizing your written evidence that I believe has 1 2 been posted on the registry as Document 778? 3 I don't know the document number, but I have. Α 4 Okay. Can we pull that up, please. 5 All right. Dr. Joseph, would you like to begin 6 your presentation? 7 Sure. Good afternoon, and thank you for the opportunity to present my evidence. And, Mr. Bolton, 8 9 nice to see you again. I think this is the third time 10 I've had the opportunity to address you. 11 Next slide, please. 12 I was hired by the Livingstone Landowners Group to 13 conduct a review of Benga's economic impact assessment 14 for the Grassy Mountain Mine. The objective of my work was to provide a critical review of Benga's economic 15 impact assessment so that the Review Panel is informed 16 17 of the quality of Benga's assessment but also to provide the Panel with further assessment of the 18 19 project's potential economic impacts. I reviewed 20 Benga's 2016 socioeconomic impact assessment undertaken by Nichols Applied Management as well as more recent 21 22 filings by Benga and additional relevant information, such as coal market forecasts. 23 24 Next slide, please. 25 My qualifications for undertaking my critical 26 review are as follows: I have bachelor's, master's,

and doctorate degrees in resource and environmental management, and my doctorate was focused on major project impact assessment.

I have written journal articles and provided peer-review articles to do with economic -- it seemed to move. Okay. I've got rid of the video on my screen -- to do with economic and other types of impact assessment. I have about 20 years' experience researching and consulting on major project impacts and evaluation. This Grassy Mountain Project is the ninth time I have appeared as an expert witness. I have consulted to, written guidance for, and advised the Alberta, BC, and federal governments.

I continue to do research on impact assessment, most recently as a collaborator on research funded by the Impact Assessment Agency of Canada and Social Sciences and Humanities Research Council on an economic impact assessment, and I have instructed university-level and professional courses in economics and impact assessment.

Q And, Dr. Joseph, do you acknowledge that, as an expert witness, you are under duty to provide opinion evidence to the panel that is fair, objective, and nonpartisan?

24 A Yes.

25 O Thank you.

26 A Next slide, please.

My review was conducted within the context of what 1 2 we know, as an international impact assessment 3 community, contributes to a quality assessment and properly informed decision-makers. 4 Excuse me. I myself have been a contributor to understanding 5 6 good practices in impact assessment. My PhD focused on 7 this, and I have since published several articles in 8 the impact assessment literature on the subject, 9 including with respect to good practices in economic 10 impact assessment. 11 Now, returning to Grassy Mountain, Benga need not 12 demonstrate the best of the best, but this context of 13 international good practice provides a solid basis for 14 my evaluating the quality of the impact assessment, identifying shortfalls and limitations, and pointing 15 the ways toward addressing deficiencies. And I've 16 shown here --17

- 18 O You --
- 19 A Yes?
- 20 O No. Go ahead.
- 21 A I'm just showing here, on the slide, articles that I
- have authored that pertain to good practices in impact
- assessment.
- 24 Q Thank you.
- So, sorry, I didn't mean to jump ahead. I note
- 26 that many of the articles you list on this slide are

- ones that were coauthored by a T. Gunton. Can you
- 2 confirm that that's a fellow named Tom Gunton and that
- 3 he provided peer review of your report done for the LLG
- 4 in this proceeding?
- 5 A He did review the report that I submitted, and, yes,
- 6 he's a colleague.
- 7 Q And can you tell us a little bit about who is
- 8 Tom Gunton?
- 9 A Yeah. Tom Gunton is a professor at Simon Fraser
- 10 University in the resource and environmental management
- 11 program. I did my master's degree and PhD with him as
- my senior supervisor, and I have worked with him on
- various research and consulting projects in between
- those two degrees and to this day.
- 15 Q Thank you.
- 16 A And just to add, I think most notably with Tom, beyond
- being a professor of many years, he has occupied
- 18 numerous high-profile government jobs in Canada.
- 19 Q Okay. Thank you.
- 20 Please proceed to the next slide, then.
- 21 A Yes. Next slide, please.
- I have summarized the findings of my report into
- 23 five topics: Benga's methodology is faulty; Number 2,
- there are gaps in Benga's assessment; Number 3, one
- 25 can't validate the black box that is Benga's
- assessment; Number 4, Benga's conclusions are not

- 1 supported by their own evidence; and Number 5, I
- 2 conducted a preliminary cost-benefit analysis of the
- 3 project, and the results of that cast doubt on the
- 4 public interest value of the project.
- 5 Next slide, please.
- 6 Finding Number 1, faulty methodology: The first
- 7 and perhaps most important problem with Benga's
- 8 economic impact is that it relies on a method that does
- 9 not do what is needed. It's a basic principle of
- 10 impact assessment that we're trying to predict
- incremental change with a product, and that means we're
- 12 trying to predict the net change that occurs in a value
- 13 component's condition with a project compared to
- 14 without a project. This is why we are concerned with
- 15 residual effects after mitigation. We're trying to
- 16 predict future impacts after all factors are taken into
- 17 account.
- 18 For economic impacts, that means we need to
- 19 predict net changes in things like employment and
- 20 government fiscal conditions. Benga, though, used a
- 21 method of economic -- the method of economic impact
- 22 analysis, a technique called input-output modelling,
- 23 but this method is not capable of assessing net
- 24 effects. It wasn't designed to do so.
- Benga's assessment does not tell us the complete
- 26 range of changes in the economy that occur nor the net

changes that occur in the economy. First of all, Benga's assessment only looked at a subset of economic effects, including what they called income, fiscal, and employment effects. But what about competition for labour, leading to higher cost to local employers? What about costs -- new cost burdens on governments to support the new activity, like wear and tear on roads, waste disposal, and local health care costs? assessment, therefore, did not adhere to the terms of reference for the assessment, which requires assessment of positive and negative economic impacts.

Second, the assessment fails to assess net change because the methodology assumes that there are no constraints on inputs like labour or capital. Benga's employment prediction is a good example to explore. Benga states that its project will create hundreds of new jobs, yet current labour market forecasts highlight skill gaps and an aging demographic; in other words, a tight labour market. This suggests that labour will simply move between jobs. Benga's economic impact assessment presented information on gross economic benefits, not net. And so we are left without a clear picture of what the project's overall economic impact would be.

Dr. Joseph, I explored this in my cross-examination of

Mr. Shewchuk, and I think it's fair to paraphrase his

1 view as being that the use of economic impact analysis 2 and this input-output model was (a) essentially 3 required by the terms of reference and (b) a standard 4 practice. Can you comment on that? 5 Sure. I'm not aware that input-output modelling, as a Α 6 technique of economic impact analysis, is required, 7 It is commonly used, and this is problematic -- problematic, as I and coauthors have 8 9 pointed out in some recent papers in the leading 10 international, you know, impact assessment. 11 As I understand the terms of reference and current 12 policy in Alberta and federally, it's not a requirement 13 to use economic impact analysis. It's one method, but 14 it's not the only method. And a key limitation, as I 15 pointed out, is it only presents a partial picture of 16 the economic impacts. And so good practices would entail using additional methods or alternative methods. 17 Thank you. 18 19 Please proceed. 20 Next slide, please. Α 21 Finding Number 2, gaps in assessment: The terms 22 of reference of the project mandates examination of not just positive but also adverse economic impacts, as 23 I've just discussed, but also cumulative effects 24 assessment, and yet Benga did neither of these things. 25 26 The gap with respect to understanding potential adverse

- 1 effects compounds Benga's use of input-output
- 2 modelling, which isn't capable of being formative with
- 3 respect to net effects. The gap with respect to
- 4 cumulative effects means that Benga's assessment is
- 5 divorced from the broader economic forces at play.
- 6 There will be no future where the only force
- 7 shaking the economy is the Grassy Mountain Mine. The
- 8 Grassy Mountain Mine is but one force within a broader
- 9 context, and Grassy Mountain impacts can only be
- 10 accurately understood if they are considered within
- 11 this broader cumulative effects context. As well,
- 12 international but increasingly also Canadian standards,
- 13 such as the Government of Canada's policy with respect
- 14 to gender-based analysis, plus also necessitate
- 15 assessment of the distribution of economic impacts, but
- 16 Benga did not do this. And, therefore, my concern is
- 17 the Review Panel's not informed with respect to where
- 18 and to who economic impacts would fall.
- 19 The question is: Are there any groups who are
- 20 disproportionately affected by this project?
- 21 Lastly, impact assessment is inherently about
- 22 dealing with uncertainty because it's about predicting
- 23 the future, and it's standard good practice and
- 24 forecasting to test the robustness of results by
- 25 exploring the effect of alternative assumptions about
- 26 the future on overall results, yet Benga did very

- 1 little exploring of uncertainty in this economic impact
- 2 assessment, which gives a false illusion of certainty
- 3 in many of Benga's predicted effects.
- 4 Benga, in response to an information request,
- 5 examined alternative coal prices and effects of those
- 6 alternative prices on royalty and tax revenues flowing
- 7 to governments, which is constructive, but Benga seems
- 8 to hold to their contention that future coal prices
- 9 will average \$140 US per tonne when the market
- 10 forecasts that I have found over the last couple of
- 11 years have gotten worse and worse. The International
- 12 Energy Agency and British Petroleum both anticipate
- 13 weak metallurgical coal market futures. And,
- 14 therefore, royalty and tax impacts should only be
- 15 expected to be on the low side or, perhaps, lower than
- 16 Benga's forecast.
- In the next two slides -- please don't go there
- 18 now -- I will show you that, indeed, the International
- 19 Energy Agency forecasts a decline in coking coal prices
- 20 over the coming decades, but first I will finish this
- 21 slide.
- To my knowledge, Benga also did not explore
- 23 uncertainty with respect to project costs. This
- 24 matters because major projects can fail, leaving
- 25 taxpayers with large clean-up bills, and beyond this,
- 26 project costs but also coal prices can affect a

- 1 project's scale and pace, affecting employment demands,
- 2 local spending, and other economic impacts.
- 3 So, overall, the key point here is that Benga's
- 4 assessment has several major gaps, which mean
- 5 incomplete information for decision-makers but also
- 6 assessment predictions that are not robust.
- 7 Next slide, please.
- 8 So what you can see here -- and I know the numbers
- 9 on the left aren't -- probably are not terribly
- 10 legible. I have blown up the key section, and, again,
- 11 I've done the best I can.
- 12 But what this shows is the International Energy
- 13 Agency's 2019 world energy outlook forecast for
- 14 different types of coal. And what you can see is that
- 15 coking coal demand, according to the International
- 16 Energy Agency, is forecast to go from 955 million
- tonnes in 2018 down consistently over time to
- 18 700 million tonnes by 2040.
- 19 Next slide, please.
- 20 And since submitting my written submission --
- 21 because, in my written submission, I referenced that
- 22 2019 forecast -- the IEA, International Energy Agency,
- 23 released their 2020 world energy outlook, and this
- 24 document was discussed in the hearing on Monday.
- 25 May I present the numbers from the IEA document?
- 26 And you can see clearly that the IEA's forecast is

- 1 referring to coking coal. This new forecast is even
- 2 more pessimistic than the IEA's 2019 report. You can
- 3 see the forecast production of coking coal demand going
- 4 from 936 million tonnes of coal equivalent in 2019,
- 5 consistently down to 704 million tonnes by 2040 in a
- 6 stated policy scenario, and 438 in a sustainable
- 7 development scenario.
- Now I will return back to the rest of my findings.
- 9 Next slide, please.
- 10 So Finding Number 3 is -- I've labelled "black
- 11 boxes can't be validated". The strength of an impact
- 12 assessment lies substantially in the ability of those
- 13 scrutinizing the assessment to understand how
- 14 conclusions were reached. This is a standard principle
- 15 in science. Yet Nichols economic impact assessment is
- 16 presented -- or how it's presented prevents one from
- 17 seeing how conclusions were reached. Benga used
- 18 standard effect characterization criteria such as
- 19 magnitude and duration but provided no definitions for
- 20 the qualifiers that they use for each criterion.
- 21 Most economic effects were characterized as low
- 22 magnitude, but what does "low" mean? As another
- 23 example, Benga concluded the effects were of high
- 24 probability, but what does this mean? Is "high"
- 25 99 percent likely or 51 percent, or what?
- 26 Without knowing how low or high these types of

- 1 terms are defined, no one can see how Benga came to
- 2 their conclusions. You can't verify or validate these
- 3 characterizations when you don't know what the
- 4 terminology means.
- 5 Given that Benga uses their characterizations to
- 6 make determinations of effect significance, Benga
- 7 concludes throughout their assessment that all the
- 8 project's effects on all socioeconomic values are not
- 9 significant, but, again, it's impossible to understand
- 10 or verify these conclusions.
- 11 Similarly, Benga provides no definition of
- 12 "significance", and so the routine conclusions of "not
- 13 significant" are further shielded from verification and
- 14 validation. We have no idea how Benga concluded "not
- 15 significant" or even what "significance" means in the
- 16 economic impact assessment.
- 17 Overall, Benga seems to want the review panel and
- 18 stakeholders to simply take their word for their
- 19 conclusions. This is unacceptable, given what is at
- 20 stake. Impact assessment is not valid unless it can be
- 21 validated.
- Next slide, please.
- 23 Finding Number 4: Conclusions are not supported
- 24 by the evidence. So in Benga's updated environmental
- 25 impact statement, Benga concludes that the project will
- 26 have major economic benefits, but Benga has no basis to

- 1 make such conclusion.
- 2 As I have already covered, Benga's method of
- 3 economic impact assessment relied -- relied upon a
- 4 method that only assesses a subset of economic impacts
- 5 and assesses gross, not net, effects of that. The
- 6 assessment ignored adverse economic impacts and didn't
- 7 undertake a cumulative effects assessment, and Benga
- 8 undertook only very limited exploration of uncertainty.
- 9 Therefore, the results are not robust, while the key
- 10 factors that can influence economic impacts.
- But perhaps most strangely of all, Benga's own
- 12 analysis concluded the economic impacts would be minor.
- 13 Benga's 2016 analysis conducted by Nichols concluded
- 14 low magnitude for all economic impacts except for one,
- which concluded to be moderate in magnitude.
- And then in Benga's most recent analysis, which
- 17 Benga admitted an error in construction employment,
- 18 Benga's estimates for several economic impacts were
- 19 reduced substantially. And so Benga's conclusion of
- 20 major economic benefits is not supported by the
- 21 evidence, including its own evidence.
- 22 Next slide, please.
- 23 Finding Number 5 concerns the results of my
- 24 preliminary cost-benefit analysis and casts doubt on
- 25 the public interest value of the project.
- 26 Excuse me. I believe I have a cold, by the way,

- 1 not anything else.
- 2 The objective of impact assessment is to inform
- 3 decision-makers so that they can make a final decision
- 4 about whether or not the project's in the public
- 5 interest and whether any adverse effects of the project
- 6 are justifiable. Therefore, information is needed on
- 7 the project's benefits and the project's adverse
- 8 effects. Economic impact assessment done right informs
- 9 decision-makers in both respects. Cost-benefit
- 10 analysis is the standard method in economics to add up
- 11 positive and negative impacts and inform with respect
- 12 to the public interest value of a project.
- Now before the Panel, I conducted a preliminary
- 14 cost-benefit analysis. I say "preliminary" in that I
- 15 used readily available data and focused the assessment
- on what seemed to be the key factors. My analysis is
- 17 but an initial exploration of the project's net social
- 18 value. The scope of factors covered included coal
- 19 production, coal price, capital, and operational costs,
- 20 and greenhouse gas emissions. All the inputs to my
- 21 model, including discount rates, came from either Benga
- 22 or Environment Canada.
- 23 Because benefits and costs will occur over a long
- 24 time period and because people discount future benefits
- 25 and costs, I discounted the future benefits and costs,
- 26 and I used two approaches: A single uniform rate for

1		all impacts and a dual-discounting approach in which
2		market impacts are discounted at a rate reflecting
3		private expectations and non-market impacts, in this
4		case, associated costs of carbon associated with
5		greenhouse gas emissions, which are discounted in this
6		dual-discounting approach using a rate reflecting
7		people's tendency to discount environmental goods much
8		less.
9		Because of uncertainty in several key factors
10		underlying the project's value to society, I conducted
11		a sensitivity analysis exploring different price, cost,
12		discounting, and social costs of carbon scenarios.
13		Next slide, please.
14		THE COURT REPORTER: Excuse me. Can I get you to
15		slow down a bit, please.
16	A	DR. JOSEPH: So that the Panel can have a
17		clearer idea of what went into the model, I present
18		this table. One can see the price scenarios assumed,
19		the different price scenarios, the discount rates, the
20		costs, and the different social costs of carbon
21		scenarios, and you can see where I got the various
22		inputs. For consistency with earlier discussions, I
23		presented the coal prices in US dollars, but project
24		costs are presented in Canadian dollars.
25		All the information is filed in my report.
26		Now, I note that I have used \$135 US per tonne,
Ī		

- 1 which is the price presented in Benga's 2019 study by
- 2 accountant Grant Thornton.
- 3 Next slide, please.
- 4 Here are the results of my limited-in-scope
- 5 cost-benefit analysis. And please note, there is a
- 6 typographical error. In the leftmost column, where it
- 7 says "\$140 per tonne", it should say "\$135 per tonne".
- Now, each row represents a scenario with different
- 9 coal price, capital costs, social cost of carbon, and
- 10 discounting inputs. The results raise the question
- 11 about whether the positive will result in a net benefit
- 12 to society.
- 13 And you can see that the results are highly
- 14 contingent upon future coal prices, capital costs,
- 15 social costs of carbon, and the discount rate.
- Green numbers in the rightmost column signify a
- 17 net positive value for society, and red numbers signify
- 18 net costs for society.
- 19 Please note, the issue here is not how many green
- 20 numbers there are, as I will explain, or compared to
- 21 red numbers, as I will explain in the next slide,
- 22 please.
- 23 The key takeaways from this preliminary analysis
- 24 are that a positive net-present value is not robust
- 25 but, instead, highly contingent upon the key model
- 26 inputs.

- 1 And we have good reason to expect that more
- 2 pessimistic results are more realistic, and this is
- 3 why. Coal market forecasts are very pessimistic
- 4 towards prices, as I've already discussed. I've
- 5 also -- in listening to the hearing over the last few
- 6 days, I've learned that the mine gate price, the price
- 7 that Benga will receive, is lower than the price being
- 8 used as the index price, so lower than the 135 or
- 9 \$140 per tonne, for example.
- 10 Secondly, climate change science is continually
- 11 coming up -- coming to be more and more alarming in its
- 12 conclusions, meaning that the social costs of carbon
- 13 are getting higher and higher. The costs to society of
- 14 releasing carbon into the air are growing.
- 15 My initial estimate is that the social cost of
- 16 carbon in this project range from between 210 million
- 17 and 1.6 billion, but these are based off of 2016 social
- 18 costs of carbon, so these numbers are probably
- 19 underestimates.
- Note also that these estimates of the social costs
- 21 of carbon in my model results do not include rail in
- 22 Canadian-range shipping emissions associated with the
- 23 project, which, I understand, are in scope according to
- 24 the terms of reference for this project -- or for this
- 25 assessment.
- 26 Major project costs almost always rise as well as

1		projects going from initial engineering to one of
2		construction. And my preliminary analysis is not
3		complete because it does not include various other
4		environmental, social, and other adverse effects.
5		Therefore, the low and negative net present values
6		shown within the orange circle would seem to be the
7		most realistic. Thus the results of my preliminary
8		analysis suggests this project has little to no
9		project or, sorry, little to no public interest
10		value.
11	Q	Dr. Joseph, before we move on to your conclusion, you
12		mentioned you used the 2016 social cost of carbon.
13		Where did you get that from?
14	A	That's from Environment Canada. That's the to my
15		knowledge, the latest publication from the Canadian
16		government on what they deem to be the official cost of
17		carbon to be used in statements.
18	Q	Thank you.
19	A	The last slide, please.
20		So in conclusion, the faulty methodology used by
21		Benga leaves us without a clear understanding of the
22		net economic benefits; Number 2, gaps in Benga's
23		assessment means that we have incomplete information;
24		Number 3, Benga's assessment is a black box, and so we
25		can't validate their conclusions; Number 4, Benga's own
26		conclusions are contradictory. Benga's conclusion is

1		not supported by its own evidence; Number 5, my
2		preliminary cost-benefit analysis suggests the project
3		poses little, if any, net benefit to society or, to put
4		another way, little, if any, public interest value.
5		More appropriate analysis seems warranted so that,
6		in the words of the University of Alberta Business
7		Professor Emeritus Allan Warrack, only good projects
8		get built, and bad projects don't get built.
9		Thank you for hearing my evidence.
10	Q	Thank you, Dr. Joseph.
11		MR. FITCH: Mr. Chair, I will now turn it
12		over to Ms. Okoye.
13		MS. OKOYE: Thank you, Mr. Fitch.
14		John Thompson Mr. Thompson, are you there?
15		MR. THOMPSON: I'm here. I have no idea
16		where the why the video's not working.
17		MS. OKOYE: Zoom Host, can you please
18		assist? There we go. Perfect. Now we can see you,
19		Panel Chair, you have before you Mr. Thompson. He
20		reviewed the socioeconomic impacts of the project on
21		behalf of the Coalition of AWA and Grassy Mountain
22		Group.
23		If I may ask Madam Court Reporter to swear him in
24		or affirm.
25		THE COURT REPORTER: Do you swear or affirm?
26		MR. THOMPSON: Affirm.
I		

1		JOHN THOMPSON, Affirmed
2		Direct Evidence of Coalition of Alberta
3		Wilderness Association and Grassy Mountain
4		Group (Purpose of Project, Visual Aesthetics,
5		Alternative Means, Land and Resources Use,
6		Socioeconomic Effects, Historic Resources)
7		MS. OKOYE: Thank you, Madam Court
8		Reporter.
9	Q	MS. OKOYE: Mr. Johnson Thompson,
10		sorry, I'm referring you to your curriculum vitae that
11		is filed starting at PDF 367 of CIAR 553 and your
12		report entitled "Grassy Mountain Coal Project Critique
13		of Evidence Related to Socioeconomic Effects and
14		Economic Benefits", dated September 20, 2020, starting
15		from PDF 346 of CIAR 553.
16		Were these documents prepared by you or under your
17		direction or control?
18	A	MR. THOMPSON: They were.
19	Q	Are there any changes you would like to make to the
20		document?
21	A	No, there are none.
22	Q	Are they accurate, to the best of your knowledge and
23		belief?
24	A	They are.
25	Q	Do you adopt your report as part of your evidence in
26		this matter?

1	A	I do.
2	Q	Mr. Thompson, do you acknowledge that you have a duty
3		to provide opinion evidence to the Panel that is fair,
4		objective, and nonpartisan?
5	A	Yes, I'm well aware of that.
6	Q	So would you please provide the Panel with a brief
7		summary of your professional qualifications and
8		experience?
9	A	So I've been doing socioeconomic impact assessment
10		before it was even before it was even a discipline.
11		I was in grad school when the first requirements for
12		assessment were were started. I helped write the
13		procedures for the Government of Ontario back in the
14		'70s. I submitted and presented my first environmental
15		assessment before a panel in 1978. That was Site C
16		Peace River Version 1.
17		I've spent most of my career working as a
18		consultant. However, I spent seven years as a senior
19		economist for Alberta Environment, at which time I
20		actually got to help write parts of a EPA [phonetic]
21		related to environmental impact assessment.
22		I then spent seven years with the Natural
23		Resources Conservation Board. I was the senior
24		economist/social scientist for the board and eventually
25		became the director of board reviews.
26		So during that time, I have been in your spot.

1 I -- I've supported a number of both NRCB, joint NRCB, 2 SEIA, and also Alberta Energy and -- ERCB SEIA-type 3 panel reviews. So I'm well aware of the -- the need for good information. 4 The last 15 years or so, I've been working back as 5 6 a consultant doing a lot of environmental impact 7 assessment work. I've worked for AMEC. I was a key witness for the Northern Gateway 8 Stantec. 9 pipeline application on the socioeconomic matters. 10 I quess if you look at my resumé, you'll see I have worked on nine different mining projects in the last 11 12 few years. 13 However, 40 years ago, I wound up looking at a 14 coal mine application for the Crowsnest Pass. 15 case, I wound up doing a benefit-cost analysis, a financial impact assessment, and a socioeconomic impact 16 17 assessment. So this is kind of history repeating itself. 18 The other interesting piece was that 50 years ago 19 20 last summer, my first job between first- and 21 second-year university was working at the coal mine at 22 Grande Cache. So that's a -- just a summary. 23 Thank you, Mr. Thompson. 24 Would you please provide the Panel with an overview of your report? 25 26 Α I've got a brief presentation that I'd like to

- 1 read. I want to thank the Panel for allowing me to
- 2 sort of delay things. I had shoulder surgery last
- 3 week, and I'm still recovering, and it's going to be
- 4 awhile, so I've taken the time to write some things
- 5 down just to make sure that I get it all there.
- 6 So I just want to note that my appearance here is
- 7 a first for me. I've been an expert witness for
- 8 applicants. I've been, you know, working for review
- 9 panels, but it's really the first time I have been a
- 10 consultant for an applicant.
- 11 So one of the things that I need to say at the
- 12 outset is that I'm neither for or against the project.
- 13 That's not my job. That's yours. My role in
- 14 this -- in this hearing, to my way of thinking, is that
- 15 I am there to examine the socioeconomic evidence
- 16 provided by the applicant and others to determine
- 17 whether that evidence of sufficient depth, breadth, and
- 18 quality for -- for the Joint Review Panel to be able to
- 19 make a defensible public interest determination at the
- 20 end of the process.
- I see my role in this process as being similar to
- 22 your technical staff, but the one thing I do bring is
- 23 more than 40 years of experience doing this.
- As I've been reading through the transcripts for
- 25 the last couple of days and again today, I must realize
- 26 for people who are not trained as economists, the

- 1 discussion must sound a little bit academic and loaded
- 2 with jargon that probably confuses rather than
- 3 clarifies, and I'm going to try and resolve this a bit
- 4 today.
- 5 For the presentation, I'm not going to review the
- 6 content of my submission contained in CIAR 553. I
- 7 think you've got technical staff that are quite capable
- 8 of going through and reviewing that stuff and advising
- 9 you on what it means and what its implications are.
- 10 Instead, I think it would be helpful for me to
- 11 revise the discussion about economic impacts and
- 12 benefits at a high level so that the Panel can come to
- its own understanding about the right metrics for
- 14 describing project benefits.
- I should note, this is not a new discussion. It
- 16 tends to come up as part of every recent hearing, and,
- 17 in my opinion, review panels and their staff have yet
- 18 to get it right.
- 19 So at the end of this process, the Joint Review
- 20 Panel is expected to make a determination as to whether
- 21 or not -- under what conditions the project is in the
- 22 public interest. If the Panel is to be able to make a
- 23 proper determination of the public interest, it must be
- 24 comfortable that the evidence shows that the full range
- of project benefits exceeds the full range of project
- 26 costs, most of which focus on adverse environmental

- 1 effects.
- While there's ample evidence on how adverse
- 3 environmental effects are to be described and
- 4 characterized, there is no such guidance on the
- 5 appropriate means for characterizing benefits.
- 6 So what constitutes a project benefit? Well,
- 7 Section 6 of CIAR 503 provides a summary of what Benga
- 8 understands the project -- the benefits of the project
- 9 to be. These two benefits are -- the so-called
- 10 benefits are taken from two sources of information:
- 11 One, their financial feasibility that they -- they
- 12 prepared, and the second is the socioeconomic impact
- 13 assessment prepared by Nichols.
- 14 So let's start with the financial feasibility
- 15 assessment. As we heard on Friday during
- 16 cross-examination, the final -- financial feasibility
- 17 model is the source of information for the estimates of
- 18 the coal royalties and corporate income taxes that
- 19 would be paid by Benga. These are noted as project
- 20 benefits.
- 21 According to Benga, the model has not been updated
- 22 since 2015. It incorporates various assumptions about
- 23 potential revenues which are based on that assumed
- 24 price of 140 US per tonne, and there is estimated
- 25 construction and operating costs.
- The accuracy of the construction costs estimate

- 1 was questioned during a cross-examination, but Benga
- 2 did not provide a clear answer, noting that for some
- 3 elements of the project, the confidence end of it was
- 4 quite high, plus or minus 20 to 25 percent, while the
- 5 confidence in the cost estimate for the earthworks was
- 6 much less reliable.
- 7 The financial feasibility was not filed as part of
- 8 the application, but this is typical because it may
- 9 contain propriety information that applicants may not
- 10 want to be publicly revealed. As was noted on Friday,
- 11 Mr. Houston indicated that it was not appropriate for
- 12 detailed information on expected taxes to be presented
- 13 with the hearing.
- 14 He also noted that he did not have the results of
- 15 the financial model in front of him, and he did not
- 16 exactly -- know exactly when the mine would achieve
- 17 payback.
- 18 So under the benefits list, the applicant is
- 19 asserting that the project will benefit the Province of
- 20 Alberta through the payment of royalties on coals in
- 21 the amount of \$195 million over the life of the project
- 22 or an average of \$30 million per year.
- 23 During cross-examination, it was noted that
- 24 30 million per year is five times more than is
- 25 currently being paid by all the other metallurgical
- 26 coal mines operating in Alberta.

- 1 In 2019, companies produced 5.2 tonnes of
- 2 bituminous coal and paid only 6.4 million in royalties.
- 3 Benga countered by suggesting that not all bituminous
- 4 coal is the same and not all is sold as thermal coal.
- 5 While Benga is correct in this assertion, further
- 6 reading of the 2019 annual report on coal production by
- 7 the Government of Alberta shows that of the four
- 8 companies that did mine bituminous coal in Alberta in
- 9 2019, three of them, in fact, were producing
- 10 metallurgical coal. So unless Benga can show that its
- 11 coal is that much better than the -- than the
- 12 metallurgical coal being produced by the Vista mine,
- 13 the Teck mine, and the -- the Grande Cache mine or it's
- 14 able to produce that coal at a much lower cost than its
- 15 competitors, their claim of \$30 million in annual
- 16 royalties seems unrealistically high. A more
- 17 reasonable number, based on production and amounts
- 18 being paid by existing companies, would probably be in
- 19 the order of 5 million a year.
- 20 Secondly, the applicant asserts that the project
- 21 will benefit the Government of Alberta through the
- 22 payment of corporate income taxes in the amount of
- 23 126 million over the life of the project or about
- 24 \$19 million per year. This was also raised on Friday,
- 25 and this information also comes from the financial
- 26 feasibility assessment, and the key point to that

- 1 discussion was that taxes and royalties are paid after
- 2 the project is starting to generate annual revenues
- 3 that cover all of the previous costs.
- 4 So what I would suggest is, if the royalty numbers
- 5 are that far out of whack, I don't think you can have
- 6 any confidence in the income tax numbers either 'cause
- 7 they're both projected on an assumed stream of net
- 8 revenues. So I think when you look at those two
- 9 elements, I don't believe that the evidence supports
- 10 their numbers.
- 11 The second source of information that Benga used
- 12 to describe project benefits was the socioeconomic
- 13 impact assessment. This study was the source of
- 14 purported benefits on GDP, employment, and income.
- On Friday, there was considerable discussion of
- 16 whether project impacts can be considered as project
- 17 benefits. On page 777 of the transcript, Mr. Shewchuk
- 18 indicated that the terms of reference called for a
- 19 description of project impacts, which he referred to as
- 20 a measure of economic activity.
- 21 Part of the problem with the confusion between
- 22 impacts and benefits is that the terms of reference
- 23 routinely call for a discussion of project impacts.
- 24 "Impacts" is the term that's used.
- 25 The problem is that people use that as being the
- 26 basis for saying we need to do an economic impact

- 1 study, and then proponents typically turn around and
- 2 assume those to be benefits, and that's just plain
- 3 wrong.
- 4 On page 791 of the transcript, Mr. Shewchuk also
- 5 states that he was commissioned to calculate economic
- 6 impacts and not to calculate economic benefits.
- 7 And on page 788, he notes that the terms of
- 8 reference did not call for an assessment of net
- 9 benefit.
- 10 So part of the difficulty in all of this
- 11 discussion is confusion in the terms of reference.
- 12 This has been going on for years, and it's -- it's part
- of the reason that, going forward, both SEIA and the
- 14 provincial regulators across the country need to get
- 15 clarification on this very issue.
- 16 So what's the difference between an economic
- 17 benefit and an economic impact? As Mr. Shewchuk
- 18 pointed out on page 786, it's certainly not the first
- 19 time the question has been raised during the project
- 20 review, and as I said, there's still incredible
- 21 confusion. The mechanics behind economic impact
- 22 estimates lie in Statistics Canada's input-output
- 23 model. It's a complicated model, and what it does is
- 24 examine the flows of goods and services on an industry
- 25 basis within an economy based on for -- data for a
- 26 particular year.

So it's kind of like a cookbook. 1 To operate a 2 coal mine, you'll need a certain quantity of labour, 3 which is considered a direct impact, and then certain 4 quantities of goods and services, like diesel, fuel, electricity, contract maintenance services, and so on. 5 6 And to obtain this fuel, for example, you'll have 7 to pay transportation costs, refining costs, and the cost of the raw crude, which includes an allowance for 8 9 seismic and exploration as well as for drilling and 10 production. These are termed "indirect effects". model also shows how the employment income associated 11 with direct and indirect effects would be spent on 12 13 consumer goods, and these are called "induced effects". 14 So when you use the model -- and I've done it frequently -- you pose the question: 15 If I were to operate another coal mine and it cost 'X' million 16 17 dollars per year to operate, how will the other parts 18 of the economy be affected? What the model does is it shows how your expenditures would flow through the 19 It's kind of like COVID tracing on dollar 20 system. bills. 21 22 So input-output metal -- models simply measure how 23 many flus -- flows through an economy and all of the pieces that it would touch, but it didn't say whether 24 25 those are net additions. They're not benefits. 26 So a benefit in one's way of thinking -- and there

- 1 was some interesting discussion on Friday about the
- 2 difference between a technical discussion of a benefit
- 3 and the common-sense discussion of a benefit, and I can
- 4 assure you, they really are both the same. It's a
- 5 question of profits or net gains, of which royalties
- 6 and taxes would be a part.
- For an impact to be a benefit, the amount of an
- 8 item purchased would have to exceed the capacity of the
- 9 current economic system to supply that item, thereby
- 10 triggering new investment, new production, and new
- 11 employment. But that never happens.
- 12 The only case that I could see that came close was
- when you started looking at the impacts of the Northern
- 14 Gateway and Trans Mountain Pipeline explanation -- or
- 15 projects where the whole question of where do you get
- 16 your steel pipe from was -- was raised. If they had
- 17 gone to solely Canadian sources, they would have had to
- 18 drastically expand pipeline production capacity. That
- 19 would have triggered a whole round of subsequent
- 20 investment in new facilities and new employment and so
- 21 forth, and those could probably have been counted as
- 22 benefits.
- 23 But within the sorts of things and -- that -- that
- 24 you need to run a coal mine and, certainly, the dollar
- 25 values associated with those things, you are not going
- 26 to get those changes in -- in output.

For example, the amount of diesel fuel needed to 1 2 run the mine would just come out of current production 3 capacity, and you wouldn't see a trigger -- or it 4 wouldn't trigger an expansion refinery, crude oil production. 5 6 So to be able to claim that somehow your 7 expenditure is going to benefit the system by having this ripple effect through the economy is just plain 8 Equipment is taken out of inventory as a --9 10 fuel, so you are not necessarily adding anything to 11 economic output. You are just moving things around. 12 Again, this problem has -- has been around a long 13 time, this confusion. During the Northern Gateway 14 hearings, many interveners argued that economic impacts were not benefits. The Panel accepted this argument 15 and requested that a project benefit-cost analysis be 16 done. 17 That analysis was completed and clearly showed 18 major net economic benefits. But in its decision 19 20 report, the Panel justified the project based on its 21 economic impacts, not benefits. Incredibly confusing. 22 During the view of the Trans Mountain pipeline project, interveners also pointed out that impacts 23 24 could be -- not counted as benefits, but the review 25 panel chose not to accept that argument, noting that 26 economic impacts have become the accepted measure of

- 1 project benefits.
- 2 The bottom line is: Past panels have been wrong
- 3 in their interpretations of impacts versus benefits,
- 4 and, as I say, it goes right back to the terms of
- 5 reference -- or reference for these studies.
- I note that the three of you are not economists.
- 7 In fact, I've run into engineers who thought they were
- 8 economists, and they're probably the most dangerous
- 9 sort. So you are going to have to rely on your
- 10 technical support specialists on how to decipher my
- 11 submission, the submission of Dr. Joseph, as well as
- 12 the application. But I would strongly recommend that
- 13 the Panel seek advice on this issue of impacts versus
- 14 benefits from other economists and, specifically, the
- 15 people at Statistics Canada who have developed and run
- 16 those input-output models that were the sources of the
- 17 multipliers used by the applicant.
- This issue is too important to be ignored, and on
- 19 a go-forward basis, I would hope that the review
- 20 agencies would work together to develop a standard and
- 21 acceptable method for assessing economic benefits.
- 22 That being said, it's simply incorrect for the
- 23 applicant to say, as it does in CIAR 503, the project
- 24 impacts on Alberta GDP, employment, and income are
- 25 economic benefits of the project. They are not,
- 26 although there may be some elements of benefits

- 1 included in those impact numbers. This would require
- 2 further analysis.
- 3 However, the extent to which construction and
- 4 operations would increase economic activity in Alberta
- 5 or in the region has not been calculated, and so it
- 6 would be misleading for the Panel to interpret the
- 7 impact estimates as being project benefits.
- 8 So if you go back now and look at that benefit
- 9 information presented in Section 6.0 of CIAR 503, which
- 10 is Benga's suggestions as to project benefits, it is my
- 11 opinion that none of the applicant's conclusions about
- 12 project benefits can be supported by the evidence.
- I believe that the Panel can take no comfort
- 14 whatsoever that the supply of evidence provides a
- 15 realistic or defensible description of project
- 16 benefits, and for that reason, it will never be able to
- 17 make a clear -- determine of -- of the public interest.
- 18 So I think, folks, you've got a problem. You can
- 19 get through this entire process, and you're faced with
- 20 having to do a trade-off analysis where you are going
- 21 to have great detail about adverse environmental
- 22 effects, and the benefits side is so fuzzy that you are
- 23 not going to be able to move forward.
- 24 The direct evidence I submitted to Panel that
- 25 forms part of CIAR 553 contains a lot more examples of
- 26 how the applicant's socioeconomic evidence of reporting

- 1 project benefits are confusing, unreliable,
- 2 unreproducible and misrepresent the likely
- 3 socioeconomic effects that would result from
- 4 constructing the project. Many of these are the same
- 5 points that Dr. Joseph has just made.
- 6 And I'm presuming that your technical staff is
- 7 going to go through these and carefully review and
- 8 consider those arguments, so I'm not going to bother
- 9 going into them.
- 10 There is one major item that I do think needs to
- 11 be discussed, and that's the applicant's assumption
- 12 that a large portion of the operational workforce will
- 13 choose to live in BC. Although the applicant never
- 14 quantifies the percentage or number of workers who
- 15 choose to live in BC, information on how they see the
- 16 population distribution suggests that about 40 percent
- 17 of operational workers are likely to choose to live in
- 18 BC.
- 19 This assumption was questioned during
- 20 cross-examination on page 825, and the response seems
- 21 to suggest that this was based on the observation that
- 22 some people working in the BC mines have chosen to live
- 23 in Alberta, so I quess by inference, the opposite must
- 24 be true, and that the ambition of the Crowsnest
- 25 Municipality captured population growth.
- 26 It was also noted that the assumed distribution of

- 1 the operational workforce was subject to uncertainty
- 2 for various economic and social reasons, because,
- 3 basically, Benga has no control over where people will
- 4 live.
- 5 While I would expect that some members of the
- 6 operational workforce ultimately choose to live in BC,
- 7 I see no compelling evidence that suggests it would be
- 8 as high as 40 percent. Furthermore, that 60-40 split
- 9 is convenient, because by splitting the workforce
- 10 between BC and Alberta, it allows the applicant to
- 11 conclude that the resulting changes in population and
- 12 their demands for housing, infrastructure, and services
- 13 would not be significant on either side of the border.
- In my approach -- opinion, the better approach
- 15 would have been a worst-case scenario which would see
- 16 all of the workers and their families living in the
- 17 Crowsnest Pass, and I would then have developed the
- 18 appropriate mitigation strategies for addressing those
- 19 effects.
- 20 We asked Benga during cross-examination on
- 21 page 826 about whether it had considered such a
- 22 possibility, and the response we received -- but this,
- 23 you know, presented a hypothetical question that isn't
- 24 practical. Yet I would see that the assumed
- 25 60-40 split as being equally hypothetical.
- 26 Based on what I've read, I don't think that Benga

- 1 seriously tried to understand the potential magnitudes
- 2 of the effects that its project could have on the
- 3 population, services, and infrastructure of
- 4 Crowsnest Pass or has developed the appropriate
- 5 strategies for managing those impacts. A population
- 6 increase of 20 percent over two or three years would
- 7 not be not significant.
- 8 A couple of things surprised me during the
- 9 evidence that was presented, specifically, on last
- 10 Friday.
- 11 Based on my review of the original consultant's
- 12 report -- and that's in CIAR 42, and the impact summary
- in Addendum 6, CIAR 70 -- I understood that impacts on
- income, employment, and government revenue were all
- 15 classified as positive in terms of direction and not
- 16 significant. These classification terms appear in both
- 17 text and tabular form and were consistent throughout
- 18 the assessment.
- 19 However, during cross-examination -- and this is
- 20 on page 831 -- Mr. Shewchuk indicated that on page 319
- 21 of CIAR 89 his description of "significance" only
- 22 applies to adverse effects. What he basically said is
- 23 an impact, if it's to be judged significant, must be
- 24 high in magnitude, long term -- and long term and
- 25 significant.
- 26 So that represents a major change in how the whole

concept of significance was developed in the first stages of the application and how it's being interpreted now.

Now, my understanding that -- under the APEA, not only do you have to assess potential positive impacts; you are also expected to assess the significance of those positive effects. So based on the most recent information, it appears now that the applicant has chosen not to describe the potential significance of their -- their effects except in -- only if they would be considered adverse.

So I don't know that this leaves you in a good spot because you don't know whether the applicant is changing -- is claiming those beneficial impacts to be significant or not.

So just for fun, and to perhaps help the Panel, I took a quick look at the construction impacts of the project and specifically Table 4.1 of the consultant's report. And I was just wondering if we could bring that particular document up on Zoom, please.

- 21 Q That would be CIAR Number 42, consultant report
- 22 Number 11?
- 23 A Correct.

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- 24 Q Mr. Thompson, if you could -- oh, the PDF page number?
- 25 A I don't have the PDF number.
- 26 O I'll pull that up.

1 But if you search for Table 4.1. That's the one. Α So this table is important, and -- and if you look 2 3 at the -- go back and look at the transcripts on Friday, what you hear is the applicant basically saying 4 5 this becomes the starting page -- place for the whole 6 economic assessment of construction. 7 And if you look at the application, you'll discover that at no point except for here does the 8 9 applicant ever try to quantify the extent to which the 10 project might benefit the existing population of the 11 region. 12 And what I want you to look at specifically is the 13 Those are the expected expenditures within RSA column. 14 the regional area, which includes Crowsnest Pass and 15 Sparwood, and it totals \$4 million over two years, or 16 2 million bucks a year. So that's what they would be 17 contributing. That might be considered a benefit. Is it significant? Well, I looked at the 2016 18 census information, and I see that 3,180 residents of 19 20 Crowsnest Pass, that's just the Alberta side of the 21 RSA, reported an average of \$53,400 in employment 22 income, which represents a total of \$170 million per 23 year. So if you look at \$2 million on an annual basis of 24 25 local purchasing -- and that's probably on the high 26 side because materials and equipment only includes a

- 1 little bit of labour -- that \$2 million is absolutely
- 2 insignificant compared to what is currently coming into
- 3 the community that -- as employment income.
- 4 So I think the simple answer is they may not
- 5 have -- they may have claimed in their first part that
- 6 it was not significant, changed their description of
- 7 what "significant" and "not significant" means, but I
- 8 think the evidence is pretty clear that -- for
- 9 construction anyway -- what they're talking about is
- 10 really an insignificant contribution to the existing
- 11 region.
- 12 The second thing I was surprised to hear was that
- 13 the most recent set of impact numbers which are
- 14 reported in CIAR 313 were generated using a custom run
- of the Stats Canada input-output model. Now, this
- isn't actually mentioned anywhere.
- 17 If you read very carefully that piece of CIAR, it
- 18 starts by saying the previous versions were -- were
- 19 based on multipliers, and that we generated another set
- 20 of numbers.
- 21 So this whole idea of a custom run comes as
- 22 completely new information for me. So in my written
- 23 submission I indicated that I could not reproduce the
- 24 impact estimates contained in the report using Stats
- 25 Canada's published multipliers for 2016, and I guess
- 26 now I know why I couldn't match them.

- 1 However, the use of a custom-model run raises its
- 2 own issues. Having done these on numerous occasions, I
- 3 know the challenges of developing the appropriate input
- 4 assumptions; and without seeing what assumptions were
- 5 used or how they were interpreted, I'm not in a
- 6 position to be able to advise the Panel whether or not
- 7 the revised estimates are realistic or not.
- 8 I do note that the revised evidence has now
- 9 concluded that total direct construction employment
- 10 would total 211 person-years, which, according to
- 11 Mr. Shewchuk on page 817, was the result of Stats
- 12 Canada adjusting their numbers downwards.
- 13 Could we bring that Table 4.1 back, please?
- Now, what's interesting is this table contains
- 15 information on labour cost. So you'll see that over
- 16 two years, the applicant expects to spend \$137 million
- 17 on labour. Now, \$137 million is going to, according to
- 18 them, buy you 211 person-years of labour.
- Now, I'm an old guy and semiretired, but if you do
- 20 the math, I'd love to work on this construction project
- 21 because what they're suggesting is that they would be
- 22 paying an average of \$649,000 in labour income for each
- 23 person-year of employment. That's crazy. That doesn't
- 24 work at all. So it tells me that there's something
- 25 wrong with how the modelling was done.
- In fact, the more reasonable estimate of average

- labour cost would probably be in the order of \$150,000
- 2 a year. So if you divide the \$137 million shown here
- 3 by an average of 150,000, you actually get 910
- 4 person-years, which, coincidently, happens to be what
- 5 the applicant said its construction labour requirements
- 6 would be in the original consultant's report. In that
- 7 one they claimed 195 people at peak construction
- 8 period.
- 9 Well, I hate to say it, but if you have 900 people
- 10 person-years of employment, your peak is on the order
- 11 of 400. Well, that would make sense, because it
- 12 explains why you're building a camp of 228 rooms and
- then putting overflow in commercial accommodation in
- 14 the buildings.
- So the bottom line is this information is horribly
- 16 consistent, and it just keeps getting worse every time
- 17 that they look at it.
- And so, again, my conclusion is that, based on my
- 19 reading of the application and the applicant's hearing
- 20 evidence, what you have got is just too inconsistent to
- 21 provide a clear or defensible understanding of the
- 22 project's socioeconomic effects or benefits, and that's
- 23 going to cause you a real problem at the end of all of
- 24 this when you have to try and balance that off against
- 25 adverse effects.
- 26 Thank you.

1	Q	Thank you, Mr. Thompson.
2		I believe that will be all from you, Mr. Thompson?
3	A	Correct.
4		MS. OKOYE: Mr. Chair, he's available for
5		cross. Or both him and Dr. Joseph are available for
6		cross.
7		THE CHAIR: Okay. Thank you.
8		So, yes, so the plan, I think, is if people have
9		questions either for Dr. Joseph or Mr. Thompson, now
10		will be the time.
11		So just start with any participants other than
12		Benga who believe they are adverse in interest have
13		questions for these two witnesses?
14		Hearing none, Benga. Mr. Brinker or Mr. Ignasiak,
15		any questions for these witnesses?
16		MR. BRINKER: Yes, Mr. Chair, we do have a
17		few questions. We are just we heard some new
18		evidence brought forward there, and we are just
19		thinking if we had if we had ten minutes, we would
20		be able to streamline our questions and proceed more
21		efficiently, if that would suit the Panel.
22		THE CHAIR: Sure. Let's take a short,
23		ten-minute break. It's 4:40. We will resume at 4:50.
24		(ADJOURNMENT)
25		THE CHAIR: Mr. Brinker, are you ready to
26		proceed?

- 1 MR. BRINKER: I am, Mr. Chair, thank you.
- 2 Mr. Brinker Cross-examines Dr. Joseph (Livingstone
- 3 Landowners Group) and Mr. Thompson (Coalition of
- 4 Alberta Wilderness Association and Grassy Mountain
- 5 Group)
- 6 Q Good afternoon. I suppose it's good evening now,
- 7 Mr. Thompson, Dr. Joseph. Coleman Brinker speaking
- 8 here. I'm a lawyer with Osler acting on behalf of
- 9 Benga. I have a few questions to ask of each of you.
- 10 Beginning with you, Dr. Joseph. Can you hear me
- okay?
- 12 A DR. JOSEPH: Yes. You?
- 13 Q You sound good. Sounds great.
- 14 A Good.
- 15 Q Now, you covered this in your direct evidence, but I
- just want to make sure we're on the same page here.
- 17 Dr. Joseph, you prepared the document titled
- 18 "Review of Grassy Mountain Coal Mine Economic Impact
- 19 Assessment attached to the submission filed by the
- 20 Livingstone Landowners Group at CIAR 552; is that
- 21 right?
- 22 A I don't know the code number, but that is the title of
- 23 my report.
- 24 Q Okay. Did anyone else help you with preparing that
- 25 document?
- 26 A Yeah. As I said, Tom Gunton was a peer reviewer and

- 1 provided suggestions. I think that's even said at the
- 2 start of the document.
- 3 Q Right. So he just provided a few comments and then did
- 4 a review of it for you?
- 5 A I did the bulk of the work, but we had some
- 6 discussions.
- 7 Q Okay. Is -- Mr. Gunton's not on the Livingstone
- 8 Landowners panel today, is he?
- 9 A No.
- 10 Q Okay. Dr. Joseph, when you were -- when is it that you
- were retained by the Livingstone group to conduct your
- review of the socioeconomic impact assessment, or SEIA,
- for the project?
- 14 A If I recall correctly, it was in August we got started.
- 15 It might have been September. If you'd like, I can
- look in my files for the contract date.
- 17 Q Okay. August or September. And you submitted on
- 18 September 21st; I think that's about right?
- 19 A Just looking at the report now. That's -- it's dated
- 20 September 21st, yes.
- 21 O Yes. So you didn't have much time to review the
- 22 materials on the registry and draft your report; is
- 23 that right?
- 24 A Well, I -- I had a decent amount of time. Did I have
- 25 months and months? No.
- 26 O Okay. Once you were retained, did you have time to

- 1 review the entirety of Consultant Report Number 11
- 2 filed by Benga and found at CIAR 42 before completing
- 3 your report?
- 4 A Is that the 2016 Nichols report?
- 5 O Yes. That would be it.
- 6 A I focused -- I was asked and I focused on the economic
- 7 impact portion.
- 8 Q So just a portion of that -- that report?
- 9 A Yeah. I read the introduction and then focused on the
- 10 economic section. The latter section focuses on
- 11 housing and population and whatnot.
- 12 Q Okay. And did you have time to review any of the
- 13 addendums to the EIA that are available on the
- 14 registry?
- 15 A I was pointed to various addendums, yes, and so that's
- what I referred to in my presentation, but I looked at
- 17 later submissions. I think there was a March 2020
- 18 addendum that I looked at and an October 5th, 2020,
- 19 response submission that I looked at, for example.
- 20 O Okay. I think you do say in your report that you did
- 21 review Addendum 10 and part of Addendum 11. Does that
- 22 sound right to you?
- 23 A Yeah. Just looking at that part of the report right
- now. Yes.
- 25 O Sure. Did you review Addendum Number 5? That would be
- 26 CIAR Number 69.

- 1 A It's not written in my report that I reviewed it. I'm
- 2 not sure if I saw it subsequent to submitting my
- 3 report. I'm not following with the code, you know, the
- 4 CIAR. The CIAR code numbers.
- 5 Q Okay.
- 6 A I'm not sure if I have or not.
- 7 Q Were you -- so were you aware at the time of writing
- 8 your report of the information provided that -- in that
- 9 addendum with respect to updates for population
- 10 estimates, capacity for social and public services in
- 11 the area of the project?
- 12 A As I said, my focus was on the economic value
- components, so I wasn't looking at population and
- public services, et cetera, that you mention.
- 15 Q Okay. Did you review Addendum Number 8, CIAR
- 16 Number 89?
- 17 A Again, it's not listed here, and I'm not certain that I
- have.
- 19 Q If you reviewed it, you would have listed it in your
- 20 report; is that right?
- 21 A I certainly would have listed it in my report if I had,
- 22 yes.
- 23 O Okay. Have you since reviewed the cumulative effects
- 24 assessment in Addendum 8 as it relates to
- 25 socioeconomics?
- 26 A No. I was made aware of that. I think it came up in

- 1 hearings over those days, if I recall correctly, and so
- 2 I'm aware that -- that Benga did some cumulative
- 3 effects assessment after the initial submission.
- 4 Q Okay. Now, at the end of your report, this would be in
- 5 CIAR 552 at PDF 148, 149 -- no need to bring it up on
- 6 the screen, though -- you include a list of references
- 7 that you relied upon for your report. Is that right?
- 8 A Are you talking about Section 3 in my report starting
- 9 with (INDISCERNIBLE BACKGROUND NOISE).
- 10 THE COURT REPORTER: I am sorry?
- 11 O MR. BRINKER: Now, I believe -- so I'm
- 12 looking at CIAR 552, PDF page 148. Your reference is
- the heading. It's --
- 14 A I see, at the end of my document.
- 15 Q Page 15 of your report, yeah.
- 16 A Okay. I do see that reference list, yes.
- 17 Q Okay. Now, on that list I note that six of the
- 18 references you rely upon are authored by Joseph, first
- 19 initial 'C'. Are all those papers papers that you
- 20 wrote?
- 21 A Yes.
- 22 Q Okay. You relied on those papers for your review of
- 23 the project SEIA; is that right?
- 24 A Well, as you'll see, I referenced them in the report.
- I raised them to make certain points.
- 26 Q Right. Dr. Joseph, in your report that a cost-benefit

- 1 analysis -- or CBA for short -- in your opinion, is
- 2 better than an economic analysis or assessment for
- 3 informing public interest; is that right?
- 4 A Yes. It's the intention just to use a method from the
- field of economics to assess public interest that
- 6 absolutely cost-benefit analysis is a much better fit
- 7 than economic impact analysis.
- 8 Q Right. And I think you state that at least twice in
- 9 your report, and you cite two papers for that
- proposition both times. But both of them are 2020
- 11 papers by Joseph et al.
- 12 Are those papers that you wrote?
- 13 A Yes.
- 14 Q Okay.
- 15 A Yeah. Those are --
- 17 A Those --
- 18 0 Sorry?
- 19 A Those papers are new contributions to the impact
- 20 assessment literature. They reference and cover all
- 21 sorts of other literature from earlier offers.
- 22 Q Okay. Would it be fair to say that in your writings
- and in your evidence given in other proceedings, you
- have frequently promoted the use of CBAs over -- over
- economic impact assessments for assessing projects?
- 26 A Absolutely. As I think John Thompson has pointed out,

- this is a consistent problem, and that was the
- 2 rationale for both of those papers, those 2020 papers,
- 3 that the profession of an impact assessment and -- you
- 4 know, what's typically done has some problems with
- 5 respect to assessing economic impacts.
- 6 I think -- I would like to add to that. I think
- 7 the more important point is that we need to use
- 8 methodology that assesses net impacts. Conceivably,
- 9 there are even other methods other than cost-benefit
- 10 analysis.
- 11 Q Okay. And you have made that -- you made that point in
- the papers that you cite for the basis of this report;
- 13 correct?
- 14 A The point that there may be other methods, no. This is
- 15 a --
- 16 0 No?
- 17 A -- recent realization, listening to hearings this week,
- 18 actually, that the key point is moving beyond the
- 19 limitations of economic impact analysis and using some
- 20 methods at least that get at net impacts.
- 21 Q Okay. Now, Dr. Joseph, you conducted a limited-scope
- 22 CBA in your report contained in the Livingstone
- 23 Landowners' submission; is that correct?
- 24 A Yes.
- 25 Q Okay. And that that CBA has to be taken with a grain
- of salt given that it was done on such short notice; is

- 1 that fair?
- 2 A Yeah, and that's why I characterized it as limited
- 3 scope and preliminary. As I explained today, it
- 4 doesn't cover the full range of factors in a -- you
- know, if I had more time, then we would have explored,
- 6 you know, things like coal prices and project costs to
- 7 a much greater depth.
- 8 Q Right. So while acknowledging those limitations on
- 9 your CBA, you did produce a long list of different
- 10 possible scenarios or results based on the factors you
- 11 decided to include in your CBA; right?
- 12 A Yes.
- 13 O Yeah. So I counted 16 different scenarios in which you
- 14 calculated a net present value. Does that sound
- 15 correct to you?
- 16 A Yeah. That's because there are four -- yeah.
- 17 It's -- it's the product of varying the different
- 18 parameters, yeah.
- 19 0 Okay.
- 20 A 16. I haven't counted them. I could count them, if
- 21 you want me to verify the number.
- 22 Q I mean, if 16 sounds right to you, I -- give or take 1,
- doesn't really matter to me.
- 24 A 10, 11, 12, 13, 14, 15. 16, that's what I count to.
- 25 O Excellent. We were counting on the same note.
- 26 Now, ten of those scenarios resulted in positive

- 1 net present value; is that right?
- 2 A Four, five, six, seven, eight, nine. Ten. Yes, that's
- 3 what I count.
- 4 Q Okay. Now, I notice the majority of your lower and
- 5 negative net present value results come in scenarios
- 6 where you used dual discounting in the scenario.
- 7 You used double discounting in many of the
- 8 scenarios you ran in your CBA; is that right?
- 9 A Well, you can count -- let's see -- one, two, three,
- 10 four, five, six, seven. Eight. Half of them used the
- uniform approach, if I'm discounting the quote.
- 12 O Right. And it looks like the -- the dual discount
- approach that you decided to take for some of these,
- they seemed to be skewed a little bit down towards the
- lower net present value, NPV, and negative NPV; is that
- 16 fair?
- 17 A Yeah, that's fair. And you can also see some of the
- 18 rows in that table where the uniform-discount approach
- 19 was used, but you still get negative because of things
- 20 like price and cost and whatnot. (INDISCERNIBLE -
- BACKGROUND NOISE).
- 22 THE COURT REPORTER: Sorry, price, cost and ...?
- 23 A Whatnot. Apologies for going fast.
- 24 THE COURT REPORTER: Sorry, there's some feedback
- 25 coming from your end.
- 26 A Still some feedback, eh? I don't know. Has anyone

- 1 stopped? I can take off the headset, if you like.
- 2 THE CHAIR: I think we should leave the
- 3 headset on. There was a bit of buzzing. It might have
- 4 stopped. Go ahead, Mr. Brinker.
- 5 O MR. BRINKER: Sure.
- 6 Dr. Joseph, this dual discounting you decided to
- do, that means, essentially, that you discounted costs
- 8 and revenues in those scenarios of the CBA at different
- 9 rates; is that right?
- 10 A Well, that's incorrect. The dual-discount approach
- 11 applied a one rate for market impacts and one rate for
- 12 non-markets. So the social cost of carbon, the
- 13 greenhouse gas damage costs were --
- 14 Q Right.
- 15 A -- discounted at one rate, a rate consistent with
- 16 Environment Canada's discount rate for social costs of
- 17 carbon, and all the other impacts, which was just coal
- 18 revenue and project cost, were discounted at the rate
- 19 that Benga used.
- 20 O Okay. So you used -- you discounted cost and revenues,
- 21 revenues in those scenarios, at the same rates?
- 22 A The total revenue and project capital operational costs
- 23 were at one rate and the social costs of carbon were at
- a different rate in the dual-discounting approach.
- 25 Q Is that consistent -- is that approach consistent with
- 26 the best practice quidance provided by the Treasury

1		Board of Canada Secretariat's Canadian Cost-Benefit
2		Analysis Guide: Regulatory Proposals
3	А	Well, you raised a couple of important points there.
4		So number one, the dual-discounted approach is not
5		described in the Treasury Board of Canada Secretariat
6		document. But as you pointed out, that Treasury Board
7		of Canada Secretariat document is for doing what's
8		called regulatory impact analysis, which is
9		cost-benefit analysis of policy change, not
10		cost-benefit analysis of major projects.
11		Regardless, I've applied both approaches. I think
12		the key point of that analysis is even if you use the
13		uniform-discount approach, there's a good chance we're
14		going to see some negative or just low values because
15		the evidence seems to suggest future coal prices are
16		going to be low, project costs tend to be high, and
17		social costs of carbon are rising.
18	Q	Okay. Thank you, Dr. Joseph.
19		I do my next question I would like to take you
20		to your the PowerPoint presentation that you gave
21		today. I think it is filed as CIAR 778 on the
22		registry. I believe it is Slide 9 or PDF 9 on the PDF
23		copy.
24		Can I ask the Zoom host to bring up that slide?
25		Thank you.
26		Dr. Joseph, when you spoke to this slide, you said

- these are tables showing coal demand declining over
- 2 time. Can you point out on these tables where the word
- 3 "demand" appears?
- 4 A My apologies. Says "coal production". But production
- 5 and demand are generally related. I think I could,
- 6 with an undertaking, provide a coal demand --
- 7 THE COURT REPORTER: Sorry, I didn't catch the last
- 8 part. A coal demand?
- 9 A Yeah, so, apologies, I forget your name. Brinkman, is
- 10 that right?
- 11 Q MR. BRINKER: Oh, Mr. Brinker is fine.
- 12 A Brinker. Mr. Brinker pointed out that this slide talks
- about coal production, not coal demand.
- 14 Q Okay.
- 15 A And I'm saying that I have the entire spreadsheet for
- 16 this -- from the world energy outlook 2020. And if I
- 17 recall correctly, it's got coal demand rows in there as
- 18 well, and we could explore that, if you wanted.
- 19 Q That's okay, Dr. Joseph. That answers my question.
- Thank you.
- Now, I have a few questions now for Mr. Thompson.
- Mr. Thompson, can you hear me okay?
- 23 THE CHAIR: I think your mic is muted,
- Mr. Thompson.
- 25 A MR. THOMPSON: Yes, I can.
- 26 O MR. BRINKER: Great.

1 Mr. Thompson, you prepared the critique report of 2 the project's socioeconomic impact assessment attached 3 as Appendix O to the Coalition's submission at CIAR 4 553; is that correct? 5 Α It is. 6 Did anyone else help you in preparing your 7 report? I had it externally reviewed by a number of colleagues, 8 Α 9 but essentially the information is mine. 10 0 Okay. So you had it reviewed by colleagues, but no one 11 else helped in actually developing that -- the report? 12 No. Α Mr. Thompson, are there any errors in your 13 Okav. 0 14 report you would like to correct at this time? 15 Not that I'm aware of. Α You do a couple of calculations in your report 16 17 that I just want to double-check, see where you're 18 getting the numbers from. Can the Zoom host please pull up the Coalition's 19 submission CIAR 553 for the witness to see? 20 21 Mr. Thompson. PDF page 357. 22 So page 12 of your report, Mr. Thompson. could just scroll to the bottom, the bottom paragraph. 23 24 Mr. Thompson, I'm just looking at the numbers 25 here. You state that: (as read)

Revised information showed a population of

26

- 1 5,470 in 2021 for the Alberta portion of the
- 2 RSA in the base case go to 6,130 in 2021
- 3 under the application case, for an increase
- 4 of 633.
- 5 You see that?
- 6 A Yes.
- 7 Q Okay. Should that increase read 660, not 633? Are you
- 8 just subtracting 5,470 from 6,130?
- 9 A It should probably be rounded to 630, yeah.
- 10 Q Sorry. Do you mean it should read 660?
- 11 A I'd have to check my math, but --
- 12 Q Is it just the difference between 6,130 and 5,000 --
- 13 A Right.
- 14 Q -- 5,470; right? Okay.
- 15 A Yeah. That's -- that's correct.
- 16 Q Okay. Yeah. Just trying to clarify. So that was just
- 17 a small error in your report; right?
- 18 A Yeah.
- 19 Q Okay. If I can take you now to PDF 354 in the
- submission, so this is page 9 of your report. And,
- 21 again, at the bottom of the page, we are looking at the
- last paragraph, speaking to labour costs, and I
- 23 understand these numbers have since been updated, so
- the calculation here is not really material, but just
- 25 to clarify where you get the numbers from for your
- 26 report, you say that the average labour income in BC

- will be 65,850 per person-year; correct?
- 2 A That -- that's correct.
- 3 O Yeah.
- 4 A So --
- 5 Q Did you -- sorry. Go ahead.
- 6 A You want to know where those come from? What I would
- 7 refer you to, the Table 4.1 --
- 8 Q Right.
- 9 A -- in the consultant's Report 11.
- 10 O Yeah.
- 11 A And what that does is it shows the labour expenditures
- in -- in the RSA.
- 13 O Right. And --
- 14 A So --
- 15 Q Sorry. Go ahead.
- 16 A -- the assumed breakdown of people from the Alberta and
- 17 BC side, and do the math; that's what you get.
- 18 O So do you get -- I mean, just looking at those three
- 19 numbers there, so you said you had 27 million for
- 20 250 person years, so you are dividing 27 million by 250
- 21 to get that number, 65,850; is that right?
- 22 A I believe that's correct.
- 23 Q Okay. That's not correct, though; right? That
- 24 calculation is an error? And again, I mean, I
- 25 understand these numbers have been updated. I'm just
- 26 trying to figure out what you did here with the

- 1 calculations.
- 2 A So the -- the question specifically is?
- 3 Q To come to your number, did you divide 27 million by
- 4 250 jobs to come to 65,850 per job?
- 5 A I'm just looking at that. I'd have to spend some time
- 6 going back and forth because there have been all sorts
- of changes. I mean, that's one of the problems with
- 8 this particular application more so than I've ever seen
- 9 before, is the -- the constant changing of -- of
- 10 numbers.
- 11 Q Okay.
- 12 A And I can understand that -- that a lot of it is -- is
- due to changing circumstances, but what I found was a
- lot of it was -- was due to -- to just trying to fix
- problems in previous versions that have caused -- that
- 16 have caused issues in subsequent.
- 17 Q Okay. And just looking at your numbers here, I think
- 18 27 million divided by 250 is actually 108,000. Does
- 19 that sound more correct to you than 65,000, the
- 20 sixty-five eight figure that you came to?
- 21 A The only way I would have -- I would -- I'm not saying
- 22 anything until such time as I agree that the -- the
- 23 numbers are correct.
- 24 Q That's okay. I think we've gotten the point there.
- Now, you also speak in your report about the need
- in an economic assessment to reduce uncertainty

- associated with the use of multipliers to estimate the
- 2 impact; is that right?
- 3 A Correct.
- 4 Q Okay. And you say that one way to reduce uncertainty
- 5 is to undertake custom runs of the Statistics Canada
- 6 input-output modelling using data for the project;
- 7 right?
- 8 A Correct.
- 9 Q Okay. And you say in your report that custom runs of
- 10 the Stats Can input-output model were not done for this
- 11 project; right?
- 12 A Yes. And as -- and as I said in my previous evidence,
- I was absolutely shocked to find that, in fact, a
- custom run was done, because if you go and look at the
- 15 CIAR 313 where this was alluded to, there's actually no
- 16 reference to those -- that modelling being done. That
- actually came about as part of Mr. Shewchuk's testimony
- on Friday.
- 19 O Okay. So your previous statement that no custom runs
- 20 have -- were done, that was incorrect; right?
- 21 A Well, based on information that I received on Friday
- during cross-examination, that's correct.
- 23 O Okay. Okay. Okay. Thank you, Mr. Thompson.
- 24 Those are all the questions that Benga has.
- 25 A You're welcome.
- 26 O Thank you.

1		THE CHAIR: Thank you.
2		Ms. LaCasse or Ms. Kapel Holden, any questions?
3		Alberta Energy Regulator Staff Questions Dr. Joseph
4		(Livingstone Landowners Group) and Mr. Thompson
5		(Coalition of Alberta Wilderness Association and Grassy
6		Mountain Group)
7		MS. KAPEL HOLDEN: Good afternoon. Sorry. I got
8		muted and unmuted.
9	Q	MS. KAPEL HOLDEN: Good afternoon, Dr. Joseph and
10		Mr. Thompson. My name is Barbara Kapel Holden, and I
11		am counsel for the Joint Panel, and I will be asking
12		you some questions that have been given to me by the
13		AER staff.
14		And I'll start off by asking Dr. Joseph my
15		questions.
16		Dr. Joseph, in your direct evidence, you stated
17		that there is a tight labour market in Alberta. Can
18		you clarify what you mean by a "tight labour market"?
19	A	DR. JOSEPH: Yeah. That's a good question.
20		My understanding I mean, right now, with COVID in
21		the oil and gas market, things in this moment aren't as
22		tight, but my my reference to it being
23		"tight" and I'll get back to explaining what I mean
24		by "tight" in a moment is based on BuildForce
25		Canada, which is, as I understand, the primary entity
26		in Canada that does forecasting labour market, and

they're anticipating things tightening up again very 1 2 soon. 3 Anyway, what I mean by "tight" is that there isn't a lot of excess supply relative to demand. 4 And so when 5 you have a new project and if someone is going and 6 saying, Hey, we're going to employ, you know, a 7 thousand people or a hundred people or whatever, that 8 labour may not be available. That labour may already 9 be working. So that would be a tight labour market, if 10 that labour is working or most of those people are 11 working. There isn't excess supply. 12 Okay. Thank you. 0 13 And your economic assessment, was that based on 14 Alberta's economy being near full employment? 15 Assessment? My preliminary cost-benefit analysis didn't get into 16 Α 17 employment, but I would argue that based on what I -- what BuildForce Canada is saying, there would be 18 19 little incremental employment benefits because of the 20 tight labour market. I think the key factor that 21 BuildForce Canada is saying is that, you know, the 22 skill sets are still tight. There are -- you know, there's -- there aren't a lot of extra or many people 23 24 in Canada with the skill sets that would be applicable 25 here, and there's an aging demographic. The workforce 26 is getting old, and that's a tight labour force.

- 1 Q Thank you.
- 2 And I've been told that the unemployment rate in
- 3 Alberta for the last five years has been around
- 4 7 percent. Would you agree with that?
- 5 A More or less. It's --
- 6 Q Okay.
- 7 A I'm sure it's been -- sure. We'll go with roughly 7.
- 8 Q Okay. And would you consider that 7 percent -- around
- 9 7 percent as being an indicator of near full
- 10 employment?
- 11 A Yeah. That's referring to the natural rate of
- 12 unemployment, which tends to be -- people would say
- it's between 5, 5 and a half and 7, 7 and a half,
- something like that. So, naturally, there's always
- 15 going to be some unemployed, but around 7 percent,
- 16 yeah, that's basically a full employment situation.
- 17 Q All right. Thank you.
- 18 And if I can get the Zoom host to please pull up
- reference CIAR 552, and it's PDF page 144, which is
- Table 2, please.
- 21 And Table 2 is the results of the limited-in-scope
- cost-benefit analysis that you had done. In your NPV
- 23 calculations, did you distribute the capital costs, or
- 24 was that all accounted for in Year 1?
- 25 A If I recall correctly, it is distributed, because I
- 26 understood it's probably a two-year construction

- 1 period. I'd have to go back and look. But, yes,
- 2 distributed across the years.
- 3 Q And as you likely know, the timing of distribution
- 4 impacts the net-present value. Can you provide further
- 5 details on the distribution years so that the Panel can
- 6 evaluate net present values?
- 7 A Can you please clarify what you're asking?
- 8 Distribution of what, exactly?
- 9 Q It was distribution of the capital cost?
- 10 A Well, as I said a moment ago, I'd have to open up the
- 11 model and have a look, but if I recall correctly, you
- 12 know, it wasn't a one-year -- Benga isn't saying it's a
- one-year construction -- yeah. It's two years, I
- 14 believe. There's a lot of discussion about
- 15 construction and employment estimates, so it would be
- 16 distributed over two years --
- 17 Q Okay.
- 18 A -- probably equally. I'd have to go back and look.
- 19 Q Okay. And my next question is in regards to the NPV
- 20 column that you have in Table 2. Can you tell me
- 21 what -- what the net present values are in that table?
- 22 A You want me to read out the numbers?
- 23 Q No. What do they signify?
- 24 A Net present value, I've -- I referred in my direct
- 25 evidence to net social value. Should I refer to the
- 26 same thing? So it's -- what that is doing is -- or

1		what cost-benefit analysis does is it adds up costs and
2		benefits that occur over different years of the project
3		and brings them back to a present value. So it's net
4		because it's at a cost and benefits, so subtracting
5		costs from benefits, and present value means you're
6		applying a discount rate as people tend to view future
7		benefits and costs as worth less than at present.
8		So it you know, you might have some future
9		impact 20 years out of a cost or a benefit of a certain
10		size, but it the number would be reduced in
11		magnitude when it's brought back to the present value.
12		Does that answer your question?
13	Q	Yes, it does. Thank you.
14		Mr. Thompson, I'd like to direct my next question
15		to you.
16		You mentioned in your direct evidence that the
17		Benga impact assessment does not have a lot of
18		information on the benefits of the project.
19		Mr. Thompson, could you explain what should have been
20		presented to show the project benefits?
21	A	MR. THOMPSON: What we're talking about is
22		something along the lines of a benefit-cost analysis.
23		What you're trying to do is get some understanding of
24		what the project will contribute in terms of net
25		benefits, and to do that, you have to look at costs,
26		and you have to look at at benefits and compare the

1		two.
2		So the benefit-cost-type model works, albeit with
3		the limitation that it can only deal with quantified
4		economic benefits and costs, and it's not so good at
5		dealing with things that aren't quantified.
6		I think you were on mute.
7	Q	My apologies. I muted myself again.
8		Can I get the Zoom host to please pull up
9		CIAR 553, PDF page 350. Thank you.
10		Mr. Thompson, on this page, you reference a 2005
11		standard cost estimation classification system from the
12		association for the advancement of cost engineering,
13		which serves to highlight variability and cost
14		estimates, depending on how well project engineering
15		has been defined. You note two levels: Class 5,
16		projects engineered at a conceptual level; and Class 4,
17		projects engineered at a feasibility level.
18		My question to you is: Are there any relevant
19		market-based metrics required to build this type of
20		classification table; for example, inflation rates and
21		commodity prices?
22	A	Not to my knowledge. These are, again, sort of general
23		guidelines that engineering societies have developed to
24		sort of give some suggestions as to the reliability of
25		the cost estimates that they're putting forward, and,
26		obviously, the more time and money you put into
1		

studying what a project might be, the more accurate the 1 2 results will be. And so typically what I have seen in 3 the past is most applicants come forward with a Class 5-type study where they've done sort of just 4 5 enough to come up with some -- some reasonable numbers 6 to -- to start the process. But what you'll discover, 7 as time goes on, is that they'll -- they'll need more and more detailed information in order to secure 8 funding and so on. So they'll update their -- their 9 10 financial feasibility assessment to -- to use 11 Level 3 -- or Class 3 or even Class 2-type data. 12 On Northern Gateway, they started with a Class 5 13 assessment, but over the life cycle of that project, 14 they actually wound up moving to, as I understand it, a Class 3 estimate, which is simply their way of saying, 15 We did a whole lot more work, and we're a lot more 16 17 confident in our results than we were when we first applied. 18 19 Thank you for your answer. 0 20 Where would you classify Benga's project within --21 We asked them that on Friday, and if you go back Α 22 through the transcripts, what they wound up saying was, Well, we have more reliability about some parts of it 23 24 than we do others. And the ones that they said they had sort of high reliability was sort of plus or 25 26 minus 20 or 25 percent, which would be Class 3/Class 4,

1		but then they wound up saying that for the earthworks,
2		they haven't got that information, so so my thought
3		would be, well, that's probably Class 5.
4	Q	And have you tried estimating the economic impacts
5		based on your classification?
6	A	No, I wouldn't I wouldn't do that. I mean, what
7		this is is an indication to the Panel of the fact that
8		a lot of the information that's been produced by the
9		applicant has got some degree of uncertainty associated
10		with it.
11		And what we're trying to point in all of this is
12		that based on, you know, whether they've done a Class 5
13		or Class 4 assessment, there's still a very high degree
14		of uncertainty in terms of the accuracy of the capital
15		and operating costs that they're using.
16	Q	Thank you. Just one moment, please.
17		Thank you, Mr. Thompson. And those are all my
18		questions.
19		THE CHAIR: Thank you.
20		Mr. Lambrecht, any questions?
21		MR. LAMBRECHT: Mr. Chairman, I have no
22		questions for these witnesses, and I thank them for
23		their participation in the process and their evidence
24		this afternoon.
25		THE CHAIR: Thank you.
26		Mr. Matthews?

1		MR. MATTHEWS: Thank you, gentlemen. Thank
2		you, Dr. Joseph and Mr. Thompson, for your
3		presentation. I have no questions.
4		THE CHAIR: And Mr. O'Gorman?
5		MR. O'GORMAN: Thank you, Mr. Chair. I just
6		have the one question. It's for Dr. Joseph.
7		Alberta Energy Regulator Panel Questions Dr. Joseph
8		(Livingstone Landowners Group) and Mr. Thompson
9		(Coalition of Alberta Wilderness Association and Grassy
10		Mountain Group)
11	Q	MR. O'GORMAN: We don't need to haul this up,
12		but in your presentation and, actually, we just saw
13		this on the screen a few minutes ago you did show
14		projections in the most recent world energy outlook
15		from the IEA with declining projection under their
16		stated policy scenario for coking coal production.
17		You clarified in an answer a second ago that we
18		can make an equation of that to demand, and you offered
19		a final demand figure, but we don't need to see it, and
20		we can take those as roughly (INDISCERNIBLE BACKGROUND
21		NOISE).
22	A	DR. JOSEPH: I had a look while I was
23		waiting.
24	Q	Okay. Good.
25		So just for completeness, I wonder if you can
26		clarify whether the IEA suggests any rationale for why

they are showing that decline in coking coal 1 2 production. I don't know if you know. I don't know if 3 you're intimately familiar with the report. curious whether you know. 4 I have read through it a couple of times. 5 Α I can't 6 recall exactly, so, no, I won't try and guess. 7 sure why they're forecasting that. Okay. That will be fine, then. 8 0 9 I think that's all the questions that I have for 10 you. Thanks. 11 I will -- in lieu of a guestion, I'll make one 12 quick comment to Mr. Thompson. If it makes you feel 13 any better, thinking back to your comment about the 14 three of us on the panel, I did some small part of my -- some small part of my honour demanded to be 15 defended by pointing out to you that I did have the job 16 17 title "Senior Economist" for a couple of years earlier in my career, so I don't know if that makes you feel 18 19 any better. In any case, just an attempt at a little 20 bit of humour to end a long day. 21 So thank you both very much for your 22 presentations. I appreciate the -- I appreciate your 23 work today. 24 DR. JOSEPH: Thanks very much. 25 THE CHAIR: I just have a couple of quick

26

questions.

1		Mr. Joseph [sic], just for me, a refresher. So
2		when you use a dual-discounting approach, that's
3		intended to reflect the preference; right? A
4		difference in the preference on how different items are
5		treated?
6	A	DR. JOSEPH: Well, it's reflecting people's
7		actual behaviour. I mean, that's an underlying
8		principal of economics that values reflect what what
9		people value. And so what research has shown is that
10		when it comes to environmental what are referred to as
11		"goods" that people, as well as health I think a
12		fair bit of this dual discounting comes from the health
13		economics literature research as well, but people view
14		those things differently. They discount them
15		differently than they do something like in a business
16		transaction when you are thinking about future profits.
17		So that, in essence, I think, would be the
18		rationale for a lower discount rate for future
19		atmospheric stability compared to the higher discount
20		rate for future profits from coal production.
21	Q	Okay. So just so I'm clear, so a higher discount rate
22		means it's valued less; is that what you just
23	A	A higher discount rate, you discount things more when
24		you bring it back to the present.
25	Q	Okay. Thank you.
26	А	So the lower the discount rate that was used in that

1		scenario just means that future impacts to the
2		atmosphere end up having greater weight in the
3		analysis.
4	Q	Okay. Thank you.
5		Mr. Thompson, just a couple of quick questions for
6		you. So we had a discussion around the difference
7		between impacts and benefits, and I think I understood
8		you to say that royalties and taxes would be benefits.
9	A	MR. THOMPSON: Right.
10	Q	And then, I think I understood you to say for anything
11		else to be a benefit, it needs to lead to kind of new
12		investment and the creation of new capacity or economic
13		output. Do I have that right?
14	А	Essentially, yeah. Some sort of economic growth that
15		goes with it.
16		The comment about tax and royalties, if you go
17		back and look at my original discussion, what I talked
18		about was I a benefit essentially being a profit. A
19		profit is a net gain. Taxes and royalties are part of
20		that profit, and so they would essentially be included
21		as a benefit, but they would show up on two sides of
22		the ledger as a cost to the to the developer and as
23		a revenue to to their to the government.
24		So you wouldn't see them show up necessarily in a
25		benefit-cost analysis, but they're embodied in the
26		concept of a profit.

1	Q	Okay. And how does that concept apply to jobs or
2		employment?
3	A	Well, again
4	Q	The idea of a benefit. What has to happen for it to be
5		a benefit?
6	A	The question you have to ask is: So what would those
7		people be doing otherwise?
8		And it's really important to understand that when
9		you have a big construction project, you are not
10		creating new construction jobs. That's not the nature
11		of a construction industry. What you've got in a
12		construction industry is construction workers who move
13		from job to job to job. And so by employing them here
14		you have a benefit, but by taking them away from
15		someplace else, it's a cost, and they would cancel out.
16		The only time you would get a potential employment
17		benefit is if you were bringing in people that would
18		otherwise be underemployed, working for \$65,000 a year
19		when they could be earning a hundred; or if they were
20		completely unemployed. And that way you are actually
21		adding to the workforce and employment.
22		I tend to think that you can count most
23		operational jobs as benefits basically through
24		displacement effect.
25		Let's assume that all your mine managers are
26		brought in from someplace else. Well, that creates a

void that gets filled by somebody else, who gets -- and 1 2 that creates a void and that creates a void, and it's 3 likely that the trickle-down effect you'll eventually result in a whole series of new jobs. 4 Now that's not 5 always the case, but that's the sort of rule of thumb 6 that I've used. 7 Thank you, Mr. Thompson. Okav. 0 8 Just one other question: So in your report, you 9 know, there's a number of critiques of the -- some of 10 the assumptions that Benga made in doing its analysis. 11 And I just want to use one as an example and ask you a 12 question. You said that there should be a clearer 13 statement with respect to the number of existing residents of Alberta and BC. 14 Sorry, of -- sorry, let 15 me start over. A clear statement on the number of existing 16 17 residents within Alberta and the BC portions of the RSA that would be hired. And so I quess my question to you 18 Do you think those things are knowable at this 19 20 point in the process? Like, it would seem to me -- I 21 mean, you can make assumptions, but until you hire, 22 it's -- there's going to be a lot of uncertainty associated with any assumptions you make. 23 24 That's absolutely correct. However, in all of the past Α 25 of -- the work that I've done, especially for the LNG

plants on the Pacific coast, one of the things that we

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did was work with the applicant to understand and to
look at the detailed labour markets in the communities
who would most likely be affected.

And so if you go through and look at, you know,
the statistics on Aboriginal employment and their

the statistics on Aboriginal employment and their qualifications, you look -- you can look -- you can do it on a gender basis. It's a matter of identifying opportunities where an applicant come in and said, You know what? We think that there are target markets that could come and work for us if they were trained or had the education or somehow -- you know, the ability to come and work for us, and we'd welcome that, and we commit to providing funding for -- for training and hiring.

I've looked through this application and I haven't seen any detailed understanding of what those, you know, sort of potential labour demands could be from the region, and I haven't seen anything that says that Benga wants to do anything about fixing them.

So as assessments go, I would suggest that that's a pretty significant deficiency compared to other applicants that I've worked with.

- Q Okay. Thank you, Mr. Thompson. Those are my questions.
- 25 THE CHAIR: So, thank you, panel, both 26 Dr. Joseph and Mr. Thompson, for your testimony today

- 1 in answering our questions.
- I will just see if Mr. Fitch or Mrs. Okoye have
- 3 any re-direct they would like to do with you.
- 4 MS. OKOYE: It --
- 5 MR. FITCH: None for me, sir.
- 6 THE CHAIR: Okay.
- 7 MS. OKOYE: None for me too. Thank you.
- 8 THE CHAIR: Thank you. Then I think you
- 9 are free to go, gentlemen. Thank you very much.
- 10 (WITNESSES STAND DOWN)
- 11 THE CHAIR: Okay. It is late, 5:40.
- 12 Mrs. Janusz, I had hoped to get to you today, but
- 13 I am thinking it may be best if we start you off first
- 14 thing in the morning, if you're still here. Is that
- 15 okay with you?
- 16 MS. JANUSZ: I'm still here, and that's my
- 17 preference. I'm a morning person.
- 18 THE CHAIR: Okay.
- 19 MS. JANUSZ: But there is the matter of
- 20 Undertaking Number 4. I believe this is from Friday.
- 21 Mr. Bott -- he's with Benga -- was to check the website
- 22 to see when was the last consultation with
- 23 Crowsnest Pass. Benga --
- 24 THE CHAIR: I think I have an update on
- 25 that. I understand from Secretariat staff that Benga
- 26 has provided a response to Undertakings 3, 4 and 5.

- I don't know, Mr. Brinker, if you want to speak to
- 2 any of those or whether we just want to assign it a
- 3 CIAR number, and then people can have a look at the
- 4 responses.
- 5 MR. BRINKER: No. We don't have anything
- 6 else to add. They were sent in to the Panel today.
- But, Ms. Janusz, we can send you a copy directly
- 8 to your email, if you would like.
- 9 MS. JANUSZ: Thank you very much. I would
- 10 appreciate it.
- 11 THE CHAIR: Okay. And then for the
- 12 record, do we have a CIAR number we can assign to that
- 13 response?
- 14 MS. ARRUDA: The next CIAR number is 785.
- 15 THE CHAIR: Okay. And just to be clear,
- 16 my understanding is that's a response to Undertakings
- 17 Number 3, 4, and 5?
- 18 MS. ARRUDA: Yes. We received them in one
- 19 document.
- 20 THE CHAIR: Okay. Thank you.
- 21 EXHIBIT CIAR 785 FROM OSLER, HOSKIN &
- 22 HARCOURT LLP ON BEHALF OF BENGA MINING
- 23 LIMITED TO THE JOINT REVIEW PANEL RE:
- 24 RESPONSE TO UNDERTAKINGS #3, #4, AND #5
- 25 MR. FITCH: Mr. Chairman, can I just ask.
- 26 There was one undertaking given to us. I'm not sure

what number it was. Is it no, no, no. It was given to us by the Benga folks, and it was to fill in some numbers on the changes in the expected economic impacts in the October 5, 2020, response. THE CHAIR: Okay. Mr MR. BRINKER: Yes. Mr yes. Sorry, Mr. Fitch. That is part of the package that we submitted today as well. MR. FITCH: Great. Thank you. THE CHAIR: Okay. Well, thank you, everyone, for your patience for another long day, and we will resume tomorrow morning at 9:00. Thank you. PROCEEDINGS ADJOURNED UNTIL 9:00 AM, NOVEMBER 5, 2020	
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          Dated at the City of Calgary, Province of Alberta,
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     this 4th day of November 2020.
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