

1 YUKON UTILITIES BOARD

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7 YUKON ENERGY CORPORATION

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9 2025-2027 GENERAL RATE APPLICATION

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17 P R O C E E D I N G S

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23 Volume 3

24 October 23, 2025

25 Whitehorse, Yukon

1 Proceedings taken at the Yukon Utilities Board, at
 2 Sternwheeler Hotel and Conference Centre, 201 Wood Street,
 3 Whitehorse, Yukon.

4 _____
 5 Volume 3

6 October 23, 2025

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Vice Chair

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1

2 (PROCEEDINGS COMMENCED AT 9:31 A.M.)

3 THE CLERK: Order. The hearing is reconvened.

4 Please be seated.

5 THE CHAIR: Good morning, everyone. Welcome

6 to the third and final day of this three-day

7 application, oral hearing into the application, which

8 will go the full three days.

9 Just before resume questioning, I'll ask are there

10 any housekeeping matters to take care of?

11 MR. HERBERT: Yes, Madam Chair. Is my

12 microphone on. Okay.

13 First of all, we filed written undertaking

14 responses yesterday, which have been provided to the

15 staff.

16 May I ask that they be given an exhibit number, I

17 think we're up to number 20.

18 THE CHAIR: Sorry, that's Exhibit 20, did you

19 say?

20 MR. HERBERT: Yes.

21 THE CHAIR: Thank you.

22 **EXHIBIT 20 - WRITTEN UNDERTAKING**23 **RESPONSES**

24 MR. HERBERT: And Mr. Murchison also would like

25 to provide a brief verbal response to one of the other

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 undertakings.

2

3 C. MILNER, J. EPP, S. CUNHA, P. MURCHISON (For Yukon Energy
4 Corporation), previously affirmed

5 A. MR. MURCHISON: Thank you, Paul Murchison, Madam
6 Chair. The question was asked about the cost estimate
7 for the Lewes Boat lock replacement and the cost
8 estimate including the road and if it includes a road
9 construction or not.

10 Our current estimate for the boat lock
11 construction and the road all inclusive is \$41.7
12 million.

13 THE CHAIR: Thank you. So if there's more
14 procedural housekeeping matters, Ms. Bentivegna, are
15 you ready to proceed.

16 MS. BENTIVEGNA: Yes, Madam Chair. Thank you.

17 MS. BENTIVEGNA QUESTIONS THE PANEL:

18 Q. MS. BENTIVEGNA: Now these following questions
19 relate to the Atlin Hydro energy purchase agreement.
20 And if we can distribute Aid to Questioning Number 12,
21 which relates to Board Order 2024-05, Appendix A,
22 paragraph 326, Directive 20.

23 Now, panel, if you could go to Appendix 5.4-1 --
24 sorry, 5.4B-1 in the application, Exhibit 1-A at PDF
25 pages 466 to 468. And I'll start with my questions on

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 the section that talks about the '23/'24 GRA heading.

2 So if you see that, it says: (as read)

3 "As stated in Yukon Energy's 2023/24
4 GRA compliance filing, the central
5 issue raised by the Board in the
6 2023/24 GRA was the current viability
7 of the project."

8 And talks about Directive 20. And that quote or that
9 passage ends with: (as read)

10 "The Board, in its response to the
11 compliance filing, did not provide
12 specific comment on the Atlin Hydro EPA
13 costs, as such Yukon Energy did not
14 cancel the project and under its then
15 current practices maintained the
16 project cost in construction
17 work-in-progress."

18 Now, in this section that we're -- that I've just
19 referred you to, it's an overview of what happened after
20 the Board ruled in paragraph 326 of the Board Order
21 2024-05, Directive 20.

22 That YEC should address in it's compliance filing
23 application to that decision whether the project still
24 had a reasonable likelihood of proceeding, if not the,
25 the Board indicated that expensing of the project should

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 be considered.

2 Now, as I've just read, YEC noted that because the
3 Board did not make a specific ruling in the compliance
4 filing decision about what to do about the Atlin Hydro
5 EPA costs, YEC determined that it should continue to
6 maintain the project costs in its construction
7 work-in-progress accounts.

8 Now, that is my focus, but I hope I have not --
9 it's a high level, but I have not missed anything that
10 you'd like to point out from that excerpt. Now so seeing
11 there's nothing I've missed, I'll go on.

12 So to go back to the top, the very top of Appendix
13 5.4B-1 on PDF page 466, where do you have in CWIP or
14 work-in-progress continuity extract for showing of the
15 2025 opening balance expenditures of the next three years
16 and the forecast 2027 yearend closing balance, which
17 shows \$1,782,100?

18 Now, I'd like to focus on the \$100,000 forecast
19 expenditure for 2025 for a moment and discuss it in the
20 context of the paragraphs immediately under "Project
21 Update" heading on PDF page 467.

22 Now, my first question is in regard to that first
23 paragraph under the heading -- under the heading "Project
24 Update", which I take to indicate that although there has
25 not been significant work on the project after the

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 '23/'24 GRA at the time of this application filing in May
2 of this year, the EPA's conditions precedent had been
3 extended to June 30th.

4 Now, looking at your response to YUB 69A and B,
5 part 4, iii, which is found on PDF page 454 and 455 of
6 Exhibit 4. I'd like to go to page 455 of that PDF
7 response, so where you say: (as read)

8 "Yukon Energy has not performed
9 significant work on this project since
10 2024."

11 And it goes on.

12 So that appears to say that you were able to
13 achieve an extension of the EPA condition precedent
14 between YEC and the Tlingit Homeland Energy Limited
15 partnership to January 1st, 2026. Is that correct?

16 **A. MS. CUNHA:** Madam Chair, that is correct.

17 **Q.** Thank you. Now, the statement in 69, YUB 69A and B,
18 that part 4 response also includes the statement:
19 (as read)

20 "The 2025 forecast costs are dependent
21 on finalization or extension of the
22 conditions precedent."

23 I note that this is similar language to what YEC used in
24 its discretion of the Atlin Hydro project in Appendix
25 5.4B-1 business case, which also includes a statement to

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 that effect, that: (as read)

2 "The 2025 forecast costs are dependent
3 on finalization or extension of the
4 conditions precedent."

5 So where are we currently at with respect to the forecast
6 costs for 2025 that were forecast at 100,000 at the time
7 that the application was prepared?

8 What I'm interested is right now, what if any costs
9 have been incurred or if you still foresee that you'll be
10 spending a forecast of 100,000 in 2025?

11 **A. MR. EPP:** **Madam Chair, we can take that away**
12 **to find out the spending in this project to**
13 **September 30th, 2025.**

14 **Q.** All right. So we'll take that as an undertaking then,
15 Mr. Epp.

16 **A. MS. CUNHA:** **Madam Chair, I can also answer the**
17 **second part of that question which was potential**
18 **anticipated costs.**

19 **As the Tlingit Homeland Energy Development**
20 **Corporation seeks funding from the federal government,**
21 **one of the options that they are assessing for**
22 **additional funding is perhaps adjustment of the**
23 **electricity purchase agreement in the terms there, so**
24 **this money was originally forecast, should Yukon Energy**
25 **have to re-enter discussions with the development**

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 corporation about terms of the electricity purchase
2 agreement to close the funding gap. So that was the
3 purpose of the '25 costs.

4 Q. But to date there haven't been any such discussions,
5 have there?

6 A. MS. CUNHA: As Mr. Epp said, we can go back
7 and look at the actual costs to date to September 30th.

8 Q. Great. And if in that undertaking you can explain what
9 the costs were for, if any costs?

10 A. MR. EPP: Yes, we can.

11 Q. And whether you continue to maintain that forecast of
12 100,000.

13 UNDERTAKING - TO EXPLAIN WHAT THE COSTS
14 ARE FOR RE THE ATLIN HYDRO PROJECT AND
15 WHETHER YEC CONTINUES TO MAINTAIN THE
16 FORECAST OF \$100,000

17 Q. MS. BENTIVEGNA: And to build on that, if there
18 were -- are there any forecasts for spending in '26 and
19 '27? We don't see any forecasting on expenditures for
20 those two years, but I want to determine whether you
21 foresee any additional forecasts costs for those two
22 years.

23 A. MS. CUNHA: Madam Chair, an important note
24 here is that this project is a project that is owned by
25 the Taku River Tlingit Development Corporation, so it

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 is an independently owned project.

2 I say that because our participation and
3 forecasted costs will be contingent on the proponent's
4 ability to find additional funding from the federal
5 government to advance the project. Should that happen
6 then certainly there could be and I anticipate there
7 would be additional costs for Yukon Energy in '26 and
8 '27 to finalize agreements that, at this current state,
9 have not yet been finalized.

10 Q. But at this stage, you don't foresee that happening
11 since you haven't forecast any expenditures?

12 A. MS. CUNHA: Madam Chair, the forecasts at the
13 time of the application was back in May. As mentioned
14 it really would be contingent on the progress made by
15 the proponent.

16 Q. And seeing that there have been a number of extensions
17 for meeting or complying with the conditions precedent,
18 does YEC believe that there will be further extensions
19 after that January 31st, 2026, deadline, if the
20 conditions haven't been met by then?

21 A. MS. CUNHA: Madam Chair, extending the
22 conditions precedent would be conditioned on whether or
23 not the proponent was seeking -- was achieving
24 advancement on getting the funding support or the
25 permitting that is required for the project. So it

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 would really be dependent on the progress made by the
2 proponent.

3 Q. And to date, as far as YEC knows or is concerned, have
4 there been advancements towards funding or project
5 permits, any advances in those areas?

6 A. MS. CUNHA: Madam Chair, in preparation for
7 this hearing, we did receive an update from the
8 proponent as of September 30th of this year. They have
9 mentioned that they have received construction permits
10 for the project.

11 They do continue to seek funding from the federal
12 government to close the funding gap, and that they have
13 active applications into the critical minerals funding
14 application. They have mentioned that detailed design
15 is complete on their transmission line. That -- 90
16 percent detail design is complete in their civil and
17 structural design, and that they have advanced detail
18 design of their turbine and generator as well.

19 So at that high level, as being is reported by the
20 proponent, they are seeing progress in achieving
21 permits and obtaining funding to this point.

22 Q. Thank you. Would you be able to provide a copy of that
23 update to the Board?

24 A. MS. CUNHA: Yes, Madam Chair. We can take
25 that as an undertaking.

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 **UNDERTAKING - TO PROVIDE THE UPDATE THE**
2 **YEC RECEIVED FROM THE PROPONENT OF THE**
3 **PROJECT OWNED BY THE TAKU RIVER TLINGIT**
4 **DEVELOPMENT CORPORATION AS OF**
5 **SEPTEMBER 30TH OF THIS YEAR**

6 Q. MS. BENTIVEGNA: Thank you. Now, going to
7 Table 5.8 from the June 30th supplementary information
8 submission at PDF page 31 and 42, and that's Exhibit
9 2-A. I'd like to explore how YEC got to the current
10 2025 opening work-in-progress balance of \$1,682,100 at
11 PDF page 39, so if you look at that Table 5.8.

12 Now, if you can explain -- pardon. I believe
13 that's page 36, and I misspoke. That's Table 5.8 at
14 PDF page 36 that shows the '23 and '24 actuals.

15 Now, can you tell us, not necessarily for every
16 expenditure, but at a higher level, what YEC has spent
17 the money on this project to get the opening balance,
18 the 2023 opening balance, of \$1,474,200?

19 A. MS. CUNHA: Madam Chair, at a high level,
20 those costs were incurred to negotiate and draft
21 electricity purchase agreement with the proponent, as
22 well as to draft the interconnection and implementation
23 agreements that are necessary in order to safely
24 operate the system, and one of those agreements is an
25 agreement between Yukon Energy and the proponent and

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 the other is an agreement between Yukon Energy ATCO
2 Electric Yukon and the proponent recognizing that the
3 project would also interconnect with ATCO Electric
4 Yukon's transmission system.

5 Q. So basically it was negotiating the EPA agreement, and
6 you just mentioned the interconnection agreements as
7 well that would be needed to tie the project into the
8 Yukon integrated system; is that correct?

9 A. MS. CUNHA: That's correct.

10 Q. Now, can you explain what the '23 and '24 spending of
11 134,500 and 73,400 respectively relate to. So the '23,
12 the 134,500 and the '24 is 73,400, so if you can tell
13 me what those costs relate to?

14 A. MS. CUNHA: Madam Chair, I can take an
15 undertaking to get the specific line items and details
16 of those two items.

17 UNDERTAKING - TO EXPLAIN WHAT THE '23
18 AND '24 SPENDING OF 134,500 AND '24
19 SPENDING OF 73,400 RESPECTIVELY RELATE
20 TO IN TABLE 5.8

21 Q. MS. BENTIVEGNA: Thank you. Now, still in that
22 updated Table 5.8, can you explain how you've gotten to
23 the current 2025 opening balance of \$355,800 for
24 contributions toward the Atlin EPA, and that is PDF
25 page 36 again -- 39 of the updated table.

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 **A. MS. CUNHA:** **Madam Chair, as part of this there**
2 **would have been some costs that Yukon Energy would have**
3 **incurred related to perhaps a system impact study that**
4 **the proponent would have reimbursed Yukon Energy for.**

5 **Q. Can you confirm that?**

6 **A. MS. CUNHA:** **I can take that back and get the**
7 **details of it.**

8 **Q. Thank you. So that is an undertaking?**

9 **A. MS. CUNHA:** **Yes, it is.**

10 **UNDERTAKING - TO CONFIRM WHAT THE COSTS**
11 **ARE RELATED TO RE THE CURRENT 2025**
12 **OPENING BALANCE OF \$355,800 FOR**
13 **CONTRIBUTIONS TOWARD THE ATLIN EPA,**
14 **PAGE 39 OF THE UPDATED TABLE**

15 **Q. MS. BENTIVEGNA:** **Thank you. Now, also there's a**
16 **\$288,500 2023 opening balance and the further**
17 **expenditures of 66,223; is that correct?**

18 **A. MS. CUNHA:** **Madam Chair, that is what's noted**
19 **on the table.**

20 **Q. Thank you. And can you explain why the contribution**
21 **wasn't paid all at once and whether the contribution**
22 **stopped increasing -- or the reason why it stopped**
23 **increasing after 2023?**

24 **A. MS. CUNHA:** **Madam Chair, if I may, as part of**
25 **the previous undertaking that we would take for the**

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 355.8, I'd be happy to look into those details, but it
2 would be premature for me to speak to that at this
3 time.

4 Q. Thank you. Now, if there were -- if the conditions
5 precedent were not met and there's an extension after
6 January 31st, 2026, is there any potential for YEC to
7 receive additional contributions?

8 A. MS. CUNHA: Madam Chair, at this point, no.

9 Q. Now, going back to Appendix 5.4B-1 write-up, now,
10 there's some sections under the heading "Conclusion"
11 that starts at the bottom of PDF page 467 of the
12 application and continues to the next page, so that's
13 Exhibit 1-A.

14 So you'll see it starts, the first paragraph
15 starts with: (as read)

16 "Based on current performance and
17 guidance from the prior GRA, it is
18 Yukon Energy's position that at the
19 time of filing of the 2025-27 GRA,
20 there is still uncertainty about the
21 project's ultimate viability; the
22 project is still being pursued; and
23 Yukon Energy cannot confirm, with
24 certainty, that the project will not
25 proceed."

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 Now, that -- if you go to the statement at the bottom of
2 page 467 that says -- that I've just read that says:
3 (as read)

4 "Yukon Energy cannot confirm, with
5 certainty, that the project will not
6 proceed."

7 It's a phrase that's very ambiguous or difficult to
8 understand because of the phrasing.

9 So does YEC believe that the project will proceed?

10 A. MR. MILNER: Madam Chair, Chris Milner. I'll
11 lift this up a little bit just because of the general
12 nature of the question. We can't confirm that it will
13 proceed or not proceed because it's entirely outside of
14 our control.

15 What we can do is stay in touch with the
16 proponent, watch the project, watch for indicators,
17 they are making significant investments in this
18 project, like in the millions of dollars.

19 There have been a number of government commitments
20 over the years, commitments and then projection of
21 those commitments and then other agreements outside of
22 our control again between nations.

23 But this is the kind of project that we want to
24 see on the system. It's winter capacity and winter
25 energy at the same time, and we're doing our part

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 within reason to sort of keep the EPA alive.

2 Now, that said, all we can do is really watch for
3 indicators of success. The most recent indicator is
4 that they have made some progress with the BC
5 government through permits and as well as the ongoing
6 financial support through the BC government.

7 So there's reason to believe they're advancing it
8 on their side, and we have to do a cost benefit
9 analysis on whether or not to keep the EPA alive in its
10 current form, through conditions precedent, which is
11 largely administrative legal process for us or to close
12 it and then open it up again, once there's more
13 certainty on the project.

14 I think it's fair to say that in the next budget
15 cycle for whether it be the territorial government or
16 the federal government, as it will involve both, we see
17 indications that it's nowhere on the radar, then we'll
18 have this conversation again and it would be well
19 within our -- well within reasonable to -- what's
20 reasonable to close the project out and attempt to
21 recover costs at that time.

22 Q. So, Mr. Milner, just to followup, I just wasn't clear
23 what you meant by closing it and then maybe reopening
24 it or -- if you can just elaborate on what you meant.

25 A. MR. MILNER: Well, I think if the -- if we

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 were -- now we're getting into regulatory language, so
2 I might actually pass this over to Jason.

3 A. MR. EPP: So if -- I believe Mr. Milner was
4 saying that if the federal and territorial governments
5 came out with budgets in the next year and that there
6 was nothing in it, it would be reason for us probably
7 to conclude that there's -- it would likely not proceed
8 and then we would close the -- this project as it
9 exists and ask for it to be recovering rates after
10 that.

11 If, however, it was subsequently was reopened or
12 there was progress by Atlin, then we would have to
13 reopen it after that time. Basically start over from
14 zero with a new project.

15 Q. All right. Thank you.

16 A. MR. MILNER: I guess I just emphasize that it's
17 not actually our project. Right? Our project is the
18 EPA portion of the project. Their project is the
19 actual project, the capital project.

20 Q. Now, again, just to clarify that last paragraph under
21 "Conclusions", is it that if YEC gets a clear direction
22 from this Board, not your board of directors, that
23 there should not be further expenditures on the
24 project, would then YEC propose to expense -- I
25 understand your explanation about closing it, but based

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 on no further progress, but would the YEC propose if
2 the Board were to direct that it basically, you know,
3 that further expenditures are not reasonable in this
4 context, would then YEC propose to expense a net amount
5 of \$1,326,300 for operating expenses in 2025 reflecting
6 the gross expenditures to the end of 2024 of
7 \$1,682,100, less the contributions of \$355,800?

8 **A. MR. EPP:** **So, Madam Chair, Yukon Energy**
9 **would recommend that the net amount be included either**
10 **as an expense in 2025 or alternatively since it was**
11 **over a million dollars, typically what the Board has**
12 **done in the past and what Yukon Energy has done in the**
13 **past is propose amortization of that over a 10-year**
14 **period.**

15 **Q.** And if you can give me your views on how YEC would view
16 such a direction from the Board on this particular
17 project. I understand you saying you want to -- that
18 it's still viable and you want to continue with it
19 until it's determined that it may not be viable as
20 determined by YEC.

21 So I'm just wondering if you believe that such a
22 direction is necessary from the Board or you would
23 rather continue with that until such time that YEC
24 determines that it's no longer viable?

25 **A. MR. EPP:** **Madam Chair, first of all, we --**

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 whatever -- if the Board makes a ruling, we will comply
2 with that for regulatory purposes, and if that means
3 expensing it at a certain time or amortizing it, that's
4 what we will do for the rate making purposes.

5 As a business, if we still feel like we need to
6 spend some money on the project for whatever reason,
7 that's a separate business decision outside of the rate
8 making process.

9 Just as an -- sort of a correction, maybe an
10 update to our prior comment regarding the closing of
11 this in 2025, yes, that is possible. The other option
12 is not closing it until 2026 because the conditions
13 precedent agreement has been extended until then, but
14 just a comment I guess.

15 Q. Sorry, what was that, not 2026?

16 A. MR. EPP: The condition --

17 Q. Not until 2026?

18 A. MR. EPP: The conditions precedent has been
19 extended to 2026, therefore that may be a more
20 appropriate closing date for the project.

21 Q. Thank you.

22 A. MR. EPP: Of course, subject to the Board's
23 decision.

24 Q. And if the amount of the expenditures to date, the
25 1,682,000 and change, if that were to be expensed,

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 would you be considering that if the Board were to give
2 you that type of direction that those costs should be
3 considered prudent?

4 So basically, if you would rather -- and basically
5 the reasons why those expenses would be or should be
6 considered prudent by the Board, and I'd be happy if
7 you want to think about that and as an undertaking
8 rather than having to answer off the cuff.

9 **A. MS. CUNHA:** Madam Chair, I would say that we
10 believe that, yes, indeed those costs of 1.6 and change
11 incurred to date are prudent. They are an agreement
12 for Yukon Energy to secure power, if the project is
13 received, the exact kind of power that we need, winter
14 dependable capacity and winter dependable energy that
15 is renewable.

16 So given that the needs, the specific needs of the
17 Yukon electricity system, winter energy, winter
18 capacity, these costs and this project are a direct
19 correlation to that as well.

20 **Q.** Thank you.

21 **MS. BENTIVEGNA:** Madam Chair, on those questions I
22 know we distributed the aid to cross, but we don't need
23 it to be entered as an exhibit.

24 **THE CHAIR:** Very well. Thank you.

25 **Q. MS. BENTIVEGNA:** Now, moving on to the BESS

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 projects and the business cases for the BESS project
2 and the thermal replacement, the 16.5-megawatt project.
3 And what I'm focusing on is YEC's capital expenditures
4 and addition forecasts for those two projects.

5 Now, would you agree that the need for both of
6 these projects was already approved in prior YEC
7 filings prior to the 2025/'27 GRA in May of this year?

8 **A. MR. MURCHISON:** Madam Chair, Paul Murchison. Yes.

9 Q. Thank you. Now, would you agree that because we don't
10 have final costs for either the thermal replacement
11 16.5-megawatt project or the BESS project because the
12 former is being finalized in 2025 and the latter is
13 coming into service in 2026 or is planned to come into
14 service in 2026, the Board is not testing prudence of
15 YEC's final costs on these projects in the current --
16 in this current proceeding and is only required to
17 approve YEC's updated capital projects forecast --
18 excuse me -- and not final costs?

19 **A. MR. EPP:** Confirmed.

20 Q. Now, going on to the Whitehorse Power Expansion
21 project, the Whitehorse Power Centre's project.

22 Now, I have a few questions on the project that
23 was called the Whitehorse Power Expansion project in
24 the original application, for which now I understand
25 based on the report provided as part of YEC's response

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 to YUB-8 that YEC now calls the Whitehorse Power Centre
2 project what was formerly the Whitehorse Power
3 Expansion project; is that correct?

4 A. MS. CUNHA: Madam Chair, that is correct.

5 Q. Thank you. Now, to start with, I'd like you to go to
6 the updated Table 5.8 from the June 30th supplementary
7 information filing and that's PDF pages 31 to 42 in
8 Exhibit 2-A, that table, but within that updated table,
9 if you could go to PDF page 40 where you see the 2027
10 closing work-in-progress balance for the Whitehorse
11 Power Expansion project which seems to be in the amount
12 of \$54,200,200.

13 Now, from the documents filed in the June 30th
14 submission, there seems to have been a change. The
15 fact that there is a \$54,200,200, 2027 yearend
16 work-in-progress balance indicates, based on Table 5.8
17 information, that YEC believed at the time it prepared
18 the application that the Whitehorse Power Expansion
19 project would not have had any facilities in service by
20 the end of 2027 but that YEC has now determined that
21 having some facilities in service by the end of 2027 is
22 now possible.

23 In fact, in the YEC's opening statement to this
24 GRA, I believe that YEC now takes the position that
25 completion of the south power centre and into service

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 by December 2027 must be done.

2 Do I understand that correctly?

3 A. MS. CUNHA: Madam Chair, that's confirmed.

4 Q. Thank you. Now, in addition to this supplementary
5 information of June 30th, YEC provided a table on PDF
6 page 7 at that same document that provided total
7 forecasts for the projects, including the Whitehorse
8 Power Expansion project, that did not at least at that
9 time, have forecasts for any capital additions during
10 the '25 -- 2025/'27 test period.

11 In fact, the information about the Whitehorse
12 Power Expansion project appears to forecast a total
13 cost, subject to an asterisk, of 114,200,000 which the
14 schedule on PDF 7 of that same supplementary
15 information indicates will occur either in '28 or '29.

16 Is that -- do you see where I'm referring to?

17 A. MR. EPP: Confirmed, yes.

18 Q. Thank you. Now, the single asterisk besides the
19 '29/'30 on the Whitehorse Power Expansion line is
20 associated with the following text: (as read)

21 "Reflects Phase I of the project."

22 Now, based on the information available to the Board in
23 the June 30th supplementary information, the way that the
24 Board interpreted this information was that the
25 Whitehorse Power Expansion project would cost 114.2

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 million to the end of the first phase of the project,
2 thus leaving us with the impression that the ultimate
3 costs of the project reflecting the costs of any
4 post-Phase I expenditures would be even higher than that.

5 Is our understanding correct or is the costs of
6 both phases that 112 -- 114.2 million.

7 **A. MS. CUNHA:** Madam Chair, that would have been
8 both phases, would have been the 114,200.2 at the time.

9 **Q.** So just to confirm, that would have been both phases?

10 **A. MS. CUNHA:** That is correct.

11 **Q.** Thank you. Now, looking at YUB-8A and B, Attachment 1,
12 from the Exhibit 4 starting at PDF page 131, if you
13 look at the table in that document found at PDF page
14 134, regarding the table Whitehorse Power Centres
15 project proposed completion phases.

16 And now if we go to the bottom of PDF page 135 of
17 that same exhibit under the heading "Costing of South
18 Whitehorse Power Centre," this continues on the next
19 page, "Costing of South Whitehorse Power Centre," and
20 there, there's an explanation.

21 Now, the statement that the cost of construction
22 and commissioning of the South Whitehorse Power
23 Centre's initial 15 megawatt was not included in the
24 2027 GRA revenue requirement due to uncertainty of
25 costs and timing of completion.

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 And can you provide clarification, because on the
2 one hand the statement could be suggesting that the
3 56.9 million expenditure, is a new expenditure or on
4 the other hand since the work-in-progress balance in
5 the updated Table 5.8 2027 closing balance for the
6 Whitehorse Power Expansion project was about 54.2
7 million, which is pretty close to the 56.9 million.

8 So could this just be a change in YEC's confidence
9 that the 15-megawatt south power centre build could be
10 completed by the end of 2027 rather than it being in
11 addition to work-in-progress?

12 **A. MS. CUNHA:** **Madam Chair, it reflects that the**
13 **project now must be done by December of 2027.**

14 **Q.** Now, could you undertake to provide an updated
15 work-in-progress continuity schedule entry for the
16 Whitehorse power centres showing any actual
17 expenditures, additions and opening and closing
18 balances for the years '23 and '24, as well as
19 forecasts of opening and closing balances, capital
20 expenditures and capital additions for the years '25,
21 '26 and '27 that incorporates this -- the goal to
22 complete the 15-megawatt south centre portion of the
23 project at a cost of 56.9 million?

24 **A. MS. CUNHA:** **Yes, absolutely. We'll take that**
25 **as an undertaking.**

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 UNDERTAKING - TO PROVIDE AN UPDATED
2 WORK-IN-PROGRESS CONTINUITY SCHEDULE
3 ENTRY FOR THE WHITEHORSE POWER CENTRES
4 SHOWING ANY ACTUAL EXPENDITURES,
5 ADDITIONS AND OPENING AND CLOSING
6 BALANCES FOR THE YEARS '23 AND '24, AS
7 WELL AS FORECASTS OF OPENING AND
8 CLOSING BALANCES, CAPITAL EXPENDITURES
9 AND CAPITAL ADDITIONS FOR THE YEARS
10 '25, '26 AND '27 THAT INCORPORATES THE
11 GOAL TO COMPLETE THE 15-MEGAWATT SOUTH
12 CENTRE PORTION OF THE PROJECT AT A COST
13 OF 56.9 MILLION

14 Q. MS. BENTIVEGNA: Thank you. Now, if we go to your
15 response to YUB-69 in Exhibit 4, if we look at the
16 budget, project budget, at page 453 showing a project
17 budget breakdown by year from '25 to '29 and in total,
18 so if you see that table. This table identified an
19 initial project budget.

20 Was this budget shown on PDF page 453 prepared
21 earlier than the budget that reflects the projected
22 expenditures totalling 56.9 million on the 15-megawatt
23 south power centre portion of the project?

24 A. MS. CUNHA: Madam Chair, the budget table that
25 is shown on page 459 of Exhibit 4 was done before the

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 **updated estimate of 56.9 completed by 2027.**

2 Q. Thank you. Now, do you see the statement: (as read)

3 "The initial project budget did not
4 separately disclose AFUDC."

5 On line 24 of PDF page 453 of that IR package?

6 So since there's no AFUDC line item in the budget
7 on PDF page 453, can you clarify whether the budget with
8 an apparent total cost of 124 million includes an
9 estimate of AFUDC, but which is not broken out from the
10 forecast or whether AFUDC is excluded from the \$124
11 million project cost estimate shown?

12 A. MR. MURCHISON: Madam Chair, AFUDC is not included
13 in this estimate that is shown here, the forecasted
14 expenditures at this time. And I'd say it's as we
15 advance this budget, we will including AFUDC.

16 The budget that we have right now is a Class 4
17 budget, so there is some variability, so as we refine
18 that, we will be including AFUDC as we move forward.

19 Q. And so followup on that, would it -- could you
20 undertake to provide an updated budget for the entire
21 Whitehorse Power Centre's project showing the current
22 forecast to 2035 that includes all expenditures
23 anticipated to the Phase 3 expand power centre's part
24 of the project noted in Table 1 at PDF page 134 of the
25 IR responses?

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 A. MS. CUNHA: So, Madam Chair, just for perhaps
2 clarity and consistency, as the table on page 453 is
3 the original budget for Phase I and Phase 2, is the
4 undertaking to expand the scope of it to include Phase
5 3 and include AFUDC and include updated costs?

6 Q. To include that information but taking it to the end of
7 what's described as the power centre -- the Whitehorse
8 Power Centre's project, so not just Phase I and 2 but
9 what's described in total?

10 A. MS. CUNHA: Thank you for that clarification.
11 Noted.

12 UNDERTAKING - TO PROVIDE AN UPDATE TO
13 THE TABLE ON PAGE 453 TO EXPAND THE
14 SCOPE OF IT TO INCLUDE PHASE 3 AND
15 INCLUDE AFUDC AND INCLUDE UPDATED
16 COSTS, ESSENTIALLY TAKING IT TO THE END
17 OF THE PROJECT

18 Q. MS. BENTIVEGNA: Now, in relation to the completion
19 of the Whitehorse Power Centre project, Phase I by the
20 end of 2027, yesterday Mr. Milner indicated that
21 staff -- this is from the transcript, was: (as read)

22 "Scrambling to keep up with workload
23 requirements."

24 And if you like, I mean, I can read the whole extract on
25 that.

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 I'll start with the second: (as read)
2 "But I think the line of questioning
3 makes a very strong assumption that
4 workload stays flat. I think we've
5 been crystal clear throughout this
6 hearing and throughout our application
7 that workload is not staying flat and
8 in fact we're scrambling to keep up
9 with that."

10 Now, in the context of those remarks and the growing
11 workload of YEC, can you provide any comments on or how
12 YEC plans to have, since it has a heavy workload, have
13 this project, the first phase, completed by the end of
14 2027?

15 What assurances can YEC give the Board that this
16 will happen. I know you've said it must, but how will
17 YEC be able to do it, is the question?

18 **A. MR. MILNER:** Madam Chair, Chris Milner with a
19 high level context because it started with my comments
20 yesterday and I will hand it over to Stephanie to give
21 the breakdown of the succession of activities and how
22 we plan to advance that project, as it must happen to
23 meet winter demands.

24 Certainly I think what you're seeing is the key
25 drives behind the positions that are in the current

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 application support projects of this nature and are
2 planning going forward. We're very aware of the
3 challenges facing the company now in terms of meeting
4 winter peaks.

5 That's why we prioritize within our strategic plan
6 for the next five years winter firm capacity projects
7 and deprioritize other projects that don't provide that
8 assurance that winter peaks will be met. So we're
9 having to do both prioritization, adding staff in
10 particular in key departments, whether it be planning,
11 because there's a huge regulatory aspect of this
12 project, engineering because there's a huge project
13 management and design component to this project, and
14 others that we're dealing with, as well as really the
15 engagement side of things and communication side of
16 things because there's a huge communication engagement
17 in partnership aspect of this project as well.

18 So at the highest level, those are the investments
19 you're seeing in the FTEs that have been presented
20 through the application, and we're having to prioritize
21 our work right from the strategic plan implementation
22 in Chapter 1 that I referenced in the opening remarks
23 in order to deliver key projects like this. So that's
24 the high level answer.

25 Now, we're going to have to have options as we

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 move forward in terms of delivering this particular
2 project, and Stephanie can speak in more details around
3 as to what gives us confidence in 2027.

4 A. MS. CUNHA: I'll start and then I'll ask
5 Mr. Murchison to jump in, as this has been an
6 all-hands-on-deck project.

7 The high level items that I can say is that, you
8 know, with it being such a high priority critical
9 project there are a number of streams that are
10 happening in parallel.

11 So for example, you know, the first thing is we
12 have selected that the fuel source for Whitehorse Power
13 Centre South will be diesel. So we have made that fuel
14 decision and can advance with that.

15 Mr. Murchison will speak to, you know -- we are
16 advancing securing long lead items and I'll him to
17 speak about the work that he and his team are doing
18 there.

19 We are also advancing all assessment and
20 permitting processes. We have established a senior
21 officials group with the City of Whitehorse, Yukon
22 government and other assessors and regulators to
23 identify areas where not only can we find efficiencies
24 in the process, but also where can we advance processes
25 in parallel.

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 We also have ongoing engagement with Kwanlin Dün
2 First Nation and Ta'an Kwach'an Council in regards to
3 relationship, in regards to partnership opportunities
4 as well as site selection.

5 As noted in this project we have sites and back-up
6 sites to the back-up sites. You know, we are looking
7 at every single possible location and we will be
8 advancing those sites that, you know, have -- where
9 possible zoning and other options that are already in
10 place.

11 For those reasons, I would say that we are looking
12 to -- we are moving forward to have this project done.
13 We are moving forward with the fuel source, long lead
14 items, moving forward with the assessment and all the
15 partnerships that are needed to make this project
16 happen.

17 I'll pass it on to Mr. Murchison to speak of the
18 details.

19 A. MR. MURCHISON: Yeah, thank you. And I would say
20 in my world, the concern or I'd say the timelines that
21 we're dealing with are the timelines to be able to
22 engineer, procure materials and equipment and then
23 construct the site.

24 So I think I just would address -- I'll address
25 sort of some of the long lead items because they're the

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 drivers sort of from a critical path perspective, and
2 so for example transformers. We have been able to
3 collaborate with ATCO on an -- and have been included
4 in a larger ATCO procurement for transformers, so
5 there's a larger transformer needed for this site and
6 we'll be able to order that transformer within a month
7 or so and that's what our expectation is because we
8 were able to collaborate with ATCO on that procurement.

9 We also know that engines, you know, we believe we
10 can get engines in about 18 months. We currently have
11 a team in Vancouver looking at units at BC Hydro is
12 currently constructing, and certainly -- and so looking
13 at quickly making decisions on the appropriate diesel
14 units for this site, so we could be procuring those
15 early in the season next -- early in the year next
16 year.

17 So that's -- so from -- so looking at critical
18 path and those timelines, that's how we're looking at
19 those items.

20 The engineering side of things, we have engineered
21 these types of sites before, and when you look at the
22 type of units that we're planning to put here, modular
23 or say mobile units, we were able to build a site in
24 Mayo in 2023 in a matter of one season, so we know we
25 have the ability to design and construct a site like

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 we're planning to build here.

2 And then finally, I guess I'm just -- make sure --

3 I want to make sure I don't miss any notes on this.

4 Yeah, that's correct. So when I talk about the
5 ability to build -- or install modular units on this
6 site, we do have a back up, right, in getting this into
7 service. We don't want to go there, but we can -- we
8 would be able to install rentals if, for example, there
9 is issues with procurement timelines as it relates to
10 the diesel units that we put on the site.

11 So I think if you look at our ability to sort of
12 design, construct -- design and construct this site and
13 get the materials and equipment needed, we are getting
14 ourselves well set up with confidence to be able to
15 deliver this project.

16 Q. Thank you. Thank you. Now, moving on to YUB-8A and B,
17 Attachment 1, now I'm interested in the paragraph that
18 begins with: (as read)

19 "The capacity of each proposed

20 generating station on PDF page 135."

21 And that's of the IR, consolidated IR responses, Exhibit
22 4. So what I'm referring to is: (as read)

23 "The capacity of each proposed

24 generating station is greater than 5

25 megawatts and will trigger YESAB

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 executive committee screening. Yukon
2 Energy assumes that a part 3 Utilities
3 Act energy project and operations
4 certificate will also be required prior
5 to the start of construction of the new
6 permanent thermal generation
7 facilities."

8 And the last sentence there states: (as read)

9 "Yukon Energy will seek an energy
10 certificate prior to commencing
11 construction."

12 Now, the paragraph that discusses both the YESAB
13 executive committee screening process and a YUB or Board
14 proceeding for part 3 or under part 3 of the Utilities
15 Act for this certificate.

16 Now, given that YEC has explained that these
17 processes must be concluded before it will commence
18 construction, what's the last state that both of these
19 processes need to be fully completed in order to meet --
20 in order to allow YEC to have the 15-megawatt south
21 Whitehorse portion of the project concluded in time to be
22 fully operational before the end of 2027.

23 **A. MR. EPP:** Madam Chair, I will start with the
24 part 3 part of this process, and Yukon Energy, a couple
25 months ago, did submit an application to the minister.

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 Yukon government has been working on what it needs to
2 do to issue the next steps, and we expect to be in a
3 position to be before the Board very soon again with a
4 part 3 hearing that would be completed hopefully by
5 next summer.

6 Q. And with regards to YESAB approvals, what has been done
7 to date, if anything, or if you need approvals. I
8 believe you do, but I'm just wondering. Go ahead.

9 A. MS. CUNHA: Madam Chair, we have already
10 submitted our prescreening and application for YESAA's
11 executive screening process.

12 At this time we are just awaiting the committee's
13 feedback on kind of what the project proposal
14 guidelines will be. We anticipate submitting our
15 project proposal in Q1 of next year.

16 From the Callison experience, we know that that --
17 we went through a pre -- we went through an executive
18 screening process with our Callison site that we just
19 completed last year or the year before, and we know
20 that that process can take about 12 months, so -- 12 to
21 18 months.

22 So we're confident now that with the senior
23 officials group that we've established, that we've
24 brought the regulators, the First Nation governments
25 and the key stakeholders together that we can find the

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 efficiencies and execute those processes in time for
2 delivery of 2027 -- or end of 2027 I should say.

3 Q. And sorry, did I understand you correctly, that
4 normally even going through the executive screening
5 process is 12 months?

6 A. MS. CUNHA: Yep, exactly. So we anticipate
7 that we would be in that process throughout 2026.

8 Q. And do you have any indication on having -- by having
9 this senior officials group, if that may -- how that
10 may shorten that 12-month period, not how, but an
11 indication of how long it would take with the senior
12 official committee, having that in place?

13 A. MS. CUNHA: Yeah, I -- with that senior
14 officials group, I'm believe that, you know, I'm
15 confident that we would have those, the decision
16 document and the evaluation completed in that 12 --
17 12-month period.

18 The reason for that is we've brought together the
19 Yukon government, which is the body which will need to
20 issue the decision document after the YESAA
21 recommendation and we have brought YESAA, and we have
22 brought the City of Whitehorse as well as Kwanlin Dün
23 and TKC together.

24 Most recently just a number of weeks ago where the
25 parties have identified where processes can happen in

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 parallel, rather than sequentially, so I would say that
2 the effectiveness of the senior officials group is
3 already finding efficiencies and ways to bring down any
4 sort of timelines that are required.

5 Q. Thank you. So we've just talked about the processes
6 that you need and certificates that you need before you
7 can start construction, so currently do you have any
8 idea of a construction start date for the Whitehorse,
9 if as anticipated, your certificate and other approvals
10 get issued, as you hope?

11 A. MR. MURCHISON: Madam Chair, we would need one
12 construction season with -- as I noted before with us
13 having the -- all the equipment in place for that site,
14 so one construction season.

15 It's tight, but we have shown that we can do that
16 and we did do that in Mayo, one construction season for
17 the site as I previously noted. Thank you.

18 Q. So when you say one construction season, what year are
19 we talking about?

20 A. MR. MURCHISON: Yeah, Madam Chair, that's 2027.

21 Q. 2027, and what's considered sort of a construction
22 season? Are we talking April to October, just to give
23 me an idea, Mr. Murchison?

24 A. MR. MURCHISON: Yeah, thank you. Madam Chair,
25 Yukon construction season often starts after the May

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 long weekend but with a site like this, depending on
2 when all approvals are in place, if we can start
3 earlier, we will start earlier, of course.

4 Q. Thank you. Now I'm going to continue my questions in
5 relation to some of the major projects that YEC has
6 identified, and that would start coming into YEC's rate
7 base over the next several years.

8 Now, you'll see I provided your counsel with an
9 Aid to Questioning Number 13. If we can distribute
10 that, and that will -- that shows the projects we're
11 interested in with these -- in relation to the
12 questions that I have.

13 So you'll see that there's a list of projects that
14 have been identified, and there's eight of them, and
15 using the information set out above in that table, it
16 shows a total of 529.45 million and change. Now, I'll
17 refer to these as "The Big Eight" just for ease of
18 reference.

19 Now, and would you accept subject to check that
20 that's the total amount of those projects that are
21 listed?

22 A. MR. EPP: Subject to check, we can confirm
23 that the total of those specific items listed there
24 does add up to 529, noting however that the project
25 total for the Whitehorse Power Centres project is only

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 again phase 1 and 2.

2 Q. Thank you. Now, in relation to these projects, I want
3 to take the discussion now, and if you can look at, now
4 we'll look at Cross Aid 14, and it's a discussion on
5 cost estimates that I'm hoping to have with you. And
6 that Cross Aid 14 is entitled "Emerald Group Webpage
7 for Cost Estimates Types Guide."

8 Now, when we looked at the application for this
9 GRA, we did a word search for terms such as Class 5,
10 Class 4, Class 3, Class 2 and Class 1, and we mainly
11 got results on the search for Class 5, Class 4 and
12 Class 3 projects, but no references to Class 2 or Class
13 1. Would you accept that subject to check?

14 A. MR. MURCHISON: Yes, Madam Chair, I would accept
15 that subject to check.

16 Q. Thank you. Now, the purpose of this discussion is to
17 try to understand YEC's specific regime for creating
18 project cost estimates of a specific class like a Class
19 5 or 4 or 3 broadly speaking, similar to the regime
20 described in that Emerald Group questioning, Aid to
21 Questioning Number 14.

22 So would you say that YEC's regime would have
23 substantial differences in the details from the regime
24 described? And we're talking about cost estimates --
25 in the regime described in the Aid to Questioning

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 Number 14, or is YEC's regime generally similar to cost
2 estimate classes or stages regime described in that aid
3 to questioning?

4 **A. MR. MURCHISON:** Yeah, thank you, Madam Chair.
5 What I'll do is maybe just to -- I'll describe what our
6 regime is and then just rather than saying generally,
7 I'll just give the numbers.

8 So we report to our board and part of our
9 reporting to our board for our large capital projects
10 is where we're at with those projects. So generally
11 similar to what you -- what was provided, we have a
12 Class 5 estimate, which we would describe as minus 50
13 to 100 percent prefeasibility planning, very high
14 level.

15 Then we go to Class 4, minus 30 to plus 50, and
16 that would be feasibility and studies. And then
17 Class 3, minus 10 percent to plus 30 percent on the
18 engineering side preliminary and the planning side of
19 things, studies and project proposal.

20 Class 2, minus 5 to plus 20 percent, we're in a
21 detailed engineering or assessment phase. And then for
22 Class 1, project construction or permitting for a
23 project. Now, we use that sort of to report
24 consistently to our board.

25 When we go out to consultants to undertake

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 estimates for us, I'd say we most commonly find the
2 estimates coming back from our consultants are
3 estimates that are completed using sort of the
4 guidance, the standard from the Association For the
5 Advancement of Cost Engineering, so that's what we find
6 say a Stantec estimate, they are typically referencing
7 that standard or other consultants that we work with.

8 So I would say generally what we have, it aligns
9 with what you provided as a reference document for us.

10 Q. And so just so I understand that comment about the
11 estimates from the consultants, what standards would
12 they be using?

13 A. MR. MURCHISON: Paul Murchison, Madam Chair. We
14 don't necessarily dictate the standard that the
15 consultant would use. So I would say the most common
16 standard that we see being used is from the Association
17 for the Advancement of Cost Engineering.

18 Q. Thank you. Now, you've given me the variations for the
19 different plus or minus the different classes, so thank
20 you for that.

21 Now, what is YEC's view as to the general purpose
22 of the cost estimates at each stage? So for example,
23 you start off having estimates for a project, let's say
24 it's a Class 5. But then as you move along, how are
25 those refined or are they refined, and do you prepare

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 changes and I'm not talking just GRA, I'm talking even
2 before coming to the Board with estimates and projects?

3 A. MR. MURCHISON: Now Madam Chair, Paul Murchison.
4 Yes, we do advance cost estimates, so maybe -- I'll use
5 one -- an example of one of the projects that we're
6 currently advancing through the cost estimating phases,
7 and I'll speak specifically to the Mayo slope, which is
8 currently under construction, and so when the Mayo
9 slope, we initially had a failure of the Mayo slope
10 that's going -- I say official initially, initially
11 when I started with YEC. I started with YEC in August
12 of 2022, and at the end of the month the slope failed
13 and impacted the back of our plant at the bottom of the
14 slope in Mayo.

15 So we initially -- we decided how do we move
16 forward, so we initially developed a Class 5. Now that
17 Class 5 was advanced to a more refined estimate. So we
18 worked with consultants to undertake a multiple
19 accounts analysis that looked at various options to
20 stabilize the slope. We essentially had very high
21 level cost estimates for those, Class 5 cost estimate
22 but in looking at that, we look at the most sort of the
23 best out of those options.

24 You then further advance a couple options to a
25 more refined cost estimate, and so say a Class 3 then

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 to make a decision on which estimate to advance further
2 to go to procurement and tender it. In that case we
3 went from essentially through a design bid build
4 process. We chose the option, we used a consultant to
5 design the slope, we tendered the slope and put it to
6 market. And at the stage right now it's under
7 construction, we describe that at being at a Class 1.

8 Q. So then for cost estimate purposes then you move down
9 the classes, if I understood you correctly, and the
10 cost estimates become more definitive, if I can put it
11 that way.

12 For example, if I started off as a Class 3 and
13 when it goes to a Class 1, the costs should be more
14 certainly?

15 A. MR. MURCHISON: Yes, Madam Chair, we generally
16 look to have more certainty around the costs as we --
17 as the estimates become more refined and we move down
18 through the classes from a Class 5 to a Class 1, and so
19 and certainly what we see coming out of those estimates
20 is depending on the type of project, varying levels of
21 accuracy. Right?

22 So it's not -- a Class 3 doesn't always land
23 within that Class 3 range, so there is certainly
24 variations that we see as estimates advance and this is
25 really is what we look at our large projects that are

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 taking a more structured approach.

2 In an example where we might just be purchasing a
3 smaller piece of equipment that's not that expensive,
4 the project manager might just call a number of vendors
5 and get prices and pick the lowest price. So he'd go
6 immediately to a Class 1, not go through the whole
7 process.

8 Q. So does YEC have a document that describes what you've
9 just told me, or how does the process flow? Like, what
10 is the understanding of different employees who are
11 dealing with or consultants who are dealing with these
12 cost estimates, if there is no document?

13 A. MR. MURCHISON: Yeah, thank you, Madam Chair. For
14 employees that we have working on the larger more
15 complex projects, we have a combination of say
16 certifications for those individuals.

17 So our project managers go through a process to
18 become PMP professionals, so they're guided by the
19 Project Management Institute guidelines, so we do have
20 sort of a foundation and individuals that have
21 appropriate training and then certification or
22 professional designation as it relates to project
23 management. So that's -- that would be foundational
24 for us in having those individuals go through that
25 process and those are the individuals that oversee

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 these large projects.

2 For our consultants, I would say we don't dictate
3 a guideline to them and, we rely on them to use their
4 expertise and if they were to use a different say
5 system to estimate a cost, as long as it's a standard
6 system that generally aligns with ours, we would accept
7 that.

8 Q. Now, Mr. Murchison, I understand that there is no
9 one -- no guiding document, if I can put it that way,
10 however, is there a summary that could for the Board,
11 that could explain what you've just said in the record
12 but in a bit more detail, which would give the range of
13 the variations which you've said for a typical project
14 development stages that correspond to each of the
15 classes.

16 So as you've said, you know, it may start as a 5
17 and go down to a 3 and then and so forth, and that the
18 general purpose of the cost estimate at each stage of a
19 project, and then the information that YEC
20 decision-maker then need before cost estimate moves to
21 a lower stage can be prepared.

22 So for example, if you're moving a project from a
23 Class 4 to a Class 3 or a 5 to a 4, so I guess what --
24 not I guess. I know what I'm looking for, is there
25 some type of summary document you could provide the

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 Board on how these cost estimates for especially large
2 projects work and how YEC works with them and advances
3 then the different cost stages?

4 A. MR. MURCHISON: Yeah, thank you, Madam Chair.
5 I'll happily take that as an undertaking.

6 UNDERTAKING - TO PROVIDE A SUMMARY
7 DOCUMENT ON HOW YEC COST ESTIMATES FOR
8 ESPECIALLY LARGE PROJECTS WORK AND HOW
9 YEC WORKS WITH THEM AND ADVANCES THEM
10 THROUGH THE DIFFERENT COST STAGES,
11 CLASSES 1 TO 5

12 Q. MS. BENTIVEGNA: Thank you.

13 MS. BENTIVEGNA: Madam Chair, if this -- if we can
14 first mark those two 13 -- the Aid to Questioning 13
15 and 14 as hearing exhibits, and then maybe if we can --
16 it would be a good time to break for the -- my
17 questions.

18 THE CHAIR: Very well. That would be Exhibits
19 21 and 22, I believe.

20 EXHIBIT 21 - AID TO QUESTIONING 13

21 EXHIBIT 22 - AID TO QUESTIONING 14

22 THE CHAIR: Thank you. As indicated, I'll
23 take a break now. Thank you.

24 THE CLERK: Order. This hearing will stand
25 adjourned for 20 minutes.

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 (ADJOURNMENT)

2 THE CLERK: Order. This hearing is
3 reconvened. Please be seated.

4 THE CHAIR: Ms. Bentivegna, when you're ready.

5 MS. BENTIVEGNA: Thank you, Madam Chair.

6 Q. MS. BENTIVEGNA: I'd like to continue with this
7 discussion of different classes of cost estimates, and
8 going to that Aid to Questioning 14, the PDF page 5 of
9 that, where you see a description of a Class 2 that is
10 referred to as a control estimate and a definitive
11 estimate Class 1.

12 Now, if you can think about YEC's cost estimate
13 classification or classes of regime and thinking in
14 particular of the big eight project, that listing that
15 was provided to you, so has YEC either prepared or does
16 YEC expect to prepare for each of those eight projects
17 a cost estimate that is intended to be a baseline
18 estimate to keep track of costs after all major
19 construction contracts have been signed and at the
20 point at which YEC is ready to give the word to its
21 project employees and contractors to actually start
22 building the project?

23 A. MR. MURCHISON: Madam Chair, would you just be
24 able to ask that question again, to make sure I fully
25 understand it.

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 Q. Oh, certainly. In looking at that listing of eight
2 projects, my question is whether YEC has prepared or
3 intends to prepare for these projects a cost estimate
4 that it would intend to be a baseline estimate to keep
5 track of costs after all major construction contracts
6 had been signed and YEC is ready to give the go-ahead
7 for construction to start?

8 A. MR. MURCHISON: Thank you. Madam Chair, Paul
9 Murchison. Maybe in the question the one point that I
10 would just like to clarify is contracts signed. Let's
11 say within the Class 2 we would be having those and
12 having the estimates there and then the contract
13 signing would take us to Class 1 because you would be
14 setting the price, so just that slight clarification I
15 think is how I would understand it.

16 Would that be correct?

17 Q. Yes.

18 A. MR. MURCHISON: Thank you, Madam Chair. So in
19 those big eight projects, projects that we will need to
20 advance to Class 2 prior to closing contracts and
21 actually being, I would say, in the construction phase,
22 you know, actually executing the construction, we will
23 be doing that for -- should we proceed with the Wareham
24 Dam spillway as a tunnel and spillway, those estimates
25 would be further advanced.

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 Whitehorse Power Centre estimates will be further
2 advanced, as well as the MH0 plant.

3 Q. So, Mr. Murchison, you mentioned the Wareham tunnel
4 project, but what about those other projects? So when
5 does YEC do those cost estimates, let's -- so I'm
6 looking for -- for all eight of those projects, where
7 and when would these Class 2 and Class 1 estimates be
8 done?

9 A. MR. MURCHISON: Thank you, Madam Chair. Maybe
10 I'll start at the top of the list then, and maybe this
11 will be helpful just to describe where we're currently
12 at right now, and then that may help with subsequent
13 questioning.

14 So for the thermal replacement for the battery
15 energy storage system, for the surge chamber and for
16 the rock slope, we would consider all those to be a
17 Class 1 contract's fully executed, construction is
18 underway, so those projects are in that stage where we
19 are essentially close to completion on some of those as
20 well.

21 The Wareham Dam spillway tunnel and spillway, we
22 have essentially between those projects a Class 3
23 estimate. The Whitehorse Power Centre we're describing
24 as Class 5, and the MH0 plant, we've done some work on
25 that with the KGS and that would be considered to be at

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 a Class 4.

2 So as those projects advance, as we get closer to
3 construction, then those estimates would be further
4 refined to let's say a Class 2 prior to moving
5 contracts into place for those projects.

6 Q. So, Mr. Murchison, if you could confirm or clarify that
7 for each of those projects, you've mentioned there is
8 Class 1 for some of them, cost estimates, but that will
9 YEC then progress the cost estimates for those that are
10 still at a Class 5, will that progress to a Class 2 or
11 Class 1 before -- so that there's a baseline before
12 actual construction, a baseline estimate, is what I'm
13 referring to.

14 Did I understand you correctly or please clarify?

15 A. MR. MURCHISON: Yes, Madam Chair. Madam Chair,
16 yes. I would say we -- with that again that's just
17 that point that the Class 1 would be the cost after the
18 construction contracts are executed for those. So
19 advancing Class 2, executing contracts, putting us into
20 a Class 1.

21 Q. So could I ask you to undertake to provide us with a
22 table for each of those eight projects identified that
23 has the name of each project, the cost estimate used,
24 and so where I guess which class it's at in the
25 variation, the plus or minus range of the estimate,

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 depending on what class it is at, at this point.

2 And just to clarify, it would correspond to
3 that -- that information I'm asking from you should
4 correspond with the projects that are currently
5 expected to be completed before the end of 2027, the
6 test period, or that are on PDF page 7 of Exhibit 2-A.

7 Again, either they're going to be in service in
8 2027 or subsequently.

9 **A. MR. MURCHISON:** As a followup, Madam Chair, just
10 for clarity on which projects, it's not just the big
11 eight? It's a larger list? So I just want to fully
12 understand the list of projects that you're interested
13 in. Thank you.

14 **Q.** Mr. Murchison, to clarify, what we're looking for is
15 just the -- what we've termed as the eight projects
16 that are on the table, and all we're looking for is the
17 class of estimate that that particular project is at
18 and the range that goes with that class estimate in
19 relation to the cross aid we've talked about, the list
20 of the project and our whole discussion about how you
21 classify projects?

22 **A. MR. MURCHISON:** Yeah, thank you, Madam Chair. So
23 we'll take as an undertaking for the big eight projects
24 listed, the class, but then as I'm understanding it,
25 the class as it relates to Aid to Cross 14

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 specifically, so that estimate range, not a -- so we'll
2 use that estimate range and put in there? Okay. Thank
3 you.

4 Q. Yes. Thank you.

5 UNDERTAKING - TO PROVIDE THE LIST OF
6 BIG EIGHT PROJECTS INCLUDING WHAT CLASS
7 THEY ARE EACH AT AS IT RELATES TO AID
8 TO CROSS 14

9 A. MR. EPP: Madam Chair, if I could just --
10 I'm not sure exactly where this questioning will be
11 going, but maybe I'll take it to a higher level for a
12 second and it seems to me like we're asking about the
13 credibility of the Yukon Energy forecasting, and I
14 would refer the Board back to actually the 2021 general
15 rate application where the Board had that more specific
16 question, and we had an information request, and it was
17 YUB-YEC-1-48, and it looked -- asked us to look at
18 all -- all major capital projects from 2008 onwards,
19 and I mean there's always going to be scope changes in
20 projects, but what the actual -- the response there
21 showed that actual major project costs were 100.6
22 percent of forecasted rate base costs, so it showed
23 very close alignment of the major projects from 2008 to
24 2021.

25 Q. MS. BENTIVEGNA: Thank you for that information,

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 Mr. Epp, but what we're trying to do is not necessarily
2 test the accuracy of the forecast, but it's to look at
3 what classes and what the range of the cost estimates
4 are for these projects at this time, and so then going
5 forward there would be at least a baseline or some
6 information in relation to these big projects.

7 A. MR. EPP: Okay.

8 Q. Now, if we can turn to YUB-YEC-71 in -- that's Exhibit
9 4, PDF pages 466 to 468, and the question was:
10 (as read)

11 "Please provide a complete description
12 of YEC's practice for determining
13 contingency allowance forecast in its
14 capital project budgets."

15 And that's at PDF page 467. And the response as you'll
16 see is: (as read)

17 "For projects above 2 million, the
18 level at which projects require Yukon
19 Energy Board approval, Yukon Energy
20 establishes the contingency allowance
21 through a structured risk
22 identification project."

23 And then there's a couple more sentences after that.

24 Now, in what I've just referred you to, that
25 response identified projects for question where -- from

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 business cases, costs forecasts -- sorry, there was a
2 contingency allowance line item, but what I understand is
3 that all projects for which the expected cost of at least
4 2 million, YEC follows what it calls a structured risk
5 identification process for which YEC identifies specific
6 risks and then quantifies the dollar value of potential
7 cost impact for one of the identified risks; is that
8 correct?

9 A. MR. MURCHISON: Yes, Madam Chair. It's correct
10 that -- just to make sure that -- I'll say it back to
11 you maybe for -- just to help out, to make sure that I
12 understood it correctly, but we would identify a risk,
13 put a cost to that risk, apply a likelihood to that
14 risk and that would give us sort of the estimated cost
15 of that risk, based on a likelihood of the risk
16 occurring.

17 Q. So say that YEC has identified five different risks
18 from -- that relate to a larger \$2 million project or
19 larger than 2 million. Now, and then there's an
20 estimate financial impact for each one of those risks.

21 How is the total contingency allowance for those
22 type of projects set, considering let's say you have
23 five risk factors?

24 A. MR. MURCHISON: Thank you, Madam Chair. For
25 the -- for an individual project, if there would be

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 multiple risks identified, individual costs associated
2 with each of those risks, then a likelihood for each of
3 those individual risk -- individual risks to occur,
4 giving a -- so say it's a likelihood of 50 percent,
5 half of the value of the risk would be of that specific
6 risk would be applied, and then the cumulative value of
7 those risks would be added up for that specific
8 project, that's then added to the overall project
9 budget.

10 Then if you look at say multiple projects, they
11 each have their own individual risk contingency.

12 Q. Could you give an example, Mr. Murchison, looking at
13 PDF page 466 of that IR response of the contingency
14 allowance for one of the larger projects.

15 So starting with, just to be helpful, I'm looking
16 for an example of a risk register document, one of the
17 larger projects that has a contingency allowance
18 attached to it, that you can give us as an example?

19 A. MR. MURCHISON: Yeah, certainly. We'd be happy to
20 provide it as an undertaking, just to do that for you.

21 UNDERTAKING - TO PROVIDE AN EXAMPLE OF
22 A RISK REGISTER DOCUMENT FOR ONE OF THE
23 LARGER PROJECTS THAT HAS A CONTINGENCY
24 ALLOWANCE ATTACHED TO IT

25 Q. MS. BENTIVEGNA: Thank you.

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 Now, I want to followup with what YEC and try to
2 understand what YEC's practice is for drawing down the
3 contingency allowance that's been set up for a project.
4 And this is the subject of 71C, and that question is on
5 PDF page 467, and the -- so YEC was asked to confirm
6 about the drawdown, and the response is at PDF page
7 468, that response to C, that it wasn't confirmed and
8 that: (as read)

9 "Project contingency allowances are
10 accessed when the pre-identified risk
11 from the risk register materializes."

12 Now, using a hypothetical, suppose the purpose -- suppose
13 that the purpose of a project where you're tracking as a
14 specific project cost line item, the cost charged by a
15 specific type of contractor, so that if in the normal
16 course where there is no risk event, the charges paid to
17 the contractor would be paid and recorded to the line
18 item for the project to track the contractor's cost.

19 Now, if we were to add the risk event twist, say
20 that a risk event occurs for a cost that's paid to the
21 same contractor, now, I don't want to complicate it too
22 much, but you know, I'm not asking about allocating an
23 invoice between normal course billing and billing related
24 specific -- with the cost of a risk event, but what I'm
25 referring to is an invoice from the contractor that is

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 only a risk event cost.

2 Would the actual amount that YEC has deemed to be
3 related to the risk event and that risk event cost would
4 end up on a contingency line of the schedule that tracks
5 the overall project, but no amount of contractors charges
6 that are deemed to be part of the risk event costs would
7 be charged to the contractor's line item.

8 I know it's a very long example, so if you don't
9 follow me, I'd be happy to try to summarize it.

10 A. MR. MURCHISON: Madam Chair, I believe I follow
11 it, and I believe I have an answer, but feel free to
12 ask more questions if I'm not on the right track.

13 What I would say is the contingency allowance that
14 we establish is not part of the contractor's contract,
15 so it would be outside of that, so we would -- we
16 track -- we would track that contingency allowance
17 separate.

18 So now if there is a change to a contract that --
19 that could initiate -- result in a change order, a
20 change order may or may not be attributed to a risk
21 that was pre-identified. The contractor wouldn't be
22 aware of that. That's, you know, our internal tracking
23 as it relates to the contingency and the contingency
24 drawdown say versus a change order that was for
25 something that wasn't previously identified. Because

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 we're not perfect.

2 We don't identify absolutely every risk that could
3 occur, so something may happen that we didn't identify.
4 Now, our normal practice and what we try to do is if a
5 risk materializes that was tracked as a part of the
6 contingency, that would be part of the contingency
7 drawdown. Something separate that was executed say
8 through a change order, a decision to execute through a
9 change order to the contract would not be shown as a
10 contingency drawdown. I hope that's the clarity that
11 you needed. Thank you.

12 Q. Yes. Thank you. So now going on to where a project is
13 expected to cost more than 2 million, so we'll --
14 that's the class of project we're talking about, that
15 has a contingency allowance based on assessed risk and
16 consequential costs related to specific risks built
17 into the project cost forecast, but none of the risks
18 have been identified, none of the risks identified in
19 the risk register for the project have materialized.

20 In that scenario, the final actual contingency
21 allowance line item in YEC's schedule tracking of final
22 actual costs would be zero; is that correct?

23 A. MR. MURCHISON: So the -- Madam Chair, so if a --
24 on a construction projects if the contingency, if
25 there's been no risks identified in the contingency,

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 the contingency that we've had set aside is not drawn
2 down, then that portion of the identified budget would
3 not be shown as utilized, so it would be -- if say we
4 had a \$2 million project or -- and there was a \$100,000
5 of contingency, risk contingency for our construction
6 projects, that line item would stay as \$100,000 if it
7 was not drawn down, if that's what you're asking.

8 Q. Thank you. Now, continuing along the line of
9 contingency allowance and risk registers. Now, we were
10 discussing project cost estimates earlier, at various
11 stages of a project life cycle.

12 So for example, your business case for the Wareham
13 Dam spillway tunnel project at PDF page 269 of your
14 application talks about a Class 3 estimate, and
15 provides a range of variances in brackets that run from
16 minus 20 percent to plus 30 percent.

17 Now, our discussion before we talked about where
18 the tender process has been completed and all contracts
19 have been awarded and signed, so that the estimate is
20 just before the construction starts, and suppose -- and
21 for the purposes of my question, suppose there's a
22 revised contingency allowance estimate reflecting only
23 the risks that would still be a concern, no risks
24 higher than the forecast tenders, for example.

25 Now, in this example is -- if none of the

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 remaining risks reflected in the contingency allowance
2 for the just before construction start estimate
3 actually materializes, should a total project final
4 cost that falls above the part of this preconstruction
5 phase forecast that reflects only the bare bones but
6 not the contingency allowance part to be above forecast
7 or not.

8 In other words, shouldn't the contingency
9 allowance be removed from a forecast versus actual
10 comparison if the risk that the contingency allowance
11 was built on -- didn't occur?

12 **A. MR. MURCHISON:** Yes, Madam Chair, there was a fair
13 bit there. So if you could repeat just to give us
14 clarity on the exact question again, that would be
15 helpful. Thank you.

16 **Q.** Certainly. Now, I'm starting with the supposition for
17 this question that there's a revised contingency
18 allowance estimate reflecting only the risks that would
19 still be a concern, so you're ready to construct, but
20 that -- there's still a contingency allowance. And so,
21 for example, there's no risks of higher than forecast
22 tenders, for example, because they've already been
23 done.

24 Now, in this example, if none of the remaining
25 risks reflected in the contingency allowance for the --

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 just before the construction start estimate actually
2 materialize, should the total project final cost that
3 falls above the part of this preconstruction phase
4 forecast that only reflects the bare bones, but not the
5 contingency allowance to be part of the above forecast
6 or not?

7 So I guess what I'm looking at is, what would the
8 contingency allowance, whether it be removed from a
9 forecast or not, if it would still continue in the
10 forecast, even though you're at that stage where it --
11 you're going to build, and the basis for the
12 contingency allowance, the risks, didn't occur?

13 **A. MR. MURCHISON:** Madam Chair, I think I'll -- I
14 think I understand, and I will again maybe I'll
15 describe a description, then answer it as I'm
16 understanding it.

17 So we have our -- you know, referencing -- that
18 reference on page 269, you know, indicating a Class 3
19 cost estimate of minus 20 to plus 30 percent, so we are
20 advancing that and we have moved into Class 1 with
21 contracts executed and the question now we're at that
22 stage, should we no longer have a contingency because I
23 think the question is the risks we don't have -- those
24 risks have been managed and maybe those risks don't
25 exist anymore.

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 The answer would be no, because even at a Class 1
2 in all the estimate models, there still is a variation
3 that's provided, potential plus or minus variation, so
4 there's things that can happen say and thinking about
5 construction specifically that can cause additional
6 costs to be incurred that there's a risk for, so if
7 you -- if we -- on a tunnel project, for example, or
8 advancing that, you have a geotechnical investigation
9 that doesn't have complete details on all the
10 geotechnical conditions.

11 An unforeseen geotechnical event could occur that
12 may be covered by a risk contingency that you evaluate
13 even after you've awarded the contract, so there's a
14 potential, just in that example a change that you might
15 identify in a risk contingency, that's even part of,
16 you know, the phase in Class 1 as you're executing the
17 contract.

18 Q. Thank you. Now, if you could go to Appendix 5.2A-3,
19 which is YEC's business case for the MGS water use
20 licence renewal process and it's at PDF pages 396 to
21 406 of the application, which is Exhibit 1-A.

22 Now, the business case refers to a stagegate
23 budgeting and decision-making process. And I'm
24 primarily interested in the paragraphs immediately
25 under the heading "Project Approach," which is found at

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 PDF page 399 of the application and you'll see it
2 starts as "stagegate framework approach was used for
3 undertaking the project" and so forth.

4 Now, the MGS water licence renewal project has a
5 budget, which is perhaps only reflective of forecast
6 expenditures at the time of the application, and that
7 was 7.295 to round off million, but I'm wondering
8 whether since all of the big eight projects have a
9 budget much higher than this, the budget of the surge
10 chamber replacement project, for example, has a budget
11 of 27 million and upwards of more than 27 million.

12 Would all of the big eight, what I refer to as the
13 big eight, those projects that were on the list, on the
14 aid to cross I gave you, also be subject to a similar
15 stagegate process or not?

16 **A. MR. MURCHISON:** So, Madam Chair, on page 399, the
17 stages from project initiation Stage 0 through to
18 Stage 4 permitting applied to those regulatory projects
19 as well as projects that would be going through the
20 permitting process to move to construction.

21 **Q.** Now, does YEC have some kind of basic document that is
22 used to explain the stagegate decision-making process
23 within YEC, say for YEC board members that may not have
24 encountered that approach before service on YEC board
25 or that -- so that could be shared with this Board, if

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 you have such a document.

2 **A. MR. MURCHISON:** Madam Chair, we don't have a
3 **specific document.**

4 **Q.** So I'm to take it from your answer that then you would,
5 for each project that you would take forward, you would
6 be preparing an explanation for let's say your board?

7 **A. MR. MURCHISON:** Yes, when we report to our board
8 to initiate a project, so the 2 million and greater
9 project, there's the initiation of a project then the
10 quarterly reporting to our board on the project as it
11 progresses.

12 **Q.** Thank you. Now, we've talked about YEC's internal
13 processes for estimating costs for managing major
14 construction projects, and we've talked about the
15 different types of class cost estimates at typical
16 points in the project development, how YEC evaluates
17 risk and how much risk is built into the contingency
18 allowance, and YEC makes decisions about whether it's
19 reasonable to advance to different stages in the
20 lifecycle of a project, stagegates.

21 So thinking about this, what we've been
22 discussing, and thinking ahead to the fact that when
23 YEC files its next GRA in 2028, which are like to
24 include some big -- some of those big projects that
25 we've listed, at that time, the Board will have to --

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 this Board will have to assess the prudence of YEC's
2 final costs.

3 Now, is anything you can think of now related to
4 how YEC manages and oversees its major projects that
5 YEC is prepared to consider adding to the information
6 that it currently provides in its GRA in defence of the
7 prudence of its final project expenditures?

8 A. MR. EPP: Madam Chair, just a question of
9 clarity. Are you referring to things we could do
10 differently in the next GRA to make it easier for the
11 Board to review?

12 Q. Yes.

13 A. MR. EPP: So yes. I mean, as we've been
14 going throughout this process, I think we've all been
15 keeping track of a lessons learned and how to avoid
16 questions in the future by providing the information
17 more upfront, and while we haven't had this discussion
18 yet as a group as far as what specifically we're going
19 to do in the next application, I generally have on my
20 list some -- without getting into specifics yet because
21 it hasn't been thought about completely but some kind
22 of schedule that tracks this is what the approved cost
23 was in the last general rate application, this is what
24 the actual costs of the project as they existed when
25 they were finalized, and then have a variance analysis

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 for those projects, and that would be sort of a
2 starting base. But that was just my idea without
3 consultation.

4 Q. All right. And maybe if I can suggest we had that
5 whole discussion on project IDs and tracking, if -- it
6 would be very useful, if there could be a system, a
7 consistent system, and maybe there is. I'm just saying
8 we don't know about it, the Board doesn't, of how
9 they're identified, named, and tracked, if they're
10 continuing as another or as part of another project.
11 I'm just referring you to that discussion we had.

12 A. MR. EPP: Yeah, that is helpful. We're
13 always open to recommendations for improvement.

14 Q. Thank you. Now, this is seeking clarification between
15 an owner's engineer and a project manager function, so
16 if you go to Exhibit 4, the response to YUB-72, that's
17 at PDF page 469, and then the application, Exhibit 1-A
18 at PDF pages 243 to 254 and I'm going to be referring
19 specifically to Table 5.1A-7 at PDF 249.

20 So now starting with that response on PDF page
21 469, that response to IR-72, Board IR, and there you
22 describe the different roles and -- but I still have
23 some questions about the role, as I was just
24 mentioning, of the owner's engineer and the project
25 manager in the context so that we can better understand

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 the project -- of the BESS project.

2 So for that project, there's both a project
3 manager and an owner's engineer, and what I'm looking
4 for when I look at Table 5.1A-7 at page 249 as I
5 mentioned of the application, so you'll see there the
6 descriptions and costs of the different categories.

7 Now, the BESS project also has a line item for an
8 EPC contractor, and I'm wondering, if in that project,
9 if the EPC contractor were to account -- a change in
10 circumstances while constructing the project and wanted
11 an adjustment to the contract to compensate the EPC
12 contractor for having to deal with some new
13 circumstance encountered in the course of constructing
14 the project, is it the owner's engineer or the project
15 manager or perhaps both that assess the EPC's
16 contractor request for a contract adjustment.

17 So I'm just trying to see how the roles are
18 defined within YEC of these different positions.

19 **A. MR. MURCHISON:** Yeah, thank you, Madam Chair. So
20 in a scenario like this, we'll say using this -- using
21 the example that you've described, the -- if there was
22 typically if there's a change that would occur and the
23 contractor would be notifying us of that change, it
24 would go to the project manager.

25 If there was a technical evaluation of that change

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 required, then the owner's engineer would take a look
2 at that.

3 Q. Okay. So the request would go to the project manager,
4 who would then consult also with the owner's engineer,
5 and the owner's engineer would be representing YEC?

6 Do I have that correct, as is the project manager.

7 A. MR. MURCHISON: Yeah, thank you, Madam Chair. If
8 there was technical information, so the owner's
9 engineer, say in the battery project, for example, that
10 supports our team technically, so engineers that have
11 experience and understanding of battery energy storage
12 systems, someone that has experience that's not on our
13 team.

14 So if there was a change that came in and it
15 needed to be evaluated from an engineering technical
16 perspective and we, with our team, would not understand
17 how to evaluate that, then we would certainly go to the
18 owner's engineer to ask them for advice on how to
19 manage that change.

20 Q. Thank you. Now, at that table, that 5.1A, A-7, at PDF
21 page 249 that we were just looking at in the
22 application, there's also both a line for YEC internal
23 labour and project management.

24 So does this mean that in respect of the BESS
25 project, the project management function is also

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 performed by an external contractor rather than a YEC
2 employee?

3 A. MR. MURCHISON: Yeah, thank you, Madam Chair. So
4 I'll actually -- to answer this question I have to step
5 back in time a little bit. So when I joined Yukon
6 Energy in -- at -- in August of 2022, there was no one
7 within our organization to manage the BESS project.

8 So we -- the engineering and capital projects team
9 has grown since then, so when I joined Yukon Energy, we
10 had an external project manager that consulted through
11 Hatch that was serving that project management role.

12 We've since recruited a senior project manager
13 that now leads the project management activities on
14 this project with occasional support from that Hatch
15 project manager.

16 We still continue to rely on the engineering
17 expertise of Hatch, so they were providing both
18 services for us and continue to, so that's -- that's --
19 there's been a change on this project over time based
20 on the increased capacity within our organization to
21 manage projects.

22 Q. Thank you. Now, looking at those eight projects that
23 I've referred you to, would there be a project manager
24 that would, in the various projects, would there be a
25 contract project manager or would it also -- or would

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 it also go to it being managed by -- internally by a
2 YEC employee?

3 And it may vary, so if you can just give me your
4 views on who you think would be -- whether it's an
5 internal resource or a consultant.

6 **A. MR. MURCHISON:** Thank you. Thank you,
7 Madam Chair. So what I'll do is I'll run through the
8 projects, so on -- and then just speak specifically to
9 project management internal or external or maybe a
10 combination of both in those cases.

11 So thermal replacement project is currently
12 managed by an internal project manager. The battery
13 energy storage sytem we just discussed, the MH0 surge
14 chamber and MH0 rock slide stabilization and
15 remediation, the project management of that is led by
16 an internal project manager with some support from an
17 external senior project manager, and that's just --
18 it's a large complex project, so that's just in case
19 our internal PM needs a bit of extra support having
20 someone that she can rely on for back up.

21 Now, we foresee as we move forward with the
22 Wareham Dam spillway tunnel and Wareham Dam spillway
23 full replacement, we have an external PM currently
24 leading that project with some internal support from
25 our team.

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 The Whitehorse Power Centres, we have external
2 support advancing that project right now.

3 And the Mayo MH0 plant renewal, we've done work on
4 this. We have kept that internal to an PM. But as
5 that advances, if we need external support, we would
6 look to that. But right now I can't say exactly where
7 that's going to go. It will depend upon the available
8 capacity within our project management team.

9 Q. Thank you. And since you've just mentioned that, you
10 know, some of those projects will have external project
11 managers or consultants, at a high level, can you
12 explain how YEC contracts with an external project
13 manager, how it structures its contracts to incent or
14 assure that change orders that may be requested by a
15 major contractor on a specific project will be
16 reasonably scrutinized and will be, where warranted
17 denied.

18 So I'm looking to see what kind of -- if not
19 specific language, but what you may include in a
20 contract in relation to how the project is managed,
21 really, when it comes to change orders or any other
22 changes to the project?

23 A. MR. MURCHISON: Yeah, thank you. Madam Chair, I
24 guess maybe the final approval of the change order
25 doesn't lie with, say, an external project manager, so

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 they would -- they would recommend accepting or not
2 accepting, but the final determination about acceptance
3 of a change order sits with Yukon Energy so, and
4 depending upon the size of the change order, different
5 levels within the organization.

6 So I think that that -- so I don't have any
7 specific language from a contract that I could
8 reference, other than that an external PM does not have
9 the authority to approve an expense. It has to be
10 approved within Yukon Energy.

11 Q. Thank you for that clarification. Now, with -- I'm
12 moving on to the MH0 surge chamber replacement project
13 described in section 5.1A-5 of the application starting
14 at PDF page 272, and it's described that there's a
15 phase 2, as the plunge pool that's being referred to
16 there.

17 Now, can you confirm that this schedule for the
18 plunge pool part of the project has not been affected
19 by the issues that are affecting the expected timing
20 for completion of the tunnel project, and again, I'm
21 referring to the surge -- MH0 surge chamber
22 replacement?

23 A. MR. MURCHISON: Madam Chair, the surge -- maybe
24 just so I'm -- the surge chamber construction is not
25 impacted by a plunge pool construction. Plunge pool

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 construction is separate from the surge chamber and is
2 associated with the replacement of the Wareham Dam
3 spillway.

4 Q. Thank you. Now, if -- now I'm referring to the October
5 14th letter from YEC, and in that first paragraph,
6 there's a sentence -- it's the second page of the
7 letter, but I'm referring to the first paragraph there,
8 which starts with: (as read)

9 "As the project schedule is
10 progressing, Yukon Energy is facing
11 some challenges and opportunities with
12 the spillway design. This includes the
13 possibility of pursuing an alternate
14 option of an open channel design
15 instead of the tunnel option described
16 as option 7 in the GRA at PDF page
17 269."

18 And it goes on.

19 Now, can you elaborate on what challenges and
20 opportunities within the spillway design are being
21 referred to here?

22 A. MR. MURCHISON: Yes, so Madam Chair, the spillway
23 project I would -- you know, and as we've been talking
24 about sort of advancing projects, this has -- project
25 has advanced a bit differently because we're dealing

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 with engineering reports in both December of 2024 as
2 well as this year indicating to us that there's the
3 potential for the spillway to fail, and really what
4 that means is that you flood the Mayo -- the community
5 of Mayo in the event of a failure, and there's
6 significant environmental impacts that could occur, so
7 we've been working to advance this project in an
8 expedited way.

9 Now, the comment that we have as it relates to
10 challenges and opportunities. One of the challenges
11 that we've experienced as we've advanced, coming from
12 the multiple accounts analysis and moving to the option
13 to select the design of a tunnel and replacing the
14 existing spillway, as those cost estimates have
15 advanced further, we've seen cost increases, so that's
16 a challenge for us.

17 It's also challenging to try to advance on the
18 timelines that we are advancing on. So as we saw some
19 of these costs starting to increase, we had our
20 engineer of record, as well as our owner's engineer and
21 an independent cost estimator that was working on the
22 engineer of record's team indicating to us that we
23 should engage a contractor that would actually build
24 this to take a look at it and help us understand, you
25 know, potentials to optimize and how to, you know, best

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 get some additional information, so in -- with that
2 recommendation, we have Kiewit as a contractor working
3 onsite, stabilizing the slope and replacing the surge
4 chamber, and we know they have experience undertaking
5 spillway work, like we're describing.

6 So we've engaged with Kiewit to take a look at the
7 design, as it's advanced, and to indicate to us
8 potential for optimization, you know, as it relates to
9 schedule and cost, and certainly when they looked at
10 the spillway, what they found was they proposed --
11 they're proposing an option as it relates to a tunnel
12 where you could potentially eliminate the need for a
13 coffer dam, \$15 million. They indicated a potential to
14 shorten the tunnel.

15 But what they also indicated to us was that, from
16 a construction perspective, they believed that building
17 a larger spillway where -- roughly where the tunnel is
18 proposed may be a better option, and that would be from
19 both a schedule and cost perspective. So Kiewit is
20 doing some work to explore that option to give us a
21 better understanding of whether that would be a
22 preferred option, primarily to mitigate the risk that
23 we're currently facing with this piece of
24 infrastructure, but also considering, you know, the
25 costs. So it's scheduling costs is what's really

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 driving this additional work that we're now doing with
2 Kiewit essentially as a contractor to provide us with
3 some information.

4 Now, prudence is also certainly critical and we
5 are in the process of retaining our own independent
6 cost advisor to make sure that, you know we get is
7 something we can stand behind if we were to have
8 information that would lead us to making a decision
9 to change the option for construction.

10 Q. Thank you for that answer.

11 Now, the second paragraph on that second page of
12 the October 14th letter, at the end of the paragraph
13 YEC indicates that: (as read)

14 "The spillway would be available for the
15 '28 spring freshet, that's indicating
16 that the new in-service date for having
17 an additional spillway in place is the
18 second quarter of 2028."

19 Am I reading that correctly? At this time.

20 A. MR. MURCHISON: Yes, Madam Chair. The anticipated
21 spillway in-service date would be prior to spring
22 freshet in 2028. We would be looking towards the end
23 of Q1 prior to that event occurring.

24 Q. Thank you. Now, going back to the first page of the
25 letter, and looking at the last paragraph on that page,

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 and that's referring to the response to YUB-70, part C
2 and D, which is in the Exhibit 4.

3 So YEC's response to part C included a project
4 schedule for the tunnel project, and that begins at PDF
5 page 458 of the IR, consolidated IRs, Exhibit 4.

6 Now, at the top of PDF page 458 of that exhibit,
7 it indicates that the tunnel project schedule provided
8 just below on the page as it existed at the time of the
9 application.

10 So does that mean that the project schedule, as it
11 existed in May of this year, that reference to, as it
12 existed at the time of the application?

13 **A. MR. MURCHISON:** Madam Chair, that this would have
14 been the schedule that existed early in 2025, I
15 believe.

16 **Q.** Thank you. And now, would you be able to provide a
17 project schedule as it exists as of September 30th,
18 since you've advised the Board that the tunnel project
19 won't be completed during the 2027 test year?

20 **A. MR. MURCHISON:** Yes, Madam Chair, we do have an
21 updated schedule that we can provide through an
22 undertaking.

23 **UNDERTAKING - TO PROVIDE A PROJECT**
24 **SCHEDULE AS IT EXISTS AS OF**
25 **SEPTEMBER 30TH, SINCE YOU'VE ADVISED**

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 THE BOARD THAT THE TUNNEL PROJECT WON'T

2 BE COMPLETED DURING THE 2027 TEST YEAR

3 Q. MS. BENTIVEGNA: Thank you. Now going back to

4 page 2 of the letter and looking at the third and

5 second last paragraph, so the one that starts:

6 (as read)

7 "Considering the significance of the

8 tunnel project and its costs."

9 And so on the subject of cost estimates, could you go to

10 your response to YUB-70, again looking at PDF page 459 of

11 that IR response, and the budget for the tunnel project

12 at PDF page 459 is approximately 74 million.

13 The lead-in to the table on that page indicates

14 that the budget, which only has six separate line items

15 was as it existed at the time of Yukon Energy's

16 management made the corporate decision to commence

17 substantial expenditures on the project.

18 So approximately what date was that, that YEC

19 management made the decision to commence substantial

20 expenditures on the project.

21 A. MR. MURCHISON: Madam Chair, so we recently had a

22 board decision in August that is advancing significant

23 expenditures.

24 Q. And that would be August of '25?

25 A. MR. MURCHISON: Yes, Madam Chair, that's correct.

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 Q. And then, so is it still your view that the IR response
2 that the forecast final cost of about 73.9 or 74
3 million still holds?

4 A. MR. MURCHISON: Madam Chair, no, that does not
5 hold for the tunnel replacement option; as I noted when
6 you asked about some of the challenges, our updated
7 estimate for the tunnel right now is sitting at 93.6
8 million.

9 Q. And I believe correctly if I'm wrong that we'll get --
10 that you've undertook to give us an updated budget for
11 the tunnel; is that correct?

12 A. MR. MURCHISON: Yeah, thanks, Madam Chair, we
13 undertook to provide an updated schedule.

14 Q. Okay. All right. Then how about an updated budget as
15 well?

16 A. MR. MURCHISON: Thank you, Madam Chair. So what
17 we can provide is an updated budget for the tunnel
18 option; is that correct? That's what you'd like,
19 correct?

20 Q. Yes. Since we were just discussing it and you
21 mentioned that costs have changed, so.

22 A. MR. MURCHISON: So, yes, thank you, Madam Chair,
23 we'll provide an updated budget for the tunnel option.
24 Thank you.

25 UNDERTAKING - TO PROVIDE AN UPDATED

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 **BUDGET FOR THE TUNNEL OPTION**

2 Q. MS. BENTIVEGNA: Thank you. Now, the second to
3 last paragraph of that letter, that October 14th
4 letter, indicates that YEC anticipates providing an
5 updated cost projection for phase 2 once the preferred
6 alternative is confirmed.

7 So when are you thinking that YEC will be able to
8 have an updated cost projection for phase 2?

9 A. MR. MURCHISON: Thank you, Madam Chair. We are in
10 the process of doing -- as I noted with --
11 independently with a contractor looking at the option
12 of an open channel spillway. We anticipate making a
13 decision by the end of this calendar year as to whether
14 or not we will continue to proceed with a tunnel and
15 a -- with the construction of a tunnel and the
16 replacement of the existing spillway or pivot to
17 construction of an open channel option.

18 So in the event that we pivot to an open channel
19 option, that's a different construction approach, and
20 that would -- we would be advancing those cost
21 estimates and that construction, if that was our
22 decision.

23 Q. Thank you. Now, I have -- I'm moving off of the
24 projects, and this is going back to get clarification
25 on a point earlier in the hearing, and it relates to

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 when there was the discussion about the CAFN and the
2 debenture, and so if you want the transcript volume
3 page 107, line 19 to page 108, line 22, and so to build
4 on that discussion, I have the following questions for
5 clarification of what the rate the debenture is for
6 rate making purposes.

7 So to start, and these are subject to check, these
8 statements, but they shouldn't be controversial.

9 The CAFN debenture arose pursuant to Chapter 22 of
10 the CAFN final agreement and was honoured as part of
11 the AGS project agreement signed July 21, 2022, as is
12 stated in YUB-54A at PDF page 327 of Exhibit 4. Is
13 that correct? Is that subject to check?

14 **A. MS. CUNHA:** **Yes, it is.**

15 **Q.** Thank you. Then the BESS project proceeding occurred
16 in 2021 with the Board issuing a report on June 30th,
17 2021, and as I go through these, if you have any issues
18 with any of my statements, just please say so.

19 And then the YEC 2023/'24 GRA was filed
20 August 31st, 2023, and in tab 7, Schedule 11, it
21 forecast new debt at -- excuse me -- at 4.23 and did
22 not include a line item for a CAFN debenture.

23 And that -- the YEC 2025/'27 GRA is the first time
24 that the CAFN debenture is before the Board in a GRA
25 setting, and that was -- that's found -- the reference

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 to it in the application, tab 7, Schedule 11.

2 Now, the cost of debt for the CAFN debenture in
3 the YEC in the current GRA, tab 7, Schedule 11,
4 calculates as follows: 2023, 3.8. 2024, 7 percent.
5 2025, 7.9. 2026, 9.2 and 2027, 9.2 and this is
6 calculated as line 39 and line -- it's calculated from
7 and line 15.

8 Now, in the current GRA forecast the debt is 4.55
9 percent, and that's from your application, PDF page
10 105, note 5.

11 Now, YEC stated in this GRA application that
12 during the BESS part 3 hearing, Yukon Energy proposed
13 that investment opportunities to be provided to the
14 First Nations by structuring the debentures
15 arrangements as a benefit where Yukon Energy pays the
16 interest on debentures, based on the actual rate of
17 return on equity, however, for rate-setting purposes,
18 Yukon Energy will use the cost of debt to remove the
19 impact on ratepayers.

20 The variance between the actual interest rate and
21 the interest expense included in rates will be charged
22 against Yukon Energy's retained earnings. The Board in
23 its report dated June 30th, 2021, stated that it
24 accepts Yukon Energy's commitment that ratepayers will
25 not be adversely impacted by the debenture investment

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 opportunity.

2 Accordingly, the application assumes all new debt
3 including any new debt related to First Nation
4 debentures, with an interest rate of 4.55, which is
5 based on the Bank of Canada benchmark plus 120 basis
6 point.

7 So now, when we were discussing this on
8 October 21st, it wasn't clear and maybe I can -- rather
9 than going through the transcript, and I will if you
10 need me to, is what is the answer to what the rate for
11 rate-making purposes for the CAFN debenture being
12 charged to rates? Is it the ROE rate or is it the
13 4.55?

14 A. MR. EPP: Madam Chair, I think I've got this
15 question here. So for the specific CAFN debt of \$1
16 million, I actually believe we have the interest cost
17 included in this application at the ROE rate of 9.15
18 percent, so for that \$1 million. New debt that would
19 come into play in the '25 to '27 years for the rate
20 making purposes is at -- there may be some of that that
21 is part of First Nation agreements, but for rate-making
22 purposes, that is all at the 4.55 percent.

23 Q. So then, Mr. Epp, if I understand you then, that 1
24 million for the CAFN is being charged in rates at 9.15?

25 A. MR. EPP: Sorry, I was not paying attention

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 there. Could you repeat your question?

2 Q. Sure. It's for -- I understand [indiscernible] debt we
3 said in the '25/'27 test period that's at -- the
4 interest on it is at 4.55. Okay.

5 But my question is -- seeing what was said in the
6 BESS proceeding how ratepayers would not be impacted by
7 debentures, and that -- that I just read you anyway,
8 and I can reread it to you, if you need to.

9 My question is, is the CAFN debenture being
10 charged to ratepayers at 9.5 percent or 4.5 percent and
11 the rest of it being at a shareholder cost?

12 A. MR. EPP: The CAFN debt is being charged to
13 ratepayers at 9.15 percent. The CAFN debt is not part
14 of the BESS agreement. The BESS -- so there has
15 actually been no agreements yet regarding BESS. The
16 CAFN debt regarding the AH3 project.

17 Q. Okay. So the CAFN is regarding the AH3 project, if I
18 understand you correctly, and that's being charged at
19 9.15?

20 A. MR. EPP: Correct.

21 Q. And what's the justification for that? Seeing that,
22 you know, let's say once you do sign an agreement for
23 BESS, it will be -- well, from what I understand at
24 4.5.

25 What's the justification for charging ratepayers

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Ms. Bentivegna

1 at the 9.5 debenture for the AH3 debt?

2 **A. MR. EPP:** There are two different projects.
3 There was no specific guidance on how to treat CAFN
4 debt to our understanding. It was the BESS debt.

5 **Q.** And do you agree that the Board didn't see the rate on
6 this debenture until this GRA, that it wasn't presented
7 in the '23/'24? And I mean, you can take that subject
8 to check?

9 **A. MR. EPP:** Yeah, I'm not sure. I don't
10 recall offhand whether the Board -- what the Board saw
11 in the previous general rate applications.

12 **Q.** All right. If you wouldn't mind then checking to see
13 when the Board, this Board, was made aware of the rate
14 that's being paid on the CAFN debenture at 9.15
15 percent?

16 **A. MR. EPP:** Yes, absolutely.
17 **UNDERTAKING - TO ADVISE WHEN THE YUKON**
18 **UTILITIES BOARD WAS MADE AWARE OF THE**
19 **RATE THAT'S BEING PAID ON THE CAFN**
20 **DEBENTURE AT 9.15 PERCENT**

21 **Q. MS. BENTIVEGNA:** Yes. Thank you.

22 **MS. BENTIVEGNA:** Madam Chair, those are my
23 questions for now, and then I'll have questions on the
24 net salvage.

25 **THE CHAIR:** Thank you, Ms. Bentivegna. And

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Mr. Johnson

1 I'm very aware that we have gone over for lunch, but
2 I'm thinking that it would still be opportune, there
3 are a few questions from the Board and to get those
4 questions taken care of before we have our one-hour
5 lunch break.

6 I believe, Mr. Johnson, you have some.

7 MR. JOHNSON: Sure, thank you, Chair.

8 MR. JOHNSON QUESTIONS THE PANEL:

9 Q. MR. JOHNSON: Couple clarification questions.

10 The first clarification I'm going to relate to a part
11 of a transcript from Tuesday's hearing, volume 1,
12 October 21st, page 20, starting at line 9.

13 I'm going to tell you what the quote is, so if you
14 want to take the time to look at it, you can, or you
15 can just accept my word for it and check later. And
16 the discussion at that point was there was a response
17 to questions from Ms. Bentivegna regarding this
18 spending reserve required for system stabilization
19 associated with the IPPs and renewables, and
20 Mr. Murchison, and I think you answered and this is a
21 quote: (as read)

22 "So we have an increased spending
23 reserve to 3.7 megawatts at an
24 increased cost of \$2 million in 2023,
25 and then in 2024 increased to 4

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Mr. Johnson

1 megawatts at a cost of 2.2 million."

2 End quote.

3 So my question is that was the increase to 3.7 and
4 4 megawatts, if IPP and renewables had not been on the
5 grid, what would the base level of -- or what would the
6 level of base spending reserve have been, so I'm just
7 looking for that incremental portion?

8 A. MR. MURCHISON: Yeah, thank you. So, Madam Chair,
9 I'll just -- we -- high level, what we had in 2023 with
10 a total spending reserve 6.7 megawatts, so spinning
11 reserve without IPP micro gen 3 megawatts, an
12 additional 3.7 on top of that.

13 And then for 2024 a total of 7 watts -- 7
14 megawatts, sorry, and then, so the system would have
15 been 3 -- so that's an increase of 4 megawatts, and
16 that's a rough estimate.

17 Q. That's great. Thank you. And I take it would be, just
18 as a followup, it would be kind of proportional, so
19 that additional spinning reserve would be proportional
20 to the quantum of energy being put on the grid by IPPs
21 and/or micro gen?

22 In other words, the more renewables put on, the
23 higher the spinning reserve would be, kind of
24 proportionate?

25 A. MR. MURCHISON: Yes, and as it relates to the load

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Mr. Johnson

1 on the grid as well.

2 Q. Right. Okay. Thank you. Second question in terms of
3 following up and this has to do with the topic of the
4 number of rented diesels through the test years. And
5 looking kind of at the various parts of the application
6 and follow-up on documentation, there has been a number
7 of different factors brought up, so I just want to
8 clarify that to make sure I've got it clear, and this
9 goes back to the transcript again for October 21st, and
10 it was starting at line 17 on page 78, and Mr. Epp, I
11 think you were responding at that point to
12 Ms. Bentivegna on the BESS in-service timing, so the
13 quote was: (as read)

14 "The intention of YEC is to have BESS
15 in service in 2026. And I can refer
16 you to NY-YEC-11, Attachment 1, where
17 we will see the benefits and we have
18 allocated to the BESS in the reduction
19 of diesel rentals and BESS online."

20 End quote.

21 So in light of the fact that there are a number of
22 factors identified that will influence the number of
23 rentals that will be in place through the test years, so
24 we've got BESS, you know, which will displace a certain
25 number of rentals.

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Mr. Johnson

1 Now, looking like that's more 2028, but we'll have
2 demand side management over a long period of time, that's
3 7 megawatts, mutual aid agreements, just what I'm looking
4 for is a confirmation on the number of rental diesels
5 through the test years, and the way I'm reading this, so
6 maybe you just have to confirm this, that it's 22 rentals
7 through '25, '26 and '27.

8 **A. MR. EPP:** **Mr. Johnson, the original**
9 **application had 22 rentals in 2025, 2026 and 2027.**

10 **With the -- so in YUB-YEC-1-8 we provided information**
11 **about the Whitehorse Power Centre coming online, and**
12 **assuming that comes online, the 2027 rentals would be**
13 **reduced to 18.**

14 **Q.** Would that be for a good portion of 2027 or just that
15 last month?

16 **A. MR. EPP:** **It would be -- the normal contract**
17 **for the diesel rentals starts in December. I mean,**
18 **November would be the commissioning period, but the**
19 **rental period normally starts December of 2027.**

20 **Q.** Okay. So one of the factors is the rental agreement
21 and the commitment, if you will, to the 22 diesels
22 through to December 2027?

23 **A. MR. EPP:** **Yep.**

24 **Q.** Okay. Thank you. My last question before lunch, at
25 least from me, would be, you know, we referenced a

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Mr. Johnson

1 comment that was made by the past Chair about who is
2 going to pay for all of this at the beginning, and I
3 think another key perspective obviously of ratepayers
4 and the Board is so what are we actually going to pay
5 for through the time period, and there's been a lot of
6 discussion on that today with respect to a couple of
7 large projects, particularly the Whitehorse Power
8 Centre South, and Mr. Epp, we did hear what you said
9 about the performance of YEC or actually I think it
10 might have been Mr. Milner, about the performance of
11 YEC in terms of forecast versus actuals over time,
12 however, part of the concern is that we're really
13 moving into a whole new era with unprecedented capital
14 spend and commitment, and the world has changed, as we
15 all know, kind of through, you know, since 2020 for
16 sure, in terms of the entire environment surrounding
17 getting projects done.

18 So my question really is, and it's kind of on
19 behalf of the Board and for ratepayers, is, you know,
20 what else can be done by YEC to reassure ratepayers and
21 the Board on the prudence of the cost forecasts over
22 time?

23 Right now, and I could pick any one of the
24 projects, but looking at the Whitehorse Power Centre,
25 there's an estimate there, it's a Class 4 estimate, I

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Mr. Johnson

1 believe, and a lot can happen between now and where
2 we're going to be, further that project even as now and
3 we heard very clearly it's schedule driven, and that
4 quite often comes at the risk of cost, and potential
5 equality as well.

6 So really we're just looking for kind of what YEC
7 would propose in order to not only provide some
8 confidence now for ratepayers and for the Board, but
9 particularly over the next couple of years to really
10 avoid the point where we get to where there's a large
11 surprise by the next GRA in terms of where we're at
12 with the costs, and of course, I've been referencing
13 the Whitehorse Power Centre, but it goes beyond that.

14 I mean, you've got a lot of projects in the hopper
15 so-to-speak, and how does YEC intend to communicate
16 differently, and in terms of being able to manage those
17 costs and manage and give confidence that the projects
18 are being well-managed?

19 And I think Mr. Murchison, you identified a number
20 of areas that do provide some of that reassurance. You
21 know, long lead time materials and the different
22 actions that are being taken, but I'm just looking for
23 a bit more of that.

24 A. MR. MILNER: Mr. Johnson, Madam Chair, I'll
25 start with the higher level sort of introduction, and

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Mr. Johnson

1 Mr. Murchison can speak to some of the details that I
2 reference, but I think over the -- I think we can all
3 agree that since the last time we were here before the
4 Board, the pressure, global pressure, has not
5 decreased. It's increased.

6 The intensity to build things faster, to all
7 access different markets that everyone is trying to
8 access at this time has increased at this time, and
9 what that does is it drives uncertainty and it drives
10 challenges, and I think the key actions that you're
11 seeing Yukon Energy take right now around extra due
12 diligence in order to respond in that context is a
13 response to that exact piece.

14 So what we're having to do is change the way we do
15 business fundamentally. We're having to access
16 partners. We're having to lean on our neighbouring
17 utilities, whether it be ATCO with extra purchasing
18 power or BC Hydro with extra resources to respond to
19 emergencies. That's becoming more and more commonplace
20 right now.

21 So certainly the diligence increases -- is
22 increasing at the same time that the urgency is
23 escalating, and all of that points to tactics to manage
24 uncertainty.

25 So some of the key changes in the way we do

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Mr. Johnson

1 business are accessing expertise to both confirm value,
2 confirm cost. We're having to access very specialized
3 expertise to manage projects that are just way outside
4 of our in-house ability to manage, and, you know, I
5 would draw -- you drew us to the Whitehorse Power
6 Centre. I would draw -- we need to draw attention to
7 the fact that the Mayo projects are incredibly complex,
8 and we're having to build out a wall of talent to be
9 able to respond to that, in both a rapid way, but also
10 in a way that assigns the due diligence is required.

11 So that's what we're feeling and how we're
12 responding to the overall landscape of things, and I
13 can ask Paul to dig into some of the more detailed
14 tactics if you wish or that was the kind of level of
15 answer that you're looking for.

16 Q. I think that kind of addresses it from a very high
17 level and globally, but I know that the Board and
18 others will be looking for more than that.

19 Like, specifically, I mean you've undertaken
20 projects in the past, and what lessons learned have
21 been brought forward, and really how are you actually
22 going to manage these and not sacrifice, you know, the
23 other 70 projects that are or whatever number it is,
24 number of other projects that you have underway, and I
25 know I'm not representing something new here. It's a

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Mr. Johnson

1 daunting task for you, but the -- certainly the concern
2 from the Board perspective is, you know, having
3 confidence in the numbers that have been put forward?

4 **A. MR. MILNER:** Yeah, we can certainly appreciate
5 that. And we're seeing the same level of inquiry at
6 our own board meetings when we're reporting quarterly
7 and annually on project. We've had to increase the
8 overall focus on our committee level discussions,
9 whether it be the project level committee and
10 throughout the whole organization, so things are
11 getting more scrutiny, more questions are being asked,
12 more advanced planning is being required. The
13 regulatory landscape is demanding that rigor as well.

14 Paul, do you want to speak to some of the more
15 specific details to support those comments?

16 **A. MR. MURCHISON:** Yeah, thank you. And I guess
17 reflecting a little bit, I mean, a lot of the questions
18 today about prudence as it relates to how we do
19 estimating, how we track contingencies, I think they
20 are all important questions to ask us because we are
21 spending more money. So yeah, I think that line of
22 questioning was important.

23 And -- but I think in line with what Mr. Milner is
24 saying, it's been quite challenging, and you look at
25 some of these big projects in Mayo where you have a

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Mr. Johnson

1 slope failure and risk of spillway. Those projects
2 have to happen and those projects have to advance.

3 What I can say in your comment about learning and
4 how do we advance projects, I think if you look at
5 projects, some of these big projects that are currently
6 underway, thermal replacement, battery energy storage
7 system, the surge chamber and the rockslope, although
8 they're not easy projects, we talked about them being
9 at Class 1, we have a -- you know, within those ranges,
10 we have a high level of confidence that they will be
11 delivered at, you know sort of in the price ranges that
12 we're talking about here, but there is risk to the
13 Wareham Dam spillway, for example, as we're advancing
14 that quickly, and we're seeing as I noted some cost
15 fluctuations, but then your question about the south
16 power centre, I actually believe that that -- although
17 not advanced cost estimate, given the recent thermal
18 replacement work we've done, given the building of the
19 Mayo facility, right, we actually are more confident in
20 that estimate, you know, being pretty good, because
21 we've done that type of work.

22 So part of what we have too is some repeatable
23 work that's in our system, and that's -- you know, we
24 built plants, we've built the infrastructure to support
25 plants, so we have some of that experience. Whereas we

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Mr. Johnson

1 don't -- we rely much more heavily on consultants when
2 it comes to building a spillway. We don't have
3 internal people that have built a spillway, right, and
4 there's lots of components there.

5 So I mean that's just -- I think with the numbers
6 that you have in front of you now, some of those
7 numbers are good, some of them as highlighted as some
8 of those numbers are subject to potential for more
9 change, but then I did want to highlight was that plant
10 renewable being on track that I think we're getting
11 those pretty good numbers there.

12 Q. So I would just caution that with the element of being
13 schedule-driven, you know, it changes the dynamics of
14 the project significantly, no matter how many times
15 you've built it, but anyway, thank you for the
16 comments.

17 A. MR. EPP: Mr. Johnson, the other thing that
18 I hope will help is we do want to come back to you more
19 frequently, for example, like applications for every
20 year, whether like we've got three-year applications,
21 so we probably will be providing a -- the plan is
22 provide a new application for '28 and future years, and
23 we would want to give that to you relatively early in
24 2027, so, and then at that time we can provide you with
25 updates on all the projects and where they've gone from

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Questioned by Mr. Johnson

1 **there as well.**

2 Q. That would be helpful. Thank you.

3 THE CHAIR: Okay. I don't think there are any
4 further questions from the Board, so we'll take our
5 one-hour lunch break now. Thank you.

6 THE CLERK: Order. This hearing will stand
7 adjourned for one hour.

8 (PROCEEDINGS ADJOURNED AT 12:56 P.M.)

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10 PROCEEDINGS ADJOURNED TO 1:56 P.M.

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C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Re-examined by Mr. Herbert

1 Volume 3

2 October 23, 2025

3 P.M. Session

4

5 (PROCEEDINGS RECOMMENCED AT 1:58)

6 THE CLERK: Order. This hearing is
7 reconvened. Please be seated.

8 THE CHAIR: Mr. Herbert.

9 MR. HERBERT: Yes.

10 THE CHAIR: Can I ask how you're planning to
11 structure your redirect in terms of the full panel here
12 and then your expert witness.

13 MR. HERBERT: My redirect will be very brief and
14 I just have a few questions on redirect from and after
15 that point we will be able to excuse the panel with the
16 exception of Mr. Epp, and he'll be joined by the two
17 representatives from -- who were the authors of the net
18 salvage study.

19 THE CHAIR: Okay. Thank you. And if you're
20 ready to start now with redirect.

21 **MR. HERBERT RE-EXAMINES THE PANEL:**

22 Q. MR. HERBERT: Thank you, Madam Chair.
23 Ms. Cunha, you spoke about the schedule including Yukon
24 Energy's engagement with the senior officials' working
25 group. Can you clarify for the Board which entities

1 are included senior officials' working group?

2 A. MS. CUNHA: Yes, absolutely. So recognizing
3 that, you know, this is a must have project and that
4 it's important that we meet the schedule, we have had
5 early engagement with First Nation -- pardon me, with
6 the Ta'an Kwach'an Council and Kwanlin Dün First
7 Nation. We have a senior officials group with those
8 two nations that is specific to energy projects and
9 their traditional territory, so we have engaged them in
10 those conversations. And it's actually through those
11 conversations that each of those nations had put
12 forward a parcels of settlement lands to be considered
13 as part of the project.

14 In addition to that, we have met with the City of
15 Whitehorse, Yukon government and YESAA independently,
16 one on one, to better understand each of their
17 independent processes and to discuss opportunities
18 where we could do processes in parallel, so for
19 example, public engagement, each of the processes has a
20 public engagement component, so we've been having
21 discussions about how we could streamline that and do
22 those in parallel.

23 Also from a public fatigue perspective wanting to
24 bring clarity to residents of Whitehorse and the Yukon
25 of, you know, exactly what engagement we're having.

1 Moving forward, we'll be moving with the City of
2 Whitehorse and Yukon government on a senior officials
3 group or a working group. To be clear, YESAA staff is
4 not part of that group.

5 Q. Thank you, Ms. Cunha. So just to clarify, that moving
6 forward, the senior officials' working group, Yukon
7 Energy, the two First Nations, City of Whitehorse and
8 the Yukon government?

9 A. MS. CUNHA: Right now we have two senior
10 officials groups, one with the nations and one with the
11 nonnations government. We will be extending
12 invitations to make one, but currently they are two
13 independent.

14 Q. Thank you. And can you just elaborate any more on how
15 you expect these discussions to assist in advancing the
16 schedule for the Whitehorse Power Centres project?

17 A. MS. CUNHA: Yes, absolutely. So what we've --
18 right now what we know is that by working together with
19 the First Nations early on in the project and we've
20 been having conversations with them for a -- more than
21 a year already is that we're able to identify interest,
22 concerns, partnership opportunities with the nations
23 earlier on in the project and to make sure that they're
24 a part of the project planning and execution early on,
25 which helps expedite the permitting processes, as they

C. MILNER, J. EPP, S. CUNHA, P. MURCHISON

Re-examined by Mr. Herbert

1 **come to fruition.**

2 Q. Thank you. Now, you also made reference during your
3 evidence this morning to Yukon Energy's experience with
4 the executive committee level screening process with
5 YESAB for the Callison project.

6 Can you elaborate a bit more about how that
7 experience informs Yukon Energy's expectations for the
8 timeline for the executive committee screening process
9 for Whitehorse Power Centres?

10 A. MS. CUNHA: Yes, right now looking back on our
11 experience with Callison, certainly having that been --
12 the development of a thermal site, there is certainly a
13 lot of learnings that we had and that we can replicate
14 here with the Whitehorse Power Centre, given that they
15 are very similar projects.

16 In that regard, the Callison executive screening
17 process took about 13 and a half months and Yukon
18 government was able to issue their decision document
19 within the two-month timeframe, so for a total of about
20 15 months.

21 Q. And can you just confirm again when Yukon Energy is
22 expecting to be in a position to submit a YESAB
23 proposal for Whitehorse Power Centres?

24 A. MS. CUNHA: Yes, we're aiming to do that in
25 March of 2026.

J. EPP, P. BOWMAN, H. MAHMUDOV

Re-examined by Mr. Herbert

1 MR. HERBERT: Thank you, Ms. Cunha. Those are
2 all my questions on redirect.

3 THE CHAIR: Thank you. So the panel members,
4 other than Mr. Epp, can be released now. Thank you.

5 MR. HERBERT: Thank you. And joining Mr. Epp on
6 the net salvage study panel will be remotely Patrick
7 Bowman of Bowman Economic Consulting and Hayitbay
8 Mahmudov of InterGroup Consultants, the authors of the
9 net salvage study and I understand that they will be
10 attending remotely, but will still need to be sworn or
11 affirmed.

12 THE CHAIR: And do they need to be registered
13 as well, Ms. Bentivegna.

14 MS. BENTIVEGNA: No, well, they will need -- if
15 Mr. Herbert wants to give more of an introduction.

16 THE CHAIR: Okay, thank you.

17 MS. BENTIVEGNA: But it doesn't have to.

18 THE CHAIR: Okay. Thank you.

19 MR. HERBERT: We have filed their CVs with the
20 Board, so I think that should suffice.

21

22 P. BOWMAN, H. MAHMUDOV (For Yukon Energy Corporation via
23 videoconference), affirmed.

24 MR. HERBERT: So I have no questions and so
25 they're open to questioning by Ms. Bentivegna.

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 THE CHAIR: Thank you. Ms. Bentivegna.

2 **MS. BENTIVEGNA QUESTIONS THE PANEL:**

3 MS. BENTIVEGNA: Thank you, Madam Chair.

4 Q. MS. BENTIVEGNA: Now, this first question relates
5 to something that you said, Mr. Epp, yesterday, but it
6 does relate to net salvage as well. So when we were
7 discussing, it was a \$46,000 in remaining of a capital
8 cost.

9 I don't know if you remember that, and you've
10 said, you confirmed, that that \$46,000 will go to
11 shareholder costs because it was not predicted, and
12 that's if you need to look it up, it's at transcript
13 volume 2, PDF page 78.

14 Now, this was also in reference to YEC-YUB-65D at
15 PDF page 355, and it was -- that loss of \$46,000.

16 Now, I'm trying to understand what you meant, if
17 you can clarify, when you said that since it was not
18 predicted that loss of \$46,000 -- or the remaining
19 cost, capital cost, of \$46,000, it was -- goes to
20 shareholders, and it's that part of the sentence --
21 your sentence that talks about predicting it and we're
22 trying to understand what you meant by that?

23 A. MR. EPP: Sure. So, Madam Chair, the
24 \$46,000-loss has happened. It does not appear in
25 revenue requirement anywhere in the application. Like,

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 you won't see a claim for \$46,000 in '25, '26 or '27,
2 so that's what is meant by that issue.

3 When I said it's not predicted, I could foresee an
4 example in the future, if we have a replacement planned
5 that is due to now a known condition of an asset that
6 we think we're going to replace it early. So it still
7 has net asset value on it.

8 We could, I guess, say in the -- we could have --
9 if we did plan for it in this GRA, I could have said,
10 oh, we're going to replace this item in 2025 because we
11 know it was in bad condition and we've got a plan to
12 fix it and it's got a net asset value of \$46,000.

13 And because it was unexpected overall, but we
14 now -- we know about at the time of preparing the
15 application, we could have then included that \$46,000
16 as a request for a revenue requirement.

17 Q. All right. So was it the asset retirement or the loss
18 that, or both, that wasn't predicted? I'm just trying
19 to hone in on the reasoning?

20 A. MR. EPP: In this specific example, the
21 relay test set was determined to not be working
22 properly, so the asset was taken out of operation.
23 That was not expected. It resulted in an unexpected
24 loss, that the -- because of the asset unexpectedly
25 being taken out of service.

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 Q. Thank you.

2 Now, can you help us understand how this type of
3 retirement and cost of removal would pertain under or
4 would apply under your proposed net salvage method?

5 Would it be considered terminal or an interim?

6 A. MR. EPP: As this is just a tool, I would
7 say it's not included in -- it's not related to the net
8 salvage study. That could be confirmed or corrected by
9 Mr. Bowman.

10 A. MR. BOWMAN: Madam Chair, my understanding of
11 the example that's being referenced is an asset that is
12 being retired, and that one is dealing with how to
13 account for the book value as it appears on the
14 company's accounts.

15 That's different than what we talk about when we
16 move to the net salvage study and the net salvage
17 approach, which is where we're talking about a new set
18 of costs that is incurred in order to remove or
19 rehabilitate a site when you remove an asset.

20 So anything you will see in the net salvage is not
21 talking about how to deal with the original capital
22 cost, depreciation of that capital cost or gains and
23 losses upon retirement of that original cost to install
24 that capital cost.

25 Q. Rather than focusing in on the example, I'd like to

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 expand it more to, if there's a retirement under the
2 proposed of an asset -- under the proposed net salvage
3 method, would it be considered a terminal or an interim
4 one?

5 A. MR. BOWMAN: Madam Chair, as I noted, I'm not
6 familiar with this example and perhaps Mr. Epp will
7 want to add, but in what I had understood you were
8 talking about a tool or a piece of equipment, and it --
9 because it wouldn't have a net salvage component or a
10 cost to remove it, I'm not sure it would be necessary
11 to classify it, but in general, if it's something
12 that's being removed from a site, but that equipment or
13 that service is still required, so that something new
14 is being constructed at that site or being installed at
15 that site to replace the function of the old asset,
16 then it would be considered an interim retirement.

17 Q. Then is the converse true where if nothing replaces it,
18 then would you consider it a terminal one?

19 A. MR. BOWMAN: Yeah, there are only --
20 Madam Chair, there are only two types of retirements in
21 the way that this language is normally used, interim
22 retirements where the requirement for the service goes
23 on and an asset is simply replaced, and terminal
24 retirements where the requirement for that service no
25 longer exists or is being replaced by some other

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 functionality in a different location in which case the
2 asset is retired and removed and not replaced in the
3 same general location.

4 But as I noted, that classification only comes
5 into account when one is dealing with costs incurred to
6 remove an asset, and I don't know that in this example
7 or in the example of any other type of tool that you
8 would actually have costs incurred to remove or to --
9 an asset or rehabilitate a site.

10 A. MR. EPP: Madam Chair, I can confirm that
11 there was no cost to remove this.

12 Q. And under the proposed net salvage method, would this
13 type of asset retirement be considered routine or
14 nonroutine?

15 So rather than focusing in on just the example of
16 an asset just being removed and not replaced, but
17 looking at it sort of generally, would this type of
18 asset retirement be considered routine or nonroutine?

19 So I guess if you can explain what routine asset
20 retirement is and what a nonroutine is to us, please?

21 A. MR. BOWMAN: Yes, Madam Chair, once one has
22 addressed the question of whether an asset is being
23 replaced or its function is being replaced, in which
24 case it's interim, then and if it's not, then it's
25 terminal, then one is left with the question of how do

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 you deal with the costs for terminal retirements.

2 Recall that the proposal is that interim
3 retirements, when you have to spend money to take away,
4 say, a transformer, install another transformer on the
5 site, the costs to take away the old transformer would
6 be rolled into the capital costs of the new
7 transformer, so you have a place for those costs to
8 reside, where they will become depreciated going
9 toward.

10 It's terminal retirements where you don't have a
11 place for the costs to reside. If you were removing a
12 transformer and not replacing it because the need for
13 that function had disappeared. Then you're left with
14 this question of, you know, where do I charge this
15 amount and how do ratepayers pay for this amount?

16 In most cases you -- where one -- a utility is
17 dealing with a terminal type of retirements, there are
18 normal amounts that are incurred in any given year.
19 They're not generally large. They can be looked at
20 over time in a spread sheet. They can be analyzed in
21 relation to the size of the plant installed, and an
22 amount can be built into rates to maintain a salvage
23 reserve to be able to fund those amounts and to charge
24 them to ratepayers on a relatively stabilized basis.
25 That's going to apply to almost everything that Yukon

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 Energy will have terminal retirements on.

2 The problem arises when you have large and
3 uncommon type of retirement experiences, and I'm
4 saying -- I'm not even sure that we can identify one at
5 this point, but if somebody says, well, you know, what
6 if you end up having a major transmission line that you
7 need to retire and you're not replacing? What if you
8 have a hydro site that reaches end-of-life and you have
9 to remove that? Are we really putting aside dollars
10 today to take down a major hydro site? And generally
11 the answer would be no, we don't expect those things to
12 occur. We don't build anything into rates for them.

13 If they did occur, they're obviously a utility
14 cost. They're obviously a part of the cost of service
15 for that hydro plant, but we're not going to start
16 incurring for them today when we don't expect them --
17 we don't know when they're going to occur. When
18 they're going to be massive numbers when they were to
19 occur, or large numbers, that does not lend itself well
20 to analysis of a depreciation study or to establishing
21 a funded reserve through rates.

22 And so what most utilities will do and there are
23 some references in our report is they will say if I'm
24 going to have thing like that, something that is very
25 large, that is unexpected, you know, far in advance,

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 but at some point may arise, we're not going to pretend
2 that the dollars being put aside over time are somehow
3 supposed to fund that balance.

4 We're going to say that if that occurs, the
5 utility would have some advance notice, it would come
6 back to the Commission, and it would have to work with
7 the Commission to find a reasonable way to build that
8 into rates so that it could deal with those costs.

9 But like I said, not something that's a normal
10 event, but not something that somebody would think
11 could be funded from a \$350,000 a year accrual or any
12 type of ongoing accrual. I hope that answers the
13 question.

14 Q. I'm still trying to understand what would be considered
15 routine and nonroutine?

16 A. MR. BOWMAN: Well, as I said, nonroutine would
17 be something that would be like a major end-of-life
18 event. For example, if Yukon Energy determined that it
19 could no longer sustain a thermal site in the City of
20 Whitehorse and it had to fully remove and rehabilitate
21 that site and relocate it somewhere else. That would
22 clearly not be a routine retirement. It would clearly
23 be very large dollars. It clearly would be planned for
24 well into the future. There would be time to set up an
25 orderly way to address that item through rates, and

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 that would be something you'd think about as
2 nonroutine.

3 Q. Thank you. Now, so if an asset retirement were to be
4 predicted or routine, so can you tell us how, Mr. Epp,
5 how YEC views an asset retirement that can be
6 predicted, and if you could give us an example of the
7 subsequent journal entry for a predicted retirement?

8 A. MR. EPP: Madam Chair, to date we haven't
9 done any predicted retirements.

10 Q. Thank you. And can you confirm that your statement
11 aligns with YEC's group depreciation practices, which
12 are associated with the development of your
13 depreciation study and depreciation rates?

14 A. MR. EPP: Sorry, can you clarify the
15 question.

16 Q. Sure. Well, you just said you can't give us an example
17 of a predicted retirement, and we've been talking about
18 the loss that was -- that asset that wasn't replaced,
19 and wasn't -- was unpredicted.

20 So I'm just in considering your net salvage study,
21 all that, is it your view that YEC's group depreciation
22 practices, which are associated with the development of
23 your depreciation studies and depreciation rates, that
24 what you've told us confirms to that?

25 A. MR. EPP: Madam Chair, the disposal of the

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 protection relay tests, that had nothing to do with the
2 net salvage value study, and once that asset is taken
3 out of service, it is no longer depreciated, and that's
4 within our policies, yes.

5 Q. Thank you. Now, going to the application, Exhibit 1-A,
6 Appendix 5.3, FX-001 the criteria for capitalization at
7 PDF page 431 to 438, so you'll see there at PDF page
8 434, acquisition costs for capitalization include but
9 are not limited to and there's a whole list there.

10 Now, looking -- if you look at the heading
11 "Acquisition Costs For Capitalization" include and
12 are -- as I just -- but looking at item S in that
13 excerpt, the sentence states: (as read)

14 "The initial estimate of the costs of
15 dismantling and removing the item and
16 restoring the site on which it is
17 located, the obligation for which an
18 entity incurs either when the item is
19 acquired or as a consequence of having
20 used the item during that particular
21 period for purposes other than to
22 produce inventories during that
23 period."

24 And then there's an IAS 16, paragraph 16C. Are these to
25 be treated as acquisition costs included in any

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 capitalized asset that reference that I've just read to
2 you in paragraph S?

3 A. MR. EPP: Madam Chair, and Mr. Bowman can
4 correct me if I need any correcting here, but this
5 clause here is specifically relating to an asset
6 retirement obligation in -- under accounting terms, and
7 if I try and relate that to the net salvage value that
8 we were also talking about, I think that's where, what
9 you call a nonroutine transaction, and Yukon Energy
10 does not have any of those nonroutine transactions
11 listed on your books because the accounting rules are
12 it has to be measurable, and as Mr. Bowman said, it's
13 very rare that you know of something and then can --
14 you know when a diesel plant is going to be taken down
15 in the City of Whitehorse and not replaced.

16 But I think if that were to occur, we would have
17 to -- would have had to set up the costs at the
18 beginning, but we -- since we don't foresee that, we
19 aren't able to predict the costs. We have no assets in
20 our books today reflecting that.

21 Q. Now, going to Exhibit 4, which is the consolidated
22 information responses, and if you can look at 65,
23 YUB-65M at PDF page 357, lines 22 to 28, and then as
24 well the information response at 65(0), which is on PDF
25 page 358. So if you see that.

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 Now, in looking at lines 25 to 28 of the IR
2 response, which is discussing depreciation expense
3 calculations as shown in the tables, I want to
4 understand more about what YEC's referring to in the
5 headers "Regulatory Accounting and Proposed Rate
6 Setting."

7 Can you explain the use of this different
8 terminology and what pertains to regulatory accounting
9 and what pertains to rate setting?

10 A. MR. EPP: Madam Chair, first, I will note
11 that this is not a net salvage issue. Nothing to do at
12 all with net salvage value. But do you still want me
13 to talk about this?

14 Q. Yes, please, because it does relate to depreciation so.

15 A. MR. EPP: It relates to, yes, depreciation,
16 completely separate from net salvage value. This is
17 where the YUB directed us in the last rate application
18 to take a look at how we do net depreciation of our
19 property and equipment. Nothing to do with net salvage
20 values.

21 So we did research, and in this application we
22 have proposed to change our depreciation method for
23 property, plant and equipment to be consistent with
24 other utilities.

25 For example, this is -- the way we proposed is the

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 way ATCO Electric Yukon does their depreciation
2 methodology. It is consistent with Northwest
3 Territories Power Corporation, and we are not aware of
4 any utility actually that does depreciation for
5 rate-setting purposes the way we did in the previous
6 applications, and the reason the utility board -- my
7 understanding why the utility board asks us to do this
8 is because in previous general rate applications, the
9 utilities board had lots of difficulty understanding
10 our depreciation calculations because we did it based
11 on our best estimate on an asset by asset basis,
12 whereas that's not how it's typically done for
13 regulatory purposes.

14 So the approach in this general rate application
15 for depreciation of property, plant and equipment is
16 to -- we've taken the approach that was -- that we said
17 we would propose in the compliance filing of the last
18 general rate application, which basically takes the
19 opening balance of your asset class, multiplies it by
20 the depreciation rate for that particular asset class,
21 and if there's any additions during the year, you would
22 take half of that calculation for the addition portion.

23 So again, nothing to do with net salvage, but it
24 is a depreciation methodology response.

25 Q. Thank you for that explanation, but in your view, is

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 there a difference between regulatory accounting and
2 proposed rate setting?

3 **A. MR. EPP:** Yes. So what we're doing here we
4 have a general rate application. Decisions and
5 methodologies used here are how rates will be set.
6 That will be what makes up revenue requirement. At the
7 end of the -- then we're done with that. Whoops,
8 sorry.

9 When we finish a year, we actually -- calculate
10 our actual results, and that's based on the normal
11 financial accounting rules, and we then can compare
12 that to -- well, I guess that's just it at that point.

13 The -- we have -- we will have variances between
14 actual and the approved amounts in everything, and that
15 would -- is what makes up our regulatory or financial
16 income. That's set -- that happens after the fact,
17 after year-end is done. Nothing do with the
18 rate-setting process that we're going through today.

19 **Q.** Thank you. Now, going back to that Exhibit 4, but
20 looking at 65(0), the answer to 0, PDF page 358, line
21 19 refers to an industry standard level for the reserve
22 for site restoration, which I take to be referring to
23 YEC's future removal and site restoration, FRSR. Is
24 that correct?

25 **A. MR. EPP:** Yes, it is correct.

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 Q. Thank you. Now, Mr. Bowman, can you point to any
2 depreciation literature or documentation of any sort
3 that refers to the existence of an industry standard
4 level of precollective net salvage costs?

5 A. MR. BOWMAN: Madam Chair, yes. If you would
6 just clarify whether you're looking for industry
7 standard in terms of practice or are you looking for a
8 literature reference?

9 Q. It would be useful if you gave us both.

10 A. MR. BOWMAN: Well, in terms of --

11 Q. The standard and the literature.

12 A. MR. BOWMAN: Yeah, in terms of a literature
13 reference, I can provide those, but what you will
14 normally find, if you look in something like the
15 Depreciation Manual produced by the National
16 Association of Regulatory Utility Commissioners, NARUC,
17 they have a volume on depreciation, and what it will
18 basically explain is that what you are trying to
19 depreciate is the service value provided by an asset,
20 and the service value is the initial investment less
21 the value at end-of-life, which would include any
22 positive salvage, as in being able to sell a used
23 truck, for example, if you used the truck for five or
24 ten years, you could sell it for something, your
25 depreciation doesn't need to collect the entire value

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 of the truck, it only needs to collect the original
2 price less what you're going to sell it for at the end.

3 And that terminal value, that end value may be
4 negative if you have to incur costs to remove it. For
5 example, if you have a transmission line, and when you
6 take it down, you have to send people out who will take
7 down the poles and pick up all that wire. And that's
8 it. That's a negative cost.

9 So you would build that cost into the
10 depreciation. So the -- that manual will talk about
11 the idea of a service value for an asset. And so in
12 that sense, yes, there is quite a bit of textbook
13 literature about -- about how one deals with, from a
14 rate setting perspective, removal costs and net
15 salvage.

16 In practice, when you turn to utilities, the
17 question becomes what is considered a net salvage cost,
18 and that's where most of our report focused, which is
19 looking at the different types of costs that can be
20 incurred when an asset reaches end-of-life and how one
21 accounts for them and which of them are effectively a
22 cost of this asset and which are accounted for in a
23 different way. That's not uncommon.

24 You always have to look at that set of dollars
25 that will be spent and think about how they will be

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 accounted for, and but our report is recommending that
2 for Yukon Energy, it use an approach that has been
3 adopted by utilities like Manitoba Hydro and
4 Newfoundland Hydro and AltaLink Management in Alberta,
5 where the interim retirement costs, those costs to get
6 assets out of the way so you can build a new asset in
7 its place, become part of the new asset, and we provide
8 it in our report, references to those utilities and
9 their practice. I can provide the decision numbers if
10 it helps you or references to where the Commission has
11 noted that or where the utilities have explained this
12 in their regulatory filings.

13 And so because those costs are being added to the
14 costs of the replacement asset, they do not need to be
15 recovered during the life of the assets that's
16 installed.

17 The only removal costs that need to be recovered
18 during the life of the asset that's installed, which
19 become part of that service value concept then is the
20 terminal retirement values, which is what we explained
21 can be addressed by the FRSR.

22 FRSR being the name for the account which will
23 address the topic of net salvage. The two are
24 synonymous.

25 So I can -- like I said, there's both the sort of

1 literature and the regulatory practice for what we're
2 talking about here.

3 Q. But is there an industry standard level of
4 precollection of net salvage costs? So I'm looking to
5 see if there's an industry-wide standard level that you
6 have found or is there one or it's just practices and
7 then as you mentioned the literature?

8 A. MR. BOWMAN: No, well, the -- Madam Chair,
9 there's no single dollar value or no single percentage
10 value that applies because each utility's assets are
11 going to be different, and each utility's removal
12 situation will be different.

13 Some utilities are operate in urban environment,
14 some operate in rural environment, some operate with
15 much more -- much more generation assets or site
16 specific assets. Some operate with wide-ranging
17 transmission, for example.

18 So having developed this concept out of the
19 literature and been applied in practice, part of the
20 work that will go into each future depreciation study
21 will be to determine the Yukon Energy specific target,
22 and that will be no different than the work that the --
23 that a depreciation expert normally does.

24 They will look at a group of assets for each
25 utility, they will determine the utility specific

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 estimated life for each type of asset, and they have
2 methods, you know, when we do studies for utilities,
3 methods for looking at how one estimates what the
4 removal costs would be.

5 Usually that is primarily by reference through
6 utility's own data and own experience, removing assets
7 under a similar accounting regime. And over time you
8 can develop percentages or estimates for what costs
9 should be included, but there's no single standard
10 that's applied. There's no, you know, national
11 approved value. It's part of the work that each
12 utility needs to do as part of their ongoing
13 depreciation studies.

14 Q. Mr. Bowman, it seems to be what you're just -- and
15 correct me if I'm wrong, but it seems to be at odds
16 with that response, what you're telling me, the
17 response and that's at the 0, under the information
18 responses, and I'll read it to you so it says:

19 (as read)

20 "Yukon Energy's revenue requirement has
21 provided for the collection of annual
22 net salvage expense in the amount of
23 0.350 million per year on the basis
24 that the balance of the reserve for
25 site restoration is currently at an

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 insufficient level, and therefore,
2 should be increased to an industry
3 standard level, as summarized in
4 section 3.4.5 on PDF page 100 of the
5 application as detailed in tab 9 of the
6 net salvage study and shown in tab 3,
7 Table 3.13."

8 So that's what I'm trying to understand is those
9 statements now in relation to what I've just asked you
10 and what you responded.

11 **A. MR. BOWMAN:** Right. So, Madam Chair, I will
12 say, you know, I didn't draft this response, but I
13 believe I understand what the words are trying to get
14 at.

15 The current Yukon Energy situation is entirely not
16 in keeping with an industry standard. Yukon Energy has
17 a balance in an FRSR that was accrued prior to 2005.
18 At that point it stopped adding anything to that
19 account and is just spending it down. And at some
20 point it will hit zero and then it has no -- no ongoing
21 plans to deal with these costs and no practice as to
22 how to deal with them.

23 So we're outside -- no matter how we approach it,
24 we're outside an energy standard and we need to move
25 towards something that is sustainable and deals with

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 the fact that these are valid and necessary utility
2 costs and they need to be built into rates.

3 The industry standard way one would deal with that
4 is to establish your accounting standards and your
5 accounting approaches for the costs which is what our
6 study tries to do, instead of just taking the costs and
7 putting them into new assets. These will accrue over
8 the life of the asset and then to establish a method
9 where you say for those costs where you do need to
10 accrue over time, how high should that be? And how
11 high should that be in and relate -- [audio
12 disconnection] all rolled in and done as part of a
13 depreciation study. You --

14 THE CHAIR: So I'm afraid, Mr. Bowman, if you
15 can hear, you're freezing on us. We may need to take a
16 minute and we'll have to ask you to repeat your
17 answers.

18 A. MR. MAHMUDOV: Madam Chair, in the mean time,
19 maybe I can just add a bit of information here with
20 reference to that insufficient level. So we -- in our
21 report we stated that the YEB directed that Yukon
22 Energy discontinue annual accruals to the future
23 restoration account, and then come back to the Board
24 once that balance -- once that liability balance
25 reaches \$2 million, and at the moment it's below that

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 \$2 million, and I think that's why the whole study was
2 initiated. But the balance is below that threshold,
3 which was written by the Yukon Energy Board.

4 Q. And in your understanding, I'm still trying to
5 reconcile the statement in the information response and
6 the information we're hearing now, so is there an
7 industry standard level that's referred to in the
8 tab 9, the net salvage study?

9 A. MR. EPP: Madam Chair, as Mr. Bowman was
10 saying, and he did not prepare this response, when we
11 were talking about industry standard levels, it's just
12 really the industry standard to have a reserve
13 sufficient in the future, and Mr. Bowman has said how
14 it's industry standard for utilities to do this, and
15 the level is dependent on utility-specific information.

16 Q. Thank you for that clarification. Now, Mr. Bowman, I
17 don't know if you were speaking when you -- when the
18 screen froze, but did you want to add anything or were
19 you saying something that we should have heard?

20 A. MR. BOWMAN: Madam Chair, I believe that the
21 last comment I was making was that Yukon Energy is in a
22 slightly unique position here moving from the past
23 situation where there was no accrual to a situation
24 where an accrual is being started again.

25 We have come up with an estimate as a way to move

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 forward on that, but it will need to become part of an
2 ongoing part of their depreciation studies. We don't
3 have a depreciation study before the Board at this
4 time, so this is a way to start moving in the direction
5 where this accrual will occur, and then it would become
6 part of the ongoing depreciation studies and over time
7 as this approach is applied, it would gain increased
8 input data from applying this practice, and it would be
9 able to be dialled in, I guess, is the best way to
10 describe it.

11 Q. Thank you. Now, Mr. Epp, can you confirm that Exhibit
12 4, response 68, Attachment 1, the PDF page is 429 to
13 448, it's a revised copy of the net salvage study was
14 submitted; is that correct?

15 A. MR. BOWMAN: Madam Chair, it's Mr. Bowman here,
16 I -- this is the study that we had prepared, and yes, a
17 revised version was filed. There were two headings
18 which were mislabeled, and so we replaced those and the
19 black lined version is in the response to part A of
20 that information request.

21 Q. All right. Thank you. Now, still in Exhibit 4, the IR
22 response noted at PDF page 431, in 20 years from 2005
23 to 2025, the balance of the future removal and site
24 restoration, FRSR, has recorded some 4 million in net
25 salvage costs, which is roughly the difference between

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 5.7 million and 2 million, for asset retirements that
2 YEC has characterized as primarily routine terminal
3 assets retirement; is that correct?

4 **A. MR. BOWMAN:** **Madam Chair, it's Mr. Bowman, and**
5 **yes, in the table I believe two pages on from this sets**
6 **out the annual spending, adding up to 3.7 million.**

7 **Q.** And would this mean that all reported net salvage costs
8 have been approximately 200,000 per year? So 4 million
9 divided by 20 years. Can you confirm that?

10 **A. MR. BOWMAN:** **Madam Chair, it's Mr. Bowman, yes,**
11 **it's pretty close to 200,000 per year. I get concerned**
12 **when we're talking about over many years and inflation**
13 **affecting them, but in a simple calculation, yes, very**
14 **close to 200,000.**

15 **Q.** Okay. So can you confirm that this roughly 200,000 per
16 year in net salvage costs were being recorded against
17 the previously collected FRSR as opposed to being a
18 depreciation expense?

19 **A. MR. BOWMAN:** **Madam Chair, it's Mr. Bowman.**
20 **That is my understanding, I believe Mr. Epp may want to**
21 **confirm.**

22 **A. MR. EPP:** **Confirmed.**

23 **Q.** Thank you. Now, can you confirm that YEC's proposal in
24 this GRA as related to the proposed net salvage study
25 method is to commence accruing 350,000 per year of net

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 salvage costs to be added to the existing FRSR; is that
2 correct?

3 A. MR. EPP: Madam Chair, that is correct.

4 Q. Thank you. Now, to record all net salvage for routine
5 terminal assets retirement against the FRSR; is that
6 correct?

7 A. MR. EPP: Yes.

8 Q. Okay. And then thirdly, record all net salvage for
9 nonroutine terminal assets retirements against the FRSR
10 to the extent there has been sufficient precollected
11 funds?

12 A. MR. EPP: Sorry, can you repeat that,
13 please?

14 Q. Sure. That you would record all net salvage for
15 nonroutine terminal asset retirements against the FRSR
16 to the extent that there's been insufficient
17 precollected funds -- sorry, sufficient, not
18 insufficient.

19 A. MR. EPP: Mr. Bowman can correct me if I'm
20 wrong. This account is for routine, is my
21 understanding, as opposed to I think you were referring
22 to nonroutine.

23 A. MR. BOWMAN: Madam Chair, it's Mr. Bowman. I
24 think we're mixing two concepts here, so I want to be
25 quite careful. Yukon Energy has an FRSR where it is

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 currently approved and expected to charge removal
2 costs, any removal costs, routine, nonroutine, interim,
3 terminal, whatever. That is what that account is for.

4 We are proposing to narrow that account so that
5 interim retirements would become part of capital.
6 Terminal requirements would still become part of --
7 remain in the FRSR.

8 In terms of charges, things that are charged to
9 the account, that is the end of the story. Now, in
10 terms of how the account is built up over time, we are
11 proposing and talking about Yukon Energy building into
12 rates of \$350,000 a year which is based on the
13 estimates we have available, a reasonable amount at
14 this time to get started building up that account,
15 based off of the estimates of routine terminal
16 retirements that have occurred. So based on past
17 practice of 350,000 tied to the 2024 asset base is a
18 reasonable starting point.

19 The issue you've raised is what if you get a
20 nonroutine one, and of course as we've noted, there
21 aren't any nonroutine ones, but the account is designed
22 and structured to be the place where that would be
23 charged, even if there was a nonroutine one. The issue
24 is we're just not proposing to start accruing for those
25 nonroutine ones today because no one is expecting them.

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 No one has got an estimate for how much they would
2 cost. No one has an example of one that might occur
3 and there's none in the historical data.

4 So I think that's the gap. In terms of where it
5 would be charged if we had a nonroutine, it would be
6 charged to this account. But \$2 million wouldn't go
7 very far if somebody all of a sudden says you need to
8 do some large nonroutine retirement. Something more
9 needs to be built into rates. So it's the accrual side
10 where right now is being built up just to address
11 keeping up with the routine type of retirements. That
12 accrual has not been built big enough to be able to
13 handle the nonroutine. But if they occurred, they
14 would still flow through the FRSR the balance of 2
15 million could disappear quite quickly, it could go into
16 a negative position and then Yukon Energy is coming
17 back to the Board to figure out how best to deal with
18 that.

19 And I guess that's no different than today. If
20 there was a large nonroutine retirement today, it would
21 be charged to that account and the 2 million would
22 become negative.

23 Q. And so if I understand you correctly, then to the
24 extent that there's insufficient precollected FRSR
25 funds or there's a future material net salvage for

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 nonroutine terminal retirements, YEC will propose at
2 that time an additional way to fund the larger terminal
3 retirements; is that correct?

4 A. MR. BOWMAN: Yes, that's exactly correct. If
5 there was, if I understood you correctly, if there was
6 a large charge that occurred or was expected to occur,
7 YEC would have to come back and say 350,000 a year is
8 not going to do it. We're going to have to start
9 building more into rates to deal with this necessary
10 utility expense.

11 Hopefully it's done with enough time in advance to
12 be able to deal with it in an orderly way, but you
13 know, this is no guarantees that will occur. It
14 certainly, you know, not -- this is not unusual. We
15 were in a proceeding with ATCO pipelines who was
16 looking at needing to retire at some point a large
17 underground storage facility and the Commission said
18 don't -- that's a nonroutine. It's a very large item.
19 It will be some point in the future. We don't know
20 when. We don't know how much it will cost. Don't
21 start accruing for that today. When we get closer and
22 you can estimate a date, you can estimate a dollar
23 value, we'll start building into rates to sort of build
24 up an amount that can handle that.

25 Q. Thank you. Now, just want to verify or confirm that

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 YEC, is the proposal that YEC will capitalize all net
2 salvage routine and nonroutine interim asset
3 retirements?

4 A. MR. BOWMAN: Madam Chair, Mr. Bowman here,
5 that's my understanding. All interim -- all salvage
6 removal-type costs associated with interim retirements
7 would become part of the capital costs of the new asset
8 being built in that location.

9 Q. And so whether it was a routine or nonroutine interim
10 asset?

11 A. MR. BOWMAN: That's correct. The interim does
12 not really have a distinction between routine,
13 nonroutine, in so far as that occurs.

14 Q. Thank you. Now, this proposed net salvage method being
15 modelled to some degree on similar capitalized methods
16 currently being used by AltaLink Management Inc. --
17 sorry, Limited in Alberta; is that correct?

18 A. MR. BOWMAN: Madam Chair, I guess AltaLink is
19 one of the utilities that uses a reasonably similar
20 approach, although theirs is still being phased in.

21 Q. Thank you. Now, either YEC, Mr. Epp or Mr. Bowman, do
22 you agree that one of the major differences between the
23 asset retirements experienced by each utility is that
24 the vast majority of AltaLink's asset retirements have
25 been and continue to be routine interim retirements

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 whose net salvage costs are under AltaLink's net
2 salvage method intended to be capitalized to the cost
3 of the new replacement asset?

4 A. MR. BOWMAN: Madam Chair, it's Mr. Bowman. No,
5 I won't necessarily agree with that, and if that --
6 Mr. Mahmudov may have a better memory than me with the
7 figures, but we are in the middle of an AltaLink
8 proceeding right now and it was a couple of years ago
9 that AltaLink stopped charging interim retirements to
10 their net salvage account. They still have a net
11 salvage account where they only charge terminal
12 retirements anymore, and it is a not immaterial amount
13 of charges that flow through that account every year
14 and forecast to flow through that account.

15 I -- we may even have cited that ratio in our
16 report, but I'll leave it to see if Mr. Mahmudov's
17 memory of dollar values is better than mine.

18 A. MR. MAHMUDOV: Sorry, Madam Chair, I'm just
19 trying to quickly check on the fly here, but I don't
20 remember the dollars, but what -- the approach as
21 Mr. Bowman said, I believe that's the correct one.

22 Q. Now, Mr. Bowman, would you agree that another
23 difference between YEC and AltaLink is that terminal
24 asset retirements for AltaLink are exceptionally rare,
25 whereas terminal asset retirements are more common type

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 of asset retirement for YEC?

2 A. MR. BOWMAN: Madam Chair, no, I don't know that
3 I necessarily agree. The -- you know, AltaLink is a
4 transmission facility owner and Yukon Energy of course
5 owns transmission assets.

6 I don't see any reason why those would be
7 materially different type of assets in so far as
8 terminal retirements. AltaLink does have, as I noted,
9 a notable amount of terminal retirements occurring
10 every year. I have not dug into the transactions but
11 I've seen the dollar values flowing through their
12 accounts and they're not small, and I don't see any
13 particular reason why there would be more or a
14 different scale of terminal retirements in a Yukon
15 Energy who has similar transmission, but also has
16 generation, which doesn't -- generation is not in the
17 habit of closing down a generating plant very often
18 either.

19 Q. Now, Mr. Epp, do you agree that in the evidence as
20 postulated by Mr. Bowman, that routine interim
21 retirements have likely been getting expensed or --
22 sorry, it's for -- that net salvage costs, to be clear,
23 routine interim retirements have been -- have likely
24 been getting expensed or capitalized?

25 I just want to ascertain whether these net salvage

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 costs for routine interim retirements have been getting
2 expensed or capitalized?

3 A. MR. EPP: Madam Chair, could we have an
4 example of what you're referring to.

5 Q. We'll come back to that as we look it up, so we'll go
6 on to other questions in the interests of time.

7 A. MR. MAHMUDOV: Madam Chair, I just wanted to let
8 you know that I have confirmed here that, with respect
9 to AltaLink's practice, their precollection of salvage
10 start beginning in 2024, and AltaLink has commenced
11 capitalization of salvage beginning in 2024, and that
12 refers to the interim retirement related costs removal.

13 Q. Thank you. Now, would it be correct to say that YEC's
14 net salvage proposal looks very similar to the
15 traditional method of net salvage in that it seeks to
16 precollect costs that will be incurred in the future?

17 A. MR. BOWMAN: Madam Chair, it's Mr. Bowman.
18 Yes, that's exactly what we would describe it as. The
19 only difference -- in that regard, it's sort of the
20 same as ATCO Electric Yukon or others who use a
21 traditional approach.

22 The only difference is that is that the proposal
23 of Yukon Energy is that the scope of costs being
24 collected through that type of net salvage provision
25 are only the terminal, not the interim.

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 A. MR. EPP: And, Mr. Bowman, just to add on to
2 that, I think in your study -- so this approach is
3 proposing an annual depreciation cost of \$350,000,
4 whereas if we were going to include the rest of the
5 terminations, it was something like 4 million a year
6 that we would be proposing.

7 A. MR. BOWMAN: Yes, the ongoing annual amount
8 based on net salvage percentages that are sort of
9 heavily dependent on looking at other utilities for
10 their practice and their experience in how much net
11 salvage expense they recognize, would be approximately
12 2 -- over \$2 million a year for the annual amount, but
13 it would also, as part of that calculation say, well,
14 how much should be built up for the assets that are
15 already in the ground and have been there for a while,
16 and the answer to that is instead of 2 million in your
17 net salvage account, you should be closer to about \$40
18 million in your net salvage account and if you had
19 wanted to have that 40 million addressed over the
20 remaining life of the assets, you would have to build
21 in another amount that's over \$2 million a year.

22 So the total impact of doing a traditional
23 approach would be something like 4 million a year, if
24 you were trying to start where you are and use the
25 course assumptions of how much might flow through a net

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 salvage account.

2 A. MR. MAHMUDOV: And Madam Chair, so just to add
3 further clarification, it's actually \$4.7 million is
4 what we have in the -- from the annual accruals for net
5 salvage and the traditional approach which includes all
6 of the interim and terminal retirements.

7 Q. Now, going on, can you -- any of the witnesses, can you
8 explain the difference in the outcomes that result from
9 determining a percentage of net salvage costs to be
10 precollected, based on the traditional method where the
11 net salvage ratio is based on historical cost of
12 removal divided by the historical cost of the asset
13 being removed and YEC's proposed method to determine a
14 net salvage ratio based on historical cost of removal
15 divided by the current in-service gross property plant
16 and equipment?

17 A. MR. BOWMAN: Yes, Madam Chair. It's
18 Mr. Bowman. The approach that was taken for this study
19 was to come up with a way to begin to build back into
20 rates an amount that will address the balance in this
21 account and let it start having a normal annual
22 accrual. It was -- it was a way to work with available
23 data and an easy development of ratios that people
24 could understand to get started on an accrual that is
25 not as refined as the product, it will ultimately come

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 the next time Yukon Energy does a depreciation study.

2 By the time the next depreciation study comes, the
3 annual accrual will be developed using the more
4 traditional ratios as you talked about where one looks
5 at the historical cost of removal in relation to the
6 historical value of assets retired.

7 Hopefully we have a few years of data under the --
8 that can be consistent with this accounting approach,
9 and start to develop some ratios that can be applied,
10 and that would be the way that the net salvage, the
11 FRSR annual accrual will occur in future the next time
12 Yukon Energy does a full depreciation study.

13 Today's objective was to try to get a framework in
14 place, focus on clarifying how interim retirements will
15 be addressed, focus on getting the start of an annual
16 accrual to the account, and then, you know, having
17 solved that, have a clear framework in place under
18 which the next depreciation study can be performed.

19 Q. Thank you. Now, Mr. Bowman, do you agree that the
20 traditional method of net salvage relies on the use of
21 a trend of historical net salvage ratios as an
22 predictor of what will happen in the future in terms of
23 expected net salvage costs?

24 A. MR. BOWMAN: Madam Chair, yes, that's one of
25 the methods, in any depreciation study of the

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 depreciation expert is challenged by the need to look
2 at multiple perspectives, backward looking is one of
3 those perspectives, but as they say past performance is
4 not always indicative of what will occur in the future.

5 So the ratios you're looking about in the past
6 performance are something that are included in any
7 given depreciation study. They are informative to how
8 one sets net salvage rates, but they're not always
9 determinative. They are mixed with other perspectives
10 that are forward looking. They're mixed with some
11 other analyses people will do using different
12 assumptions about inflation, and in that regard try to
13 come up with a set of estimates that's durable and
14 forward looking rather than just backward looking, but
15 I absolutely agree that the typical practice and the
16 thing that will occur the next time Yukon Energy does a
17 depreciation study, I'm sure is that backward looking
18 type of analysis that says how much removal costs did
19 we incur in relation to the dollar value of the assets
20 removed.

21 Q. Thank you. Now, referring to YEC's proposed method,
22 how does a ratio of average historical removal costs to
23 average gross plant and service provide a similar
24 predictive value in terms of expected net salvage, and
25 I'm referring to the historical ratios? And how does

1 then what's being proposed, does it provide a similar
2 predicted value?

3 **A. MR. BOWMAN:** Madam Chair, the logic behind the
4 ratio is effectively no different than the logic behind
5 the ratio that is -- has been described that would be
6 used were we in a full depreciation study.

7 The idea is that the dollars that a utility needs
8 to incur to remove assets is in some way relative to
9 the size of its asset base, to turn over in those
10 assets, those type of factors. A bigger utility would
11 need more dollars.

12 So this approach was just a way to use readily
13 available data. It didn't require all the work that
14 goes into preparing the input data that one would
15 normally do for a depreciation study. That wasn't
16 available to us. And it wasn't the primary focus of
17 the work, and it probably wasn't the most cost
18 effective way to approach the work when we're going
19 from zero to starting to build something into rates
20 that we know is directionally appropriate and that's
21 going to be refined the next time Yukon Energy does a
22 depreciation study, in any event.

23 **Q.** Now, for purposes of estimating net salvage percents or
24 ratios, can you identify any utility precedent for a
25 net salvage ratio being estimated on the basis of the

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 historical costs of removal divided by the in-service
2 gross property plant and equipment as is being proposed
3 for YEC today?

4 A. MR. BOWMAN: Madam Chair, no. There is no --
5 we are not aware of anybody who would use this ratio,
6 but I'm not aware of any utility who is in the same
7 situation as Yukon Energy, where they're going from
8 zero and an account that is declining and needing to
9 start to build something into rates. So without going
10 through the full work of depreciation study.

11 This is a way to get started, come up with a
12 number that is -- that we know is directionally
13 appropriate. It's got a positive amount being built
14 into rates and an accrual, and then let it be refined
15 with all the work that will go into a full depreciation
16 study in the next proceeding I presume.

17 Q. Thank you. Now, Mr. Epp, you asked -- when I asked you
18 the question about whether you agree that in the
19 evidence as postulated by Mr. Bowman that net salvage
20 costs for routine interim retirements have likely been
21 getting expensed or capitalized, and you asked me for
22 an example.

23 Now, if I can point you to the application, that's
24 Exhibit 1-A at PDF page 528. So you'll see there
25 regarding -- on that page from the above data it

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 appears likely that Yukon Energy has -- sorry:

2 (as read)

3 "Has approached use of FRSR with
4 restraint, likely accounting for costs
5 as either capital or O&M, which could
6 have been included in the FRSR based on
7 utility industry practice."

8 So that's -- I was referring to that and asking if what
9 your view was, whether you agreed that that's what's been
10 happening.

11 **A. MR. EPP: Madam Chair, yes, I can confirm**
12 **that I agree that that is a reasonable statement.**

13 **Q.** Thank you. Now, next if we can look at the response to
14 YUB 68, Attachment 1, which is the net salvage study,
15 and Exhibit 4 at PDF page 443, and at that page I'm
16 looking at the excerpt that starts with: (as read)

17 "The final consideration is the overlap
18 with the IFRS asset retirement
19 obligation, AR0. It is understood that
20 Yukon Energy has had little need to
21 record AR0s in recent years, so there
22 has been no need to resolve any
23 potential conflict between the
24 activities meant to be reflected in the
25 FRSR and the AR0s. Going forward,

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 there is a potential for more
2 significant AROs. To maintain a
3 complementary operation of FRSR and
4 AROs, it will be necessary to be clear
5 on regulatory versus IFRS accounting.
6 The FRSR is inherent to a
7 financial ..."

8 And then it goes on.

9 Now, I'd like to understand, Mr. Bowman, the
10 statement that YEC has had little need to record AROs in
11 recent years.

12 Can you give me more background on that statement?

13 **A. MR. BOWMAN:** **Madam Chair, I can, and I believe**
14 **it's likely Mr. Epp who will want to add at the end of**
15 **this, but to explain the concept, AROs and the FRSR are**
16 **each representing a type of liability for the company,**
17 **but they're very different types of liabilities related**
18 **in some ways to the same end result.**

19 So one has to be careful that you're not ending up
20 with double counting in the way that you treat them.
21 The FRSR is noted there as a financial liability. It
22 means I've collected a certain number of dollars from
23 ratepayers. I have not yet spent those dollars,
24 therefore I have a liability for the unspent amount.
25 It is a mathematical calculation, add what I've

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 collected minus what I've spent, that's what I still
2 effectively have a liability for.

3 An ARO is something different. An ARO is a
4 necessary component of FRSR accounting. The utility
5 cannot avoid it. And it means that the utility has to
6 do an assessment as to whether it has certain future
7 obligations to remove assets that meet a test set out
8 in IAS 16.

9 At this point in time, and Mr. Epp can clarify,
10 but at this point in time I -- my understanding is
11 Yukon Energy has had zero situations where it has an
12 asset or a future obligation that meets that test. I
13 believe there is one that may be some material that's
14 referenced in an IR, but is -- there are none that have
15 reached that level, so if you go to look on Yukon
16 Energy's balance sheet, you will not see any AROs
17 recorded.

18 But the ARO is not a financial liability in the
19 same sense of adding up what you've collected minus
20 what you've spent. It is a look at a cost to do
21 something in the future that you have to do and then
22 present value it back to figure out the current present
23 value of doing that thing in the future is and record
24 that as a liability.

25 It's an action-based liability. The dollars

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 represent the fact that you must take this action in
2 the future, and they can change it every year for all
3 sorts of different estimates or discount rates.

4 And so the two of them are trying to get at the
5 same thing, which is what do I need to do in the
6 future, but they're -- and while they're effectively
7 representing the same future event, they're
8 representing it in different ways, and that's the need
9 to avoid double counting, but I think Mr. Epp might
10 want to confirm that what I've just said about Yukon
11 Energy's actual situation on AROs is accurate.

12 A. MR. EPP: Madam Chair, I do confirm that we
13 have had zero in the past and we have zero recorded in
14 our current financial statements and that has been
15 approved and audited by the office of the auditor
16 general of Canada.

17 Q. Now, looking at YUB IR Response 66, and those -- that
18 response goes from page 414 to 419, but I'll direct
19 your attention to B, PDF page 414, where YEC was asked
20 to provide detail with respect to how YEC will
21 determine if the costs of removal of an asset
22 retirement -- for an asset -- excuse me, for an asset
23 retirement, whether terminal or interim, are routine
24 versus nonroutine and to include a list of decision
25 points and criterion relied on to make this

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 determination, and the answer is on page, that I'm
2 looking at, is on PDF page 417 where YEC states in part
3 that: (as read)

4 "Nonroutine terminal retirements would
5 be highly infrequent events, such as
6 the decision to abandon or remove a
7 major transmission or hydro asset. No
8 such retirement has been recorded in
9 the accounts of the 2005 to 2023
10 period, and none is presently
11 anticipated. Such an event would
12 likely drive a need for material ARO
13 liability reporting, and planning and
14 estimating of removal costs would occur
15 well in advance of the removal
16 activity."

17 So again to go back on that, can you tell us if there's a
18 nonroutine terminal retirement recorded by YEC prior to
19 2005?

20 **A. MR. EPP:** Madam Chair, no, there has not
21 been.

22 **Q.** Thank you. Now, if you look at the net salvage study
23 at PDF page 431, it's noted that prior to 2005 YEC used
24 the traditional approach to net salvage as follows, and
25 you'll see there the notation: (as read)

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 "Prior to 2005, Yukon Energy used an
2 approach to accruing future costs and
3 recoveries associated with asset
4 end-of-life commonly known as the
5 traditional approach to net
6 salvage ..."

7 And it goes on.

8 Now, is it possible that the historical data that
9 was collected under the traditional approach to net
10 salvage may contain information that shows a nonroutine
11 terminal -- nonroutine terminal asset retirement prior to
12 2005?

13 A. MR. EPP: Madam Chair, while anything is
14 possible, Yukon Energy has been growing over the years.
15 We've been expanding generation assets, transmission
16 lines, distribution lines, so I'm not aware of us ever
17 doing that.

18 A. MR. BOWMAN: Madam Chair, it's Mr. Bowman here.
19 I suspect it's possible. For example, maybe there's a
20 line that went to the Faro mine that was removed on a
21 terminal basis, but whatever it was, it wouldn't have
22 been nonroutine in the way we're currently using the
23 term, from the perspective that the accruals, annual
24 accruals were able to deal with it.

25 You know, there was a positive balance of \$5.7

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 million at the end of 2004, even though the accruals
2 were 3, 4, 500,000 a year over that period. So it
3 would not have been one of these ideas that we're going
4 to start to accrue, but if something really big comes
5 along, it's going to dwarf this amount. It clearly
6 didn't dwarf the account.

7 A. MR. EPP: Madam Chair, just to clarify that,
8 the Faro mine is still being serviced.

9 A. MR. BOWMAN: Okay.

10 Q. Now, Mr. Epp, if you know and if not, if you could
11 provide an undertaking, when the YEC offices burnt
12 down, the headquarters, in around 1995, do you know how
13 retirement and -- would that have been recorded, net
14 salvage costs I'm talking about for retired assets,
15 have been recorded terminal or interim, routine or
16 nonroutine, do you have records I guess that would tell
17 you that or do you know?

18 A. MR. EPP: What I do know is when the
19 plant -- or not the plant, the office building burnt
20 down in '97, so the assets were -- whatever the asset
21 value was at that time, they were written down to zero,
22 and we received an insurance proceeds, and we received
23 I think an insurance gain was recorded of about -- I
24 can't remember, about \$10 million anyways, and that
25 still exists on your books, and ratepayers are still

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 receiving benefit for that amortization of that
2 insurance gain today.

3 Q. Thank you.

4 A. MR. MAHMUDOV: Madam Chair, I think it may be
5 worth just pointing out that the net salvage study and
6 proposed recommendations are about the cost of removal
7 associated with retirements. It's not about the
8 retirements themselves.

9 So if an asset is retired, it wouldn't impact just
10 the retirement cost or what was on the books, it would
11 impact the FRSR account.

12 Q. Now, still referring to the response in Exhibit 4 at
13 66B, PDF page 417 at line 13 and 14, YEC states that:
14 (as read)

15 "If there ever were to be an anticipated
16 terminal retirement such as an event
17 that would likely result in a material
18 ARO liability reporting and planning and
19 estimating of removal costs would occur
20 well in advance of the removal activity?

21 Is that correct?

22 A. MR. EPP: Correct.

23 Q. Thank you. Now, if that were the case, why does YEC
24 feel it's necessary to start the accrual of remediation
25 costs now if the asset retirement obligation mechanism

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 is going to occur at a very early stage and likely to
2 be the first trigger to recording and estimating the
3 costs of a nonroutine asset retirement event?

4 A. MR. BOWMAN: Madam Chair, it's Mr. Bowman.
5 There isn't a proposal to start accruing for the costs
6 of nonroutine events. That is the exception to the
7 accrual occurring today. The idea is to set up in
8 rates accruals that focus on the routine things, and
9 with a note, if you like, a caveat, an asterisk saying
10 if there's something really big and unusual, it's not
11 covered by \$350,000 a year.

12 It will have to have its own treatment and Yukon
13 Energy will come back to you to propose treatment
14 that -- once it has some information on that, the same
15 as it would if it had an ARO, but it's not given that
16 it would have an ARO, but in the event that it did,
17 it's some of the same information that it would need.

18 Q. Thank you. Now, we'd like to get YEC -- I'd like to
19 get Mr. -- Mr. Bowman's take on the differences and
20 similarities and interdependencies between IAS 16E
21 respecting property, plant and equipment, to the asset
22 retirement obligation or AROs under IAS 37 and the
23 relationship or bearing of either of those accounting
24 standards to YEC's proposed net salvage method, which
25 is intended to be used for regulatory or rate-making --

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 and rate-making purposes?

2 A. MR. BOWMAN: Yes, thank you, Madam Chair. I
3 will start the response by noting -- I am not an
4 accountant. I am familiar with IAS 16 but I am not the
5 ultimate authority on how to interpret those
6 provisions.

7 The -- but the -- the fact that these two accounts
8 can relate to somewhat the same event and needing to
9 avoid the idea of double counting, what most utilities
10 will do, in my experience, and definitely, for example,
11 we're dealing with Nova Scotia Power right now that
12 does this, on the regulatory side they report only the
13 FRSR for the purposes of the board and for calculating
14 rate base in setting rates.

15 The FRSR will have an annual accrual associated
16 with it. It will have a balance associated with it,
17 and that accrual and that balance is sufficient to be
18 able to calculate the revenue requirement of the
19 utility.

20 When the utility then goes away from this Board
21 and has to deal with its auditors, its auditors will
22 have to see that Yukon Energy has done its homework to
23 report whether it has any AROs or not, but if it did do
24 its homework and concluded it had an ARO, and let's,
25 for the sake of argument, let's say it's a half a

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 million dollar ARO it needs to record, what would be
2 practical is to say if it had a \$2 million FRSR
3 balance, it would come to this Board and say I have a
4 \$2 million FRSR balance. In dealing with the auditor
5 though, it would record half a million as its ARO
6 balance and one and a half million as its additional
7 liability, regulatory liability associated with the
8 FRSR.

9 So the balance sheet would look different but it
10 would sum to the same values, and that way this Board
11 can always deal with a single framework, the FRSR-type
12 framework, which it has good information on through
13 depreciation studies and through being able to track
14 the account balance and the reconciliation, and it can
15 use to set rates, and it needn't -- needn't build into
16 revenue requirement an additional amount to deal with
17 anything on AROs. That will just be a way that that
18 FRSR pie is carved up for the purposes of financial
19 reporting.

20 Q. Now, in response to YUB 66F at PDF page 418, now you'll
21 see Yukon Energy -- it starts with: (as read)

22 "Yukon Energy performs an annual ARO
23 calculation that is reviewed by the
24 office of the auditor general of
25 Canada. All assets are assessed in an

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 ARO assessment but only assets that --
2 that met the definition of an ARO is
3 the energy -- sorry, the only asset
4 that met that definition is the energy
5 storage system land lease. And the ARO
6 of approximately 20,000 was calculated
7 as follows."

8 And then it explains how it was calculated. Now, in
9 looking at that, how YEC calculated its most recent ARO
10 and provided its materiality threshold, would the
11 response indicate that the ARO was determined to be
12 \$20,000?

13 **A. MR. EPP: Madam Chair, that is correct.**

14 **Q.** And now trying to understand the inputs that went into
15 YEC's ARO calculation, these next questions address
16 that.

17 So as provided in the IR response, can you explain
18 to us whether the \$100,000 of estimated reclamation
19 costs in its current 2025 -- sorry, in current -- is in
20 current 2025 dollars or has the \$100,000 been
21 determined by taking the estimated reclamation costs in
22 current 2025 dollars and inflating it at some rate over
23 some period of time with the result being \$100,000?

24 **A. MR. EPP: Madam Chair, I believe that is in**
25 **today's dollars.**

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 Q. Okay. Thank you. Now, then if it is current dollars,
2 2025 dollars, the 100,000. Now in trying to follow
3 through on YEC's ARO calculation, can you confirm that
4 the estimated reclamation costs in the current 2025
5 dollars was inflated by some inflation rate over the
6 period of some years?

7 A. MR. EPP: Sorry, Madam Chair, I can't
8 confirm that.

9 Q. Sorry, was that Mr. Epp, can or can't?

10 A. MR. EPP: I cannot confirm that.

11 Q. Thank you.

12 A. MR. EPP: I can confirm that this
13 calculation was audited in detail by the auditor --
14 office of the auditor general of Canada, though.

15 Q. Mr. Epp, can you undertake to provide the inputs to
16 this calculation that resulted in the 100,000 ARO?

17 A. MR. EPP: Madam Chair, I believe these are
18 all the inputs into the calculation.

19 Q. Thank you. Still trying to understand, so was there an
20 inflation rate that was used? And is there discount
21 rate to take the inflated value to the present value?
22 That's what we're trying to understand.

23 A. MR. EPP: Madam Chair, I believe the
24 calculation is you take \$100,000 in the 50 years at the
25 end of the life of the so called end-of-life of this

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 asset and discount it back by 3.28 percent.

2 Q. And what would that inflation rate have been?

3 A. MR. EPP: 3.28 percent is the discount rate,
4 not the inflation rate.

5 Q. And so did you start with an inflation rate to then
6 arrive at the discounted rate or not? I guess explain
7 to me how that's done?

8 A. MR. EPP: The -- it's simply the costs are
9 estimated at \$100,000, 50 years in the future, you
10 discount that by 3.28 percent to get the present value
11 of \$20,000.

12 Q. So then there wasn't -- the starting point was not the
13 interest rate that then just -- I just want to
14 understand or be clear, that to arrive at the \$20,000,
15 you just did the discounted rate, that it's not current
16 costs times inflation rate?

17 A. MR. EPP: Can you --

18 A. MR. MAHMUDOV: Madam Chair, I can jump in here to
19 provide my thoughts. So the discount rate of 3.28 from
20 what I understand I believe it is time value of money,
21 so it's basically your investment return; right?

22 So if you go with 20,000 today and have the
23 investment of 3.28 percent per year for 50 years you
24 will get that 100,000. That does not include the
25 inflation impact. So it is in today's dollars. It's

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 your -- assuming that 3.28 is -- does not have any
2 inflation built into it. It is your -- a real return
3 of money, so it's time value of money before inflation.

4 Q. Now, can you tell us the historical costs of the asset
5 to which the estimated reclamation costs are related
6 to, given the assets are still in service and could
7 also call -- that you could also call them current
8 plant and service costs; correct?

9 A. MR. EPP: Sorry, Madam Chair, what costs are
10 you referring to?

11 Q. The 20,000, the discounted 20,000 or the 100,000 that
12 you started off with.

13 A. MR. EPP: So the 100,000 is the cost -- this
14 is specifically at the battery site, which we have a
15 land lease for, so really there hasn't been -- there's
16 not much done there. We have some concrete pads poured
17 there, and to get them to remove them in the future,
18 that's the process. That's what we are getting it back
19 to the original site as.

20 Q. So then Mr. Epp, what are the costs of that asset that
21 we're talking about, that land lease or land -- you
22 just said it, but?

23 A. MR. EPP: The last lease is one thing. The
24 cost of the concrete that we poured is a different
25 asset.

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 Q. So then for net salvage, you're separating out then the
2 cost of your lease or the land, and what you've done
3 sort of with the concrete, so the net -- so are you
4 then saying that it's the cost of both those assets,
5 the land, and concrete, just to use that example, or is
6 it just -- are we just talking the land and lease and
7 concrete? I'm just trying to understand --

8 A. MR. EPP: Sure.

9 Q. -- what it refers to?

10 A. MR. EPP: So the land lease is an asset just
11 for accounting purposes. It's a capitalized land
12 lease. There's no cost to end a land lease. The
13 reclamation costs are to remove the concrete from that
14 land in the future.

15 Q. And that's what that 20,000 represents? I mean, once
16 it's discounted and all that?

17 A. MR. EPP: Yeah, the \$20,000 represents the
18 cost, the present value of the cost to remove that
19 concrete in the future.

20 Q. Thank you.

21 A. MR. EPP: The cost of the concrete is part
22 of the battery project. You'd find the concrete costs
23 in the battery project itself, the installation of the
24 concrete.

25 Q. So, Mr. Epp, would you have the historical costs of the

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 land and the lease of this battery asset?

2 A. MR. EPP: Yes, I believe the -- well, sorry,
3 can you say that again, the lease -- say that again?

4 Q. And the land?

5 A. MR. EPP: The land, there is no cost to the
6 land. It is property we are leasing.

7 Q. Okay. And the lease?

8 A. MR. EPP: The lease I believe this is -- we
9 paid \$1 million for this lease in advance.

10 Q. And so then that -- the concrete we've been talking
11 about and its removal then would be a nominal cost, am
12 I correct?

13 A. MR. EPP: The concrete is not part of a
14 lease. It is part of the battery project.

15 Q. Right. But that's -- the discussion we've been having
16 is what would it cost to remove that battery, so you
17 said concrete, so is there other things that are
18 encompassed in that calculation with regards to where
19 you have an ARO of 20,000?

20 A. MR. EPP: No, there is not -- and just
21 for -- to hopefully put a perspective on this.

22 The only reason there is an asset retirement
23 obligation potential here in the future is because this
24 land is leased. If Yukon Energy owned this land, it
25 would not meet the definition of an asset retirement

1 obligation.

2 The auditor felt that because there is a
3 possibility we may not have the land in the future,
4 that it met the definition. In all reality, this land
5 will be renewed and renewed and renewed.

6 Q. Thank you.

7 A. MR. BOWMAN: Madam Chair, it's Mr. Bowman, and
8 I think this is a good example of what I was
9 referencing about how AROs and terminal salvage are
10 attempting to represent the same thing, but they use
11 different considerations.

12 In a net salvage account over time, as you are
13 able to develop the data and figure out the ratios, you
14 would be aiming to have \$100,000 or \$100,000 in 2025
15 dollars available to you at whatever point you need to
16 take out that concrete, whether you owned the land or
17 you leased the land, but it only shows up as an ARO if
18 you lease it and not if you own it, because ARO has a
19 different type of test, but it's a cost to Yukon Energy
20 in the future when the batteries are no longer on the
21 system, if they reach the terminal retirement point and
22 the concrete is no longer good and it has to be removed
23 and it's a terminal retirement, that's the cost
24 of having had those batteries in service and that's
25 what we're starting to accrue for with the 350,000

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 **today.**

2 Q. Now, looking at and we did before, that the report in
3 Exhibit 1-A at PDF page 528, and now looking at 1- --
4 the responses in Exhibit 4, 67A at PDF page 423, so if
5 you look at that, please.

6 Now, in these two IR responses that I've just
7 mentioned, Mr. Bowman asserts that YEC may have been
8 either capitalizing or expecting interim retirement net
9 salvage, and I went through that with you, Mr. Epp,
10 when we went back to that question.

11 Now, has -- based on this statement, on a
12 comparison with YEC's peer utilities, do you agree,
13 Mr. Bowman, or do you have anything to add, so that YEC
14 has been either capitalizing or expensing interim
15 retirement net salvage costs historically and has based
16 this -- and so has based this statement on comparison
17 with YEC's peer utilities, and I want to know,
18 Mr. Bowman, if you agree or have anything to add to
19 that statement?

20 A. **MR. BOWMAN:** Yes, Madam Chair, I would add
21 that -- the question that I believe is referenced on
22 the next page, you'll see the transactions that
23 occurred for the years that were requested at the top
24 of the next page of this IR response, and there's very
25 few transactions.

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 In many years there is one or two transactions.
2 In some years there is zero. That's -- for utilities
3 that are keeping a close eye on what are removal costs,
4 they won't have one or two or three in a year. They
5 will have, you know, many, many of these transactions,
6 many of them being quite small, but almost every
7 capital job will have some degree of removal or net
8 salvage cost.

9 I believe ATCO Yukon has even asked to have a
10 ratio applied so they don't even have to track it
11 because effectively almost every job should have some
12 of these costs, but it's not uncommon for a utility of
13 Yukon Energy's size to not have the systems in place on
14 a routine basis to be able to do that type of
15 estimating over time.

16 And so the fact that we are trying to put in place
17 a system where you don't have to identify the interim
18 costs anymore, you don't have to look at every time you
19 replaced a pole how much of the company's time was
20 spent taking out the old one versus adding the new one.
21 It all just becomes capital costs for replacing the
22 pole.

23 It simplifies and makes it easier going forward
24 for the company to manage the tracking because it no
25 longer needs to track those interim retirement costs,

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 it just becomes part of capital. Which as I said is
2 basically what it's been doing by default because it
3 hasn't had that type of tracking in place, as is
4 evident by the very small number of entries in this
5 account.

6 So that's the first comment I would make. This is
7 not only a mathematical way of helping manage rates.
8 It's also a way of helping put in place a system that's
9 more practical for the utility of this size and this
10 resources.

11 Second is the fact that Yukon Energy was not using
12 this account to the extent that it may be or would have
13 or could have if it had a very refined system to find
14 all of these and record all of these. It wasn't --
15 this doesn't harm ratepayers in any way. I think it
16 probably benefited ratepayers because some of these
17 costs were probably expensed just as operating costs
18 when they could have validly been charged to this
19 regulatory deferral, and Yukon Energy took those into
20 its net income over time and is now behind us, as that
21 doesn't harm ratepayers.

22 If anything that's aided ratepayers over the
23 years, and so I think the concern is the implication
24 that they may not have been doing a thorough job
25 implies that there's something, you know, something

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 missing that may be a disadvantage to the ratepayers.
2 That's not correct. If anything, like I said, it's a
3 benefit to the ratepayers.

4 So I think those two perspectives I think are
5 important to recognize in regard to this statement.

6 Q. Thank you. Now, following up on Mr. Bowman's
7 statements, Mr. Epp, can you explain if YEC gives
8 instructions to its employees or consultants with
9 respect to where to record let's say a timesheet,
10 labour hours, spent in active removing an asset from
11 utility service?

12 A. MR. EPP: Madam Chair, Yukon Energy
13 employees are given directions to record the time to
14 where the work is spent. The actual work order that is
15 created by the operations department may be very broad
16 and may not be broken down into -- you don't spit out
17 time to -- it's basically for the whole work. It's not
18 actually broken down into different components of the
19 job they are doing on that specific project.

20 Q. So then would you say that -- I just heard you say, you
21 know, sometimes it's a broad -- the work order is broad
22 and it's not broken down, so then would that mean that
23 employees or consultants have the discretion as to
24 where to record where the labour hours spent in the act
25 of removing an asset from utility service?

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 A. MR. EPP: No, so what I mean is there may be
2 a work order for them to go out and fix a transmission
3 line. They will -- there's one work order for that.
4 They will spend time travelling out there. They will
5 have fuel going out there. They will have materials
6 out there. They will record their time for all of that
7 for removing the old asset, adding the new asset,
8 returning home, and that is one work order. That's
9 what I meant.

10 Q. Right. And where would that work order be recorded?
11 Is it like an expense? Does it go to capital? Is it
12 out of this FSR account for removing the asset, like,
13 part of it -- FRSR. So that's what I'm trying to
14 understand?

15 A. MR. EPP: Yeah, depending on the project, it
16 could go to be expensed or capitalized or we could
17 have -- as we see here, we've done some to the FRSR
18 account.

19 A. MR. BOWMAN: Madam Chair, I just note that
20 there are some to the FRSR account. They would be far
21 more rare than one would expect given the degree of
22 assets and activity that occurred in Yukon Energy,
23 which was the point that we were making.

24 Q. Now, Mr. Epp, given that could be viewed as a lack of
25 control because these work orders, as you've explained,

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 cover all the work, how would capitalizing interim
2 retirement net salvage costs have affected the
3 integrity of YEC's business cases and related capital
4 forecasts?

5 A. MR. EPP: Madam Chair, this is not a lack of
6 control.

7 Q. Can you elaborate a bit more?

8 A. MR. EPP: In what way?

9 Q. Well, what you mean by -- you've just explained that
10 the work is done as a whole as opposed to broken down,
11 so that different components, so for example, the
12 salvage --

13 A. MR. EPP: The --

14 Q. -- can be recorded?

15 A. MR. EPP: For example, the operations staff
16 works on many different jobs, and they can have many
17 different work orders throughout a day. If they work
18 on, say, 10 different jobs during a day.

19 If we have to break each job down by well, this
20 was the travel time here, this was the time I did this
21 part of the job, this was the time that part of the
22 job, I'm not sure it provides any value and it would
23 definitely come at a cost because then operations
24 employees is putting more time on their timesheet than
25 actually doing work.

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 Q. Maybe if you can look at it another way, is there -- in
2 your view, would there be little effect on ratepayers
3 from capitalizing interim retirements net salvage costs
4 as opposed to going to the FRSR account?

5 A. **MR. EPP:** **Can you repeat that question,**
6 **please?**

7 Q. Sure. So Mr. Bowman was talking about how there may
8 be, and I think you've mentioned as well, benefits to
9 not breaking down these costs and what the impact might
10 be from capitalizing the interim retirement net salvage
11 costs or the effect on ratepayers from expensing them,
12 so I'm -- on O&M, so what I'm trying to understand is
13 what is your understanding about the impact of the
14 method that you've been using on ratepayers?

15 A. **MR. EPP:** **As Mr. Bowman said, it's been**
16 **beneficial to ratepayers.**

17 A. **MR. BOWMAN:** **If I can just help with the**
18 **components of that. It's Mr. Bowman, Madam Chair. If**
19 **you take the idea that somebody is doing a capital job**
20 **and they -- let's say it's a million dollar job but**
21 **100,000 of it is -- could have arguably been removal**
22 **costs and 900,000 could have been capitalized. If they**
23 **record it in the more detailed fashion that takes all**
24 **the extra effort on timesheets and tracking and the**
25 **like that Mr. Epp noted, the FRSR would go down by**

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 \$100,000 and the plant and service would go up by
2 \$900,000, and because FRSR is an offset to rate base,
3 rate base would change by a million dollars.

4 If they don't do the tracking, the capital asset
5 will go up by a million dollars and the FRSR won't
6 change, so rate base will go up by a million dollars.
7 So to the extent that it's put into capital as opposed
8 to being put against the FRSR makes no difference to
9 rate base. It makes a very small difference to
10 depreciation in any given year, but the idea of doing a
11 routine update to depreciation expense and depreciation
12 studies is that even that would net out after a small
13 amount of time, particularly for Yukon Energy that was
14 not accruing to the FRSR, it meant that the FRSR
15 balance we had in place lasted a lot longer than was
16 anticipated.

17 I was on Yukon Energy's panel at the 2005 GRA, and
18 dealt with this topic, and at the time when the Board
19 elected to stop accruing to it, I know that we were
20 thinking that it might last 10 years, the balance, and
21 here we are 20 years later and the reason it's been
22 able to not have an accrual in part is because less has
23 been tracked to it.

24 The net effect then of those that end up as
25 capital as opposed to being charged the FRSR is

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Ms. Bentivegna

1 therefore very small. But it's possible and without, I
2 don't know, possibly an omelet that could never be
3 unscrambled at this point, it's possible that some of
4 those tasks were actually tracked as capital. It's
5 possible some of them were tracked as operating costs.

6 You'll hear examples of utilities that do removal
7 costs or salvage activities. You know, sometimes years
8 after the asset was removed. Sometimes you have to
9 clean up a site. Sometimes you have to go back and
10 pick up remaining parts and the like. And if they
11 didn't know that they could or if the team didn't make
12 a work order to be able to charge that against the
13 FRSR, that would have ended up in just in operating
14 costs and expense and that wouldn't have been in
15 anybody's revenue requirement or rate base it just
16 would have been something that went against the
17 company's net income and that year as an O&M expense.

18 So that's where I'm saying that if anything
19 ratepayers probably benefitted from the fact that this
20 was not necessarily every possible nickel wasn't being
21 charged against the FRSR. But overall the parts that
22 went to capital versus the parts that FRSR would make
23 very little different to revenue requirement and it's a
24 part of the reason we recommend not trying to implement
25 a system going forward that is impractical for a

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Mr. Woroniuk

1 utility of this size that offers very little benefit.

2 Q. Thank you.

3 MS. BENTIVEGNA: Thank you, panel. Those are my
4 questions, Madam Chair.

5 THE CHAIR: Thank you, I believe there's at
6 least one question from the Board.

7 MR. WORONIUK QUESTIONS THE PANEL:

8 Q. MR. WORONIUK: Hi there. Thanks for being here
9 today. These questions can be answered by either
10 Mr. Epp or Mr. Bowman. One second, sorry.

11 Regarding the Callison project, would the diesel
12 engines and any supporting assets that are going to
13 removed from downtown Dawson as part of that project be
14 considered a nonroutine terminal asset retirement?

15 A. MR. EPP: Thank you for the question,
16 Mr. Woroniuk. First of all, the Callison part of
17 things is a separate, it's yeah, the one project there,
18 and we do not have any estimated costs to decommission
19 that site as we plan on using that in perpetuity.

20 Regarding the assets that are in downtown Dawson,
21 we -- my understanding, and we don't have the rest of
22 the panel here to confirm this, so we'll see how this
23 goes, but right now we are keeping all the diesel
24 engines in service and using them as much as we can
25 because we're short of generation as we've said.

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Mr. Woroniuk

1 When we do take these engines out of service one
2 by one, that doesn't actually -- it's -- we aren't
3 actually getting rid of the site. We're just getting
4 rid of the -- one of the engines, and we don't have an
5 estimate of -- I think we have a -- in our five-year
6 plan I think we have an estimate of a few hundred
7 thousand dollars to do that take away of the engine,
8 but it's not scheduled within the test period.

9 Q. Okay.

10 A. MR. EPP: And that is all subject to check.

11 Q. For sure, yeah.

12 A. MR. EPP: Not my area of expertise.

13 Q. Acknowledging that Mr. Murchison has been released,
14 that subject to check, and then sort of a couple quick
15 questions and that can be part of an undertaking
16 because Mr. Murchison isn't here.

17 It's my understanding that the engines in downtown
18 Dawson will be removed when they reach end-of-life, and
19 I was wondering if that information on those
20 end-of-life dates for those engines can be provided as
21 part of an undertaking?

22 A. MR. EPP: Sure. We can take an undertaking
23 on that.

24 UNDERTAKING - TO PROVIDE THE
25 INFORMATION ON THE END-OF-LIFE DATES

J. EPP, P. BOWMAN, H. MAHMUDOV

Questioned by Mr. Woroniuk

1 RELATED TO THE ENGINES IN DOWNTOWN

2 DAWSON AND WHETHER THEY WILL BE REMOVED

3 WHEN THEY REACH END OF LIFE

4 Q. MR. WORONIUK: Okay. And related to that, just
5 to confirm at this point you have -- there's no
6 internal Yukon Energy Corp. internal forecast on when
7 all of these diesel engines would be removed from that
8 location?

9 A. MR. EPP: That's correct. We have no
10 estimate of that to my knowledge.

11 Q. Thank you. No further questions.

12 A. MR. BOWMAN: It's -- thank you for the
13 questions. It's Mr. Bowman here. I just would add if
14 you'll see a note, when the Whitehorse diesels were
15 removed, 1, 2 and 3, that cost of removal was run
16 through the account, and it would be similar in the
17 future, and if the Dawson diesels were considered, you
18 know, whether it's terminal routine or not routine,
19 they would run through the account, and they would
20 become part of the analysis in the future as to how
21 much ratepayers need to pay on an ongoing basis.

22 But if it's anything like the scale of costs in
23 Whitehorse or less, which I would -- I think the
24 Whitehorse municipal probably considerably larger.
25 That scale of costs would not make up -- you know,

1 would not need a special accrual, a special sort of
2 nonroutine type of accrual at that level.

3 MR. WORONIUK: Thank you.

4 THE CHAIR: Okay. Then I'll just check,
5 Mr. Herbert, did you have any direct questioning for
6 the redirect for your witnesses?

7 MR. HERBERT: No, I don't. Thank you.

8 THE CHAIR: Okay. I believe all witnesses can
9 be released from this panel then.

10 It's been a long three days for you, Mr. Epp.

11 A. MR. EPP: It's been fun.

12 (PANEL STANDS DOWN)

13 THE CHAIR: So I just want to speak briefly to
14 the outstanding procedural actions in respect of the
15 application. As I understand them, the deadline to
16 file written undertakings is October 28th, final
17 written argument is due November 12th, and the written
18 reply argument date is now due November 27th.

19 I just want to check, are there any procedural
20 aspects that -- or information that I'm missing or
21 should be added to that?

22 MS. BENTIVEGNA: No, Madam Chair.

23 THE CHAIR: Thank you. I'll be very quick.

24 I just want to take the opportunity to thank
25 everyone who has taken part in this hearing over the

1 three days, including all those who have already left.
2 You all bore with me through my first chairing; that's
3 really appreciated.

4 Mr. Yee, I think I can see you're on the line. I
5 want to thank you for your well-prepared and
6 efficiently presented questioning.

7 I'd like to thank the entire YEC team, panels and
8 otherwise, for all the work, all the answering they had
9 to do.

10 I want to really thank the Board's technical,
11 legal and support team and the members.

12 And I want to shout out by name the court
13 reporters, who I didn't have your names before, Leanne
14 Kowalyk and Sonja Petryshyn, and our technical support,
15 Mike Hamm.

16 And thank you, this hearing is now closed.

17 THE CLERK: Order. This hearing is now
18 closed.

19 (PROCEEDINGS ADJOURNED AT 4:15 P.M.)

20 _____

21 PROCEEDINGS CONCLUDED

22 _____

23

24

25

1 Certificate of Transcript

2
3 We, the undersigned, hereby certify that the foregoing
4 pages 329 to 503 are a complete and accurate transcript of
5 the proceedings taken down by us in shorthand and
6 transcribed from our shorthand notes to the best of our
7 skill and ability.

8 Dated at the City of Whitehorse, Yukon Territory, on
9 October 23, 2025.

10
11
12 "Leanne Kowalyk"_____

13 Leanne Kowalyk, RCR, CSR(A)
14 Official Court Reporter

15
16 "Sonja Petryshyn"_____

17 Sonja Petryshyn, CSR (A)
18 Official Court Reporter
19
20
21
22
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24
25

- I N D E X -

VOLUME 3

<u>C. MILNER, J. EPP, S. CUNHA, P. MURCHISON</u>	332
(For Yukon Energy Corporation)	
MS. BENTIVEGNA QUESTIONS THE PANEL	332
MR. JOHNSON QUESTIONS THE PANEL	416
MR. HERBERT RE-EXAMINES THE PANEL	428
<u>P. BOWMAN, H. MAHMUDOV</u> (For Yukon Energy Corporation via videoconference)	432
MS. BENTIVEGNA QUESTIONS THE PANEL	433
MR. WORONIUK QUESTIONS THE PANEL	498

EXHIBITS

EXHIBIT 20 - WRITTEN UNDERTAKING RESPONSES	331
EXHIBIT 21 - AID TO QUESTIONING 13	376
EXHIBIT 22 - AID TO QUESTIONING 14	376

UNDERTAKINGS GIVEN

UNDERTAKING - TO EXPLAIN WHAT THE COSTS ARE FOR RE 337

THE ATLIN HYDRO PROJECT AND WHETHER YEC CONTINUES

TO MAINTAIN THE FORECAST OF \$100,000

UNDERTAKING - TO PROVIDE THE UPDATE THE YEC 340

RECEIVED FROM THE PROPONENT OF THE PROJECT OWNED

BY THE TAKU RIVER TLINGIT DEVELOPMENT CORPORATION

AS OF SEPTEMBER 30TH OF THIS YEAR

UNDERTAKING - TO EXPLAIN WHAT THE '23 AND '24 341

SPENDING OF 134,500 AND '24 SPENDING OF 73,400

RESPECTIVELY RELATE TO IN TABLE 5.8

UNDERTAKING - TO CONFIRM WHAT THE COSTS ARE 342

RELATED TO RE THE CURRENT 2025 OPENING BALANCE OF

\$355,800 FOR CONTRIBUTIONS TOWARD THE ATLIN EPA,

PAGE 39 OF THE UPDATED TABLE

1	UNDERTAKING - TO PROVIDE AN UPDATED	355
2	WORK-IN-PROGRESS CONTINUITY SCHEDULE ENTRY FOR THE	
3	WHITEHORSE POWER CENTRES SHOWING ANY ACTUAL	
4	EXPENDITURES, ADDITIONS AND OPENING AND CLOSING	
5	BALANCES FOR THE YEARS '23 AND '24, AS WELL AS	
6	FORECASTS OF OPENING AND CLOSING BALANCES, CAPITAL	
7	EXPENDITURES AND CAPITAL ADDITIONS FOR THE YEARS	
8	'25, '26 AND '27 THAT INCORPORATES THE GOAL TO	
9	COMPLETE THE 15-MEGAWATT SOUTH CENTRE PORTION OF	
10	THE PROJECT AT A COST OF 56.9 MILLION	
11		
12	UNDERTAKING - TO PROVIDE AN UPDATE TO THE TABLE ON	357
13	PAGE 453 TO EXPAND THE SCOPE OF IT TO INCLUDE	
14	PHASE 3 AND INCLUDE AFUDC AND INCLUDE UPDATED	
15	COSTS, ESSENTIALLY TAKING IT TO THE END OF THE	
16	PROJECT	
17		
18	UNDERTAKING - TO PROVIDE A SUMMARY DOCUMENT ON HOW	376
19	YEC COST ESTIMATES FOR ESPECIALLY LARGE PROJECTS	
20	WORK AND HOW YEC WORKS WITH THEM AND ADVANCES THEM	
21	THROUGH THE DIFFERENT COST STAGES, CLASSES 1 TO 5	
22		
23		
24		
25		

1	UNDERTAKING - TO PROVIDE THE LIST OF BIG EIGHT	382
2	PROJECTS INCLUDING WHAT CLASS THEY ARE EACH AT AS	
3	IT RELATES TO AID TO CROSS 14	
4		
5	UNDERTAKING - TO PROVIDE AN EXAMPLE OF A RISK	385
6	REGISTER DOCUMENT FOR ONE OF THE LARGER PROJECTS	
7	THAT HAS A CONTINGENCY ALLOWANCE ATTACHED TO IT	
8		
9	UNDERTAKING - TO PROVIDE A PROJECT SCHEDULE AS IT	407
10	EXISTS AS OF SEPTEMBER 30TH, SINCE YOU'VE ADVISED	
11	THE BOARD THAT THE TUNNEL PROJECT WON'T BE	
12	COMPLETED DURING THE 2027 TEST YEAR	
13		
14	UNDERTAKING - TO PROVIDE AN UPDATED BUDGET FOR THE	409
15	TUNNEL OPTION	
16		
17	UNDERTAKING - TO ADVISE WHEN THE YUKON UTILITIES	415
18	BOARD WAS MADE AWARE OF THE RATE THAT'S BEING PAID	
19	ON THE CAFN DEBENTURE AT 9.15 PERCENT	
20		
21	UNDERTAKING - TO PROVIDE THE INFORMATION ON THE	499
22	END-OF-LIFE DATES RELATED TO THE ENGINES IN	
23	DOWNTOWN DAWSON AND WHETHER THEY WILL BE REMOVED	
24	WHEN THEY REACH END OF LIFE	
25		

\$	338:8, 354:21, 355:10, 413:19, 419:7, 434:1 '28 [3] - 352:15, 406:15, 426:22 '29 [2] - 352:15, 355:17 '29/'30 [1] - 352:19 '97 [1] - 477:20	114,200.2 [1] - 353:8 114.2 [2] - 352:25, 353:6 12 [5] - 332:20, 365:20, 366:5, 366:16 12-month [2] - 366:10, 366:17 120 [1] - 413:5 124 [1] - 356:8 12:56 [1] - 427:8 12th [1] - 501:17 13 [7] - 368:9, 376:14, 376:20, 431:17, 478:13, 504:20 131 [1] - 353:12 134 [2] - 353:14, 356:24 134,500 [4] - 341:11, 341:12, 341:18, 505:14 135 [2] - 353:16, 363:20 14 [11] - 369:4, 369:6, 369:21, 370:1, 376:15, 376:21, 377:8, 381:25, 382:8, 478:13, 504:22 14th [3] - 403:5, 406:12, 410:3 15 [3] - 353:23, 412:7, 431:20 15-MEGAWATT [1] - 355:11 15-megawatt [4] - 354:9, 354:22, 355:22, 364:20 16 [3] - 442:24, 473:8, 480:4 16.5-megawatt [2] - 350:2, 350:11 16C [1] - 442:24 16E [1] - 479:20 17 [1] - 418:10 18 [3] - 362:10, 365:21, 419:13 19 [2] - 411:3, 446:21 1995 [1] - 477:12 1:56 [1] - 427:10 1:58 [1] - 428:5 1st [1] - 335:15	383:17, 384:4, 384:18, 384:19, 388:13, 389:4, 394:8, 402:15, 408:4, 410:5, 410:8, 416:24, 433:13, 453:25, 454:1, 456:1, 459:6, 459:14, 459:21, 465:12, 465:16, 465:21, 481:2, 481:4, 500:15 2-A [3] - 340:9, 351:8, 381:6 2.2 [1] - 417:1 20 [15] - 331:17, 331:18, 331:22, 332:22, 333:8, 333:21, 370:20, 376:25, 389:16, 391:19, 416:12, 455:22, 456:9, 496:21, 504:18 20,000 [6] - 482:6, 484:22, 485:11, 486:15, 487:19 200,000 [4] - 456:8, 456:11, 456:14, 456:15 2004 [1] - 477:1 2005 [8] - 452:17, 455:22, 475:9, 475:19, 475:23, 476:1, 476:12, 496:17 2008 [2] - 382:18, 382:23 201 [1] - 330:2 2020 [1] - 420:15 2021 [5] - 382:14, 382:24, 411:16, 411:17, 412:23 2022 [3] - 372:12, 399:6, 411:11 2023 [9] - 340:18, 342:16, 342:23, 362:24, 411:20, 412:4, 416:24, 417:9, 475:9 2023/'24 [1] - 411:19 2023/24 [2] - 333:3, 333:6 2024 [9] - 335:10, 347:6, 404:1, 412:4, 416:25, 417:13, 458:17, 464:10, 464:11 2024-05 [2] - 332:21, 333:21 2025 [29] - 330:6, 334:15, 334:19, 335:20, 336:2, 336:6,	336:10, 336:13, 340:10, 341:23, 342:11, 347:5, 347:10, 348:11, 350:12, 407:14, 412:5, 419:9, 428:2, 434:10, 455:23, 482:19, 482:20, 482:22, 483:2, 483:4, 488:14, 503:9, 505:18 2025-27 [1] - 343:19 2025/'27 [3] - 350:7, 352:10, 411:23 2026 [14] - 335:15, 338:19, 343:6, 348:12, 348:15, 348:17, 348:19, 350:13, 350:14, 366:7, 412:5, 418:15, 419:9, 431:25 2027 [30] - 334:16, 351:9, 351:15, 351:20, 351:21, 352:1, 353:24, 354:5, 354:10, 354:13, 356:1, 357:20, 358:14, 360:3, 364:22, 366:2, 367:20, 367:21, 381:5, 381:8, 407:19, 408:2, 412:5, 419:9, 419:12, 419:14, 419:19, 419:22, 426:24 2028 [4] - 394:23, 406:18, 406:22, 419:1 2035 [1] - 356:22 21 [4] - 376:19, 376:20, 411:11, 504:20 21st [3] - 413:8, 416:12, 418:9 22 [9] - 376:19, 376:21, 411:3, 411:9, 419:6, 419:9, 419:21, 443:23, 504:22 23 [3] - 330:6, 428:2, 503:9 24 [1] - 356:5 243 [1] - 396:18 249 [3] - 396:19, 397:4, 398:21 25 [1] - 444:1 254 [1] - 396:18 269 [3] - 389:13, 391:18, 403:17 27 [2] - 393:11 272 [1] - 402:14 27th [1] - 501:18 28 [2] - 443:23, 444:1
	0 [1] - 393:17 0.350 [1] - 451:23			
1	1 [35] - 353:11, 356:24, 359:22, 363:17, 369:1, 369:10, 369:13, 370:22, 373:7, 373:13, 373:18, 374:6, 376:11, 377:11, 378:13, 379:7, 379:17, 380:8, 380:11, 380:17, 380:20, 391:20, 392:1, 392:16, 413:15, 413:18, 413:23, 416:11, 418:16, 425:9, 455:12, 471:14, 487:9, 489:3, 500:15 1,682,000 [1] - 348:25 1-A [7] - 332:24, 343:13, 392:21, 396:17, 442:5, 470:24, 489:3 1.6 [1] - 349:10 10 [3] - 370:17, 494:18, 496:20 10-year [1] - 347:13 100 [2] - 370:13, 452:4 100,000 [9] - 336:6, 336:10, 337:12, 483:2, 483:16, 484:24, 485:11, 485:13, 495:21 100.6 [1] - 382:21 105 [1] - 412:10 107 [1] - 411:3 108 [1] - 411:3 11 [3] - 411:20, 412:1, 412:3 112 [1] - 353:6 114,200,000 [1] - 352:13			
		2 [39] - 357:3, 357:8, 369:1, 369:10, 369:12, 370:20, 377:9, 378:11, 378:20, 379:7, 380:4, 380:10, 380:19,		

28th ^[1] - 501:16	376 ^[2] - 504:20, 504:22 39 ^[5] - 340:11, 341:25, 342:14, 412:6, 505:20 396 ^[1] - 392:20 399 ^[2] - 393:1, 393:16	455 ^[2] - 335:5, 335:6 458 ^[2] - 407:5, 407:6 459 ^[3] - 355:25, 408:10, 408:12 46,000-loss ^[1] - 433:24 466 ^[4] - 332:25, 334:13, 383:9, 385:13 467 ^[5] - 334:21, 343:11, 344:2, 383:15, 386:5 468 ^[3] - 332:25, 383:9, 386:7 469 ^[2] - 396:17, 396:21 498 ^[1] - 504:14 4:15 ^[1] - 502:19	6 6.7 ^[1] - 417:10 65 ^[1] - 443:22 65(O) ^[2] - 443:24, 446:20 66 ^[1] - 474:17 66,223 ^[1] - 342:17 66B ^[1] - 478:13 66F ^[1] - 481:20 67A ^[1] - 489:4 68 ^[2] - 455:12, 471:14 69 ^[1] - 335:17 69A ^[2] - 335:4, 335:17	363:11, 423:4, 503:7 able ^[31] - 335:12, 339:22, 358:17, 361:21, 362:2, 362:6, 362:8, 362:23, 363:8, 363:14, 377:24, 407:16, 410:7, 421:16, 423:9, 428:15, 430:21, 431:18, 438:23, 443:19, 447:22, 455:9, 459:12, 460:12, 476:24, 480:18, 481:13, 488:13, 490:14, 496:22, 497:12 absolutely ^[6] - 354:24, 388:2, 415:16, 429:2, 430:17, 468:15 accept ^[5] - 368:19, 369:13, 369:14, 375:6, 416:15 acceptance ^[1] - 402:2 accepting ^[2] - 402:1, 402:2 accepts ^[1] - 412:24 access ^[4] - 422:7, 422:8, 422:15, 423:2 accessed ^[1] - 386:10 accessing ^[1] - 423:1 accordingly ^[1] - 413:2 account ^[37] - 397:9, 435:13, 437:5, 449:22, 452:19, 453:23, 457:20, 458:3, 458:4, 458:9, 458:10, 458:14, 458:21, 459:6, 459:21, 462:10, 462:11, 462:13, 462:14, 465:17, 465:18, 466:1, 466:21, 467:16, 470:8, 477:6, 478:11, 481:14, 488:12, 491:5, 491:12, 493:12, 493:18, 493:20, 495:4, 500:16, 500:19 accountant ^[1] - 480:4 accounted ^[2] - 448:22, 449:1 accounting ^[14] - 443:6, 443:11, 444:8,	
3	4 4 ^[37] - 335:5, 335:6, 335:18, 353:12, 355:15, 355:25, 356:16, 363:22, 369:10, 369:11, 369:19, 370:15, 375:23, 380:1, 383:9, 393:18, 396:16, 407:2, 407:5, 411:12, 416:25, 417:4, 417:15, 420:25, 443:21, 446:19, 455:12, 455:21, 455:24, 456:8, 465:5, 465:23, 471:15, 477:2, 478:12, 489:4 4.23 ^[1] - 411:21 4.5 ^[2] - 414:10, 414:24 4.55 ^[5] - 412:8, 413:4, 413:13, 413:22, 414:4 4.7 ^[1] - 466:3 40 ^[2] - 351:9, 465:19 406 ^[1] - 392:21 41.7 ^[1] - 332:11 414 ^[2] - 474:18, 474:19 416 ^[1] - 504:8 417 ^[2] - 475:2, 478:13 418 ^[1] - 481:20 419 ^[1] - 474:18 42 ^[2] - 340:8, 351:7 423 ^[1] - 489:4 428 ^[1] - 504:9 429 ^[1] - 455:12 431 ^[3] - 442:7, 455:22, 475:23 432 ^[1] - 504:11 433 ^[1] - 504:13 434 ^[1] - 442:8 438 ^[1] - 442:7 443 ^[1] - 471:15 448 ^[1] - 455:13 453 ^[6] - 355:16, 355:20, 356:5, 356:7, 357:2, 357:13 454 ^[1] - 335:5	5 5 ^[18] - 363:24, 369:9, 369:11, 369:19, 370:12, 370:20, 371:24, 372:16, 372:17, 372:21, 373:18, 375:16, 375:23, 376:11, 377:8, 379:24, 380:10, 412:10 5.1A ^[1] - 398:20 5.1A-5 ^[1] - 402:13 5.1A-7 ^[2] - 396:19, 397:4 5.2A-3 ^[1] - 392:18 5.3 ^[1] - 442:6 5.4-1 ^[1] - 332:23 5.4B-1 ^[4] - 332:24, 334:13, 335:25, 343:9 5.7 ^[2] - 456:1, 476:25 5.8 ^[9] - 340:7, 340:11, 340:13, 341:20, 341:22, 351:6, 351:16, 354:5, 505:15 50 ^[6] - 370:12, 370:15, 385:4, 483:24, 484:9, 484:23 500,000 ^[1] - 477:2 503 ^[1] - 503:4 528 ^[2] - 470:24, 489:3 529 ^[1] - 368:24 529.45 ^[1] - 368:16 54.2 ^[1] - 354:6 56.9 ^[6] - 354:3, 354:7, 354:23, 355:13, 355:22, 356:1	7 7 ^[11] - 352:6, 352:14, 381:6, 403:16, 411:20, 412:1, 412:3, 412:4, 417:13, 419:3 7.295 ^[1] - 393:7 7.9 ^[1] - 412:5 70 ^[1] - 423:23 71C ^[1] - 386:4 73,400 ^[4] - 341:11, 341:12, 341:19, 505:14 73.9 ^[1] - 409:2 74 ^[2] - 408:12, 409:2 78 ^[2] - 418:10, 433:13	9 9 ^[3] - 416:12, 452:5, 454:8 9.15 ^[6] - 413:17, 413:24, 414:13, 414:19, 415:14, 415:20 9.2 ^[2] - 412:5 9.5 ^[2] - 414:10, 415:1 90 ^[1] - 339:15 900,000 ^[1] - 495:22 93.6 ^[1] - 409:7 9:31 ^[1] - 331:2	
		5	7	9	
		5	7	9	
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446:1, 446:11, 451:7, 453:4, 453:5, 467:8, 471:4, 472:5, 473:4, 479:23, 486:11 Accounting [1] - 444:5 accounts [8] - 334:7, 372:19, 404:12, 435:14, 448:21, 463:12, 475:9, 480:7 accrual [20] - 440:11, 440:12, 454:23, 454:24, 455:5, 459:9, 459:12, 466:22, 466:24, 467:3, 467:11, 467:16, 470:14, 478:24, 479:7, 480:15, 480:17, 496:22, 501:1, 501:2 accruals [6] - 453:22, 466:4, 476:23, 476:24, 477:1, 479:8 accrue [4] - 453:7, 453:10, 477:4, 488:25 accrued [1] - 452:17 accruing [7] - 456:25, 458:24, 460:21, 476:2, 479:5, 496:14, 496:19 accuracy [2] - 373:21, 383:2 accurate [2] - 474:11, 503:4 achieve [1] - 335:13 achieving [2] - 338:23, 339:20 acknowledging [1] - 499:13 acquired [1] - 442:19 acquisition [2] - 442:8, 442:25 Acquisition [1] - 442:11 Act [2] - 364:3, 364:15 act [1] - 492:24 action [2] - 473:25, 474:1 action-based [1] - 473:25 actions [3] - 421:22, 422:10, 501:14 active [2] - 339:13, 492:10 activities [4] - 358:21, 399:13, 471:24, 497:7 activity [3] - 475:16,	478:20, 493:22 ACTUAL [1] - 355:4 actual [17] - 337:7, 346:19, 354:16, 380:12, 382:20, 382:21, 387:2, 388:20, 388:22, 390:9, 395:24, 412:16, 412:20, 446:10, 446:14, 474:11, 492:14 actuals [2] - 340:14, 420:11 add [13] - 368:24, 386:19, 436:7, 453:19, 454:18, 465:1, 466:2, 472:14, 472:25, 489:13, 489:18, 489:20, 500:13 added [5] - 385:7, 385:8, 449:13, 457:1, 501:21 adding [7] - 359:9, 395:5, 452:18, 456:6, 473:19, 490:20, 493:7 addition [5] - 350:4, 352:4, 354:11, 429:14, 445:22 additional [14] - 336:22, 337:21, 338:4, 338:7, 343:7, 392:5, 405:1, 406:1, 406:17, 417:12, 417:19, 460:2, 481:6, 481:16 ADDITIONS [2] - 355:5, 355:9 additions [4] - 352:9, 354:17, 354:20, 445:21 address [8] - 333:22, 361:24, 440:25, 449:23, 459:10, 466:20, 482:15 addressed [4] - 437:22, 449:21, 465:19, 467:15 addresses [1] - 423:16 adjourned [2] - 376:25, 427:7 ADJOURNED [3] - 427:8, 427:10, 502:19 ADJOURNMENT [1] - 377:1 adjustment [3] - 336:22, 397:11, 397:16 administrative [1] -	345:11 adopted [1] - 449:3 advance [22] - 338:5, 356:15, 358:22, 360:14, 360:24, 372:4, 372:24, 373:1, 373:24, 378:20, 380:2, 394:19, 404:7, 404:17, 425:2, 425:4, 439:25, 440:5, 460:11, 475:15, 478:20, 487:9 advanced [10] - 339:17, 372:17, 378:25, 379:2, 403:25, 404:11, 404:15, 405:7, 424:12, 425:17 Advancement [2] - 371:5, 371:17 advancement [1] - 338:24 advancements [1] - 339:4 ADVANCES [1] - 376:9 advances [3] - 339:5, 376:2, 401:5 advancing [15] - 345:7, 360:16, 360:19, 361:8, 372:6, 380:19, 391:20, 392:8, 401:2, 403:24, 404:18, 408:22, 410:20, 425:13, 430:15 adversely [1] - 412:25 advice [1] - 398:18 ADVISE [1] - 415:17 advised [1] - 407:18 ADVISED [1] - 407:25 advisor [1] - 406:6 affected [2] - 402:18, 494:2 affecting [2] - 402:19, 456:13 affirmed [3] - 332:4, 432:11, 432:23 afraid [1] - 453:14 AFUDC [9] - 356:4, 356:6, 356:9, 356:10, 356:12, 356:15, 356:18, 357:5, 357:15 ago [3] - 364:25, 366:24, 462:8 agree [15] - 350:5, 350:9, 415:5, 422:3, 461:22, 462:5,	462:22, 463:3, 463:19, 467:19, 468:15, 470:18, 471:12, 489:12, 489:18 agreed [1] - 471:9 agreement [14] - 332:19, 336:23, 337:2, 340:21, 340:25, 341:1, 341:5, 348:13, 349:11, 411:10, 411:11, 414:14, 414:22, 419:20 agreements [8] - 338:8, 340:23, 340:24, 341:6, 344:21, 413:21, 414:15, 419:3 AGS [1] - 411:11 AH3 [3] - 414:16, 414:17, 415:1 ahead [3] - 365:8, 378:6, 394:22 aid [6] - 349:22, 369:4, 370:2, 381:19, 393:14, 419:3 AID [5] - 376:20, 376:21, 382:7, 504:20, 504:22 Aid [8] - 332:20, 368:9, 369:6, 369:20, 369:25, 376:14, 377:8, 381:25 aided [1] - 491:22 aiming [2] - 431:24, 488:14 Alberta [2] - 449:4, 461:17 alignment [1] - 382:23 aligns [3] - 371:8, 375:6, 441:11 alive [2] - 345:1, 345:9 all-hands-on-deck [1] - 360:6 allocated [1] - 418:18 allocating [1] - 386:22 allow [1] - 364:20 allowance [24] - 383:13, 383:20, 384:2, 384:21, 385:14, 385:17, 386:3, 387:13, 387:16, 388:15, 388:21, 389:9, 389:22, 390:1, 390:6,	390:9, 390:10, 390:18, 390:20, 390:25, 391:5, 391:8, 391:12, 394:18 ALLOWANCE [1] - 385:24 allowances [1] - 386:9 almost [3] - 438:25, 490:6, 490:11 AltaLink [10] - 449:4, 461:16, 461:18, 462:7, 462:9, 462:23, 462:24, 463:3, 463:8, 464:10 AltaLink's [3] - 461:24, 462:1, 464:9 alternate [1] - 403:13 alternative [1] - 410:6 alternatively [1] - 347:10 ambiguous [1] - 344:7 amortization [2] - 347:13, 478:1 amortizing [1] - 348:3 amount [24] - 347:4, 347:9, 348:24, 351:11, 368:20, 387:2, 387:5, 438:15, 438:22, 451:22, 458:13, 460:24, 462:12, 463:9, 465:7, 465:12, 465:21, 466:20, 470:13, 472:24, 477:5, 481:16, 496:13 amounts [3] - 438:18, 438:23, 446:14 AN [4] - 355:1, 357:12, 385:21, 409:25 analyses [1] - 468:11 analysis [7] - 345:9, 372:19, 395:25, 404:12, 439:20, 468:18, 500:20 analyzed [1] - 438:20 AND [17] - 337:14, 341:18, 355:5, 355:6, 355:7, 355:9, 355:10, 357:14, 357:15, 376:8, 376:9, 500:2, 505:5, 505:13, 505:14 annual [14] - 451:21, 453:22, 456:6, 465:3, 465:7, 465:12, 466:4,
--	--	---	--	--

466:21, 467:3, 467:11, 467:15, 476:23, 480:15, 481:22 annually [1] - 424:7 answer [15] - 336:16, 349:8, 359:24, 387:11, 391:15, 392:1, 394:4, 399:4, 406:10, 413:10, 423:15, 439:11, 446:20, 465:16, 475:1 answered [2] - 416:20, 498:9 answering [1] - 502:8 answers [2] - 440:12, 453:17 anticipate [4] - 338:6, 365:14, 366:6, 410:12 anticipated [7] - 336:18, 356:23, 367:9, 406:20, 475:11, 478:15, 496:16 anticipates [1] - 410:4 ANY [1] - 355:4 anyway [2] - 414:7, 426:15 anyways [1] - 477:24 apparent [1] - 356:8 appear [1] - 433:24 Appendix [6] - 332:21, 332:23, 334:12, 335:24, 343:9, 442:6 appendix [1] - 392:18 application [49] - 331:7, 332:24, 333:23, 335:1, 336:7, 338:13, 339:14, 343:12, 350:24, 351:18, 358:6, 359:1, 359:20, 364:25, 365:10, 369:8, 382:15, 389:14, 392:21, 393:1, 393:6, 395:19, 395:23, 396:17, 397:5, 398:22, 402:13, 407:9, 407:12, 412:1, 412:9, 412:11, 413:2, 413:17, 418:5, 419:9, 426:22, 433:25, 434:15, 442:5, 444:17, 444:21, 445:14, 445:18,	446:4, 452:5, 470:23, 501:15 applications [6] - 339:13, 415:11, 426:19, 426:20, 445:6, 445:8 applied [7] - 385:6, 393:18, 450:19, 451:10, 455:7, 467:9, 490:10 applies [1] - 450:10 apply [3] - 384:13, 435:4, 438:25 applying [1] - 455:8 appreciate [1] - 424:4 appreciated [1] - 502:3 approach [24] - 374:1, 393:2, 393:24, 410:19, 435:17, 445:14, 445:16, 449:2, 452:23, 455:7, 461:20, 462:20, 464:21, 465:2, 465:23, 466:5, 466:18, 467:8, 469:12, 469:18, 475:24, 476:2, 476:5, 476:9 Approach [1] - 392:25 approached [1] - 471:3 approaches [1] - 453:5 appropriate [5] - 348:20, 362:13, 374:21, 469:20, 470:13 approval [2] - 383:19, 401:24 approvals [4] - 365:6, 365:7, 367:9, 368:2 approve [2] - 350:17, 402:9 approved [7] - 350:6, 395:22, 402:10, 446:14, 451:11, 458:1, 474:15 April [1] - 367:22 ARE [5] - 337:14, 342:11, 382:7, 505:4, 505:17 area [1] - 499:12 areas [3] - 339:5, 360:23, 421:20 arguably [1] - 495:21 argument [3] -	480:25, 501:17, 501:18 arise [1] - 440:1 arises [1] - 439:2 ARO [23] - 471:19, 473:3, 473:18, 475:12, 478:18, 479:15, 479:16, 480:24, 481:1, 481:5, 481:22, 482:1, 482:2, 482:5, 482:9, 482:11, 482:15, 483:3, 483:16, 487:19, 488:17, 488:18 AROs [12] - 471:21, 471:25, 472:2, 472:4, 472:10, 472:15, 473:16, 474:11, 479:22, 480:23, 481:17, 488:9 arose [1] - 411:9 arrangements [1] - 412:15 arrive [2] - 484:6, 484:14 AS [7] - 340:4, 355:6, 355:7, 382:7, 407:24, 505:11 ascertain [1] - 463:25 aside [3] - 389:1, 439:9, 440:2 aspect [2] - 359:11, 359:17 aspects [1] - 501:20 asserts [1] - 489:7 assess [2] - 395:1, 397:15 assessed [2] - 388:15, 481:25 assessing [1] - 336:21 assessment [5] - 360:19, 361:14, 370:21, 473:6, 482:1 assessors [1] - 360:22 asset [83] - 434:5, 434:7, 434:12, 434:17, 434:22, 434:24, 435:11, 435:19, 436:2, 436:15, 436:23, 437:2, 437:6, 437:9, 437:13, 437:16, 437:18, 437:19, 437:22, 441:3, 441:5, 441:18, 442:2, 443:1, 443:5, 445:11, 445:19, 445:20,	447:19, 448:11, 448:20, 448:22, 449:6, 449:7, 449:14, 449:18, 451:1, 453:8, 456:1, 457:15, 458:17, 461:2, 461:7, 461:10, 461:23, 461:24, 462:3, 462:24, 462:25, 463:1, 466:12, 469:9, 471:18, 473:12, 474:21, 474:22, 475:7, 476:3, 476:11, 477:20, 478:9, 478:25, 479:3, 479:21, 482:3, 484:1, 485:4, 485:20, 485:25, 486:10, 487:1, 487:22, 487:25, 492:10, 492:25, 493:7, 493:12, 496:4, 497:8, 498:14 assets [31] - 443:19, 449:6, 449:15, 450:10, 450:15, 450:16, 450:24, 451:6, 453:7, 456:3, 457:5, 457:9, 463:5, 463:7, 465:14, 465:20, 467:6, 468:19, 469:8, 469:10, 473:7, 476:15, 477:14, 477:20, 481:25, 482:1, 485:6, 486:4, 493:22, 498:12, 498:20 assigns [1] - 423:10 assist [1] - 430:15 associated [12] - 352:20, 385:1, 403:2, 416:19, 441:12, 441:22, 461:6, 476:3, 478:7, 480:15, 480:16, 481:7 Association [3] - 371:4, 371:16, 447:16 assumes [2] - 364:2, 413:2 assuming [2] - 419:12, 485:1 assumption [1] - 358:3 assumptions [2] - 465:25, 468:12 assurance [1] - 359:8 assurances [1] - 358:15	assure [1] - 401:14 asterisk [3] - 352:13, 352:18, 479:9 AT [7] - 331:2, 355:12, 382:7, 415:20, 427:8, 428:5, 502:19 ATCO [10] - 341:1, 341:3, 362:3, 362:4, 362:8, 422:17, 445:1, 460:15, 464:20, 490:9 Atlin [6] - 332:19, 333:12, 334:4, 335:24, 341:24, 346:12 ATLIN [4] - 337:14, 342:13, 505:5, 505:19 attached [1] - 385:18 ATTACHED [1] - 385:24 Attachment [5] - 353:11, 363:17, 418:16, 455:12, 471:14 attempt [1] - 345:20 attempting [1] - 488:10 attending [1] - 432:10 attention [3] - 413:25, 423:6, 474:19 attributed [1] - 387:20 audio [1] - 453:11 audited [2] - 474:15, 483:13 auditor [6] - 474:15, 481:4, 481:24, 483:13, 483:14, 488:2 auditors [2] - 480:21 August [5] - 372:11, 399:6, 408:22, 408:24, 411:20 authority [2] - 402:9, 480:5 authors [2] - 428:17, 432:8 available [8] - 352:22, 401:7, 406:14, 458:13, 466:22, 469:13, 469:16, 488:15 average [2] - 468:22, 468:23 avoid [5] - 395:15, 421:10, 473:5, 474:9, 480:9 awaiting [1] - 365:12 awarded [2] - 389:19, 392:13
---	--	---	--	--

aware [8] - 359:2, 387:22, 415:13, 416:1, 445:3, 470:5, 470:6, 476:16 AWARE [1] - 415:18	basic [1] - 393:21 basis [9] - 391:11, 413:5, 438:24, 445:11, 451:23, 469:25, 476:21, 490:14, 500:21 batteries [2] - 488:20, 488:24 Battersby [1] - 330:15 battery [11] - 379:14, 398:9, 398:11, 400:12, 425:6, 485:14, 486:22, 486:23, 487:1, 487:14, 487:16 BC [4] - 345:4, 345:6, 362:11, 422:18 BE [2] - 408:2, 500:2 bearing [1] - 479:23 become [13] - 373:10, 373:17, 374:18, 438:8, 449:7, 449:19, 455:1, 455:5, 458:5, 458:6, 459:22, 461:7, 500:20 becomes [3] - 448:17, 490:21, 491:1 becoming [1] - 422:19 begin [1] - 466:19 beginning [4] - 420:2, 443:18, 464:10, 464:11 begins [2] - 363:18, 407:4 behalf [1] - 420:19 behind [5] - 358:25, 406:7, 469:3, 469:4, 491:20 BEING [1] - 415:19 below [3] - 407:8, 453:25, 454:2 benchmark [1] - 413:5 beneficial [1] - 495:16 benefit [5] - 345:8, 412:15, 478:1, 492:3, 498:1 benefited [1] - 491:16 benefits [2] - 418:17, 495:8 benefitted [1] - 497:19 BENTIVEGNA [30] - 332:16, 332:17, 332:18, 337:17, 340:6, 341:21,	342:15, 349:21, 349:25, 355:14, 357:18, 376:12, 376:13, 377:5, 377:6, 382:25, 385:25, 408:3, 410:2, 415:21, 415:22, 432:14, 432:17, 433:2, 433:3, 433:4, 498:3, 501:22, 504:7, 504:13 Bentivegna [9] - 330:10, 332:14, 377:4, 415:25, 416:17, 418:12, 432:13, 432:25, 433:1 BESS [20] - 349:25, 350:1, 350:11, 397:1, 397:7, 398:24, 399:7, 411:15, 412:12, 414:6, 414:14, 414:15, 414:23, 415:4, 418:12, 418:14, 418:18, 418:19, 418:24 best [6] - 372:23, 404:25, 445:11, 455:9, 459:17, 503:6 better [6] - 396:25, 405:18, 405:21, 429:16, 462:6, 462:17 between [17] - 335:14, 340:25, 341:1, 344:22, 379:22, 386:23, 396:14, 412:20, 421:1, 446:1, 446:13, 455:25, 461:12, 461:22, 462:23, 471:23, 479:20 beyond [1] - 421:13 bid [1] - 373:3 Big [1] - 368:17 BIG [1] - 382:6 big [15] - 377:14, 378:19, 381:10, 381:23, 383:6, 393:8, 393:12, 393:13, 394:24, 424:25, 425:5, 459:12, 477:4, 479:10 bigger [1] - 469:10 billing [2] - 386:23 bit [12] - 344:11, 375:12, 390:13, 399:5, 400:19, 403:25, 421:23, 424:17, 431:6, 448:12, 453:19, 494:7 black [1] - 455:19 Board [68] - 330:1,	330:8, 330:9, 330:9, 330:10, 332:21, 333:5, 333:10, 333:20, 333:25, 334:3, 339:23, 346:22, 347:2, 347:11, 347:16, 347:22, 348:1, 349:1, 349:6, 350:14, 352:22, 352:24, 358:15, 364:13, 365:3, 372:2, 375:10, 376:1, 382:14, 382:15, 383:19, 393:25, 394:25, 395:1, 395:11, 396:8, 396:21, 407:18, 411:16, 411:24, 412:22, 415:5, 415:10, 415:13, 416:3, 420:4, 420:19, 420:21, 421:8, 422:4, 423:17, 424:2, 427:4, 428:25, 432:20, 453:23, 454:3, 455:3, 459:17, 480:20, 481:3, 481:10, 496:18, 498:6 board [15] - 346:22, 370:8, 370:9, 370:24, 393:23, 393:24, 394:6, 394:7, 394:10, 408:22, 424:6, 445:6, 445:7, 445:9, 480:13 BOARD [2] - 408:1, 415:18 Board's [2] - 348:22, 502:10 Boat [1] - 332:7 boat [1] - 332:10 body [1] - 366:19 bones [2] - 390:5, 391:4 book [1] - 435:13 books [4] - 443:11, 443:20, 477:25, 478:10 bore [1] - 502:2 bottom [4] - 343:11, 344:1, 353:16, 372:13 Bowman [40] - 432:7, 435:9, 443:3, 443:12, 447:1, 451:14, 453:14, 454:9, 454:13, 454:16, 455:15, 456:4, 456:10, 456:19, 457:19, 457:23, 461:4, 461:21, 462:4,	462:21, 462:22, 463:20, 464:17, 465:1, 466:18, 467:19, 470:19, 472:9, 476:18, 479:4, 488:7, 489:7, 489:13, 489:18, 495:7, 495:15, 495:18, 498:10, 500:13 BOWMAN [40] - 432:22, 435:10, 436:5, 436:19, 437:21, 440:16, 447:5, 447:10, 447:12, 450:8, 452:11, 454:20, 455:15, 456:4, 456:10, 456:19, 457:23, 460:4, 461:4, 461:11, 461:18, 462:4, 463:2, 464:17, 465:7, 466:17, 467:24, 469:3, 470:4, 472:13, 476:18, 477:9, 479:4, 480:2, 488:7, 489:20, 493:19, 495:17, 500:12, 504:11 Bowman's [2] - 479:19, 492:6 brackets [1] - 389:15 break [5] - 376:16, 376:23, 416:5, 427:5, 494:19 breakdown [2] - 355:17, 358:21 breaking [1] - 495:9 Briana [1] - 330:15 brief [2] - 331:25, 428:13 briefly [1] - 501:13 bring [2] - 367:3, 429:24 broad [3] - 492:15, 492:21 broadly [1] - 369:19 broken [5] - 356:9, 492:16, 492:18, 492:22, 494:10 brought [6] - 365:24, 366:18, 366:21, 366:22, 418:7, 423:21 BUDGET [1] - 410:1 budget [28] - 345:14, 355:16, 355:17, 355:19, 355:20, 355:21, 355:24, 356:3, 356:6, 356:7, 356:15, 356:16, 356:17, 356:20,
--	---	---	--	--

357:3, 385:9, 389:2, 393:5, 393:9, 393:10, 408:11, 408:14, 409:10, 409:14, 409:17, 409:23 budgeting [1] - 392:23 budgets [2] - 346:5, 383:14 build [21] - 337:17, 354:9, 362:23, 363:1, 363:5, 373:3, 391:11, 404:23, 411:3, 422:6, 423:8, 439:12, 440:7, 448:9, 449:6, 460:23, 465:20, 466:19, 469:19, 470:9, 481:15 building [9] - 377:22, 405:16, 425:18, 426:2, 458:11, 458:14, 460:9, 460:23, 477:19 built [17] - 388:16, 390:11, 394:17, 425:24, 426:3, 426:15, 438:22, 453:2, 458:10, 459:9, 459:10, 459:12, 461:8, 465:14, 470:13, 485:2 burnt [2] - 477:11, 477:19 business [11] - 335:25, 348:5, 348:7, 350:1, 384:1, 389:12, 392:19, 392:22, 422:15, 423:1, 494:3 BY [2] - 340:3, 505:10	calculation [12] - 445:22, 456:13, 465:13, 472:25, 481:23, 482:15, 483:3, 483:13, 483:16, 483:18, 483:24, 487:18 calculations [2] - 444:3, 445:10 calendar [1] - 410:13 Callison [7] - 365:16, 365:18, 431:5, 431:11, 431:16, 498:11, 498:16 Canada [4] - 413:5, 474:16, 481:25, 483:14 cancel [1] - 333:14 cannot [4] - 343:23, 344:4, 473:5, 483:10 capacity [8] - 344:24, 349:14, 349:18, 359:6, 363:19, 363:23, 399:20, 401:8 CAPITAL [2] - 355:8, 355:9 capital [31] - 346:19, 350:3, 350:17, 352:9, 354:19, 354:20, 370:9, 382:18, 383:14, 399:8, 420:13, 433:7, 433:19, 435:21, 435:22, 435:24, 438:6, 458:5, 461:7, 471:5, 490:7, 490:21, 491:1, 493:11, 494:3, 495:19, 496:4, 496:7, 496:25, 497:4, 497:22 capitalization [3] - 442:6, 442:8, 464:11 Capitalization [1] - 442:11 capitalize [1] - 461:1 capitalized [9] - 443:1, 461:15, 462:2, 463:24, 464:2, 470:21, 486:11, 493:16, 495:22 capitalizing [5] - 489:8, 489:14, 494:1, 495:3, 495:10 care [2] - 331:10, 416:4 careful [2] - 457:25, 472:19 carved [1] - 481:18 case [9] - 335:25, 373:2, 389:12,	392:19, 392:22, 400:18, 437:1, 437:24, 478:23 cases [5] - 350:1, 384:1, 400:10, 438:16, 494:3 categories [1] - 397:6 caution [1] - 426:12 caveat [1] - 479:9 central [1] - 333:4 Centre [14] - 330:2, 351:1, 353:18, 353:19, 357:19, 360:13, 379:1, 379:23, 419:11, 420:8, 420:24, 421:13, 423:6, 431:14 centre [6] - 351:25, 354:9, 354:22, 355:23, 357:7, 425:16 CENTRE [1] - 355:12 Centre's [4] - 350:21, 353:23, 356:21, 357:8 centre's [1] - 356:23 Centres [6] - 353:14, 368:25, 401:1, 430:16, 431:9, 431:23 CENTRES [1] - 355:3 centres [1] - 354:16 certain [4] - 348:3, 418:24, 472:22, 473:6 certainly [18] - 338:6, 358:24, 362:12, 373:14, 373:19, 373:23, 378:1, 385:19, 390:16, 398:17, 405:9, 406:4, 422:21, 424:1, 424:4, 431:11, 431:12, 460:14 certainty [4] - 343:24, 344:5, 345:13, 373:16 Certificate [1] - 503:1 certificate [4] - 364:4, 364:10, 364:15, 367:9 certificates [1] - 367:6 certification [1] - 374:21 certifications [1] - 374:16 certify [1] - 503:3 CHAIR [24] - 331:5, 331:18, 331:21, 332:13, 349:24,	376:18, 376:22, 377:4, 415:25, 427:3, 428:8, 428:10, 428:19, 432:3, 432:12, 432:16, 432:18, 433:1, 453:14, 498:5, 501:4, 501:8, 501:13, 501:23 Chair [150] - 330:7, 330:8, 331:11, 332:6, 332:16, 335:16, 336:11, 336:16, 337:23, 338:12, 338:21, 339:6, 339:24, 340:19, 341:14, 342:1, 342:18, 342:24, 343:8, 344:10, 347:8, 347:25, 349:9, 349:21, 350:8, 351:4, 352:3, 353:7, 354:12, 355:24, 356:12, 357:1, 358:18, 364:23, 365:9, 367:11, 367:20, 367:24, 369:14, 370:4, 371:13, 372:3, 373:15, 374:13, 376:4, 376:13, 377:5, 377:23, 378:8, 378:18, 379:9, 380:15, 381:9, 381:22, 382:9, 384:9, 384:24, 387:10, 388:23, 390:12, 391:13, 393:16, 394:2, 395:8, 397:19, 398:7, 399:3, 400:7, 401:23, 402:23, 403:22, 406:20, 407:13, 407:20, 408:21, 408:25, 409:4, 409:12, 409:16, 409:22, 410:9, 413:14, 415:22, 416:7, 417:8, 420:1, 421:24, 428:22, 433:3, 433:23, 435:10, 436:5, 436:20, 437:10, 437:21, 441:8, 441:25, 443:3, 444:10, 447:5, 450:8, 452:11, 453:18, 454:9, 454:20, 455:15, 456:4, 456:10, 456:19, 457:3, 457:23, 461:4, 461:18, 462:4, 462:18, 463:2, 464:3, 464:7, 464:17, 466:2,	466:17, 467:24, 469:3, 470:4, 471:11, 472:13, 474:12, 475:20, 476:13, 476:18, 477:7, 478:4, 479:4, 480:2, 482:13, 482:24, 483:7, 483:17, 483:23, 484:18, 485:9, 488:7, 489:20, 492:12, 493:19, 494:5, 495:18, 498:4, 501:22 chairing [1] - 502:2 challenge [1] - 404:16 challenged [1] - 468:1 challenges [7] - 359:3, 403:11, 403:19, 404:10, 409:6, 422:10 challenging [2] - 404:17, 424:24 chamber [9] - 379:15, 393:10, 400:14, 402:12, 402:21, 402:24, 403:1, 405:4, 425:7 change [31] - 348:25, 349:10, 351:14, 354:8, 368:16, 387:18, 387:19, 387:20, 387:24, 388:8, 388:9, 392:14, 397:9, 397:22, 397:23, 397:25, 398:14, 398:19, 399:19, 401:14, 401:21, 401:24, 402:3, 402:4, 406:9, 422:14, 426:9, 444:22, 474:2, 496:3, 496:6 changed [2] - 409:21, 420:14 changes [5] - 372:1, 382:19, 401:22, 422:25, 426:13 channel [4] - 403:14, 410:12, 410:17, 410:18 Chapter [2] - 359:22, 411:9 characterized [1] - 456:2 charge [6] - 438:14, 438:23, 458:1, 460:6, 462:11, 497:12 charged [16] - 386:14, 387:7,
C				
CAFN [17] - 411:1, 411:9, 411:10, 411:22, 411:24, 412:2, 413:11, 413:15, 413:24, 414:9, 414:12, 414:13, 414:16, 414:17, 415:3, 415:14, 415:19 calculate [2] - 446:9, 480:18 calculated [5] - 412:6, 482:6, 482:8, 482:9 calculates [1] - 412:4 calculating [1] - 480:13				

412:21, 413:12, 413:24, 414:10, 414:12, 414:18, 458:8, 458:23, 459:5, 459:6, 459:21, 491:18, 496:25, 497:21 charges [4] - 386:16, 387:5, 458:8, 462:13 charging [2] - 414:25, 462:9 check [13] - 368:19, 368:22, 369:13, 369:15, 411:7, 411:13, 415:8, 416:15, 462:19, 499:10, 499:14, 501:4, 501:19 checking [1] - 415:12 chose [1] - 373:4 Chris [2] - 344:10, 358:18 circumstance [1] - 397:13 circumstances [1] - 397:10 cited [1] - 462:15 City [8] - 360:21, 366:22, 429:14, 430:1, 430:7, 440:19, 443:15, 503:8 civil [1] - 339:16 claim [1] - 434:1 clarification [11] - 354:1, 357:10, 378:14, 396:14, 402:11, 410:24, 411:5, 416:9, 416:10, 454:16, 466:3 clarify [15] - 346:20, 356:7, 378:10, 380:6, 380:14, 381:2, 381:14, 418:8, 428:25, 430:5, 433:17, 441:14, 447:6, 473:9, 477:7 clarifying [1] - 467:14 clarity [6] - 357:2, 381:10, 388:10, 390:14, 395:9, 429:24 CLASS [1] - 382:6 Class [58] - 356:16, 369:9, 369:10, 369:11, 369:12, 369:18, 370:12, 370:15, 370:17, 370:20, 370:22, 371:24, 372:16,	372:17, 372:21, 372:25, 373:7, 373:12, 373:13, 373:18, 373:22, 373:23, 374:6, 375:23, 377:9, 377:11, 378:11, 378:13, 378:20, 379:7, 379:17, 379:22, 379:24, 380:1, 380:4, 380:8, 380:10, 380:11, 380:17, 380:19, 380:20, 389:14, 391:18, 391:20, 392:1, 392:16, 420:25, 425:9 class [11] - 369:18, 380:24, 381:1, 381:17, 381:18, 381:24, 381:25, 388:14, 394:15, 445:19, 445:20 CLASSES [1] - 376:11 classes [8] - 370:2, 371:19, 373:9, 373:18, 375:15, 377:7, 377:13, 383:3 classification [2] - 377:13, 437:4 classify [2] - 381:21, 436:11 clause [1] - 443:5 clean [1] - 497:9 clear [10] - 345:22, 346:21, 358:5, 413:8, 418:8, 430:3, 463:22, 467:17, 472:4, 484:14 clearly [5] - 421:3, 440:22, 440:23, 477:5 Clerk [1] - 330:13 CLERK [6] - 331:3, 376:24, 377:2, 427:6, 428:6, 502:17 close [11] - 337:2, 339:12, 345:11, 345:20, 346:8, 354:7, 379:19, 382:23, 456:11, 456:14, 490:3 closed [2] - 502:16, 502:18 closer [3] - 380:2, 460:21, 465:17 CLOSING [2] - 355:5, 355:8 closing [12] - 334:16, 345:23, 346:25, 348:10, 348:12, 348:20, 351:10,	354:5, 354:17, 354:19, 378:20, 463:17 coffer [1] - 405:13 collaborate [2] - 362:3, 362:8 collect [2] - 447:25, 448:1 collected [6] - 456:17, 464:24, 472:22, 473:1, 473:19, 476:9 collection [1] - 451:21 Colleen [1] - 330:14 combination [2] - 374:15, 400:10 coming [8] - 350:13, 368:6, 371:2, 372:2, 373:19, 404:11, 419:11, 459:16 commence [4] - 364:17, 408:16, 408:19, 456:25 COMMENCED [1] - 331:2 commenced [1] - 464:10 commencing [1] - 364:10 comment [9] - 333:12, 348:10, 348:14, 371:10, 404:9, 420:1, 425:3, 454:21, 491:6 comments [4] - 358:11, 358:19, 424:15, 426:16 Commission [4] - 440:6, 440:7, 449:10, 460:17 Commissioners [1] - 447:16 commissioning [2] - 353:22, 419:18 commitment [3] - 412:24, 419:21, 420:14 commitments [3] - 344:19, 344:20, 344:21 committee [7] - 364:1, 364:13, 366:12, 424:8, 424:9, 431:4, 431:8 committee's [1] - 365:12 common [2] - 371:15, 462:25 commonly [2] -	371:1, 476:4 commonplace [1] - 422:19 communicate [1] - 421:15 communication [2] - 359:15, 359:16 community [1] - 404:4 company [3] - 359:3, 472:16, 490:24 company's [3] - 435:14, 490:19, 497:17 compare [1] - 446:11 comparison [3] - 390:10, 489:12, 489:16 compensate [1] - 397:11 complementary [1] - 472:3 complete [6] - 339:15, 339:16, 354:22, 383:11, 392:9, 503:4 COMPLETE [1] - 355:11 completed [11] - 354:10, 356:1, 358:13, 364:19, 365:4, 365:19, 366:16, 371:3, 381:5, 389:18, 407:19 COMPLETED [1] - 408:2 completely [2] - 395:21, 444:16 completion [6] - 351:25, 353:15, 353:25, 357:18, 379:19, 402:20 complex [3] - 374:15, 400:18, 423:7 compliance [5] - 333:4, 333:11, 333:22, 334:3, 445:17 complicate [1] - 386:21 comply [1] - 348:1 complying [1] - 338:17 component [4] - 359:13, 429:20, 436:9, 473:4 components [4] - 426:4, 492:18, 494:11, 495:18 concept [3] - 449:19, 450:18, 472:15	concepts [1] - 457:24 concern [6] - 361:20, 389:23, 390:19, 420:12, 424:1, 491:23 concerned [2] - 339:3, 456:11 concerns [1] - 430:22 conclude [1] - 346:7 concluded [3] - 364:17, 364:21, 480:24 CONCLUDED [1] - 502:21 Conclusion [1] - 343:10 Conclusions [1] - 346:21 concrete [15] - 485:16, 485:24, 486:3, 486:5, 486:7, 486:13, 486:19, 486:21, 486:22, 486:24, 487:10, 487:13, 487:17, 488:16, 488:22 condition [4] - 335:13, 348:16, 434:5, 434:11 conditioned [1] - 338:22 conditions [11] - 335:2, 335:22, 336:4, 338:17, 338:20, 338:22, 343:4, 345:10, 348:12, 348:18, 392:10 Conference [1] - 330:2 confidence [7] - 354:8, 360:3, 363:14, 421:8, 421:17, 424:3, 425:10 confident [3] - 365:22, 366:15, 425:19 confirm [30] - 342:5, 343:23, 344:4, 344:12, 353:9, 368:22, 380:6, 386:5, 402:17, 419:6, 423:1, 423:2, 431:21, 437:10, 441:10, 455:11, 456:9, 456:15, 456:21, 456:23, 460:25, 471:11, 474:10, 474:12, 483:3, 483:8, 483:10, 483:12,
---	--	--	---	--

498:22, 500:5 CONFIRM [2] - 342:10, 505:17 confirmation [1] - 419:4 confirmed [9] - 350:19, 352:3, 352:17, 386:7, 410:6, 433:10, 435:8, 456:22, 464:8 confirms [1] - 441:24 conflict [1] - 471:23 Connie [1] - 330:8 consequence [1] - 442:19 consequential [1] - 388:16 consider [3] - 379:16, 395:5, 436:18 considerably [1] - 500:24 consideration [1] - 471:17 considerations [1] - 488:11 considered [15] - 334:1, 349:3, 349:6, 367:21, 379:25, 429:12, 435:5, 436:3, 436:16, 437:13, 437:18, 440:14, 448:17, 498:14, 500:17 considering [5] - 349:1, 384:22, 405:24, 408:7, 441:20 consistency [1] - 357:2 consistent [4] - 396:7, 444:23, 445:2, 467:8 consistently [1] - 370:24 consolidated [3] - 363:21, 407:5, 443:21 construct [5] - 361:23, 362:25, 363:12, 390:19 constructed [1] - 436:14 constructing [3] - 362:12, 397:10, 397:13 construction [46] - 332:9, 332:11, 333:16, 334:6, 339:9, 353:21, 364:5, 364:11, 364:18, 367:7, 367:8, 367:12, 367:14, 367:16,	367:18, 367:21, 367:25, 370:22, 372:8, 373:7, 377:19, 378:5, 378:7, 378:21, 378:22, 379:17, 380:3, 380:12, 380:18, 388:24, 389:5, 389:20, 390:2, 391:1, 392:5, 393:20, 394:14, 402:24, 402:25, 403:1, 405:16, 406:9, 410:15, 410:17, 410:19, 410:21 consult [1] - 398:4 consultant [3] - 371:15, 373:4, 400:5 Consultants [1] - 432:8 consultants [11] - 370:25, 371:2, 371:7, 371:11, 372:18, 374:11, 375:2, 401:11, 426:1, 492:8, 492:23 consultation [1] - 396:3 consulted [1] - 399:10 Consulting [1] - 432:7 contain [1] - 476:10 context [6] - 334:20, 347:4, 358:10, 358:19, 396:25, 422:12 contingencies [1] - 424:19 contingency [40] - 383:13, 383:20, 384:2, 384:21, 385:11, 385:13, 385:17, 386:3, 386:9, 387:4, 387:13, 387:16, 387:23, 388:6, 388:10, 388:15, 388:20, 388:24, 388:25, 389:1, 389:5, 389:9, 389:22, 390:1, 390:6, 390:8, 390:10, 390:17, 390:20, 390:25, 391:5, 391:8, 391:12, 391:22, 392:12, 392:15, 394:17 CONTINGENCY [1] - 385:23 contingent [2] - 338:3, 338:14	continue [12] - 334:5, 337:11, 339:11, 347:18, 347:23, 368:4, 377:6, 391:9, 399:16, 399:18, 410:14, 461:25 continues [2] - 343:12, 353:18 CONTINUES [2] - 337:15, 505:5 continuing [2] - 389:8, 396:10 continuity [2] - 334:14, 354:15 CONTINUITY [1] - 355:2 contract [12] - 378:12, 387:14, 387:18, 388:9, 392:13, 392:17, 397:11, 397:16, 399:25, 401:20, 402:7, 419:16 contract's [1] - 379:17 contractor [16] - 386:15, 386:17, 386:21, 386:25, 387:21, 397:8, 397:9, 397:12, 397:16, 397:23, 399:1, 401:15, 404:23, 405:2, 406:2, 410:11 contractor's [3] - 386:18, 387:7, 387:14 contractors [2] - 377:21, 387:5 contracts [11] - 377:19, 378:5, 378:10, 378:20, 380:5, 380:18, 380:19, 389:18, 391:21, 401:12, 401:13 contribution [2] - 342:20, 342:21 contributions [3] - 341:24, 343:7, 347:7 CONTRIBUTIONS [2] - 342:13, 505:19 control [5] - 344:14, 344:22, 377:10, 493:25, 494:6 controversial [1] - 411:8 conversation [1] - 345:18 conversations [3] - 429:10, 429:11,	430:20 converse [1] - 436:17 copy [2] - 339:22, 455:13 Corp [1] - 500:6 corporate [1] - 408:16 Corporation [8] - 330:16, 332:4, 336:20, 337:25, 432:22, 445:3, 504:6, 504:12 CORPORATION [2] - 340:4, 505:10 corporation [1] - 337:1 correct [44] - 335:15, 335:16, 341:8, 341:9, 342:17, 351:3, 351:4, 353:5, 353:10, 363:4, 378:16, 384:8, 384:9, 388:22, 398:6, 408:25, 409:11, 409:18, 409:19, 411:13, 414:20, 443:4, 446:24, 446:25, 451:15, 455:14, 456:3, 457:2, 457:3, 457:6, 457:19, 460:3, 460:4, 461:11, 461:17, 462:21, 464:13, 478:21, 478:22, 482:13, 485:8, 487:12, 492:2, 500:9 corrected [1] - 435:8 correcting [1] - 443:4 correction [1] - 348:9 correctly [10] - 352:2, 366:3, 373:9, 380:14, 384:12, 406:19, 409:9, 414:18, 459:23, 460:5 correlation [1] - 349:19 correspond [3] - 375:14, 381:2, 381:4 COST [3] - 355:12, 376:7, 376:10 cost [123] - 332:6, 332:7, 333:16, 345:8, 352:13, 352:25, 353:21, 354:23, 356:8, 356:11, 369:5, 369:18, 369:24, 370:1, 371:22, 372:4, 372:6, 372:21,	372:25, 373:8, 373:10, 374:12, 375:5, 375:18, 375:20, 376:1, 376:3, 377:7, 377:12, 377:17, 378:3, 379:5, 380:8, 380:9, 380:17, 380:23, 383:3, 384:3, 384:7, 384:13, 384:14, 386:14, 386:18, 386:20, 386:24, 387:1, 387:3, 388:13, 388:17, 389:10, 390:4, 391:2, 391:19, 394:15, 395:22, 404:14, 404:15, 404:21, 405:9, 405:19, 406:6, 408:9, 409:2, 410:5, 410:8, 410:20, 412:2, 412:18, 413:16, 414:11, 416:24, 417:1, 420:21, 421:4, 423:2, 425:14, 425:17, 433:8, 433:19, 435:3, 435:22, 435:23, 435:24, 436:10, 437:11, 439:14, 448:8, 448:9, 448:17, 448:22, 459:2, 460:20, 462:2, 465:3, 466:11, 466:12, 466:14, 467:5, 469:17, 473:20, 478:6, 478:10, 485:13, 485:24, 486:2, 486:4, 486:12, 486:18, 486:21, 487:5, 487:11, 487:16, 488:19, 488:23, 490:8, 494:23, 500:15 Cost [3] - 369:7, 371:5, 371:17 Costing [2] - 353:17, 353:19 Costs [1] - 442:11 COSTS [5] - 337:13, 342:10, 357:16, 505:4, 505:17 costs [146] - 333:13, 334:5, 334:6, 335:20, 336:2, 336:6, 336:8, 336:18, 337:3, 337:7, 337:9, 337:21, 338:3, 338:7, 340:20, 341:13, 342:2, 345:21, 349:2, 349:10, 349:18,
---	---	--	---	--

350:10, 350:15, 350:18, 353:3, 353:5, 353:25, 357:5, 373:13, 373:16, 377:18, 378:5, 382:21, 382:22, 384:1, 385:1, 387:6, 388:16, 388:22, 392:6, 394:13, 395:2, 395:24, 397:6, 404:19, 405:25, 408:8, 409:21, 421:12, 421:17, 433:11, 435:18, 437:5, 437:8, 438:1, 438:5, 438:6, 438:7, 438:11, 440:8, 442:8, 442:14, 442:25, 443:17, 443:19, 447:4, 448:4, 448:14, 448:19, 449:5, 449:13, 449:14, 449:17, 450:4, 451:4, 451:8, 452:21, 453:2, 453:5, 453:6, 453:9, 455:25, 456:7, 456:16, 457:1, 458:2, 461:6, 461:7, 462:1, 463:22, 464:1, 464:12, 464:16, 464:23, 466:9, 467:23, 468:18, 468:22, 470:1, 470:20, 471:4, 474:21, 475:14, 476:2, 477:14, 478:19, 478:25, 479:3, 479:5, 482:19, 482:21, 483:4, 484:8, 484:16, 485:4, 485:5, 485:8, 485:9, 485:20, 486:13, 486:22, 486:25, 489:15, 490:3, 490:12, 490:18, 490:21, 490:25, 491:17, 494:2, 495:3, 495:9, 495:11, 495:22, 497:5, 497:7, 497:14, 498:18, 500:22, 500:25 Council [2] - 361:2, 429:6 Counsel [1] - 330:10 counsel [1] - 368:8 counting [3] - 472:20, 474:9, 480:9 couple [8] - 364:24, 372:24, 383:23, 416:9, 420:6, 421:9,	462:8, 499:14 course [9] - 348:22, 368:3, 386:16, 386:23, 397:13, 421:12, 458:20, 463:4, 465:25 court [1] - 502:12 Court [3] - 330:18, 503:14, 503:18 cover [1] - 494:1 covered [2] - 392:12, 479:11 created [1] - 492:15 creating [1] - 369:17 credibility [1] - 382:13 criteria [1] - 442:6 criterion [1] - 474:25 critical [5] - 339:13, 360:8, 362:1, 362:17, 406:4 CROSS [1] - 382:8 cross [4] - 349:22, 369:4, 381:19, 393:14 Cross [2] - 369:6, 381:25 crystal [1] - 358:5 CSR [1] - 503:17 CSR(A) [3] - 330:18, 330:18, 503:13 cuff [1] - 349:8 cumulative [1] - 385:6 Cunha [3] - 428:23, 430:5, 432:1 CUNHA [39] - 332:3, 335:16, 336:16, 337:6, 337:23, 338:12, 338:21, 339:6, 339:24, 340:19, 341:9, 341:14, 342:1, 342:6, 342:9, 342:18, 342:24, 343:8, 349:9, 351:4, 352:3, 353:7, 353:10, 354:12, 354:24, 355:24, 357:1, 357:10, 360:4, 365:9, 366:6, 366:13, 411:14, 429:2, 430:9, 430:17, 431:10, 431:24, 504:5 CURRENT [2] - 342:11, 505:18 current [26] - 332:10, 333:6, 333:15, 338:8, 340:9, 341:23, 343:16, 345:10, 350:15, 350:16, 356:21, 358:25,	412:3, 412:8, 452:15, 466:15, 473:22, 474:14, 482:19, 482:20, 482:22, 483:1, 483:4, 484:15, 485:7 CVs [1] - 432:19 CWIP [1] - 334:13 cycle [2] - 345:15, 389:11 D dam [1] - 405:13 Dam [7] - 378:24, 379:21, 389:13, 400:22, 403:2, 425:13 data [10] - 451:6, 455:8, 459:3, 466:23, 467:7, 469:13, 469:14, 470:25, 476:8, 488:13 date [14] - 337:4, 337:7, 339:3, 348:20, 348:24, 349:11, 365:7, 367:8, 406:16, 406:21, 408:18, 441:8, 460:22, 501:18 dated [1] - 412:23 Dated [1] - 503:8 dates [1] - 499:20 DATES [1] - 499:25 daunting [1] - 424:1 Dawson [4] - 498:13, 498:20, 499:18, 500:17 DAWSON [1] - 500:2 days [3] - 331:8, 501:10, 502:1 deadline [2] - 338:19, 501:15 deal [14] - 397:12, 435:21, 438:1, 440:8, 452:21, 452:22, 453:3, 459:17, 460:9, 460:12, 476:24, 480:21, 481:11, 481:16 dealing [10] - 359:14, 361:21, 374:11, 403:25, 435:12, 437:5, 438:17, 480:11, 481:4 deals [2] - 448:13, 452:25 dealt [1] - 496:18 DEBENTURE [1] - 415:20 debenture [12] - 411:2, 411:5, 411:9,	411:22, 411:24, 412:2, 412:25, 413:11, 414:9, 415:1, 415:6, 415:14 debentures [4] - 412:14, 412:16, 413:4, 414:7 debt [15] - 411:21, 412:2, 412:8, 412:18, 413:2, 413:3, 413:15, 413:18, 414:2, 414:12, 414:13, 414:16, 415:1, 415:4 December [6] - 352:1, 354:13, 404:1, 419:17, 419:19, 419:22 decided [1] - 372:15 decision [22] - 333:23, 334:4, 348:7, 348:23, 360:14, 366:15, 366:20, 373:1, 375:20, 388:8, 392:23, 393:22, 406:8, 408:16, 408:19, 408:22, 410:13, 410:22, 431:18, 449:9, 474:24, 475:6 decision-maker [1] - 375:20 decision-making [2] - 392:23, 393:22 decisions [3] - 362:13, 394:18, 446:4 deck [1] - 360:6 declining [1] - 470:8 decommission [1] - 498:18 decreased [1] - 422:5 deemed [2] - 387:2, 387:6 default [1] - 491:2 defence [1] - 395:6 deferral [1] - 491:19 defined [1] - 397:18 definitely [2] - 480:10, 494:23 definition [4] - 482:2, 482:4, 487:25, 488:4 definitive [2] - 373:10, 377:10 degree [3] - 461:15, 490:7, 493:21 deliver [2] - 359:23, 363:15 delivered [1] - 425:11 delivering [1] - 360:1	delivery [1] - 366:2 demand [1] - 419:2 demanding [1] - 424:13 demands [1] - 358:23 denied [1] - 401:17 department [1] - 492:15 departments [1] - 359:10 dependable [2] - 349:14 dependent [5] - 335:20, 336:2, 339:1, 454:15, 465:9 depreciate [1] - 447:19 depreciated [2] - 438:8, 442:3 Depreciation [1] - 447:15 depreciation [49] - 435:22, 439:20, 441:11, 441:13, 441:21, 441:23, 444:2, 444:14, 444:15, 444:18, 444:22, 445:1, 445:4, 445:10, 445:15, 445:20, 445:24, 447:2, 447:17, 447:25, 448:10, 450:20, 450:23, 451:13, 453:13, 455:2, 455:3, 455:6, 456:18, 465:3, 467:1, 467:2, 467:12, 467:18, 467:25, 468:1, 468:7, 468:17, 469:6, 469:15, 469:22, 470:10, 470:15, 481:13, 496:10, 496:11 deprioritize [1] - 359:7 describe [8] - 370:5, 370:12, 373:7, 379:11, 391:15, 396:22, 455:10, 464:18 described [11] - 357:7, 357:9, 369:20, 369:24, 369:25, 370:2, 397:21, 402:13, 402:14, 403:15, 469:5 describes [1] - 374:8 describing [2] - 379:23, 405:5
--	---	---	--	--

description [3] - 377:9, 383:11, 391:15 descriptions [1] - 397:6 design [15] - 339:14, 339:16, 339:17, 339:18, 359:13, 362:25, 363:12, 373:3, 373:5, 403:12, 403:14, 403:20, 404:13, 405:7 designation [1] - 374:22 designed [1] - 458:21 detail [5] - 339:16, 339:17, 375:12, 474:20, 483:13 detailed [5] - 339:14, 370:21, 423:13, 452:5, 495:23 details [9] - 341:15, 342:7, 343:1, 360:2, 361:18, 369:23, 392:9, 422:1, 424:15 determination [2] - 402:2, 475:1 determinative [1] - 468:9 determine [5] - 337:20, 450:21, 450:25, 466:13, 474:21 determined [8] - 334:5, 347:19, 347:20, 351:20, 434:21, 440:18, 482:11, 482:21 determines [1] - 347:24 determining [2] - 383:12, 466:9 develop [3] - 451:8, 467:9, 488:13 developed [3] - 372:16, 450:18, 467:3 DEVELOPMENT [2] - 340:4, 505:10 Development [2] - 336:19, 337:25 development [7] - 336:25, 375:14, 394:16, 431:12, 441:12, 441:22, 466:23 dialled [1] - 455:9 dictate [2] - 371:14, 375:2 diesel [9] - 360:13, 362:13, 363:10,	418:19, 419:17, 443:14, 498:11, 498:23, 500:7 diesels [5] - 418:4, 419:4, 419:21, 500:14, 500:17 difference [8] - 446:1, 455:25, 462:23, 464:19, 464:22, 466:8, 496:8, 496:9 differences [3] - 369:23, 461:22, 479:19 DIFFERENT [1] - 376:10 different [45] - 371:19, 374:10, 375:4, 376:3, 377:7, 384:17, 394:15, 394:19, 396:22, 397:6, 397:18, 402:4, 410:19, 415:2, 418:7, 421:21, 422:7, 435:15, 437:1, 444:7, 448:19, 448:23, 450:11, 450:12, 450:22, 459:19, 463:7, 463:14, 468:11, 469:4, 472:17, 473:3, 474:3, 474:8, 481:9, 485:24, 488:11, 488:19, 492:18, 494:11, 494:16, 494:17, 494:18, 497:23 differently [3] - 395:10, 403:25, 421:16 difficult [1] - 344:7 difficulty [1] - 445:9 dig [1] - 423:13 diligence [3] - 422:12, 422:21, 423:10 direct [4] - 347:2, 349:18, 474:18, 501:5 directed [2] - 444:17, 453:21 direction [5] - 346:21, 347:16, 347:22, 349:2, 455:4 directionally [2] - 469:20, 470:12 directions [1] - 492:13 Directive [3] - 332:22, 333:8, 333:21 directors [1] - 346:22	disadvantage [1] - 492:1 disappear [1] - 459:15 disappeared [1] - 438:13 disclose [1] - 356:4 disconnection [1] - 453:12 discontinue [1] - 453:22 discount [6] - 474:3, 483:20, 484:1, 484:3, 484:10, 484:19 discounted [4] - 484:6, 484:15, 485:11, 486:16 discretion [2] - 335:24, 492:23 discuss [2] - 334:19, 429:17 discussed [1] - 400:13 discusses [1] - 364:12 discussing [6] - 389:10, 394:22, 409:20, 413:7, 433:7, 444:2 discussion [14] - 369:3, 369:4, 369:16, 377:7, 381:20, 389:17, 395:17, 396:5, 396:11, 411:1, 411:4, 416:16, 420:6, 487:15 discussions [5] - 336:25, 337:4, 424:8, 429:21, 430:15 dismantling [1] - 442:15 displace [1] - 418:24 disposal [1] - 441:25 distinction [1] - 461:12 distribute [2] - 332:20, 368:9 distributed [1] - 349:22 distribution [1] - 476:16 divided [4] - 456:9, 466:12, 466:15, 470:1 DOCUMENT [2] - 376:7, 385:22 document [14] - 352:6, 353:13, 366:16, 366:20, 371:9, 374:8, 374:12, 375:9, 375:25,	385:16, 393:21, 394:1, 394:3, 431:18 documentation [2] - 418:6, 447:2 documents [1] - 351:13 dollar [8] - 384:6, 450:9, 460:22, 462:17, 463:11, 468:19, 481:1, 495:20 dollars [24] - 344:18, 347:11, 439:9, 440:2, 440:23, 448:24, 462:20, 469:7, 469:11, 472:22, 472:23, 473:25, 482:20, 482:22, 482:25, 483:1, 483:2, 483:5, 484:25, 488:15, 496:3, 496:5, 496:6, 499:7 done [27] - 347:12, 352:1, 354:13, 355:25, 361:12, 365:6, 379:8, 379:24, 390:23, 401:3, 420:17, 420:20, 425:18, 425:21, 441:9, 445:12, 446:7, 446:17, 453:12, 460:11, 480:22, 484:7, 485:16, 486:2, 493:17, 494:10 double [3] - 472:20, 474:9, 480:9 down [24] - 367:3, 373:8, 373:17, 375:17, 386:2, 389:2, 389:7, 439:10, 443:14, 448:6, 448:7, 452:19, 463:17, 477:12, 477:20, 477:21, 492:16, 492:18, 492:22, 494:10, 494:19, 495:9, 495:25, 503:5 DOWN [1] - 501:12 downtown [3] - 498:13, 498:20, 499:17 DOWNTOWN [1] - 500:1 draft [3] - 340:20, 340:22, 452:12 draw [3] - 423:5, 423:6 drawdown [4] - 386:6, 387:24, 388:7, 388:10 drawing [1] - 386:2	drawn [2] - 389:1, 389:7 drew [1] - 423:5 drive [1] - 475:12 driven [2] - 421:3, 426:13 drivers [1] - 362:1 drives [3] - 358:25, 422:9 driving [1] - 406:1 due [6] - 353:24, 422:11, 423:10, 434:5, 501:17, 501:18 dug [1] - 463:10 durable [1] - 468:13 DURING [1] - 408:2 during [10] - 352:9, 407:19, 412:12, 431:2, 442:20, 442:22, 445:21, 449:15, 449:18, 494:18 dwarf [2] - 477:5, 477:6 Dwayne [1] - 330:11 dynamics [1] - 426:13 Dün [3] - 361:1, 366:22, 429:6
E				
EACH [1] - 382:7 early [9] - 362:15, 407:14, 426:23, 429:5, 430:19, 430:24, 434:6, 479:1 earnings [1] - 412:22 ease [1] - 368:17 easier [2] - 395:10, 490:23 easy [2] - 425:8, 466:23 Economic [1] - 432:7 effect [4] - 336:1, 495:2, 495:11, 496:24 effective [1] - 469:18 effectively [5] - 448:21, 469:4, 473:2, 474:6, 490:11 effectiveness [1] - 367:2 efficiencies [3] - 360:23, 366:1, 367:3 efficiently [1] - 502:6 effort [1] - 495:24 EIGHT [1] - 382:6 eight [14] - 368:14, 377:14, 377:16, 378:1, 378:19, 379:6,				

380:22, 381:11, 381:15, 381:23, 393:8, 393:12, 393:13, 399:22 Eight [1] - 368:17 either [13] - 347:9, 350:10, 352:15, 377:15, 381:7, 442:18, 461:21, 463:18, 471:5, 479:23, 489:8, 489:14, 498:9 elaborate [5] - 345:24, 403:19, 430:14, 431:6, 494:7 elected [1] - 496:19 Electric [4] - 341:2, 341:3, 445:1, 464:20 electricity [4] - 336:23, 337:1, 340:21, 349:17 element [1] - 426:12 eliminate [1] - 405:12 Emerald [2] - 369:6, 369:20 emergencies [1] - 422:19 emphasize [1] - 346:16 employee [2] - 399:2, 400:2 employees [7] - 374:10, 374:14, 377:21, 492:8, 492:13, 492:23, 494:24 encompassed [1] - 487:18 encountered [2] - 393:24, 397:13 end [38] - 347:6, 351:20, 351:21, 353:1, 354:10, 357:6, 357:20, 358:13, 364:22, 366:2, 372:12, 381:5, 387:4, 406:12, 406:22, 410:13, 417:2, 418:20, 439:6, 439:8, 440:17, 446:7, 446:17, 447:21, 448:2, 448:3, 448:20, 458:9, 472:14, 472:18, 476:4, 477:1, 483:25, 486:12, 496:24, 499:18, 499:20 END [3] - 357:16, 499:25, 500:3	END-OF-LIFE [1] - 499:25 end-of-life [8] - 439:8, 440:17, 447:21, 448:20, 476:4, 483:25, 499:18, 499:20 ended [1] - 497:13 ending [1] - 472:19 ends [1] - 333:9 Energy [75] - 330:16, 332:3, 333:13, 335:8, 335:14, 336:19, 336:24, 338:7, 340:25, 341:1, 342:2, 342:4, 343:23, 344:4, 347:8, 347:12, 349:12, 364:2, 364:9, 364:24, 382:13, 383:19, 399:6, 399:9, 402:3, 402:10, 403:10, 412:12, 412:15, 412:18, 422:11, 430:7, 431:21, 432:22, 439:1, 440:18, 443:9, 449:2, 450:21, 452:15, 452:16, 453:22, 454:3, 454:21, 457:25, 458:11, 459:16, 463:4, 463:15, 464:23, 467:1, 467:12, 468:16, 469:21, 470:7, 471:1, 471:20, 473:11, 476:1, 476:14, 479:13, 480:22, 481:21, 481:22, 487:24, 488:19, 491:11, 491:19, 492:12, 493:22, 496:13, 500:6, 504:6, 504:11 energy [15] - 332:19, 344:25, 349:14, 349:17, 364:3, 364:9, 379:15, 398:11, 400:13, 417:20, 425:6, 429:8, 452:24, 482:3, 482:4 Energy's [13] - 333:3, 343:18, 408:15, 412:22, 412:24, 428:24, 431:3, 431:7, 451:20, 473:16, 474:11, 490:13, 496:17 engage [1] - 404:23 engaged [2] - 405:6,	429:9 engagement [8] - 359:15, 359:16, 361:1, 428:24, 429:5, 429:19, 429:20, 429:25 engine [1] - 499:7 engineer [13] - 361:22, 396:15, 396:24, 397:3, 397:14, 398:1, 398:4, 398:5, 398:9, 398:18, 404:20, 404:22 engineered [1] - 362:20 engineering [8] - 359:12, 362:20, 370:18, 370:21, 398:15, 399:8, 399:16, 404:1 Engineering [2] - 371:5, 371:17 engineers [1] - 398:10 engines [9] - 362:9, 362:10, 498:12, 498:24, 499:1, 499:4, 499:17, 499:20, 500:7 ENGINES [1] - 500:1 enter [1] - 336:25 entered [1] - 349:23 entire [4] - 356:20, 420:16, 447:25, 502:7 entirely [2] - 344:13, 452:15 entities [1] - 428:25 entitled [1] - 369:6 entity [1] - 442:18 entries [1] - 491:4 entry [2] - 354:15, 441:7 ENTRY [1] - 355:3 environment [3] - 420:16, 450:13, 450:14 environmental [1] - 404:6 EPA [10] - 333:12, 334:5, 335:13, 341:5, 341:24, 342:13, 345:1, 345:9, 346:18, 505:19 EPA's [1] - 335:2 EPC [3] - 397:8, 397:9, 397:11 EPC's [1] - 397:15 EPP [94] - 332:3, 336:11, 337:10, 346:3, 347:8, 347:25, 348:16, 348:18,	348:22, 350:19, 352:17, 364:23, 368:22, 382:9, 383:7, 395:8, 395:13, 396:12, 413:14, 413:25, 414:12, 414:20, 415:2, 415:9, 415:16, 419:8, 419:16, 419:23, 426:17, 433:23, 434:20, 435:6, 437:10, 441:8, 441:14, 441:25, 443:3, 444:10, 444:15, 446:3, 446:25, 454:9, 456:22, 457:3, 457:7, 457:12, 457:19, 464:3, 465:1, 471:11, 474:12, 475:20, 476:13, 477:7, 477:18, 478:22, 482:13, 482:24, 483:7, 483:10, 483:12, 483:17, 483:23, 484:3, 484:8, 484:17, 485:9, 485:13, 485:23, 486:8, 486:10, 486:17, 486:21, 487:2, 487:5, 487:8, 487:13, 487:20, 492:12, 493:1, 493:15, 494:5, 494:8, 494:13, 494:15, 495:5, 495:15, 498:15, 499:10, 499:12, 499:22, 500:9, 501:11, 504:5 Epp [31] - 336:15, 337:6, 383:1, 413:23, 418:10, 420:8, 428:16, 432:4, 432:5, 433:5, 436:6, 441:4, 455:11, 456:20, 461:21, 463:19, 470:17, 472:14, 473:9, 474:9, 477:10, 483:9, 483:15, 485:20, 486:25, 489:9, 492:7, 493:24, 495:25, 498:10, 501:10 equality [1] - 421:5 equipment [12] - 361:22, 363:13, 367:13, 374:3, 436:8, 436:12, 444:19, 444:23, 445:15, 466:16, 470:2, 479:21 equity [1] - 412:17	era [1] - 420:13 escalating [1] - 422:23 especially [1] - 376:1 ESPECIALLY [1] - 376:8 essentially [5] - 372:20, 373:3, 379:19, 379:22, 406:2 ESSENTIALLY [1] - 357:16 establish [3] - 387:14, 453:4, 453:8 established [2] - 360:20, 365:23 establishes [1] - 383:20 establishing [1] - 439:20 estimate [57] - 332:6, 332:8, 332:10, 356:1, 356:9, 356:11, 356:13, 370:2, 370:12, 371:6, 372:17, 372:21, 372:25, 373:1, 373:8, 375:5, 375:18, 375:20, 377:10, 377:11, 377:12, 377:17, 377:18, 378:3, 378:4, 379:23, 380:12, 380:23, 380:25, 381:17, 381:18, 382:1, 382:2, 384:20, 389:14, 389:19, 389:22, 390:2, 390:18, 391:1, 391:19, 392:2, 409:7, 417:16, 420:25, 425:17, 425:20, 442:14, 445:11, 454:25, 459:1, 460:22, 499:5, 499:6, 500:10 estimated [9] - 384:14, 451:1, 469:25, 482:18, 482:21, 483:4, 484:9, 485:5, 498:18 estimates [39] - 369:5, 369:18, 369:24, 371:1, 371:2, 371:3, 371:11, 371:22, 371:23, 372:2, 372:4, 372:21, 373:10, 373:17, 373:19, 373:24, 374:12, 376:1, 377:7, 378:12, 378:24, 379:1, 379:5, 379:7,
--	--	---	---	---

380:3, 380:8, 380:9, 383:3, 389:10, 394:15, 404:14, 408:9, 410:21, 451:3, 451:8, 458:13, 458:15, 468:13, 474:3 ESTIMATES [1] - 376:7 Estimates [1] - 369:7 estimating [8] - 372:6, 394:13, 424:19, 469:23, 475:14, 478:19, 479:2, 490:15 estimator [1] - 404:21 evaluate [2] - 392:12, 398:17 evaluated [1] - 398:15 evaluates [1] - 394:16 evaluation [2] - 366:16, 397:25 event [21] - 386:16, 386:19, 386:20, 386:24, 387:1, 387:3, 387:6, 392:11, 404:5, 406:23, 410:18, 440:10, 440:18, 469:22, 474:7, 475:11, 478:16, 479:3, 479:16, 480:8 events [2] - 475:5, 479:6 evidence [3] - 431:3, 463:19, 470:19 evident [1] - 491:4 exact [3] - 349:13, 390:14, 422:13 exactly [6] - 366:6, 382:10, 401:6, 429:25, 460:4, 464:18 EXAMINES [2] - 428:21, 504:9 EXAMPLE [1] - 385:21 example [50] - 360:11, 362:2, 363:8, 371:22, 372:5, 373:12, 374:2, 375:22, 385:12, 385:16, 385:18, 387:8, 389:12, 389:24, 389:25, 390:21, 390:22, 390:24, 392:7, 392:14, 393:10, 397:21, 398:9, 425:13, 426:19, 429:19, 434:4, 434:20, 435:11, 435:25, 436:6, 437:6, 437:7, 437:15, 440:18, 441:6, 441:16, 444:25, 447:23, 448:5, 450:17, 459:2, 464:4, 470:22, 476:19, 480:10, 486:5, 488:8, 494:11, 494:15 examples [1] - 497:6 exception [2] - 428:16, 479:6 exceptionally [1] - 462:24 excerpt [3] - 334:10, 442:13, 471:16 excluded [1] - 356:10 excuse [4] - 350:18, 411:21, 428:15, 474:22 execute [2] - 366:1, 388:8 executed [4] - 379:17, 380:18, 388:7, 391:21 executing [3] - 378:22, 380:19, 392:16 execution [1] - 430:24 Executive [1] - 330:14 executive [8] - 364:1, 364:13, 365:11, 365:17, 366:4, 431:4, 431:8, 431:16 exhibit [4] - 331:16, 349:23, 353:17, 407:6 Exhibit [28] - 331:18, 332:24, 335:6, 340:8, 343:13, 351:8, 353:12, 355:15, 355:25, 363:21, 381:6, 383:8, 392:21, 396:16, 396:17, 407:2, 407:5, 411:12, 442:5, 443:21, 446:19, 455:11, 455:21, 470:24, 471:15, 478:12, 489:3, 489:4 EXHIBIT [6] - 331:22, 376:20, 376:21, 504:18, 504:20, 504:22 exhibits [1] - 376:15	EXHIBITS [1] - 504:16 Exhibits [1] - 376:18 exist [1] - 391:25 existed [6] - 395:24, 407:8, 407:11, 407:12, 407:14, 408:15 existence [1] - 447:3 existing [3] - 404:14, 410:16, 457:1 exists [4] - 346:9, 407:17, 436:25, 477:25 EXISTS [1] - 407:24 expand [3] - 356:23, 357:4, 436:1 EXPAND [1] - 357:13 expanding [1] - 476:15 Expansion [10] - 350:20, 350:23, 351:3, 351:11, 351:18, 352:8, 352:12, 352:19, 352:25, 354:6 expect [6] - 365:2, 377:16, 430:15, 439:11, 439:16, 493:21 expectation [1] - 362:7 expectations [1] - 431:7 expected [9] - 381:5, 384:3, 388:13, 402:19, 434:23, 458:1, 460:6, 467:23, 468:24 expecting [3] - 431:22, 458:25, 489:8 expedite [1] - 430:25 expedited [1] - 404:8 expenditure [4] - 334:19, 340:16, 354:3 EXPENDITURES [2] - 355:4, 355:8 expenditures [20] - 334:15, 337:19, 338:11, 342:17, 346:23, 347:3, 347:6, 348:24, 350:3, 353:4, 354:17, 354:20, 355:22, 356:14, 356:22, 393:6, 395:7, 408:17, 408:20, 408:23 expense [14] - 346:24, 347:4, 347:10, 402:9, 412:21, 444:2, 451:22, 456:18, 460:10, 465:11, 493:11, 496:11, 497:14, 497:17 expensed [7] - 348:25, 463:21, 463:24, 464:2, 470:21, 491:17, 493:16 expenses [2] - 347:5, 349:5 expensing [4] - 333:25, 348:3, 489:14, 495:11 expensive [1] - 374:3 experience [11] - 365:16, 398:11, 398:12, 405:4, 425:25, 431:3, 431:7, 431:11, 451:6, 465:10, 480:10 experienced [2] - 404:11, 461:23 experiences [1] - 439:3 expert [3] - 428:12, 450:23, 468:1 expertise [5] - 375:4, 399:17, 423:1, 423:3, 499:12 explain [16] - 337:8, 340:12, 341:10, 341:22, 342:20, 375:11, 393:22, 401:12, 437:19, 444:7, 447:18, 466:8, 472:15, 482:17, 484:6, 492:7 EXPLAIN [4] - 337:13, 341:17, 505:4, 505:13 explained [5] - 364:16, 449:11, 449:20, 493:25, 494:9 explains [1] - 482:8 explanation [4] - 346:25, 353:20, 394:6, 445:25 explore [2] - 340:9, 405:20 extended [3] - 335:3, 348:13, 348:19 extending [2] - 338:21, 430:11 extension [4] - 335:13, 335:21, 336:3, 343:5 extensions [2] -	338:16, 338:18 extent [5] - 457:10, 457:16, 459:24, 491:12, 496:7 external [11] - 399:1, 399:10, 400:9, 400:17, 400:23, 401:1, 401:5, 401:10, 401:12, 401:25, 402:8 extra [5] - 400:19, 422:11, 422:17, 422:18, 495:24 extract [2] - 334:14, 357:24 eye [1] - 490:3
F		
facilities [3] - 351:19, 351:21, 364:7 facility [3] - 425:19, 460:17, 463:4 facing [3] - 359:3, 403:10, 405:23 fact [14] - 351:15, 351:23, 352:11, 358:8, 394:22, 418:21, 423:7, 446:16, 453:1, 474:1, 480:7, 490:16, 491:11, 497:19 factors [5] - 384:23, 418:7, 418:22, 419:20, 469:10 fail [1] - 404:3 failed [1] - 372:12 failure [3] - 372:9, 404:5, 425:1 fair [2] - 345:14, 390:12 falls [2] - 390:4, 391:3 familiar [2] - 436:6, 480:4 far [7] - 339:3, 395:18, 439:25, 459:7, 461:13, 463:7, 493:20 Faro [2] - 476:20, 477:8 fashion [1] - 495:23 faster [1] - 422:6 fatigue [1] - 429:23 feasibility [1] - 370:16 federal [5] - 336:20, 338:4, 339:11, 345:16, 346:4 feedback [1] - 365:13		

felt ^[1] - 488:2 few ^[6] - 350:22, 416:3, 428:14, 467:7, 489:25, 499:6 figure ^[3] - 459:17, 473:22, 488:13 figures ^[1] - 462:7 file ^[1] - 501:16 filed ^[5] - 331:13, 351:13, 411:19, 432:19, 455:17 files ^[1] - 394:23 filing ^[8] - 333:4, 333:11, 333:22, 334:4, 335:1, 343:19, 351:7, 445:17 filings ^[2] - 350:7, 449:12 final ^[16] - 331:6, 350:10, 350:15, 350:18, 388:20, 388:21, 390:3, 391:2, 395:2, 395:7, 401:24, 402:2, 409:2, 411:10, 471:17, 501:16 finalization ^[2] - 335:21, 336:3 finalize ^[1] - 338:8 finalized ^[3] - 338:9, 350:12, 395:25 finally ^[1] - 363:2 financial ^[9] - 345:6, 384:20, 446:11, 446:15, 472:7, 472:21, 473:18, 474:14, 481:18 finish ^[1] - 446:9 firm ^[1] - 359:6 First ^[9] - 361:2, 365:24, 412:14, 413:3, 413:21, 429:5, 429:6, 430:7, 430:19 first ^[20] - 331:13, 334:22, 343:14, 347:25, 353:1, 358:13, 360:11, 376:14, 403:5, 403:7, 406:24, 411:23, 416:10, 433:4, 444:10, 479:2, 491:6, 498:16, 502:2 five ^[5] - 359:6, 384:17, 384:23, 447:23, 499:5 five-year ^[1] - 499:5 fix ^[2] - 434:12, 493:2 flat ^[2] - 358:4, 358:7 flood ^[1] - 404:4 flow ^[5] - 374:9, 459:14, 462:13,	462:14, 465:25 flowing ^[1] - 463:11 fluctuations ^[1] - 425:15 fly ^[1] - 462:19 focus ^[7] - 334:8, 334:18, 424:8, 467:14, 467:15, 469:16, 479:8 focused ^[1] - 448:18 focusing ^[3] - 350:3, 435:25, 437:15 follow ^[4] - 387:9, 387:10, 418:6, 483:2 follow-up ^[1] - 418:6 following ^[5] - 332:18, 352:20, 411:4, 418:3, 492:6 follows ^[4] - 384:4, 412:4, 475:24, 482:7 followup ^[5] - 345:22, 356:19, 381:9, 386:1, 417:18 FOR ^[10] - 337:14, 342:12, 355:3, 355:6, 355:9, 376:7, 385:22, 410:1, 505:4, 505:19 forecast ^[33] - 334:16, 334:18, 335:20, 336:2, 336:5, 336:6, 336:10, 336:24, 337:11, 338:11, 350:17, 352:12, 356:10, 356:22, 383:2, 383:13, 388:17, 389:24, 390:5, 390:6, 390:9, 390:21, 391:4, 391:5, 391:9, 391:10, 393:5, 409:2, 411:21, 412:8, 420:11, 462:14, 500:6 FORECAST ^[2] - 337:16, 505:6 forecasted ^[3] - 338:3, 356:13, 382:22 forecasting ^[2] - 337:19, 382:13 FORECASTS ^[1] - 355:7 forecasts ^[10] - 337:18, 337:21, 338:12, 350:4, 352:7, 352:9, 354:19, 384:1, 420:21, 494:4 foregoing ^[1] - 503:3 foresee ^[6] - 336:9, 337:21, 338:10, 400:21, 434:3, 443:18 form ^[1] - 345:10	former ^[1] - 350:12 formerly ^[1] - 351:2 forth ^[2] - 375:17, 393:3 forward ^[21] - 356:18, 359:2, 360:1, 361:12, 361:13, 361:14, 372:16, 383:5, 394:5, 400:21, 423:21, 424:3, 429:12, 430:1, 430:6, 455:1, 468:10, 468:14, 471:25, 490:23, 497:25 foundation ^[1] - 374:20 foundational ^[1] - 374:23 framework ^[5] - 393:2, 467:13, 467:17, 481:11, 481:12 free ^[1] - 387:11 freezing ^[1] - 453:15 frequently ^[1] - 426:19 freshet ^[2] - 406:15, 406:22 FROM ^[2] - 340:2, 505:9 front ^[1] - 426:6 froze ^[1] - 454:18 FRSR ^[45] - 446:23, 449:21, 449:22, 452:17, 455:24, 456:17, 457:1, 457:5, 457:9, 457:15, 457:25, 458:7, 459:14, 459:24, 467:11, 471:3, 471:6, 471:25, 472:3, 472:6, 472:15, 472:21, 473:4, 478:11, 480:13, 480:15, 481:2, 481:4, 481:8, 481:11, 481:18, 493:13, 493:17, 493:20, 495:4, 495:25, 496:2, 496:5, 496:8, 496:14, 496:25, 497:13, 497:21, 497:22 FRSR-type ^[1] - 481:11 fruition ^[1] - 431:1 FSR ^[1] - 493:12 FTEs ^[1] - 359:19 fuel ^[4] - 360:12, 360:13, 361:13, 493:5 full ^[7] - 331:8,	400:23, 428:11, 467:12, 469:6, 470:10, 470:15 fully ^[6] - 364:19, 364:22, 377:24, 379:17, 381:11, 440:20 fun ^[1] - 501:11 function ^[5] - 396:15, 398:25, 436:15, 437:23, 438:13 functionality ^[1] - 437:1 fund ^[3] - 438:23, 440:3, 460:2 fundamentally ^[1] - 422:15 funded ^[2] - 439:21, 440:11 funding ^[10] - 336:20, 336:22, 337:2, 338:4, 338:24, 339:4, 339:11, 339:12, 339:13, 339:21 funds ^[3] - 457:11, 457:17, 459:25 future ^[32] - 395:16, 426:22, 434:4, 440:24, 446:23, 450:20, 453:22, 454:13, 455:23, 459:25, 460:19, 464:16, 467:11, 467:22, 468:4, 473:6, 473:12, 473:21, 473:23, 474:2, 474:6, 474:7, 476:2, 484:9, 485:17, 486:14, 486:19, 487:23, 488:3, 488:20, 500:17, 500:20 FX-001 ^[1] - 442:6	481:24, 483:14 generally ^[10] - 370:1, 370:6, 370:10, 371:8, 373:15, 375:6, 395:19, 437:17, 438:19, 439:10 generating ^[3] - 363:20, 363:24, 463:17 generation ^[6] - 364:6, 450:15, 463:16, 476:15, 498:25 generator ^[1] - 339:18 geotechnical ^[3] - 392:8, 392:10, 392:11 Giuseppa ^[1] - 330:10 GIVEN ^[1] - 505:2 given ^[15] - 331:16, 349:16, 364:16, 371:18, 425:17, 425:18, 431:14, 438:18, 468:7, 479:15, 485:6, 492:13, 493:21, 493:24, 496:10 global ^[1] - 422:4 globally ^[1] - 423:17 go-ahead ^[1] - 378:6 GOAL ^[1] - 355:11 goal ^[1] - 354:21 government ^[16] - 336:20, 338:5, 339:12, 344:19, 345:5, 345:6, 345:15, 345:16, 360:22, 365:1, 366:19, 429:15, 430:2, 430:8, 430:11, 431:18 governments ^[2] - 346:4, 365:24 GRA ^[26] - 333:1, 333:4, 333:6, 335:1, 343:17, 343:19, 350:7, 351:24, 353:24, 369:9, 372:1, 394:23, 395:6, 395:10, 403:16, 411:19, 411:23, 411:24, 412:3, 412:8, 412:11, 415:6, 421:11, 434:9, 456:24, 496:17 great ^[2] - 337:8, 417:17 greater ^[2] - 363:24, 394:8 grid ^[3] - 417:5,
--	---	--	---	--

417:20, 418:1 gross [4] - 347:6, 466:15, 468:23, 470:2 ground [1] - 465:15 group [16] - 360:21, 365:23, 366:9, 366:14, 367:2, 395:18, 428:25, 429:1, 429:7, 430:3, 430:4, 430:6, 441:11, 441:21, 450:24 Group [2] - 369:6, 369:20 groups [1] - 430:10 growing [2] - 358:10, 476:14 grown [1] - 399:9 guarantees [1] - 460:13 guess [17] - 346:16, 348:14, 363:2, 375:23, 375:24, 380:24, 391:7, 401:24, 424:16, 434:8, 437:19, 446:12, 455:9, 459:19, 461:18, 477:16, 484:6 guidance [3] - 343:17, 371:4, 415:3 Guide [1] - 369:7 guided [1] - 374:18 guideline [1] - 375:3 guidelines [2] - 365:14, 374:19 guiding [1] - 375:9	headers [1] - 444:5 heading [8] - 333:1, 334:21, 334:23, 343:10, 353:17, 392:25, 442:10 headings [1] - 455:17 headquarters [1] - 477:12 hear [3] - 420:8, 453:15, 497:6 heard [3] - 421:3, 454:19, 492:20 Hearing [1] - 330:13 hearing [17] - 331:3, 331:7, 339:7, 358:6, 365:4, 376:15, 376:24, 377:2, 410:25, 412:12, 416:11, 427:6, 428:6, 454:6, 501:25, 502:16, 502:17 heavily [2] - 426:1, 465:9 heavy [1] - 358:12 help [6] - 379:12, 384:11, 404:24, 426:18, 435:2, 495:17 helpful [5] - 379:11, 385:15, 390:15, 396:12, 427:2 helping [2] - 491:7, 491:8 helps [2] - 430:25, 449:10 Henry [1] - 330:14 HERBERT [13] - 331:11, 331:20, 331:24, 428:9, 428:13, 428:21, 428:22, 432:1, 432:5, 432:19, 432:24, 501:7, 504:9 Herbert [4] - 330:16, 428:8, 432:15, 501:5 hereby [1] - 503:3 hi [1] - 498:8 high [15] - 334:9, 339:19, 340:19, 358:19, 359:24, 360:7, 360:8, 370:13, 372:20, 401:11, 417:9, 423:16, 425:10, 453:10, 453:11 higher [8] - 340:16, 353:4, 382:11, 389:24, 390:21, 393:9, 417:23, 421:25 highest [1] - 359:18	highlight [1] - 426:9 highlighted [1] - 426:7 highly [1] - 475:5 historical [13] - 459:3, 466:11, 466:12, 466:14, 467:5, 467:6, 467:21, 468:22, 468:25, 470:1, 476:8, 485:4, 486:25 historically [1] - 489:15 hit [1] - 452:20 hold [1] - 409:5 holds [1] - 409:3 home [1] - 493:8 Homeland [2] - 335:14, 336:19 homework [2] - 480:22, 480:24 hone [1] - 434:19 honoured [1] - 411:10 hope [5] - 334:8, 367:10, 388:10, 426:18, 440:12 hopefully [4] - 365:4, 460:11, 467:7, 487:21 hoping [1] - 369:5 hopper [1] - 421:14 Hotel [1] - 330:2 hour [3] - 416:4, 427:5, 427:7 hours [2] - 492:10, 492:24 house [1] - 423:4 housekeeping [2] - 331:10, 332:14 HOW [2] - 376:7, 376:8 huge [3] - 359:11, 359:12, 359:16 hundred [1] - 499:6 Hydro [8] - 332:19, 333:12, 334:4, 335:24, 362:11, 422:18, 449:3, 449:4 hydro [4] - 439:8, 439:10, 439:15, 475:7 HYDRO [2] - 337:14, 505:5 hypothetical [1] - 386:12	idea [9] - 367:8, 367:23, 396:2, 448:11, 469:7, 479:7, 480:9, 495:19, 496:10 ideas [1] - 477:3 identification [2] - 383:22, 384:5 identified [19] - 355:18, 366:25, 368:6, 368:14, 380:22, 383:25, 384:7, 384:17, 385:1, 386:10, 387:21, 387:25, 388:18, 388:25, 389:2, 396:9, 418:22, 421:19 identifies [1] - 384:5 identify [9] - 360:23, 384:12, 388:2, 388:3, 392:15, 430:21, 439:4, 469:24, 490:17 IDs [1] - 396:5 IFRS [2] - 471:18, 472:5 iiii [1] - 335:5 immaterial [1] - 462:12 immediately [3] - 334:20, 374:6, 392:24 impact [10] - 342:3, 384:7, 384:20, 412:19, 465:22, 478:9, 478:11, 484:25, 495:9, 495:13 impacted [4] - 372:13, 402:25, 412:25, 414:6 impacts [1] - 404:6 implement [1] - 497:24 implementation [2] - 340:22, 359:21 implication [1] - 491:23 implies [1] - 491:25 important [5] - 337:23, 424:20, 424:22, 429:4, 492:5 impractical [1] - 497:25 impression [1] - 353:2 improvement [1] - 396:13 IN [4] - 341:20, 355:2, 500:1, 505:15 in-house [1] - 423:4 in-service [5] - 406:16, 406:21, 418:12, 466:15, 470:1	Inc [1] - 461:16 incent [1] - 401:13 include [13] - 357:4, 357:5, 357:6, 394:24, 401:19, 411:22, 442:8, 442:11, 447:21, 465:4, 474:24, 484:24 INCLUDE [3] - 357:14, 357:15 included [14] - 347:9, 353:23, 356:12, 362:3, 407:3, 412:21, 413:17, 429:1, 434:15, 435:7, 442:25, 451:9, 468:6, 471:6 includes [7] - 332:8, 335:18, 335:25, 356:8, 356:22, 403:12, 466:5 INCLUDING [1] - 382:6 including [7] - 332:8, 352:7, 356:15, 356:18, 413:3, 428:23, 502:1 inclusive [1] - 332:11 income [3] - 446:16, 491:20, 497:17 INCORPORATES [1] - 355:10 incorporates [1] - 354:21 increase [4] - 404:19, 417:3, 417:15, 424:7 increased [8] - 399:20, 416:22, 416:24, 416:25, 422:5, 422:8, 452:2, 455:7 increases [2] - 404:15, 422:21 increasing [3] - 342:22, 342:23, 422:22 incredibly [1] - 423:7 incremental [1] - 417:7 incur [3] - 448:4, 468:19, 469:8 incurred [11] - 336:9, 340:20, 342:3, 349:11, 392:6, 435:18, 437:5, 437:8, 438:18, 448:20, 464:16 incurring [1] -
H				
habit [1] - 463:17 half [6] - 385:5, 431:17, 445:22, 480:25, 481:5, 481:6 Halls [1] - 330:12 Hamm [1] - 502:15 Hancock [1] - 330:9 hand [3] - 354:2, 354:4, 358:20 handle [2] - 459:13, 460:24 hands [1] - 360:6 happily [1] - 376:5 happy [4] - 343:1, 349:6, 385:19, 387:9 harm [2] - 491:15, 491:21 HAS [1] - 385:23 Hatch [3] - 399:11, 399:14, 399:17 Hayitbay [1] - 432:7				
I				
IAS [5] - 442:24, 473:8, 479:20, 479:22, 480:4				

lack [2] - 493:24, 494:5 land [22] - 373:22, 482:5, 485:15, 485:21, 486:2, 486:5, 486:6, 486:10, 486:11, 486:12, 486:14, 487:1, 487:4, 487:5, 487:6, 487:24, 488:3, 488:4, 488:16, 488:17 lands [1] - 429:12 landscape [2] - 423:12, 424:13 language [5] - 335:23, 346:1, 401:19, 402:7, 436:21 LARGE [1] - 376:8 large [17] - 370:9, 373:25, 375:1, 376:1, 400:18, 420:7, 421:10, 438:19, 439:2, 439:19, 439:25, 440:23, 459:8, 459:20, 460:6, 460:16, 460:18 largely [1] - 345:11 LARGER [1] - 385:23 larger [11] - 362:4, 362:5, 374:14, 381:11, 384:18, 384:19, 385:14, 385:17, 405:17, 460:2, 500:24 last [16] - 346:20, 364:8, 364:18, 365:19, 395:23, 406:25, 408:5, 410:3, 419:15, 419:24, 422:3, 444:17, 445:17, 454:21, 485:23, 496:20 lasted [1] - 496:15 latter [1] - 350:12 lead [6] - 360:16, 361:13, 361:25, 406:8, 408:13, 421:21 lead-in [1] - 408:13 leading [1] - 400:24 leads [1] - 399:13 lean [1] - 422:16 Leanne [4] - 330:18, 502:13, 503:12, 503:13 learned [2] - 395:15, 423:20 learning [1] - 425:3 learnings [1] - 431:13 lease [16] - 482:5,	485:15, 485:21, 485:23, 486:2, 486:6, 486:10, 486:12, 487:1, 487:3, 487:7, 487:8, 487:9, 487:14, 488:18 leased [2] - 487:24, 488:17 leasing [1] - 487:6 least [5] - 352:8, 383:5, 384:3, 419:25, 498:6 leave [1] - 462:16 leaving [1] - 353:2 led [1] - 400:15 left [3] - 437:25, 438:13, 502:1 legal [2] - 345:11, 502:11 lend [1] - 439:19 Lesley [1] - 330:7 less [5] - 347:7, 447:20, 448:2, 496:22, 500:23 lessons [2] - 395:15, 423:20 letter [7] - 403:5, 403:7, 406:12, 406:25, 408:4, 410:3, 410:4 level [35] - 334:9, 339:19, 340:16, 340:19, 358:19, 359:18, 359:24, 360:7, 370:14, 372:21, 382:11, 383:18, 401:11, 417:5, 417:6, 417:9, 421:25, 423:14, 423:17, 424:5, 424:8, 424:9, 425:10, 431:4, 446:21, 447:4, 450:3, 450:5, 452:1, 452:3, 453:20, 454:7, 454:15, 473:15, 501:2 levels [3] - 373:20, 402:5, 454:11 Lewes [1] - 332:7 liabilities [1] - 472:17 liability [12] - 453:24, 472:16, 472:21, 472:24, 473:2, 473:18, 473:24, 473:25, 475:13, 478:18, 481:7 licence [2] - 392:20, 393:4 lie [1] - 401:25 LIFE [2] - 499:25,	500:3 life [15] - 389:11, 439:8, 440:17, 447:21, 448:20, 449:15, 449:18, 451:1, 453:8, 465:20, 476:4, 483:25, 499:18, 499:20 lifecycle [1] - 394:20 lift [1] - 344:11 light [1] - 418:21 likelihood [5] - 333:24, 384:13, 384:15, 385:2, 385:4 likely [10] - 346:7, 463:21, 463:23, 470:20, 471:1, 471:4, 472:14, 475:12, 478:17, 479:1 limited [1] - 442:9 Limited [2] - 335:14, 461:17 line [34] - 339:15, 341:15, 352:19, 356:5, 356:6, 358:2, 384:2, 386:14, 386:17, 387:4, 387:7, 388:21, 389:6, 389:8, 397:7, 398:22, 408:14, 411:3, 411:22, 412:6, 412:7, 416:12, 418:10, 424:21, 424:23, 439:6, 446:20, 448:5, 476:20, 478:13, 493:3, 502:4 lined [1] - 455:19 lines [4] - 443:23, 444:1, 476:16 list [9] - 368:13, 379:10, 381:11, 381:12, 381:19, 393:13, 395:20, 442:9, 474:24 LIST [1] - 382:5 listed [5] - 368:21, 368:23, 381:24, 394:25, 443:11 listing [2] - 377:14, 378:1 literature [8] - 447:2, 447:8, 447:11, 447:12, 448:13, 450:1, 450:7, 450:19 load [1] - 417:25 located [1] - 442:17 location [5] - 361:7, 437:1, 437:3, 461:8, 500:8 lock [2] - 332:7,	332:10 logic [2] - 469:3, 469:4 look [40] - 337:7, 340:11, 343:1, 353:13, 355:15, 362:21, 363:11, 369:3, 369:4, 372:22, 373:16, 373:25, 382:17, 383:2, 385:10, 397:4, 398:1, 401:6, 404:24, 405:6, 416:14, 424:24, 425:4, 433:12, 442:10, 443:22, 444:18, 447:14, 448:24, 450:24, 464:5, 468:1, 471:13, 473:15, 473:20, 475:22, 481:9, 489:5, 490:18, 495:1 looked [5] - 369:8, 372:19, 382:17, 405:9, 438:19 looking [60] - 335:4, 353:11, 361:6, 361:11, 362:11, 362:12, 362:17, 362:18, 372:22, 375:24, 378:1, 379:6, 381:14, 381:16, 385:12, 385:15, 391:7, 397:3, 398:21, 399:22, 401:18, 406:22, 406:25, 408:4, 408:10, 410:11, 417:7, 418:5, 419:1, 419:3, 420:24, 421:6, 421:22, 423:15, 423:18, 431:10, 437:17, 442:10, 442:12, 4
---	--	---	---

476:18, 477:7, 478:4, 479:4, 480:2, 482:13, 482:24, 483:7, 483:17, 483:23, 484:18, 485:9, 488:7, 489:20, 492:12, 493:19, 494:5, 495:18, 498:4, 501:22 MADE [1] - 415:18 Mahmudov [2] - 432:8, 462:6 MAHMUDOV [8] - 432:22, 453:18, 462:18, 464:7, 466:2, 478:4, 484:18, 504:11 Mahmudov's [1] - 462:16 maintain [4] - 334:6, 337:11, 438:22, 472:2 MAINTAIN [2] - 337:15, 505:6 maintained [1] - 333:15 major [14] - 368:5, 377:18, 378:5, 382:18, 382:21, 382:23, 394:13, 395:4, 401:15, 439:6, 439:10, 440:17, 461:22, 475:7 majority [1] - 461:24 maker [1] - 375:20 manage [11] - 398:19, 399:7, 399:21, 421:16, 421:17, 422:23, 423:3, 423:4, 423:22, 490:24, 491:7 managed [5] - 391:24, 400:1, 400:12, 401:20, 421:18 Management [3] - 374:19, 449:4, 461:16 management [12] - 359:13, 374:23, 398:23, 398:25, 399:11, 399:13, 400:9, 400:15, 401:8, 408:16, 408:19, 419:2 manager [18] - 374:4, 396:15, 396:25, 397:3, 397:15, 397:24, 398:3, 398:6, 399:10, 399:12, 399:15, 399:23, 399:25, 400:12, 400:16, 400:17, 401:13, 401:25	managers [2] - 374:17, 401:11 manages [1] - 395:4 managing [1] - 394:13 Manitoba [1] - 449:3 Manual [1] - 447:15 manual [1] - 448:10 March [1] - 431:25 mark [1] - 376:14 market [1] - 373:6 markets [1] - 422:7 massive [1] - 439:18 material [4] - 459:25, 473:13, 475:12, 478:17 materiality [1] - 482:10 materialize [1] - 391:2 materialized [1] - 388:19 materializes [3] - 386:11, 388:5, 390:3 materially [1] - 463:7 materials [4] - 361:22, 363:13, 421:21, 493:5 mathematical [2] - 472:25, 491:7 matter [3] - 362:24, 426:14, 452:23 matters [2] - 331:10, 332:14 Mayo [12] - 362:24, 367:16, 372:7, 372:8, 372:9, 372:14, 401:3, 404:4, 404:5, 423:7, 424:25, 425:19 McCullough [1] - 330:7 mean [17] - 357:24, 382:19, 395:13, 398:24, 407:10, 415:7, 419:17, 421:14, 423:19, 424:17, 426:5, 453:18, 456:7, 486:15, 492:22, 493:1, 494:9 means [4] - 348:2, 404:4, 472:22, 473:5 meant [8] - 345:23, 345:24, 433:16, 433:22, 434:2, 471:24, 493:9, 496:14 measurable [1] - 443:12 mechanism [1] - 478:25	meet [5] - 358:23, 364:19, 429:4, 473:7, 487:25 meeting [2] - 338:17, 359:3 meetings [1] - 424:6 meets [1] - 473:12 megawatt [1] - 353:23 megawatts [9] - 363:25, 416:23, 417:1, 417:4, 417:10, 417:11, 417:14, 417:15, 419:3 Mel [1] - 330:8 Member [3] - 330:8, 330:9, 330:9 members [3] - 393:23, 432:3, 502:11 memory [2] - 462:6, 462:17 mentioned [12] - 338:13, 339:9, 339:14, 341:6, 379:3, 380:7, 397:5, 401:9, 409:21, 450:7, 489:7, 495:8 mentioning [1] - 396:24 met [7] - 338:20, 343:5, 359:8, 429:14, 482:2, 482:4, 488:4 method [15] - 435:4, 436:3, 437:12, 444:22, 453:8, 456:25, 461:14, 462:2, 464:15, 466:10, 466:13, 467:20, 468:21, 479:24, 495:14 methodologies [1] - 446:5 methodology [2] - 445:2, 445:24 methods [4] - 451:2, 451:3, 461:15, 467:25 MGS [2] - 392:19, 393:4 MHO [7] - 379:2, 379:24, 400:13, 400:14, 401:3, 402:12, 402:21 micro [2] - 417:11, 417:21 microphone [1] - 331:12 middle [1] - 462:7 might [10] - 346:2, 374:2, 374:4, 392:14, 420:10, 459:2,	465:25, 474:9, 495:9, 496:20 mike [1] - 502:15 MILLION [1] - 355:13 million [62] - 332:12, 347:11, 353:1, 353:6, 354:3, 354:7, 354:23, 355:22, 356:8, 356:11, 368:16, 383:17, 384:4, 384:18, 384:19, 388:13, 389:4, 393:7, 393:11, 394:8, 405:13, 408:12, 409:3, 409:8, 413:16, 413:18, 413:24, 416:24, 417:1, 451:23, 453:25, 454:1, 455:24, 456:1, 456:6, 456:8, 459:6, 459:15, 459:21, 465:5, 465:12, 465:16, 465:18, 465:19, 465:21, 465:23, 466:3, 477:1, 477:24, 481:1, 481:2, 481:4, 481:5, 481:6, 487:9, 495:20, 496:3, 496:5, 496:6 millions [1] - 344:18 Milner [7] - 344:10, 345:22, 346:3, 357:20, 358:18, 420:10, 424:23 MILNER [8] - 332:3, 344:10, 345:25, 346:16, 358:18, 421:24, 424:4, 504:5 mind [1] - 415:12 mine [3] - 462:17, 476:20, 477:8 minerals [1] - 339:13 minister [1] - 364:25 minus [11] - 370:12, 370:15, 370:17, 370:20, 371:19, 380:25, 389:16, 391:19, 392:3, 473:1, 473:19 minute [1] - 453:16 minutes [1] - 376:25 misabeled [1] - 455:18 miss [1] - 363:3 missed [2] - 334:9, 334:11 missing [2] - 492:1, 501:20 misspoke [1] - 340:13	mitigate [1] - 405:22 mixed [2] - 468:9, 468:10 mixing [1] - 457:24 mobile [1] - 362:23 modelled [1] - 461:15 models [1] - 392:2 modular [2] - 362:22, 363:5 moment [2] - 334:19, 453:25 money [8] - 336:24, 340:17, 348:6, 424:21, 438:3, 484:20, 485:3 month [4] - 362:6, 372:12, 419:15, 431:19 months [7] - 362:10, 364:25, 365:20, 365:21, 366:5, 431:17, 431:20 morning [2] - 331:5, 431:3 most [11] - 345:3, 366:24, 371:1, 371:15, 372:22, 438:16, 439:22, 448:18, 469:17, 480:9, 482:9 move [11] - 356:18, 360:1, 371:24, 372:15, 373:8, 373:17, 393:20, 400:21, 435:16, 452:24, 454:25 moved [1] - 391:20 moves [1] - 375:20 moving [16] - 349:25, 361:12, 361:13, 361:14, 363:16, 375:22, 380:4, 402:12, 404:12, 410:23, 420:13, 430:1, 430:5, 454:22, 455:4 MR [215] - 331:11, 331:20, 331:24, 332:5, 336:11, 337:10, 344:10, 345:25, 346:3, 346:16, 347:8, 347:25, 348:16, 348:18, 348:22, 350:8, 350:19, 352:17, 356:12, 358:18, 361:19, 364:23, 367:11, 367:20, 367:24,
--	--	--	--	--

368:22, 369:14, 370:4, 371:13, 372:3, 373:15, 374:13, 376:4, 377:23, 378:8, 378:18, 379:9, 380:15, 381:9, 381:22, 382:9, 383:7, 384:9, 384:24, 385:19, 387:10, 388:23, 390:12, 391:13, 393:16, 394:2, 394:7, 395:8, 395:13, 396:12, 397:19, 398:7, 399:3, 400:6, 401:23, 402:23, 403:22, 406:20, 407:13, 407:20, 408:21, 408:25, 409:4, 409:12, 409:16, 409:22, 410:9, 413:14, 413:25, 414:12, 414:20, 415:2, 415:9, 415:16, 416:7, 416:8, 416:9, 417:8, 417:25, 419:8, 419:16, 419:23, 421:24, 424:4, 424:16, 426:17, 428:9, 428:13, 428:21, 428:22, 432:1, 432:5, 432:19, 432:24, 433:23, 434:20, 435:6, 435:10, 436:5, 436:19, 437:10, 437:21, 440:16, 441:8, 441:14, 441:25, 443:3, 444:10, 444:15, 446:3, 446:25, 447:5, 447:10, 447:12, 450:8, 452:11, 453:18, 454:9, 454:20, 455:15, 456:4, 456:10, 456:19, 456:22, 457:3, 457:7, 457:12, 457:19, 457:23, 460:4, 461:4, 461:11, 461:18, 462:4, 462:18, 463:2, 464:3, 464:7, 464:17, 465:1, 465:7, 466:2, 466:17, 467:24, 469:3, 470:4, 471:11, 472:13, 474:12, 475:20, 476:13, 476:18, 477:7, 477:9, 477:18, 478:4, 478:22, 479:4, 480:2, 482:13,	482:24, 483:7, 483:10, 483:12, 483:17, 483:23, 484:3, 484:8, 484:17, 484:18, 485:9, 485:13, 485:23, 486:8, 486:10, 486:17, 486:21, 487:2, 487:5, 487:8, 487:13, 487:20, 488:7, 489:20, 492:12, 493:1, 493:15, 493:19, 494:5, 494:8, 494:13, 494:15, 495:5, 495:15, 495:17, 498:7, 498:8, 498:15, 499:10, 499:12, 499:22, 500:4, 500:9, 500:12, 501:3, 501:7, 501:11, 504:8, 504:9, 504:14 MS [67] - 332:16, 332:17, 332:18, 335:16, 336:16, 337:6, 337:17, 337:23, 338:12, 338:21, 339:6, 339:24, 340:6, 340:19, 341:9, 341:14, 341:21, 342:1, 342:6, 342:9, 342:15, 342:18, 342:24, 343:8, 349:9, 349:21, 349:25, 351:4, 352:3, 353:7, 353:10, 354:12, 354:24, 355:14, 355:24, 357:1, 357:10, 357:18, 360:4, 365:9, 366:6, 366:13, 376:12, 376:13, 377:5, 377:6, 382:25, 385:25, 408:3, 410:2, 411:14, 415:21, 415:22, 429:2, 430:9, 430:17, 431:10, 431:24, 432:14, 432:17, 433:2, 433:3, 433:4, 498:3, 501:22, 504:7, 504:13 Mullen [1] - 330:12 multiple [5] - 372:18, 385:1, 385:10, 404:12, 468:2 multiplies [1] - 445:19 municipal [1] - 500:24	Murchison [20] - 331:24, 332:5, 350:8, 360:5, 360:15, 361:17, 367:23, 371:13, 372:3, 375:8, 378:9, 379:3, 380:6, 381:14, 385:12, 416:20, 421:19, 422:1, 499:13, 499:16 MURCHISON [53] - 332:3, 332:5, 350:8, 356:12, 361:19, 367:11, 367:20, 367:24, 369:14, 370:4, 371:13, 372:3, 373:15, 374:13, 376:4, 377:23, 378:8, 378:18, 379:9, 380:15, 381:9, 381:22, 384:9, 384:24, 385:19, 387:10, 388:23, 390:12, 391:13, 393:16, 394:2, 394:7, 397:19, 398:7, 399:3, 400:6, 401:23, 402:23, 403:22, 406:20, 407:13, 407:20, 408:21, 408:25, 409:4, 409:12, 409:16, 409:22, 410:9, 417:8, 417:25, 424:16, 504:5 must [7] - 352:1, 354:13, 358:16, 358:22, 364:17, 353:10, 474:1 mutual [1] - 419:3	359:1 necessarily [6] - 340:15, 371:14, 383:1, 462:5, 463:3, 497:20 necessary [8] - 340:23, 347:22, 436:10, 453:1, 460:9, 472:4, 473:4, 478:24 need [45] - 348:5, 349:13, 349:22, 350:5, 364:19, 365:7, 366:19, 367:6, 367:11, 375:20, 378:19, 401:5, 405:12, 413:10, 414:8, 423:6, 432:10, 432:12, 432:14, 433:12, 438:12, 439:7, 443:4, 447:25, 449:14, 449:17, 452:24, 453:2, 453:9, 453:15, 455:1, 459:7, 468:1, 469:11, 471:20, 471:22, 472:10, 474:5, 474:8, 475:12, 479:17, 488:15, 500:21, 501:1 needed [6] - 341:7, 361:15, 362:5, 363:13, 388:11, 398:15 needing [3] - 460:16, 470:8, 480:8 needn't [2] - 481:15 needs [10] - 349:16, 365:1, 400:19, 448:1, 451:12, 459:9, 469:7, 481:1, 490:25 negative [4] - 448:4, 448:8, 459:16, 459:22 negotiate [1] - 340:20 negotiating [1] - 341:5 neighbouring [1] - 422:16 net [94] - 347:4, 347:9, 415:24, 428:17, 432:6, 432:9, 433:6, 434:7, 434:12, 435:4, 435:7, 435:16, 435:20, 436:2, 436:9, 437:12, 441:20, 442:2, 443:7, 444:11, 444:12, 444:16, 444:18, 444:19, 445:23, 447:4, 448:14, 448:17, 449:23, 450:4,	451:22, 452:6, 454:8, 455:13, 455:24, 456:7, 456:16, 456:24, 456:25, 457:4, 457:8, 457:14, 459:25, 461:1, 461:14, 462:1, 462:10, 463:22, 463:25, 464:14, 464:15, 464:24, 465:8, 465:10, 465:17, 465:18, 465:25, 466:4, 466:9, 466:11, 466:14, 467:10, 467:20, 467:21, 467:23, 468:8, 468:24, 469:23, 469:25, 470:19, 471:14, 475:22, 475:24, 476:5, 476:9, 477:13, 478:5, 479:24, 486:1, 486:3, 488:12, 489:8, 489:15, 490:7, 491:20, 494:2, 495:3, 495:10, 496:12, 496:24, 497:17 never [1] - 497:2 new [22] - 346:14, 354:3, 364:5, 397:12, 406:16, 411:21, 413:2, 413:3, 413:18, 420:13, 423:25, 426:22, 435:17, 436:13, 438:6, 449:6, 449:7, 453:7, 461:7, 462:3, 490:20, 493:7 Newfoundland [1] - 449:4 next [28] - 334:15, 343:12, 345:14, 346:5, 353:18, 359:6, 362:15, 365:2, 365:5, 365:15, 368:7, 394:23, 395:10, 395:19, 421:9, 421:11, 467:1, 467:2, 467:11, 467:18, 468:16, 469:21, 470:16, 471:13, 482:15, 489:22, 489:24 nickel [1] - 497:20 nominal [1] - 487:11 none [7] - 388:17, 388:18, 389:25, 390:24, 459:3, 473:14, 475:10 nonnations [1] - 430:11
---	--	---	--	--

nonroutine ^[36] - 437:14, 437:18, 437:20, 440:15, 440:16, 441:2, 443:9, 443:10, 457:9, 457:15, 457:22, 458:2, 458:20, 458:21, 458:23, 458:25, 459:5, 459:8, 459:13, 459:20, 460:1, 460:18, 461:2, 461:9, 461:13, 474:24, 475:4, 475:18, 476:10, 476:11, 476:22, 477:16, 479:3, 479:6, 498:14, 501:2 normal ^[8] - 386:15, 386:23, 388:4, 419:16, 438:18, 440:9, 446:10, 466:21 normally ^[6] - 366:4, 419:19, 436:21, 447:14, 450:23, 469:15 Northwest ^[1] - 445:2 notable ^[1] - 463:9 notation ^[1] - 475:25 note ^[7] - 335:23, 337:23, 412:10, 444:10, 479:9, 493:19, 500:14 noted ^[19] - 334:2, 342:18, 356:24, 357:11, 361:5, 367:12, 367:17, 409:5, 410:10, 425:14, 436:5, 437:4, 449:11, 455:22, 458:20, 463:8, 472:21, 475:23, 495:25 notes ^[2] - 363:3, 503:6 nothing ^[8] - 334:11, 346:6, 436:17, 442:1, 444:11, 444:19, 445:23, 446:17 notice ^[1] - 440:5 notifying ^[1] - 397:23 noting ^[2] - 368:24, 480:3 Nova ^[1] - 480:11 November ^[3] - 419:18, 501:17, 501:18 nowhere ^[1] - 345:17 number ^[19] - 331:16, 331:17,	338:16, 344:19, 360:9, 366:24, 374:4, 418:4, 418:6, 418:21, 418:22, 418:25, 419:4, 421:19, 423:23, 423:24, 470:12, 472:22, 491:4 Number ^[4] - 332:20, 368:9, 369:21, 370:1 numbers ^[9] - 370:7, 424:3, 426:5, 426:7, 426:8, 426:11, 439:18, 439:19, 449:9 NY-YEC-11 ^[1] - 418:16	odds ^[1] - 451:15 OF ^[28] - 337:16, 340:2, 340:4, 340:5, 341:18, 341:19, 342:12, 342:14, 355:7, 355:12, 355:13, 357:14, 357:17, 382:5, 385:21, 385:22, 407:24, 415:18, 499:25, 500:3, 505:6, 505:9, 505:11, 505:14, 505:18, 505:20 offers ^[1] - 498:1 offhand ^[1] - 415:10 office ^[4] - 474:15, 477:19, 481:24, 483:14 offices ^[1] - 477:11 Official ^[3] - 330:18, 503:14, 503:18 official ^[2] - 366:12, 372:10 officials ^[8] - 360:21, 365:23, 366:9, 366:14, 367:2, 429:7, 430:2, 430:10 officials' ^[3] - 428:24, 429:1, 430:6 offset ^[1] - 496:2 often ^[3] - 367:25, 421:4, 463:17 old ^[4] - 436:15, 438:5, 490:20, 493:7 omelet ^[1] - 497:2 ON ^[4] - 357:13, 376:7, 415:19, 499:25 once ^[10] - 342:21, 345:12, 410:5, 414:22, 437:21, 442:2, 453:24, 479:14, 486:15 ONE ^[1] - 385:22 one ^[75] - 331:25, 336:21, 340:24, 354:2, 362:24, 367:11, 367:14, 367:16, 367:18, 372:5, 375:9, 378:9, 384:7, 384:20, 385:14, 385:16, 399:6, 404:10, 408:5, 416:4, 419:20, 420:23, 427:5, 427:7, 429:16, 430:10, 430:12, 435:12, 436:4, 436:18, 437:5, 437:21, 437:25, 438:16, 439:4,	448:13, 448:20, 450:6, 451:3, 453:3, 458:20, 458:23, 458:25, 459:1, 459:2, 461:19, 461:22, 462:21, 467:4, 467:24, 468:2, 468:8, 469:14, 472:19, 473:13, 477:3, 481:6, 485:23, 490:1, 490:4, 490:20, 493:3, 493:8, 493:21, 498:6, 498:10, 498:17, 499:1, 499:2, 499:4 one-hour ^[2] - 416:4, 427:5 ones ^[2] - 458:21, 458:25 ongoing ^[9] - 345:5, 361:1, 440:12, 451:12, 452:20, 455:2, 455:6, 465:7, 500:21 online ^[3] - 418:19, 419:11, 419:12 onsite ^[1] - 405:3 onwards ^[1] - 382:18 open ^[7] - 345:12, 396:13, 403:14, 410:12, 410:17, 410:18, 432:25 OPENING ^[4] - 342:12, 355:5, 355:7, 505:18 opening ^[11] - 334:15, 340:10, 340:17, 340:18, 341:23, 342:16, 351:23, 354:17, 354:19, 359:22, 445:19 operate ^[5] - 340:24, 450:13, 450:14, 450:16 operating ^[4] - 347:5, 491:17, 497:5, 497:13 operation ^[2] - 434:22, 472:3 operational ^[1] - 364:22 operations ^[4] - 364:3, 492:15, 494:15, 494:23 opportune ^[1] - 416:2 opportunities ^[7] - 361:3, 403:11, 403:20, 404:10, 412:13, 429:17,	430:22 opportunity ^[2] - 413:1, 501:24 opposed ^[6] - 456:17, 457:21, 494:10, 495:4, 496:7, 496:25 optimization ^[1] - 405:8 optimize ^[1] - 404:25 option ^[17] - 348:11, 373:4, 403:14, 403:15, 403:16, 404:12, 405:11, 405:18, 405:20, 405:22, 406:9, 409:5, 409:18, 409:23, 410:11, 410:17, 410:19 OPTION ^[1] - 410:1 options ^[6] - 336:21, 359:25, 361:9, 372:19, 372:23, 372:24 oral ^[1] - 331:7 Order ^[2] - 332:21, 333:20 order ^[29] - 331:3, 340:23, 359:23, 362:6, 364:19, 364:20, 376:24, 377:2, 387:19, 387:20, 387:24, 388:8, 388:9, 401:24, 402:3, 402:4, 421:7, 422:12, 427:6, 428:6, 435:18, 492:14, 492:21, 493:2, 493:3, 493:8, 493:10, 497:12, 502:17 orderly ^[2] - 440:25, 460:12 orders ^[4] - 401:14, 401:21, 493:25, 494:17 organization ^[4] - 399:7, 399:20, 402:5, 424:10 original ^[7] - 350:24, 357:3, 419:8, 435:21, 435:23, 448:1, 485:19 originally ^[1] - 336:24 otherwise ^[1] - 502:8 ourselves ^[1] - 363:14 outcomes ^[1] - 466:8 outside ^[7] - 344:13, 344:21, 348:7, 387:15, 423:3,
--	--	--	---	--

452:23, 452:24 outstanding [1] - 501:14 overall [6] - 385:8, 387:5, 423:12, 424:8, 434:13, 497:21 overlap [1] - 471:17 oversee [1] - 374:25 oversees [1] - 395:4 overview [1] - 333:19 own [8] - 330:17, 385:11, 406:5, 424:6, 451:6, 479:12, 488:18 OWNED [2] - 340:3, 505:9 owned [4] - 337:24, 338:1, 487:24, 488:16 owner [1] - 463:4 owner's [10] - 396:15, 396:24, 397:3, 397:14, 398:1, 398:4, 398:5, 398:8, 398:18, 404:20 owns [1] - 463:5	433:13, 433:15, 442:7, 443:23, 443:25, 446:20, 452:4, 455:12, 455:22, 470:24, 470:25, 471:15, 474:18, 474:19, 475:1, 475:2, 475:23, 478:13, 481:20, 489:3, 489:4, 489:22, 489:24 pages [7] - 332:25, 351:7, 383:9, 392:20, 396:18, 456:5, 503:4 PAID [1] - 415:19 paid [6] - 342:21, 386:16, 386:17, 386:20, 415:14, 487:9 PANEL [11] - 332:17, 416:8, 428:21, 433:2, 498:7, 501:12, 504:7, 504:8, 504:9, 504:13, 504:14 panel [9] - 332:23, 428:11, 428:15, 432:3, 432:6, 496:17, 498:3, 498:22, 501:9 panels [1] - 502:7 paragraph [16] - 332:22, 333:20, 334:23, 343:14, 346:20, 363:17, 364:12, 403:5, 403:7, 406:11, 406:12, 406:25, 408:5, 410:3, 442:24, 443:2 paragraphs [2] - 334:20, 392:24 parallel [5] - 360:10, 360:25, 367:1, 429:18, 429:22 parcels [1] - 429:12 pardon [2] - 340:12, 429:5 part [70] - 335:5, 335:18, 336:17, 342:1, 342:24, 344:25, 350:25, 356:23, 364:2, 364:14, 364:24, 365:4, 370:8, 387:6, 387:14, 388:5, 388:6, 390:4, 390:6, 391:3, 391:5, 392:15, 396:10, 402:18, 407:1, 407:3, 411:10, 412:12, 413:21, 414:13, 416:10, 420:12, 425:22, 429:13, 430:4,	430:24, 433:20, 439:14, 449:7, 449:19, 450:19, 451:11, 451:12, 453:12, 455:1, 455:2, 455:6, 455:19, 458:5, 458:6, 461:7, 465:13, 475:2, 486:21, 487:13, 487:14, 491:1, 493:13, 494:21, 496:22, 497:24, 498:13, 498:16, 499:15, 499:21, 500:20, 501:25 participation [1] - 338:2 particular [8] - 347:16, 359:10, 360:1, 377:14, 381:17, 442:20, 445:20, 463:13 particularly [3] - 420:7, 421:9, 496:13 parties [1] - 366:25 partners [1] - 422:16 partnership [4] - 335:15, 359:17, 361:3, 430:22 partnerships [1] - 361:15 parts [4] - 418:5, 497:10, 497:21, 497:22 pass [2] - 346:2, 361:17 passage [1] - 333:9 past [9] - 347:12, 347:13, 420:1, 423:20, 454:22, 458:16, 468:3, 468:5, 474:13 path [2] - 362:1, 362:18 Patrick [1] - 432:6 Paul [7] - 332:5, 350:8, 371:13, 372:3, 378:8, 423:13, 424:14 pay [4] - 420:2, 420:4, 438:15, 500:21 paying [1] - 413:25 pays [1] - 412:15 PDF [64] - 332:24, 334:13, 334:21, 335:5, 335:6, 340:8, 340:11, 340:14, 341:24, 343:11, 351:7, 351:9, 352:5, 352:14, 353:12, 353:13, 353:16,	355:20, 356:5, 356:7, 356:24, 363:20, 377:8, 381:6, 383:9, 383:15, 385:13, 386:5, 386:6, 389:13, 392:20, 393:1, 396:17, 396:18, 396:19, 396:20, 398:20, 402:14, 403:16, 407:4, 407:6, 408:10, 408:12, 411:12, 412:9, 433:13, 433:15, 442:7, 443:23, 443:24, 446:20, 452:4, 455:12, 455:22, 470:24, 471:15, 474:19, 475:2, 475:23, 478:13, 481:20, 489:3, 489:4 peaks [2] - 359:4, 359:8 peer [2] - 489:12, 489:17 people [4] - 426:3, 448:6, 466:23, 468:11 per [6] - 451:23, 456:8, 456:11, 456:15, 456:25, 484:23 PERCENT [1] - 415:20 percent [22] - 339:16, 370:13, 370:17, 370:20, 382:22, 385:4, 389:16, 391:19, 412:4, 412:9, 413:18, 413:22, 414:10, 414:13, 415:15, 484:1, 484:3, 484:10, 484:23 percentage [2] - 450:9, 466:9 percentages [2] - 451:8, 465:8 percents [1] - 469:23 perfect [1] - 388:1 performance [5] - 343:16, 420:9, 420:10, 468:3, 468:6 performed [3] - 335:8, 399:1, 467:18 performs [1] - 481:22 perhaps [6] - 336:22, 342:3, 357:1, 393:5, 397:15, 436:6 period [17] - 347:14,	352:10, 366:10, 366:17, 381:6, 414:3, 419:2, 419:18, 419:19, 420:5, 442:21, 442:23, 475:10, 477:2, 482:23, 483:6, 499:8 permanent [1] - 364:6 permits [4] - 339:5, 339:9, 339:21, 345:5 permitting [6] - 338:25, 360:20, 370:22, 393:18, 393:20, 430:25 perpetuity [1] - 498:19 perspective [10] - 362:1, 398:16, 405:16, 405:19, 420:3, 424:2, 429:23, 448:14, 476:23, 487:21 perspectives [4] - 468:2, 468:3, 468:9, 492:4 pertain [1] - 435:3 pertains [2] - 444:8, 444:9 Petryshyn [4] - 330:18, 502:14, 503:16, 503:17 PHASE [1] - 357:14 Phase [8] - 352:21, 353:4, 356:23, 357:3, 357:4, 357:8, 357:19 phase [11] - 353:1, 358:13, 369:1, 370:21, 378:21, 390:5, 391:3, 392:16, 402:15, 410:5, 410:8 phased [1] - 461:20 phases [5] - 353:6, 353:8, 353:9, 353:15, 372:6 phrase [1] - 344:7 phrasing [1] - 344:8 pick [4] - 374:5, 420:23, 448:7, 497:10 pie [1] - 481:18 piece [4] - 374:3, 405:23, 422:13, 436:8 pipelines [1] - 460:15 pivot [2] - 410:16, 410:18 place [18] - 361:10, 366:12, 367:13, 368:2, 380:5, 406:17, 418:23, 438:7,
P				
P.M [4] - 427:8, 427:10, 428:3, 502:19 package [1] - 356:5 pads [1] - 485:16 PAGE [3] - 342:14, 357:13, 505:20 page [84] - 334:13, 334:21, 335:5, 335:6, 340:8, 340:11, 340:13, 340:14, 341:25, 343:11, 343:12, 344:2, 351:9, 352:6, 353:12, 353:13, 353:16, 353:19, 355:16, 355:20, 355:25, 356:5, 356:7, 356:24, 357:2, 363:20, 377:8, 381:6, 383:15, 385:13, 386:5, 386:6, 389:13, 391:18, 393:1, 393:16, 396:17, 396:20, 397:4, 398:21, 402:14, 403:6, 403:16, 406:11, 406:24, 406:25, 407:5, 407:6, 407:8, 408:4, 408:10, 408:12, 408:13, 411:3, 411:12, 412:9, 416:12, 418:10,				

438:11, 449:7, 458:22, 467:14, 467:17, 490:13, 490:16, 491:3, 491:8, 496:15 plan [8] - 358:22, 359:5, 359:21, 426:21, 434:9, 434:11, 498:19, 499:6 planned [3] - 350:13, 434:4, 440:23 planning [11] - 359:2, 359:10, 362:22, 363:1, 370:13, 370:18, 424:12, 428:10, 430:24, 475:13, 478:18 plans [2] - 358:12, 452:21 plant [19] - 372:13, 379:2, 379:24, 401:3, 426:9, 438:21, 439:15, 443:14, 444:23, 445:15, 463:17, 466:15, 468:23, 470:2, 477:19, 479:21, 485:8, 496:1 plants [2] - 425:24, 425:25 play [1] - 413:19 plunge [4] - 402:15, 402:18, 402:25 plus [9] - 370:15, 370:17, 370:20, 371:19, 380:25, 389:16, 391:19, 392:3, 413:5 PM [4] - 400:19, 400:23, 401:4, 402:8 PMP [1] - 374:18 point [31] - 334:10, 339:21, 343:8, 377:20, 378:9, 380:17, 381:1, 410:25, 413:6, 416:16, 418:11, 421:10, 428:15, 439:5, 440:1, 446:12, 447:1, 452:18, 452:20, 458:18, 460:16, 460:19, 470:23, 473:9, 473:10, 484:12, 488:15, 488:21, 493:23, 497:3, 500:5 pointing [1] - 478:5 points [3] - 394:16, 422:23, 474:25	pole [2] - 490:19, 490:22 poles [1] - 448:7 policies [1] - 442:4 pool [4] - 402:15, 402:18, 402:25 PORTION [1] - 355:12 portion [8] - 346:18, 354:22, 355:23, 364:21, 389:2, 417:7, 419:14, 445:22 position [6] - 343:18, 351:24, 365:3, 431:22, 454:22, 459:16 positions [2] - 358:25, 397:18 positive [3] - 447:22, 470:13, 476:25 possibility [2] - 403:13, 488:3 possible [11] - 348:11, 351:22, 361:7, 361:9, 476:8, 476:14, 476:19, 497:1, 497:3, 497:5, 497:20 possibly [1] - 497:2 post [1] - 353:4 post-Phase [1] - 353:4 postulated [2] - 463:20, 470:19 potential [13] - 336:17, 343:6, 384:6, 392:3, 392:14, 404:3, 405:8, 405:13, 421:4, 426:8, 471:23, 472:1, 487:23 potentially [1] - 405:12 potentials [1] - 404:25 poured [2] - 485:16, 485:24 power [10] - 349:12, 349:13, 351:25, 354:9, 354:16, 355:23, 356:23, 357:7, 422:18, 425:16 POWER [1] - 355:3 Power [35] - 350:20, 350:21, 350:23, 351:1, 351:2, 351:11, 351:18, 352:8, 352:12, 352:19, 352:25, 353:14, 353:18, 353:19, 353:22, 354:6,	356:21, 357:8, 357:19, 360:12, 368:25, 379:1, 379:23, 401:1, 419:11, 420:7, 420:24, 421:13, 423:5, 430:16, 431:9, 431:14, 431:23, 445:3, 480:11 practical [2] - 481:2, 491:9 practice [15] - 383:12, 386:2, 388:4, 447:7, 448:16, 449:9, 450:1, 450:19, 452:21, 455:8, 458:17, 464:9, 465:10, 468:15, 471:7 practices [4] - 333:15, 441:11, 441:22, 450:6 pre [3] - 365:17, 386:10, 387:21 pre-identified [2] - 386:10, 387:21 precedent [11] - 335:2, 335:13, 335:22, 336:4, 338:17, 338:22, 343:5, 345:10, 348:13, 348:18, 469:24 precollect [1] - 464:16 precollected [4] - 457:10, 457:17, 459:24, 466:10 precollection [2] - 450:4, 464:9 precollective [1] - 447:4 preconstruction [2] - 390:4, 391:3 predict [1] - 443:19 predicted [10] - 433:11, 433:18, 434:3, 434:18, 441:4, 441:6, 441:7, 441:9, 441:17, 469:2 predicting [1] - 433:21 predictive [1] - 468:24 predictor [1] - 467:22 prefeasibility [1] - 370:13 preferred [2] - 405:22, 410:5 preliminary [1] -	370:18 premature [1] - 343:2 preparation [1] - 339:6 prepare [4] - 371:25, 377:16, 378:3, 454:10 prepared [9] - 336:7, 351:17, 355:20, 375:21, 377:15, 378:2, 395:5, 455:16, 502:5 preparing [3] - 394:6, 434:14, 469:14 prescreening [1] - 365:10 present [5] - 473:22, 483:21, 484:10, 486:18 presented [3] - 359:19, 415:6, 502:6 presently [1] - 475:10 pressure [2] - 422:4 presume [1] - 470:16 pretend [1] - 440:1 pretty [4] - 354:7, 425:20, 426:11, 456:11 previous [4] - 342:25, 415:11, 445:5, 445:8 previously [4] - 332:4, 367:17, 387:25, 456:17 price [4] - 374:5, 378:14, 425:11, 448:2 prices [1] - 374:5 primarily [4] - 392:24, 405:22, 451:5, 456:2 primary [1] - 469:16 prioritization [1] - 359:9 prioritize [2] - 359:5, 359:20 priority [1] - 360:8 problem [1] - 439:2 procedural [3] - 332:14, 501:14, 501:19 proceed [9] - 332:15, 343:25, 344:6, 344:9, 344:13, 346:7, 378:23, 410:14 proceeding [8] - 333:24, 350:16, 364:14, 411:15, 414:6, 460:15, 462:8, 470:16	proceedings [3] - 330:1, 502:19, 503:5 PROCEEDINGS [5] - 331:2, 427:8, 427:10, 428:5, 502:21 proceeds [1] - 477:22 process [30] - 345:11, 348:8, 360:24, 364:13, 364:24, 365:11, 365:18, 365:20, 366:5, 366:7, 373:4, 374:7, 374:9, 374:17, 374:25, 384:5, 389:18, 392:20, 392:23, 393:15, 393:20, 393:22, 395:14, 406:5, 410:10, 431:4, 431:8, 431:17, 446:18, 485:18 processes [12] - 360:20, 360:24, 364:17, 364:19, 366:1, 366:25, 367:5, 394:13, 429:17, 429:18, 429:19, 430:25 procure [1] - 361:22 procurement [4] - 362:4, 362:8, 363:9, 373:2 procuring [1] - 362:14 produce [1] - 442:22 produced [1] - 447:15 product [1] - 466:25 professional [1] - 374:22 professionals [1] - 374:18 PROGRESS [1] - 355:2 progress [17] - 333:17, 334:7, 334:14, 338:14, 339:1, 339:20, 340:10, 345:4, 346:12, 347:1, 351:10, 351:16, 354:4, 354:11, 354:15, 380:9, 380:10 progresses [1] - 394:11 progressing [1] - 403:10 project [236] - 333:7, 333:14, 333:16,
---	--	--	---	--

333:23, 333:25, 334:6, 334:25, 335:9, 335:24, 336:12, 337:24, 338:1, 338:5, 338:25, 339:4, 339:10, 340:17, 341:3, 341:7, 343:22, 343:24, 344:5, 344:9, 344:16, 344:18, 344:23, 345:13, 345:20, 346:8, 346:14, 346:17, 346:18, 346:19, 346:24, 347:17, 348:6, 348:20, 349:12, 349:18, 350:1, 350:2, 350:11, 350:21, 350:22, 350:23, 351:2, 351:3, 351:11, 351:19, 352:8, 352:12, 352:21, 352:25, 353:1, 353:3, 353:15, 354:6, 354:13, 354:23, 355:16, 355:19, 355:23, 356:3, 356:11, 356:21, 356:24, 357:8, 357:19, 358:13, 358:22, 359:12, 359:13, 359:17, 360:2, 360:6, 360:9, 361:5, 361:12, 361:15, 363:15, 364:3, 364:21, 365:13, 365:15, 368:24, 368:25, 369:18, 370:19, 370:22, 370:23, 371:23, 373:20, 374:4, 374:17, 374:22, 375:13, 375:19, 375:22, 377:14, 377:21, 377:22, 379:4, 380:23, 381:17, 381:20, 382:21, 383:14, 383:22, 384:18, 384:25, 385:8, 386:3, 386:9, 386:13, 386:14, 386:18, 387:5, 388:12, 388:14, 388:17, 388:19, 389:4, 389:10, 389:11, 389:13, 390:3, 391:2, 392:7, 393:3, 393:4, 393:10, 393:17, 394:5, 394:8, 394:9, 394:10, 394:16, 394:20,	395:7, 395:24, 396:5, 396:10, 396:15, 396:24, 397:1, 397:2, 397:7, 397:8, 397:10, 397:14, 397:24, 398:3, 398:6, 398:9, 398:23, 398:25, 399:7, 399:10, 399:11, 399:12, 399:13, 399:14, 399:15, 399:19, 399:23, 399:25, 400:9, 400:11, 400:12, 400:15, 400:16, 400:17, 400:18, 400:24, 401:2, 401:8, 401:10, 401:12, 401:15, 401:20, 401:22, 401:25, 402:12, 402:18, 402:20, 403:9, 403:23, 403:24, 404:7, 407:3, 407:4, 407:7, 407:10, 407:17, 407:18, 408:8, 408:11, 408:17, 408:20, 411:11, 411:15, 414:16, 414:17, 421:2, 424:7, 424:9, 426:14, 429:3, 429:13, 430:16, 430:19, 430:23, 430:24, 431:5, 486:22, 486:23, 487:14, 492:19, 493:15, 498:11, 498:13, 498:17 Project [4] - 334:20, 334:23, 374:19, 392:25 PROJECT [8] - 337:14, 340:3, 355:12, 357:17, 407:23, 408:1, 505:5, 505:9 project's [1] - 343:21 projected [1] - 355:21 projection [3] - 344:20, 410:5, 410:8 projects [95] - 350:1, 350:4, 350:6, 350:15, 350:17, 352:7, 359:1, 359:6, 359:7, 359:23, 368:5, 368:10, 368:13, 368:20, 369:2, 369:12, 370:9, 370:10, 372:2, 372:5, 373:25, 374:15,	375:1, 376:2, 377:16, 378:2, 378:3, 378:19, 379:4, 379:6, 379:18, 379:22, 380:2, 380:5, 380:7, 380:22, 381:4, 381:10, 381:12, 381:15, 381:21, 381:23, 382:18, 382:20, 382:23, 383:4, 383:6, 383:17, 383:18, 383:25, 384:3, 384:22, 385:10, 385:14, 385:17, 388:24, 389:6, 393:8, 393:13, 393:18, 393:19, 394:14, 394:24, 395:4, 396:1, 399:8, 399:21, 399:22, 399:24, 400:8, 401:10, 403:24, 410:24, 415:2, 420:7, 420:17, 420:24, 421:14, 421:17, 423:3, 423:7, 423:20, 423:23, 423:24, 424:25, 425:1, 425:2, 425:4, 425:5, 425:8, 426:25, 429:8, 431:15 PROJECTS [3] - 376:8, 382:6, 385:23 properly [1] - 434:22 property [7] - 444:19, 444:23, 445:15, 466:15, 470:2, 479:21, 487:6 PROPOSENT [2] - 340:2, 505:9 proponent [10] - 338:15, 338:23, 339:2, 339:8, 339:20, 340:21, 340:25, 341:2, 342:4, 344:16 proponent's [1] - 338:3 proportional [2] - 417:18, 417:19 proportionate [1] - 417:24 proposal [10] - 365:13, 365:15, 370:19, 431:23, 438:2, 456:23, 461:1, 464:14, 464:22, 479:5 propose [8] - 346:24, 347:1, 347:4, 347:13, 421:7, 445:17, 460:1, 479:13 Proposed [1] - 444:5 proposed [21] -	353:15, 363:19, 363:23, 405:10, 405:18, 412:12, 435:4, 436:2, 437:12, 444:22, 444:25, 446:2, 456:24, 461:14, 466:13, 468:21, 469:1, 470:2, 478:6, 479:24 proposing [6] - 405:11, 458:4, 458:11, 458:24, 465:3, 465:6 protection [1] - 442:1 PROVIDE [10] - 340:1, 355:1, 357:12, 376:6, 382:5, 385:21, 407:23, 409:25, 499:24, 505:8 provide [31] - 331:25, 333:11, 339:22, 354:1, 354:14, 356:20, 358:11, 359:7, 375:25, 380:21, 383:11, 385:20, 406:2, 407:16, 407:21, 409:13, 409:17, 409:23, 421:7, 421:20, 426:22, 426:24, 447:13, 449:7, 449:9, 468:23, 469:1, 474:20, 477:11, 483:15, 484:19 provided [17] - 331:14, 350:25, 352:5, 352:6, 368:8, 370:11, 371:9, 3
---	---	--	--

questions [31] - 332:18, 332:25, 349:21, 350:22, 368:4, 368:12, 376:17, 387:12, 395:16, 396:23, 411:4, 415:23, 416:3, 416:4, 416:9, 416:17, 424:11, 424:17, 424:20, 427:4, 428:14, 432:2, 432:24, 464:6, 482:15, 498:4, 498:9, 499:15, 500:11, 500:13 quick [2] - 499:14, 501:23 quickly [4] - 362:13, 425:14, 459:15, 462:19 quite [6] - 421:4, 424:24, 448:12, 457:25, 459:15, 490:6 quote [6] - 333:8, 416:13, 416:21, 417:2, 418:13, 418:20	482:22, 483:5, 483:20, 483:21, 484:2, 484:3, 484:4, 484:5, 484:6, 484:13, 484:15, 484:16, 484:19, 496:2, 496:3, 496:6, 496:9, 497:15 rate-making [4] - 413:11, 413:21, 479:25, 480:1 rate-setting [3] - 412:17, 445:5, 446:18 ratepayers [26] - 412:19, 412:24, 414:6, 414:10, 414:13, 414:25, 420:3, 420:19, 420:20, 421:8, 438:15, 438:24, 472:23, 477:25, 491:15, 491:16, 491:21, 491:22, 492:1, 492:3, 495:2, 495:11, 495:14, 495:16, 497:19, 500:21 rates [27] - 346:9, 412:21, 413:12, 413:24, 438:22, 439:12, 439:21, 440:8, 440:25, 441:13, 441:23, 446:5, 453:2, 458:12, 459:9, 460:9, 460:23, 466:20, 468:8, 469:19, 470:9, 470:14, 474:3, 479:8, 480:14, 481:15, 491:7 rather [11] - 347:23, 349:4, 349:8, 354:10, 367:1, 370:6, 399:1, 413:8, 435:25, 437:15, 468:14 ratio [9] - 462:15, 466:11, 466:14, 468:22, 469:4, 469:5, 469:25, 470:5, 490:10 ratios [8] - 466:23, 467:4, 467:9, 467:21, 468:5, 468:25, 469:24, 488:13 RCR [2] - 330:18, 503:13 re [1] - 336:25 RE [6] - 337:14, 342:11, 428:21, 504:9, 505:4, 505:18 re-enter [1] - 336:25 RE-EXAMINES [2] - 428:21, 504:9	reach [2] - 488:21, 499:18 REACH [1] - 500:3 reached [1] - 473:15 reaches [3] - 439:8, 448:20, 453:25 read [36] - 333:2, 333:9, 334:2, 335:7, 335:19, 336:1, 343:15, 344:2, 344:3, 352:20, 356:2, 357:21, 357:24, 358:1, 363:18, 363:22, 364:8, 383:10, 383:16, 386:8, 403:8, 406:13, 408:6, 414:7, 416:21, 418:13, 442:13, 443:1, 451:18, 451:19, 471:2, 471:16, 475:3, 475:25, 478:14, 481:21 readily [1] - 469:12 reading [2] - 406:19, 419:5 ready [6] - 332:15, 377:4, 377:20, 378:6, 390:19, 428:20 real [1] - 485:2 reality [1] - 488:4 really [21] - 338:14, 339:1, 345:2, 359:14, 373:25, 401:21, 404:3, 405:25, 420:12, 420:18, 421:6, 421:9, 423:21, 439:9, 454:12, 461:12, 477:4, 479:10, 485:15, 502:3, 502:10 reason [12] - 342:22, 345:1, 345:7, 346:6, 348:6, 366:18, 445:6, 463:6, 463:13, 487:22, 496:21, 497:24 reasonable [9] - 333:24, 345:19, 345:20, 347:3, 394:19, 440:7, 458:13, 458:18, 471:12 reasonably [2] - 401:16, 461:19 reasoning [1] - 434:19 reasons [2] - 349:5, 361:11 reassurance [1] -	421:20 reassure [1] - 420:20 receive [2] - 339:7, 343:7 received [4] - 339:9, 349:13, 477:22 RECEIVED [2] - 340:2, 505:9 receiving [1] - 478:1 recent [5] - 345:3, 425:17, 471:21, 472:11, 482:9 recently [2] - 366:24, 408:21 reclamation [5] - 482:18, 482:21, 483:4, 485:5, 486:13 recognize [2] - 465:11, 492:5 recognizing [2] - 341:2, 429:2 RECOMMENCED [1] - 428:5 recommend [3] - 347:9, 402:1, 497:24 recommendation [2] - 366:21, 405:2 recommendations [2] - 396:13, 478:6 recommending [1] - 449:1 reconcile [1] - 454:5 reconciliation [1] - 481:14 reconvened [3] - 331:3, 377:3, 428:7 record [16] - 375:11, 404:20, 457:4, 457:8, 457:14, 471:21, 472:10, 473:23, 481:1, 481:5, 491:14, 492:9, 492:13, 492:24, 493:6, 495:23 record's [1] - 404:22 recorded [12] - 386:17, 455:24, 456:16, 473:17, 474:13, 475:8, 475:18, 477:13, 477:15, 477:23, 493:10, 494:14 recording [1] - 479:2 records [1] - 477:16 recover [1] - 345:21 recovered [2] - 449:15, 449:17 recoveries [1] - 476:3 recovering [1] - 346:9	recruited [1] - 399:12 redirect [6] - 428:11, 428:13, 428:14, 428:20, 432:2, 501:6 reduced [1] - 419:13 reduction [1] - 418:18 refer [4] - 368:17, 382:14, 393:12, 418:15 reference [14] - 368:18, 371:9, 391:18, 402:8, 407:11, 411:25, 422:2, 431:2, 433:14, 443:1, 447:8, 447:13, 451:5, 453:20 referenced [5] - 359:22, 419:25, 435:11, 473:14, 489:21 references [4] - 369:12, 439:23, 449:8, 449:10 referencing [4] - 371:6, 391:17, 421:12, 488:9 referred [7] - 333:19, 377:10, 383:24, 399:23, 402:15, 403:21, 454:7 referring [20] - 352:16, 363:22, 380:13, 386:25, 395:9, 396:11, 396:18, 402:21, 403:4, 403:7, 407:1, 444:4, 446:22, 457:21, 464:4, 468:21, 468:25, 471:8, 478:12, 485:10 refers [5] - 392:22, 446:21, 447:3, 464:12, 486:9 refine [1] - 356:17 refined [10] - 371:25, 372:17, 372:25, 373:17, 380:4, 466:25, 469:21, 470:14, 491:13 reflected [3] - 390:1, 390:25, 471:24 reflecting [6] - 347:5, 353:3, 389:22, 390:18, 424:17, 443:20 reflective [1] - 393:5 reflects [5] - 352:21, 354:12, 355:21,
R				
radar [1] - 345:17 raised [2] - 333:5, 458:19 range [8] - 373:23, 375:12, 380:25, 381:18, 382:1, 382:2, 383:3, 389:15 ranges [2] - 425:9, 425:11 ranging [1] - 450:16 rapid [1] - 423:9 rare [3] - 443:13, 462:24, 493:21 RATE [1] - 415:19 Rate [1] - 444:5 rate [53] - 348:4, 348:7, 368:6, 382:15, 382:22, 395:23, 411:5, 411:6, 412:16, 412:17, 412:20, 413:4, 413:10, 413:11, 413:12, 413:17, 413:19, 413:21, 415:5, 415:11, 415:13, 444:9, 444:17, 445:5, 445:8, 445:14, 445:18, 445:20, 446:2, 446:4, 446:18, 448:14, 479:25, 480:1, 480:14,				

390:5, 391:4 regard [5] - 334:22, 431:16, 464:19, 468:12, 492:5 regarding [9] - 348:10, 353:14, 414:15, 414:16, 414:17, 416:17, 470:25, 498:11, 498:20 regards [4] - 361:2, 361:3, 365:6, 487:18 regime [10] - 369:17, 369:19, 369:22, 369:23, 369:25, 370:1, 370:2, 370:6, 377:13, 451:7 register [3] - 385:16, 386:11, 388:19 REGISTER [1] - 385:22 registered [1] - 432:12 registers [1] - 389:9 regulators [2] - 360:22, 365:24 regulatory [16] - 346:1, 348:2, 359:11, 393:18, 424:13, 444:8, 445:13, 446:1, 446:15, 449:12, 450:1, 472:5, 479:25, 480:12, 481:7, 491:19 Regulatory [2] - 444:5, 447:16 rehabilitate [3] - 435:19, 437:9, 440:20 reimbursed [1] - 342:4 RELATE [2] - 341:19, 505:15 relate [10] - 332:19, 341:11, 341:13, 384:18, 416:10, 433:6, 443:7, 444:14, 453:11, 480:8 related [13] - 342:3, 386:23, 387:3, 388:16, 395:3, 413:3, 435:7, 456:24, 464:12, 472:17, 485:5, 494:3, 500:4 RELATED [3] - 342:11, 500:1, 505:18 RELATES [1] - 382:7 relates [13] - 332:21, 363:9, 374:22, 381:25, 387:23, 404:9, 405:8, 405:11, 410:25, 417:25,	424:18, 433:4, 444:15 relating [1] - 443:5 relation [11] - 357:18, 368:5, 368:11, 369:2, 381:19, 383:6, 401:20, 438:21, 452:9, 467:5, 468:19 relationship [2] - 361:3, 479:23 relative [1] - 469:8 relatively [2] - 426:23, 438:24 relay [2] - 434:21, 442:1 released [3] - 432:4, 499:13, 501:9 relied [1] - 474:25 relies [1] - 467:20 relocate [1] - 440:21 rely [4] - 375:3, 399:16, 400:20, 426:1 remain [1] - 458:7 remaining [6] - 390:1, 390:24, 433:7, 433:18, 465:20, 497:10 remarks [2] - 358:10, 359:22 remediation [2] - 400:15, 478:24 remember [3] - 433:9, 462:20, 477:24 remotely [2] - 432:6, 432:10 removal [29] - 435:3, 446:23, 448:14, 449:17, 450:11, 451:4, 455:23, 458:1, 458:2, 461:6, 464:12, 466:12, 466:14, 467:5, 468:18, 468:22, 470:1, 474:21, 475:14, 475:15, 478:6, 478:19, 478:20, 487:11, 490:3, 490:7, 495:21, 497:6, 500:15 removal-type [1] - 461:6 remove [17] - 412:18, 435:18, 435:19, 436:10, 437:6, 437:8, 437:11, 439:9, 440:20, 448:4, 469:8, 473:7, 475:6, 485:17, 486:13, 486:18, 487:16 removed [14] - 390:9, 391:8, 436:12,	437:2, 437:16, 466:13, 468:20, 476:20, 488:22, 497:8, 498:13, 499:18, 500:7, 500:15 REMOVED [1] - 500:2 removing [7] - 438:11, 442:15, 451:6, 492:10, 492:25, 493:7, 493:12 renewable [2] - 349:15, 426:10 renewables [3] - 416:19, 417:4, 417:22 renewal [3] - 392:20, 393:4, 401:3 renewed [3] - 488:5 rental [3] - 419:4, 419:19, 419:20 rentals [8] - 363:8, 418:19, 418:23, 418:25, 419:6, 419:9, 419:12, 419:17 rented [1] - 418:4 reopen [1] - 346:13 reopened [1] - 346:11 reopening [1] - 345:23 repeat [5] - 390:13, 414:1, 453:16, 457:12, 495:5 repeatable [1] - 425:22 replace [3] - 434:6, 434:10, 436:15 replaced [10] - 436:23, 436:25, 437:2, 437:16, 437:23, 441:18, 443:15, 455:18, 490:19 replacement [17] - 332:7, 350:2, 350:10, 379:14, 393:10, 400:11, 400:23, 402:12, 402:22, 403:2, 409:5, 410:16, 425:6, 425:18, 434:4, 449:14, 462:3 replaces [1] - 436:17 replacing [5] - 404:13, 405:3, 438:12, 439:7, 490:21 replicate [1] - 431:13 reply [1] - 501:18 report [15] - 350:25, 370:8, 370:23, 394:7, 411:16, 412:23,	439:23, 448:18, 449:1, 449:8, 453:21, 462:16, 480:12, 480:23, 489:2 reported [2] - 339:19, 456:7 Reporter [2] - 503:14, 503:18 Reporters [1] - 330:18 reporters [1] - 502:13 reporting [6] - 370:9, 394:10, 424:6, 475:13, 478:18, 481:19 reports [1] - 404:1 represent [2] - 474:1, 488:10 representatives [1] - 428:17 representing [5] - 398:5, 423:25, 472:16, 474:7, 474:8 represents [2] - 486:15, 486:17 request [5] - 382:16, 397:16, 398:3, 434:16, 455:20 requested [2] - 401:14, 489:23 require [2] - 383:18, 469:13 required [9] - 338:25, 350:16, 364:4, 367:4, 398:1, 416:18, 423:10, 424:12, 436:13 requirement [11] - 353:24, 433:25, 434:16, 436:22, 436:24, 446:6, 451:20, 480:18, 481:16, 497:15, 497:23 requirements [2] - 357:23, 458:6 reread [1] - 414:8 research [1] - 444:21 reserve [12] - 416:18, 416:23, 417:6, 417:10, 417:11, 417:19, 417:23, 438:23, 439:21, 446:21, 451:24, 454:12 reside [2] - 438:8, 438:11 residents [1] - 429:24	resolve [1] - 471:22 resource [1] - 400:5 resources [2] - 422:18, 491:10 respect [7] - 336:5, 398:24, 420:6, 464:8, 474:20, 492:9, 501:14 respecting [1] - 479:21 respectively [1] - 341:11 RESPECTIVELY [2] - 341:19, 505:15 respond [3] - 422:12, 422:18, 423:9 responded [1] - 452:10 responding [2] - 418:11, 423:12 response [42] - 331:25, 333:10, 335:4, 335:7, 335:18, 350:25, 355:15, 382:20, 383:15, 383:25, 385:13, 386:6, 386:7, 396:16, 396:20, 396:21, 407:1, 407:3, 408:10, 408:11, 409:1, 416:16, 422:13, 443:24, 444:2, 445:24, 451:16, 451:17, 452:12, 454:5, 454:10, 455:12, 455:19, 455:22, 471:13, 474:18, 478:12, 480:3, 481:20, 482:11, 482:17, 489:24 Response [1] - 474:17 responses [7] - 331:14, 356:25, 363:21, 443:22, 451:18, 489:4, 489:6 RESPONSES [2] - 331:23, 504:18 rest [3] - 414:11, 465:4, 498:21 restoration [5] - 446:22, 446:23, 451:25, 453:23, 455:24 restoring [1] - 442:16 restraint [1] - 471:4 result [5] - 387:19, 466:8, 472:18, 478:17, 482:23
---	--	---	---	--

resulted [2] - 434:23, 483:16 results [2] - 369:11, 446:10 resume [1] - 331:9 retained [1] - 412:22 retaining [1] - 406:5 retire [2] - 439:7, 460:16 retired [5] - 435:12, 437:2, 467:6, 477:14, 478:9 retirement [45] - 434:17, 435:3, 435:23, 436:1, 436:16, 437:13, 437:18, 437:20, 439:3, 440:22, 441:3, 441:5, 441:7, 441:17, 443:6, 449:5, 449:20, 456:3, 457:5, 459:8, 459:20, 463:1, 464:12, 471:18, 474:22, 474:23, 475:8, 475:18, 476:11, 477:13, 478:10, 478:16, 478:25, 479:3, 479:22, 487:22, 487:25, 488:21, 488:23, 489:8, 489:15, 490:25, 494:2, 495:10, 498:14 retirements [39] - 436:20, 436:22, 436:24, 438:1, 438:3, 438:10, 438:17, 439:1, 441:9, 456:1, 457:9, 457:15, 458:5, 458:16, 459:11, 460:1, 460:3, 461:3, 461:6, 461:23, 461:24, 461:25, 462:9, 462:12, 462:24, 462:25, 463:8, 463:9, 463:14, 463:21, 463:23, 464:1, 466:6, 467:14, 470:20, 475:4, 478:7, 478:8, 495:3 return [3] - 412:17, 484:21, 485:2 returning [1] - 493:8 revenue [9] - 353:24, 433:25, 434:16, 446:6, 451:20, 480:18, 481:16, 497:15, 497:23 review [1] - 395:11 reviewed [1] -	481:23 revised [4] - 389:22, 390:17, 455:13, 455:17 Richard [1] - 330:9 rid [2] - 499:3, 499:4 rigor [1] - 424:13 RISK [1] - 385:22 risk [40] - 383:21, 384:4, 384:12, 384:13, 384:14, 384:15, 384:23, 385:3, 385:5, 385:6, 385:11, 385:16, 386:10, 386:11, 386:16, 386:19, 386:20, 386:24, 387:1, 387:3, 387:6, 387:20, 388:2, 388:5, 388:15, 388:19, 389:5, 389:9, 390:10, 392:6, 392:12, 392:15, 394:17, 405:22, 421:4, 425:1, 425:12 risks [22] - 384:6, 384:7, 384:17, 384:20, 385:1, 385:2, 385:3, 385:7, 388:16, 388:17, 388:18, 388:25, 389:23, 390:1, 390:18, 390:21, 390:25, 391:12, 391:23, 391:24 River [1] - 337:25 RIVER [2] - 340:3, 505:10 road [3] - 332:8, 332:11 rock [2] - 379:16, 400:14 rockslope [1] - 425:7 ROE [2] - 413:12, 413:17 role [2] - 396:23, 399:11 roles [2] - 396:22, 397:17 rolled [2] - 438:6, 453:12 rough [1] - 417:16 roughly [3] - 405:17, 455:25, 456:15 round [1] - 393:7 routine [27] - 437:13, 437:18, 437:19, 440:15, 440:22, 441:4, 456:2, 457:4, 457:20, 458:2,	458:15, 459:11, 461:2, 461:9, 461:12, 461:25, 463:20, 463:23, 464:1, 470:20, 474:23, 477:15, 479:8, 490:14, 496:11, 500:18 ruled [1] - 333:20 rules [2] - 443:11, 446:11 ruling [2] - 334:3, 348:1 run [4] - 389:15, 400:7, 500:15, 500:19 rural [1] - 450:14	494:12, 495:3, 495:10, 497:7 saw [2] - 404:18, 415:10 scale [3] - 463:14, 500:22, 500:25 scenario [2] - 388:20, 397:20 schedule [21] - 352:14, 354:15, 387:4, 388:21, 395:22, 402:17, 403:9, 405:9, 405:19, 407:4, 407:7, 407:10, 407:14, 407:17, 407:21, 409:13, 421:3, 426:13, 428:23, 429:4, 430:16 SCHEDULE [2] - 355:2, 407:24 Schedule [3] - 411:20, 412:1, 412:3 schedule-driven [1] - 426:13 scheduled [1] - 499:8 scheduling [1] - 405:25 scope [3] - 357:4, 382:19, 464:23 SCOPE [1] - 357:14 Scotia [1] - 480:11 scrambling [2] - 357:22, 358:8 screen [1] - 454:18 screening [8] - 364:1, 364:13, 365:11, 365:18, 366:4, 431:4, 431:8, 431:16 scrutinized [1] - 401:16 scrutiny [1] - 424:11 search [2] - 369:9, 369:11 season [8] - 362:15, 362:24, 367:12, 367:14, 367:16, 367:18, 367:22, 367:25 seated [3] - 331:4, 377:3, 428:7 second [12] - 336:17, 358:1, 382:12, 403:6, 406:11, 406:18, 408:5, 410:2, 418:2, 491:11, 498:10 Secretary [1] - 330:14 section [4] - 333:1,	333:18, 402:13, 452:4 sections [1] - 343:10 secure [1] - 349:12 securing [1] - 360:16 see [41] - 333:2, 337:19, 343:14, 344:24, 345:16, 351:9, 352:16, 355:18, 356:2, 368:8, 368:13, 371:16, 373:19, 373:24, 377:9, 383:16, 393:1, 397:5, 397:17, 401:18, 415:5, 415:12, 418:17, 434:1, 435:20, 442:7, 443:25, 450:5, 462:16, 463:6, 463:12, 470:24, 473:16, 475:25, 480:22, 481:21, 489:22, 493:17, 498:22, 500:14, 502:4 seeing [10] - 334:10, 338:16, 339:20, 358:24, 359:19, 414:5, 414:21, 422:11, 424:5, 425:14 seek [2] - 339:11, 364:9 seeking [2] - 338:23, 396:14 seeks [2] - 336:20, 464:15 select [1] - 404:13 selected [1] - 360:12 selection [1] - 361:4 sell [3] - 447:22, 447:24, 448:2 send [1] - 448:6 senior [14] - 360:20, 365:22, 366:9, 366:11, 366:13, 367:2, 399:12, 400:17, 428:24, 429:1, 429:7, 430:2, 430:6, 430:9 sense [2] - 448:12, 473:19 sentence [5] - 364:8, 403:6, 433:20, 433:21, 442:13 sentences [1] - 383:23 separate [7] - 348:7, 387:17, 388:7, 403:1, 408:14, 444:16, 498:17 separately [1] - 356:4
---	--	--	---	---

separating [1] - 486:1 September [4] - 336:13, 337:7, 339:8, 407:17 SEPTEMBER [3] - 340:5, 407:25, 505:11 sequentially [1] - 367:1 service [33] - 350:13, 350:14, 351:19, 351:21, 351:25, 363:7, 381:7, 393:24, 406:16, 406:21, 418:12, 418:15, 434:25, 436:13, 436:22, 436:24, 439:14, 442:3, 447:19, 447:20, 448:11, 449:19, 466:15, 468:23, 470:1, 485:6, 485:8, 488:24, 492:11, 492:25, 496:1, 498:24, 499:1 serviced [1] - 477:8 services [1] - 399:18 serving [1] - 399:11 Session [1] - 428:3 set [16] - 363:14, 368:15, 384:22, 386:3, 389:1, 434:21, 435:17, 440:24, 443:17, 446:5, 446:16, 448:24, 468:13, 473:7, 479:7, 481:15 sets [2] - 456:5, 468:8 Setting [1] - 444:6 setting [9] - 378:14, 411:25, 412:17, 444:9, 445:5, 446:2, 446:18, 448:14, 480:14 settlement [1] - 429:12 several [1] - 368:7 shared [1] - 393:25 shareholder [2] - 414:11, 433:11 shareholders [1] - 433:20 Sharon [1] - 330:13 sheet [3] - 438:20, 473:16, 481:9 short [1] - 498:25 shorten [2] - 366:10, 405:14 shorthand [2] -	503:5, 503:6 shout [1] - 502:12 showed [2] - 382:21, 382:22 showing [4] - 334:14, 354:16, 355:16, 356:21 SHOWING [1] - 355:4 shown [9] - 355:20, 355:25, 356:11, 356:13, 367:15, 388:9, 389:3, 444:3, 452:6 shows [6] - 334:17, 340:14, 368:10, 368:16, 476:10, 488:17 side [9] - 345:8, 359:15, 362:20, 370:18, 419:2, 459:9, 480:12 sign [1] - 414:22 signed [5] - 377:19, 378:6, 378:10, 389:19, 411:11 significance [1] - 408:7 significant [6] - 334:25, 335:9, 344:17, 404:6, 408:22, 472:2 significantly [1] - 426:14 signing [1] - 378:13 similar [14] - 335:23, 369:19, 370:1, 370:11, 393:14, 431:15, 451:7, 461:15, 461:19, 463:15, 464:14, 468:23, 469:1, 500:16 similarities [1] - 479:20 simple [1] - 456:13 simplifies [1] - 490:23 simply [2] - 436:23, 484:8 SINCE [1] - 407:25 single [6] - 352:18, 361:7, 450:9, 451:9, 481:11 site [35] - 361:4, 361:23, 362:5, 362:14, 362:23, 362:25, 363:6, 363:10, 363:12, 365:18, 367:13, 367:17, 368:1,	431:12, 435:19, 436:12, 436:14, 436:15, 437:9, 438:5, 439:8, 439:10, 440:19, 440:21, 442:16, 446:22, 446:23, 450:15, 451:25, 455:23, 485:14, 485:19, 497:9, 498:19, 499:3 sites [5] - 361:5, 361:6, 361:8, 362:21 sits [1] - 402:3 sitting [1] - 409:7 situation [6] - 450:12, 452:15, 454:23, 470:7, 474:11 situations [1] - 473:11 six [1] - 408:14 size [6] - 402:4, 438:21, 469:9, 490:13, 491:9, 498:1 skill [1] - 503:7 slide [1] - 400:14 slight [1] - 378:14 slightly [1] - 454:22 slope [11] - 372:7, 372:9, 372:12, 372:14, 372:20, 373:5, 379:16, 405:3, 425:1 small [6] - 463:12, 490:6, 491:4, 496:9, 496:12, 497:1 smaller [1] - 374:3 so-to-speak [1] - 421:15 solved [1] - 467:17 someone [2] - 398:12, 400:20 sometimes [4] - 492:21, 497:7, 497:8, 497:9 somewhat [1] - 480:8 somewhere [1] - 440:21 Sonja [4] - 330:18, 502:14, 503:16, 503:17 soon [1] - 365:3 sorry [22] - 331:18, 332:24, 348:15, 366:3, 384:1, 413:25, 417:14, 441:14, 446:8, 457:12, 457:17, 461:17, 462:18, 463:22, 471:1, 482:3, 482:19,	483:7, 483:9, 485:9, 487:2, 498:10 sort [25] - 345:1, 348:9, 361:25, 362:1, 363:11, 367:4, 367:21, 370:23, 371:3, 372:22, 374:20, 384:14, 396:1, 403:24, 421:25, 425:11, 437:17, 447:2, 449:25, 460:23, 464:19, 465:8, 486:3, 499:14, 501:1 sorts [1] - 474:3 source [2] - 360:12, 361:13 South [5] - 353:17, 353:19, 353:22, 360:13, 420:8 south [6] - 351:25, 354:9, 354:22, 355:23, 364:20, 425:15 SOUTH [1] - 355:11 speaking [2] - 369:19, 454:17 special [2] - 501:1 specialized [1] - 423:2 specific [29] - 333:12, 334:3, 341:15, 349:16, 368:23, 369:17, 369:18, 382:15, 384:5, 385:5, 385:7, 386:14, 386:15, 386:24, 388:16, 394:3, 401:15, 401:19, 402:7, 413:15, 415:3, 424:15, 429:8, 434:20, 450:16, 450:21, 450:25, 454:15, 492:19 specifically [9] - 372:7, 382:1, 392:5, 395:18, 396:19, 400:8, 423:19, 443:5, 485:14 specifics [1] - 395:20 spend [4] - 348:6, 420:14, 438:3, 493:4 SPENDING [4] - 341:18, 341:19, 505:14 spending [11] - 336:10, 336:12, 337:18, 341:10,	416:18, 416:22, 417:6, 417:10, 424:21, 452:19, 456:6 spent [9] - 340:16, 448:25, 472:23, 473:1, 473:20, 490:20, 492:10, 492:14, 492:24 spillway [25] - 378:24, 379:21, 389:13, 400:22, 403:3, 403:12, 403:20, 403:22, 404:3, 404:14, 405:5, 405:10, 405:17, 406:14, 406:17, 406:21, 410:12, 410:16, 425:1, 425:13, 426:2, 426:3 spinning [3] - 417:10, 417:19, 417:23 spit [1] - 492:16 spread [1] - 438:20 spring [2] - 406:15, 406:21 stabilization [2] - 400:14, 416:18 stabilize [1] - 372:20 stabilized [1] - 438:24 stabilizing [1] - 405:3 Staff [1] - 330:11 staff [5] - 331:15, 357:21, 359:9, 430:3, 494:15 stage [9] - 338:10, 371:22, 373:6, 375:18, 375:21, 379:18, 391:10, 391:22, 479:1 Stage [2] - 393:17, 393:18 stagegate [4] - 392:22, 393:2, 393:15, 393:22 stagegates [1] - 394:20 STAGES [1] - 376:10 stages [6] - 370:2, 375:14, 376:3, 389:11, 393:17, 394:19 stakeholders [1] - 365:25 stand [3] - 376:24, 406:7, 427:6 standard [20] - 371:4, 371:7, 371:14,
--	--	---	--	---

371:16, 375:5, 446:21, 447:3, 447:7, 447:11, 450:3, 450:5, 451:9, 452:3, 452:16, 452:24, 453:3, 454:7, 454:11, 454:12, 454:14 standards [3] - 371:11, 453:4, 479:24 STANDS [1] - 501:12 Stantec [1] - 371:6 start [39] - 332:25, 346:13, 351:5, 358:1, 360:4, 364:5, 364:23, 367:7, 367:8, 368:2, 368:3, 368:6, 371:23, 375:16, 377:21, 378:7, 379:10, 390:2, 391:1, 411:7, 421:25, 428:20, 439:15, 455:4, 458:24, 460:8, 460:21, 460:23, 464:10, 465:24, 466:21, 467:9, 467:15, 470:9, 477:4, 478:24, 479:5, 480:3, 484:5 started [9] - 358:19, 372:11, 373:12, 454:24, 458:14, 466:24, 470:11, 485:12 starting [13] - 353:12, 385:15, 390:16, 396:2, 396:20, 402:13, 404:19, 416:12, 418:10, 458:18, 469:19, 484:12, 488:25 starts [12] - 343:11, 343:14, 343:15, 367:25, 389:20, 393:2, 403:8, 408:5, 419:17, 419:19, 471:16, 481:21 state [2] - 338:8, 364:18 statement [17] - 335:17, 335:18, 335:25, 344:1, 351:23, 353:21, 354:2, 356:2, 441:10, 454:5, 471:12, 472:10, 472:12, 489:11, 489:16, 489:19, 492:5 statements [5] - 411:8, 411:18, 452:9, 474:14, 492:7	states [4] - 364:8, 442:13, 475:2, 478:13 station [2] - 363:20, 363:24 stay [2] - 344:15, 389:6 staying [1] - 358:7 stays [1] - 358:4 Stead [1] - 330:17 step [1] - 399:4 Stephanie [2] - 358:20, 360:2 steps [1] - 365:2 Sternwheeler [1] - 330:2 still [36] - 333:23, 336:9, 341:21, 343:20, 343:22, 347:18, 348:5, 380:10, 389:23, 390:19, 390:20, 391:9, 392:2, 396:22, 399:16, 409:1, 409:3, 416:2, 432:10, 434:6, 436:13, 440:14, 444:12, 454:4, 455:21, 458:6, 459:14, 461:20, 462:10, 473:1, 477:8, 477:25, 478:12, 483:19, 485:6 stop [1] - 496:19 stopped [4] - 342:22, 452:18, 462:9 storage [6] - 379:15, 398:11, 400:13, 425:6, 460:17, 482:5 story [1] - 458:9 strategic [2] - 359:5, 359:21 streamline [1] - 429:21 streams [1] - 360:9 Street [1] - 330:2 strong [1] - 358:3 structural [1] - 339:17 structure [1] - 428:11 structured [4] - 374:1, 383:21, 384:4, 458:22 structures [1] - 401:13 structuring [1] - 412:14 studies [9] - 370:16, 370:19, 441:23, 451:2, 451:13, 455:2, 455:6, 481:13, 496:12	study [37] - 342:3, 428:18, 432:6, 432:9, 435:8, 435:16, 439:20, 441:13, 441:20, 442:2, 450:20, 452:6, 453:6, 453:13, 454:1, 454:8, 455:3, 455:13, 455:16, 456:24, 465:2, 466:18, 467:1, 467:2, 467:12, 467:18, 467:25, 468:7, 468:17, 469:6, 469:15, 469:22, 470:10, 470:16, 471:14, 475:22, 478:5 subject [15] - 348:22, 352:13, 368:19, 368:22, 369:13, 369:15, 386:4, 393:14, 408:9, 411:7, 411:13, 415:7, 426:8, 499:10, 499:14 submission [2] - 340:8, 351:14 submit [2] - 364:25, 431:22 submitted [2] - 365:10, 455:14 submitting [1] - 365:14 subsequent [2] - 379:12, 441:7 subsequently [2] - 346:11, 381:8 substantial [3] - 369:23, 408:17, 408:19 success [1] - 345:3 succession [1] - 358:21 sudden [1] - 459:7 suffice [1] - 432:20 sufficient [4] - 454:13, 457:10, 457:17, 480:17 suggest [1] - 396:4 suggesting [1] - 354:2 sum [1] - 481:10 summarize [1] - 387:9 summarized [1] - 452:3 summary [2] - 375:10, 375:25 SUMMARY [1] - 376:6 summer [1] - 365:5 supplementary [5] -	340:7, 351:6, 352:4, 352:14, 352:23 support [13] - 338:24, 345:6, 359:1, 399:14, 400:16, 400:19, 400:24, 401:2, 401:5, 424:15, 425:24, 502:11, 502:14 supporting [1] - 498:12 supports [1] - 398:10 suppose [4] - 386:12, 389:20, 389:21 supposed [1] - 440:3 supposition [1] - 390:16 surge [11] - 379:15, 393:9, 400:13, 402:12, 402:21, 402:23, 402:24, 403:1, 405:3, 425:7 surprise [1] - 421:11 surrounding [1] - 420:16 suspect [1] - 476:19 sustain [1] - 440:19 sustainable [1] - 452:25 sworn [1] - 432:10 synonymous [1] - 449:24 system [21] - 340:24, 341:4, 341:8, 342:3, 344:24, 349:17, 375:5, 375:6, 379:15, 396:6, 396:7, 416:18, 417:14, 425:7, 425:23, 482:5, 488:21, 490:17, 491:8, 491:13, 497:25 systems [2] - 398:12, 490:13 sytem [1] - 400:13	340:11, 340:13, 341:22, 351:6, 351:16, 354:5, 356:24, 396:19, 397:4, 452:7 TABLE [5] - 341:20, 342:14, 357:13, 505:15, 505:20 tables [1] - 444:3 tactics [2] - 422:23, 423:14 TAKING [1] - 357:16 Taku [1] - 337:25 TAKU [2] - 340:3, 505:10 talent [1] - 423:8 talks [4] - 333:1, 333:8, 389:14, 433:21 target [1] - 450:21 task [1] - 424:1 tasks [1] - 497:4 Ta'an [2] - 361:2, 429:6 team [12] - 360:17, 362:11, 398:10, 398:13, 398:16, 399:8, 400:25, 401:8, 404:22, 497:11, 502:7, 502:11 Technical [1] - 330:11 technical [5] - 397:25, 398:8, 398:15, 502:10, 502:14 technically [1] - 398:10 ten [1] - 447:24 tender [2] - 373:2, 389:18 tendered [1] - 373:5 tenders [2] - 389:24, 390:22 term [1] - 476:23 termed [1] - 381:15 terminal [41] - 435:5, 436:3, 436:18, 436:23, 437:25, 438:1, 438:10, 438:17, 439:1, 448:3, 449:20, 456:2, 457:5, 457:9, 457:15, 458:3, 458:6, 458:15, 460:1, 460:2, 462:11, 462:23, 462:25, 463:8, 463:9, 463:14, 464:25, 466:6, 474:23, 475:4, 475:18, 476:11, 476:21, 477:15,
--	---	--	--	--

T

tab [6] - 411:20,
412:1, 412:3, 452:5,
452:6, 454:8
table [17] - 341:25,
342:19, 351:8, 352:5,
353:13, 353:14,
355:18, 355:24,
357:2, 368:15,
380:22, 381:16,
398:20, 408:13, 456:5
Table [11] - 340:7,

478:16, 488:9, 488:21, 488:23, 498:14, 500:18 terminations [1] - 465:5 terminology [1] - 444:8 terms [20] - 336:23, 337:1, 359:3, 360:1, 369:9, 418:2, 420:11, 420:16, 421:11, 421:16, 428:11, 443:6, 447:7, 447:10, 447:12, 458:8, 458:10, 459:4, 467:22, 468:24 territorial [2] - 345:15, 346:4 Territories [1] - 445:3 territory [1] - 429:9 Territory [1] - 503:8 TEST [1] - 408:2 test [13] - 352:10, 381:6, 383:2, 407:19, 414:3, 418:4, 418:23, 419:5, 434:21, 473:7, 473:12, 488:19, 499:8 testing [1] - 350:14 tests [1] - 442:1 text [1] - 352:20 textbook [1] - 448:12 THAT [3] - 355:10, 385:23, 408:1 THAT'S [1] - 415:19 THE [89] - 331:3, 331:5, 331:18, 331:21, 332:13, 332:17, 337:13, 337:14, 337:15, 340:1, 340:2, 340:3, 341:17, 342:10, 342:11, 342:13, 342:14, 349:24, 355:3, 355:6, 355:9, 355:10, 355:11, 355:12, 357:13, 357:16, 357:17, 376:10, 376:18, 376:22, 376:24, 377:2, 377:4, 382:5, 385:22, 408:1, 408:2, 410:1, 415:17, 415:18, 415:19, 415:25, 416:8, 427:3, 427:6, 428:6, 428:8, 428:10, 428:19, 428:21, 432:3, 432:12, 432:16, 432:18, 433:1, 433:2,	453:14, 498:5, 498:7, 499:24, 499:25, 500:1, 501:4, 501:8, 501:13, 501:23, 502:17, 504:7, 504:8, 504:9, 504:13, 504:14, 505:4, 505:5, 505:6, 505:8, 505:9, 505:10, 505:13, 505:17, 505:18, 505:19, 505:20 theirs [1] - 461:20 THEM [2] - 376:9 themselves [1] - 478:8 therefore [4] - 348:19, 452:1, 472:24, 497:1 thermal [9] - 350:2, 350:10, 364:6, 379:14, 400:11, 425:6, 425:17, 431:12, 440:19 THEY [3] - 382:7, 500:2, 500:3 they've [2] - 390:22, 426:25 thinking [7] - 377:13, 392:4, 394:21, 394:22, 410:7, 416:2, 496:20 third [2] - 331:6, 408:4 thirdly [1] - 457:8 THIS [2] - 340:5, 505:11 thorough [1] - 491:24 thoughts [1] - 484:19 thousand [1] - 499:7 three [7] - 331:6, 331:8, 334:15, 426:20, 490:4, 501:10, 502:1 three-day [1] - 331:6 three-year [1] - 426:20 threshold [2] - 454:2, 482:10 THROUGH [1] - 376:10 throughout [6] - 358:5, 358:6, 366:7, 395:14, 424:10, 494:17 tie [1] - 341:7 tied [1] - 458:17 tight [1] - 367:15 timeframe [1] -	431:19 timeline [1] - 431:8 timelines [6] - 361:20, 361:21, 362:18, 363:9, 367:4, 404:18 timesheet [2] - 492:9, 494:24 timesheets [1] - 495:24 timing [3] - 353:25, 402:19, 418:12 TKC [1] - 366:23 Tlingit [3] - 335:14, 336:19, 337:25 TLINGIT [2] - 340:3, 505:10 TO [38] - 337:13, 337:15, 340:1, 341:17, 341:20, 342:10, 342:11, 355:1, 355:11, 357:12, 357:13, 357:14, 357:16, 376:6, 376:11, 376:20, 376:21, 382:5, 382:7, 382:8, 385:21, 385:24, 407:23, 409:25, 415:17, 427:10, 499:24, 500:1, 504:20, 504:22, 505:4, 505:6, 505:8, 505:13, 505:15, 505:17, 505:18 today [16] - 420:6, 424:18, 439:10, 439:16, 443:20, 446:18, 458:25, 459:19, 459:20, 460:21, 470:3, 478:2, 479:7, 484:22, 489:1, 498:9 today's [3] - 467:13, 482:25, 484:25 together [4] - 365:25, 366:18, 366:23, 430:18 took [2] - 431:17, 491:19 tool [3] - 435:6, 436:8, 437:7 top [6] - 334:12, 379:10, 407:6, 417:12, 489:23 topic [3] - 418:3, 449:23, 496:18 total [16] - 352:6, 352:12, 355:17, 356:8, 357:9, 368:16,	368:20, 368:23, 368:25, 384:21, 390:3, 391:2, 417:10, 417:13, 431:19, 465:22 totalling [1] - 355:22 touch [1] - 344:15 toward [2] - 341:24, 438:9 TOWARD [2] - 342:13, 505:19 towards [3] - 339:4, 406:22, 452:25 track [12] - 377:18, 378:5, 386:18, 387:12, 387:16, 395:15, 424:19, 426:10, 481:13, 490:10, 490:25 tracked [5] - 388:5, 396:9, 496:23, 497:4, 497:5 tracking [8] - 386:13, 387:22, 388:21, 396:5, 490:24, 491:3, 495:24, 496:4 tracks [2] - 387:4, 395:22 traditional [11] - 429:9, 464:15, 464:21, 465:22, 466:5, 466:10, 467:4, 467:20, 475:24, 476:5, 476:9 training [1] - 374:21 transaction [1] - 443:9 transactions [6] - 443:10, 463:10, 489:22, 489:25, 490:1, 490:5 transcribed [1] - 503:6 transcript [7] - 357:21, 411:2, 413:9, 416:11, 418:9, 433:12, 503:4 Transcript [1] - 503:1 transformer [7] - 362:5, 362:6, 438:4, 438:5, 438:7, 438:12 transformers [2] - 362:2, 362:4 transmission [11] - 339:15, 341:4, 439:6, 448:5, 450:17, 463:4, 463:5, 463:15, 475:7, 476:15, 493:2 travel [1] - 494:20	travelling [1] - 493:4 treat [2] - 415:3, 472:20 treated [1] - 442:25 treatment [2] - 479:12, 479:13 trend [1] - 467:21 tries [1] - 453:6 trigger [2] - 363:25, 479:2 truck [3] - 447:23, 448:1 true [1] - 436:17 try [8] - 369:17, 386:1, 387:9, 388:4, 404:17, 443:7, 467:13, 468:12 trying [23] - 383:1, 397:17, 422:7, 433:16, 433:22, 434:18, 440:14, 447:18, 452:8, 452:13, 454:4, 462:19, 465:24, 474:4, 482:14, 483:2, 483:19, 483:22, 486:7, 490:16, 493:13, 495:12, 497:24 Tuesday's [1] - 416:11 tunnel [24] - 378:24, 379:3, 379:21, 389:13, 392:7, 400:22, 402:20, 403:15, 404:13, 405:11, 405:14, 405:17, 407:4, 407:7, 407:18, 408:8, 408:11, 409:5, 409:7, 409:11, 409:17, 409:23, 410:14, 410:15 TUNNEL [2] - 408:1, 410:1 turbine [1] - 339:18 turn [3] - 383:8, 448:16, 469:9 twist [1] - 386:19 two [23] - 337:20, 337:21, 341:16, 350:4, 376:14, 415:2, 428:16, 429:8, 430:7, 430:9, 430:12, 431:19, 436:20, 449:23, 455:17, 456:5, 457:24, 474:4, 480:7, 489:6, 490:1, 490:4, 492:4 two-month [1] -
--	---	---	--	---

431:19 type ^[28] - 349:2, 362:22, 373:20, 375:25, 384:22, 386:15, 425:21, 435:2, 437:7, 437:13, 437:17, 438:17, 439:3, 440:12, 451:1, 459:11, 461:6, 462:25, 463:7, 464:24, 468:18, 469:10, 472:16, 481:11, 488:19, 490:14, 491:3, 501:2 Types ^[1] - 369:7 types ^[5] - 362:21, 394:15, 436:20, 448:19, 472:17 typical ^[3] - 375:13, 394:15, 468:15 typically ^[4] - 347:11, 371:6, 397:22, 445:12	337:8, 339:25, 341:15, 342:8, 342:25, 349:7, 354:25, 357:4, 376:5, 381:23, 385:20, 393:3, 405:4, 407:22, 477:11, 499:15, 499:21, 499:22 UNDERTAKING ^[19] - 331:22, 337:13, 340:1, 341:17, 342:10, 355:1, 357:12, 376:6, 382:5, 385:21, 407:23, 409:25, 415:17, 499:24, 504:18, 505:4, 505:8, 505:13, 505:17 UNDERTAKINGS ^[1] - 505:2 undertakings ^[2] - 332:1, 501:16 undertook ^[2] - 409:10, 409:13 underway ^[3] - 379:18, 423:24, 425:6 unexpected ^[3] - 434:13, 434:23, 439:25 unexpectedly ^[1] - 434:24 unforeseen ^[1] - 392:11 unique ^[1] - 454:22 units ^[6] - 362:11, 362:14, 362:22, 362:23, 363:5, 363:10 unprecedented ^[1] - 420:13 unpredicted ^[1] - 441:19 unscrambled ^[1] - 497:3 unspent ^[1] - 472:24 unusual ^[2] - 460:14, 479:10 up ^[51] - 331:17, 343:9, 344:11, 345:12, 357:22, 358:8, 361:5, 361:6, 363:6, 363:14, 368:24, 385:7, 386:3, 387:4, 400:20, 418:3, 418:6, 418:7, 433:12, 439:6, 440:24, 443:17, 446:6, 446:15, 448:7, 454:25, 456:6, 458:10, 458:14, 459:10, 459:11,	460:24, 464:5, 465:14, 466:19, 468:13, 470:11, 472:19, 473:19, 479:7, 481:18, 488:17, 492:6, 496:1, 496:5, 496:6, 496:24, 497:9, 497:10, 497:13, 500:25 update ^[4] - 339:7, 339:23, 348:10, 496:11 Update ^[2] - 334:21, 334:24 UPDATE ^[3] - 340:1, 357:12, 505:8 UPDATED ^[5] - 342:14, 355:1, 357:15, 409:25, 505:20 updated ^[19] - 341:22, 341:25, 350:17, 351:6, 351:8, 354:5, 354:14, 356:1, 356:20, 357:5, 407:21, 409:6, 409:10, 409:13, 409:14, 409:17, 409:23, 410:5, 410:8 updates ^[1] - 426:25 upfront ^[1] - 395:17 upwards ^[1] - 393:11 urban ^[1] - 450:13 urgency ^[1] - 422:22 useful ^[2] - 396:6, 447:9 uses ^[1] - 461:19 UTILITIES ^[1] - 415:18 utilities ^[18] - 422:17, 439:22, 444:24, 445:9, 448:16, 449:3, 449:8, 449:11, 450:13, 451:2, 454:14, 461:19, 465:9, 480:9, 489:12, 489:17, 490:2, 497:6 Utilities ^[3] - 330:1, 364:2, 364:14 Utility ^[1] - 447:16 utility ^[27] - 438:16, 439:13, 440:5, 445:4, 445:6, 445:7, 450:25, 451:12, 453:1, 454:15, 460:10, 461:23, 469:7, 469:10, 469:24, 470:6, 471:7, 473:4, 473:5, 480:19, 480:20, 490:12,	491:9, 492:11, 492:25, 498:1 utility's ^[3] - 450:10, 450:11, 451:6 utility-specific ^[1] - 454:15 utilized ^[1] - 389:3	504:12 viability ^[2] - 333:6, 343:21 viable ^[3] - 347:18, 347:19, 347:24 Vice ^[1] - 330:8 videoconference ^[2] - 432:23, 504:12 view ^[7] - 347:15, 371:21, 409:1, 441:21, 445:25, 471:9, 495:2 viewed ^[1] - 493:24 views ^[3] - 347:15, 400:4, 441:5 VOLUME ^[1] - 504:3 volume ^[4] - 411:2, 416:11, 433:13, 447:17 Volume ^[2] - 330:5, 428:1
U ultimate ^[3] - 343:21, 353:2, 480:5 ultimately ^[1] - 466:25 uncertainty ^[4] - 343:20, 353:24, 422:9, 422:24 uncommon ^[3] - 439:3, 448:23, 490:12 under ^[24] - 333:14, 334:20, 334:23, 343:10, 346:20, 353:17, 364:14, 372:8, 373:6, 392:25, 435:3, 435:4, 436:1, 436:2, 437:12, 443:6, 451:7, 451:17, 462:1, 467:7, 467:17, 476:9, 479:22 underground ^[1] - 460:17 undersigned ^[1] - 503:3 understood ^[5] - 373:9, 384:12, 436:7, 460:5, 471:19 undertake ^[6] - 354:14, 356:20, 370:25, 372:18, 380:21, 483:15 undertaken ^[1] - 423:19 undertaking ^[20] - 331:13, 336:14,	W wall ^[1] - 423:8 wants ^[1] - 432:15 Ward ^[1] - 330:11 Wareham ^[8] - 378:23, 379:3, 379:21, 389:12, 400:22, 403:2, 425:13 warranted ^[1] - 401:16 WAS ^[1] - 415:18 watch ^[3] - 344:16, 345:2 water ^[2] - 392:19, 393:4 watts ^[1] - 417:13 ways ^[3] - 367:3, 472:18, 474:8 Webpage ^[1] - 369:6 weekend ^[1] - 368:1 weeks ^[1] - 366:24 welcome ^[1] - 331:5 WELL ^[1] - 355:7 well-managed ^[1] - 421:18 well-prepared ^[1] - 502:5 WHAT ^[7] - 337:13, 341:17, 342:10, 382:6, 505:4, 505:13, 505:17 WHEN ^[2] - 415:17, 500:3 whereas ^[4] - 425:25, 445:12, 462:25, 465:4 WHETHER ^[3] -			

337:15, 500:2, 505:5 WHITEHORSE [1] - 355:3 Whitehorse [49] - 330:3, 350:20, 350:21, 350:23, 351:1, 351:2, 351:10, 351:18, 352:7, 352:11, 352:19, 352:25, 353:14, 353:18, 353:19, 353:22, 354:6, 354:16, 356:21, 357:7, 357:19, 360:12, 360:21, 364:21, 366:22, 367:8, 368:25, 379:1, 379:23, 401:1, 419:11, 420:7, 420:24, 421:13, 423:5, 429:15, 429:24, 430:2, 430:7, 430:16, 431:9, 431:14, 431:23, 440:20, 443:15, 500:14, 500:23, 500:24, 503:8 whole [10] - 357:24, 374:6, 381:20, 396:5, 420:13, 424:10, 442:9, 454:1, 492:17, 494:10 whoops [1] - 446:7 wide [2] - 450:5, 450:16 wide-ranging [1] - 450:16 WILL [1] - 500:2 winter [10] - 344:24, 349:13, 349:14, 349:17, 358:23, 359:4, 359:6, 359:8 wire [1] - 448:7 wish [1] - 423:14 WITH [1] - 376:9 witness [1] - 428:12 witnesses [3] - 466:7, 501:6, 501:8 WON'T [1] - 408:1 wondering [5] - 347:21, 365:8, 393:7, 397:8, 499:19 Wood [1] - 330:2 word [3] - 369:9, 377:20, 416:15 words [3] - 390:8, 417:22, 452:13 WORK [2] - 355:2, 376:8 work-in-progress	[9] - 333:17, 334:7, 334:14, 340:10, 351:10, 351:16, 354:4, 354:11, 354:15 WORK-IN-PROGRESS [1] - 355:2 workload [5] - 357:22, 358:4, 358:7, 358:11, 358:12 works [2] - 376:2, 494:16 WORKS [1] - 376:9 world [2] - 361:20, 420:14 WORONIUK [5] - 498:7, 498:8, 500:4, 501:3, 504:14 Woroniuk [2] - 330:9, 498:16 worth [1] - 478:5 write [1] - 343:9 write-up [1] - 343:9 written [6] - 331:13, 454:3, 477:21, 501:16, 501:17 WRITTEN [2] - 331:22, 504:18	344:20, 354:18, 354:20, 359:6, 368:7, 413:19, 418:4, 418:23, 419:5, 421:9, 426:22, 447:24, 455:22, 456:9, 456:12, 462:8, 467:7, 471:21, 472:11, 476:14, 483:6, 483:24, 484:9, 484:23, 489:23, 490:1, 490:2, 491:23, 496:20, 496:21, 497:7 YEB [1] - 453:21 YEC [110] - 333:22, 334:2, 334:5, 335:14, 335:23, 337:15, 338:18, 339:3, 340:2, 340:9, 340:16, 343:6, 344:9, 346:21, 346:24, 347:1, 347:4, 347:15, 347:20, 347:23, 350:6, 351:1, 351:17, 351:20, 351:24, 352:5, 358:11, 358:12, 358:15, 358:17, 364:16, 364:20, 368:5, 372:11, 374:8, 375:19, 376:2, 376:7, 376:9, 377:15, 377:16, 377:20, 378:2, 378:6, 379:5, 380:9, 384:4, 384:5, 384:17, 386:1, 386:5, 387:2, 393:21, 393:23, 393:24, 394:16, 394:18, 394:23, 395:4, 395:5, 397:18, 398:5, 398:22, 399:1, 400:2, 401:12, 403:5, 406:13, 408:18, 410:4, 410:7, 411:19, 411:23, 412:3, 412:11, 418:14, 420:9, 420:11, 420:20, 421:6, 421:15, 441:5, 456:2, 460:1, 460:7, 461:1, 461:21, 462:23, 463:1, 470:3, 472:10, 474:19, 474:20, 475:2, 475:18, 475:23, 477:11, 478:13, 478:23, 479:18, 482:9, 489:7, 489:13, 492:7, 502:7, 505:5, 505:8 YEC's [33] - 350:3, 350:15, 350:17,	350:25, 351:23, 354:8, 368:6, 369:17, 369:22, 370:1, 371:21, 377:12, 383:12, 386:2, 388:21, 392:19, 394:12, 395:1, 407:3, 441:11, 441:21, 444:4, 446:23, 456:23, 464:13, 466:13, 468:21, 479:24, 482:15, 483:3, 489:12, 489:17, 494:3 YEC-YUB-65D [1] - 433:14 Yee [2] - 330:17, 502:4 YESAA [4] - 366:20, 366:21, 429:15, 430:3 YESAA's [1] - 365:10 YESAB [5] - 363:25, 364:12, 365:6, 431:5, 431:22 yesterday [4] - 331:14, 357:20, 358:20, 433:5 YOU'VE [1] - 407:25 YUB [7] - 335:4, 335:17, 364:13, 444:17, 471:14, 474:17, 481:20 YUB-54A [1] - 411:12 YUB-65M [1] - 443:23 YUB-69 [1] - 355:15 YUB-70 [2] - 407:1, 408:10 YUB-72 [1] - 396:16 YUB-8 [1] - 351:1 YUB-8A [2] - 353:11, 363:16 YUB-YEC-1-48 [1] - 382:17 YUB-YEC-1-8 [1] - 419:10 YUB-YEC-71 [1] - 383:8 YUKON [1] - 415:17 Yukon [104] - 330:1, 330:3, 330:16, 332:3, 333:3, 333:13, 335:8, 336:24, 338:7, 340:25, 341:1, 341:2, 341:8, 342:2, 342:4, 343:18, 343:23, 344:4, 347:8, 347:12, 349:12, 349:17, 360:21, 364:1, 364:9,	364:24, 365:1, 366:19, 367:25, 382:13, 383:18, 383:19, 399:5, 399:9, 402:3, 402:10, 403:10, 408:15, 412:12, 412:15, 412:18, 412:22, 412:24, 422:11, 428:23, 429:15, 429:24, 430:2, 430:6, 430:8, 431:3, 431:7, 431:17, 431:21, 432:22, 438:25, 440:18, 443:9, 445:1, 449:2, 450:21, 451:20, 452:15, 452:16, 453:21, 454:3, 454:21, 457:25, 458:11, 459:16, 463:4, 463:14, 464:20, 464:23, 467:1, 467:12, 468:16, 469:21, 470:7, 471:1, 471:20, 473:11, 473:15, 474:10, 476:1, 476:14, 479:12, 480:22, 481:21, 481:22, 487:24, 488:19, 490:9, 490:13, 491:11, 491:19, 492:12, 493:22, 496:13, 496:17, 500:6, 503:8, 504:6, 504:11 Yukon's [1] - 341:4
Y				
YEAR [3] - 340:5, 408:2, 505:11 year [44] - 335:2, 339:8, 346:5, 350:7, 355:17, 362:15, 362:16, 365:15, 365:19, 367:18, 404:2, 407:11, 407:19, 410:13, 426:20, 430:21, 438:18, 440:11, 445:21, 446:9, 446:17, 451:23, 456:8, 456:11, 456:16, 456:25, 458:12, 460:7, 462:13, 463:10, 465:5, 465:12, 465:21, 465:23, 474:2, 477:2, 479:11, 484:23, 490:4, 496:10, 497:17, 499:5 year-end [1] - 446:17 yearend [2] - 334:16, 351:15 YEARS [2] - 355:6, 355:9 years [34] - 334:15, 337:20, 337:22,				
Z				
zero [10] - 346:14, 388:22, 452:20, 469:19, 470:8, 473:11, 474:13, 477:21, 490:2 zoning [1] - 361:9				