MANITOBA PUBLIC UTILITIES BOARD

re:

MANITOBA HYDRO

2023/24 and 2024/25

GENERAL RATE APPLICATION

Hearing

Before Board Panel:

Robert Gabor, KC	- Board Chairperson
Marilyn Kapitany	- Board Vice Chair
Carol Bellringer	- Board Member
Hamath Sy	- Board Member
George Bass, KC	- Board Member

HELD AT:

Public Utilities Board

400, 330 Portage Avenue

Winnipeg, Manitoba

June 5th, 2023

Pages 2999 to 3273

APPEARANCES

Bob Peters	)Board Counsel
Sven Hombach	)
Brent Czarnecki	)Manitoba Hydro
Odette Fernandes	)
Deanna Hiebert (np)	)
Gwen Muirhead (np)	)
Matthew Ghikas (np)	)
Byron Williams	)Consumers Coalition
Chris Klassen (np)	)
Hannah Taylor (np)	
Antoine Hacault	)MIPUG
Melissa Beaumont	)
Carly Fox (np)	)Assembly of
Emily Guglielmin (by TEAMS)	)Manitoba Chiefs
Markus Buchart	) MKO
Thomas Reimer	) GSS and GSM
Robert Walichnowski (np)	) customer classes

APPEARANCES

William Haight (np)	) Daymark Energy
Bradley McClelland (np)	) Advisors

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--- Upon commencing at 9:03 a.m.

THE CHAIRPERSON: Good morning, everyone. I hope you all had a lovely weekend. We are here for an exciting day of depreciation, and I'm going to turn it over to Mr. Hombach.

MR. SVEN HOMBACH: Thank you, Mr. Chair, and thank you for building up the excitement early on in the process.

Today is the beginning of week 3 of the hearing, and it might be the last week of oral evidence. And the process to be followed today is a bit different from what we've encountered so far.

The subject today is depreciation, and the evidence is being presented by way of concurrent evidence, which means a joint witness panel of several independent experts.

That process was established by the Board in its fourth procedural Order which is Order 42/'23, where it held that depreciation-related evidence is to be delivered by way of concurrent evidence, meaning a witness panel that includes the depreciation experts of each party.

The parties are requested to arrange for a discussion between the respective depreciation experts ahead of the hearing in an attempt to find common ground and narrow the areas of disagreement.

To that extent, the Board has made available a facilitator for the province -- for the process, and I would like to welcome to the hearing room Mr. Ian Innis of Elenchus Research Associates who has been working diligently with Manitoba Hydro and with several Interveners to narrow down the areas of disagreement, find areas of mutual agreement, and put together an issues document which has been filed on the Board record as PUB Exhibit 20.

As a procedural matter, the -- the issues document refers to the views of certain parties. I wanted to make it clear for the record that those are the views of the independent experts working for or retained by the parties. The parties are, of course, at liberty in their closing submissions to adopt or not adopt those views.

There are a number of witnesses that will be speaking today, and some of them have been sworn before; others have not been. I am advised that Manitoba Hydro will have on the panel Michelle Hooper who has not previously been sworn.

And Manitoba Hydro also has made available Mr. Dane Watson of Alliance. He is a depreciation consultant that authored a depreciation study for Manitoba Hydro.

On behalf of MIPUG, we have Mr. Bowman on the witness panel, and of course we have Mr. Ian Innis as the facilitator.

Four (4) people have not previously been sworn in. Those are Ms. Hooper, Mr. Bowman, Mr. Innis, and Mr. Watson. So before we turn it over to Mr. Innis, I would like to ask Ms. McMillin to swear those witnesses in.

THE CHAIRPERSON: Sorry. Can I just ask you, Mr. Hombach, the document that was on the screen, was that intended to be the PowerPoint presentation or the written? Because it's a different -- that's a different document than the PowerPoint presentation, and I don't know if you wanted the PowerPoint presentation on the screen as Exhibit 20, or if you want this document as Exhibit 20.

MR. SVEN HOMBACH: So -- so that is a fair point, Mr. Chair. The -- the issues document that sets out the positions and views of the experts in detail in PUB Exhibit 20.

THE CHAIRPERSON: Okay.

MR. SVEN HOMBACH: However, Mr. Ian (sic) this morning is also going to provide a high-level overview of that document by way of the PowerPoint presentation which I believe has been entered into the record as PUB Exhibit 25.

--- EXHIBIT NO. PUB-25: Depreciation Presentation - June 5, 2023.

THE CHAIRPERSON: Okay. Thank you.

MR. SVEN HOMBACH: Perhaps on that note, if I could briefly take the parties to the agenda for this morning which was on screen previously, the -- the process today is as follows:

Mr. Innis is going to present the issues document at a high level using the PowerPoint presentation. The various parties who participated will then have fifteen (15) minutes to explain their own positions, and they have provided PowerPoint presentations as well. Once that is completed, we will launch into cross-examination.

Ms. McMillin...?

MANITOBA HYDRO DEPRECIATION PANEL:

IAN INNIS, Sworn

POSITION OVERVIEWS:

DUSTIN MADSEN, Resumed
PATRICK BOWMAN, Sworn
ALASTAIR FOGG, Resumed
MICHELLE HOOPER, Sworn
DANE WATSON, Sworn

THE CHAIRPERSON: Mr. Hombach...?

MR. SVEN HOMBACH: Thank you, Mr. Chair. The witnesses for this morning have been sworn in. Procedurally, I will ask you to turn the microphone over to Mr. Innis shortly.

I just wanted to indicate two (2) brief housekeeping matters. We've agreed with counsel for MIPUG that we will wait with running through Mr. Bowman's qualifications until he is expected to testify on Friday rather than doing it today with a joint panel.

I've also been advised by Mr. Czarnecki that Manitoba Hydro would like to quality Mr. Watson as a witness, but I would suggest we do that once the microphone gets turned over to Manitoba Hydro after Mr. Innis has completed his presentation.

With that, I would ask that we turn it over to Mr. Innis.

--- EXHIBIT NO. PUB-26 CV of Ian Innis - June 5, 2023

MANITOBA HYDRO - PRESENTATION BY MR. IAN INNIS

MR. IAN INNIS: Thank you, Mr. Hombach. Good morning, Panel. My name is Ian Innis and I'm a consultant with Elenchus Research Associates. And the purpose of my presentation today is to provide information on the depreciation issues document.

The document contains information on the background of a -- of a facilitation process. It also has information on alternatives that were developed through the course of the facilitation process. And there's other issues that are identified, as well.

My role was to serve as facilitator and not to participate activity in discussions. It was bring parties together, arrange meetings, and with a view towards coming up with a common understanding of what the depreciation issues are and, where possible, to seek common ground and resolution.

This issue goes back over ten (10) years. And in Board Order 43/'13, which was issued on April 26, 2013, there was findings with respect to depreciation.

At that time, the primary reason for a change in depreciation was due to the implementation of international financial reporting standards. And, at that time, Manitoba Hydro proposed to implement a equal life group methodology or depreciation expense.

A key finding from the proceeding was that the Board was concerned that not enough information was provided to assess the true impact on ratepayers of a switch to the Equal Life Group, and that's in section 6.2, page 18, of that Board Order.

So, we are now ten (10) years down the road, and depreciation issues are still outstanding. There's been hearings in the interim, and those hearings have moved the issue forward. And now we -- we're today with depreciation issues that are many and complex.

And so, the Board asked the Elenchus Research Associates to help facilitate a process. And that was in, as Mr. Hombach mentioned, Board Order 42/'23. And in that Board Order 42/'23 there were six (6) primary issues identified.

It's important to note that in the proceedings so far there are well over one thousand (1,000) pages of evidence, and it is a very complex issue. And in order to focus the deliberations, these six (6) issues were identified. And let me enumerate those issues because those issues are the subject of the sessions that I facilitated.

The issue number 1 is use of an IFRS compliant depreciation methodology for rate-setting purposes.

Issue number 2, the use of the average service life procedure as opposed to the Equal Life Group procedure.

And I should mention the terminology "average service life," which is ASL, is used interchangeably with average life group, which is ALG. It's -- they're very -- they are the same thing. It's just in different context those two (2) different names are used.

Issue number 3, the use of remaining life technique as opposed to the whole life technique.

Issue number 4, the required level of componentization.

Issue number 5, the treatment of interim gains and losses.

And issue number 6, the establishment and disposition of deferral accounts. This is the high level summary of the issues which were deliberated.

And through the course of the deliberations, each of those was unpacked in terms of definitions, what that means. And the issues document itself further describes the -- in detail what each of those issues refer to.

In this presentation this morning, we'll be touching on these at a high level. And I would refer you to the actual depreciation issues document for further information.

The other issues with respect to depreciation are to be dealt with through written evidence. And so, as part of the oral hearing, this is the focus of -- the six (6) issues I just mentioned are the focus of the -- of the conversation today.

The parties requested, by a Board procedural Order, to arrange for their appropriate and their respective depreciation experts ahead of the Hearing in order to help find common ground and to narrow the areas of disagreement.

And to that effect, Elenchus Research, who I'm part of, is the -- I served as the facilitator and -- and that's my involvement in this process.

I'd like to give a little bit of background on the process that was followed for I understand that this is somewhat unique in the proceeding and, at a high level, I just wanted to go over what some of the steps were that we followed to -- to have this process. And then, I'll discuss what the results of the process were.

At the outset, it was agreed that the facilitation process -- also referred to as a technical conference or a technical meeting -- these would be informal discussions, without prejudice, not binding, and non-transcribed. And I think you get the sense from that that we were trying to create an environment that would be a free exchange of information, rather than in a formal hearing session with positions of parties being defended. This was an open -- open discussion and it was informal. And I served as facilitator of that.

Just so you know who the teams were, or the folks were involved in the facilitation process, for Manitoba Hydro, it was led by Alistair Fogg, with Michelle Hooper. And there were also support staff from Manitoba Hydro there as well.

Emrydia Consulting had Dustin Madsen who -- and Dustin is a witness for GSS -- witness -- I should say an expert for GSS/GSM.

Patrick Bowman as the expert for MIPUG.

And Mr. Darren Rainkie for the -- the Coalition.

Unpacking that process a bit further, there were a series of three (3) technical conferences. I'd like to describe what happened at each of those -- those three (3).

The first technical conference involved counsel and it also involved other Interveners in this proceeding as well. And that was more of a broad-based discussion taking place at that time.

As a result of that broad-based discussion, it was understood that there are certain parties that have a more deeper, more thorough interest in depreciation issues. And it was agreed that those parties would continue to meet to focus on sorting out some of these issues.

So at the second technical conference, there were no -- no counsel involved. It was the deprecation experts. The other parties that chose not to participate in the depreciation technical conference were not there and so it remained the parties that had a -- what I could -- perhaps a -- is a keener interest in diving into deprecation issues.

I am pleased to report that throughout the -- the process, there was a free exchange of information, a genuine desire to seek and understand each other's positions. A very open discussion took place and each meeting -- the subsequent meetings on April the 18th and May the 2nd -- and as you can see by those dates, they are quite compressed. We had a schedule that was established and agreed to by the parties. And all parties met their responsibilities with respect to that schedule in terms of preparing information, reviewing information, providing input. And it was a very -- very cooperative process.

And to the point where we did put together a joint issues document. The pen on that document was held by Manitoba Hydro from a pointed view of starting the process. That document -- the deprecation issues document was circulated amongst all parties and went through iterations with the participation of those parties.

And at the end of it, the -- the document is something that all parties have agreed to submit on the record.

Not all the parties agree with every position, but I -- we believe that the document fairly represents the positions of the parties and that document is filed as PUB-20.

So, enough of the process, let -- let's talk for a few minutes about the areas of agreement.

You will recall that there six (6) areas of focus that the Board asked parties to come to some sort of understanding on. And of those six (6) areas, there are four (4) areas where there is, I would call it, a consistency of opinion and let me enumerate those -- those areas.

The first area is, parties agree that the Manitoba Hydro is preferable to apply the same method of depreciation for both financial reporting and regulatory rate setting, common agreement on that.

There is common agreement on the fact that the whole life method of depreciation should be -- continue to be used -- the whole life technique I should say, can -- should continue to be used for the calculation of depreciation and that is the basis of depreciation Manitoba Hydro has used in the past and all parties agree that it would be appropriate to continue with that methodology.

It was also understood that judgment is required in the area of determining the appropriate level of componentization and it -- it should be based on significance and materiality.

And, I'll be talking in a few more minutes about componentization because that remains an area of disagreement, not the fact the number of components could be reduced, it's what is the appropriate number of components the depreciation should -- should be used for calculating depreciation expense.

The other area of agreement was the amortization period for depreciation needs to be established for regulatory deferral accounts. And this is consistent with IFRS treatment on rate regulated accounting. It -- it's very important not to have outstanding balances for deferral and variance accounts, with no planned or expectation of disposition. It -- it puts those balances at risk from a -- a -- a financial accounting point of view and so all parties agreed, it is important to establish a disposition and -- or amortization period for -- for those accounts.

I'd like to unpack the componentization issue just a little bit further and, as I mentioned, the parties agree that the componentization level could be reduced and we have a varying degree of numbers of asset components and they range from under the ELG method from three hundred and seventy-one (371) components for Manitoba Hydro's assets, in the IFRS average service life procedure, seventy hundred and eighty-one (781) components.

So, the views of the parties are that somewhere within that range there lies an appropriate level of componentization and different parties have different opinions as to what the resulting number may be.

And, it was also agreed that this area needs to have further refinement and further review. There are certain positions established right now and all parties are willing and open to consider that issue being refined -- be refined further; based on the significance of the components and also the materiality.

So, despite best efforts and -- and goodwill amongst all the parties to the technical conference, there remain areas where there is not agreement. And there are two (2) main areas where there is a -- a difference of -- of opinion, and parties will be discussing those differences at -- after my presentation.

The main area is to do with the approach for -- using average life group or equal life group and the parties agree, fundamentally, that both are rational and a systematic approach to calculating depreciation. Both are implementable, but where parties differ is on their -- their merits, the -- the drawbacks or the benefits of the approaches and whether they lead to just and reasonable rates.

So, parties remain at different positions with respect to the -- which one is preferable and which should be used for rate setting for Manitoba Hydro and they're also -- the other area where there's not full agreement is to do with the approached used for calculating gains and losses. And gains and losses are inextricably linked to the methodology used for depreciation, whether ELG or Average Life Group.

The -- the fundamental issue there is that the Utility is entitled to, and should, recover all asset costs over the asset service life. What gains and losses refer to is the fact that what is the pattern of the recovery of those gains and losses and also, similarly, the ELG and the ALG approaches depreciation. No one is disputing that Manitoba Hydro should recover all of their depreciation expense. The real issue comes down to what is the pattern of recovery, essentially, over what -- over what period of time.

To put something in perspective with respect to the ALG and ELG methodology, and this is on page 20 of the Depreciation Issues Report, is that, based on calculations provided by Manitoba Hydro, through their -- their modelling, the ALG approach is, on average, $15 million lower, year over year, compared to depreciation expense under the ELG approach and that's something that's on the record in that proceeding. So, the -- there is no argument or difference of opinion with respect to the fact that ALG depreciation expense is lower in the -- in the short run.

So, with that information on the table, the parties said, what do we do with that and, when you look at the number of different elements involved, there could be no end of combinations and permutations -- and permutations to solve this -- this issue. What the parties worked diligently to do is to come up with alternatives and present these alternatives as a package to the Board.

There are four (4) alternatives and I would like to take you through those four (4) alternatives and un -- unpack them just a --a little bit.

Two (2) alternatives, and these are primary alternatives. They have it combine -- they're Alternatives 1 and 2, and they deal with different combinations of how to treat ELG, ALG, gains and losses and -- and deferral accounts, and I'll unpack those in a couple more slides. So, Alternatives 1 and 2 are similar in nature, but have different -- different futures.

Alternatives 3 and 4, and these alternatives were presented by the -- the Coalition and take a slightly different perspective, and the perspective on Alternatives 3 and 4 is that there is not sufficient information on the record, so far, in order to make a final determination of depreciation expense, and Alternatives 3 and 4 present different views and how to -- how to deal with that circumstance and, so, I'll take you through that in a minute.

Just to let you know that Alternatives 1 and 2, similar in nature, 3 and 4 take a different -- a different progress.

So, Alternative Number 1, what is it? Alternative Number 1 is, essentially, the proposal that Manitoba Hydro put forward in their pre-filed evidence, and the -- the main features of Alternative Number 1 is to, first of all, go with the ELG method of calculating depreciation expense.

Also, in Alternative 1 is to cease gain -- calculating or determining gains and losses and, also, to amortize the deferral account balances right away and because there is a financial impact to implementing ELG, meaning it -- there is higher depreciation expense, phase in that impact over a 15-year period. So, there would be a -- a smoothing effect.

So, that's essentially Alternative Number 1 and I -- I should mention that the -- the -- the slides that I'm going through are the -- the high level version of these alternatives. The depreciation issues document gives a fairly comprehensive understanding of a side-by-side comparison of these -- these alternatives for further information.

Alternative Number 2 says, go with the AL -- ALG method of calculating depreciation expense and maybe put in a final process when -- not totally comfortable with the number of components associated with ALG, but perhaps what we should do is reduce and refine the componentization level of detail.

Under this method, we would continue with the gains and losses deferral account and continue depreciation until the ALG transition takes place, because under Alternative Number 2, as it's currently described, it was thought that it would take longer to determine, or to fully implement the ALG Method. It could take up until April 1st, 2023 -- or

2026 to implement the ALG methodology. In the meantime, starting September 2023, commence deferral -- commence amortization of the deferral account balances.

So, in summary, Alternative Number 2: use ALG; continue to defer gains and losses but not fully implement it until April 1st, 2026, because there's further refinement needed with the componentization.

As I mentioned, Alternatives 3 and 4 take a -- a slightly different approach. And Alternative 3 says, Continue with what you're doing right now, which is the C-GAAP ASL basis, keep going on that path on an interim basis without ammor -- amortizing existing deferral accounts and wait until a later proceeding to fully address this issue. In the meantime, continue with gains and losses with no amortization and just wait until next time.

Alternative 4 is a slightly different take on Alternative 3 and the -- the main difference is to commence amortization of deferral accounts until -- defer them, continue to -- continue the previous ASL and commence amortization of deferral accounts until the PUB opines on them.

And then also what we'll do is

Alternative Number 4, commence amortization of balances effective September 2023. So, amor -- under Option Number 4, amortize some of the accounts a bit sooner as compared to Alternative Number 3.

So, you might be saying, well, where are we at with these alternatives, even 4 is a bit -- a bit too confusing. Just to put this in perspective, Manitoba Hydro considers Alternative 1 to be preferable. However, also they also think that Alternative 2 is viable. So Number 1 preferable, but Number 2 is viable.

MIPUG and GSF -- MIPUG and GSS/GSM recommend Alternative Number 2.

And the Coalition recommends Alternatives Numbers 3 or 4.

And -- and I think it's important to -- to know that the nature of the -- the technical conference was not a -- it was not a negotiation and it was not coming to an agreed negotiated outcome.

What it does is it identifies -- develops alternatives and identifies options. And as an effort to be helpful to the Board by trying to boil down where have we landed on these issues.

Parties did their best to come to some common understanding and it's just mentioned the --

the two (2) main issues relate to the depreciation, ELG or ALG, or componentization.

I want to summarize the comp -- the issue that the Coalition raised because Alternatives 3 and 4 are -- are different. And there's -- their focus would be -- is on the need to have further refinement of componentization in order to be fully in compliance with the Board's PUB directive.

And the -- it's important to note, as well, that in the depreciation issue doc -- issues document, all the positions of the parties to the technical conference are summarized on pages 28 to 35. So, that summarized the parties positions in detail, which I'm sure they'll be elaborating on later this morning.

Also, in appendix A of the depreciation issues document is a line-by-line comparison of Alternatives Number 1 and Alternatives Number 2 in more detail in what I provided here today.

And in the depreciation issues document as well, there are seventeen (17) pages of financial impact analysis of -- on pages 40 to 47, which present full financial statements and impacts over a, I believe, it is a twenty (20) plus year period of the implications of alternatives 1 and 2.

Now, I want to conclude with a few other observations, and it's important to note that depreciation cannot be taken in context -- out of context from the overall rate proceeding.

Depreciation does have an impact on rates and financial ratios, and so part of the work that was done that's included in the document, it provides a comfort level on saying what -- if we decide something on depreciation, what does that mean? And what does it mean in terms to the debt-to-capitalization target in '39/'40 which is a requirement?

And the observation and the information in the report is that, with or without the deferral count, without -- without the deferral gains and losses for both ALG and ELG, it's the same debt-to-capitalization target continues. So no overall impact regardless of the methodology that you choose with respect to the capitalization target.

There's a minimal change in the net debt since depreciation is a cash item, so borrowings would not increase. And the treatment of gains and losses does not significantly impact the proposed rates. So, this is taking the macro view and macro financial considerations.

Also, when the depreciation -- depreciation procedure is isolated, despite the difference in cumulative net income between ALG and ELG, and assuming a constant rate path, the same target debt-to-capitalization ratios would be achieved by '29/'40 (sic).

And also, when we look at rates by customer class, the selection of depreciation procedure does not significantly impact the proposed rates by customer class.

So I'd like to summarize the work of the -- the team on the technical conference to say that the -- the process went well. It provided the parties a forum to understand and to collaborate and find -- find common ground.

And as facilitator, my hope is that the resulting depreciation issues document and this presentation have helped the Board to focus the issues with respect to depreciation. Thank you. And I'll be pleased to take any questions.

THE CHAIRPERSON: Okay. Mr. Innis, I -- I've got a question about the process. I note that Mr. Rainkie, known from the Coalition, is on this panel. Should we be reading something into that?

MR. IAN INNIS: Perhaps Mr. Hombach

can address that.

MR. SVEN HOMBACH: Yes, Mr. Chair. I don't think the Panel should be reading anything into it. I've had the discussion with counsel for the Coalition. They agreed that, while Mr. Rainkie participated, he would not be providing evidence to the Panel on depreciation today.

So the Board should not -- there's no suggestion that the Board should draw any adverse inferences from that, but ultimately Coalition indicated that they weren't planning to have Mr. Rainkie on the stand.

I'd invite Mr. Williams to comment as well.

DR. BYRON WILLIAMS: Thank you, Mr. Chair and members of the Panel. My recollection would be slightly different.

I just indicated we were agnostic, we -- whether or not Mr. Rainkie appeared. From our perspective, we thought the focus of the -- the Panel would -- would be on these witnesses, so we -- we said we were prepared to present him, but we were not anxious or looking forward. You know, we were -- we would go with the will of the Board on that.

THE CHAIRPERSON: Okay.

DR. BYRON WILLIAMS: Mr. Chair, just while --

THE CHAIRPERSON: Yeah.

DR. BYRON WILLIAMS: -- I'm on the bike -- on the mic -- I will not raise this in cross; I will in closing. Our client is -- is uncomfortable with the use of the word 'parties' as presented by the facilitator.

I -- I think it's understood that this agreement is really between Manitoba Hydro, as well as independent experts re -- retained by -- by groups. So we just want -- want -- we're not going to belabour that today, but we are uncomfortable with the use of the word 'parties' as presented by the facilitator.

THE CHAIRPERSON: Okay. We'll note that. I guess the question, Mr. Williams, is: It appears the position of the Coalition is different than the other experts on specific issues. They will be addressing, I -- I take it, their views on these issues.

If we have a question in relation to the views of the Coalition on those issues, or the views I guess of -- sorry, of the -- of Mr. Rainkie as -- as the expert who participated in the process, how do we deal with those?

DR. BYRON WILLIAMS: Thank you. And I'll -- I'll just reiterate that the -- the position articulated by Mr. Rainkie may be different from the position -- it's not the position of the Coalition. The Coalition obviously has an open mind on these issues, as we always do with independent experts.

If our -- our clients certainly believe that the views of Mr. Rainkie were well represented in PUB-20, but if the Board want -- has any questions of Mr. Rainkie, we'd be happy to do that on a time-sensitive basis by -- by undertaking.

THE CHAIRPERSON: Okay. Thank you. Does the Panel have any questions? No? Not yet. Not yet.

Okay. That's great. We will -- we'll proceed with -- I guess with Manitoba Hydro and Mr. Fogg and Ms. Hooper.

MR. BRENT CZARNECKI: Mr. Chairman, it's Mr. Czarnecki over here in Intervener row. Before we turn the microphone over to Mr. Fogg and Mr. (sic) Hooper, I think I'd just like to qualify Mr. Watson --

THE CHAIRPERSON: Right.

MR. BRENT CZARNECKI: -- this morning.

THE CHAIRPERSON: Yeah.

MR. BRENT CZARNECKI: And Ms. Schubert has pulled up his CV which was attachment to the PUB/Manitoba Hydro 1-140(b). And it's up on the screen.

So I would just ask Mr. Watson to quickly review his extensive experience and expertise in depreciation matters for you so you have it, and then we can proceed with Mr. Fogg and Mr. (sic) Hooper's presentation.

THE CHAIRPERSON: Certainly. Thank you.

CONTINUED BY MR. BRENT CZARNECKI:

MR. BRENT CZARNECKI: Thank you.

MR. DANE WATSON: Well, good morning. I'm sitting here in the back corner. My name is Dane Watson. I'm managing partner of Alliance Consulting Group. I -- I guess my background, I graduated in 1985 with an electrical engineering degree. I later went on and got my MBA. I am a professional engineer and a certified depreciation professional.

For the first twenty (20) years of my career, I worked for Texas Utilities, or TXU. It's changed names a few times, but it was at the time one (1) of the largest vertically integrated utilities in the US.

For the first ten (10) years, I worked in the engineering areas, and then later moved, for the last ten (10) years, managing much of the accounting back shop worldwide for them, including fixed asset accounting.

During that time at the beginning of my career, I started working in the depreciation area, as well as other areas. Back at that point, engineers did more of the depreciation studies than -- than they do now, including developing the depreciation systems and programs that were used to run the depreciation models within TXU.

I have -- in 2004, I started Alliance Consulting Group, and over the last closer to twenty (20) years, we've done between three hundred (300) and four hundred (400) studies across all of North America and beyond.

I teach quite a bit all over the industry. I do all of the training for Edison Electric Institute and American Gas Association. I teach the highest level -- developed and teach the highest level course at the Society of Depreciation Professionals. I teach at Michigan State University and other places across -- across the US, including

I've held a number of training sessions for US state commission staff over the years.

I was a primary editor -- the primary editor of the EEI/AGA, sort of the industry resource and depreciation -- the book called "Introduction to Depreciation for Regulated Industries," and as it relates to IFRS specifically, I was on the task force that was created by EEI and AGA for the -- what was thought -- the eventual IRS adoption by US.

We were tasked with providing guidance to US companies on how they would, from a fixed-asset and depreciation standpoint, be able to deal with having to move into an IR -- IFRS world.

I think that sort of concludes my thoughts.

THE CHAIRPERSON: Thank you, sir.

Vice-Chair Kapitany has a question.

VICE-CHAIR KAPITANY: Mr. Watson, can you just clarify for me.

Were you part of any of the technical conference sessions that took place that led to the report we just saw?

MR. DANE WATSON: No, I was not.

VICE-CHAIR KAPITANY: Thank you.

MR. BRENT CZARNECKI: Mr. Chair, it's

-- it's me again. I'm sorry to interrupt the flow here again, just housekeeping matters. The qualifications of Ms. Hooper were filed with the Board, and they're marked as Hydro Exhibit 48.

The -- or sorry, the PowerPoint presentation that you're about to hear has been filed, as well, yesterday, and it's Manitoba Hydro Exhibit number 49.

And perhaps, Ms. Kapitany, just to add, Hydro felt it was important to have Mr. Watson here for the benefit of the Board and all parties.

I expect most of the speaking will be done by Mr. Fogg and Ms. Hooper, but we felt it important to have him here in the room so that you can avail yourself to his expertise, knowing that he has conducted the -- his company has conducted the depreciation study on behalf of Manitoba Hydro.

So, he's here to assist in any manner you wish.

--- EXHIBIT NO. MH-48: MH witness qualifications - depreciation concurrent evidence panel - June 5, 2023.

--- EXHIBIT NO. MH-49: MH depreciation position overview - June 5, 2023.

THE CHAIRPERSON: Thank you, Mr. Czarnecki. Mr. Fogg, are you taking the lead, or Ms. Hooper?

MR. ALASTAIR FOGG: I will, Mr. Chair. I'll just let Ms. Hooper introduce herself to the Panel first before we start.

THE CHAIRPERSON: Thank you.

CONTINUED BY MR. BRENT CZARNECKI:

MS. MICHELLE HOOPER: Good morning, Board Chair Gabor, Vice-chair Kapitany, Board members, and other parties. My name is Michelle Hooper. And I am pleased to be here on D-Day to provide evidence with respect to depreciation.

I am a chartered professional accountant with twenty-seven (27) years of experience at Manitoba Hydro. I am currently the senior analyst in the Assets and Operations Accounting Department and the Company's in-house depreciation expert.

(BRIEF PAUSE)

MS. MICHELLE HOOPER: I have a bachelor of science in mathematics from Brandon University. I articled with Kendall Wall Pandya chartered accountants Thompson, Manitoba and was granted my designation as a chartered accountant in 1995.

I started with Manitoba Hydro in 1996, and during the early portion of my career I provided financial support to the transmission, distribution, and customer service areas and participated in the original SAP implementation project.

In 2000, I moved into the corporate accounting department where I progressed through several roles. During this time, I was responsible for the development and maintenance of cost allocation processes, the oversight of SAP month-end accounting processes and served as the business solutions coordinator for the MyBudget Project.

This project developed a detailed position-based operating budget system and associated reporting within SAP business warehouse. Most of the processes that were developed during my time in these roles are still in use today.

In 2009, I was seconded to Manitoba Hydro's IFRS conversion project where I led the

Company's analysis of the IFRS impacts to property plant and equipment.

In addition, I was the business lead for the IT system implementation of IFRS accounting and reporting changes, including the componentization changes implemented in 2012, in preparation for the Company's adoption of IFRS.

Except for brief assignments in the strategic business integration energy markets compliance and rates and regulatory affairs departments, which broadened my experience, I have continued to work on the Company's depreciation methodology issues.

I was the Company lead for the 2010, 2014, 2019, and the IFRS compliant ASL depreciation studies and served as Company witness with respect to depreciation during the 2014/'15 and '15/'16 General Rate Application.

I received my accreditation as a certified depreciation professional in 2021. I have an expert knowledge of Manitoba Hydro's assets and complex SAP system, its modules and external applications which underpin Manitoba Hydro's asset accounting function.

I look forward to sharing my knowledge

and experience with you today.

MR. ALASTAIR FOGG: Thank you very much for the opportunity to speak to Manitoba Hydro's position.

So, if we move to the next slide, what we'd just like to highlight is, first and foremost, and this has really been the focus through our discussions in the technical conference. Manitoba Hydro's key objective is to -- to seek the resolution out of the depreciation matters and allow for that to be resolved as part of this proceeding.

We do believe through what's been filed and what we'll further discussion today, there is sufficient information on the record to allow the Public Utilities Board to opine on the depreciation matters.

In terms of Manitoba Hydro's position, Mr. Innis has highlighted that briefly already in his presentation but I'll just reiterate here.

We are recommending the Alternative 1, or IFRS ELG methodology, that can be implemented immediately with no additional expense or resources allocated to -- to it with no negative impact on customers and allows our employees to work on value-added initiatives from our perspective.

To be clear though, we do consider the IFRS ASL or ALG, using those interchangeably, to be a viable alternative but -- but is not our preference. It would certainly allow the resolution of the depreciation matters.

We will speak to it further, but we do see that having a delayed implementation due to additional work on componentization but, also, this would -- could very well represent system changes within our SAP system training required, data conversion work.

And there will be some permanent administrative aspects that will be required around those additional componentization and recording of time that, while not material, would have some O&A expense impacts.

And you'll see this come up again. We've noted that it would reduce hands on the tools (phonetic) reliance app. What we mean by that is, if we were adding additional components and all of those staff in the field need to charge their time in detail to those components, that may be additional administrative burden on that field staff versus their time working on maintenance or other tasks.

Finally, we -- we are not recommending

Alternatives 3 or 4. And, as I said earlier, we -- we believe there's sufficient information on the depreciation matters that have been provided to allow for a decision to be made as part of this proceeding and that Directives 8 and 9 from Order 43/'13 have been satisfied.

So, our outline -- outline today we will talk about the position on the six (6) policy issues. I will go through some of that quickly as we've covered it already this morning.

We'll cover our view around ALG being viable but some of the reasons we consider it not to be preferred, our recommendation of the ELG procedure, the importance of amortization periods. And then we'll conclude and summarize our position.

We've talked about some of these already, so I -- I won't belabour them, but these are the matters where Manitoba Hydro and the other parties did reach agreement or consensus as we talked about already this morning.

The first was policy item -- identified as policy item 1. All parties agreed that, as preferable, that the same depreciation approach be applied for financial reporting and rate-setting purposes. This improves the comparability and understandability of the financial statements and removes the need to maintain separate accounts for financial reporting versus rate setting.

And the next item was identified as policy item 3, and that's to maintain -- we believe we should maintain the existence -- existing practice of the whole-life technique. And Manitoba Hydro didn't intend to suggest a change in this technique. We've been using the whole-life technique since 2005, and that's what we would recommend as the -- remained the approach.

Policy item number 4 is componentization and that -- that's an item we'll be discussing, I believe, further today. The parties did agree that this is an area where the application of professional judgment is required. And the parties were supportive of a review of the refinement of componentization as this is an ongoing or regular activity that is done; that is a review of components on a regular basis.

The refinement to address -- this is really a refinement to address what we would consider non-material components; in other words, not materially impacting depreciation expense or revenue requirement and that this can be done as part of a next steps.

Finally, policy item number 6 was the amortization of existing deferral accounts. Establishment of the amortization and the recovery mechanism is critical, and it's -- it's necessary from an IFRS 14 perspective.

Move to the next slide. I'll hand things over to Ms. Hooper.

MS. MICHELLE HOOPER: So, the next policy issue we would like to discuss is the treatment of interim gains and losses on which the parties are not fully aligned.

Manitoba Hydro's interpretation of IFRS, based on international accounting standard 16, paragraph 68, is that it is necessary to recognize a gain or loss into income in retirement of an asset.

Paragraph 68 is one of the bolded paragraphs which, per Mr. Madsen's testimony, on -- is considered required under IFRS.

Regulated entities reporting under IFRS 14, which is the interim standard pertaining to rate regulated activities, amounts may be deferred if the regulator requires a different treatment for rate-setting purposes.

Under IFRS 14, it is necessary to

isolate the impacts of rate regulation within the financial statements, which means that we can either retain gains and losses within or discharge the existing deferral accounts to accumulated depreciation.

The magnitude of gains and losses depends on the depreciation procedure used and Manitoba Hydro has estimated losses to be approximately 3 million per year for ELG versus 23 million for ALG.

Just to clarify, Manitoba Hydro is not opposed to deferral under either approach. Our preferred alternative, ELG, includes immediate recognition of gains and losses.

We recommend a cessation of the deferral account due to immateriality, but continuing the deferral would protect net income against one-off material losses, should a large piece of equipment fail early in life.

If the PUB decides in favour of ALG, Manitoba Hydro supports the ongoing deferral of gains and losses.

Under ALG, annual losses are expected to be much more material and immediate recognition produces a fluctuating pattern of expense, which is not reflective of the assets in use.

Appendix 9.12 includes several charts, and figures 10, 13, and 16, which show the pattern of depreciation expense achieved for different Iowa curves when using ALG either with or without deferral of gains and losses.

Regardless of whether gains and losses are recognized immediately or deferred, Section 7.2 of the depreciation issues document demonstrates that the decision does not have any material impact on either proposed customer rates or achievement of the debt ratio. This is due to a minimal change in net debt since depreciation is a non-cash item. If I could have the next slide, please.

The use of ELG versus ALG is an area where there is not full agreement between the parties.

All parties agree that both methods provide just and reasonable rates for customers as both methods are rational and systematic approaches to determining depreciation and both are acceptable under IFRS.

ELG is more complex. But this really only matters when you are explaining the calculations or developing depreciation models; such as the gain/loss models used by Manitoba Hydro.

Rather than the procedure itself, it is the level of componentization that has an impact on day to day operations. For example, regardless of the procedure, we still need to use a model to determine the amount of gains and losses to recognize each year. And although the calculations embedded in the model differ between ELG and ALG, the inputs and work effort for the process are the same regardless of the procedure.

Based on Manitoba Hydro's research, the use of ELG in Canada has become much more prevalent. Manitoba Hydro researched the accounting standards and depreciation practices used by the predominant electric utilities in each province. And the results of that research are shown in the responses to PUB/MH-2-37. And depicted on this slide.

Excluding Manitoba Hydro, these charts show ELG in green and ALG in blue. And in all three (3) charts, ELG use is more prevalent than ALG.

As demonstrated in Section 7.3 of the depreciation issues document, the choice of ELG versus ALG results in a difference in net income, but that difference is not material enough to impact proposed customer rates or the achievement of debt ratio targets.

Others have submitted evidence that the true difference between ALG and ELG is significantly higher than that shown in this section. We believe the figures quoted by other parties are based on scenarios which are not consistent with their recommendations.

Manitoba Hydro has proposed a phase-in for ELG which smooths net income without changing the proposed rate path. The phase-in provides short-term protection to net income in case operational risk materialized during the projected low income years in the first decade of the forecast.

A phase-in is not included in the ALG alternative, but could still be beneficial. Manitoba Hydro is open to alternative approached to the phase in.

And I'll pass it back to Mr. Fogg to continue.

MR. ALISTAIR FOGG: Thank you, Ms. Hooper. If we go to the next slide, I'll just -- we'll discuss ALG, which would be alternative to as presented in the depreciation issues document.

So as I mentioned earlier, Manitoba Hydro's view is that ALG is viable, but not preferred. We -- we would certainly proceed in that fashion if that's the direction of the Panel. And it would allow for the resolution of the depreciation matters and would be IFRS compliant.

That said, while it's viable, an ALG would take, in our view, several years to implement and would require some additional administrative efforts associated with that.

The parties agree that further work should occur to refine the level of componentization that is currently proposed by Alliance for ALG. This would involve removing components of immaterial amount or insignificant affect to either depreciation expense or gains and losses.

And I think it's critical to note that removing immaterial or insignificant items, from Manitoba Hydro's perspective, would not be expected to impact Manitoba Hydro's financial outcome or customer rates.

After this work, Manitoba Hydro would proceed with the effort to convert to ALG. Additional resources would be required to executive this conversion and provide ongoing support. This would likely result in some increased operating and administrative expenses, although those would not -- are not anticipated to be material to Manitoba Hydro's overall electric segment expenses.

Since alternative 2 could not be implemented immediately, a transition period would be required. And we discussed that earlier this morning.

That would require the current C-GAAP ASL methodology to be continued until the new ALG methodology could be applied. But the recommendation would be the amortization of the balances would begin immediately.

If alternative 2 is selected, as Ms. Hopper has mentioned, a phase-in may not be necessary as inputs to net income are expected to be smaller than ELG due to the proposed deferral of gains and losses under this alternative.

If we go to the next slide, we'll discuss in more detail the efforts required to implement an IRFS complaint ALG methodology.

So to be clear, componentization as it relates to ALG is not just an accounting issue for Manitoba Hydro. Componentization is embedded throughout numerous SAP modules and integrated IT systems and would impose a minimum level of granularity for time and expense capturing which affects every capital project that our staff work on.

For our front line staff, additional

componentization means more administrative effort on a day-to-day basis throughout the capital project life cycle, to record their time accurately, reducing their time -- as we would call it -- on the tools where they would be working on their -- their primary work.

I'll now let Ms. Hooper discuss the -- a bit more in detail what the implementation requirements of an ALG methodology would be.

MS. MICHELLE HOOPER: Implementation of additional components is a significant undertaking. And based on our past experience with the 2012 componentization, we estimate the earliest possible implementation date for ALG alternative to be April 1, 2026.

We cannot finalized a cost estimate at this time, but just for context, in 2012, in preparation for transition from C-GAAP ASL to IFRS, Manitoba Hydro added two hundred (200) components, expanding from roughly one-hundred-and-fifty (150) to three-hundred-and-fifty (350).

And the implementation effort, not including IT system changes, cost $2.2 million and required over twenty-five-thousand (25,000) internal labour hours over a four (4) year period which is equivalent to approximately fifteen (15) FTEs.

The long lead time is required to address the following processes, commencing with receipt of an order at the end of the current proceeding.

The first step in transitioning to an ALG procedure is to finalize componentization. Since the Alliance study was a special purpose study, further iterative analysis is required to determine which immaterial or insignificant components can be combined.

After finalizing the componentization, a fulsome depreciation study would be required to include updated data sets reflecting the refined componentization and asset activity up to March 2024.

Based on past experience with the IFRS compliant ASL study, the data analysis required to componentize (phonetic) the 2020 to 2024 activity would be time consuming.

Updates to IT systems to accommodate additional components would commence after confirmation is received from the Board to proceed.

Updating IT systems would be challenging due to the competing IT demands and enterprise priorities. Our current SAP system and other integrated IT applications, such as those used for capital estimating, portfolio optimization, customer pricing, and asset maintenance have significant customization and each affected table and custom program would require independent update.

For accounting purposes, changes of this magnitude would need to be aligned with the start of a fiscal year.

In addition to IT system changes, we would also have to convert existing assets in capital projects. We have approximately ninety-thousand (90,000) active in-service assets and twenty-nine-hundred (2,900) active capital projects. At this point, we don't know how many of these would be affected but the proportion is likely to be significant based on past experience.

Training would be required for hundreds of individuals across the Company, not just accounting staff. All employees involved in capital projects or asset-related activities would require training.

Some of the affected processes are shown on the slide in bullets, surrounding the central table. Properly training staff is essential to ensure proper cost capture and ultimately accurate depreciation expense.

I will now pass it over to Mr. Fogg.

MR. ALASTAIR FOGG: Thank you. If we move to the next slide, again -- the -- so this is Manitoba Hydro's recommendation and we are recommending ELG. But first and foremost, we -- again, we just -- we believe that there has been sufficient information in the application and in the depreciation issues document to offer a decision.

We do prefer alternative 1, which is the use of an ELG procedure, as it could be implemented immediately on a receipt of direction from the PUB and fully resolves the depreciation issues.

Manitoba Hydro currently uses ELG for financial reporting purposes and would simply have to stop calculating the difference in deferral for the change in depreciation methodology account and it -- then we would be in full implementation.

As noted, Manitoba Hydro would also not be an outlier amongst other Canadian electrical utilities in the use of ELG.

Not only can Manitoba Hydro implement ELG for rates and new purposes immediately, but there would be no additional cost or administrative requirements as those that exist with the IFRS/ALG approach. And that includes such items as additional time carding requirements, estimating and accounting work, et cetera.

And you've also heard that based on our analysis, and the -- and presented in the depreciation issues document, the difference in net income between alternatives 1 and 2 is not material enough to impact Manitoba Hydro's proposed rate path, the proposed differential rates by customer class, or the achievement of the 70 percent debt ratio target by 2039/'40. Therefore, there is no detriment to our customers or -- or Manitobans that is as a result of that -- this decision.

While Alternative 1 also assumes a phase in of ELG depreciation over fifteen (15) years, with amortization over thirty (30) years, and does not include the deferral of gains and losses, Manitoba Hydro is open to consideration of deferring gains and losses and other alternate approaches to the proposed fifteen (15) year phase-in as part of an implementation of an ELG approach. Move to the next slide and after this slide.

In the interest of time we won't belabour this. We've talked about it already. All parties agree that amortization period should be established for the existing deferrals.

The existing depreciation related

methodology deferral accounts have grown to greater than three hundred and fifty-five (355) million -- as estimated at March 31st, 2022.

Manitoba Hydro's view is that using the weighted average remaining life of the assets that have contributed to the deferral account balances provides a reasonable and logical amortization period for those accounts. Move to the next slide.

So, really in summary, we do believe a decision can be made as part of these proceedings and that decision would be either -- our preference is Alternative 1, as we've outlined, but we are open to proceeding under Alternative 2, if that's the decision of the Board.

Depreciation allows for the recovery of the costs in Manitoba Hydro's assets from customers over time, but it is an estimate and require -- and it will require regular depreciation studies to update its calculation as asset service life continually change as a result of asset health, new technology and maintenance programs. So, this will remain an ongoing item that we work on from a study perspective but -- but can be substantially resolved today as part of these proceedings.

I think with that, I'll leave it there

and -- and if there's any questions on our presentation, I'd be happy to answer them.

VICE-CHAIR KAPITANY: Just on your last slide, Mr. Fogg, you said that ALG would require continual updating of depreciation study.

Wouldn't that be the case regardless of what methodology is used?

MR. ALASTAIR FOGG: Yeah, and sorry, that's -- Vice-Chair Kapitany, that's -- that's what I meant as -- regardless of selection and even the question of componentization, we'll regularly need to do studies to look at asset health, asset lives and -- and update components on an ongoing basis. It's -- it will be an ongoing activity.

VICE-CHAIR KAPITANY: Thank you.

THE CHAIRPERSON: Ms. Bellringer...?

BOARD MEMBER BELLRINGER: Morning. Thank you for that. I've got a couple of questions and I know that a number of them will end up coming out again in other presentations, so I won't go through everything.

But, a couple of -- one of the main ones that I'm trying to wrap my head around, can you explain, like -- under your current -- like last year's financial statements indicated depreciation calculated on an ELG basis, but it also included the deferral account, that in effect, brought it to ASL.

So, what I'm not understanding -- I'm -- I'm understanding from your slides, if you could just confirm this, that the current -- the current systems, SAP and other systems that are backing all of this up, are recorded on an ELG basis.

MS. MICHELLE HOOPER: Yes, that's correct.

BOARD MEMBER BELLRINGER: And that -- so how do you do the adjustment in the financial statements to show the deferral that takes it, in effect, back I'm -- I'm assuming to the C-GAAP A -- ALG?

MS. MICHELLE HOOPER: We do calculations in spreadsheets to basically unwind the depreciation rate charged under ELG and apply an ALG depreciation rate instead and then book the difference in -- as a regulatory deferral addition.

BOARD MEMBER BELLRINGER: Okay. Thank you. When I -- so you have the data, I'm assuming, but if you could confirm this as well, to -- if you were to say, record it on an ALG basis, that you've got that data, but it's in a spreadsheet, you'd have to still adjust SAP to reflect what's currently being

adjusted through SAP plus spreadsheet.
Is that -- is that the -- the mechanism that we're talking about?
MS. MICHELLE HOOPER: The calculation that we're doing to book that assumes identical componentization as we used for C-GAAP.
Our opinion is that that level of componentization under A -- ALG is not sufficient to meet IFRS requirements. So, in order to apply an IFRS compliant methodology, we would need to increase the componentization.
So, the implementation effort would be splitting apart our assets within SAP and it -- within our capital projects to the level of componentization needed to comply with IFRS.
BOARD MEMBER BELLRINGER: Okay. I'm still -- I'm still a bit confused. So, I'm going to have to ask a couple more on this one.
Okay, so -- the -- the financial statements are in compliance with IFRS currently.
MS. MICHELLE HOOPER: Yes.
BOARD MEMBER BELLRINGER: And it's showing it net at the level of componentization that was in C-GAAP.
MS. MICHELLE HOOPER: After regulatory

deferral. So, with -- with IFRS-14, you have this kind of above the line versus below the line. So you have to be fully compliant with IFRS first, and then once you've applied all of the IFRS standards, you can adjust for differences resulting from rate regulation and that's done in a separate section on the income statement.

So, our depreciation expense in our depreciation expense line of our income statement is ELG IFR -- and is IFRS compliant and then we adjust, kind of below the line in net movement to alter that depreciation expense to what it would have been under C-GAAP previous -- prior to our implementation of IFRS.

BOARD MEMBER BELLRINGER: So, the -- and -- and I -- because that deferral -- the deferral account had not yet gone through the regulatory process and the Board hasn't approved it, for financial statement reporting purposes, I read it as the depreciation in the statements is basically the net number. Is that your interpretation as well?

MS. MICHELLE HOOPER: Ultimately, yes, but we feel that it's confusing for the -- the reader to have that adjustment and we would like to discontinue the off-line calculations, if possible, and resolve the issue.

The regulatory deferral hasn't been approved by the Board yet, but they have -- they're well aware of it and our understanding from past Board Orders, is there is an intent to opine on this and resolve the issue at some point, which is how we justify capturing that deferral account.

BOARD MEMBER BELLRINGER: Okay. Thanks. I -- I think I've got enough information to understand what the impact would be on the accounting.

The other -- the other question and, again, I'm sure this will come up again because we have been talking about it before, is the comparisons.

And in -- it was, I believe, slide 7 in your deck, that lists a number of utilities that are using -- yeah, slide 7, who's using ALG, who's using ELG and it's -- the numbers on this chart are a lot larger applying ELG than we have seen previously.

Can you provide us with a list of the entities you used to create that graph?

MS. MICHELLE HOOPER: That's shown in the response to PUB/MH Round 2, Question 37. There's a --

BOARD MEMBER BELLRINGER: It's got all the -- all the -- thank you very much.

THE CHAIRPERSON: So, I've got a couple of questions, following up on Ms. Bellringer. If we could go to Screen 12. I'm going to come back to this screen, but I want 12 first.

So, five (5) out of nine (9) Canadian electric utilities -- so, are you -- I'm -- I'm trying to understand, are there nine (9) Canadian electric utilities or are there are nine (9) Canadian electril -- electric utilities reporting under I -- IFRS, using AL -- ELG?

MS. MICHELLE HOOPER: Okay. That is also from the response to PUB/MH 2-37.

So, the research that was done looked just at the predominant utilities of -- if you just go to the second page of it.

THE CHAIRPERSON: Yeah. That's what I --

MS. MICHELLE HOOPER: It looks at the predominant utilities in each -- in each province so, it doesn't include the local distribution companies. So, if you -- if you could just page down --

THE CHAIRPERSON: Yeah.

MS. MICHELLE HOOPER: To the next page?

THE CHAIRPERSON: Yeah. Yeah.

MS. MICHELLE HOOPER: So, there is the list of all of the -- the predominant utilities, so which ones have been included. The very last line, for Yukon Energy, should state that it's IFRS accounting standards. That's just an oversight in preparation of that document.

THE CHAIRPERSON: Okay. Can you just hold on this screen for a second.

(BRIEF PAUSE)

THE CHAIRPERSON: Okay. So, in Alberta, those are all private companies. Correct?

MS. MICHELLE HOOPER: That's my understanding. Yes.

THE CHAIRPERSON: Yeah. So, the -- the -- if I could call them the Crowns, which are B.C. -- yeah, I was going to say Quebec. I know there's tough -- it's -- it is difficult to find the information about Quebec -- sorry -- BC is ALG and -- and I noticed New Brunswick is ELG.

Now, New Brunswick is -- is not, for the most part, hydroelectric, is it?

MS. MICHELLE HOOPER: No.

THE CHAIRPERSON: It's nuclear, plus

fossil fuel, for the most part.

MS. MICHELLE HOOPER: That's my understanding.

THE CHAIRPERSON: Yeah.

MS. MICHELLE HOOPER: Just to clarify, BC Hydro does not use ALG. They use a unit accounting for individual unit accounting.

THE CHAIRPERSON: Okay. So -- oh, I see. Fortis is the one with ALG.

MS. MICHELLE HOOPER: Yes.

THE CHAIRPERSON: Okay. The ones for Screen 12, when you're saying they re -- they report under IFRS, are they using ELG for rate-setting purposes, as well, or just for the reporting -- the IFRS purposes?

MS. MICHELLE HOOPER: That -- that is our understanding. We -- from our research --

THE CHAIRPERSON: Sor -- sorry. It -- It's your understanding that they use it for rate-setting purposes?

MS. MICHELLE HOOPER: Yes.

THE CHAIRPERSON: Okay.

MS. MICHELLE HOOPER: Based on our research, Manitoba Hydro is the only utility that we're aware of that uses a different accounting standard for PP&E for purposes of regulatory versus financial reporting.

THE CHAIRPERSON: Okay. And, then, if you can go to page 7, under the 'All Utilities', the eight (8) there are -- these are electric utilities, the eight (8)?

MS. MICHELLE HOOPER: That's the utilities listed on -- on the chart that you just --

THE CHAIRPERSON: That's 37.

MS. MICHELLE HOOPER: -- looked at --

THE CHAIRPERSON: Yep. Okay. Thank you.

MS. MICHELLE HOOPER: -- including Manitoba Hydro.

THE CHAIRPERSON: Yes.

MS. MICHELLE HOOPER: So, we --

THE CHAIRPERSON: Yes.

MS. MICHELLE: We've not included Manitoba Hydro in those charts.

THE CHAIRPERSON: Yep. Okay. Thank you very much. Thank you very much for the presentation. Want to take a break?

We're taking a break now for -- something in my head was telling me we're taking a break. So, we'll come back at 25 to 11:00. Thank you.

--- Upon recessing at 10:20 a.m.

--- Upon resuming at 10:38 a.m.

THE CHAIRPERSON: Thank you. Mr. Madsen...?

MR. ANTOINE HACAULT: Sorry, Mr. Chair. Before we proceed -- it's Mr. Hacault here. I -- we'll see where it goes, but I see that Mr. Dane Watson is sitting at the front on the witness panel.

That wasn't our understanding of who was going to be sitting on the evidence panel. I didn't prepare for cross-examination. I don't know where it's going to go.

I -- though -- it just came as a surprise to me that Mr. Watson -- it doesn't mean that the Board shouldn't get proper information, but I didn't prepare for this and I was quite surprised that he got sworn in and now he's at the -- on the front with everybody else.

I thought it was just going to be the depreciation issues people that were going -- that participated in the document. So, I'm just putting it on the record.

THE CHAIRPERSON: I'm -- I'm sure you can adjust, Mr. Hacault. Mr. Madsen...?

GSS/GSM - PRESENTATION BY MR. DUSTIN MADSEN:

MR. DUSTIN MADSEN: Thank you. Good morning, everyone. Thank you for having me back again. So, I'm going to try and be as brief as I can to save us some time.

THE CHAIRPERSON: Sorry, before you begin, are we -- what do you mean, this is in as an exhibit?

(BRIEF PAUSE)

MR. THOMAS REIMER: Pardon me, Mr. Chair. Thomas Reimer here. Yes, I -- if it could be marked as GSS/GSN Exhibit 8?

THE CHAIRPERSON: Thank you.

MR. THOMAS REIMER: Thank you.

--- EXHIBIT NO. GSS/GSN 8: Dustin Madsen - Emrydia - Depreciation evidence presentation - June 5, 2023.

MR. DUSTIN MADSEN: No, worries, sir. Thank you. So, this slide here just kind of summarizes my depreciation experience. I don't plan to go into any significant detail on it. I -- I have both in-house and out-of-house expertise in depreciation.

I have worked for utilities, consumer groups, and regulators on the issue. I am actively involved the Society of Depreciation Professionals, and -- and I just have a general -- generalized passion for depreciation expense, as we all found out on Friday.

So, I won't go anywhere on this slide 3. If we move actually just to slide 5 because Mr. Innis did an excellent job of summarizing the process.

So, the IFRS requirements for depreciation expenses. The depreciation expense is an estimate. IFRS is not prescriptive on the requirements to determine depreciation expense.

Professional judgment, as in all things, is required and indeed expected in calculating your depreciation expense estimate. IFRS and Canadian GAAP are generally aligned in the definition of 'depreciation expense'. While IFRS did include some additional guidance around componentization, nothing under Canadian GAAP prohibited additional levels of componentization, if that was your estimate.

The concept of componentization under IFRS stems from IAS-16 (phonetic), which is the Property Planting Equipment Standard and it's paragraph 43, and it states:

> "Each part of an item of property, plant, and equipment with a cost that is significant in relation to the total cost of the item shall be depreciated separately."

You'll see in this -- in this wording here there's -- there's no definition of 'significance'. There's no quantification as to what that amount means. It's judgment based. And in my mind, goes to the materiality of the change relative to the overall financial statements.

And -- and in principle, why that's relevant is, IFRS remains a practical set of standards. And by that I mean IFRS is not trying to have accountants -- have armies of accountants accounting for the most intricate detail of a transaction, right?

It needs to be implementable and practical. So, the intent is that the level of componentization wouldn't be hamstringing an entity from being able to continue with its ordinary operations on a day-to-day basis. That would be counterintuitive, especially where it's immaterial.

Gains and losses are expensed, but judgment is required in the determination of whether or not a gain or loss has actually been recognized or quantified.

My recommendation in this area is -- is that both ALG and ELG are IFRS compliant and -- and by that I mean the ALG calculations that were performed by Concentric in the ELG-compliant depreciation study are also IFRS compliant at that level of componentization, as is the original IFRS C-GAAP call it calculations.

I would also consider under ASL to be IFRS compliant. There's judgment required, but nothing within any of those amounts causes me concern that there would be a violation of this standard under IFRS, which is IAS 16.43. Moving to the next slide.

Just briefly again -- other parties have already touched on this. ELG versus ALG, which procedure is best? Fundamentally, both procedures recognize the same amount of depreciation expense over the life of the assets. I don't think that's in dispute.

When asset accounts for growing, ELG will realize a greater depreciation expense than ALG, and vice versa. So if asset accounts are starting to decline over time, ALG should result in a lower depre -- or a higher depreciation expense relative to ELG. So business growing, higher under ELG. Business shrinking, higher under ALG.

The parties agree that both procedures are acceptable and IFRS compliant, and the ALG -- this is my recommendation -- the ALG procedure provides for a more balanced collection of costs over the life of the assets, and can potentially avoid the over-collection of costs where future life extension is possible.

Componentization. Is additional componentization required for Manitoba Hydro to comply with IFRS? My opinion is no.

Would additional componentization result in a significant change in depreciation expense for the individual items of property, plant, and equipment as determined under IFRS? Again, my opinion is no.

Is there a benefit to refining componentization levels each test period? And the answer to that is yes. IFRS requires depreciation expense to be assessed annually, and refinement is appropriate.

And as we've heard from Manitoba Hydro, that effort and that assessment is done under ELG, it's done under ALG, it's done regardless of which depreciation procedure you utilized.

Is the level of componentization as proposed in the Alliance depreciation study necessary to comply with IFRS? And once again, no.

Our recommendation is the existing level of componentization as proposed in the Concentric study is sufficient under ELG or ALG. I am supportive of modifications, as required by IFRS, and that is, for example, where there is clear evidence that there is a significant change in a component -- in an asset.

So let's -- let's consider it -- give an example. So let's assume you have an asset with a fifty (50) year life, and that -- and it's worth -- and it's a billion dollars in costs, and it's amortized over fifty (50) years.

If there's a sub-component of that asset which has $500 million of that cost and it has a twenty-five (25) year life and the remaining $500 million still has a fifty (50) year life, there's likely a material difference in that individual component because the average depreciation expense over those two (2) $500 million components varies significantly from the existing fifty (50) year life.

And I -- I can walk back through that a bit more but, in that situation, you've got both a significant account balance -- for example, over a billion dollars -- and you've got a significant difference in the -- the average life of two (2) components of that asset.

In that case, componentization may be appropriate, particularly because it would be material to that account. My question in that would be: Then it likely should have been componentized under ELG. It would also likely have been componentized under ALG. That type of an issue is -- that type of a difference is something you would expect to see, again, regardless of the depreciation procedure used.

All right. So I'm not going to talk too much about this: whole life versus remaining life. All parties agree that the whole-life technique is the appropriate technique to apply for Manitoba Hydro. There's no dispute.

Just fundamentally -- I'll touch on

this briefly -- the -- the calculations are over here on the right. The -- the calculations appear different, but ultimately, what's being done is the same thing. It's just taking a different denominator in one calculation and -- and adjusting the numerator in -- in the calculation as well.

So -- but the end result, fundamentally it's the same formula, just achieving a different thing.

Overall, though, the whole-life procedure is, in my mind, a bit easier to understand. It provides for the remaining amortization of any what they call reserve -- reserve account balances over the remaining life of the assets. It's clearer. It's -- it's more transparent and, in my mind, for this Board, it's also more commonly used in Canada. Next slide here.

Again just very briefly, determination of gains and losses. The key here is that there's judgment required in determining the amount of gains or losses under either ALG or ELG. I've seen it done a number of different ways depending on the utility, including under ELG it's been done differently and under ALG it's been done differently. And it can significantly change the quantum.

Deferral treatment of gains and losses, regardless of the procedure used is, in my mind appropriate because it helps to -- fundamentally, any gain or loss recognized on a group account is representative of the depreciation estimate not providing the best and most accurate consumption of that asset over its life.

So the -- the better way to address any gains or losses, if you have them, is to take that amount and re-amortize it over the remaining assets -- remaining life of the assets in that account so it begins to more mimic the actual correction of that depreciation expense over time.

And ultimately, I think the PUB should consider, regardless of which procedure is chosen in a future GRA, to revisit maybe the calculation of gains and losses in a bit more detail as -- as there could be some significant differences that might arise in the future.

Finally, I just want to talk about implementation costs and efficiencies, and hopefully I'm not over my time. Aligning financial and regular reporting will save costs. We -- we've heard from Manitoba Hydro today that the approach to -- so they have ELG, the ELG procedure, within their SAP system.

And then they have to now go through and do a -- what I would assume is not an uncomplicated process of using Excel spreadsheets to calculate the ALG base rates and reconcile all of those amounts and report them to the Board and explain them in their financial statements and understand the gain and loss differences on a whole bunch of different accounts.

This is done at a very detailed level. That effort, if you move to alternative 2, which is to align both IFRS -- so financial reporting inventory under the ALG procedure, disappears. You don't have that effort any further. It's -- it's gone. You don't have to do this detailed reconciliation.

And -- and as Ms. Hooper testified today as well, the ELG procedure is more complex than the ALG procedure. It's -- it's complex in the calculations, but if you move to an ALG procedure, you come to a less complex calculation, a more simply understood calculation that is potentially easier to implement -- forward.

All of this should reduce Manitoba Hydro's costs by transitioning by ALG, not increase Manitoba's -- Manitoba Hydro's costs. I appreciate there are some one (1) time transition costs to implement some additional componentization. Again, in my mind, none is required.

There probably would be some minor adjustments. We're not -- I don't think we're talking about adding a hundred (100) additional accounts. That's not what we're looking at -- or -- or four hundred (400) or three hundred (300). We're talking about the significant accounts that should be added.

And if you're adding two (2) or three (3) or four (4) major new accounts that are truly required to be componentized, that's not going to add a significant amount of costs to your -- your front-end staff to track those additional components for those specific assets. It's not going to change the fundamental nature of Manitoba Hydro's business.

So fundamentally, I disagree with -- that Manitoba Hydro requires incremental FTEs if the ALG procedure is approved. Indeed, I would suggest that it's a simplified -- simple exercise to do some additional componentization.

It should be achievable quickly, and there should be very minimal incremental costs, if any. There might even be savings. I strongly suggest there are likely going to be savings.

Reporting two (2) different

depreciation calculations and reconciling the same is the status quo, and in my mind, would be just more onerous than alignment of the calculations, as I propose.

So my recommendation on this area is just do not approve any incremental revenues. And I appreciate Manitoba Hydro has not quantified what those would be, but I would also strongly suggest the PUB might want to send the direction that it would expect savings as a result of this. If alternative 2 is approved, I would expect savings from that change.

That's my presentation. Thank you.

THE CHAIRPERSON: Thank you. I'll ask the Panel if they have any questions. Yes, Ms. Kapitany...?

VICE-CHAIR KAPITANY: Mr. Madsen, I'm just still on your side 10, so perfect.

Have you had experience with a utility that has had a different -- for rate setting and for financial reporting?

MR. DUSTIN MADSEN: No. Manitoba Hydro is the first. So, it's highly unusual.

So, in my mind, the -- the PUB establishes the revenues -- actually establish the revenues that a utility is permitted to recover, and the revenues include the depreciation expense.

Fundamentally, that establishes the economic life and the economic recovery of those assets over a period of time.

In -- in all other jurisdictions that I've been in, the reason why there's always alignment between financial reporting and regulatory reporting is because that decision of the regulator has a lot of weight, has a lot of weight to the accountants and has a lot of weight to the auditors.

So, if the -- put it down to a simple example. If the -- if the PUB approves a life of ten (10) years for a simple asset, let's call it a truck, and that truck is covered over a ten (10) year period and that's the -- that's the strict profile of the -- the cost. It'll be one dollar ($1) each year for ten (10) years.

If Manitoba Hydro says, no, we think it's eight (8) years, well, that -- that might be what Manitoba Hydro views as the useful life, but it doesn't change the fact that the actual depreciation expense, that economic life of the asset, is ten (10) years.

And I think that that is an important distinction. And economic life is a concept that is inherent within the -- the amortization expense, or depreciation expense, fundamentally is the consumption of the future economic benefits of the asset over time.

So, those concepts in my mind are -- are linked; that's why I have not seen that.

VICE-CHAIR KAPITANY: So, that's really helpful. I was just curious, though, if you hadn't had experience with a utility that's had to make this change, how you came to -- incremental FTEs required to do this.

MR. DUSTIN MADSEN: The -- the reason is, is because -- let me put it this way. So, when I was back at Fortis Alberta, we were assessing the what ifs.

So, when we were looking at the depreciation impacts, and this is again linked to -- what if the regulator approved a different depreciation methodology than we're asking for, and that would result in -- and then -- then we could justify to our auditors, what if that happened. It never did.

But we started looking at the -- the costs of tracking two (2) systems, and the -- so -- which is what Manitoba Hydro does. And we presented -

- we had -- let me give you an example.

A bunch of the utilities in Alberta when I was with those utilities presented to the Alberta Utilities Commission at the time -- and all parties agreed that the maintenance of two (2) sets of books for fixed assets is very, very costly, very, very complex.

If you try to internalize that into a system, you have duel sets of books in an SAP system which is very expensive to do. Tracking it outside is very expensive to do.

So, I guess fundamentally my -- my recommendation is based on two (2) points: 1) what -- what Manitoba Hydro's currently doing no other parties do, and we understood it to be very expenses and would take a lot of effort. That's the status quo.

And 2), I don't believe that transitioning to Alternative 2 would require significant additional componentization. And for that reason, if it doesn't require significant additional componentization, you're not touching the systems very much and you're not fundamentally changing the work that the people on the frontline do, so you shouldn't have a significant change in effort.

VICE-CHAIR KAPITANY: So, that's

helpful, too. And so, now, Mr. -- Mr. Hombach, I'm not sure if I'm allowed to ask this question or not, so if I'm not, please stop me because this is asking Mr. Madsen a question about something that Manitoba Hydro said. Is that okay?

MR. SVEN HOMBACH: I think that is fair game.

VICE-CHAIR KAPITANY: Okay. Thank you. So, Mr. Madsen, I believe it was Ms. Hooper that said it would take several years to implement this and that it wouldn't be done until April 1st, 2026.

So, I mean, that implies to me, like, a time frame where there would be effort involved. But I just wondered if you had any comment on that time frame?

MR. DUSTIN MADSEN: Yes. I -- I can't, in my mind, see what would be done over what would be closing in on roughly three (3) years of time to do this -- to do this effort.

So, I would envision it as -- as this: You would have the Board's direction to go to the ALG procedure. You would then -- an IFRS compliant ALG procedure into a line financial reporting and regulatory books.

You would then go through a

componentization exercise which presumably -- well, which was done in the ELG study for Concentric -- not presumably; it -- it was done.

You would maybe go through an additional componentization exercise focussing strictly on those material changes. And, in my mind, given there are already hundreds of accounts for Manitoba Hydro, I mean, how many more accounts can you add to get to a material change? I mean, how many would result in a material change? And I -- I can't imagine that there would be any.

And to be clear, the -- the ALG procedure is -- is not supposed to be componentized down to a level, simply that it results in the same depreciation expense that the ELG procedure does. The two (2) procedures are entirely different, and they're intended to be different.

And many utilities operate at a similar level of componentization under ALG as they do under -- as those that do under ELG. So, you don't need to make ALG equal ELG, which is effectively what the Alliance consulting study achieves, is to make a ALG achieve the ELG result. You don't need to do that.

So, if you're talking about a few components, and then implementing that, I mean, it should be done before the end of June, but it wouldn't take -- it certainly wouldn't take a significant amount of effort.

If you're talking about a couple of components to which I -- I can't really identify what those would be, it would be lesser effort than is being forecast.

VICE-CHAIR KAPITANY: Thank you.

THE CHAIRPERSON: All right. Ms. Bellringer...?

BOARD MEMBER BELLRINGER: Thank you. Thank you, Mr. Madsen. So, my understanding is you've supported Alternative 2. Is that correct?

MR. DUSTIN MADSEN: That is correct.

BOARD MEMBER BELLRINGER: And do you disagree with Alternative 1 or was 2 a preference?

MR. DUSTIN MADSEN: Alternative 1 and 2 both address the six (6) issues that were within the scope of the -- the Board's -- scope of the issues that were to be discussed.

I disagree with Alternative 1 though because the ELG procedure's not required to -- to make that -- to make that change. The ALG procedure is acceptable for IFRS. It's an acceptable procedure. It's easy to implement, easy to understand, and it provides for, in my mind, a reasonable estimate of depreciation expense over the life of the assets.

BOARD MEMBER BELLRINGER: So -- okay. Thank you. The -- sorry. The other component that I didn't hear in your description of the alternatives, did you look up -- did you look at the true-up and do you have a position on that?

MR. DUSTIN MADSEN: The -- the true-up being the -- the deferral account balance?

BOARD MEMBER BELLRINGER: Well, it's -- no, it's what -- I mean, yes, it impacts -- it impacts gains and losses that impacts the deferral account.

I mean, at the end of the day, it impacts the depreciation number net, and it's the adjustment to -- from the 2019 depreciation study to take into account, if you will, and I'm using, like, quick language that doesn't describe it completely, the over depreciation to date, and it's about 40 million a year currently under ASL.

I mean, if you didn't look at it, that's fine. I'm just wondering if you did and if you had a position on it.

MR. DUSTIN MADSEN: I did. I think that's the accumulated variance of -- I believe it's

$1.2 billion year to date that's being amortized. I would recommend you continue to amortize that balance over the expected remaining life of the assets.

If you convert to the ALG procedure, that remains a viable solution. And then that balance would just be recalculated and reset at each -- next future GRA and depreciation study. But I would accept that that would be continued; it wouldn't be -- wouldn't be adjusted.

THE CHAIRPERSON: Mr. Madsen, I'm just wondering how many utilities have you looked at further depreciation models?

MR. DUSTIN MADSEN: Quite a few, off the top of my head. Everyone in Alberta, Northwest Territories, New Brunswick, Ontario, and here in Manitoba, so one (1) or two (2) -- one (1) in Ontario --

THE CHAIRPERSON: Okay.

MR. DUSTIN MADSEN: -- and then here in Manitoba.

THE CHAIRPERSON: So, if you've done Alberta, according to the list, the Alberta -- as I understand it, the Alberta utilities on that exhibit use ELG?

MR. DUSTIN MADSEN: That's correct.

Mr. Kennedy, who did the study for Manitoba Hydro, is the -- generally the expert that does all of the depreciation studies for the utilities in Alberta, as well.

THE CHAIRPERSON: Okay. For the utilities that you saw that use ELG, do they use the same level of componentization?

MR. DUSTIN MADSEN: No, they do not. ELG -- sorry. As -- as Manitoba Hydro's currently using in the Concentric study?

THE CHAIRPERSON: Yes.

MR. DUSTIN MADSEN: Yes, the -- relatively consistent with that level of componentization. So, I can give you some examples. But for an integrated utility, the -- the level of componentization being recommended in Concentric study under ELGs is again relatively consistent.

You're -- you're talking about componentizing your steel poles, your wooden poles, your various generation facilities by the -- the significant assets that are included within them.

But it's -- it's -- I think that's a reasonable level of componentization as a starting point --

THE CHAIRPERSON: And -- and how many

categories is that?

MR. DUSTIN MADSEN: Pardon me?

THE CHAIRPERSON: Concentric; how many categories?

MR. DUSTIN MADSEN: I'm going to -- it's around three hundred (300).

THE CHAIRPERSON: Okay.

MR. DUSTIN MADSEN: I forget the exact number. It's less than the seven hundred (700) that was being proposed in the Alliance study. It's around three hundred (300) accounts.

THE CHAIRPERSON: Okay. And what -- do you have a comment on moving from three -- approximately three hundred (300) to seven hundred (700)?

MR. DUSTIN MADSEN: Yes. I would not recommend doing that. Seven hundred (700) would put Manitoba Hydro at a level of componentization that I simply have not seen.

I think BC Hydro was the next highest, and they were in the high three hundreds.

THE CHAIRPERSON: Okay. And the Alberta ones using ELG would be approximately what in terms of --

MR. DUSTIN MADSEN: Not even --

THE CHAIRPERSON: -- componentization?

MR. DUSTIN MADSEN: Not even above a hundred.

THE CHAIRPERSON: Okay.

MR. DUSTIN MADSEN: But in -- in all fairness, sir, the Alberta utilities are distribution or transmission utilities --

THE CHAIRPERSON: Right.

MR. DUSTIN MADSEN: -- so, they -- but it's -- it's less than a hundred, I would assume.

THE CHAIRPERSON: Yeah. Okay. Thank you. Thank you, Mr. Madsen.

MR. DUSTIN MADSEN: You're very welcome.

THE CHAIRPERSON: Mr. Bowman...?

MIPUG - PRESENTATION BY MR. PATRICK BOWMAN:

MR. PATRICK BOWMAN: Good morning, Mr. Chair, Madam Vice-Chair, members of the Board. I guess I'm on cleanup today.

Pleased to be here to deal with the exciting topic of depreciation. Sorry to say it's not a passion of mine. It's just a necessary part of setting just and reasonable rates, which is where I have practiced most of my career.

I also should note at the outset, I am not an accountant. And so, to the extent that there are comments on IFRS, which you will probably find few, those are not -- from the perspective of anyone who has a background or training in reading the IFRS standards, that is not where I -- where I work.

And you will note that in the document -- depreciation issues documents, I have avoided taking a position on what was IFRS complaint and what was not.

THE CHAIRPERSON: Sorry to interrupt you, Mr. Bowman. Just so we don't forget -- screw up numbers, if we could have this marked as an exhibit.

MR. ANTOINE HACAULT: Ms. Schubert, I believe it's MIPUG-15.

--- EXHIBIT NO. MIPUG-15: Patrick Bowman depreciation presentation - June 5, 2023

THE CHAIRPERSON: Thank you, Mr. Bowman.

MR. PATRICK BOWMAN: Thank you. I will also note that I have evidence with my resume filed as MIPUG Exhibit 6. I understand we'll be going over that on Friday, so I didn't intend to deal with that this morning.

I will note, for the record, that I have been involved in the issues of Manitoba Hydro's depreciation since the 2012 proceeding where this first became a significant issue. I was also in the 2015 proceeding with Pat Lee (phonetic). The two of us dealing with depreciation matters. And -- and to the extent that it arose in the 2017 GRA, the -- you know, 2015 was still a long time ago. There's been a lot of ink spilled on this topic.

I think there is the opportunity for resolution available in this proceeding. You'll note that the approach I recommend comes up with a full and final recommendation and decision on all substantive matters, even though implementation will take some period. Whether that's 2026 or whatever it is, it is the -- in my submission, the next GRA. There is some -- some steps that Hydro will need to go through. They wouldn't be able to walk out of this room using the alternative 2, as I recommend, and implement it tomorrow. And I accept that conclusion of Hydro.

I also just want to note at the outset, this process has been unusual. It has been extremely cooperative. I give credit to the parties who participated in it and I will say it's a significant change from the way we approached this topic in 2012 and 2015. And I think credit is due in -- in that regard.

I'll also note that as a depreciation matter, although we're sitting here today discussing matters of depreciation and methods, that is generally the minority of issues that most people deal with in a depreciation proceeding.

Most of the time you're sitting talking about depreciation, it's about the lives of an account or the actuarial analysis or the, you know, types of -- whether you should be using a rolling band or a shrinking band or excluding the 1997 assets because they're not the same as the current ones. That's usually where the focus is.

The -- the procedures and methods we're talking about today are much more aligned with the outcome of trying to arrive at just and reasonable rates. Just put that out for the record and say, you know, I've -- since the last time I was here, I think I've been in nineteen (19) hearings dealing with depreciation but methods is -- is only at issue occasionally.

Currently, there is a proceeding before

the Ontario Energy Board for Enbridge Pipelines trying to convert to ELG. And that -- that's probably the most recent example I'm aware of that people actually debate some of the things we're talking about here.

Flipping to the second slide, I summarized my introductory comments there. I will come back to this at the end, but I didn't want to -- want to withhold the -- the surprise ending.

Alternative 2 is the recommended approach and, in my submission, it still has steps needed to implement it. I do agree with the comments of Mr. Rainkie in the report that the Board does not have perfect information on what alternative 2 looks like. There's still steps to figure out what exact components will be implemented.

And when we look forward on the twenty (20) year horizon, we are taking today's rates and just applying those year after year for the twenty (20) years. Of course, those will be recalculated as we go along.

And to some degree, that recalculation will depend on the initial decisions we make. And I'll come back to that.

But alternative 2, I would submit we have enough information to make that decision today and proceed with alternative 2.

I will go through the remainder of these comments as I proceed through the presentation. Moving to the third slide, I wanted to note that, in my submission, the key issue for today is the -- what's cited as issue 2 as the procedure to be used. ELG versus average service life -- or average life group.

I note that this issue has been situated in this proceeding and in past Hydro proceedings in amongst a number of considerations, which were cited as issue 4 and issue 5, as well as a debate about the merits of the two (2) procedures.

And under the heading of 'Merits', we also have the consideration of peers and practice across the country and across North America.

On issue 4 is on componentization that I'll have some comments.

And on issue 5, the treatments of gains and losses, which I have put in -- in quotes for obvious reasons as we go through this. It is also a key issue, but they are key in the extent that they inform the ultimate decision about ELG vs ASL.

I note that issue 6, in respect of deferral accounts, is in effect an overarching issue that is critical to the job of this Board. And I believe this was linked to -- to Board Member Bellringer's comments earlier that, at the end of the day, in setting just and reasonable rates, it will be the sum of what is recorded as IFRS depreciation and what is recorded as deferral accounts that will drive the way we set rates and what we look to for net income for setting rates.

Similarly, when one looks to the balance sheet, it will be the sum of what is recorded as accumulated depreciation and what is recorded as deferral accounts for depreciation that will be relevant for setting the future depreciation rates.

Deferral accounts, as such, are critical to rate setting and they establish the bottom line impact.

To the extent that we are regulating Hydro with an eye to net income, ratepayers indifferent if the costs are part of depreciation expense as recorded by IFRS or part of the deferral as established by this Board. The sum of the two is what matters.

And I note that the PUB is not an auditor. It's a prospective rate setter and, I believe, Mr. Madsen dealt with this appropriately in his comments, that the PUB establishes the economic context in which Hydro will operate and the rates. The accounting and the auditing comes after the fact to determine how to appropriately report that.

I have an example in one of the IRs that I was asked in this proceeding on this very point, where I walked through a similar example with respect to demand side management spending, where IFRS will lead to one conclusion, regulation will lead to another. At the end of the day, we design rates on the assumption that demand side management is an asset and will be amortized.

Even though, for all practical purposes, IFRS standards would not consider DSM to -- most DSM spending to be something that creates an asset that is -- that is amortized.

I do accept and -- and recommend that to the extent we can achieve just and reasonable rates, it is best if that is achieved with deferral account use being minimized. That helps with presentation. It helps with Hydro's accounting. It helps with people understanding Hydro's statements. But it's not a requirement.

If just and reasonable rates requires us to use a different method than IFRS would require, then we should accept and use deferral accounts as needed to achieve that.

I note that issue 1, which the Board set out, is related. The question is use of an IFRS compliant depreciation methodology and, similarly, as I noted there, it's just all the approaches, to my understanding, and as said in the report, set out are IFRS compliant because IFRS includes the ability to use regulatory deferrals. But we should strive to minimize those deferrals.

The only exception is possibly alternative 3. And for people that have been through the document, alternative 3 was Mr. Rainkie's option that said if -- if the Board were to reach a conclusion that it didn't have enough information, it could continue with the current practice. And -- and not amortize the deferral balances.

And there is a question as to whether Hydro can just continue to charge amounts to a deferral account that doesn't have an amortization and whether that does lead them offside with some IFRS questions.

So alternative 3 may or may not be -- as highlighted, may or may not be IFRS compliant. Otherwise, to the -- to my understanding and the way it's dealt with in the document, this -- this issue -- issue 1 is -- is -- is basically not a distinguishing criteria between the alternatives.

Moving to slide 5. On the merits, I have dealt with the merits of ALG versus ASL in -- in the evidence. Those comments stand. And by evidence, I mean MIPUG Exhibit 6. And I would encourage the Board to review that. The -- the evidence of the past proceedings I was involved in here, 2012 and 2015, also deals with this topic.

In general, though, Equal Life Group procedure is inferior or a Hydro -- a -- a -- a system like Hydro, a utility like Hydro, as it does not well match the expense each year to the consumption of the utility services at a group level.

ELG relies on also an assertion of precision, which relies on high quality actuarial projections, and it relies on life and dispersion estimates that end up being accurate in order for ELG to achieve that assertion of precision and that is generally challenging a -- and often not true for a utility like Manitoba Hydro and I go through those reasons also in my -- in my evidence and I'd be happy to go over them if it is helpful for the Board.

ELG is also more costly in each case

where I've dealt with where utilities have compared ELG to ASL approaches. ELG is a higher cost.

In this proceeding there are two (2) consistent studies, each of which has ELG more costly than ASL. One is the -- one is actuarial and those come out to $30 to $54 million higher per year for ELG.

And, I will note that through the -- the Chair's comments, ELG has primarily been used by private utilities -- mostly coming out of Alberta or subsidiaries of those utilities of the five (5) that were discussed. Some are subsidiaries of the utilities in Alberta, such as Atco companies.

It has -- it has rarely been used by Crowns, and it's mostly been used by utilities which are in distribution or transmission, not generally in a hydro -- with hydro assets.

Part of the reason for that is ELG is potentially better to apply, easier to apply when you have good actuarial data, when you have large data sets of assets that have been through a full cycle of life, or more, something like distribution poles, we have lots of wood poles. We get a good statistical measure of those. We see them go through their life.

We do not have a large compliment of

spillways. We don't have a large compliment of -- of turbines and generators in Manitoba Hydro system.

So, you don't necessarily get some of that precision that's outlined in the ELG approach. We also do not have a good record of those assets having gone through an entire life cycle.

When they're a hundred and twenty-five (125) year assets, we're just now starting to get -- with Pointe du Bois being rebuilt. Pointe du Bois is a bit of an exception, it was built in 1910's. There's questions about the concrete that was used and the acidity in it. There's a whole bunch of issues, so the ELG allegation of precision, to the extent it's -- it's accurate, it does apply somewhat to things like transmission utilities in Alberta. It applies less so to something like hydro utilities in -- in Manitoba.

Also, I'll note both methods recognize and rely on retirement dispersion. Both assume that when you choose an -- a life, if you had a truck that's (10) years as Mr. Madsen noted, both are assuming and calculating on the basis that -- that there will be some trucks that last one (1) and some that last fifteen (15). It -- it's -- inherent in each approach.

Componentization I -- I have noted is not a reasonable matter of distinction between these two (2) approaches. Group accounting requires appropriate componentization. I didn't spend -- intend to spend much more time on this, I think Mr. Madsen described it very well.

And with respect to gains and losses. The approach to dealing with gains and losses has had a large degree of consistency in utilities over many, many years. Gains and losses are inherent in the assumption of the average service life. They're part of the analysis you're doing and so they need to be part of the mix when you're doing your analysis.

And, I note, otherwise you are pancaking methods there and I will -- I -- I don't use the word 'pancaking' in my evidence, but it's described at page 34. And, what you effectively do if you're expensing your gains and losses, is you are taking to income, typically your worst performing assets.

So, the truck that lasts one (1) year, you say, oh wait, I have a loss on that, it was supposed to last ten (10). I'll take that nine (9) year loss to income.

But that means the remainder of trucks

on your system are no longer average ten (10) year. You -- you came up with the ten (10) year average on the assumption that some would be ones (1) and some would be fifteens (15).

If, you all of a sudden start taking to income, those gains and losses, you've undermined the -- the entire integrity of the system that says I'm going to work with an average life of ten (10).

So, with a system that -- that re-circulates those gains and losses as part of the accumulated depreciation, keeps that within one set of analysis, keeps that within your depreciation study. When you start booking gains and losses separately, you end up adding a second approach. If you're taking them to income, you end up undermining the -- the depreciation study you've prepared.

And, over time, you will find that you start seeing large surpluses in your depreciation study because you're still running it as if all the trucks will last ten (10), but the only trucks that are left in the account are the ones that last eleven (11) and twelve (12) or thirteen (13).

And, so that will start showing up as -- as surpluses or variances as -- as Board Member Bellringer raised in the account.

As far as the cost impact, and this is moving to slide 6. The depreciation issues document shows that -- a scenario with the Alliance estimates with ASL is -- leads to $267 million increase in the twenty (20) year net income compared to ELG, which was based on Concentric's estimates.

I note in my evidence that there are a number of cases where the differences between Alliance and Concentric are not about componentization. They're about two (2) different depreciation professionals having used their judgment to come up with two (2) different sets of estimates.

So, the -- some of that is to do with which -- which professional determined which life is appropriate and it's -- it's simply a -- a -- a disagreement on the fundamental mathematics of -- of what lives should be assumed.

Also, that approach has some degree of this pancaking included, because it takes the gains and losses. It does amortize them over the remaining life, the same way the study would. But it never then considers what happens in your four (4) or five (5) or six (6) while you're amortizing those gains and losses, you no longer need to include that within the study. It doesn't -- it doesn't add back into the study that you'll have these surpluses starting to show up or -- or greater surpluses starting to show up.

So, for those reasons I think the two sixty-seven (267) million is the best estimate one can come up with today, but I think it's probably the lowest that anyone would ever expect. Also, it has the three hundred (300) or four hundred (410) extra components that -- that Alliance came up with, which all parties seem to agree is -- is -- probably farther than is needed if we do a -- a screening for materiality.

There are other scenarios that are provided in the -- in the evidence which I set out there that show ELG versus ASL under different types of approaches that are more consistent with Alternative 3, Alternative 4 and some other amortization scenarios that the PUB set out and those lead to even higher impacts from adopting ELG as compared to ASL. Likely, the final answer is going to be in the middle of that range somewhere.

I will note that Hydro's conclusion, which is summarized in the document and I -- I accept Hydro makes the conclusion, this does not change the rate path, but that's because the rate path is focused almost entirely on cash and debt and this is a non-cash item.

So, it makes very little difference at the end of the day to a rate path, if your rate path is going to be religiously devoted to achieving a certain level of paid on a debt over a certain period.

I don't think that will be the only thing that the Board looks to, as we go forward in the future. I don't know exactly how that aspect of the -- of the Act will be -- will be implemented of the Bill 36 and the regulations. I didn't intend to get into that today, but I will say when you see comments say that the rate path is the same, understand that that's because the rate path is defined by paying down debt and this is non-cash transaction.

So, in -- in effect, it's -- it's diminishing, minimizing the extent to which this does have a very material impact on Hydro's net income.

And I -- I think I've summarized the last point there. So, moving to slide 7.

I agree with the other parties that whole life versus remaining life was a lesser issue. It's never been an issue in Manitoba. And whole life provides better information.

There's one other matter that I didn't

know was going to be commented on until I saw on Mr. Innis' presentation this morning, which was about the impact on rates. There's a couple of comments in Mr. Innis' presentation about the fact that this does not have an impact on rates.

Those take two (2) forms. One I've already talked about, which is the rate path impact, and again that's because of the cash.

The other is that there was analysis done just to see what would happen to the cost of service study, if you implemented these different depreciation procedure.

And the end result on the cost of service study was it had relatively little impact on the relative level of pay -- rates paid by each customer.

There is a small impact and, in fact, doing what I recommend is -- an -- an adverse impact on the clients I work with, to a small degree, and I can explain why, but overall it's going to make very little difference to the relative level of rates. So, you -- that -- that's what those comments are about when it says it doesn't make a difference to rates. It's the impact relatively between the classes.

And the final point I will note is I --

I -- I mentioned this at the outset, there is an -- an alternative path set out for the Board, in the issues document, that says, what if the Board decides it needs to see all of the information before it comes up with the final recommendation,?

And, in that case, my submission is Alternative 3 is better than Alternative 4. Alternative 3 is just a continuation of what we've done now, let all the work be done, let all the components be developed, let a full study come through, and, then, we can deal with it.

Alternatively 4 starts to amortize a number of accounts and it's -- it's, basically, Alternative 4 is -- in my submission, Alternative 4 is -- is almost like Alternative 2, except for the (INDISCERNIBLE). They're very, very similar and -- and I don't -- if the Board can't come up with a final decision to move Alternative 2, I don't know why you'd go to Alternative 4. It's just, you know, take a pass, give Hydro the homework, and, then, we'll deal with it the next step around, but it's not what I recommend. I think that is -- that is the end of the direct.

THE CHAIRPERSON: Thank you, Mr. Bowman. I'll ask the Panel if they have got any questions. Ms. Kapitany...? No? Okay.

I've got a couple questions. Can you go to screen 5, Kristen? Okay. Yeah. So, here -- here's your first bullet says, E -- ELG inferior, as it does not match expense to consumption, but, when you spoke, you said, it does not well match.

So, which is it? Is it that it doesn't mat -- doesn't match. In my mind, it's sort of an absolute term. 'Well match' is the subjective term. Is it -- which one is it?

MR. PATRICK BOWMAN: I -- I -- I apologize if I said, "well match". In my submission, ELG does not match --

THE CHAIRPERSON: Okay.

MR. PATRICK BOWMAN: -- expense to consumption of the utility. I would say it also does not well match it's -- it's purported precision, because rarely do we have the type of data in a utility like Manitoba Hydro to allow you to achieve that precision that --

THE CHAIRPERSON: Okay.

MR. PATRICK BOWMAN: -- that is alleged by the ELG procedure.

THE CHAIRPERSON: Okay, and, finally, the last page, page 8? Your -- your last comment is, "potential benefits from added componentization", and, that, I take it, is in relation to Alternative 2.

Can I have your comment in relation to the componentization that Manitoba Hydro is suggesting it would have to go to?

MR. PATRICK BOWMAN: Well, yes. My understanding is that the -- there is general agreement that the four hundred and ten (410) new accounts that were produced by the -- the Alliance study, is farther than Manitoba Hydro would need to go.

My review of the Alliance study also suggests that there are cases where Alliance has identified material accounts that probably appropriately should be componentized.

When that arises, my suggestion is they should be componentized. It doesn't matter if you're under, you know, ELG or ASL, or any other. If there is a material difference within a type of asset that would be otherwise included in a single class, you should divide them.

And ELG is not a -- a back door way of achieving the same outcome, and that's for a couple of reasons, one of which there's a benefit to componentizing, when it's merited, because it gives you the data separated by the two (2) types of assets you're looking at, so that you can, then, have an asset -- a -- a database built up that you can use to track the performance of the assets and update your studies as you go forward and you can independently change the lives on the assets, if they find different perform over time. There's a benefit to having material components separated under either approach.

I -- I don't understand how, you know -- ELG takes the idea that there's a dispersion within an account and that dispersion is relevant, whether you have assets that are identical -- even in cases where you have assets that are identical.

If we made up an account that was made up of 65-foot-high cedar poles in the distribution system, you would still have a dispersion, even though there -- the -- the finest definition of the same asset, you'd still have a retirement dispersion, you could still apply ASL or ELG, but, if you are start mixing in materially different types of assets into that account, you -- you end up with -- with something that -- a -- a -- an omelette that ELG doesn't unscramble.

If you're going -- if you need to componentize, go ahead, do the components, move on.

It's a benefit and it's not a distinguishing feature in -- in my submission between ELG and ASL.

Now, Hydro's conclusion on that is also rooted in IFRS, which I will note again is -- I -- I'm not going to say what IFRS requires you to do. I'm saying from a just and reasonable rates perspective, if you need a component, create it. If you don't need it, then -- then I don't know why we would go through the trouble.

THE CHAIRPERSON: Thank you. Mr. Sy...?

BOARD MEMBER SY: Thank you. To me, this is a -- a learning lesson, really, between ELG and ALG. The question I have is regarding BC Hydro.

Mr. Madsen, you indicated that BC Hydro is using ALG and componentization is about three hundred (300) or more -- a bit more than three hundred (300).

The question: Is how long has BC Hydro been using ALG and why Manitoba Hydro is not using it? Like what -- what is so different between these two (2) organization that one is using, which is BC Hydro, using ALG. I'm assuming you're going to tell us how long they have been using it, and, two, why is Manitoba Hydro not using that?

MR. PATRICK BOWMAN: Yes, thank you, Board Member, for the question. I will just note for the record, I was recently testifying on matters of depreciation before the BCUC about nine (9) months ago, you know. You'll find the -- the -- the record of that decision, it just came out.

BC Hydro does not use group methods at all. BC Hydro actually uses an item or individual unit method of depreciation, which Hydro notes here, and they're -- although they have three hundred (300) some odd accounts, it would be interesting to put before you the list of accounts and you could see the balances.

There are many accounts that have, like, thousands of dollars of assets in them. There are many very small accounts and it's a -- it's a historical system that they've had in place.

There are probably -- I'm going to guess -- less than a hundred that -- that make up anything more than about, you know, point -- .1 percent -- .05 percent of their asset base that really matter -- probably 40 of them that that make up more than half of it.

But because they do this other type of depreciation approach, they never do what was considered group approaches. They never bring their -- their -- all of their -- their turbines and analyze them, as a group, to come up with a dispersion and to consider the right way to actuarially model that within to their depreciation expense.

What they do instead is they say, turbines are going to last 60 days, they apply that to each turbine, and amortize each one over 60 years. If it hits 60, they stop. If it ends before 60, they -- they write it off and they -- they -- they take the loss on disposal to their -- to their statements which they, ultimately, defer into rates.

But that -- that unit approach is -- is unusual, I will say, it's a -- it's a bit of a relic. There is -- BC Hydro has not done much with their depreciation system for -- for many, many years.

THE CHAIRPERSON: In relation to Question 2, I don't think it's appropriate for Mr. Bowman to talk about why Manitoba Hydro's doing something. It may be you can ask Manitoba Hydro later why -- why -- why they do it and, you know, as we go, later on, somebody can ask Mr. Bowman if -- if he agrees with it or it's appropriate, but I -- Mr. Bowman can't testify on what Manitoba Hydro is doing.

So, Mr. Hombach, did you want to start

your cross-examination?

MR. SVEN HOMBACH: Yes. Thank you, Mr. Chair, with the Panel's permission, I could go till about noon, find a natural place to break, and we'll take the lunch break at that time?

THE CHAIRPERSON: Okay. We can do that, certainly. I -- I need Ms. Carriere (phonetic) to come in and give me the head nod and, when she does that, if -- if she comes in before noon and gives me the head nod, we'll break at noon. If it's not till after noon, we'll -- we'll wait until she comes in. I'll -- I'll tell people right now. I think we're going to have a shorter lunch today because we need to -- to catch up on where we're at.

MR. SVEN HOMBACH: That sounds fair. Thank you, Mr. Chair. I will get started.

CROSS-EXAMINATION BY MR. SVEN HOMBACH:

MR. SVEN HOMBACH: Good morning, again, to everybody. Just for the record, I see some new faces on the Panel. My name is Sven Hombach. I'm counsel to the Public Utilities Board.

I do have some questions for the Panel and I recognize that this is an usual process and the previous panels have not been joint witness Panels.

I plan to direct most of my questions to individual Members on the panel, but I, certainly, would encourage anybody who feels that they would like to weigh in on the topic to raise their hands and -- and let me. I'm not trying to cut anybody off.

Mr. Watson, like Mr. Bowman, I did not expect you to be a Member of the Panel. I don't anticipate directing any questions to you. I will re -- I will direct them to Ms. Hooper or Mr. Fogg and, then, if there's a need for you to weigh in, perhaps we'll deal with it that way.

Now, Ms. Hooper, you've testified this morning that the SAP system currently uses Equal Life Group, and the ASL calculations are being done offline on spreadsheets, correct?

MS. MICHELLE HOOPER: Yes, that's correct.

MR. SVEN HOMBACH: Now, you'd agree with me that the Board so far has not approved the switch from ASL to Equal Life Group for rate-setting purposes?

MS. MICHELLE HOOPER: Yes, which is why we have the regulatory deferral account to capture those differences.

MR. SVEN HOMBACH: When did Manitoba

Hydro make the switch on its SAP system from ASL to ELG?

MS. MICHELLE HOOPER: We made that change when we implemented IFRS in -- in the -- it was during the 2015/'16 year, but retrospective to April 1, 2014.

MR. SVEN HOMBACH: And the -- the two (2) sets of books that it currently keeps, correct me if I'm wrong, Ms. Hooper, but they're both based on the 2019 Concentric study?

MS. MICHELLE HOOPER: They are based on the Concentric study. So initially, it was the 2014 study when we first implemented, and then, once the 2019 study was approved by our board of directors, then we updated the depreciation rates for both the ALG and ELG calculations accordingly.

MR. SVEN HOMBACH: And your ALG and ELG calculations are currently both based on the 2019 study?

MS. MICHELLE HOOPER: Yes, that is correct.

MR. SVEN HOMBACH: Could you please comment on the difference, if any, and components between the ELG portion of the 2019 study and the ASL or ALG portion of that study?

MS. MICHELLE HOOPER: There's no difference in components.

MR. SVEN HOMBACH: They're the same components?

MS. MICHELLE HOOPER: Yes.

MR. SVEN HOMBACH: So I'll stay with you, Ms. Hooper. You're -- you're aware that at least one (1) of the witnesses on the panel has testified that, in their opinion, the 2019 componentization is adequate for IFRS. Do you -- and that's Mr. Madsen.

MS. MICHELLE HOOPER: Yes, I'm aware that he has testified.

MR. SVEN HOMBACH: Without trying to put the cart before the horse, if the Board were to find that the 2019 study is appropriate for now, does that mean Manitoba Hydro would not have to make any changes to componentization and its SAP system?

MS. MICHELLE HOOPER: During the IFRS compliant ASL depreciation study, we undertook a detailed review of the composition of each of those components. And some of the recommendations that were made by Alliance Consulting Group we would need to implement regardless.

So that would occur with our next major depreciation study which we're due for a regular depreciation study fairly soon, probably 2024, if we do -- we usually do depreciation studies approximately every five (5) years. So there would be some amount of componentization where -- like as Mr. Bowman had indicated as well, that, where there are material, very significant sub-components that have been identified with very different lives, we would need to implement that for just our regular accounting.

So for both ALG and ELG, we would -- regardless of procedure, we would implement some of those.

MR. SVEN HOMBACH: Were there changes in componentization between the 2014 study and the 2019 study?

MS. MICHELLE HOOPER: A few very minor changes. I'm trying to think of an example here. If we -- if I could maybe come back to that, I'll just ask if my -- my back row could find an example of something that changed between the two (2) studies.

MR. SVEN HOMBACH: Yes, please. But -- but really what I'm getting at, Ms. Hooper, is:

Is it common that between depreciation studies, there are some changes to componentization?

MS. MICHELLE HOOPER: We would normally look at all of our accounts and consider whether or not there's been changes in business such that a change in componentization is warranted.

There's normally some accounts added, and I know we added accounts in the 2019 study just for new -- new information and new business processes that were occurring, and there were some new assets, technology changes, and such that just didn't fit into the existing components.

MR. SVEN HOMBACH: Okay. Ms. Hooper, I'd like to get back to the issue of componentization in a bit, but I wanted to start with first principles. Like Mr. Bowman, I'm not an accountant. It's one (1) of my big life regrets. And I wanted to take you to the -- the actual documents that set out what is required.

And if I could ask Ms. Schubert to open Board Counsel book of documents, volume 5, and go to page 10.

(BRIEF PAUSE)

MR. SVEN HOMBACH: We'll stay with you for the time being, Ms. Hooper.

Is my understanding correct that it is IAS-16, 'Property, Plant, and Equipment', that sets out depreciation requirements under IFRS?

MS. MICHELLE HOOPER: Yes, for physical plant.

MR. SVEN HOMBACH: And that qualification for physical plant suggests to me that there's another standard for intangible assets?

MS. MICHELLE HOOPER: Yes, that's correct.

MR. SVEN HOMBACH: And what standard is that, Ms. Hooper?

MS. MICHELLE HOOPER: IAS-38.

MR. SVEN HOMBACH: Thank you. So if we go to section 43 of IAS-16, it states that:

> "Each part of an item of property, plant, and equipment with a cost that is significant in relation to the total cost of the item shall be depreciated separately."

Do you see that?

MS. MICHELLE HOOPER: Yes, I do.

MR. SVEN HOMBACH: So am I to read that 'significant' is basically creating a threshold of materiality?

MS. MICHELLE HOOPER: That's certainly the interpretation that Mr. Madsen has applied to this. The following paragraphs, 44 through 47, apply some contextual interpretive information, and there is indication in those other paragraphs that immaterial components can be grouped.

But if you do group them, you need to use an estimation technique, or you should use an estimation technique, such that depreciation is faithful to the life of the items contained in the group.

MR. SVEN HOMBACH: And is it fair to say that this is a judgment call, or is there more detailed guidance under IAS-16 that sets out when an asset is material or when it is significant?

MS. MICHELLE HOOPER: Professional judgment is required to determine materiality.

MR. SVEN HOMBACH: Now, Ms. Hooper, in terms of the -- the judgment that Manitoba Hydro exercised on componentization, whose judgment was it?

(BRIEF PAUSE)

MS. MICHELLE HOOPER: It's the judgment of management that establishes that componentization. Recommendations are made by our depreciation professionals, but ultimately it's management that concludes on what to -- how to interpret that and whether to accept those -- those recommendations.

MR. SVEN HOMBACH: Now, Ms. Hooper, to -- to interpret this standard, does one have to be an accountant?

MS. MICHELLE HOOPER: I'd say that anyone can come up with their own interpretation, but accountants are trained in interpreting the standards.

MR. SVEN HOMBACH: I -- I'd like you to undertake, or if necessary take it under advisement, to let me know who exercised the professional judgment as to what level of componentization was required, to the extent that there's a professional opinion underlying Manitoba Hydro's position.

MS. MICHELLE HOOPER: Can you clarify for which study you're asking that information?

MR. SVEN HOMBACH: For 2019 and for 2022, and --

MS. MICHELLE HOOPER: So for both the Concentric 2019 depreciation study and the IFRS-compliant ASL depreciation study?

MR. SVEN HOMBACH: Yes, please.

MS. MICHELLE HOOPER: Yes, we can

undertake to do -- provide that information.

MR. BRENT CZARNECKI: Perhaps before we get to the actual undertaking, can we take that under advisement? Because I think Ms. Hooper has answered the question, respectfully, Mr. Hombach, in saying that there's a team of professionals at Manitoba Hydro that look into it, and then it ultimately is advanced to management who makes a decision.

So, maybe if we -- I take it under advisement because are you looking for all of the individuals and their positions within the team that Ms. Hooper works with? Or perhaps you can clarify, like, what specifically you're looking for.

MR. SVEN HOMBACH: Certainly, Mr. Czarnecki. Let's break that down. First of all, taking it under advisement is fine. You'll let the Board know what Manitoba Hydro's position is.

What I'm really getting at is there appears to be a difference in opinion as to what that threshold is between Mr. Madsen on the one hand and Manitoba Hydro staff on the other hand.

So, to the extent that there is an underlying professional opinion that was adopted by management, I'd like to know whose opinion that is.

MR. BRENT CZARNECKI: Okay. And --

MR. SVEN HOMBACH: Enable the Boards to weigh those two (2) competing opinions.

MR. BRENT CZARNECKI: And just so we're clear on my -- why it's under advisement, we normally don't break it down to individuals at Manitoba Hydro. There's a corporate position. And she's outlined that the corporate position made its way up to management who blessed it.

So, we'll -- we'll see if we can add a little more granularity as to who those professionals were. But, of course, we operate as Manitoba Hydro as a team.

MR. SVEN HOMBACH: Understood. Thank you, Mr. Czarnecki. On my next --

THE CHAIRPERSON: Sorry. Mr. Hombach, though, were you look -- you used the word 'opinion'.

Do you want also to see if there's something in writing where they arrived at the decision or is it just the decision?

MR. SVEN HOMBACH: Yes, to the extent that there is something in writing. Perhaps the undertaking can be expanded to -- to file it on the record.

MR. BRENT CZARNECKI: Yeah, we'll --

we'll take a look and try our best.

--- UNDERTAKING NO: 51: For Manitoba Hydro to advise who exercised the professional judgment as to what level of componentization was required, to the extent that there's a professional opinion underlying Manitoba Hydro's position for both the Concentric 2019 depreciation study and the IFRS-compliant ASL depreciation study? (TAKEN UNDER ADVISEMENT)

CONTINUED BY MR. SVEN HOMBACH:

MR. SVEN HOMBACH: And again, Ms. Hooper, I -- I plan to circle back to the issue of componentization in a little more detail. But still on the subject of IAS-16, I'd like to ask Ms. Schubert to turn to page 11 of the document, and scroll down to section 60.

Now, section 60 states that:

"The -- the depreciation method used shall reflect the pattern in which the asset's future economic benefits are expected to be consumed by the entity."

In my non-accounting mind, is this the concept that's commonly referred to as matching?

MS. MICHELLE HOOPER: There is no matching principle in IFRS specifically. There used to be under Canadian GAAP.

But it is the intent, my interpretation, at least, of the standards, that you want to try as best as you can to match the depreciation expense to the consumption of assets and their useful life so that those costs are taken into income at the same time as the assets are used up, in effect.

MR. SVEN HOMBACH: Thank you. And without belabouring this point, I -- I would like to break this down a bit. And I'll ask Mr. Bowman to weigh in, as well.

This does not refer to the use of the asset, its refers to the future economic benefits.

In -- in your respective mind, is the

economic benefit of a Hydro asset consistent over the asset's lifespan or is it more like a new car whether it's a higher economic benefit early on in the process?

(BRIEF PAUSE)

MS. MICHELLE HOOPER: If you look to paragraph 62(a), it specifically states that:

"A depreciation method that's based on revenue generated is not -- is not appropriate."

So, if you're referring to economic benefits early in life as the revenue, or the profit, on a generating station, then that would not be appropriate to use that as an assumption for depreciation.

MR. SVEN HOMBACH: So, is it your understanding then, Ms. Hooper, that a hydro dam -- let's use Keeyask as an example -- has a consistent benefit while it is in operation?

(BRIEF PAUSE)

MS. MICHELLE HOOPER: I'm not an

engineer, but my expectation would be that, as the various sub-components of smaller assets of a generating station wear, they would become less efficient over time.

But, you know, you -- you see that with -- as items come up and get replaced throughout the life of the generating station.

MR. SVEN HOMBACH: Mr. Fogg...?

MR. ALASTAIR FOGG: Yeah, I'd just like -- like to add, I think that was an important point that Ms. -- Ms. Hooper made. When we generalize it to a generating station, those are very different assets that we're talking about from an economic benefit or life perspective, whereas you may be talking about digital components that have a very short life versus a concrete structure that may have a hundred year life.

So, I think that's part of what that section of the standard is trying to get at, is that the opportunity for future benefit of that asset differs by the asset we're talking about.

So, when we talk about a generating station, for example, we need to be more specific and differentiate between those types of assets.

MR. SVEN HOMBACH: Thank you. Mr.

Bowman, in your written evidence you suggested that the economic benefit of a hydro asset is higher later in life.

Perhaps you'd like to elaborate and weigh on this issue?

MR. PATRICK BOWMAN: I would, although I'm hesitant to do it with an IFRS accounting standard in front of us, lest it be interpreted that I'm trying to -- well, where -- where an opinion doesn't belong.

But I believe Ms. Hooper appropriately took you to 62(a) -- it's the same place I was going to take you -- about the IFRS specifically noting that revenue based methods are not appropriate.

I -- I would understand most of the economic profile of an asset that we're talking about to not necessarily be revenue based, but things like -- like avoided cost or roll in a system that change over time.

And -- and I will say there are depreciation methods, approaches that would allow you to better pick up some of those. But we would be a significant outlier in Manitoba where we could use some of those. They -- they are effectively non-straight line methods. And -- and straight line is, like, almost universally used throughout -- throughout

North America for these type of assets.

Also, there -- to the extent that there's something that's not revenue based but that is value based, you will find something like inflation would be a relevant factor.

When we say "straight line," we generally mean straight line based on nominal dollars as of the date of installation, not something that does an adjustment for inflation on a straight line basis or straight line real amortization of an asset into -- into rates or into consumption of its value.

As a matter of fact, most of the depreciation textbooks you find, within, like, the first five (5) pages, it'll say, oh, by the way, mostly inflation, let's just ignore that, because it gets quite complicated when you start to build it in.

There are some approaches that do that, but it's not generally a major factor. But I think, at the end of the day, and the reason I contextualize it that way, is you've taken us to an IFRS standard about how to -- how to amortize an asset.

I would suggest that when you're looking to just and reasonable rates, this is one (1) of the factors one should consider, something like an -- an economic value over time, which Mr. Fogg correctly notes is about a complex of assets, usually not just one (1) -- one (1) feature, should flavour and colour the way that one comes up with what is just and reasonable rates rather than saying, oh, we want to use a non-straight line method or we want to use real depreciation or something of that nature.

It should just be an overriding caution against the idea that we got to hurry up and pay down assets or -- or depreciate down assets where really they're going to give us a lot more of their value in their back end than in the front end. And so, it's more like a -- it's more like a caution against events front loading.

And I -- if you want to follow the math of that as an example, I did pull up from the Concentric study the amortization of Bipole III. And Bipole III under -- you know, buildings on Bipole III are supposed to be a sixty-five (65) year asset.

Under ASL versus ELG, we'll find a very different amortization because they're brand-new assets. That's where ASL and ELG come up with very different rates.

And you'll find that, even though we expect these buildings to last on average sixty-five (65) years, if you do it under ASL, you come up with one sixty-fifth every year. If you do it under ELG, you're closer to one fiftieth every year because of this idea that we got to hurry up and -- and deal with this -- this early years -- you know, early retirements.

And that to me is -- is moving in the wrong direction compared to just and reasonable rates, trying to reflect when that asset is providing benefits to -- to customers. If anything, it leaves less of the asset on the books later in its life when it's of its most value to customers given the -- the tendency, if nothing else, inflation, but, also, other -- other cost trends that the system will see.

I don't -- I don't think by use of ASL for fifty (50) years my grandparents left us a mess by not paying down Pine Falls enough. I think Pine Falls is a brilliant asset that is giving us great value. And, as a result, I -- I don't know how we'd say, oh, well, we -- we need to go back and fix that, and catch up from that. It just doesn't -- doesn't fit with my understanding of the economic profile of the system.

MR. SVEN HOMBACH: Thank you, Mr. Bowman. Before we delve into the methodologies, I'd like to refer the panel to one (1) more provision in the standard. And that is Section 67, which is found on page 12.

Ms. Hooper, back to you. Section 67 states that:

"The carrying amount of an item of property, plant, and equipment shall be derecognized on disposal or when no future economic benefits are expected from its use or disposal."

I take it that is the provision Manitoba Hydro relies on when it states that interim gains and losses can -- have to enter net income under IFRS unless there's an approved deferral account.

MS. MICHELLE HOOPER: Yes. In combination with paragraph 68, which follows it, which states that:

"The gain or loss arising from derecognition shall be included in profit or loss when the item is derecognized."

MR. SVEN HOMBACH: So -- so Ms. Hooper, do accountants draw a distinction between interim gains and losses on the one hand, and terminal losses on the other hand?

And -- and perhaps I should elaborate. There's been a lot of talk in this proceeding on interim gains and losses. But there are also losses like the decommissioning of Selkirk.

Would you consider the decommissioning of Selkirk in the same vein as an interim gain or loss? Or is that different?

MS. MICHELLE HOOPER: We consider the decommissioning of Selkirk to be a terminal loss.

MR. SVEN HOMBACH: And in -- in a minute or less, what is the difference between an interim loss and a terminal loss for an accountant?

MS. MICHELLE HOOPER: So an interim loss, when you're talking group accounting approaches to depreciation, would be when you're retiring individual assets within an account prior to the termination of the account as a whole.

MR. SVEN HOMBACH: Thank you.

Mr. Chair, I note it's 11:57. I'm happy to keep going for fifteen (15) minutes on a different topic or to break now.

THE CHAIRPERSON: I think we'll break now. And we'll break until 12:45. Thank you.

--- Upon recessing at 11:57 a.m.

--- Upon resuming at 12:48 p.m.

THE CHAIRPERSON: Good afternoon. Mr. Williams...?

DR. BYRON WILLIAMS: Mr. Chair, just -- I know we're always anxious about timing. And if the Panel is worried about timing, I don't expect that we will use all of our allotted time. I would expect we'll come in at less than thirty (30) minutes, if that assists.

THE CHAIRPERSON: I appreciate that. Yeah. Mr. Hombach...?

MR. SVEN HOMBACH: Thank you, Mr. Chair.

CONTINUED BY MR. SVEN HOMBACH:

MR. SVEN HOMBACH: I would like to change subjects from what I examined on before the lunch break and turn to the issue of utilities that use equal life group as opposed to average life group.

And to begin with, let's go back to Manitoba Hydro's presentation from this morning and turn to page 7, please.

Ms. Hooper, I don't recall whether it was you or Mr. Fogg that -- that discussed which utilities are included here. But my understanding is you based this on the response to PUB/Manitoba Hydro

2nd Round Information Request 37. Correct?

MS. MICHELLE HOOPER: Yes, that's correct.

MR. SVEN HOMBACH: Okay. Would it be possible to obtain an undertaking for you to just list the utilities in each of these buckets. So -- and -- and create a revised slide to -- to indicate which utility you're relying on for each charge? As a visual aid for the Panel?

MS. MICHELLE HOOPER: Sure. Just -- just rework PUB 2-37 to show, like, the --

MR. SVEN HOMBACH: That would work. For example, colour coding the chart to match the colours on the slide would work. I'm just looking for a visual aid for that.

MS. MICHELLE HOOPER: Sure. We can do that.

--- UNDERTAKING NO. 52: Manitoba Hydro to revise PUB 2-37 to list utilities in each bucket colour coded.

CONTINUED BY MR. SVEN HOMBACH:

MR. SVEN HOMBACH: Thank you. Now,

let's turn to that Information Request. Ms. Schubert, if we could put 2nd Round Information Request 37 back on screen.

Ms. Hooper, you'll recall the Chair asking you about some of the large Crown utilities.

Do you recall that?

MS. MICHELLE HOOPER: Yes, I do.

MR. SVEN HOMBACH: And you and Mr. Fogg indicated -- and I believe Mr. Bowman supported -- that BC Hydro uses something called individual unit accounting?

MS. MICHELLE HOOPER: Yes, that's correct.

MR. SVEN HOMBACH: I'd like to show you an excerpt from BC Hydro's most recent revenue requirement application. And if I could ask Ms. Schubert to put that up on screen.

This is not currently on the record for ease of reference. I would propose we make this PUB Exhibit 27.

--- EXHIBIT NO. PUB-27: Excerpt of BC Hydro's most recent revenue requirement application

CONTINUED BY MR. SVEN HOMBACH:

MR. SVEN HOMBACH: If we could scroll down, please. A bit further.

So -- so BC Hydro in that application indicates that they used the straight line average service life method.

And I wanted to simply confirm my understanding with you, with Mr. Fogg, and perhaps Mr. Bowman, if appropriate, that -- that what BC Hydro does is it uses average service life, but rather than lumping, let's say, two (2) or three (3) generating stations together into one (1) bucket, it has individual accounts for each of those generating stations.

MS. MICHELLE HOOPER: That's my understanding. Individual accounts for each asset at each generating station.

MR. SVEN HOMBACH: In -- in -- again, for my benefit as someone that isn't an accountant, the -- the underlying methodology here though is still average service life as opposed to something more akin to equal life group because it's based on the type of asset rather than the service life of the asset.

Does it not?

MS. MICHELLE HOOPER: An average

service life is an input to any kind of depreciation model, whether it be a group or an individual asset approach.

So you use an average service life assumption in calculating ELG group depreciation and in ALG group depreciation and in individual unit depreciation.

MR. SVEN HOMBACH: Mr. Bowman, you're comfortable with that explanation?

MR. PATRICK BOWMAN: Generally. I -- I can help a little bit. I was in this BC Hydro hearing and I have evidence on depreciation in it.

You'll see it does say average service life, but as you noted, it's not applied to groups. It was applied to -- to individual assets, although, in some cases, their assets are mass assets. But in general, they're -- they're applied to individual assets.

They are not divided by site, in fact. So turbines are all the turbines on the system. And -- and transmission towers are all the transmission towers and spillways are all the spillways.

So it -- so it doesn't have that site-specific aspect. It -- but it does have asset type broken out.

But to each asset, if you were to say, I -- I will adopt a sixty-five (65) year life for my turbine, the first year you put your turbine in, you would amortize one-sixty-fifth (1/65) of it. Exact same way we would do with an average service life approach.

Whereas, if you used equal life group and you said, I want to put in a turbine and call it sixty-five (65) years, it -- it would depend -- your rate would depend on your dispersion curve and it would vary depending on if you're an L3 or an R4 or an S2.

And it would be generally -- if not, universally -- shorter than sixty-five (65).

And we can show that in -- in Mr. Kennedy's (phonetic) study in this Hearing, if you like, about how ELG and ASL lead to -- one leads to taking the original investment and dividing by sixty-five (65). And one leads to taking the original investment and dividing by something shorter than sixty-five (65).

BC Hydro's would be more akin to that ASL type approach.

MR. SVEN HOMBACH: Thank you, Mr. Bowman. I'd like to put another document on the record. This is an excerpt from Ontario Power Generation's most recent depreciation study. And I've provided that to Ms. Schubert earlier this morning.

I propose that, for the record, we make this PUB Exhibit 28. And let's go to page 14 of that document, please.

--- EXHIBIT NO. PUB-28: Excerpt of Ontario Power Generation's most recent depreciation study

CONTINUED BY MR. SVEN HOMBACH:

MR. SVEN HOMBACH: So Ms. Hooper, subject to check, it's -- it's my understanding that while Ontario Power Generation does not use average service life for its computer systems, it does use it for its generating stations, including the nuclear power plants.

Do you have that same understanding?

MS. MICHELLE HOOPER: There is an average service life estimate provided by the depreciation consultant. But they do not apply average life group, that's my understanding.

(BRIEF PAUSE)

MR. SVEN HOMBACH: If we could go back to PUB 2nd Round Information Request 37 for a moment.

Ms. Hooper, just for the record, is my understanding correct that when Newfoundland Power uses equal life group, that utility is privately owned?

MS. MICHELLE HOOPER: I believe so.

MR. SVEN HOMBACH: Does -- does Manitoba Hydro agree with the argument that Mr. Bowman made in his written evidence that New Brunswick power is currently the only Crown utility using equal life group for rate-setting purposes?

(BRIEF PAUSE)

MS. MICHELLE HOOPER: I believe that's generally the case.

MR. SVEN HOMBACH: Thank you. I'd like to take a moment to just very briefly go back to the Ontario Power Generation study and go to page 17. Second paragraph on the page.

Now, Ms. Hooper, again, I'd -- I'd just ask you to accept that, subject to check, it indicates that reports noted that OPG had continued to calculate depreciation rates based on the average life group procedure whole life technique.

So -- so I'd simply to ask you to accept, subject to check, that this is what Ontario Power Generation does. And if that is incorrect, perhaps advise by way of an undertaking. And if necessary, correct the record.

MS. MICHELLE HOOPER: Will you just bear with me for one (1) minute?

(BRIEF PAUSE)

MR. SVEN HOMBACH: It might be easiest to do this by way of an undertaking so we can move on.

MS. MICHELLE HOOPER: If I could just -- there's a footnote on -- below the chart on PUB/MH-2-37. So based on my discussions with Mr. Kennedy and review of the materials that are available online for OPG, that they developed depreciation rates themselves by applying the service lives from the depreciation study on a straight line basis.

So the document that you brought up says otherwise, but from discussion with Mr. Kennedy, he indicated that what's in the -- in the application -- or in PUB/MH-2-37 is based on those discussions with Mr. Kennedy.

MR. SVEN HOMBACH: Let's move on from this issue and turn to the issue of componentization. And I'll indicate I do not have any questions on whole life versus remaining life, since all parties appear to be in agreement.

Now, Ms. Hooper, you indicated before that there's professional judgment involved in determining what constitutes significance for the purpose of IAS 16. Correct?

MS. MICHELLE HOOPER: Yes, that's correct.

MR. SVEN HOMBACH: And -- and I had asked this morning for an undertaking to advise who made the professional accounting determination at Manitoba Hydro.

And I -- I do understand that, Mr. Fogg, you had a comment on that on the record that might clear this up?

MR. ALASTAIR FOGG: Sure, Mr. Hombach, I -- I'll try and do my best.

So, maybe it -- it's appropriate to first talk about if we go back a number of years to the time where Manitoba Hydro transitioned from C-GAAP to IFRS.

There would have been work done at that

time by Manitoba Hydro accounting staff, at the time, as well as with support from -- I believe it was Concentric conducted the depreciation study, as well as we had advice from KPMG from a financial reporting perspective.

There would have -- we would have the made decisions at that time around the level of componentization, to meet IFRS compliance. And that's -- at that time, was where that decision around the ELG methodology was made in relation to that transition to IFRS or at least the -- that -- started that discussion.

I guess, to your specific question, I believe you referenced the 2019 Concentric study and the -- then the 2022, which would be the Alliance study.

Any time we have a new depreciation component that's identified from one of these studies, or that's there's a change in the life that's applied for an asset, that would change the depreciation rate, that singular change has to be approved by our CFO.

So, each and every individual small change to either add a component or change the life, which would change the depreciation rate, would proceed through the different levels of management within the accounting area and then ultimately be approved by our CFO.

So, he would receive a memo with details around that recommended change and the reasons for the change and then would approve it.

MR. SVEN HOMBACH: Has Manitoba Hydro's auditor ever opined on the issue of componentization.

MR. ALASTAIR FOGG: So, from the auditor's perspective, the auditor would receive and confirm that those approvals have been received. The -- I don't believe our auditor would have taken a position around whether it is the right level of components, they're simply ensuring that the componentization meets -- meets the requirements and that we can properly -- that our financial statements are properly represented, based on those -- that level of componentization that we've -- that management has elected to apply.

MS. MICHELLE HOOPER: If I could just add to that, the auditors provide an opinion on the financial statements as a whole, rather than each individual.

So, to the extent they do review our depreciation and componentization and everything else, as part of the audit, but they're not providing an opinion specifically on individual aspects of the accounting.

MR. SVEN HOMBACH: And -- and I'd like to explore that issue a little bit further, specifically, with respect to average life groups since we don't seem to be having the same argument about componentization on Equal Life Group.

If I could ask Ms. Schubert to actually pull up the 2019 study which is Minimum Filing Requirement 95, Attachment 1, and go to page 5 of the PDF.

Sorry, I -- I my page -- it may be page 4. There we go.

Mr. Fogg and -- and Ms. Hooper, this question goes to you. If -- if you look on the left column on that page, page 4 of the PDF, the second paragraph.

There is the statement that:

"Concentric notes that the ALG accrual rates are not in accordance with IFRS and should only be used for regulatory reporting purposes in the circumstances of Manitoba Hydro."

Do you see that statement, left column of the second paragraph?

MS. MICHELLE HOOPER: Yes, I do.

MR. SVEN HOMBACH: Who made that determination? Was that Mr. Kennedy? Or, did Manitoba Hydro make that determination?

MS. MICHELLE HOOPER: I believe that statement has been in all of the depreciation studies since 2010 or with the -- in conjunction with the ALG depreciation rate schedules.

They weren't always part of the same document, back since 2010, so it would stem back to his initial analysis of how much componentization was required for IFRS under an ELG approach versus an ALG approach.

It is Mr. Kennedy's opinion that more componentization is required for an ALG approach and that is reflected in the record from past proceedings.

I think there was an Appendix 11.49 from the 2015/'16 GRA that has -- puts up -- forward that position. So, since there's been no substantial change in componentization since 2010, Mr. Kennedy's opinion has not likely changed on that matter, which would be reflected in his report.

MR. SVEN HOMBACH: Mr. Madsen, do you

disagree with the statement on that report and believe that the study is, in fact, IFRS compliant?

MR. DUSTIN MADSEN: Yes, I do, sir.

MR. SVEN HOMBACH: Ms. Hooper, does -- does Manitoba Hydro, independent of Mr. Kennedy, have any -- any evidence or -- or professional accounting opinion that -- that refutes Mr. Madsen's assessment, keeping in mind the comment that there's judgment involved?

MS. MICHELLE HOOPER: Mr. -- or it's -- sorry, it's Manitoba Hydro's opinion that the current level of componentization is not compliant with IFRS on an ALG basis. And that's -- there are -- there's too wide of a dispersion in some of those accounts to -- for the average of the -- the average service life of the account to be representative of the depreciation or of the useful life of the assets contained in the account.

And that's what you're seeing in the IFRS compliant ASL depreciation study, where those accounts have been split up in order to narrow the dispersion on the accounts, such that, the average is representative or is reasonably representative of the life expectancies of the assets within each account, after sub-componentization.

MR. ALASTAIR FOGG: And -- it's Mr. Fogg. Just -- just if I could add.

I mean I -- I just would like to -- that -- that -- this goes all the way, as I mentioned, back to that initial conversion to IFRS. So, we would have detailed review and study at that time, both by Concentric, but also KPMG at the time from a financial perspective and an interpretation of IR -- IFRS.

As Ms. Hooper mentioned, that has continued in further studies that Mr. -- detailed studies, that Mr. Kennedy had done and also is what you see in the Alliance study that Mr. Watson has done as well, which is another detailed review from a depreciation perspective.

MR. SVEN HOMBACH: Thank you, Mr. Fogg and Ms. Hooper. Now, the parties -- or at least the experts who participated, appeared to be in agreement. If the Board were to adopt option 2 there has to be a transitional process.

So, I'm going to throw a hypothetical at you and Mr. Czarnecki or Ms. Fernandes may want their finger on the button.

If the Board, after hearing all of the evidence, were to accept Mr. Madsen's opinion, that the 2019 study is IFRS compliant and the Board were to issue a direction to say, until a new study exists, though with the Average Life Group numbers in that study. And Manitoba Hydro disagrees with that assessment, what would that mean for your purposes, and in particular, would it be your position that you would have to set up another deferral account or would you just have to go with the Board's ruling on that issue?

(BRIEF PAUSE)

MR. ALASTAIR FOGG: Mr. Hombach, I'll do my best on -- on the theoretical or the -- the potential. But I -- I suppose it would be an interesting situation where we'd have a -- a decision that has made an assessment, took a view around the level of componentization required on that adoption of -- of ALG.

I believe in -- in kind of the narrow time period, we may have to continue some degree of deferral until we had a time to assess from a -- a financial reporting perspective, as well, whether we could proceed on that from a componentization that likely still involves doing a depreciation study at the same time.

So, I think there could be -- we'd have

to determine something in the interim that would allow us to proceed to actually assess that.

I just would note, and I think it came up earlier that and -- and I believe Mr. Bowman identified it as well. We do know, just even from today, from the analysis and the Alliance study, that there are likely components that we should add, based on Mr. Watson identified, regardless of whether we're talking about ALG or ELG and that would be something we should be doing, as well.

MR. SVEN HOMBACH: So, in terms of timing, Mr. Fogg, I believe you indicated that there would be a new depreciation study in 2024. Correct?

MR. ALASTAIR FOGG: I do believe that would be and subject to Ms. Hooper correcting me, but I believe we would to look to -- to initiate that exercise shortly after the Board Order from this proceeding.

It may complete itself within the 2024 time frame but we would look to -- to have another depreciation study started following the Order in September.

MR. SVEN HOMBACH: So, at this point in time, then, is it Manitoba Hydro's intention to file the next General ate -- General Rate Application under a new depreciation study, regardless of whether the Board goes with Option 1, Option 2, Option -- perhaps not Option 3 or Option 4, since those would defer the issue.

MR. ALASTAIR FOGG: Subject to confirmation of the exact schedule of that proceeding, I think it would be beneficial that if we had that new depreciation study completed, it would be filed as part of that proceeding.

(BRIEF PAUSE)

MR. SVEN HOMBACH: Let me approach the -- the same hypothetical from the other side, Mr. Fogg, and -- and, Ms. Hooper, please feel wee -- free to weigh in.

If the Board were to accept average life group, going forward, from Manitoba Hydro's perspective, would it be feasible to use the aligned study until the next depreciation study is in place, rather than having a transitional process?

MS. MICHELLE HOOPER: We cannot implement the Alliance study immediately. There's a -- a time-frame, as I explained, in our direct evidence, that it would take time in order to implement that.

Even if we accepted it, as is, with the componentization, we still have to update all of our systems, and update all of our assets and capital projects to reflect that.

So, there would be -- the time period might be a bit shorter than it would, if we don't need to do, you know, further analysis to finalize componentization and engage with the PUB but it would still -- there would still be an interim period while that work was conducted.

MR. SVEN HOMBACH: And the primary issue, it's really just the -- the -- the amount of new accounts, the amount of different accounts?

MS. MICHELLE HOOPER: The implementation is -- is -- the effort required to implement will be directly related to the number of new accounts.

So, as Mr. Madsen indicated, if it was really only two (2) or three (3) or four (4) accounts, yes, we could do that quite simply and easily. There would not be very many people that needed training, but we do not believe that two (2) or three (3) or four (4) accounts would do it.

MR. SVEN HOMBACH: And -- and, Ms.

Hooper, I know that Board Member Bellringer already asked you about this earlier, but, perhaps, ex -- ex -- explain it to me.

If Manitoba Hydro already uses the spreadsheets to do an average service life calculation, independent of its S-A-P system, why would it not be possible to use that spreadsheet, on a temporary basis, to determine the actual depreciation expense for financial recording and rate-setting purposes.

MS. MICHELLE HOOPER: It's only feasible to make those calculations in a spreadsheet, because the cost base and the componentization are identical between our ELG methodology that we're using for financial reporting purposes and the ALG that we're using for -- for rate-setting purposes -- or for to determine the deferral amount.

As soon as your cost starts to diverge, it becomes a -- it would become a very, very complex effort to maintain a separate set of books and financial state -- or in Excel.

MR. SVEN HOMBACH: And I recognize the evidence for this is on the record, Ms. Hooper, but, if we could go to Board Counsel Book of Documents, Volume 5, please, and turn to page 41. And, if we could scroll down a little bit.

Ms. Hooper, this is an excerpt from PUB/Manitoba Hydro's 2nd Round Information Request 39, and it asked Manitoba Hydro to quantify the impact on annual depreciation expense between the 2019 average service life study and the 2022 average service life study. I take it you're familiar with that tract?

MS. MICHELLE HOOPER: Yes, I am.

MR. SVEN HOMBACH: So, as a rule of thumb, can we simply say that the difference is about 40 million per year?

MS. MICHELLE HOOPER: Yes, I can accept that.

MR. SVEN HOMBACH: And that's in each of the test years?

MS. MICHELLE HOOPER: Yes.

MR. SVEN HOMBACH: So, let's change topics, then, and deal with the issue of interim gains and losses. And I'd like to refer to the issues document and I'd ask Ms. Schubert to turn to page 16 of that document, please. Sorry. The -- the depreciation issues document, please, which is Exhibit PUB-20, I believe. Page 16. And let's scroll down to the table in the middle off that page, please.

Let -- let's start with the basics. Is

my understanding correct that with the average life group methodology there is a much bigger difference between applying the methodology with deferring interim gains and losses as opposed to without than there is for ELG?

MS. MICHELLE HOOPER: I'm sorry, can you clarify that question?

MR. SVEN HOMBACH: Yes. So -- so that -- the table on page 16 of the issues document suggests to me that the deferral of interim gains and losses has a significantly higher impact for the ALG procedure than for the ELG procedure, specifically over twenty (20) years, about 318 million as opposed to 34 million.

MS. MICHELLE HOOPER: Yes, based on our estimates of gains and losses under ALG being very much more significant than under ELG. Not everyone agrees that we're calculating them correctly.

MR. SVEN HOMBACH: I'd like to break that issue down a bit further. And first of all, if -- if you could, in two (2) minutes, I'll ask at a high-level, please explain why there is such a higher difference for ALG than for ELG?

(BRIEF PAUSE)

MS. MICHELLE HOOPER: With ELG, the depreciation rates are calculated based on the amount of depreciation that you need for each -- like -- okay, back up a bit.

In ELG, within the calculation itself, each vintage of -- of assets and -- is sliced into equal life slices and a depreciation requirement is determined for each of those equal life slices.

So, they -- they -- statistically, based on the Iowa Curve that's assigned, the -- the depreciation calculation depreciate like within -- embedded in that calculation, assets that have an expected life of one (1) year are amortized over one (1) year. If it's ten (10) years, they're amortized over ten (10) years.

Over the account as a whole you expect the average will be whatever the average is that is assigned for that account.

So, because that's built right into the calculation, any asset that retires at the time that is expected from the assigned -- like the depreciation parameters are assigned, is expected to be fully deprec -- or is deemed to be fully depreciated on retirement.

So, we don't take a gain or loss on

anything that is retired when it's expected. We only calculate a gain or loss on differences from expected. So, our calculation for ELG looks at actual retirement activity versus expected and calculates a gain or loss only on the difference.

What they --

MR. SVEN HOMBACH: So --

MS. MICHELLE HOOPER: Sorry, go ahead.

MR. SVEN HOMBACH: Sorry, I interrupted you. So -- so if there's an inherent function of the difference in methodologies, is it normal for ALG to always have a bigger difference in interim gains and losses?

MS. MICHELLE HOOPER: ALG uses an average, applies an average to every asset. So, when you're using that average, the average is not going to be reflective of the shorter-lived or the longer-lived assets in the account.

So, to the extent that there's significant dispersion in an account, in life expectancies you're going to have bigger gains and losses. And with our -- with our accounts we're -- we are expecting it would be bigger, gains and losses, based on our analysis.

MR. SVEN HOMBACH: Ms. Hooper, if we

could go briefly back to PUB/MH 2nd Round Information Request 37.

MR. DUSTIN MADSEN: Excuse me, sir, it's just Mr. Madsen. Could I just add -- weigh in on the ALG side of that response?

MR. SVEN HOMBACH: Yes, please.

MR. DUSTIN MADSEN: Thank you. So, it was -- Mr. Bowman explained it earlier today. The ALG procedure, it's a group procedure, while it is calculated, as Ms. Hooper has explained, it -- it also assumes that assets have different lives as well.

So, while it does apply an average rate, so if you have a ten (10) year average service life, each asset is 10 percent, it assumes that there are some assets that will retire after one (1) year. It assumes some assets will retire after fifteen (15) or -- or twenty (20) years. It's -- it's an average life.

So the logic that Manitoba Hydro is applying to the calculation of the ELG gain or loss can also be applied to the termination of an ALG gain or loss as well. And the opposite is true.

The ELG rates are also determined -- they're determined in the manner that Ms. Hooper explained, but you also apply a single rate to all asset accounts as well, similar to the ALG rate.

So if you want to -- you can calculate both gains and losses under both procedures consistently is what I'm trying to say, either by increasing or decreasing the amount of the -- or the size of the loss.

MR. SVEN HOMBACH: Thank you, Mr. Madsen. So -- so on that note, if we could briefly go back to PUB/Manitoba Hydro 2nd Round Information Request 37, I'll open this question up to anybody on the panel that would like to weigh in.

Is it the group's understanding that the utilities on this chart that use average service life or average life group all defer interim gains and losses, or are there any that don't?

MS. MICHELLE HOOPER: I don't know specifically what each of these utilities is doing but, generally, if they're reporting under US GAAP, they are likely not reporting gains and losses.

The company that reports under CPE GAAP, or Canadian Public or Private Enterprise GAAP, is like within that standard. It allows you to use industry standard practices, so they are really reporting under US GAAP within Canadian -- within C-GAAP for them. So they are likely not reporting losses either.

The IFRS companies, I -- I don't know individually whether they're reporting losses or not, but I would think that if their determination is that losses are material, or gains, they would need to report them to be in compliance with IFRS.

MR. SVEN HOMBACH: When -- and -- and just so that we're clear, when you say, "reporting interim gains and losses," that means taking them into account in that income and on the operating statement on an annual basis?

MS. MICHELLE HOOPER: Again, I don't know exactly what they're doing, but my expectation from my knowledge of IFRS is they would have to, at least, be doing some kind of estimating to determine what kind of magnitude of gains or losses may have arisen, and deciding on a materiality basis whether or not to book them.

MR. SVEN HOMBACH: So -- so then -- then let's turn back to the comment that you made about the US GAAP utilities and the C-GAAP utilities.

I took you to the standard earlier, and -- and could you please confirm to me that, under the old C-GAAP standards, interim losses could be deferred, terminal losses like Selkirk could not?

MS. MICHELLE HOOPER: Under the old C-GAAP standards, there was an -- you were allowed to look to industry standard practices if the specifics in the standard did not relate well to your industry.

So most -- we -- our -- our Company and probably most of the companies in Canada were following -- really following US GAAP for property, plant, and equipment prior to implementation of IFRS.

MR. SVEN HOMBACH: And -- and you're rapidly losing me on the distinction between US GAAP and -- and C-GAAP, but let me just put it to you more directly.

A terminal loss like Selkirk, would you have been able to defer that under C-GAAP?

MS. MICHELLE HOOPER: We would have recognized a terminal loss under C-GAAP prior to the implementation of IFRS.

MR. SVEN HOMBACH: Recognizing meaning it would have hit the books, it would not have --

MS. MICHELLE HOOPER: Reported it against net income in the year that it occurred.

MR. SVEN HOMBACH: So then, at the risk of belabouring the -- the point, Ms. Hooper and Mr. Fogg, when Manitoba Hydro set up its current deferral account, it rolled interim as well as terminal losses into that account?

MS. MICHELLE HOOPER: Yes, it did.

MR. SVEN HOMBACH: So -- so let's explore that a little bit more, and I would ask Ms. Schubert to open the PUB/Manitoba Hydro 1st Round Information Requests and go to PUB/MH-I-82, page 3 of 3, and let's scroll down to -- to the bottom of the document.

So, Ms. Hooper, I'd like to refer you to the second line from the bottom. It's row 38. You with me?

MS. MICHELLE HOOPER: Yes.

MR. SVEN HOMBACH: And under 'Equal Life Group', there are -- I'd like to just point out the first two (2) columns. The first column is for the 2020/'21 fiscal year, correct?

MS. MICHELLE HOOPER: Yes.

MR. SVEN HOMBACH: The second is for 2021/'22?

MS. MICHELLE HOOPER: Correct.

MR. SVEN HOMBACH: And there is a $32 million addition on -- in the 2020/'21 fiscal year.

MS. MICHELLE HOOPER: That's correct.

MR. SVEN HOMBACH: Is that largely Selkirk?

MS. MICHELLE HOOPER: Yes, $37.1 million, I believe, subject to check, of that -- of the thirty-two point six (32.6) is Selkirk, or -- did I say -- 37.1 million.

MR. SVEN HOMBACH: And when Manitoba Hydro decided to put that into the deferral account, it assumed that the Board would approve that deferral?

(BRIEF PAUSE)

MS. MICHELLE HOOPER: The creation of that deferral account on the implementation of IFRS was based on our interpretation of direction provided by the Board to maintain C-GAAP accounting practices.

There was -- and just to be clear, there was no specific direction from the Board regarding gains and losses themselves, just to maintain C-GAAP accounting. So we just deferred all gains and losses in the absence of direction on what to do with gains and losses.

MR. SVEN HOMBACH: And -- and this is where I may require some clarification, Ms. Hooper.

You -- you testified a few minutes ago that, under C-GAAP, terminal losses would have had to be recognized, correct?

MS. MICHELLE HOOPER: Yes, that's correct.

MR. SVEN HOMBACH: So when the Board is being presented with option 2 -- and, Mr. Madsen, Mr. Bowman, please feel free to weigh in -- is it in the intention in option 2 to permanently defer terminal losses, as well as interim losses, or interim losses only? Ms. Hooper...?

MS. MICHELLE HOOPER: In our opinion, the -- the two (2) should be considered separately, and a decision should be made for what to do with interim losses and also what to do with terminal losses for rate-setting purposes.

So for terminal losses, there is potentially some benefit to deferral in order to avoid spikes in net income that may result when such a loss occurs.

MR. DUSTIN MADSEN: So -- it's Mr. Madsen. I -- I suppose it's -- from an accounting perspective, IFRS doesn't distinguish between whether the loss is terminal or interim, the -- simply that all gains or losses as quantified are -- are taken to income.

I think the Board should assess whether or not, from a rate-setting perspective, it would be reasonable to defer all amounts. In other jurisdictions, the general practice for group assets is to defer interim. It's kind of de facto. It's the kind of approach that's used -- for rate-setting purposes, it's the approach that's used.

Terminal losses have and -- and can be deferred. In some cases, they are simply recognized. So a terminal loss, for example, on a generating facility or a building may simply just be recognized in the year it is -- it occurs from a rate-setting perspective. It's just judgment of the Board as far as what's applied, but there's no bright-line test or -- or clear rule.

MR. PATRICK BOWMAN: Yes. Mr. Hombach, it's Mr. Bowman. I would say obviously not coming from an IFRS perspective, only coming from a ratepayer perspective, it would be my recommendation to this Board that terminal losses, to the extent possible, are not deferred.

They don't represent an ongoing value to customers. They don't represent assets that continue to provide service. Honestly, to the extent possible, terminal losses should be -- should be forecast and accrued for and included in rates even before they're -- they occur.

You know, if -- if we had Selkirk heading towards its final retirement date and it's still providing service, that's the time people should be paying to take it down, not -- not ten (10) years later when you finally get around to it.

So, terminal loses I do think are quite a bit different in terms of the substance of the economic transaction.

And -- and it -- it probably doesn't make me the -- the popular guy with the people who hired me, but I'd be looking to Selkirk's 2030 costs that people have on the books to continue removing it and figuring out how quickly we can -- we can accrue for that now rather than saying wait until that occurs in 2030, and then -- and then have it charged into rates until 2035 or something.

Interim losses, I think the question goes back to where I had put quotes around the word in the presentation, the -- it was hard to jump in. I'm not always sure when you're -- I certainly don't want to interrupt Ms. Hooper. Her answers are very helpful.

But when you were talking about the ALG versus ALG interim losses, I think the -- the quotation marks around "losses" is important here.

Manitoba Hydro is calculating these losses by way of a model that is custom and was developed with Concentric, and my understanding is that's because they're the only people in the country doing this with respect to applying average service life.

And it comes back to that question of, if you have ten (10) trucks and you say they're going to last ten (10) years and one (1) only lasts one (1) year, is that a nine (9) year loss because you expected it to be ten (10) or has that always been inherent in your assumption, that you're going to average it over ten (10) years?

If it's inherent in your assumption, it's not a loss, it's part of the estimate you prepared, and you update the estimate. You don't have that as a loss necessarily.

Now, I understand how IFRS might say, well, no, no, you don't have that truck anymore, so we need to get it out of there. But if you're overall talking about representing the service of a fleet of ten (10) trucks and you're going to replace them on a permanent basis and continue bringing them into rates over time, the service of ten (10) trucks is the service of ten (10) trucks, and it occurs in year one (1) and year six (6) and year twenty (20).

And -- and so, that idea that somehow I'd have to take a loss just because one (1) of them, you know, retired before the average is -- is I think a fundamental misunderstanding of the whole point of using an -- an average life for the purposes to develop depreciation rates.

And that's where -- that's where I think Ms. Hooper was -- was suggesting there's some -- some difference of opinion about whether this method would -- unique to Manitoba Hydro is in fact required or -- or appropriate for an ALG methodology.

MR. ALASTAIR FOGG: Mr. Hombach, if I could just jump in just -- Mr. Fogg.

I'm -- I'm certainly not maybe as much of an expert as some of my colleagues over here in this respect, but maybe to simplify it, I think what we're saying is we are dealing with an issue around a group -- a group approach and dealing with something like interim gains and losses versus some of our interpretation of IFRS.

As we noted in the depreciation issues document, that's really why we're saying that that deferral of -- of interim gains and losses may be a mechanism to address that both from that group approach perspective, as well as from the IFRS perspective of meeting both of those objectives, of being able to basically amortize those -- those over the average -- average life of the assets contributing to that -- that balance.

So, it really would address all of the concerns that we're talking about if -- if we were to adopt an approach like that.

MR. SVEN HOMBACH: So, is the rationale for not deferring interim losses under option 1 that option 1 does not -- is not based on average life, or is it just not worth it because the difference is so small under ELG?

MR. ALASTAIR FOGG: So, our -- our rationale had been based on the value of the estimated impact from a gain and loss perspective. I think we've clarified that we're certainly open to the consideration of applying it under Alternative 1; that is the deferral of gains and losses under Alternative 1, as well as Alternative 2.

MR. SVEN HOMBACH: So, it's a pragmatic decision from Manitoba Hydro's perspective?

MR. ALASTAIR FOGG: Yeah.

MR. SVEN HOMBACH: Okay. Mr. Bowman...?

MR. PATRICK BOWMAN: I was just going

say that the same -- I -- I wanted to agree with Mr. Fogg, that the -- the cooperative work towards the depreciation issues document helped highlight the importance of -- of deferring and amortizing the -- the gains and losses that Hydro feels it -- it needs to record under IFRS.

Some of the same issues that we talked about with ASL also effectively occurs with -- with the ELG estimates. And, in fact, sometimes you'll see gains there.

The -- the model that calculates this is in evidence. It's interesting for those people who like big Excel files. It was interesting particularly to me because it is -- I think of gains and losses as something that occurs when you have a disposal, gains and losses on disposal but, in fact, a lot of the transactions in that account are non-disposals.

It's an assumption that ELG assumes there'll be some assets that retire in year 1 from Wuskwatim. Well, nothing retired in year 1 from Wuskwatim, so it -- it records that as a gain. And that -- that -- a gain on non-disposal that you had assumed would occur.

And so, it's sort of a mix of a whole bunch of things going on that is normally an implicit and inherent part of -- of recording your cumulated depreciation, and it's effectively pulling it out and doing it -- doing it on the side.

So, even under ELG it can -- it can lead to some big numbers potentially in some years. It tends to lead to lower numbers because ELG's a more accelerated method. And since usually you're going to see losses here, you'd just see less losses if you -- if you push it harder.

But those -- those are still in -- in principle, an -- an inherent part of what the overall depreciation model is -- and depreciation study is -- is trying to do when it's measuring accumulated depreciation.

And so, I think the amortization probably is appropriate under -- under either of -- of ELG and ASL. It -- it may be that it's de minimis under ELG in -- in most years, I don't know that it always will be, but -- but it -- it has a better adherence to the overall idea of -- of average lifes and dispersions by -- by amortizing it as -- as a part of -- as if it's a part of accumulated depreciation.

MR. SVEN HOMBACH: Let's use this as a segue to actually discuss the issue of the deferral accounts. And, Ms. Schubert, I'd like you to ask you to pull up Volume 4 of Board counsel book of documents and go to page 329 of that volume.

The -- the document that we're looking at is note 20 from Manitoba Hydro's most recent financial report. The following is a question for Mr. Fogg and -- and Ms. Hooper.

To date, neither of the change in depreciation method account, nor the loss on retirement of disposal of assets account has been approved by this Board, correct?

MS. MICHELLE HOOPER: Correct.

MR. SVEN HOMBACH: Right. And trying to think ahead to Mr. Bowman's recommendation number 4, in contrast to the Conawapa deferral account, that previously has been approved?

MS. MICHELLE HOOPER: Yes, it has.

MR. SVEN HOMBACH: Now, this is the report that ended on March 31, 2022, so that was a bit over a year go.

And the accrued balance at that point and the change in depreciation method account was 288 million?

MS. MICHELLE HOOPER: That's correct.

MR. SVEN HOMBACH: And the accrued amount and the loss on retirement or disposal of assets account was 67 million?

MS. MICHELLE HOOPER: Yes, that's correct.

MR. SVEN HOMBACH: Does Manitoba Hydro have actuals for the 2022/'23 fiscal year yet?

MS. MICHELLE HOOPER: Our actuals have not yet been finalized for '22/'23.

MR. SVEN HOMBACH: And, Ms. Hooper, in that case, let's go to the rejections. And I'd ask Ms. Schubert to open Volume 5 of the Board counsel book of documents and turn to page 139.

(BRIEF PAUSE)

MR. SVEN HOMBACH: Ms. Hooper, Figure 6 shows Manitoba Hydro's projections. And that indicates that the balance and the change in depreciation method account at the end of the most recent fiscal year would be 288 million and the amount in the loss on retirement of disposal of assets account would be 67 million, correct?

MS. MICHELLE HOOPER: Those are the opening balances.

MR. SVEN HOMBACH: Okay. So --

MS. MICHELLE HOOPER: The ending

balances would be 343 and 70 million based on the forecast figures shown in this chart.

MR. SVEN HOMBACH: You have preempted my next question. Thank you. Are we in the ballpark even if the actuals haven't closed yet?

(BRIEF PAUSE)

MS. MICHELLE HOOPER: The change in depreciation method amounts are -- are expected to be very close to what's shown here. The loss on retirement will be higher this year.

We had a large transformer fail at Riel Station, which is one of -- of the very -- a very new and very expensive transformer, so there is a more significant loss for that, a one-off loss for that item, but we don't have finalized figures yet.

MR. SVEN HOMBACH: When you say a "one off loss," would that be considered a terminal loss or an interim loss?

MS. MICHELLE HOOPER: It's an interim loss.

MR. SVEN HOMBACH: So, seeing these balances and -- and contrasting them to the $751 million of projected net income for that fiscal year, I'm going to ask you generally, Ms. Hooper and Mr. Fogg, would it be feasible for the Board to not defer these amounts, and instead have Manitoba Hydro write them off in the most recent fiscal year?

(BRIEF PAUSE)

MR. ALISTAIR FOGG: So Mr. Hombach, to write those off in '22/'23, I guess we would have to be asking ourselves the question of whether these would be considered -- because we're -- we're past the fiscal year and whether these would be a subsequent (INDISCERNIBLE) decision that was, you know, one that we would adjust for or not. And whether -- I think we would have to go back and I don't -- we haven't done this analysis, but we would have say whether because these are items that have existed or were open previously, whether we have considered them as occurring or open within the fiscal year that has subsequently closed -- whether we can go back and adjust for them.

I'm not sure it's -- it's not something we've given enough analysis to that I'd want to answer more than that, I think, at this point.

MR. SVEN HOMBACH: And you're testing

my memory now. But I believe without that writeoff you were projecting 474 million in net income in the upcoming fiscal year -- or the fiscal year we're currently in?

MR. ALISTAIR FOGG: My recollection is 450 million, but it's -- it's within the similar range.

MR. SVEN HOMBACH: So -- so that basically would mean that a writeoff in the current fiscal year would erode most of Manitoba Hydro's net income?

MR. ALISTAIR FOGG: Most of it, not more. And I suppose it would be a question of whether -- and, in particular, I guess, on -- on the loss and retirement related to the assets, whether that -- you know, you'd have to ask whether that was the timing and recognition of those expenses were to make sense versus considering that these are related to a pool of longer-lived assets, whether -- whether it's more reasonable to recognize those -- the amortization periods over the life of the assets since they're still in service and providing value.

MR. PATRICK BOWMAN: It's Mr. Bowman. At an appropriate time, I wouldn't mind an opportunity to comment on that item. I don't know if now is good.

MR. SVEN HOMBACH: I'm going to hold you in abeyance for one (1) minute, Mr. Bowman, and then I'll turn it back to you. I just wanted to -- to ask one more question of Mr. Fogg.

Mr. Fogg, I -- I take Manitoba Hydro's point on that and I believe the -- the argument is well established in the report.

I just wanted to take a minute or less to establish what that would mean for ongoing revenue going forward.

So let's turn to page 153 of the book of documents. And let's go to the very bottom of that page.

So -- so Mr. Fogg, again, correct me if I'm wrong, but for the change in depreciation method deferral account, on a go-forward basis, Manitoba Hydro is basically anticipating that amortizing that account over a number of years would increase expense by about $12 million per year?

MR. ALISTAIR FOGG: It would -- it would result in that amount being put to the net -- net movement line, essentially, reducing -- or adding an additional expense, reducing net income, whichever way you want to look at it, yes.

MR. SVEN HOMBACH: And similarly, Mr.

Fogg, if we go to page 154 of the book of documents, the impact for the loss on retirement account would be about $3 million per year?

MR. ALISTAIR FOGG: Correct.

MR. SVEN HOMBACH: So add those two, it's about fifteen (15)?

MR. ALISTAIR FOGG: That's right.

MR. SVEN HOMBACH: Thank you. Mr. Bowman, I'll turn the microphone over to you.

MR. PATRICK BOWMAN: I -- I just thought it might be helpful to contextualize this point in regard to the -- the item I addressed in my presentation, which is properly considered from the regulatory perspective, this account is part of accumulated depreciation. In fact, when Mr. Kennedy runs his reports, he includes it effectively as part of accumulated depreciation.

And -- and when Board Member Bellringer was asking about the fact that there is surplus depreciation -- if you look at the -- for example, Mr. Kennedy's -- Concentric's ASL study, right now we are -- or as of 2019, it was 1.2 billion ahead of schedule compared to what -- what would be expected on the assets there.

If those amounts were to be written

off, that 1.2 billion would be more like 1.5 billion ahead of schedule because that's -- that's effectively where -- how it's been included into -- into Hydro's calculation.

And I think -- I think to the extent that we talk about -- about that as -- you know, depreciation, Hydro has -- has booked for IFRS purposes, but not yet collected from customers. That's not -- that's not a problem. If anything, it's -- it's already built into the estimates that Mr. Kennedy prepared and is -- and -- and if anything, it would be going the wrong way to -- to write that off to use the language; that's already part of the surplus that's -- that's recorded in the study.

MR. SVEN HOMBACH: Would you recommend to the Board that the Board write off that portion of the loss on retirement account that relates to Selkirk or other terminal losses?

MR. PATRICK BOWMAN: In -- for the reasons I set out earlier, yes. But I think that's different than the change in depreciation methodology balance.

MR. DUSTIN MADSEN: Mr. Hombach, it's Mr. Madsen. If I could also just chime in.

If you -- if the Board were to adopt

alternative 2, just to Mr. Bowman's statement, alternative 2 would also resolve that change in depreciation deferral balance naturally.

If IFRS or accounting and regulatory are aligned, that balance of $300 million, as Mr. Bowman has said, would just naturally form the ongoing difference between unrecovered or over recovered depreciation expense that is naturally reconciled in the depreciation study. It goes away, effectively.

MR. SVEN HOMBACH: Just to clarify, Mr. Madsen, if -- if the Board were to accept that some increased level of componentization were required for option 2 -- and I recognize you disagree with that assessment of Manitoba Hydro -- there would be some remaining balance in that account that the Board would have deal with, no?

MR. DUSTIN MADSEN: Not -- not if that additional level of componentization is used for both regulatory and for natural reporting purposes.

If both are aligned, the account goes away. If there is a lingering difference, yes, sir, there would be a lingering -- if there is a difference between componentization, it would be a lingering difference.

MR. SVEN HOMBACH: So Ms. Hooper, I'll

turn the microphone to you in a moment. But Mr. Madsen, perhaps let's walk the Panel through this.

Let's say the Panel were to adopt option 2. Manitoba Hydro comes in with a new depreciation study that shows some level of increased componentization. And that $40 million difference that currently exists between the 2019 study and the 2022 study shrinks to, let's say, 20 million or 10 million or -- or pick your number.

What would have to happen with the existing change in depreciation methodology account, if anything?

MR. DUSTIN MADSEN: Well, that's a good question.

So if there is a new application that is -- remains different from the existing, say, 2019 ALG procedure, the future depreciation study is different from that and creates a slightly different, again, adjustment between financial reporting and regulatory depreciation, then the Board would either need to adopt that new level of componentization to close the difference or could leave it and it would just naturally unwind between the differences in regulatory depreciation and financial reporting depreciation over time.

Both will ultimately equal the same amount at the end of the life of all assets.

MR. SVEN HOMBACH: Ms. Hooper, do you agree with that assessment? Or do you have anything to add on that issue?

MS. MICHELLE HOOPER: Just to clarify for the record, Mr. Kennedy's studies -- in the ELG study, these deferral accounts are not considered. So they're not considered part of accumulated depreciation for financial reporting purposes.

The C-GAAP -- or the -- the ALG study prepared by Mr. Kennedy that's embedded in the 2019 study -- so that's the regulatory depreciation rates -- includes the change in depreciation method account. But it does not include the gains and losses.

So they are not included in Mr. -- the gains and loss deferral account is not included in Mr. Kennedy's studies at all.

If the Board was to accept -- regardless of what the Board accepts, basic deferral account will not naturally unwind. It won't just vanish. It's not going to disappear. Because if there is no further change between depreciation for regulatory purposes and depreciation for financial reporting purposes, there will be no further additions to this account. The only way it goes away is if it's amortized.

The -- you can't just smoosh this into accumulate depreciation. It's arisen as a result of rate setting -- like, for difference in regulatory versus financial reporting. According to the IFRS standards, that difference has to be isolated on your financial statements. We can't just move it in.

The only way you'd get it to disappear is if the Board was to provide us direction to retrospectively unwind everything that we'd done back to 2015. So you'd have to have like a retrospective application back to 2015 by Board Order, which I don't -- my understanding of the evidence from Mr. Bowman and Mr. Madsen is that they don't believe retrospective treatment is appropriate.

MR. SVEN HOMBACH: Ms. Hooper, let's turn from options 1 and 2 to options 3 and 4. And I'm -- I'm --

THE CHAIRPERSON: Mr. Hombach, sorry, you've got ten (10) minutes.

CONTINUED BY MR. SVEN HOMBACH:

MR. SVEN HOMBACH: Let's turn to options 3 and 4, and I'm sure my friend Mr. Williams will have some questions on that issue as well.

You've no doubt reviewed alternative 3 which would indicate that the Board would provide, for lack of a better word, a comfort letter.

MS. MICHELLE HOOPER: Yes and I think we would need some kind of indication from the Board that they do still intend to opine on this at some point in order to continue to maintain that deferral account.

MR. SVEN HOMBACH: So -- so to confirm then, if -- if the Board were to choose to adopt that option and were to opine that it would deal with the issue of the deferral account in the next GRA, would that provide an adequate level of comfort to Manitoba Hydro that it would no longer need to keep two (2) sets of books?

MS. MICHELLE HOOPER: We would still have to maintain the deferral in the interim, until a final decision was -- was made by the Board on depreciation.

If we had comfort that they did intend to opine on this at the next GRA, then we could use that as justification to continue the deferral without amortizing in the interim until the decision is made.

MR. SVEN HOMBACH: Now, for the

benefit of the Panel, I'd just like to take a few minutes to deal with accumulated depreciation variance. It's -- it's been mentioned a few times, but we haven't gone into a lot of detail at -- yet, and let's turn to MFR-95, Attachment 1 again. And let's go to page 52 of the PDF.

So, I just wanted to take a moment to -- to illustrate how this works. It might be helpful for the rest of the discussions this afternoon.

Manitoba Hydro currently files a new depreciation study every five (5) years. Correct?

MS. MICHELLE HOOPER: Approximately.

MR. SVEN HOMBACH: And -- and when those studies happen, asset lives get revised, is appropriate?

MS. MICHELLE HOOPER: Yes, where the depreciation consultant identifies that there is a need from -- based on discussions with management, industry, review and the results of the statistical analysis that's done on historical -- historical findings.

MR. SVEN HOMBACH: So -- so then, if on such review, the estimated asset life gets shortened, that may mean that Manitoba Hydro has under depreciated it?

MS. MICHELLE HOOPER: If the life is shortened, you'll end up in a position which indicates that you don't -- haven't accumulated enough depreciation, based on the current assumptions.

It doesn't mean that we have historically under depreciated it, as we in history will have depreciated it based on the service life assumptions that were in place at the time and are duly approved, based on the best estimates that were available at that time.

MR. SVEN HOMBACH: So, I -- I take your point. It doesn't mean that you made a mistake in the past, it just means that going forward, you're revising it, right?

So -- so -- so let's just illustrate this and let's have a look at the first line, this is for Great Falls dams dikes and weirs.

The original cost, back in the day, would have been about twenty-two (22) million? That's the -- that's column 1.

MS. MICHELLE HOOPER: That's -- that's the accumulated historical cost since the original construction of that dam.

MR. SVEN HOMBACH: And the book accumulated depreciation, column 3, that's about 9.9

million?

MS. MICHELLE HOOPER: Yes, that's correct.

MR. SVEN HOMBACH: So, it -- so that's the amount that you've actually recovered through depreciation to date. Correct?

And then the column in the middle, column 3, that's what this depreciation study says you should have depreciated?

MS. MICHELLE HOOPER: Yes, based on the assumptions, the parameters that are used for this depreciation study.

MR. SVEN HOMBACH: Okay. And there's a difference there of about eight hundred and forty-four thousand (844,000), right?

MS. MICHELLE HOOPER: Yes, that's correct.

MR. SVEN HOMBACH: So -- so and if we go to column 4, it's negative, so does that mean you lengthened the life span of the asset at some point?

MS. MICHELLE HOOPER: There was some lengthening back in, I think 2010. We increased the service life for these assets from one hundred (100) years to one hundred and twenty-five (125).

But we also in 2015 removed the net

salvage assumption, which -- which was a 10 percent net salvage factor on these accounts, so that would have also had an impact.

MR. SVEN HOMBACH: And I take your point on that. We don't have time to -- to delve into that this afternoon, unfortunately.

But, just turning to the right then, the probable remaining life, the forty-two (42) years, that's what this study says the average service life of the Dams, Dikes and Weirs account is going forward, right? Another forty-two (42) years of life?

MS. MICHELLE HOOPER: It's the probable remaining life, not the average service life.

MR. SVEN HOMBACH: So, okay, the -- the -- yeah, it -- you expect the -- you expect those dams to last another forty-two (42) years?

MS. MICHELLE HOOPER: Yes, and with Great Falls that'll be informed largely by the term -- the life span date that's assigned to that generating station.

MR. SVEN HOMBACH: And then again, just for illustration purposes, if you take those eight hundred and forty-four thousand (844,000) and you divide it by forty-two (42) years, you get a credit of about $20,000 per year in the right column.

MS. MICHELLE HOOPER: Yes, that's correct.

MR. SVEN HOMBACH: Okay. So, we can do this on a line-by-line item. We won't be doing that today, but if you move down to turbines and generators, it's about, I think, seven (7) lines down.

Here you have a situation where the accumulated depreciation variance is positive. It's about 1.2 billion.

MS. MICHELLE HOOPER: Yes, that's correct.

MR. SVEN HOMBACH: Okay. So, that means, at some point in time, that life span was shortened when -- what you previously estimated. Right?

MS. MICHELLE HOOPER: Yes.

MR. SVEN HOMBACH: Okay. So, here you have a probable remaining life of that asset of forty (40) years?

MS. MICHELLE HOOPER: Yes.

MR. SVEN HOMBACH: So, you divide the 1.2 billion by forty (40), you have an additional depreciation expense of about thirty-one thousand (31,000) per year?

MS. MICHELLE HOOPER: Correct.

MR. SVEN HOMBACH: Okay.

MR. PATRICK BOWMAN: Mr. Hombach, it's -- it's Mr. Bowman here. Two (2) quick things. First that -- that number is 1.2 million, not billion on the screen. This is --

MR. SVEN HOMBACH: Thank you. I -- I mis-spoke.

MR. PATRICK BOWMAN: That -- that's fine, but the other comment is you mentioned that those arise because you've changed the life estimate.

That is one of the reasons why you can get variances. The other is because the assets perform differently than expected. And, if it's helpful in this same document, if I -- would take you to page 225.

MR. SVEN HOMBACH: Yes.

MR. PATRICK BOWMAN: And Ms. Schubert can pull that up. This is a different account, but it's the one I happen to have in front of me -- 225.

And I worry that this is where angels fear -- fear to tread in pulling up Iowa curves in the room. I -- it's hard -- hard are broke.

This is a -- a -- graph prepared by Mr. Kennedy, that shows with the black line the curve -- the -- the -- the expected life performance of this asset. These are sub-station buildings. If we scroll to the top you'll see that these are sub-station buildings. It's the one I happen to have in front of me.

The black line is how those assets are expected to perform, given the life and dispersion estimates that Mr. Kennedy prepared. The blue dots -- blue squares are how the assets have actually performed.

And so, on something like this you will see that there is a surplus because you haven't necessarily had the retirements that -- that Mr. Kennedy's math would have expected you to have. And so, that's part of what's driving the variance that's being amortized.

So, it's not just the change in life, it's also a change in the asset performance.

MR. SVEN HOMBACH: Mr. Chair, may I have an additional few minutes. I am almost done. I just wanted to ask three (3) more questions on this.

Let's go to page 62 of this PDF please, Ms. Schubert. And let's go to the bottom of this.

So -- so -- sorry, page 61. Now these are the equal life group numbers and -- and, Ms. Hooper, that shows that there is an under depreciation of about 845 million for Equal Life Group. Correct?

MS. MICHELLE HOOPER: Yes, that's correct.

MR. SVEN HOMBACH: And let's contrast with the same number for average service life, which can be found at page 91 of the document which is about 1.2 billion. Correct?

MS. MICHELLE HOOPER: Yes, that's correct.

MR. SVEN HOMBACH: So -- so, that means that under either of those two (2) methodologies, Manitoba Hydro has over-depreciated quite significantly, has it not?

MS. MICHELLE HOOPER: Under either methodology, our book depreciation is significantly higher than the calculated accrued depreciation, but that doesn't mean that we have gouged our customers in the past. That is based on the assumptions in place.

I do have a Schedule, that's not on the record, that breaks that down into how much of those variances are due to change in service life assumptions versus removal of net salvage versus change to the EGL methodology. So, if it would be helpful --

MR. SVEN HOMBACH: If --

MS. MICHELLE HOOPER: -- you can put that on the record.

MR. SVEN HOMBACH: If you could put that on the record, that would be appreciated. Yes. Thank you.

Now, Ms. Hooper, I certainly wasn't suggesting that Manitoba Hydro had gouged, but, as I understand it, the intention of the Utility is to credit these amounts over the weighted remaining service life of the assets. Correct?

MS. MICHELLE HOOPER: On an account-by-account basis. Yes.

MR. SVEN HOMBACH: And my -- my -- my last question, and I'll open it up to anybody is:

Do you think that it is the appropriate account or should this be credited over a shorter amount of time, considering that current ratepayers may have been paying this additional depreciation expense in the past?

MS. MICHELLE HOOPER: My understanding is this is the most widely used meth -- like approach that's applied to recovering accumulated depreciation variances is to allocate, like, to recover them over the remaining life of the accounts.

MR. SVEN HOMBACH: Mr. Madsen and Mr.

Bowman, any comments on that issue?

MR. DUSTIN MADSEN: Sure. I can chime in and Mr. Bowman can -- may supplement.

So, there -- pardon me -- there are other jurisdictions, Alberta is one of them, that has looked at accelerating the recovery of these differences, where they are significant and, particularly, where they have occurred over a, potentially, a short period of time, due to either changes in lives or a build-up of assets.

In Alberta, the Alberta Utilities Commission ordered refunds of, I think, hundreds of millions of dollars, Patrick, in previously collected -- accumulated depreciation variances for one utility, AltaLink, and they accelerated those refunds over a very short period of time.

But, generally speaking, as Ms. Hooper has said, the -- the period of collection is generally over the expected remaining life, but there is some history and practice of other regulators doing it differently, particularly, where those balances are large and not expected to unwind quickly.

MR. SVEN HOMBACH: So -- so, Mr. Bowman, before you chime in, I have one other question for Mr. Madsen.

And, Mr. Madsen, if we contrast these 1.2 billion against an original cost of about 22 billion in column 1, is this a normal percentage or is this unduly high or unduly low, in your view?

MR. DUSTIN MADSEN: I wouldn't say it's entirely irregular. You -- you'd prefer to have these balances be smaller, to the extent necessary, and rebalanced a lot quicker, and you'd prefer not to have something be it roughly -- I think this is roughly 5 percent of the initial, original cost, maybe a bit more than that.

I think you'd prefer to have it at a lower amount, but I wouldn't -- I -- I'd say that I've -- I've seen balances of a similar magnitude in other utilities be left --

MR. SVEN HOMBACH: Sure.

MR. DUSTIN MADSEN: -- and, then, not accelerated.

MR. SVEN HOMBACH: Mr. Bowman...?

MR. PATRICK BOWMAN: The Hydro's proposal is appropriate and it's one of the reasons I -- I -- I didn't comment on it, in my evidence.

The only sort of asterisks I'll put on that is, I did go back and look at the recent studies and, sometimes, you might get a bit concerned, if you see these balances growing and growing and growing, not actually get resolved, like the idea is it's a surplus. We're going to amortize it into -- into income. It should get smaller, not bigger.

And what we're actually seeing is that it is getting bigger. In 2012, I pulled up the number and the E -- the ELG number was 594 million. It's now up, under Concentric, to about 850. So, even though, in theory, we had a 594 million surplus, we should have been amortizing. In -- instead -- in -- in the intervening 10 years, it grew.

And, under ASL, I -- I wasn't able to pull up the 2012 number quickly, but the 2014 number I have 1.026 billion and that is now up to 1,691 billion and I'm quoting the numbers with Wuskwatim in them but Wuskwatim is not much of a factor.

So, the fact that it's continuing to grow may suggest to one that you should consider taking some action, but I -- I didn't think it was the key issue today.

But I would say it's -- it's a good reason not to write off the -- the deferral account, as you said, otherwise that 1.2 something you saw there, that would be 1.5 or 1.6, which is just, what -- at some point it's getting it little -- a little large to just leave on the books.

MR. SVEN HOMBACH: Thank you, members of the panel, Mr. Chair. Those are my questions on this issue. I'll leave it up to you as to whether we should take the afternoon break now or proceed with Mr. -- with Dr. Williams and break after his examination.

THE CHAIRPERSON: Ms. Bellringer has a question or sub question.

BOARD MEMBER BELLRINGER: Well, it's just a quick followup on this one and it's -- have you -- are there alternative ways of tracking this kind of difference? Like does anyone actually set it up in any kind of deferral account, or like it's, if you will, off the books.

Just -- I mean, you know, you track it and then the -- the true-up regularly takes care of it over the next estimated period. So, I'm just -- I'm curious more than anything, because I -- you know, I'm -- I wasn't -- like I couldn't figure it out right at first.

And then I realized, oh, it's not showing up anywhere. You have to know to go into the Depreciation Report. So, I was wondering if anyone deals with it any other way?

MR. PATRICK BOWMAN: Well, the most common alternative, which was earlier in our issue list is whether you do a whole life or a remaining life study. If you do a whole life study, you measure this value and then you decide what you're going to do with it.

If you do a remaining life study, you don't even measure the value. You just take, here's what's depreciated, here's what's left. I'll do what's left over the remaining life.

So, it just gets rolled in over the remaining life no matter what. And that would be the more -- maybe I'll let -- Mr. Watson weigh -- weigh in on this, but that would be, from my understanding, much more the common way people do it with ASL studies throughout the United States and -- and the like.

Whole life seems to be used a bit more in Canada where you can report these balances. But Mr. Madsen and I were in a hearing on -- on opposite sides, I will say, in Alberta where there was a large -- a large variance and there were two (2) things that drove it.

First was, they had just built a giant HVDC system and started depreciating it at a relatively fast rate and then did -- done some studies and decided to slow it down. And so, they had a large surplus from the first five (5) years of going fast and then slowing it down.

But that -- that didn't build up over decades. That was just like three (3) or four (4) years balance. So, they -- they sort of pushed that backwards to customers quite quickly.

After that, there was -- there was then a -- a look at the remaining balance. And the remaining balance had been very large, similar to here, and it had not been going down over decades.

And so there was some degree, if I remember correctly, some degree of that was then credited back to customers but -- but that -- that second step is not -- I think you ought to be careful on that.

The whole -- your estimates, estimates change. You know, it doesn't take much of a swing in some of your big accounts to see those numbers vary. It looks big as a billion dollars, but as Mr. Madsen says, it's like 5 percent of your assets.

So, I -- I just say, on that front, yeah, remaining life is -- is vastly the most common approach even if it's done through a whole life estimate and then amortized the remaining life, or done as a remaining life method.

And -- and I -- I see Mr. Madsen may want to weigh in here. I -- I think his experience would be useful.

MR. DUSTIN MADSEN: Since my name was mentioned, may I speak?

I -- I totally agree. The -- the most common method is remaining life. And -- and so that would be over the -- equal to what you're doing in the whole life approach by taking the remaining life to carry that across.

And I have seen negatives of this nitro swing to positives and then back to negatives. So, you need to be careful about you're looking at a theoretical reserve. And the theoretical reserve is based on a number of parameters.

So, you've got to be careful not to make a -- a quick, sort of -- a quick reaction to something. And you also, I think, need to ask if it was a positive instead of a negative, would you be recovering it over five (5) years, and to make sure you're not biassing because of which direction it is. I think that's only fair in that.

THE CHAIRPERSON: Okay. You know what, we'll take the -- the break and resume at 2:25.

--- Upon recessing at 2:10 p.m.
--- Upon resuming at 2:26 p.m.

THE CHAIRPERSON: Dr. Williams...?
DR. BYRON WILLIAMS: Thank you.

CROSS-EXAMINATION BY DR. BYRON WILLIAMS:
DR. BYRON WILLIAMS: Mr. Fogg, just at a -- at a high level, you recall the joint document prepared by Hydro and the independent experts which we've marked as PUB Exhibit 20?
You remember that document, sir?
MR. ALASTAIR FOGG: Yes, sir, I do.
DR. BYRON WILLIAMS: And again, I don't need to turn you there, but in part 7 of that document, there was a financial analysis comparing the -- the consequences of depreciation procedure ALG versus ELG in terms of forecasted net income, et cetera.
You remember that generally, sir?
MR. ALASTAIR FOGG: I -- I do, and I believe in that case we were doing it to isolate certain aspects around the depreciation issues to show financial impacts.
DR. BYRON WILLIAMS: And just in terms

of the analysis that underlay the ALG scenarios, that -- that was based upon the depreciation study provided by Alliance, agreed?

MR. ALASTAIR FOGG: Agreed.

DR. BYRON WILLIAMS: And it is Manitoba Hydro's position, sir, that the depreciation Alliance -- sorry, that an IFRS-compliant ALG method -- methodology can likely be achieved with a lower level of componentization than identified in the Alliance study, correct?

MR. ALASTAIR FOGG: Yes, that's our position. We anticipate we can go through the -- the components identified and identify some that may be non-material or insignificant from a -- a revenue requirement or -- or depreciation expense perspective.

DR. BYRON WILLIAMS: Okay. Thank you. And, Mr. Madsen, in your evidence -- I don't think I need to take you there -- you suggest that none of the changes being proposed in Alliance's Consulting's IFRS-compliant depreciation study for ALG are significant, either individually or in aggregate.

Agreed?

MR. DUSTIN MADSEN: That's correct.

DR. BYRON WILLIAMS: Mr. Bowman, I want to take you to PUB 20, Exhibit 20, page 30, and the -- the third last paragraph on that page.

And -- and, Mr. Bowman, if you'll permit me an editorial comment, you say you're not passionate about depreciation, but I can sense differently, sir.

In this paragraph, sir, you -- you are asserting that -- first of all, that assertions that have been made about the need for additional componentization only if implementing ALG are not well-founded, that's one (1) of the points or observations you suggest?

MR. PATRICK BOWMAN: Yes.

DR. BYRON WILLIAMS: And I want to direct your attention to the last sentence of this paragraph, sir:

> "Now that Alliance has identified accounts whereas assets of materially different levels are mixed, it is incumbent on Hydro to consider implementing these components whether using ELG or ASL."

That's reflective of the statement you made, sir?

MR. PATRICK BOWMAN: Yes.

DR. BYRON WILLIAMS: And, Mr. Bowman, what's the logic flowing from that statement? Are you suggesting that more componentization is required with -- with regard to ELG, or are you simply saying that we have to understand that -- that more be -- more may be required for -- for -- from both procedures?

MR. PATRICK BOWMAN: I'm not commenting on procedure there. It is procedure indifferent. It is saying that when you bring in someone like Dane Watson who has the experience he has and he looks at your accounts and he says, I've got some examples of things that should be divided in the material, that you -- you should consider that, including whether -- even if you're staying under an ELG procedure.

And -- and I believe Mr. Fogg agreed with that this morning, that they would be looking at some additional components under an ELG procedure.

DR. BYRON WILLIAMS: Thank you. Mr. Bowman, if we can go up to the -- this is still PUB Exhibit 20, the bottom of page 29, the top of page 30. And maybe, Ms. Schubert, Mr. Bowman, we can scroll down now on to page 30.

Mr. Bowman, in this paragraph, you're suggesting that while the -- the current estimated difference may be as -- as small as 15 million per year, comparing ALG and ELG, you expect that that gap is likely to increase.

Is that your point, sir?

MR. PATRICK BOWMAN: Yes.

DR. BYRON WILLIAMS: And at slide 6 of your presentation this morning, sir, you went through a range of cost impacts of the -- of the difference between ELG and ALG.

Do you recall that, sir?

MR. PATRICK BOWMAN: Yes.

DR. BYRON WILLIAMS: And, sir, in essence, you flagged for our attention the 267 million that would flow if we were using the Alliance approach to ALG, that 267 million difference?

MR. PATRICK BOWMAN: Yes.

DR. BYRON WILLIAMS: And you also highlighted differences of between 680 million to 1 billion. And, sir, did that flow from the Concentric analysis?

MR. PATRICK BOWMAN: No, that flew -- flowed -- flew -- flowed from Information Request posed by the Board to Manitoba Hydro to use some different scenarios. And it's in PUB/MH-1-32.

DR. BYRON WILLIAMS: Okay. In

essence, sir, you've got a range here between 267 million and 1.3 billion in terms of potential impacts on retained earnings from the adoption of ALG.

Is that what you're suggesting?

MR. PATRICK BOWMAN: I'm saying that those numbers are in the record at various places. I think the -- some of them obviously are very large, and they -- they suffer from the problem of looking forward twenty (20) years and taking a set of depreciation estimates and assuming those continue to apply for the next twenty (20) years.

And they use the same estimates even though each of those is deferring different balances which we know isn't consistent because those deferred balances will become part of the accumulated depreciation for the calculation of the next study, right?

So you can't have the same rate arise in future with two (2) different accumulated appreciations assumed in the future. So we don't -- we don't have a full, perfect, twenty (20) year pathway under -- you know, under an ASL path.

DR. BYRON WILLIAMS: And you do suggest that the likely final answer of the ALG benefit is in the middle of this range, agreed?

MR. PATRICK BOWMAN: I -- I -- yes, I say that. Middle -- by 'middle', I don't mean average or mean. I mean it's somewhere -- in my submission, by the time we're done, it would be somewhere higher than two sixty-seven (267) and somewhere lower than probably the -- you know, the top of this range.

But I -- I hesitate to guess, but I -- I don't -- I don't want it to be read as meaning the -- the midpoint.

DR. BYRON WILLIAMS: Well, let me push you just a little bit, sir.

Do you expect the upward development from that two sixty-seven (267) lower-bound to be significantly more than 267 million?

MR. PATRICK BOWMAN: I -- I expect it to be more than two sixty-seven (267). I think it's likely it would be significant -- significant, you know, very possibly into -- into nine (9) figures. But beyond that, I think -- I think it would be important to give Hydro the time to figure out which components it's adding and -- and to figure out how to -- how to assign lives to those.

To give you an example, though, the seven thirty (730) is -- is alternative 4, which would be keeping C-GAAP rates -- the -- the -- I'm going to call it C-GAAP, but keeping ASL rates as prepared by Mr. Kennedy on his consistent -- you remember Mr. Kennedy's prepared the last four (4) or five (5) depreciation studies for -- for Manitoba Hydro.

It's Mr. Kennedy's judgment applied to the current componentization using, you know, lives that are independent of the -- of the procedures selected and applied with -- with the -- the balances being amortized.

And so, it's -- it's probably not a bad number as far as what would happen if we -- if we effectively adopted Alternative 4 permanently. I think that's pretty close to what Mr. Hombach was asking this morning with his hypothetical.

The Board says keep the rates designed the way you used to, amortize as needed, and -- and move on.

DR. BYRON WILLIAMS: Okay. Thank you. I am going to turn to -- ask to turn to Mr. Bowman's evidence, but I am going to give Mr. Madsen and a witness from Manitoba Hydro a chance to comment on -- on the next -- next couple of questions.

And, Ms. Schubert, I think I asked you to turn to page 24, but I'm actually going to ask you to turn to page 25 instead of Mr. Bowman's evidence, which is MIPUG 20 -- MIPUG 6, yeah. And right there is fine for right now.

Mr. Bowman, in your written evidence, as well as in your direct evidence this morning, you made the point that when one is estimating depreciation, you have to look both at the average service life, as well as dispersion around the average service life.

Is that correct, sir?

MR. PATRICK BOWMAN: Yes.

DR. BYRON WILLIAMS: And when we talk about dispersion around the average service life, we're talking about detailed estimates of how retirements will vary around the average, agreed?

MR. PATRICK BOWMAN: Yes.

DR. BYRON WILLIAMS: And, sir, one of the points you make about ALG is that the selection of the dispersion is of limited importance?

MR. PATRICK BOWMAN: Less -- much lesser importance than -- than ELG, correct.

DR. BYRON WILLIAMS: And, of course, the point you're making about ELG is, in terms of it, at the first sentence on this page being 25, it's significantly more complicated.

Much of that complication relates to

the estimates of the dispersion around the -- the range, agreed?

MR. PATRICK BOWMAN: Correct, as well as in the mathematics to implement the varying equal life group rates.

DR. BYRON WILLIAMS: Okay. And if we could just scroll up -- sorry, scroll down on this page to the 3. And, Ms. Schubert, just go up just a little bit. I want to see the sentence just above that.

One (1) of the concerns, sir, I'll suggest to your raising about the ELG approach is that to make those estimates relating to dispersion around the average, you need access to good actuarial data, agreed?

MR. PATRICK BOWMAN: Yeah. Good actuarial data is an important input to considering the -- the dispersion.

DR. BYRON WILLIAMS: And, sir, I'm going to ask you to comment on item --

THE CHAIRPERSON: Sorry to interrupt. Mr. Bowman, can you move the mic a little closer to you. I'm just missing some of your comments. Thanks.

CONTINUED BY DR. BYRON WILLIAMS:

DR. BYRON WILLIAMS: Mr. Bowman, and then alerting the other witnesses, I'll ask them to comment generally, as well.

You make -- you give three (3) examples here in -- in which you're trying to support your assertion that access to this very good actuarial data -- or it may require data that is -- is not typical of Hydro's assets.

And I wonder if at a high level you can highlight these three (3) points here, sir?

MR. PATRICK BOWMAN: Sure. And -- and I would use this to help also draw the distinction between, in some ways, the type of accounts Hydro has versus some of the utilities we see using ELG.

The first point noted is that in order to develop good estimates of -- of a life in dispersion, it is helpful to have a statistically meaningful number of individuals.

And for many types of Hydro's accounts, that is possible, things like trucks, computers, you know, even distribution poles. For many types of Hydro's accounts, including things like -- like spillways, there are relatively few individuals, and retirements are -- are rare, and we can go to some examples to show.

Second is that in order to use the Utility's own data, which is usually the best source of -- of estimates, it's helpful to have a set of data that is relatively complete through a life cycle.

So, if you have, you know, fifty (50) year poles and you have history of -- of many, many decades of records of -- of the forms of poles in your -- your climate and with your type of capital investment approaches, you can develop some pretty good statistical work on that.

If you're dealing with something like -- like Hydro's powerhouses which, you know, Pointe du Bois is the -- the first one we're really taking on in a -- in sort of a major redevelopment way, you don't necessarily have a lot -- a lot to go on.

So, I think if you -- if you look at some of the numbers Hydro's using, I'm not saying this is inappropriate. Hydro is using a hundred and twenty-five (125) years for its -- its major hydro dams. Well, most of its hydro investment is -- is from the seventy something fifties, but it's not -- they don't have a lot of a hundred and twenty-five (125) year assets built out to sort of zero in on that.

And the third is that you would want to

be able to use that data to develop the actuarial estimates on the assumption, and -- and reflecting hopefully underlying facts, that the performance of the -- of the earlier assets is reasonably similar to what you expect in the future.

The more you get to very long lived assets or -- or very quick changes in technology, for example, that becomes more challenging.

And so, where you have something like -- like, again, you know, hydro dams, well, okay, we've got Pointe du Bois. We can do some analysis on Pointe du Boise. But I do recall the hearing we were in some time ago which talked about the fact that Pointe du Bois was -- was built with concrete, with a source that is more acidic than the rest of the dams here, and so its life's expected to be shorter.

So, you know, if -- if you don't -- if the data you're relying on is not representative of what you're going to have in future, then it's -- then -- then that set of inputs is also -- is also weaker.

Now, none of that's unique to Hydro. It's just that Manitoba Hydro with its particular mix of assets -- and -- and when I say "assets," I'm -- I'm really more focussing on generation here, to some extent, transmission.

But Hydro's particular mix of assets is -- is pretty uniquely challenging in that regard. Some other -- some other utilities are starting to get into this issue with things like plastic pipe that might last forever, you know, or -- or darn close to forever.

But -- but even with Manitoba Hydro's situation, it's -- it's not like -- it's not like AltaLink in -- in Alberta or -- or primary distribution.

DR. BYRON WILLIAMS: Okay. And, Mr. Watson, I see you leaning in at the request of Ms. Hooper, so I'm going to go to you next. And please take a couple moments and share your thoughts on this, please.

MR. DANE WATSON: Okay. So, relative to hydro facilities, I'd just like to make sure we level set. If he's talking about dams and concrete facilities, and a hundred and twenty-five (125) years is what we projected, that is though an interim retirement pattern.

What that means is, what we're relying on is a terminal retirement date. And all this is doing is saying there are going to be some assets that will retire prior to whatever the terminal retirement date is.

So, we have to keep in perspective what we're talking about. Most of the assets with generation, which are the -- the hydro, which is what they're pointing to, this has very little bearing on those types of things.

And to the do -- the degree they do, setting a hundred and twenty-five (125) year life means that we're only projecting a percent -- 5 percent of the total investment is going to be retired at eighty (80) years.

So, as a backdrop to doing ELG or ALG, in -- in situations like that, we're being very conservative. And we know that there will be some assets that will retire.

Now, if you use ALG, you're doing basically one (1) over one twenty-five (125), more so than ELG. ELG is saying, okay, based on this hundred and twenty-five (125) year curve, I know that a percent of this may retire at a year hundred.

And so, that's better than saying, no, then the average is one twenty-five (125) because we know some really will. Do we have a hundred and twenty-five (125) years of historical data to do a full life cycle? No, but we have pretty good estimates.

We know that there will be some retirements. And we can make a pretty good educated estimate of the different types of curves, the pattern of curves because, you know, when you're working with these assets across the whole industry, you sort of have a feel for how they retire and their forces of retirement and their mortality sets.

So, you know, to me, you know, ELG -- any of the theoretical literature -- I mean, the people that originally created the ELG curve, the -- the -- Dr. Robley Winfrey, that was -- that created the whole system we used, Wolfe and Fitch (phonetic), who is the people -- the book, everybody, that's been around a while has been taught from.

You know, the book that I edited, the (INDISCERNIBLE) book, all of them will say that ELG is a better representation of the pattern of retirement of assets because it does reflect that some assets retire earlier than the average.

ALG doesn't. It reflects an average. One (1) over fifty (50).

And so, you know, I sort of disagree with that. And -- and the fact that there's not as much information doesn't mean it's not better to do something that reflects reality better than something that just says, Oh, we don't know positively for sure, so therefore, we're not going to do it.

DR. BYRON WILLIAMS: Okay. I'm going to just ask if I can ask Mr. Madsen -- because I want to do one more question after this -- if you have any kind of conclusionary comments?

MR. DUSTIN MADSEN: Sure. I'll -- I'll just be really quick.

I agree with Mr. Bowman's points 1, 2, and 3. I would just add with point 2, whether doing ALG or the ELG procedure -- if you're faced with incomplete data, you're likely faced with what's termed a stub curve, which is a curve that doesn't go all the way to the end.

In that case, as Mr. Bowman has suggested, you might need to use some judgment as to what weight you place on that stub curve.

In my practice, I -- I tend not to completely discount any information from the stub curb. It's -- it's still data. But I would just caveat that. I mean, if there's incomplete information, it can still be data that could be valuable.

DR. BYRON WILLIAMS: I want to turn to

Mr. Bowman's evidence again, in MIPUG-6, page 35. And right there is fine. Actually, scroll up just a bit. Thank you.

Mr. Bowman, right near the end of Mr. Hombach's conversation, you adverted to this. But at the top of this page, we see an -- an estimate of surplus accumulated depreciation of 857 million under ELG; under ALG, a surplus of in excess of 2.1 billion. Agreed?

And you're also noting these estimates are growing as compared to the 2014 respective elements -- estimates both for ELG and ALG, correct?

MR. PATRICK BOWMAN: Yes.

DR. BYRON WILLIAMS: Sir, from a perspective of intergenerational equity and just and reasonable rates, what, if any, inferences do you -- do you draw from -- from the -- both the surplus and the continued, what I would characterize as, deterioration in the surplus?

MR. PATRICK BOWMAN: Well, it -- 'deterioration' is your word. The -- the fact that there's a surplus is -- is indicative of the performance of the assets. And to some extent, the fact that the lives have been lengthened since the depreciation expense was recorded in past years.

The fact that it continues to grow means that the efforts to amortize it have not yielded a reduction in this value. It's continued to grow.

That may be an indication that your lives are -- are too short. And as a result, your assets are out-performing the estimates you've put on them.

But it may also be, I'll say, a -- a quirk. I hate to call $250 million a quirk. But as -- as Mr. Watson noted, you know, in relation to the size of the asset base, these are actually fairly small numbers. So I wouldn't read too much into it until one, sort of, notes the pattern and sees -- and see if it is sustained for long periods.

Either way, I think it would be a fairly -- it would be a fairly high hurdle to say that you'd want to do something other than take these balances and amortize them over the remaining life.

DR. BYRON WILLIAMS: Thank you. Mr. Chair, I said I'd do this in half an hour. I think I started at 2:18, so I think I'm pretty close.

So that would conclude my --

THE CHAIRPERSON: You actually did better. You started at 2:25, so.

DR. BYRON WILLIAMS: Oh. Well, that's

okay. So I'm okay.

THE CHAIRPERSON: Very good. Mr. Reimer...?

MR. THOMAS REIMER: Thank you, Mr. Chair.

CROSS-EXAMINATION BY MR. THOMAS REIMER:

MR. THOMAS REIMER: Good afternoon. I'm just going to go from here. Mr. Bowman will hear a disembodied voice, but I believe that won't be a problem. So this is likely a question for Ms. Hooper.

If I understand correctly, one (1) of the issues that Manitoba Hydro has identified with respect to ALG is that -- or one (1) of the reasons for its preference not to move to ALG is the additional resources that would be needed to make the transition. Do I have that right?

MS. MICHELLE HOOPER: The additional componentization that we believe is necessary would require both an implementation, so there's additional resources one time for the implementation. And then there's additional administrative effort on a go-forward basis that affects everyone that works on capital.

So it's not ALG itself that we have a

concern with, it's the componentization that causes us an issue from a -- from a cost perspective.

MR. THOMAS REIMER: And componentization analysis is something that Manitoba Hydro does as part of its regular depreciation analysis, is that right?

MS. MICHELLE HOOPER: Yes, we review componentization at each depreciation study.

MR. THOMAS REIMER: And at present, the financial reporting depreciation expense differs from regulatory reporting depreciation expense?

MS. MICHELLE HOOPER: Yes.

MR. THOMAS REIMER: And you outlined -- or sorry, Mr. Madsen outlined some of the things that he expected would be done. I believe you also spoke about the fact that you do the ELG within the SAP system, and then you do a spreadsheet analysis with respect to the C-GAAP for regulatory purposes.

Do I have that right?

MS. MICHELLE HOOPER: Yes, that's correct.

MR. THOMAS REIMER: And so, that requires Manitoba Hydro to do two (2) different depreciation expense amounts?

MS. MICHELLE HOOPER: Yes.

MR. THOMAS REIMER: And it required Hydro to calculate, track, and reconcile differences in gains and losses, total depreciation expense, and accumulated reserve account balances for each year between the two (2) methodologies?

MS. MICHELLE HOOPER: We track differences in depreciation expenses. The gain and loss deferral is just the total amount that was booked on Manitoba Hydro's -- for financial reporting purposes.

So there's no, kind of, reconciliation there.

MR. THOMAS REIMER: Okay. So you -- so you're disagreeing with me on the gains and losses then?

MS. MICHELLE HOOPER: We don't calculate the ASL losses on a regular basis. We calculated them for purposes of the scenarios presented in this proceeding.

MR. THOMAS REIMER: Okay. And if I understand correctly, Manitoba Hydro acknowledges that whichever way the Board decides -- whether it be ELG or ALG -- Manitoba Hydro would like to use a consistent approach to both financial reporting and regulatory reporting. Is that -- is that right?

MS. MICHELLE HOOPER: Yes, that's our preference.

MR. THOMAS REIMER: And so, you will experience some efficiency as a result of the move away from two (2) methods to one (1)?

MS. MICHELLE HOOPER: There will be some efficiency, but really we're talking one (1) or two (2) people with a few hours a month in corporate accounting and maybe, you know, a little longer when we're doing a rate proceeding. It's not a huge amount of efficiency.

And that's because the cost base for both the financial reporting and the regulatory depreciation is the same. So it's -- there's relatively -- it's not a complicated calculation to determine the amounts.

MR. THOMAS REIMER: And -- sorry, I've got a lot scratched out here, so I'm just trying to see what's still on my list.

(BRIEF PAUSE)

MR. THOMAS REIMER: And so, Manitoba Hydro's position is that alternative 2 can't be implemented immediately, right?

MS. MICHELLE HOOPER: That's correct. Based on our -- our belief that we need more componentization.

MR. THOMAS REIMER: And -- and so -- and that's -- my next question was -- and I'm going to use a much simpler way of describing it.

You believe there's additional work that would need to be done?

MS. MICHELLE HOOPER: Yes, as I indicated in our direct presentation.

MR. THOMAS REIMER: And if I could get Ms. Schubert to bring up Appendix 4.3.

And I heard Mr. Fogg give evidence this morning about additional FTE levels that -- that would be required. But I also heard him say that it would -- that the additional FTE levels would not be material in terms of rates. Did I have that right, Mr. Fogg?

MR. ALISTAIR FOGG: That -- that's correct. Our estimation was it's, you know -- I don't -- we don't know exact numbers but we don't want to anticipate it's an amount that would be material from an overall operating and admin expense perspective.

It's just to flag that there is an anticipation of additional operating costs associated with that transition to an ALG approach, both one time and ongoing.

MR. THOMAS REIMER: And if I could get Ms. Schubert to Appendix 4.3, page 22. And, pardon me, I -- I need to bring it up on my computer, as well, so just give me one moment, please.

(BRIEF PAUSE)

MR. THOMAS REIMER: Thank you. Sorry for that. So, I'm looking at -- oh, pardon me. Sorry, Ms. Schubert, I meant 25 of 35. And I'm looking at the last paragraph of the top section, so above the heading 1.4.10, there's -- there's that paragraph that begins, 'Manitoba Hydro has not calculated', do you see that, Mr. Fogg?

MR. ALASTAIR FOGG: Yes, I do.

MR. THOMAS REIMER: And so, initially, Manitoba Hydro's position was that the FTE additions would be material relative to the benefit to customers. Do you see that at line 10?

MR. ALASTAIR FOGG: Yes, I do.

MR. THOMAS REIMER: And, and if I understand correctly, you've re-evaluated that position and you've determined it would not be.

MR. ALASTAIR FOGG: So, I think what

we were trying to say, and maybe not as precisely here as -- as -- is that on an overall operating and admin perspective and the expense, those costs are not material, but relative to the benefit of -- to the customers who -- what we believe we've highlighted in the depreciation issues document is that it didn't modify the rate path or our target to the -- that -- capitalization ratio and as such you're, essentially, incurring additional operating expenses to end up in the same place.

MR. THOMAS REIMER: And, if we go up two (2) pages to page 23. So, at the bottom of this -- so I think this section actually -- starting at 1.4.9, the heading talks about the steps that Manitoba Hydro believed it needed to do in turn -- in order to -- convert from ELG to an ALG or ASL methodology.

Is that right?

MR. ALASTAIR FOGG: That's right.

MR. THOMAS REIMER: And one of the things I noted down a page, on page 24, the fourth bullet, middle of the page, it's line 18. There's something, it starts 'notably'.

Do you see where I am?

MR. ALASTAIR FOGG: Yes.

MR. THOMAS REIMER: And so it says:

"Notably with the Corporation transitioning to SAP S/4HANA, and implementing the IT aspect to Strategy 2040 initiatives..."

et cetera.

So, as you might imagine, Mr. Fogg, this jumped out at me in the context of the evidence that we heard last week with respect to a decision not having been made.

I just wanted to put this to you and make sure that I didn't misunderstand the evidence last week and that there hasn't been a decision, 'cause this appears to be --

MR. ALASTAIR FOGG: No, there hasn't been the decision on --

MR. THOMAS REIMER: Okay.

MR. ALASTAIR FOGG: -- SAP. I think what we -- just wanted to highlight was that should we transition to SAP S/4 if we also were adding components to our existing SAP, depending on the timing of those, we may make those changes in the current system and then make those changes again in -- in a new SAP and similar resources would be working on both of those projects as well.

MR. THOMAS REIMER: Right. And then

you -- you go on at line 21 to make the point that the use of external resources may be available, but are typically more expensive. And that's -- that comment would still stand. Is that right?

MR. ALASTAIR FOGG: That's right.

MR. THOMAS REIMER: Now, as I understood it originally when Manitoba Hydro filed its application materials in November, it believed that it needed to recalculate depreciation expense retroactively going back to 2014.

Did I understand that correctly in terms of your initial position in November?

MR. ALASTAIR FOGG: The initial assessment was that it was a, I believe, if you scroll up it was that we considered a change in accounting policy. That was updated in -- and I don't recall the specific Information Request, but it was updated to note that it's a change in estimate, not a change in accounting policy and that would be applied prospectively as a result.

MR. THOMAS REIMER: And, so when you were developing the -- the bullet list of things that -- Manitoba Hydro believed it needed to do to make the change to ALG, you believe that the accounting change required retroactive work and as -- and sorry, this is a long question, bear with me, if I need to break it down, I can.

But, as a result of further analysis that you did as a -- when you received Information Requests, you determined that retroactive work was no longer needed.

MR. ALASTAIR FOGG: That's correct.

MR. THOMAS REIMER: Okay. And so, in other words the -- the -- the bullets that follow at the bottom of '23 and into '24, at least anything that relates to retroactive work is no longer needed from Manitoba Hydro's perspective?

MR. ALASTAIR FOGG: Specific to the -- the -- the financial accounting statements, but Ms. Hooper may be able to add to that.

MS. MICHELLE HOOPER: We updated that in PUB/MH-1-115, part b, the list of work effort has been -- has been modified to reflect a perspective treatment instead of retrospective.

MR. THOMAS REIMER: Right. So, it would be a lot -- a lot -- if I -- if I suggest to you a lot less work, as a result of that Information Request response than you initially believed in November of 2022.

MS. MICHELLE HOOPER: It would be less

work. I don't believe it would be a lot less work, because the retrospective is just a balance sheet -- balance sheet entries. So they're pretty -- it's -- with -- they have already been calculated so we would book some balance sheet entries.

The -- the work effort is the -- is in changing the systems and training people and converting assets. That would happen regardless of whether it's retrospective or prospective.

MR. THOMAS REIMER: Am I correct that whether it's ELG or ALG that the Board decides is appropriate for regulatory purposes, it's going to resolve the depreciation issues in terms of the -- the two (2) different methodologies that Manitoba Hydro has been using, going back to 2014?

MS. MICHELLE HOOPER: Provided that the Board's decision is an IFRS compliant version of depreciation expense, yes, it would resolve the -- the issues.

MR. THOMAS REIMER: But the Board's direction would be a factor that you would need to determine, in discussion with your -- your accounting team, when it comes to deciding what is IFRS compliant, right?

MS. MICHELLE HOOPER: If the Board

provides us direction that's different from what we already believe to be IFRS compliant, then we would have to take that away and -- and analyze it and assess whether or not it was -- we were in agreement that it was IFRS compliant.

And if it was not compliant, we'd be looking at some kind of regulatory deferral going forward.

MR. THOMAS REIMER: And -- and sorry, this is more a point of clarification, because I actually don't know the answer, but is your regulator's decision not one of the factors that you need to consider in -- in determining IFRS compliance?

MS. MICHELLE HOOPER: The regulator's decision affects that net movement in regulatory deferral accounts and the balances in your regulatory deferral accounts. It doesn't affect your above-the-line compliance with IFRS.

MR. THOMAS REIMER: This is a question I'm going to direct to either of the Hydro witnesses and then to Mr. Bowman, as well.

So, maybe I'll start with Manitoba Hydro. Is there a practical reason for why private utilities would want to use ELG over ALG?

I -- I have a suggestion, if -- if you

don't want to hazard your own.

MS. MICHELLE HOOPER: I believe Mr. Madsen put some -- his position on this -- on the record in his written evidence but it -- it's not something that I personally would want to opine on.

MR. THOMAS REIMER: Okay. Well, I -- I'm not going to ask Mr. Madsen any questions for probably obvious reasons, but I'm asking you as the representative here for Manitoba Hydro dealing with depreciation issues, in your understanding of the various -- I'm going to get the word wrong -- methods of depreciation -- so, we're dealing with ALG and ELG and you've got an understanding of those.

And you've also got an understanding of the industry in Canada, and I'm wondering if you can provide your understanding of why a private entity might want to use ELG rather than ALG.

MR. ALASTAIR FOGG: I -- I -- I'm -- Mr. Reimer, I'm not sure I'm prepared to say exactly why I think they've elected to do that. I would -- they may believe that better reflects the consumption of their assets or how their assets are depreciated.

MR. THOMAS REIMER: Is -- let me put it -- let me put it a different way.

Is there a practical benefit to a

private utility, that's shareholder-owned, to use ELG over ALG, that would not apply to Manitoba Hydro, as a Crown-owned entity?

Perhaps, I should go to Mr. Bowman and you can tell me if you agree or disagree with what he says. Mr. Bowman, same question to you, please.

MR. PATRICK BOWMAN: Thank you, Mr. Chairman, Members of the Board.

I've dealt with quite a few different utilities over my career and I will say that, in my experience dealing with utilities in the private sector is that there can be two (2) different motivations that are -- appear competing and that depend on the priorities of the utility in question that can be relevant to things like depreciation, treatment of net salvage, what you do with those surplus balances, and the like.

One of those groups of utilities will tend to be the utilities who prefer not to generate cash and would rather have a larger rate base, on which they can earn a return. I would say that's the minority. I can think of exactly one that I've dealt who's in that situation and that utility works very hard to ensure that -- that their depreciation is minimized, because depreciation is a non-cash expense, but it generates cash from rates.

And so, they, without naming or -- or dealing with things that were in negotiating sessions that were confidential, I'll say that some utilities, or that one utility, at least, had an interest in minimizing cash generation.

Outside of that, the normal tendency is for utilities who -- and -- and I think this is in a lot of the -- a lot of the literature -- it's a lot of the -- the types of rationale to let people to adopt performance-based rate-making and the like is a lot of utilities will have an incentive to, first, build up a rate base, to spend, to build capital, and, then, to -- to generate cash from it quite quickly.

And the different depreciation methods will have a tendency of different -- generating different amounts of cash, with ELG tending to generate more cash quickly because the -- the expense is higher.

And if you want to see that in this application, I believe Ms. Schubert had MFR-95, Attachment 1 up, at one point. This is Mr. Kennedy's depreciation study and -- and, hopefully, Mr. Kennedy does the calculations both ways.

If we were to go to -- and I'm just

going to pick an account here that I happen to have in front of you, which was the sub-station buildings, again, it is page 1,035 of this document.

Now, this is the section where Mr. Kennedy generates the depreciation expense for assets in this account. This account called 3,000B, the buildings at sub-stations.

And if you see the top right-hand corner of the page, Ms. Schubert, scroll up, you'll see that he has prepared this on the basis of the ALG approach, whole life, survivor curve R3, average service life 65 years. So, this is a 65, R3 account, average life of 65 for investment in sub-station buildings.

And in preparing that depreciation expense if you go down the page, you will see that, for each vintage, each year of investment, there's some investment from 1931, 24,000 of investment. There is a rate there that's applied. The rate yields an amount and that -- that particular asset of twenty-four thousand dollars ($24,000) has a three hundred and seventy dollar ($370) depreciation expense.

And if you scroll down the page you start to see the newer investments. You go over to the next page and you'll see that as we get into more modern times, oh wait, 1970s, mid-1970s there. You see the -- what I'm assuming is a -- Bipole II coming in, 1976, '78 there's some pretty big investment, $15 million in a year, 25 million in a year.

But if you keep scrolling down, you'll get the -- the key example for this, which is what I would assume is Bipole III investment on the substations, or Riel I guess, is from the 2019 vintage.

There's $500 million of investment. Inve -- it's built in 2019. Under an ALG approach, that is a sixty-five (65) year average life. The rate is 1.54 percent. And so, the depreciation expense that would be built into revenue requirement, the way that most of those private sector utilities are regulated, would generate a depreciation expense of $7.7 million in that year, one sixty-fifth (1/65) of $500 million.

It would also tell you that you should have 3.7 million set aside as accumulated depreciation, which is in the final column there. And you'll see how that works as you -- as you work up the page. So, that's just the newest investment. $500 million would be $7.7 million under ASL, sixty-five (65) year life.

If we were to jump to Mr. Kennedy's page 623, which is the ELG version. Under ELG you'll see the rate varies by vintage, because that's part of what the -- reflecting the Iowa curve does. That's the supposed precision.

And if you scroll down to the bottom of that page, we see that same $500 million investment, except in this case it's one (1) of the youngest assets there, and instead of the sixty-five (65) year life, if you look to the right-hand side of the page, you'll see a number 54.58. That is the remaining life, assuming equal life group method and its current average is -- is a half, half a year on average through that year.

So, the total life of this asset, for the purposes of setting the depreciation rate in this is at fifty-five (55) years. As a result, the rate is generated at 1.82 percent and the expense -- amortization expense, the depreciation expense on this asset, instead of the 7.7 we just saw, same asset, same average life, has the depreciation expense of 9 -- 9 million -- $9.1 million.

And your accumulated depreciation it says should be set aside as 4.5 million. So, by nothing other than flipping the method, you -- a -- a utility can change significantly whether they're generating cash -- a lot of cash from their assets or -- or not generating cas -- the same cash from their assets.

And that's just, like I said, one (1) example it's a pretty extreme example because it's a very large investment that's brand new. And -- but I -- I thought it might helpful to take someone to that and show you the -- the way that the math works.

MR. THOMAS REIMER: Mr. Bowman, if I just may try and pull out what I think is the essence of -- of that response.

Am I understanding then that ELG front loads depreciation expense in comparison to ALG?

MR. PATRICK BOWMAN: ELG results in a higher expense, in general, because most of your assets -- most of your asset dollar value is quite new and new assets tend to lead -- or will lead to higher rates under ELG, which generates a higher revenue requirement. But because it's a non-cash expense, it generates more free cashflow to the utility for the purposes of being abl -- which yields the ability to pay dividends.

I won't say for the purposes. I -- I don't want to ascribe motives, but there are private sector utilities who would value the ability to generate cash and pay dividends.

MR. ALASTAIR FOGG: So, Mr. Reimer, if I may, I'd just like to have -- at least -- from the depreciation issues document that we presented noted that, despite the differences and how that depreciation expense is calculated, what we saw is that it -- it didn't result in a change to what we were forecasting from a rate path perspective.

So, in terms of actual collection of customer revenue and the cash associated with that, there was no change within what we modelled?

MR. PATRICK BOWMAN: Right. I -- I will just echo that. I'll say that in the cash of Manitoba Hydro where we're doing the various types of deferral and things, this is not the same consideration and incentive for doing ELG.

But when you look across the country, this is where -- you'll -- you'll see ELG if you followed the path of it, tends to, in Canada, come out of -- tends to come out of Alberta with private sector utilities largely in transmission and distribution picked up by some of their private sector peers in places like Nova Scotia and -- and Newfoundland.

MR. THOMAS REIMER: So, and -- and

fair enough for that clarification, Mr. Fogg.

I -- I think what I'm getting at though, if I can just sort of show my cards, is you've -- you've got a slide in your slide deck that refers to other utilities in Canada that deal with -- that -- that use ELG as -- as the Chair pointed out in -- in one (1) of his questions, or maybe a couple of his questions, several of them, at least the ones in Alberta and -- and the subsidiaries of Atco and other jurisdictions are private entities.

And so I'm just offering an explanation as to why they may prefer using ELG as opposed to ALG. And so it may not be an apples-to-apples comparison when you're talking about a Crown-owned utility versus a private-owned utility. And -- and so that's the point I'm making.

You're -- you're welcome to respond to that assertion or -- or that suggestion that I'm making.

THE CHAIRPERSON: You know, Mr. Reimer, I don't quite frankly think he has to respond. You've -- what -- what you've put forward -- I mean, the fact is, yes, they're a private sector. I don't know if asking a Crown corporation what a private-sector company is thinking about is -- is a proper question.

And what you've put forward is a perfectly valid argument to put forward on final submission, but asking Mr. Fogg or Ms. Hooper to comment on what the private sector company is thinking and why they're doing certain things, I don't think that's up for them to do.

Mr. Bowman, you know, who -- who is not working for them and is experienced with private-sector companies and Crown corporations, I think, you know, provided an answer. And if -- if that isn't good enough, I think -- you know, you could put to him -- and you already did -- the exhibit they put forward contains private-sector companies --

MR. THOMAS REIMER: Fair enough.

THE CHAIRPERSON: -- that are ELG. And that -- that's fine, and then you can go to argument.

If you want to ask Mr. Watson, who I assume has lots of experience with private-sector companies, you can do it.

Asking Manitoba Hydro, I -- I mean, I just don't think you can expect them to give an answering considering they've -- you know, they've worked for Manitoba -- for a Crown corporation for so many years.

MR. THOMAS REIMER: Fair enough. And -- and I -- I'm going to move on, Mr. Chair, so thank you for that comment.

CONTINUED BY MR. THOMAS REIMER:

MR. THOMAS REIMER: Two (2) questions more. Ms. Hooper, I think this is for you.

Do you agree that the depreciation expense under ELG and under ALG will always recover the full value of the asset?

MS. MICHELLE HOOPER: It depends on how accurate your assumptions are, but assuming your assumptions that you're using are accurate, yes, it should. Over the life of a pool of assets, it should recover the full depreciation expense.

MR. THOMAS REIMER: Under either ELG or ALG?

MS. MICHELLE HOOPER: Under either methodology.

MR. THOMAS REIMER: Yeah. And do you also agree that the -- that -- that that principle stands whether you're accounting for the amounts in the deferral account, in the original cost, or in accumulated depreciation?

In other words, no matter where you're tracking it, you're still going to depreciate the whole asset.

MS. MICHELLE HOOPER: The amounts that are in a deferral account only get depreciated if the Board approves a depreciation rate for them.

If they don't approve a depreciation rate for them or refuse to approve a depreciation rate, we would likely have to write them off.

MR. ALASTAIR FOGG: We can't take a balance in a regulatory deferral and add it back into accumulated depreciation. So to recover that, we need an amortization period.

MR. THOMAS REIMER: But -- but am I not right, Mr. Fogg, that you've got a regul -- you've got a deferral without regulatory authorization for it in this case?

MR. ALASTAIR FOGG: We establish it based on direction around the C-GAAP ASL matter and maintaining that, which we noted already.

MR. THOMAS REIMER: Right, but you don't -- so --

MR. ALASTAIR FOGG: So there's different provisions under IFRS-14 that would allow -- would allow that creation of that deferral account that's been tested with out auditors, and -- and they've said we've met the compliance with that aspect of the standard.

MS. MICHELLE HOOPER: If I could just add, though, that is subject to the understanding of our auditors that the Board will eventually opine on these accounts, that they're not going to sit there forever.

MR. THOMAS REIMER: Right. In other words, until the Board makes a direction one (1) way or the other. Like what happens to that money if -- if you don't get your authorization from the Board, as you've suggested to your auditors that you will?

MS. MICHELLE HOOPER: The direction that we've received to date from the Board is -- our understanding of it is that they fully intend to opine on depreciation matters at some point.

And once that opinion has been provided, then we'll have to assess recoverability. And provided that the Board gives us a -- if the Board refuses to give us an amortization period, our assessment of recoverability would be that it's not there, and we would likely have to write off.

If the Board provides an amortization period, there's a recovery, and that's the -- how it would be recovered.

MR. THOMAS REIMER: Mr. Chair, those are all my questions.

Thank you to the panel.

THE CHAIRPERSON: Thank you, Mr. Reimer. M. Hacault...?

CROSS-EXAMINATION BY MR. ANTOINE HACAULT:

MR. ANTOINE HACAULT: Yes. Good afternoon. I was thinking morning. Boy, am I out to lunch today. So Antoine Hacault, for the record. Nice to see all of you.

The first item, just to give some clarification, there was some discussion about the Society of Depre -- Depreciation Professionals, and I thought I'd bring up the page, if you have it, Ms. Schubert, with respect to what it takes to be certified as a certified depreciation professional.

Am I correct in bringing up this page and does it show the correct credentials required to be a certified depreciation expert?

MS. MICHELLE HOOPER: You're looking at me, Mr. Hacault, so I will answer. Yes, this is the -- the page from the Society of Depreciation Professionals website which outlines requirements for certification as a CDP.

MR. ANTOINE HACAULT: Okay. Thank you, Ms. Hooper. Could we mark this document as the next MIPUG exhibit? I think it's 18 -- 16.

--- EXHIBIT NO. MIPUG-16: Page from the Society of Depreciation Professionals website which outlines requirements for certification as a CDP

CONTINUED BY MR. ANTOINE HACAULT:

MR. ANTOINE HACAULT: The Board counsel -- and I'm not going to go through everything that he went through on IFRS, or the International Accounting Standard 16. But in the Board book, volume 5, at page 10, he directed your -- the attention of Ms. Hooper, I believe, to paragraph 43.

And then Ms. Hooper said, well, yeah, but you have to read it in the context of the other paragraphs that follow. And I'll take time to read paragraph 45:

"A significant part of an item of property, plant and equipment may have a useful life and depreciation

method that are the same as the
useful life and depreciation method
of another significant part of that
same item. Such parts may be
grouped in determining the
depreciation charge."

So that is what allows the average life grouping, whether it's equal life or average life?

And, Mr. Madsen, you can answer the question, too. It's more an accounting thing.

(BRIEF PAUSE)

MS. MICHELLE HOOPER: The paragraph does indicate that grouping of assets is allowed as long as the -- even if they're significant, provided that the assumptions that you're using for depreciation are consistent.

MR. ALASTAIR FOGG: I would agree.

MR. ANTOINE HACAULT: Okay. And there was also a reference at page 11 to paragraph 62(a), which was put by Board counsel I believe to Ms. Hooper.

Mr. Madsen, with respect to your education and involvement in IFRS, do you have any comments on paragraph 62(a) and how that fits into the previous paragraph 62?

MR. DUSTIN MADSEN: Sure. Certainly. So paragraph 62(a), it's an important paragraph. It's in my opinion not relevant to Manitoba Hydro's circumstances.

The intention behind 62(a) is to stipulate that -- to use the example, if you -- if you have a productive asset like a -- a shop and you construct that shop and you just built your shop but you aren't expecting to have significant revenues for that -- call it an auto shop, for some significant period of time, you cannot vary your depreciation expense by virtue of the consumption -- or the -- the expected revenues.

You need to continue to depreciate the asset over its actual useful life regardless of your revenue stream.

From a utility's perspective it's -- it's different because we're determining depreciation expense by reference to a lot of different factors, useful lives, actuarial data, management information and what have you; there's a lot of detail. Peer data is another one.

That informs the development of the

depreciation expense which, from a regulatory perspective, also informs the amount of revenue that's collected. That's different. That's not the -- that's not the concept that's being contemplated under 62(a).

That type of a calculation which is initially built up based on the underlying useful life of the assets simply because it's linked to revenues doesn't mean it's prohibited under IFRS under 62(a).

MR. ANTOINE HACAULT: Thank you. Next subject area that I'll move to is the general area of componentization.

And first, I'll go to MIPUG/MH Round 1, 91, questions (a) to (b)(d). I'll start with page 12, the answer to the question 'X'. And, Mr. Watson, I -- I think you're very eager to want to -- to contribute.

The last sentence says, "This depreciation methodology..." first, I'll stop there.

Are you referring to the average life group methodology?

(BRIEF PAUSE)

MR. SVEN HOMBACH: Mr. Watson, I don't think your microphone was on. The Hearing is being transcribed. If we could ask --

MR. ANTOINE HACAULT: He wants to see the question. I'll go there.

MR. DANE WATSON: Yeah, I asked if I could see the question and not just the response that was there.

CONTINUED BY MR. ANTOINE HACAULT:

MR. ANTOINE HACAULT: So, for the record:

"Please indicate if the Alliance Consulting depreciation study included in Appendix 9.11 represents an industry standard approach applied by the Alliance and the conclusions of Alliance's depreciation experts as to fair and reasonable annual depreciation expense for Manitoba Hydro. If not, please provide a detailed description of why not."

You can go to the answer now.

MR. DANE WATSON: Okay.

MR. ANTOINE HACAULT: My question to you is, the last sentence says, "This depreciation methodology." Were you referring to average Life Group, sir?

MR. DANE WATSON: I was referring to the overall method that I used for the study, including average life group, remaining life, straight line methodology and the process that I used.

MR. ANTOINE HACAULT: Okay. And with that context, sir, you then have further defined what you meant in saying:

> "This deprecation methodology is predominantly -- or used predominantly by the utility clients of Alliance Consulting Group and is the methodology frequently used by regulated utilities in the United States."

Correct?

MR. DANE WATSON: Yes. The system I described above is -- is a normal method in -- in the -- the United States that is used.

MR. ANTOINE HACAULT: Okay. Thank you. I'll now move to...

(BRIEF PAUSE)

MR. ANTOINE HACAULT: While I'm on this document, sorry, I've been crossing things out. All of the counsel have done a great job.

If we go back to page 10 of this same document -- I don't know what it is in the PDF.

(BRIEF PAUSE)

MR. ANTOINE HACAULT: I have page 11 of 527. Yeah, it's that table. So, going back a little bit more, one (1) page back, please, Ms. Schubert. To give some context, again, we could go to (v), but we're discussing an account called spillway.

And I don't know whether or not you're going to be -- be able to provide any information on this, Mr. Watson. But there's a figure that's referred to at the bottom of the paragraph on this page that indicates:

> "Figure 1 below summarizes what portion of the total investment in source account 000D [as in Donald] is attributed to each sub-component account."

And if we can go to the next page. Sir, my understanding is that the description under the heading, "Sub-component group account," if it has the number 00A, that was part of the initial depreciation study.

Is that correct, Ms. Hooper?

MS. MICHELLE HOOPER: The first four (4) characters represent the original account from the -- from the Concentric depreciation study.

So, for hydraulic, we combine all of our hydraulic generating stations in order to determine service lives, and then calculate depreciation rates at a generating station level.

So, this would be all of the accounts in the Concentric study that start with 11 and end in 'D', would be, like, 000D. Of if they start with 11 and end in 'A', they would be 000A accounts.

MR. ANTOINE HACAULT: Okay. And are these with respect to one (1) specific spillway or all the spillways generally?

MS MICHELLE HOOPER: The amount shown would be the combined amount for all spillways.

MR. ANTOINE HACAULT: Okay. And if we go down this table on the issue of significance, one (1) of the things that I understand Manitoba Hydro is going to go back and do is to look, for example, if I go the fourth line down, there's a new sub-component that's been identified for all the spillways.

It's fifty-four thousand eight hundred and forty-nine dollars (54,849), correct?

MS. MICHELLE HOOPER: No, that's not the total for that account. That's the portion of the dollars that were in the original spillway accounts that got allocated to new account 000B-01, which is a powerhouse account, actually. So, that's only a portion of the costs that are in that new account.

MR. ANTOINE HACAULT: Gee, I had misworded my question. I think we're saying the same thing. There was a new sub-account that was created, and it allocated fifty-four thousand eight hundred and forty-nine dollars ($54,849) in that sub-account?

MS. MICHELLE HOOPER: So, there was fifty-four thousand (54,000) allocated from the original spillway accounts, but there were amounts allocated from other accounts, as well. Fifty-four thousand dollars ($54,000) is not the total for the new account.

MR. ANTOINE HACAULT: And what's the total for the new account then under that particular line?

MS. MICHELLE HOOPER: Sir, I'll just have to look for a reference.

MR. DANE WATSON: The total investment A01 is $986.7 million.

MR. ANTOINE HACAULT: And the sub-component balance left in that account is fifty-four thousand eight hundred and forty-nine (54,849)?

MR. DANE WATSON: No. Let -- let me -- let me try. So, the source group you see at the top, 000D, is the original source account.

What we did is, as we unbundled those accounts, if you will, we found that some of the assets really belonged in 000A01, which is titled, "Concrete dams, dikes and substructures'. And some of what was in that account belonged in other categories -- and we did that in order to make each of the categories homogeneous.

So you had the same basic assets lives in each of the accounts. So you didn't have as much variability. So the 000D was split into these different other accounts.

MR. ANTOINE HACAULT: And I represents .01 percent of the total account. Correct?

MR. DANE WATSON: I'm sorry, would you repeat that?

MR. ANTOINE HACAULT: I'm looking to the right-hand side here. The same number that we were talking about, the 000B-01, at fifty-four-thousand-eight-hundred-and-forty-nine dollars ($54,849) represents .01 percent.

MR. DANE WATSON: And -- and all of this -- what you can find in the depreciation study, you can see the actual total dollars on each of the accounts if you go to the study itself and that's what I'm referencing here.

The B01110B00B01 is called 'Superstructures and support buildings'. It's the very long-lived account. And that account has 9.5 million in total in it. So -- but only fifty-four (54) or fifty-five-thousand (55,000) from this particular sub-account was moved over to become homogenous because there was some assets in there that had that long hundred-and-twenty-five (125) year life expectation that this substructure -- this -- this building account has.

MR. ANTOINE HACAULT: And does that same explanation hold for the bottom account on -- we see on the screen, 000F-01, at some forty-three-thousand-seventeen dollars ($43,017) which also represents a .01 percent of the total balance?

MR. DANE WATSON: Yeah. Again, from the -- yes, from the spillway account, that much is transferred over to F01, which is titled 'Roads, grounds, and physical site security'. And there's $169.8 million in total in that account that is like.

MR. ANTOINE HACAULT: Thank you for that explanation, sir. Now, I'd like to move to the bottom of this page, which is going to take us to another figure.

And it refers to the Concentric retirement rate analysis for this same account, 000D Spillway. Do I have it so far correct?

MR. DANE WATSON: Yes.

MR. ANTOINE HACAULT: And if we move on to the next page, there's different curves on these and these are the dreaded Iowa curves. Correct?

MR. DANE WATSON: The beautiful Iowa curves, you mean.

MR. ANTOINE HACAULT: I did about three (3) or four (4) hours of cross-examination on curves last Hearing and I had enough of it. I'm not as passionate as Mr. Madsen and Mr. Bowman and yourself, Mr. Watson.

But there's a couple things that are happening on -- on this graph. I would suggest to you, firstly, in the dark blue line at the top is the actual experience based on the observed data.

Correct?

MR. DANE WATSON: Correct. From the Concentric study from 2019, that is correct.

MR. ANTOINE HACAULT: Okay. And do you accept that as being actual data for your study?

MR. DANE WATSON: Yes, I accept that's what I prepared and used in the study.

MR. ANTOINE HACAULT: Okay. And Concentric, am I correct, used -- I don't know if it's green or what it is on this -- but it's an Iowa curve, which is 90-R35 for its study. Correct?

We see that at the top, in the middle.

MR. DANE WATSON: Yes, the higher Iowa curve is a 90R3.5.

MR. ANTOINE HACAULT: And the ninety (90) means it's based on a ninety (90) year life. Correct?

MR. DANE WATSON: Ninety (90) year average service life. That is correct.

MR. ANTOINE HACAULT: And you, in your professional judgment, used a different curve with a shorter life span of eighty-five (85) years.

MR. DANE WATSON: Can I see the question? I think this is from -- with the addition of the eighty-five (85) year. Yes.

(BRIEF PAUSE)

MR. DANE WATSON: If we could see the question. I don't remember what -- there was something requested and I don't remember, at this point, what it was.

(BRIEF PAUSE)

MR. DANE WATSON: So the question asked was to add the eighty-five (85) year R3.5 in addition to the ninety (90) that was from the Concentric retirement rate analysis, and that's what we did.

MR. ANTOINE HACAULT: And I guess I'd have to take you there. But I'm suggesting to you that when you completed your study, you chose a different Iowa curve being eighty-five (85) and that's why we were asking for that to be modelled.

MR. DANE WATSON: I'm sorry. I mean, our -- we broke it down into individual homogenous sub-groups to do our analytics -- or to -- in the end of the day, and your question is...?

MR. ANTOINE HACAULT: My question was whether or not the eighty-five (85) year life curve was something that was chosen by Alliance as opposed to Concentric.

MR. DANE WATSON: The 1100D01, 'Spillway substructures', is set to a ninety (90) year life. The 00D would be the original unsplit or -- unsplit source account, not the sub-accounts that we opined on for the 90R5.

And when -- we chose a 90R5 for subway steel structures, so I'm not really sure what -- what the ninety (90) versus eighty-five (85) R3.5 -- we would not recommend an R3.5.

MS. MICHELLE HOOPER: If I could just clarify, the data points on this graph are from the Concentric study. So they're Concentric's, like -- like, with the original componentization; not after the results of Mr. Watson's analysis.

MR. ANTOINE HACAULT: And the effect of choosing a shorter average life is to create additional depreciation earlier on in that asset.

Correct?

MR. DANE WATSON: No. Okay. So the 000D was a source account. And we moved some of the assets from that source account to a hundred-and-twenty-five (125) year asset group.

We moved some of the others that had

shorter observable lives to another asset group.

So I'm -- I'm not really sure what this is -- is showing. I don't recall having chosen any life with an R3.5 curve. So these are from the Concentric study; not from what I did.

MR. ANTOINE HACAULT: I understand that. What I'm trying to understand, sir, when there are two (2) different Iowa curves, irrespective of whether it was chosen by you or somebody else, if we see an Iowa curve that says 90-R3.5 versus an Iowa curve 85R3.5, the eighty-five (85) year Iowa curve will result in earlier depreciation of that asset.

MR. DANE WATSON: Yes, because it will be fully depreciated at an earlier period.

THE CHAIRPERSON: Mr. Hacault, you've got five (5) minutes left.

CONTINUED BY MR. ANTOINE HACAULT:

MR. ANTOINE HACAULT: The -- in Appendix 9.11 at page 167 of 99, (sic) I'd have to, hopefully my lawyer counting on the left-hand side when I go all the way down, I see there's about thirty-four (34) accounts.

And, I'm going to suggest to you that that's generally reflective, although this is for a generation dam, Seven Sisters, generally reflective of the sub-componentization in the Alliance depreciation analysis.

MS. MICHELLE HOOPER: This is an individual generating station, but we applied the same sub-componentization to all hydraulic generating stations.

MR. ANTOINE HACAULT: Okay. And, you may know this by heart, but would I consider that there's sixteen (16) generation systems then that benefitted from this sub-componentization? That counts Laurie River 1 and Laurie River 2, that's two (2) separate generating stations.

MS. MICHELLE HOOPER: I'm sorry, Mr. Hacault, I don't have the accounts at the top of my head.

MR. ANTOINE HACAULT: Okay, if we can go to PUB/MH Round II-41, Attachment 1. And I have it at page 14 of 151.

I'm trying to understand your question Ms. -- or your answer, Ms. Hooper. You indicated that those sub-components were applied to each generating station.

MS. MICHELLE HOOPER: You have sixteen (16) on this list. We do not separate the assets for

Laurie 1 and 2. They're together in our asset accounting. We also have separate assets within hydraulic generation for Churchill River diversion and the Lake Winnipeg Regulation.

MR. ANTOINE HACAULT: Okay. Thank you.

MS. MICHELLE HOOPER: And some infrastructure assets as well that are not on this list.

MR. ANTOINE HACAULT: And let me take you there, it's Concentric MF4-95, was the attachment, but generally, Concentric used fourteen (14) accounts instead of thirty-four (34) accounts.

Does that sound about right, subject to check?

MS. MICHELLE HOOPER: Yes, subject to check.

MR. ANTOINE HACAULT: Those are all my questions. Thank you very much.

THE CHAIRPERSON: Thank you. Mr. Czarnecki...?

MR. BRENT CZARNECKI: Thank you, Mr. Chairman. Just by way of timing, I will be very brief. I won't have many questions and that's not to be an inference of anything other than the fact that -

- from Hydro's position, the issues have been very well canvassed and are, frankly, ripe for argument.

But I do have a few and before I get to the questions, I, on behalf of Manitoba Hydro, I would like to thank Mr. Innis for his efforts in facilitating this at the direction and guidance of the Board and all of the participants for cooperatively responding to what is otherwise a very detailed and technical issue, which we've boiled it down to this one hearing -- oral hearing day for the panel's consideration. So, those efforts are deeply appreciated and I -- I think we arrived at a -- a more efficient spot in this process.

RE-DIRECT EXAMINATION BY MR. BRETT CZARNECKI:

MR. BRETT CZARNECKI: I won't be asking about IOWA curves, you'll be glad to hear and, however, when my son, Michael, asked me what I did at work today, as he normally does, I will speak of Iowa curves and I'm thinking he's going to ask me to teach him how to pitch one of those and we'll -- we'll go from there, but I -- I digress.

Mr. Bowman, I'll just start with you. This morning I fairly heard you say that you are not a -- an accountant. Correct?

MR. PATRICK BOWMAN: Correct.

MR. BRENT CZARNECKI: And just to confirm, sir, you're also not a certified depreciation professional, right?

MR. PATRICK BOWMAN: No, I've never taken the test.

MR. BRENT CZARNECKI: Now, I -- I shared with Mr. Williams, I sense that you do, of course, have a passion for this.

Is -- is it on your horizon to try and become one for future proceedings?

MR. PATRICK BOWMAN: I doubt it. My focus has been on rate setting and how depreciation fits into that for the purposes of saying just and reasonable rates. It's not my -- not my interest to do depreciation studies for utilities and so that -- that hasn't been the -- the -- the area where I've looked to focus.

MR. BRENT CZARNECKI: Yeah, understood. And we recognize your experience.

So, just to confirm then, sir, you -- you haven't personally undertaken an extensive depreciation study of an integrated electric utility, such as Manitoba Hydro, like Mr. Watson or Mr. Kennedy have done?

MR. PATRICK BOWMAN: I -- I haven't done any depreciation studies.

MR. BRENT CZARNECKI: Mr. Madsen, over to you. Now, last week we did confirm that you are a Certified Depreciation Professional? You passed the exam?

MR. DUSTIN MADSEN: Yes, sir.

MR. BRENT CZARNECKI: And, how long have you been a Certified Depreciation Professional for?

MR. DUSTIN MADSEN: I think I wrote the exam during the pandemic. Actually, I'm certain of it. So, it would have been around 20 -- early 2022 that I found out that I had passed.

MR. BRENT CZARNECKI: Okay, so less than two (2) years?

MR. DUSTIN MADSEN: That's correct.

MR. BRENT CZARNECKI: And, I saw from slide 2 of your presentation this morning, you -- you peaked my interest when you said, when your bullet says you've created your own depreciation model.

MR. DUSTIN MADSEN: That's correct.

MR. BRENT CZARNECKI: Can you just explain what that is and where it's been used?

MR. DUSTIN MADSEN: So, it -- it's --

it's a model that starts from we heard about Wolf and Fitch in Bulletin 125, 155, these are very dated books that have these curves modeled and all the data points for these curves.

What I did was begin with those curves, modeled them into an Excel model and then sort of converting that into a model that could also mimic those curves for different types of lives, recalculate them down to a much more discreet level of detail and then also calculate the depreciation expense and salvage costs and everything, what have you -- subject to any other assumptions as well as graphing and performing the actuarial analysis that you see being done by Mr. Kennedy, Mr. Watson and that -- that's essentially the purpose of the model to do a depreciation study.

MR. BRENT CZARNECKI: So, could I characterize such trail blazing because you disagree with the long standing text books on depreciation?

MR. DUSTIN MADSEN: No, I found some errors in them. And I've had some preliminary discussions with the Society of Depreciation Professionals about correcting some of those errors in the texts.

It's totally understandable. It's

probably just transposition errors. And, also, potentially expanding those curves to be more detailed to provide additional data points to be helpful to all parties, quite frankly.

But, it wasn't done in any way to question the -- the substance of what's being recommended. The -- the curves are based off of those book.

MR. BRENT CZARNECKI: Okay. Understand. And then you say you have prepared depreciation studies utilizing the model, which I take, is your model?

MR. DUSTIN MADSEN: That's correct.

MR. BRENT CZARNECKI: And are those depreciation studies publicly available that you've completed?

MR. DUSTIN MADSEN: No, they were for private utilities.

MR. BRENT CZARNECKI: And so, in your experience since you've become a Certified Depreciation Professional, like Mr. Bowman, have you -- can you confirm that you haven't conducted a large scale depreciation study or evaluation of a large electric utility or even gas or oil company for that matter?

MR. DUSTIN MADSEN: I've never been invited to. So, no, I have not.

MR. BRENT CZARNECKI: I also noted in your bullet, the fourth one down, it says that you're active in the Society of Depreciation Professionals.

Now, that activity I take it, is limited to two (2) years or so, since you've become a Certified Depreciation Professional?

MR. DUSTIN MADSEN: Oh, and prior to that, I took several courses with them, but yes.

MR. BRENT CZARNECKI: And, you'd agree with me, sir, that you're -- how active you've been, respectfully, pales in comparison to say that of Mr. Watson or Mr. Kennedy. Correct?

MR. THOMAS REIMER: I'm going to object to that question, Mr. Chair. I don't think it's a fair question. We've got their qualifications -- respective qualifications on the record. That's an argument that Mr. Czarnecki can make, but I don't think it's appropriate to put it to Mr. Madsen and have him opine on other expert's credentials.

THE CHAIRPERSON: Well, we have on the record, Mr. Czarnecki, the comparison of experience. So, if you want to use it in final argument --

MR. BRENT CZARNECKI: I -- I will do

so.

THE CHAIRPERSON: -- you can do that.

CONTINUED BY MR. BRENT CZARNECKI:

MR. BRENT CZARNECKI: You also say in the same bullet, that you're an instructor at the September 2023 conference. So, just to confirm, there's no typo, that's a conference that's pending this fall?

MR. DUSTIN MADSEN: That's correct.

MR. BRENT CZARNECKI: And have you been confirmed as an instructor at that?

MR. DUSTIN MADSEN: To my knowledge, yes.

MR. BRENT CZARNECKI: And what topic are you instructing on, sir?

MR. DUSTIN MADSEN: Discussing the balance between return of capital, so depreciation expense and return on capital and how those concepts are interlinked.

I understand the session will be a -- a panel session, potentially including others. I'm not going to volunteer Mr. Kennedy as being part of that, but I understood he may have been part of that, but it's to discuss it from different perspectives and how those two (2) concepts are interlinked.

MR. BRENT CZARNECKI: And -- and do I take it, from the lack of information otherwise, that this is your first time being an instructor at such a conference?

MR. DUSTIN MADSEN: At the STP Conference? Yes.

MR. BRENT CZARNECKI: Yes.

MR. DUSTIN MADSEN: I've instructed at CICA conferences in the past, as well as other conferences, but not at the STP conference.

MR. BRENT CZARNECKI: Thank you, sir. Mr. Chairman, those are my questions.

THE CHAIRPERSON: Thank you. Panel have any questions? No? You'll be happy to know this concludes today's session. I'd like to -- I'd like to thank the Panel.

It's been a long day and I would, specifically, like to thank Mr. Watson and Mr. Madsen for coming the distance here and wish you safe travels home.

Mr. Czarnecki beat -- beat me to it. Mr. Innis, on behalf of our Panel, I'd like to thank you for all the -- the effort you did.

This is a new approach that we have

taken on the issue of depreciation, and a new way to review evidence. It, certainly, was interesting and much different from our normal hearing on this kind of topic.

I'd indicate that, following the issuance of the Order, Ms. McMillin will be contacting the participants, through the process, to talk about it, to -- to look at the approach that was used to see if there are ways to improve it but, certainly, we're open to looking at -- at a different ways to deal with issues at the proceedings.

So, I'm going to adjourn the hearing now and we will reconvene at nine o'clock tomorrow morning. Thank you very much.

(PANEL STANDS DOWN)

--- Upon adjourning at 3:58 p.m.

Certified Correct,

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Wendy Woodworth, Ms.