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

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APPEARANCES

Bob Peters	)Board Counsel
Sven Hombach	)
Brent Czarnecki	)Manitoba Hydro
Odette Fernandes	)
Deanna Hiebert	)
Byron Williams	)Consumers Coalition
Chris Klassen	)
Antoine Hacault	)MIPUG
Carly Fox	)Assembly of
Emily Guglielmin	)Manitoba Chiefs
Markus Buchart	) MKO
Thomas Reimer (np)	) GSS and GSM
Robert Walichnowski (np)	) customer classes
William Haight	) Daymark Energy
Bradley McClelland (np)	) Advisors

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--- Upon commencing at 9:04 a.m.

THE CHAIRPERSON: Good morning, everyone. We're going to have presentations this morning. It's interesting because I'm so used to seeing everybody sitting there and everybody sitting here.

So we'll have presentations today. We're going to start -- I have on my -- my notes a daily overview by Board counsel.

Mr. Peters, is there a daily overview, or are you going to tell us that we're doing presentations this morning?

MR. BOB PETERS: The daily overview's been provided by Ms. McMillin and Ms. Schubert. It's before everybody today.

We -- the Public Utilities Board welcomes the opportunity for members of the public to come before the Board and to provide presentations with respect to the matters that are before the Board. And this morning, the Board has set aside times to allow that to happen, and it's a relatively full schedule.

I can say that there are some virtual presentations as well as some in-person presentations,

and I think they're going to flow relatively unannounced and in accordance with the schedule.

I will indicate that we have estimated some times in there only to allow the Board some time if there are questions that they have of the presenter.

And with that, I think we'll invite the first presenter, Ms. Amanda Leighton who is before you when you're ready, sir.

THE CHAIRPERSON: Okay. Thank you. Let me just make a few comments. We're very happy to have these presentations. What we will do is we will -- because we are taking this as evidence, we will have the witnesses sworn in or they can declare. The secretary will swear each of the witnesses in.

The -- we're asking that each party or person take approximately ten (10) minutes for the presentation, and we'll have five (5) minutes for questions. And we -- we'd like to roll through these, and I'll try and enforce the -- the time limits.

But we do want this as -- as evidence before the panel. So, Ms. McMillin, if you could swear in the first witness.

PUBLIC PRESENTATIONS

AMANDA LEIGHTON, Affirmed

THE CHAIRPERSON: Please proceed.

PRESENTATION BY MS. AMANDA LEIGHTON:

MS. AMANDA LEIGHTON: Good morning, everyone, Panel members, Manitoba Hydro representatives, Interveners, and the public. Thank you so much for allowing me to present today.

I understand that the process of hearing the public is not standard across our country, so I see it as a privilege and a responsibility.

My name is Amanda Leighton, and I'm here representing both myself as a Hydro consumer and the Interfaith Council on Hydropower of which I am a member.

The Interfaith Council on Hydropower is a non-partisan advocacy group with a fifty (50) year history working for justice with hydro-impacted communities and people.

A major motivator for our council is the PUB's consideration of all Manitobans which was made apparent when you created the First Nations on-reserve rate class, no longer in place following the

Court of Appeal's decision in 2020.

At the time, the PUB's initiative was a signal to us that you recognized the real need to find ways to mitigate hydro costs for First Nations Hydro consum -- customers and, in our view, recognize and reconcile the long-standing and dirty history between the Manitoba Government, Manitoba Hydro, and the communities living in and around hydro-generating stations and projects.

By way of mutual understanding during this presentation, when I use the term 'hydro-impacted areas', I am referring to communities and territories that have been devastated environmentally, culturally, economically, and spiritually by hydro development.

This industry causes an endless list of damage including poor water quality, unnaturally fluctuating water levels causing massive shoreline erosion.

As we speak, Norway House First Nation has been imploring Manitoba Hydro to assist with massive erosion on the two (2) and eight (8) mile channel. Other damage includes death and decay of wildlife and habitat, destruction of fisheries, trap lines, and livelihoods, and loss of traditional ways of life, food, and land. This list goes on.

The matter at hand is the impact of Manitoba Hydro's proposed rate increase of two (2) consecutive 2 percent rate increases this September and in April of next year on Northern communities, specifically those who live in hydro impacted areas.

That 2 percent being an overall increase, I understand it is being proposed by Manitoba Hydro that the -- the allocation of this increase is not across the board. Rather residential customers will see a 2.4 percent increase while industrial class customers would see something like 1.5 percent.

This 2.4 percent times two (2) coupled with the 3.6 interim rate increase already implemented at the beginning of January 2022 amounts to an overall increase of over 8.4 percent within a twenty-seven (27) month period.

The rationale to increase the residential rate more than the industrial rate is based on a mechanistic approach that boils down to infrastructure needs.

We understand how Manitoba Hydro might have come to this conclusion. And perhaps it is even a recognition that increased hydro rates will damage the industries that are reliant on massive amounts of

power and could be a deterrent to new industry finding a home in Manitoba. But we feel that the financial burden of rate increases should be shared by all customer classes. We all rely on electricity.

As you are aware, the repeal of the First Nations on reserve hydro rate resulted in a 9 percent increase in September of that year for all First Nations on reserve customers.

A report submitted to you in 2019 on behalf of the Assembly of Manitoba Chiefs titled, "Energy poverty on First Nation reserves" -- for your reference, that is Exhibit AMC-3 from the 2019/2020 Electric Rate Application -- which states that:

> "Average annual energy consumption is considerably higher on First Nations on reserve residences both in absolute terms and per unit floor space.
>
> First Nation on reserve values are roughly three (3) times the average Winnipeg city values and 35 to 55 percent higher than the Winnipeg city low-income cutoff values."

This report also notes that the yearly average electricity bill in First Nations on reserve

households is two thousand eight hundred and fifty-five dollars ($2,855), which is 59 percent higher than Winnipeg city low-income cutoff households and 82 percent higher than the average bill for all Winnipeg city households.

If this rate is accepted as it is, the hydro bill of a First Nation on reserve household would climb dramatically, an already difficult bill adding debt and insult to Hydro customers in the North.

On the other hand, from what we understand, Manitoba Hydro is fairing well these days. In 2022/2023, Manitoba Hydro's net income was approximately 750 million with projected net income to have significant surpluses in the coming years.

We also understand that Manitoba Hydro's projected net debt will continue to be reduced by the end of '24/'25.

Additionally, the Provincial Government gave Manitoba Hydro a break when they chose to reduce water rental fees and debt guarantee fees which, in our opinion, can only lead to more net income.

But where is the break for the customer? Where is the recognition that hydro impacted communities have paid enough? We are not

here to convince you of anything. You have more information before you than I would ever have the time to engage with. This is your job.

We are here to remind you that you have protected Manitobans from higher than necessary hydro rates before, and we trust that you will do it again. You have the unique position to keep this publically-owned Crown corporation in check. And we believe that you can:

> "Fairly and transparently weigh the financial needs of the Utility with the needs of the ratepayers."

I run a Timbit soccer league for kids aged 4 to 12. It's my first year. We had the opportunity to raise our registration fee this year. It hadn't been raised in a long time. People won't be surprised considering inflation. Everything's going up. But we chose not to because we knew we could make due without extra income.

I feel very confident that Manitoba Hydro can more than make due without more money from the -- from the consumers' pockets and certainly should not be looking for it in the pockets of those who have endured Manitoba Hydro's over fifty (50) year legacy of disregard for hydro impacted communities.

Thank you.

THE CHAIRPERSON: Thank you, Ms. Leighton. I'll ask the panel. Ms. Kapitany...?

VICE CHAIR KAPITANY: Thank you for your presentation. I just have a couple questions.

Could -- could you tell me -- and I apologize if you said it and I missed it, but could you tell me about how many people your organization represents?

MS. AMANDA LEIGHTON: Well, over the time that we've existed, it would be just a variety of communities up north. So right now, we have relationships with Southern Indian Lake, Tataskweyak Cree Nation, Norway House Cree Nation.

This summer, we're hosting a kokum's gathering, which will gather grandmothers from a variety of -- of communities.

So I'm not sure that I have a number for you exactly, but I hope that's a good enough answer.

VICE CHAIR KAPITANY: So it's not members of the council per se, it's just organizations that you work with then?

MS. AMANDA LEIGHTON: Well, on our council, we have about ten (10) members. Yeah. Is

that -- that was the answer you were looking for?

VICE CHAIR KAPITANY: Both, yeah. Like, the number of people and about how many people in the council.

The other thing I was wondering is what kind of relationship your council would have with Efficiency Manitoba in terms of looking for ways that you might be able to reduce your energy costs?

MS. AMANDA LEIGHTON: On northern communities, you're saying?

Well, we don't have a history of having a relationship with Efficiency Manitoba.

VICE CHAIR KAPITANY: Okay. Thank you.

(BRIEF PAUSE)

BOARD MEMBER BELLRINGER: Do you have to announce me or anything?

THE CHAIRPERSON: I'm announcing Ms. Bellringer.

BOARD MEMBER BELLRINGER: Sorry, it's early still for us, I guess.

And thank you very much for the presentation. And as you know, you know, we've --

we've looked at -- at the northern communities before. But it's my first time on the Board, so I'm actually wondering if you could -- and you did include this in your presentation, but I just want to make sure I got it -- got it straight.

And it was around the -- I heard two-thousand-eight-hundred-and-fifty-five (2,855) on average. What was that on? That was per --

MS. AMANDA LEIGHTON: That was the yearly average electricity bill rate -- or sorry, just bill on First Nations on reserve. And that would have been from 2019, before the 9 percent increase that came after the repeal.

BOARD MEMBER BELLRINGER: So those are figures for 2019?

MS. AMANDA LEIGHTON: Yes.

BOARD MEMBER BELLRINGER: That's okay. And also, you compared that to other -- to Winnipeg and low income.

Can you go -- can you just run through that one more time?

MS. AMANDA LEIGHTON: Sure. So those numbers are coming from the report submitted to you in 2019 on behalf of the Assembly of Manitoba Chiefs. So you could find that information there.

But what I said was that -- so the yearly average electricity bill in First Nations on reserve households is two-thousand-eight-hundred-and-fifty-five (2,855). That was 2019 which is 59 percent higher than Winnipeg city low income cutoffs and 82 percent higher than the average bill for the Winnipeg city households.

THE CHAIRPERSON: Ms. Leighton, I have a question for you.

Has the Interfaith Council ever met with Manitoba Hydro to express concerns?

MS. AMANDA LEIGHTON: In the past, yes. But it has been several years.

THE CHAIRPERSON: Thank you. Sorry, do you have a question, Mr. Sy?

BOARD MEMBER SY: Yes, Amanda. Thank you again for -- for your presentation. And thanks for sharing those numbers with -- with us.

Maybe you can -- you can just help me understand. I'm new to the Board as well.

What would you say the overall impact is going to be for Manitoba Hydro if they were to go with zero (0) increase?

MS. AMANDA LEIGHTON: The impact on Manitoba Hydro?

BOARD MEMBER SY: Yeah. From you, from your community.

Or another way, the 2 percent increase, how much in dollar term are we talking about?

MS. AMANDA LEIGHTON: Well, I don't have that math in front of me so I'm not going to try to do that live.

I mean, I -- I understand that the bill is already terribly high for northern communities. This is likely due to housing issues and so I -- I don't -- I don't really feel like I can answer this question without doing a little bit of work beforehand.

So, if there's a way for me to submit an answer like that, I'd be happy to do that at a later time. Is that okay? Is that welcome? Or is this kind of it?

THE CHAIRPERSON: You can -- sorry, you can always submit after the fact.

MS. AMANDA LEIGHTON: Okay.

THE CHAIRPERSON: Okay. Any of the Interveners have a question for the witness? Not Ms. Leighton. Don't think --

MS. AMANDA LEIGHTON: Okay.

THE CHAIRPERSON: Okay. Thank you,

very much, Ms. Leighton. The next person is Mr. Brandon.

Mr. Brandon, you're on-line? I think you're muted.

MR. JOSH BRANDON (by Teams): Hi there. Thank you so much. My name's Josh Brandon, I'm with the Social Planning Council of Winnipeg. I'm a community animator there.

And I just have a few comments today to express concern about the high rates of -- of the increases proposed in the Manitoba Hydro Rate Application.

Here in Manitoba, we have some of the highest rates of child poverty. We have the highest rates of any province of child poverty across Canada. And for families that are living in poverty, energy costs are -- are a major stress. They add to the financial burden of families that are already struggling.

And so, what we found at the Social Planning Council is that because of the high rates of child poverty and poverty generally across the -- across the province, but particularly with child poverty, there are negative social impacts. There are negative health impacts and reduced social inclusion

for families who are suffering from low incomes.

We are concerned that, in particular, we did -- we did a research project just last year through a project called Campaign 2000. And there we found over one (1) in five (5) Manitoba children are living in poverty.

And we know that for families that are living in poverty there are much higher rates of -- of energy poverty. And that's families that are paying a high portion of their -- of their total income towards their energy costs.

One of the things that we found in our Campaign 2000 report, is that there are severe negative impacts on human health. So, for example, as a result of poverty, so families that are living in -- in low income households, are more likely to have higher rates of child mortality.

Tragically, we've also found higher rates of childhood diseases, including diabetes, dental extraction, which is associated with poverty and -- and most tragically we found higher rates of child suicide as a result of poverty.

And these are -- these are conditions that -- that we see across the province and we know that for families that are living in low income,

they're much more likely to be paying more than 6 percent of their income into -- for their energy costs. And when we see the increases that are being proposed here, that's going to add to that burden even more substantially.

One of the things that we've proposed in past hearings, and in past engagements with Manitoba Hydro, is to look at a -- a low income rate for families that are -- that are living in poverty.

And I -- I hope that's something that comes back into consideration, because I think when -- when we talk about four (4) or 5 percent increases on an annual basis to energy rates, that's going to have a -- a large impact for all families and for all households, you know, most of us are not seeing our incomes going up by -- by that amount every year.

But, for families that are living in poverty, what it means is making critical decisions around what they can afford, whether they can afford food, whether they can afford to pay their rent, or whether they can pay their -- their hydro bills.

And, so, we need to examine if there are opportunities available to create better subsidies, either through the Hydro system or -- or with assistance with governments and other agencies,

to make sure that there is affordable hydro for everyone.

I know that that is part of the mandate of Manitoba Hydro is to -- is to provide affordable electricity for everyone and, even if electricity rates here in Manitoba are relatively low compared to other provinces, we do know that it does provide a -- a burden for the families that are most in need.

And, so, those are the rec -- the -- the recommendations that we have is to reduce the -- the rate for residential customers and to consider a low income fund for -- for low income customers, and -- and that's all the comments that I have for -- for today. So, thanks so much for the opportunity to present.

THE CHAIRPERSON: Thank you. Am I correct it's Ms. Wall. Okay. You're -- you're muted as well.

MS. BAILEY WALL (by TEAMS): Yes.

THE CHAIRPERSON: I -- I -- I forgot and Ms. McMillin, can you swear them both in?

MS. BAILEY WALL (by TEAMS): Pardon me. Did you ask a question?

THE CHAIRPERSON: Sorry. We -- we need to swear you in as presenters, so that we can

consider your --

MS. BAILEY WALL (by TEAMS): Oh. I'm so sorry about that.

THE CHAIRPERSON: -- your presentations as evidence.

MS. BAILEY WALL (by TEAMS): I thought I was just supposed to just start to presenting.

THE CHAIRPERSON: And that was a mistake on my part --

MS. RACHEL MCMILLIN: Okay. So, I'll do you both now.

THE CHAIRPERSON: -- notwithstanding you're virtually rather than in the room but that's the process.

JOSH BRANDON, Affirmed

BAILEY WALL, Affirmed

THE CHAIRPERSON: I'm wondering if we can do this as a tag team. So, maybe, what we'll do, Ms. Wall, is we'll have your -- we'll have you do your presentation and, then, we'll ask questions of -- of the two (2) of you, because I suspect that may be some overlap in the questions. Okay?

MS. BAILEY WALL (by TEAMS): Okay. I

do have a presentation to share but I -- it doesn't look like I have sharing capabilities at the moment.

(BRIEF PAUSE)

THE CHAIRPERSON: Okay. Now, if you've got a -- a -- if you could try and I -- I think it's longer, sort of summarize it in about 10 minutes or hit the high points in 10 minutes and, then, we need some time to ask questions.

MS. BAILEY WALL (by TEAMS): Of course. It is -- I timed. I'm about nine (9) minutes. There are multiple slides by the way it just like progresses through.

THE CHAIRPERSON: Okay.

MS. BAILEY WALL (by TEAMS): So, I will get going, so I don't keep you too long.

So, my name is Bailey Wall. I am the Program Co-ordinator for the Rent Relief Fund, a program of the Manitoba Non-Profit Housing Association.

So, what I will do today is give you an overview of what the Manitoba Non-Profit Housing Association is, what the Rent Relief Fund does, so that you have some context from where I'm giving you

this information from, and then go through some of the data and case studies from our participants.

So the Manitoba Non-Profit Housing Association is a member-based organization. We have a hundred (100) non-profit housing providers as members that offer twenty-four thousand (24,000) affordable homes in Manitoba.

The Association offers housing supports, educational tools, resources, and advocacy for our members. Next slide, please.

In April 2021, the Manitoba Non-Profit Housing Association partnered with SEED Winnipeg and Manitoba Housing to establish the fund. Next slide, please.

What this means, essentially, is that the Rent Reli -- Relief Fund is a rent bank model. So, the Province of Manitoba provided $5.6 million to this fund for us to provide interest free loans to tenants in Manitoba to secure, stabilize, and maintain housing. Next slide, please.

The things that we cover are rent arrears. Next. Damage deposits and first month's rent and utility arrears, which is why I'm here to speak to you today.

The first thing that I would like to

address is that we have a maximum household income threshold and that is for households without dependents is sixty-three thousand four hundred and fifty (63,450). And households with dependents is eighty-four thousand six hundred (84,600).

So, we're not dealing with just low-income households. We deal with the moderate to low-income household threshold for our participants. Next slide.

The next thing that I would like to address is that the Rent Relief Fund has a very good working relationship with Manitoba Hydro. Our case workers are in contact with Manitoba Hydro nearly every day, and we do this to negotiate affordable payment arrangements for our participants, find out if there are other resources available to them, and just to determine whether our loan will actually stabilize their services.

And we value this relationship a lot because it benefits our participants, makes our job easier by helping them find the best solution for them, and we appreciate that we have that relationship. Next slide.

So, in 2022, we received nine hundred and fifty-two (952) utility applications towards

utility arrears. Out of a total of two thousand eight hundred and seventy-three (2,873) total applications.

This results in approximately 33 percent of our applications being towards utility arrears. And I want to acknowledge a couple things with this data. First is that the number of loan applications that are towards utility arrears is actually probably higher -- not probably, it is higher than 30 percent -- or 33 percent.

And that's because when you apply for a program you have to identify either rent arrears or utility arrears or utility arrears, not -- you can't identify both at this point. And when our caseworkers get involved with people that apply for rent arrears, we often find that they're often struggling to keep up with utilities, or they do already have utility arrears, so it ends up being a double situation once we dive into their situation.

And that is a common scenario, as Josh mentioned previously, is that people often make a trade-off between paying for their rent so that they can pay their utilities, or paying their utilities so that they can pay their rent. This is a scenario we come across often.

The second thing with that 33 percent

is that that number does include water arrears because, again, it just identifies utilities in our application. However, we do know that the majority of those applications are towards Hydro arrears and that can be demonstrated by looking at the numbers that we've actually approved, because then we can break them up.

So, in 2022 we approved a hundred and twenty-six (126) loans towards Hydro arrears, for a dollar value of one hundred and thirty thousand forty-nine and twenty-one cents ($130,049.21). In comparison to only approving thirty-eight (38) towards water arrears.

And so, again, I want to acknowledge a little bit of a difference in this data here where we had such a high number of applications and a lot lower approved. And the reason for that is that our program is designed to be a last resource for participants.

So, if we can identify other programs through that relationship we have with Manitoba Hydro, such as getting them a grant through Neighbours Helping Neighbours, or maybe setting them up on the Customer Arrears Assistance Plan, we'll encourage them to take that route rather than taking a loan through our program adding, you know, extra financial

hardship, having to pay that back.

So, that's one (1) of the reasons why they might not go through with a loan through our program.

The second one is we often have participants apply with utility arrears beyond what we can fund. And therefore, our loan through our program would not stabilize their utilities, would not stabilize their housing.

Therefore, it doesn't make sense to fund that loan, because the goal of our program is to stabilize housing, so we try to work for other solutions when that happens.

So, now I have a few case studies for you, just giving you a snapshot of our participants' experience with utilities. Next slide, please.

So, the first one is a single non-elderly participant. They are living in a roommate situation in a single detached residential home. Their income source is EIA Disability, and their annual income is twelve thousand two hundred and forty-six (12,246). Next slide, please.

So, this is a snapshot of their monthly budget. Our caseworkers dive in and do a budget assessment with every participant to determine what

kind of expenses they have against what income they have coming in. And there are a few things I'd like to identify with this budget for you.

First is that the Hydro expense is only 50 percent of the actual household cost because they're in that roommate situation. They're splitting this 50/50, so their actually monthly utility expenses are two hundred and forty five dollars ($245).

The second thing is is that they are on an equal payment plan in this budget snapshot. Before they were connected with the Rent Relief Fund, they were not on an equal payment plan, and they were experiencing seasonal spikes in their utility expenses.

You can see at the bottom of their balanced budget there that there is -- it's in the positive, but it's just barely. So seasonal winter spikes would cause them to fall into a winter -- a deficit in the winter.

The other thing that I'd like to draw attention to is that they have a very lean grocery budget, no entertainment or leisure expenses. You can see this tradeoff already where they're trying to balance their rent and utility expenses against other things in their lives just to make the payments work.

So of -- sorry. Next slide, please. Of this income, Hydro utilities accounts for 9 percent of their costs.

Okay. Study number 2 is a couple, non-elderly, living in a single detached residential home. They have an income source combined of pension from one and EI from the other. Before they went on EI, their annual income was fifty-seven thousand nine seventy-two (57,972). Next slide, please.

This snapshot of their budget again does show that they have a positive balance at the end of the month, but there are a few things I'd like to draw your attention to as well.

They do have lean budgeted costs for transportation, internet, and phone expenses for two (2) individuals, again, making those tradeoffs to make this budget work for them. As you can see, any sudden expense would cause a disruption to this budget and cause them to fall into a deficit in something. They'll have to pick which one they fall behind in.

This family was not on the equal payment plan, so they are experiencing seasonal spikes in their utility costs. I believe this dollar value was on a shoulder season, like in between winter and fall, so it would go up a bit, but it's not at the

lowest it would be. So we try to keep an average in there to show. And then next slide, please.

Of this budget, their costs -- their utility costs were 12 percent of the participants' income. Next slide.

So final case study is a couple, non-elderly, with two (2) dependents living again in a single detached residential home. Income was a combination of employment and child benefits. Annual income was forty-three thousand five hundred and seventy-six (43,576).

Snapshot of their budget here. First thing to us that we see is that their rent was not affordable and their budget is in a deficit every month. However, their budget is also very lean and budgeted in areas of groceries and transportation for four (4) individuals. So they're trying to make this work, but it's not.

Unfortunately, we were unable to fund a loan for this participant because their housing was not sustainable going forward. So we did make the recommendation for them to move somewhere that would fit in their budget.

However, you can see again that the utility expenses were 9 percent of their household

income at this place. Sorry. That's the next slide, and one more slide.

The final key points that I'd like to leave you with is that 33 percent of our participants are struggling with utility arrears, and again this number is higher. This is just the initial application recorded number.

Next, that applicants are struggling -- that are struggling have utility expenses between 9 and 12 percent of their household income. Next slide.

And finally, applicants that are struggling have household incomes between ten thousand (10,000) and sixty thousand (60,000) in these case studies.

However, again, we do accept applications up to eighty-four thousand six hundred (84,600) for household income, and we have seen people apply for utility arrears with that dollar value as their annual income. So this is not just a low-income issue where people are struggling to keep up with utility expenses.

And last slide just has my contact information if you have any questions, but you can ask them to me now.

THE CHAIRPERSON: Thank you. We have

questions from the Panel.

Ms. Bellringer...?

BOARD MEMBER BELLRINGER: Ms. -- Ms. Wall, what -- what geographical area do you cover? Is it all of Manitoba or primarily Winnipeg?

MS. BAILEY WALL (by TEAMS): All of Manitoba we cover. However, the -- the majority of our applications are from Winnipeg, but we do cover all of Manitoba. And I can -- we just actually did a report, so I could pull the exact numbers if you guys need them.

BOARD MEMBER BELLRINGER: I'd be interested in that, so thank you.

MS. BAILEY WALL (by TEAMS): For sure.

THE CHAIRPERSON: Mr. Brandon --

MR. JOHN BRANDON (by TEAMS): M-hm.

THE CHAIRPERSON: -- I've got questions for both of you.

From your studies, what percentage of people in Manitoba have the cost of energy as over 6 percent? Do you have any statistics on that?

MR. JOHN BRANDON (by TEAMS): I don't have it on the top of my head. There was a report done by the -- by Manitoba Hydro and the Manitoba Hydro Affordability Group in 2017, and it has the

exact numbers in there, and I can find that for you if -- if you're --

THE CHAIRPERSON: Okay.

MR. JOHN BRANDON (by TEAMS): -- if that would be appropriate.

THE CHAIRPERSON: Sure. I just indicate -- so I was at a conference last week in Toronto where there were utilities and regulators from across the country. And in Ontario, they mentioned that 22 percent of the population is -- has more than 6 percent of net income going towards energy.

The interesting thing in Ontario is that the government started a program a number of years ago where they subsidize everybody's energy use right across the board by 25 percent. So their -- their -- the 22 percent is following a subsidy.

So I was just wondering if -- you know, if you could find that number. If not, we can -- we can find it. I know -- I know which hearing it came from.

Ms. Wall, how are you funded?

MS. BAILEY WALL (by TEAMS): Province of Manitoba.

THE CHAIRPERSON: Okay. So here -- here's a question I have for -- for both of you.

Let's say Manitoba Hydro does not get a rate increase. You still have problems with energy poverty, correct?

MS. BAILEY WALL (by TEAMS): Correct.

THE CHAIRPERSON: Situation doesn't change.

MS. BAILEY WALL (by TEAMS): Correct.

THE CHAIRPERSON: Okay. So --

MR. JOHN BRANDON (by TEAMS): But it certainly -- if -- if it goes up, we're -- we'll see higher rates of energy poverty as a result of the -- the proposed increases.

THE CHAIRPERSON: Okay. So is this a -- in your mind, is this an issue of -- a ratepayer issue, or is this a taxpayer issue?

Is this that Manitoba Hydro should not get a higher rate even if they can show they need it, or is it that the state should be doing something to subsidize those people who can't afford to pay higher rates?

MS. BAILEY WALL (by TEAMS): I can start answering that question if you'd like, in my opinion.

THE CHAIRPERSON: Yeah, sure.

MS. BAILEY WALL (by TEAMS): Well, when you're looking at it from a housing security

perspective -- and we have established in Canada that housing is a human right -- if you don't have utilities in your house, you are at risk for eviction if you get disconnected.

And so if we're looking at housing as a human right, I think that we need to consider this as an inclusive factor in that because we're in Canada. Without utilities, your house -- you're going to freeze and you're going to get disconnected.

So if we are going to take that seriously of -- with housing as a human right, we need to consider it as lumped into that, in my opinion, which then falls on the government. Sorry.

THE CHAIRPERSON: Yeah. Mr. Brandon...?

MR. JOHN BRANDON (by TEAMS): My -- my opinion is that it's an area of shared responsibility. Manitoba Hydro has a responsibility to provide equitable rates for all its customers, and -- and part of that equity is considerations of geography, it's considerations of what the costs are of providing energy to households. But it's also a matter of what they can afford.

And if we're not providing energy that's affordable for Manitobans, then that is a -- an

issue that -- where Manitoba Hydro isn't fulfilling its responsibilities to all of its customers.

When we think about how Hydro rates are set, I think you're considering a number of factors here as you're -- as you're looking at this proposal, I know.

And you're going to be looking at, you know, areas that -- some areas of the province are more expensive to -- to service than others, and we've decided as a -- as a community that we're going to provide the same rates in rural Manitoba as we provide in -- in Winnipeg. And -- and to some degree, that in effect means that some parts of the provinces -- province are subsidizing others.

We also know that here in -- in Manitoba compared to some other provinces residential customers pay a higher rate than -- than large corporate consumers. And if I understand the rate application that's before you this -- this time around, they're looking at a higher rate increase for residential customers than for -- than for large corporate consumers.

And so, there's -- there's all of these considerations. In -- in many ways, various classes of consumers are, in effect, subsidizing other classes

of consumers.

And part of that, we believe, could be that lower income consumers have -- have more of a subsidy as a result, you know, programs like -- like Ms. Wall's or programs -- more broad-based, low-income subsidy programs.

And if those were put into effect, Manitoba Hydro could be better implementing its mandate. And there -- there certainly is a responsibility from the province, as well, for this. We know that for EIA, for example, there have been no significant increases for the basic needs budget for -- - for many years, since -- really since the 1990s.

And many consumers are -- are paying out of -- out of their basic needs budget if they're on EIA, paying their hydro rates, and that's not sustainable either.

So, certainly, there are government responsibilities, but -- but Manitoba Hydro, as the public utility, also has a responsibility to ensure that affordable hydro is available for everyone.

THE CHAIRPERSON: Thank you very much.

MS. BAILEY WALL (by TEAMS): That's so much better than me.

THE CHAIRPERSON: Questions...? Mr.

Sy...?

BOARD MEMBER SY: Yeah. Ms. Wall, thank you very much for your -- for your presentation. I'm just trying to get some clarification here.

The income range that you are -- that people that you are working with goes anywhere between twelve thousand (12,000) K to eight-four thousand (84,000) K. Is that correct?

MS. BAILEY WALL (by TEAMS): So, we don't have a minimum income. The lowest one I picked was twelve thousand (12,000) because that's a participate on EIA disability.

If someone is on general EIA, their income would be less than that, and we will still consider their application.

The main criteria we're looking at when -- when we're looking at income is that they can afford housing going forward, that it's still sustainable.

If it's not sustainable, one time loan isn't going to help, so we'll be looking at connecting them with other resources, possibly more affordable housing, things like that. But, yes, our maximum at the top end is eighty-four thousand (84,000).

BOARD MEMBER SY: Yeah. So, just, you

know, if you look at stats so, currently, the middle-class income in Canada is anywhere between forty-five thousand (45,000) to a hundred and twenty thousand (120,000).

So, a good portion of the population that you are dealing with, based on what you guys just said -- what -- what you said, is earning more than the average income in Canada.

What would you say the breakdown is between those who are above and those who are below the average income in Canada? I'm not talking about Manitoba. I'm just talking about Canada in general.

MS. BAILEY WALL (by TEAMS): The breakdown of our participants that's above and below?

BOARD MEMBER SY: Yeah.

MS. BAILEY WALL (by TEAMS): I would -- our database would be able to pull that, I believe, because we do record annual income on everyone, but I don't have that specific statistic available to me.

From my experience, I've worked here for two (2) years, and off the top of my head, I would suspect that we're -- I'd almost say we're probably almost equally split because I see low-income participants all the time, but I also see moderate income participants all the time. I don't see at the

top end that often.

Like, near the eighty thousand (80,000), seventy thousand (70,000) is less frequent, but definitely in the fifty (50), sixty thousands (60,000s), very frequent to see that income threshold to come through but, again, that's just my perception of what I see day to day. I can get the data from -- for you if you need.

(BRIEF PAUSE)

THE CHAIRPERSON: Any of the -- I don't know if Manitoba Hydro or any of the Interveners have any questions.

I'd like to thank both of you for -- for very good presentations and -- and thank you for participating in the Hearing.

MS. BAILEY WALL (by TEAMS): Thank you.

THE CHAIRPERSON: Thank you.

MR. JOSH BRANDON (by TEAMS): Thanks very much.

THE CHAIRPERSON: Okay. The next person will be Mr. Guenther, from New Jersey -- New Journey Housing. Sorry. Is Mr. Guenther here? I'm

sorry, Codi Guenther. Sorry. Please -- my apologies.

AZARIAS BUTARIHO, Affirmed

CODI GUENTHER, Affirmed

THE CHAIRPERSON: Good morning.

MS. CODI GUENTHER: Good morning.

THE CHAIRPERSON: So, if you could give us your names -- sorry, the panel, your names.

MS. CODI GUENTHER: Sure. My name is Codi Guenther.

THE CHAIRPERSON: Right. Yeah, it's the magic button. And I'm going to say this before we get a note from -- we have a reporter. You need to speak closely into the mic, or else we're going to get a note.

So, sir, you just turned it off. There. There's a red -- there's a -- yeah, it's on now.

MR. AZARIAS BUTARIHO: My name is Azarias Butariho.

THE CHAIRPERSON: And can you spell your last name, sir?

MR. AZARIAS BUTARIHO: B-U-T-A-R-I-H-O.

THE CHAIRPERSON: Thank you. Thank you very much. So, if you could do the presentation in approximately ten (10) minutes. And then we'll have some time for questions.

MS. CODI GUENTHER: Okay.

THE CHAIRPERSON: Thank you.

MS. CODI GUENTHER: Okay. Thanks for having us today. A little bit of nerves. We went to the hydro building first, and now we're here, but nice to see you all. And --

THE CHAIRPERSON: Their -- their building's much nicer.

MS. CODI GUENTHER: It's very fancy over there. Yes, it is very nice, but we're happy to be here either way, without the waterfall; it's okay.

So, we'll be going back and forth during this presentation. Thank you for having us today and giving us the opportunity to speak in front of the members of the Board.

My name is Codi, like I said, and I'm the Director of New Journey Housing. We're a local charity, a housing resource centre that helps newcomers to Canada with housing.

Our clients are anyone born outside the country, and we work with them regardless of their

immigration status or how long they've been here. If they need help with housing, they can come and see us.

We started fourteen (14) years ago. And we provide supports through one-on-one housing advising and plus a group workshop. On average, we usually met with about twenty (20) to thirty (30) households in a month.

In the year 2022, that number has jumped to around a hundred and fifty (150) to two hundred and fifty (250) households a month, and this is because of the war in Ukraine. And we've been welcoming -- I think there's over eighteen thousand (18,000) Ukrainians that have arrived since March 2022.

And our role at New Journey has been moving them out of temporary hotels and into permanent housing. So we have been fortunate to meet with many of those families and help them out along the way. We've been very busy, to say the least.

Some of the reasons that newcomers come to see us, they can't find a place to rent because they don't have a guarantor or a damage deposit. Or they're renting a place, but it's too expensive so they need help applying for support, like Manitoba Housing, Employment and Income Assistance.

They have a place to live, but there are bed bugs and mice, and they don't know what to do about it or how to talk with their landlord.

And the final reason -- or one of the reasons -- is they're renting a place that they can't afford the high costs, including utilities and their Hydro bills.

So they come to us looking for either alternative housing or ways to try to increase their income from different benefits to cover those costs.

This last point, as you may have guessed it, is why we're here today. Our presentation aims to highlight some of the ways that we feel Manitoba Hydro isn't meeting the needs of newcomers to Manitoba.

So I'll pass it over to Azarias, with his red light on, and he will talk about some of the costs.

MR. AZARIAS BUTARIHO: Thank you, Codi. I'm talking -- I'm going to talk about the costs.

So newcomers to Canada are struggling to pay the bills. When newcomers arrive, they are, most of them, low income for the first years of their settlement journey.

According to Stats Canada, poverty was more prevalent among immigrants than among the Canadian born population; particularly among refugees and recent immigrants.

They are often choosing between paying rent or paying Hydro. So they struggle or can't pay both in one month. I can give just some examples.

So in our office, we are working with newcomers to Canada. I'm going to talk about one family, one case, among many, from EIA and another case among working community.

So one family from EIA, a family of six (6) people. So they are receiving a budget for utilities and their rent, which is twelve hundred and thirty-four (1,234) -- one thousand two hundred and thirty-four (1,234) for rent and utilities.

And this family, they are renting a three (3) bedroom. And they just -- for their rent, they are paying seventeen hundred (1,700) -- one thousand seven hundred (1,700) just for their rent. Already there is a gap -- a gap of five hundred and thirty-four (534). Just for their rent.

And when they add the utilities, the Hydro, which was one hundred and fifty (150) -- so the gap in their budget goes to six hundred and sixteen

(616). So they came to me, crying. Saying, What are we going to do in this case? I talked to them. I can't change the figures, but they said, We spent two (2) days without sleeping.

They receive their bills. As newcomers to Canada, when we receive papers, either from the Government or from Manitoba Hydro, we all think that this is from the Government. And through the experience we have in our home countries, we really fear the Government.

So these people, they could not sleep for two (2) nights. And I was powerless. I could not change the figures, as I said.

And I was wondering, when I heard that there is this idea of Hydro increment, I said, I have to raise these issues among the newcomer community.

And those who are working, newcomers to Canada, when they arrive here, they are minimum wage full-time. Minimum wage in the first years.

A family working to pay -- is paying. Another family came to me. They are paying 80 percent over their income on housing costs. I mean, their rent plus utilities.

So here, to find -- I'm going to talk about the impact of this in the family, what is the

impact of all of this in their families.

And not only these cases I'm working or saw in the community, and we see such cases. People are stressed. That is what I will talk about, the impact of this high cost in the communities.

So I wanted to pass on to Codi to talk about large families of newcomers and the housing, their rent, and this relationship.

MS. CODI GUENTHER: Thanks, Azarias. So yeah, another piece is that a lot of the families we see are larger families. You know, they need three (3) bedroom, four (4) bedroom, five (5) bedroom -- these are going to be big houses that they're renting, poorly insulated, very drafty, which means their utility bills are a lot higher. And that impacts specifically, I think, newcomer -- newcomer groups.

Another issue that we wanted to bring up today was around the fact of new -- of new customers to Hydro have to pay deposits. And a lot of times, that's newcomers because they've never had a Hydro account before.

This can be $200, $300 that a lot of these families do not have. EIA does not give them extra money to pay deposits.

I know there's an ability to waive that

deposit, but that often requires a community advocate to do that on their behalf or with them. So that's another way that Hydro is impacting newcomers.

And also, along those lines, are issues that we've been seeing around customer service. Manitoba Hydro has an obligation to provide quality service to all Manitobans. Services like setting up new accounts, inquiring about bills have all shifted to online or telephone support.

There's no place we can go and just walk up in person and talk to a human. That impacts newcomers. They maybe don't have computer literacy skills. They don't have internet at home. They can't speak over the phone with an agent or understand, 'Press 4, press 3, press 2'. That can be very confusing.

And that work shifts to an office like ours. If clients can't access Hydro, they're either going to go without or they're going to go to a community agency to get that help.

When our team at New Journey has to spend an hour on hold with Hydro or navigating the online portal with them, that takes away from our resources. We are non-profit. We don't have a lot of money. And it's very difficult for us to shift those

resources that way.

So I just don't think it's fair or right that Hydro is closing those services and then putting that responsibility on the non-profit sector.

And one of the other points that Azarias -- I'll go to him -- is the impacts of a rate increase that we could see happening with the clients that we work with.

MR. AZARIAS BUTARIHO: So the -- the impacts of all these rent increase and the rate increase for our newcomer clients -- first of all, many of them, they are on EIA. And on EIA, they are given a budget. And as I said, there is a gap to pay the rent and utilities.

So the families are forced to take from the food allocation money to pay Hydro and to pay the rent. So this alone creates a lot of challenges, a lot of problems in the family.

They cannot have balanced diet. They cannot buy proper clothing for their children and for themselves. They cannot take the children maybe for after school programs or to extracurricular programs. And this bring a lot of stress in the family.

Sometimes it can lead to separation or divorce. Financial stress.

So we are seeing this in the community, in low income community. And also, they are facing eviction because the rent is too high. They cannot afford to rent certain houses or apartment. So this leads to homelessness and also, if we can consider about their health. Once they are not eating healthy, they have a lot of challenges we have. And finally, the government will pay a lot of money because of their health issues.

And they don't have even their children, because they have to move to one apartment or one house to another one, cheaper than that, so they -- the effects, the schooling, the school of the children. The children are moving from schools to schools and it is really interfering with the -- the -- the education of the children.

And, I don't know -- I speak many languages. I don't know how I can say to you, the Board members, to really advocate for non-hydro rate increase. (RUSSIAN SPOKEN). This is in Russian. (RUSSIAN SPOKEN)

THE CHAIRPERSON: I -- sorry, I appreciate the languages, but I don't know if -- anybody doesn't speak Russian, they're not going to. No, can you -- could you conclude because I think we

have a number of questions.

MS. CODI GUENTHER: Sure.

MR. AZARIAS BUTARIHO: So, I wanted to ask Codi to continue and give an email from our clients.

MS. CODI GUENTHER: I'll be very fast. We want to end the presentation with an email from one of our clients Nagen (sic).

When I told her that we could have this opportunity to present in front of the Board, she was happy because she knew that she could express her feelings through this way.

She said,

> "I'm a single mother of seven (7) kids. We all live in the same house. You can imagine how big of a hydro bill I have to deal with. I even sometimes have to choose paying the bill over buying my kids new clothes or taking them on a little trip.
>
> All these hardships and the million questions I have to face for my kids is before the increase. I can't imagine how my kids and I would

survive after the increase. All I can say and ask for is; please help."

So, I wanted to end with her words and thank you for the time, sorry we went over, that we look forward to your questions.

THE CHAIRPERSON: Thank you. Thanks very much. Any questions, Ms. Kapitany?

VICE CHAIR KAPITANY: Thank you for the presentation. At the beginning you said that you are a charity. Does all your money come from charitable donations? All your funding?

MS. CODI GUENTHER: The vast majority, yes. From New Journey Foundation, it's a local foundation that funds us almost 98 percent.

VICE CHAIR KAPITANY: Okay. And, the other thing I was wondering is, what kind of linkages you have with other organizations in the community? And we just, before you came, heard the presentation from the Rent Relief Fund.

And so I'm wondering would that, and also you had mentioned, you know, the -- the high -- the houses that some people go into and they're not very energy efficient, have you had any linkages at all with Efficiency Manitoba or with other

organizations that you might be able to pull together different resources to help you -- your clients?

MS. CODI GUENTHER: Yeah, like -- like I said, we've been around for fourteen (14) years, so we -- we know quite a few of those folks. Bailey, we know her well, we know their rent relief program.

Rent Assist we work with all the time. There's MANSO, the Manitoba Association of Newcomers Serving Organizations. That's our umbrella for all the agencies that work with newcomers. So, we're all very connected that way.

But, when it comes to the big houses that are drafty and poorly insulated, a lot of that falls on the landlord and the owner. Right? Newcomers are renting. They're not owning in their first five (5) years, ten (years). Right?

So, that falls a lot on the landlords and when the tenants are paying the utilities, there's not a lot of in -- reason for them to do that, is what we've seen.

VICE CHAIR KAPITANY: Thank you.

MS. CODI GUENTHER: Thanks for the question.

THE CHAIRPERSON: Mr. Bass...?

BOARD MEMBER BASS: Great

presentation, as were all of them this morning and I certainly feel your pain and I expect it's shared by my fellow Panel members.

But the -- the challenge I see is even if we were to grant a 0 percent increase for the residential class, that's not going to solve the problem of energy poverty, is it?

And, our hands are tied a little bit and Mr. Peters will gently remind me at some point in the future, but between the Manitoba Court of Appeal decision in the First Nations on reserve residential rate case, and I -- I have recollection that there might be something in Bill 36, when it eventually becomes applicable to us.

Like, the government has -- and the courts and the law, has -- has tied our hands. Do you have any suggestions and I throw it out even to the Interveners and other parties to eventually make some suggestions to us if they like.

But asking to you, specifically, do you have any suggestions as to how we can deal with this?

MS. CODI GUENTHER: Yeah, well, like Josh Brandon said that it will get worse, if the increase happens, right? So, keeping that in mind, but there's a -- you're right, there's a huge issue

with the lack of income. EIA has remained very stagnant. Cost of living is -- is going up and we see every day that, yeah, people need more money. Right? In order to -- to pay for their -- to pay for their bills.

But, I don't have a solution for you right now. Maybe we'll -- we'll come up with that later, but, yeah.

BOARD MEMBER BASS: Well, I think part of it too gets back to our Chair, Mr. Gabor's comment as to whether it's a bigger issue that needs to be dealt with at the taxpayer level --

MS. CODI GUENTHER: M-hm.

BOARD MEMBER BASS: --- and not just at the ratepayer level.

MS. CODI GUENTHER: M-hm. Yeah, perhaps.

THE CHAIRPERSON: I echo the comments of my -- my learned friend. Lawyers used to say that, so I -- oh, okay.

If -- if -- if we gave Manitoba Hydro 0 percent increase, or we -- and Ms. Fernandes is going to hit her head against the table if -- or if we ever rolled back rates, it wouldn't solve your problem.

I mean, when I read 80 percent for some

is on housing costs, you're -- you're hooped at that point.

MS. CODI GUENTHER: Yeah.

THE CHAIRPERSON: Your issue is the housing cost issue. Manitoba Hydro is just one (1) of many other factors. The price of -- of -- of fruit and vegetables going up.

MS. CODI GUENTHER: M-hm.

THE CHAIRPERSON: It's all of those things. So, you know, it's a great presentation and, you know, I think you said it and Mr. Brandon said it earlier, Ms. Wall, you know, there are a lot of things we look at. We look at a plethora of -- of -- of factors that we have to consider.

Mr. Bass eluded to it, but under a part of the Bill that has not yet been proclaimed, we are -- cannot look at social economic factors.

So, it's -- it's a complicated problem right across the country and I -- I suspect right across the world, but it was a very good presentation and -- and -- and we thank you for it.

Ms. Bellringer is -- has a question.

MS. CODI GUENTHER: Sure.

BOARD MEMBER BELLRINGER: Well, and -- and taking all of that in mind, but still there were

two (2) things that jumped out from your presentation that I saw as specifics that we could, you know, be and -- I don't know, I have to process it.

One was deposits, so that specifically being a -- something that's required.

MS. CODI GUENTHER: For new clients, yeah.

BOARD MEMBER BELLRINGER: And -- for new clients, and also the amount of, like an access point for appropriate getting -- getting good information.

MS. CODI GUENTHER: Yeah.

BOARD MEMBER BELLRINGER: Directly from Hydro.

MS. CODI GUENTHER: Yeah.

BOARD MEMBER BELLRINGER: And, are those -- so is -- are there any other elements to those two (2) points that you'd want to add for -- we're looking at that as something specific that's outside of public policy and social policy and everything that we can't touch. Those are pretty specific to making sure that access is -- is equitable.

MS. CODI GUENTHER: M-hm. Sorry, what was -- what was the question?

BOARD MEMBER BELLRINGER: Other than, you -- you brought them up as -- as I just described them --

MS. CODI GUENTHER: Yeah. Yeah.

BOARD MEMBER BELLRINGER: -- I believe, and is there anything more to it than that that we should be considering?

MS. CODI GUENTHER: I guess just the piece about equitable service for newcomers and those two (2) points really stuck out around how it's impacting them directly.

And then also how that's impacting our work in the non-profit sector, 'cause that's really taking a big piece of our time that we didn't really sign up for but we didn't sign up for a lot of things and we just respond to the needs, right, that are out there in the community.

But it's definitely been, I think since COVID maybe, that's when the in-person stuff started closing and other agencies did that too, like Manitoba Health, but they've opened up again. So, now you can go in person to see them, so that was just one (1) of the pieces that we've heard from our clients that we wanted to bring with you, here today.

THE CHAIRPERSON: Do any of the

Interveners or Manitoba Hydro have any questions for the witnesses?

I'm sorry, Mr. Christle gave me the -- do any of the Interveners or Manitoba Hydro have any questions for these presenters? If not, thank you very much.

Again, we're a little early but I think at this point we're going to take the morning break. So we will reconvene at 10:30. Thank you.

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

--- Upon resuming at 10:34 a.m.

THE CHAIRPERSON: Mr. Hacault...?

MR. ANTOINE HACAULT: Yes. Good morning again, Panel members and everybody in the room. My name is Antoine Hacault, for the record, for the court reporter. I'll be sitting at the presentation table today.

You'll have a presentation from various members of Manitoba Power Industrial Users Group who we've been referring to as MIPUG, first from Chemtrade, Gerdau, TransCanada, Maple Leaf, and finally Canadian Kraft Paper.

What I would propose is that each of

the presenters introduce themselves at their respective presentations, and it's my understanding that the secretary will come and affirm or swear as the case may be for each of the presenters.

And with that, I leave it to the first presenter, ChemTrade. Dale Bossons online and Rick Zetariuk.

THE CHAIRPERSON: Okay. So my understanding is we're going to deal with them as separate presentations, so we'll have questions after each presentation. If possible, maybe after people have done their presentations, if they could remain here, we might have -- depending on the amount of time we have left over, we may want to ask questions of the -- of the parties as a group at the end.

MR. ANTOINE HACAULT: Thank you for -- very much for letting us know that, and -- and we'll make our best efforts as presenters to accommodate your request.

THE CHAIRPERSON: Yeah. I just thought of it two (2) seconds ago. So if it causes a problem for anybody, that's fine, but I think there may be some issues that we can -- we may want to raise after if we have time again.

(BRIEF PAUSE)

MR. ANTOINE HACAULT: I'm advised with respect to ChemTrade that Mr. Zateriuk unfortunately won't be able to stay. I -- I hope -- I can't speak to Mr. Bossons 'cause he's on line right now because they're in a plant shutdown situation, and he's the plant manager so he needs to get back --

THE CHAIRPERSON: That's fine.

MR. ANTOINE HACAULT: -- to deal with that issue.

THE CHAIRPERSON: Yeah.

(BRIEF PAUSE)

PRESENTATION BY MANITOBA POWER INDUSTRIAL USERS GROUP:

RICK ZETARIUK, Affirmed

MR. RICK ZETARIUK (by TEAMS): So thank you for having us today -- or me today. In this presentation, I'm going to give a brief overview of who we are, some of our concerns about -- certainly around cost of service, and then some opportunities that we see with some of the new policy as far as time

of use and -- and some of the concerns inside that policy.

So ChemTrade ElectroChem is a Canadian chemical manufacturing company, handling company, and service all over North America for more than half a century. We pride ourselves in being a low-cost operations, strategic -- strategic growth, quality service, and a commitment to responsible care through safe, substantial operating practices.

The Brandon sodium chlorate plant is a key operation for ChemTrade and is the largest low-cost sodium chlorate plant in North America. The plant has been in operation for the last fifty-five (55) years, with a current capacity of 320,000 tonnes. We are the largest single power consumer in Manitoba at 223 MV at full load, equivalent to a hundred and fifty (150) households.

Chlorate and salt are shipped by rail. Approximately thirty-two hundred (3,200) cars are shipped a year of chlorate and sixteen hundred (1,600) salt cars per year by CN and CP Rail. And -- and one of our advantages being where we are located is that we have access to both railways.

Plant capacity has increased from original 18,000 tonnes per year to five (5) distinct

expansion projects. Our -- our employee -- our plant employs seventy-eight (78) employees, twenty-seven (27) staff, seventeen (17) in maintenance, thirty-four (34) in operations, and a -- and a unionized workforce Unifor (phonetic) for maintenance and operations.

We provide high-paying jobs in the city with an annual payroll of over $8.5 million. Strong philosophy of growth -- growth and improvement, and I'll speak to some opportunities later in the presentation that we hope will -- will come to fruition alongside with -- with stable operation.

We have a strong safety culture and a long history of responsible care since 1994.

This is an overview of our plant site, so when you look at it -- look at it, you see the -- the distinct expansions and a change in technology where we were actually supposed to be shut down in 1978.

We've grown this -- this process to the biggest one in North America, and -- and particular I guess attention to phase 6 because when power rates were extremely high in Louisiana, we went down. And -- and we owned that plant. We dismantled it, brought it up to Canada, located it in Brandon, and -- and it's been in service since the early 2000s.

I guess the one (1) distinguishing factor, you look at the size of that being built in -- in the lower US, and it was all outside, the footprint. In comparison, it makes the exact same amount of tonnes as the other processes with a much larger footprint.

(BRIEF PAUSE)

MR. RICK ZETARIUK: So ChemTrade as well as all other chlorate producers utilize an electrolytic process. Electricity accounts for approximately 72 percent of our variable cost. Salt is the next most costly raw material and accounts for approximately 16 percent, with the balance being other materials that make up the remainder of our variable costs.

Chlorate competitiveness is determined by three (3) key considerations: power pricing, stability of operation, and availability. And what we've been seeing and certainly has impacted our business certainly since COVID, the North American market, we bleach fine white pulp to fine white paper.

So COVID has had an impact on it. It's coming back, but we're certainly not to where we were

before. And that's strictly because people working from home and -- and not I guess returning to -- to the office, and hopefully that, for -- for our business anyway, changes.

Salt pricing and availability. We're a single-source supplier out of -- out of Saskatchewan, so, I mean, we all -- always looking for alternatives in that as far as having I guess a backup plan to continue operation.

And transportation to markets. We're -- we're located in Manitoba, and we were located, or are located, because of power pricing originally, but our transportation costs are one (1) of our main concerns. We ship most of our product to the southeastern United States, so we're -- our -- our location to market is not ideal.

Of the three (3), obviously power is the most important due to the large volumes required for electrolysis. In 2022, two (2) chlorate plants were idled in Canada -- and again, the industry is very competitive -- one (1) of those plants being our own in Quebec.

I -- we struggle -- well, we compete for market share almost daily with other -- other suppliers. And -- and certainly, if we go back in the

past, decisions about capital investment in Brandon certainly weigh on being cost competitive and -- and making sure that we can -- we can run our plants at maximum rates.

And presently, I'll speak to some of the -- some of the projects that are being considered, but right now in -- in Brandon itself, we're looking at capital investment of over $100 million in the next five (5) years, which is I guess for the city, the province a real positive story.

If these investments go through, it -- it means increased -- increased jobs, probably to the -- to the magnitude of 15 to 20 percent of unionized employees and staff. So something that we -- we look forward to I guess being able to bring to fruition.

And what helps us is stable and predictable power -- powerable (sic) rates on true power costs, reliability of service with no interruptions -- and I'll talk to the -- to the impact that -- that interruptions have on our business in the next -- in the following slides -- and flexibility of alternate rate options.

And -- and we do feel that we are somewhat of a unique business as when we look at a time of use -- and I'll speak to that again -- we

think we -- there's an opportunity there, but again some concerns with the way it's structured presently -- and support from customer service.

So when we get into stable power supply and critical operation, a single power loss to our plant -- and again, it's -- it doesn't matter the duration because when you look at it further down the thing, a two (2) minute -- two (2) second delay is equivalent to around forty thousand dollars ($400,000) in loss production.

And nitrogen costs reproduce hydrogen as a byproduct. So, when we trip, all of our -- all of our systems have to be purged. And then there's the -- the time lag to start up.

When we have kind of, I guess, interruptible and unstable power supply. And the last event coincided with a hydro -- hydro upset on April 19th, that we had fluctuation in incoming power. And that resulted in our capacitor banks having failures in -- in that yard, and -- and the timing is -- is basically the same as the interruption, and that was a thirty thousand dollar ($30,000) cost to the plant in repairs.

When you look at other, I mean, if you take 220 megawatts and shut it off, it jars your

system. And we often see gasket failures associated with that when we start up. And if we do have one, that's about an eight (8) hour outage for -- for one (1) of our cell lines.

So, stability and supply is -- is critical for us. We can go to the next slide.

So, annual power costs for Manitoba Hydro when we're at full rates are about $65 million. If we have a 2 percent increase multiplied year over year for five (5) years, we have a cost of $20 million, which is a huge number when you look at trying to be competitive.

And it has a significant decision-making regard for future growth. And again, as I say, highly -- highly competitive market where market -- market share is -- is -- or the -- the total sales are shrinking.

So, our concern when we're looking for -- for cost-base rates that are fair and equitable, right now, I mean, our general service large status results in us paying 113 percent of the cost. And on an annual -- annual basis, that's $7 1/2 million to our -- our facility.

And we're certainly looking -- we're not adverse to certainly paying our share because we

understand the importance of -- of maintaining equipment, but $7 1/2 million seems like it's far in excess of what we should be -- what we should be looking at.

And I understand that -- that there is a process that has been put in place to try to equalize those rates, but the process is going to take a long time and, again, will result in -- in tens of millions of dollars if we ever get to the -- get to the point where we are at the 95 to 100 percent -- 105 percent acceptable rate or -- or, I guess -- variable.

And -- and, obviously, the long-term goal should be we pay a hundred percent of -- of our cost.

The change in -- in billing demand, when you look at time of use, again, I -- I said that we're -- we're a pretty unique process. We can move plant load around, up and down. But when we look at the 90 percent off-peak ratchet, that's not a risk we'd be prepared to take, especially with market conditions being unpredictable.

So, it puts us at -- at a disadvantage, saying, okay, we -- we can work with Manitoba Hydro on an initiative but, in the end, inherit some risk that -- that is not acceptable to us.

BOARD MEMBER BASS: Just on that bullet, can you explain what 'off-peak ratchet' is?

MR. RICK ZETARIUK: We would be -- the 90 percent demand is if we dropped our load if we -- if we weren't running would be we'd still be accountable for 90 percent of the demand, so.

And then the second part of that is the increased tax rate on demand of -- of 1.2 percent, which seems like, for working with Manitoba Hydro, we're being penalized in the process.

When I talked about investment in Brandon, and -- and you won't see this on -- on the slides, but, I mean, we are the -- the largest emitter of green hydrogen in North America.

So, we're -- we're looking at, obviously, utilizing that stream, and -- and for several reasons; 1) because it's the right thing to do with greenhouse effect. And we've got several -- we've had several discussions with several different off-takers as partners.

And one (1) of the main -- not one (1) of the main, the main question that they ask is, if you're going to invest -- and this over a hundred million dollars -- if you're going to invest that, can you guarantee stable supply of hydrogen, because

nobody wants to put that kind of investment into place or -- or go to customer base and say, well, we can only have that intermittently, so a big concern, but also a huge opportunity for, I think, but the province and -- and for certainly ChemTrade.

And then finally, we -- we've -- we need to have a good working relation with our customer service, and -- and for the most part, we do. They've helped us research the resource equipment. We certainly -- any questions we have, they ask, but -- but that has to be ongoing not only for us, but to be able to -- to, I guess, instill confidence in -- in our partners.

So, that is the end of -- of my presentation. Hopefully, if you have questions, I can answer then. If not, we will certainly get back to you with -- with our answers.

THE CHAIRPERSON: Ms. Kapitany...?

VICE CHAIR KAPITANY: Thanks for the presentation. A couple questions. You talked about curtailing. So, the Curtailable Rate Program is something that's already available.

And I don't want you to give out any company secrets, obviously, but you work with Manitoba Hydro in terms of that Curtailable Rate Program?

MR. RICK ZETARIUK: We do.

VICE CHAIR KAPITANY: Okay. And do you have any issues with that, any concerns you'd want to --

MR. RICK ZETARIUK: No. I think the -- the Curtailable Rate Program certainly has improved since we've been part of the -- part of the program. Initially, it was -- I mean, if it was on peak and we were curtailed, they had thirty (30) -- thirty (30) curtailments a year, and we got all thirty (30) of them, and -- and on a plant that was hard.

Now, it's basically curtailing for -- for loss of -- or loss of equipment on their end. So, no, I wouldn't say we have any issue with that.

VICE CHAIR KAPITANY: My other question is about the reliability of the system. And I certainly understand why reliability is important to you, but have you looked at any of the other jurisdictions near or other jurisdictions that might be of interest to you to see what kind of reliability they have?

My understanding from evidence we've seen is that Manitoba Hydro has an above average reputation or reliability service standard. So, I just wondered what the comparables are that you might

have seen.

MR. RICK ZETARIUK: We haven't done a comparison.

VICE CHAIR KAPITANY: Thank you.

BOARD MEMBER SY: Thanks for -- for the presentation. First of all, thank you for using the rail. I am from the oil industry so I appreciate that.

MR. RICK ZETARIUK: That's a whole different conversation.

BOARD MEMBER SY: Yeah, I know. We are not bring it here. So, the question I have is just related to what you -- what you talked to earlier in your presentation.

You said power rates are based on true cost of service. I'm stressing the word 'true'. What do you mean by that?

(BRIEF PAUSE)

MR. RICK ZETARIUK: I'm just looking through here.

(BRIEF PAUSE)

MR. RICK ZETARIUK: Yeah, I mean, it's the -- it's the cost being determined between the calculation of demand and energy consumption and the calculation of kilowatt hours actually consumed.

BOARD MEMBER SY: Okay.

THE CHAIRPERSON: Mr. Zetariuk, ChemTrade has a plant in Quebec?

MR. RICK ZETARIUK: We've got one (1) in Quebec that is basically shut down. The electrolysis process is just providing brine to a sister plant -- not a sister plant, a service to another chemical plant that's adjourned to it.

THE CHAIRPERSON: Okay. And when did it shut down the electrolysis?

MR. RICK ZETARIUK: It was, I believe, September, October of last year.

THE CHAIRPERSON: Okay. And can you give us the reason they shut it down?

MR. RICK ZETARIUK: Competitive market. I mean, their -- their costs were high. I mean, we've -- we've got the advantage of economy of scale with our employees. I mean, making 320,000 tonnes with seventy-eight (78) employees or making 40,000 tonnes with -- with thirty (30) to forty (40) employees, and -- and there was, I believe, a Hydro

component -- cost component there also.

THE CHAIRPERSON: Okay. My understanding is that the last rate for Quebec Hydro for commercial clients was 6.4 percent. I don't know if you can confirm that or not?

MR. RICK ZETARIUK: I can't -- I can't answer that.

THE CHAIRPERSON: Can you, without disclosing confidential information, indicate a comparison between the cost you'd be paying Manitoba Hydro on a per kilowatt basis, versus how much the company was paying Quebec Hydro on a kilowatt basis?

MR. RICK ZETARIUK: I can't confirm that.

THE CHAIRPERSON: Okay. When you had this outage in April and you had the $30,000 cost repairs, are you compensated by Manitoba Hydro as a result of the outage?

MR. RICK ZETARIUK: We are not.

THE CHAIRPERSON: So anytime you have a service interruption or outage, essentially, you eat it?

MR. RICK ZETARIUK: Yes.

THE CHAIRPERSON: Okay. And Mr. Hacault is going to tell me whether my memory is

correct or not on the following question.

I believe, when we had the Interim Rate Application, and we had presenters, that there was somebody from ChemTrade who testified.

Mr. Hacault, is that correct? No?

MR. ANTOINE HACAULT: I don't believe so. I don't think in the interim process we had presenters. Surely, if we did, then your recollection would be correct.

THE CHAIRPERSON: I think -- what was -- was the Hearing where we had --

MR. RICK ZETARIUK: It was the 2019.

THE CHAIRPERSON: It was the 2019. And do you remember who -- who -- who presented?

MR. RICK ZETARIUK: Dale Bossons from ChemTrade was here.

THE CHAIRPERSON: Okay. That's -- and presented?

MR. RICK ZETARIUK HACAULT: Yes.

THE CHAIRPERSON: Okay. And there was -- there was another MIPUG representative who presented as well?

MR. RICK ZETARIUK: There were several companies, including Gerdau, the Canadian Manufacturers and Exporters were part of that

presentation, and that is the limit of my memory at this point. But there were at least one (1) or two (2) others, yes.

THE CHAIRPERSON: Okay. Just wait until you get older, it gets worse.

MR. ANTOINE HACAULT: I believe Morgan Curran-Blaney from Maple Leaf was also present because he --

THE CHAIRPERSON: Okay.

MR. ANTOINE HACAULT: -- both Mr. Bossons and -- and Curran -- Morgan Curran-Blaney are on the executive of MIPUG.

THE CHAIRPERSON: Okay. The question is just -- maybe Mr. Zetariuk can answer the question. And it's a question, I guess, which will be open to the other people presenting is:

I believe that, at the time, there was a comment made that there was less consultation between Manitoba Hydro and the members at that time. For about five (5) years.

And if they went back five (5) years, there was more discussion in terms of needs between account managers and the -- the individual companies.

I'm just wondering if you have any information on that, Mr. Zetariuk?

MR. RICK ZETARIUK: I do not.

THE CHAIRPERSON: Okay. Thank you. Any other questions? Okay. Thank you. We'll move to the next presenter, Ms. McMillin.

(BRIEF PAUSE)

THE CHAIRPERSON: I'm advised by Ms. McMillin -- she just handed me the note -- that ChemTrade and Gerdau presented at the Interim Rate Application in December of 2021.

(BRIEF PAUSE)

MR. RICK ZETARIUK: My apologies.

THE CHAIRPERSON: No, I'm not blaming you. I'm just sort of beaming --

MR. ANTOINE HACAULT: No. No, you're correct.

THE CHAIRPERSON: -- that I actually remembered something.

MR. RICK ZETARIUK: Yeah, we did it virtually. You're -- you're correct.

THE CHAIRPERSON: Yeah. Okay.

MR. RICK ZETARIUK: My apologies.

THE CHAIRPERSON: That's why I thought it was -- yeah.

JEFF ANTHOFER, Sworn

MR. JEFF ANTHOFER: I am the Regional Energy Manager for Gerdau. Good morning, everyone. Could you flip to the next slide, please? Thanks.

Good morning, everyone. Thanks for the opportunity to speak to you today. I have with me, sitting beside me, Rob Sternat, who is the Acting Environmental Manager for our Selkirk Mill here in Manitoba.

As I mentioned, I'm the Regional Energy Manager and part of an energy management team that works with a variety of our mills throughout North America. And we work in different markets, including Manitoba, such as the IESO in Ontario, MISO market, PGIM, and AIRCOT (phonetic).

And we work with regulatory bodies, utilities, and our local industrial facilities to develop and design rate solutions or regulatory solutions for those -- for those sites.

And the reason we're here today is to address our concern about growing and rising

electricity costs in Manitoba and our mill.

Can you flip to the -- Manitoba and the Selkirk Mill represents five hundred and forty (540) full-time employees. And three hundred (300) indirect, upstream, and downstream employees that are related to both supply and -- and this submission of materials for our plant. And in general, we represent about a five (5) to one (1) ratio of every employee in Gerdau has a spinoff or related employment elsewhere in the community.

We melt scrap steel into -- into steel -- we are one of the number one recyclers of metal. It is a -- it's a fabulous process to witness. If you ever have the opportunity to watch, an electric arc furnace under operation, it is -- it makes the ground shake. It is quite impressive.

Energy represents our third largest variable cost after scrap and labour. As such, we are defined as an energy intensive in trade exposed customer.

And what that means is two (2) things. One, that we -- we compete for business internally with all the other Gerdau mills. We also compete internationally for business.

And as such, what's really important to

take away from being an EIT customer is that we can't automatically push cost increases to our customers because these are cost increases that may not be experienced by our competitors either in North America or offshore.

The corporate trend for Gerdau for power costs is heading down. What you're looking at on the graph on the right-hand side is a green line that represents our overall corporate average costs for power and Manitoba's average costs for power in the blue line.

The trend is continually increasing for our Manitoba mill for power costs. Currently, Manitoba is the fifth most expensive mill in our portfolio of fifteen (15) mills, on a dollar per kilowatt hour basis. The attraction of low power costs in Manitoba has eroded.

You'll notice, when you look at the graph as well, that there's that quite significant anomaly at the very end of -- in the middle of 2022. That was a result of increasing gas prices, which resulted in increased electricity costs in all of our markets where electricity is -- is set by natural gas costs which we are fortunate to avoid here in Manitoba, which is one of the -- the saving graces of

being here.

But it also resulted in increased revenues for Manitoba Hydro of which the greater than 100 KV class customers, of which Gerdau is one, did not see as much of the benefit from a percentage basis as some of the other participants in the marketplace.

So the take away from here is that where we are successful in -- in reducing our overall average costs of power is where we're able to implement innovative rate structures and take advantage of our load flexibility.

Internal competition for investment capital is dependent on stable and competitive electricity rates.

Rate design, in most jurisdictions where Gerdau operates, values load flexibility and demand reduction.

Manitoba Hydro does not want offer reasonable options to monetize our flexibility like other jurisdictions.

Our load flexibility could be of great value in Manitoba. We feel there are opportunities where there are shared revenue between ourselves and Manitoba Hydro.

We feel we can bring reduced demand

during critical peak periods and we think that our load flexibility could offer relief in the future for potential drought situations.

We have concerns with the rate design as it is laid out currently. Hydro is addressing the disparity of revenue recovering cost of service by adjusting energy and demand components. Most specifically the proposal is to increase only the demand charge and achieve a balance of -- by correcting the price signals for customers.

The impact of this proposed -- is weighted based on a higher load factor customer than Gerdau, which has a disproportionately negative impact on a lower load factor customer like Gerdau.

To begin with Manitoba Hydro does not have a revenue shortfall because of the demand in energy mismatch between -- for the general service greater than 100 KV customer. We are fully recovered.

And when we're looking at opportunities like this, or concerns like this, we need to have Manitoba Hydro provide a much clearer indication of how capacity and energy costs are going to be dealt with in the long term future.

And how is recovery costs coverage ratios going to change as a result of net revenue, net

income, operating maintenance costs and capital investments.

And -- and really the take-away here is, we do not need to further aggravate the revenue cost coverage ratio in a way that's going to be detrimental to the greater than 100 KV class customer.

I'm going into a little more detail around the impact it has for a lower load factor customer. And let me add a little bit of colour as to what we mean by 'load factor'.

If you think of the very -- very flat customer that operates pretty well seven (7) by twenty-four (24), and throughout the week on a fairly flat basis, you have a very high load factor.

When you look at the operation of a steel mill, it is much more fluctuating when we're operating our furnace. And as a result, that load factor is a smaller percentage and it's more like 50/55 percent.

So, the -- the impact of changing the demand component only of the rate, has a more detrimental impact on the lower load factor customer, like ourselves.

And this increase will be compounded as we see further increases in demand charges only, which

will have a further detrimental effect on an overall demand charge.

What we are proposing is that Gerdau, that Ontario or -- sorry, that's a Freudian since I am from Toronto. It's not Ontario Hydro. That Manitoba Hydro transitioned to an hourly measurement of demand, versus the current fifteen (15) minute peak window measurement.

This is similar to the measurement process that is currently experienced for our plants in the ISO, MISO and PJM. And we propose that any lost revenue as a result should not be an issue, given the current high revenue cost coverage that we are experiencing with the greater than 100 KV class customer.

This was raised earlier. We have further concerns about the rate designs as it relates to the recovery of costs. So, the cost service study indicates there's a disparity of revenue costs between the -- between the customer classes.

In Hydro's proposal, they would recover 113.2 percent of revenue required to cover the costs for the large -- large class above 100 KV class customer.

This is well outside the zone of

reasonableness defined by ninety-five (95) to 105 percent established in Manitoba.

We feel, just getting back to the zone of reasonableness is not enough. There must be and should be, full alignment of our costs, our cost of service requirements and it should not -- it should be basically 100 percent.

Let's go into a little more detail around what we mean by this zone of reasonableness. The purple dotted line, which is a little difficult to see, represents the -- the -- the larger class customer service that we're talking about. The -- above 100 KV class client.

And since 1991, the GSL, the general service large user customer over 100 KV has been above the zone of reasonableness.

Continuing to increase rates while above the zone of reasonableness using a gradualism approach, is not working and should not be -- it should be stopped.

The Board should not agree with this proposed disparity and rate design. The Board should order Hydro to align the rates to achieve parity among its' rate classes. At a minimum, freezing rates for the greater than 100 KV class, until they are inside

the zone of reasonableness should be considered. Specifically, no customer class should be -- no customer class should be designed to over pay.

So, what does the future look like from our perspective? One, we've talked a little bit about this earlier, is Hydro should continue to work with its customers to design options that unlocks flexibility and potentially benefits to the system, lower cost for the participants and all customers.

Also, Hydro should be transparent in sharing important utility data that supports customers contribution to rate design.

And, lastly, it's important that Manitoba Hydro has a plan for the future and discusses that plan in detail on an ongoing basis with its industrial customers.

Thank you for your attention to this very important matter. Thank you for your time today in hearing our presentation and also for supporting Manitoba Steel. And we welcome your questions.

THE CHAIRPERSON: Thank you. Questions, Ms. Kapitany...?

VICE CHAIR KAPITANY: Thank you. You mentioned on your slide 5 that Manitoba Hydro does not offer reasonable options to monetize your flexibility

like other jurisdictions. You did speak about hourly measurement of demand.

MR. JEFF ANTHOFER: Yes.

VICE CHAIR KAPITANY: Are there other measures that you would like to see taken?

MR. JEFF ANTHOFER: There -- there's a number of opportunities that we feel will -- could be applied to our -- our mill and -- and our operation.

And so, in a summary, we would like to see our -- our demand be reflective of what -- what's considered a coincident peak. So, the amount of money we pay for our demand charge would be directly to our -- our demand contribution to the provincial peak, which is called 4CP or 5CP, which is similar to the global adjustment program you see in Ontario. And we have the similar program both PJM and AIRCOT.

We would like to see an opportunity for demand -- demand reduction or DR and DR participation where you're paid a stand-by fee to be interruptible in -- on need for the utility to curtail.

And, we participate both on a -- on a five (5) minute basis for demand reduction and we also do an hourly demand reduction in Ontario, PJM, Michigan and also in Texas.

We would also like to participate in

the curtailable rate program, which is currently closed. So, we do not have an opportunity. It's similar to both spinning reserve and operating reserve that we are able to participate in in Michigan, PJM, which -- which is MISO, Michigan, PJM for our Petersburg site and also in Texas and in Ontario.

And, what am I missing? I'm missing somewhere in there. Time of use is a -- is a little -- a little tougher nut to crack, because it really depends -- we -- we have some opportunity, but there needs to be a narrower view on what the time of use window should be, because there's only so much we can do in turning down our factory during the peak periods and turning up the factory in the off peak periods, but it is -- we do use time of -- time of use rates in our Cartersville facility, which is part of PJM.

VICE CHAIR KAPITANY: And you would have a dedicated service person at Manitoba Hydro with whom you could discuss these options?

MR. JEFF ANTHOFER: We had and have. We've -- we've had these -- we've had this level of discussion on a number of different occasions.

VICE CHAIR KAPITANY: Thank you.

THE CHAIRPERSON: I have a -- a series of questions. How many mills does Gerdau have?

MR. JEFF ANTHOFER: Fifteen (15) in North America.

THE CHAIRPERSON: Okay.

MR. JEFF ANTHOFER: All -- all similar to Manitoba being a mini-mill where we operate a -- an electric arch furnace that melts scrap.

THE CHAIRPERSON: Okay, so you're -- because I knew the Gerdau facility here is a specialty mill, these others are speciality mills and would be competitors to yours?

MR. JEFF ANTHOFER: Yes, they would, because some of the product line that we run in Manitoba, we run at other mills as well.

THE CHAIRPERSON: Right. What's your planning cycle? So, when the company decides to make investments, over what period of time are they planning -- over what period of time ahead are they planning?

MR. JEFF ANTHOFER: That's a -- that's a great question. So, I'll -- I'll -- I might lean on Rob here to hit me under the table, but it really is dependent on the level of cap -- capital expenditure.

THE CHAIRPERSON: Yeah.

MR. JEFF ANTHOFER: So, as an example, currently, because of the -- the rates that we, I'll

say, enjoy, in Ontario, do -- al -- also because many of the specialty rates in Ontario that we have around coincident peak and DR and operating reserve that we -- that we participate in, we are seeing a -- a new -- a new arc furnace being installed in that mill, which is in the tens of millions of dollars, and that par -- that process -- that CapEx process is easily five years, I would say, in the -- in the --

MR. ROB STERNAT: Part of the 10-year planning cycle.

THE CHAIRPERSON: And was the cost of energy part of the --

MR. ROB STERNAT: It was almost --

THE CHAIRPERSON: -- factors --

MR. ROB STERNAT: -- almost the top of the list --

THE CHAIRPERSON: Okay.

MR. ROB STERNAT: -- when it comes to something like that, because it represents 35 percent of our overall power costs consumption.

THE CHAIRPERSON: So --

MR. ROB STERNAT: It's just melting.

THE CHAIRPERSON: -- so, in terms of Ontario versus Manitoba, if you remove sort of the different programs, what would be the difference in

the kilowatt-hour cost for the company?

MR. JEFF ANTHOFER: That is a really good question and there's one major anomaly that you can't easily remove and, then, make it an apples and apples, and that is the global adjustment.

So, in Ontario, the global adjustment is -- is paid out and the global adjustment accounts for some long-term generation contracts, some energy efficiency, used to also contain the green energy plan that was our solar and wind program.

If you -- a more -- a major portion of our avoided costs is our ability to -- to -- to curtail during those peak -- those CP periods. I -- I would be happy to -- to take this as an Undertaking, where we could demonstrate the mathematics, as we peel out each of the different variable load programs because I think it's -- it's a very important question, because it really does relate to what is possible here and how we address it in Ontario. So --

THE CHAIRPERSON: No. I would appreciate it if you could put together a comparison.

What -- what I'm particularly interested in is, you know, a comparison of just the general rate, Manitoba versus Ontario and, then, your position seems to be we have a lot more flexibility in

Ontario because of the different programs they -- they offer and maybe, then, include those and show how it affects your rate and the flexibility, because I -- I -- you know, I note from page 10, and I'm happy to hear it, it says Hydro should continue to work with customers to design options. I'm happy they used the word "continue".

MR. JEFF ANTHOFER: M-hm.

THE CHAIRPERSON: So, there are discussions, but, then, the question is: What are some of the programs, what -- what are the impacts, and things of that nature?

MR. JEFF ANTHOFER: One of the -- and, so, I agree. I think that's -- that's a great take-away and I will work to -- to provide a breakdown of how each of those costs impact our mill and our -- also our competitive mills, not just in Ontario, but Petersburg and -- and PJM and also our Texas mill with AIRCOT.

THE CHAIRPERSON: Is -- is the Manitoba mill, within the scheme of the 15, is the Manitoba mill the least flexible or near the bottom for flexible programs?

MR. JEFF ANTHOFER: Well, I might -- the lovely people over at Manitoba Hydro are sitting

right there, but --

THE CHAIRPERSON: Yeah.

MR. JEFF ANTHOFER: -- it is -- it is the least flexible that we have dealt with, the second -- yeah, they would be the least flexible in their ability or their -- willingness is strong, because I, you know, we appreciate and respect the fact that they have to work within their own finances, but we've had the least amount of opportunity to participate as a flexible load in this jurisdiction.

THE CHAIRPERSON: Sure. Thank you. Any questions? Thanks very much, sir.

MR. ANTOINE HACAULT: Mr. Chair, you had also asked a question of Mr. Zetariuk, which he said he didn't have the answer to.

In the interim rate proceeding, there was a -- an Exhibit MIPUG-4, which answered your question.

THE CHAIRPERSON: Okay.

MR. ANTOINE HACAULT: I don't know if we can -- if there is an interest of the Board, we could undertake to update that Undertaking, which had been made, to a very similar question --

THE CHAIRPERSON: Okay.

MR. ANTOINE HACAULT: -- that had been

asked.

THE CHAIRPERSON: Yeah. That would be -- that would be helpful. Okay. Thank you.

So, now, I guess, we'll go to representatives of TransCanada Energy, who I -- who I understand are virtual? No? They're here? Oh. Oh, gentlemen. Okay. Sorry. The list -- no, it says here in person. Sorry. Okay.

MR. RICK ZETARIUK: Just for information, the exhibit that Mr. Antoine Hacault was referring to is slide 7 of the presentation that was delivered at the interim rate hearing.

THE CHAIRPERSON: Sorry. At the which -- at the?

MR. RICK ZETARIUK: Slide 7.

THE CHAIRPERSON: At which hearing?

MR. RICK ZETARIUK: At the interim rate.

THE CHAIRPERSON: At the interim rate. Yeah. Yep. Okay.

CHRISTOPHER HOST, Affirmed

JUSTIN CHAN, Affirmed

MR. CHRISTOPHER HOST: Good morning,

everyone. Thank you for taking an audience with us. Myself, I'm Christopher Host, representing TC Energy. I'm the Engineering Manager and we're representing Liquids Pipelines, specifically.

My colleague here, Justin Chan, he's the Technical Services Manager.

Specifically, today, we'll be talking more about the reliability side of Manitoba Hydro and how that affects our system and operations. Any other commercial questions we'll have to take back to our team. So, next slide.

So, we're going to start with a bit of an overview of our system. So, TC Energy Liquids Pipeline has been around for about 13 -- in operation for about 13 years.

It runs from Hardesty Terminal in Alberta. It runs all the way east, across to Manitoba, heads south through North Dakota, South Dakota, down to Cushing and Oklahoma, and down to the Gulf Coast.

We have around 50 pump stations along this whole line and around six (6) of those pump stations are located in Manitoba Hydro and it's transported around 3.6 billion barrels since 2010 and, on a daily basis, we transport anywhere between 500

and 600 thousand barrels a day. Slide, please.

Yeah. So, I'm just going to do a bit of a -- an introduction on how oil is moved and transported along the system and the impact that reliability has.

So, if you look at the chart here, along our x axis, is the direction or flow or distance, and, on the y axis is pressure, and every -- it's a bit of a saw-tooth diagram. Every time you leave the discharge of a pump station and you start pushing out oil, you start losing pressure. You start losing pressure because of transient flow in the oil and you start losing pressure because of frictional losses on the pipe wall.

So, as you move along, between pump station to pump station, you will see that pressure loss, and we have about 70 kilometres between individual pump stations.

So, you can see that our pressure -- suction pressure at each pump station is pretty critical. If we go below it -- an initial suction pressure, then the -- the pump station will trip. So, if we have lower pressures, we will, then, generally, have to have lower flow. So, for example, if you look at a hose, the longer the hose, the slower the flow

will come out of the end, which is why we have these pump stations along the pipeline route.

So, why is Manitoba so crucial to us? We have six (6) pump stations in this area. There's -- - there's some elevation gains in there which make them critical and any trip on a -- on a pump station could cause a line trip.

So, for example, if we have an instantaneous outage from electrical service, that will mean that our whole pump station will be tripped. We will have lower suction discharge pressures, and we will have at least a 30-minute delay before we can get that pump station up and running.

If it's one of our critical pump stations, of which we have two (2) out of the six (6) pump stations within Manitoba, it may full -- cause a full line shutdown, meaning that the whole line will have to be shut down, and that will be a minimum of two (2) hours before we can get that pipeline up and running. Next slide, please.

MR. JUSTIN CHAN: All right. So, two (2) industry statistics that we -- we know measure utility reliability are SAIDI and SAIFI. SAIDI refers to the duration index, SAIFI refers to the frequency index. When you study both of these numbers, the

lower the number the better.

So, the shorter the duration the interruption the better and the less frequent, the better. When we look at the published data from the Strategic Assessment Plan and the Generic Rate Application, we can see for the T-SAIDI and T-SAIFI, the actual experienced reliability was worse than what was targeted.

What this does for Keystone is it diminishes our ability to be reliable as a pipeline operator as well. And one (1) specific thing to note here is, reliability is important as measured by these statistics, but as defined by EEE (phonetic), interruptions are only measured if they're lasting longer than five (5) minutes.

For us, as an industrial user, as opposed to utility outages or interruptions in the seconds range matter to us. And in the next slide I'd like to show you how.

So, this graph here shows where Manitoba Hydro ranks in terms of magnitude of impact to our operations. On the left, Y-axis there, you can see it's equivalent hours. We can't disclose how Manitoba Hydro interruptions diminish our ability to flow oil, but we've converted that to equivalent

hours.

So, on the basis of hours and frequency of events, outages related to Manitoba Hydro's declining performance has resulted in more downtime and longer duration of downtime than any other provider on the Keystone system.

So, this represents all utilities ranging from Alberta all the way through the US south. And I want to highlight three (3) things that this does for us. The first is, this impacts our ability to deliver oil to our customers on time and in the volume that we want.

Secondly, it's -- it's an operational challenge. There's a controller in Calgary who has to manage all of these outages. So, for instance, if a pump station trips in Manitoba, he has to adjust and lower pump speeds all the way across Canada to try to manage this.

As Chris mentioned, due to Manitoba's position in the pipeline, and the hydraulic criticality of these pump stations, there's a high likelihood that a single station that trips as a rela -- result of the Utility are multiple, will shut down the entire pipeline.

And that -- that takes two (2) hours to

restart and if it's a single station, it might take an hour to restart.

And lastly, safety is paramount for TC. One (1) of the challenges with having pump stations trip is that a technician has to be called out and drive to site. This could be after hours and it could be during adverse weather conditions. So, we want to try to avoid these as much as possible. Thanks. Next slide.

So, if we take out this data and purely look at reliability with weather removed, we can see that Manitoba Hydro's reliability is still the largest impact to our Keystone operation relative to other providers along this system.

The grey bars are American utility providers and the light blue are other Canadian utility providers. So, when we look at similar jurisdictions, we still experience high levels of unreliability. Next slide, please.

And when we look purely on weather basis, we can see Manitoba Hydro ranks the -- has the far -- fourth largest impact relative to other providers across Keystone, including American providers.

And in Canada it's the second -- second

largest impact to us.

We recognize weather; it varies from year to year and it could be unpredictable. But one (1) thing we note, that is, since we're -- we have 66 kV transmission lines feeding our substations, compared to other jurisdictions where we might have higher voltages, the unreliability we experience is shown here.

So, with that, I'll turn it over to Chris to close us out.

MR. CHRISTOPHER HOST: So, if you look at the -- Manitoba Hydro's General Rate Application excerpt, it's basically saying that the system is becoming more aging and the overall conditions begin to degrade.

So, what impact does that have on us, it means that it's our ability to perform and be reliable for our customers is also starting to be impacted by that.

So, what are we asking for? We're asking for funds to be prioritized and allocated to increase the reliability across the system. This degradation and reliability has had a knock-on effect to our business and it's quite significant, because it effects not just one (1) single area, but can affect a

whole line from Alberta all the way down to -- to the Gulf coast.

And as counterpart, and as you provide, is we also want to provide maximum reliability to our customers, similar to Manihy -- Manitoba Hydro wanting to do for theirs, and so we're looking to partner with this to see if there's opportunities where we can put our engineering technical minds together to find opportunities to make the system more reliable.

What might seem like a very small outage for an instantaneous second will actually cause some of these longer more sustained issues along the whole pipeline. Thank you. So, we're open for twenty (20) questions now.

(BRIEF PAUSE)

VICE CHAIR KAPITANY: Okay. Thank you for the presentation. Sorry, and I'm -- I'm not -- I didn't catch which slide number it was, but there was a reference on one, two targets and it was noted on the bottom that it came out of the Manitoba Hydro's Strategic Asset Management Plan.

I appreciate you weren't here yesterday and the CEO who was here yesterday isn't here today,

so we don't have everybody in the room. But I did ask about KPIs on the customer on the -- like, there was a discussion of the degradation and customer survey results and the outage times I believe was what we were talking about yesterday.

And I -- I just specifically asked what KPIs were being developed. And I -- my -- my -- I'm not reading this word for word. My interpretation of the answer was it was being discussed with the customers.

So, can you tell me just from this slide, and the comparison between the SAIDI/SAIFI target versus actual? Are you having those discussions? Are you comfortable with the targets? Do you think the targets need revision or are they like okay as is and that's not the issue that you're concerned about?

MR. JUSTIN CHAN: Yeah, we're -- we haven't had recent discussions with Manitoba Hydro, but we plan to resume them this year and especially on an engineering-to-engineering conversation. We will be having those, so.

Yeah, we weren't too fixated on -- on the targets, but rather to work together to explain how it influences Keystone.

(BRIEF PAUSE)

THE CHAIRPERSON: Ms. Kapitany...?

VICE CHAIR KAPITANY: This is maybe a followup question. You -- on your last slide I think you said that the engineers were working together to try and find solutions, so your engineers and the engineers at Manitoba Hydro?

So, you have a customer agent then that you would work with to -- so -- so they're well aware then of -- of the issues that you're facing and the impact on your business?

MR. CHRISTOPHER HOST: So, I'd say that where we're focussing at the moment is more on the reactive. When things happen, how do we get the system back up and running. I wouldn't say we've had conversations around increasing the long-term reliability and stability of the system, and that's where we want to go next.

VICE CHAIR KAPITANY: I see. Thank you.

BOARD MEMBER SY: Thank you. It's just more of a -- of a comment, and thank you for sharing this KPI. I think TC Energy is a -- is a perfect example of assisting the efficiency of

Manitoba Hydro, because you're across Canada and the US as well, and you touch different utilities, so that -- that's pretty good.

I guess my question to you or to Manitoba Hydro is: I'm assuming that you do have an account manager, somebody who is dealing with Manitoba Hydro.

And are you sharing, or have you been sharing this PPI with them, with Manitoba Hydro's (INDISCERNIBLE) and if so, what is the game plan? I mean it's good to say we are the best, we are the best, but at the end of the day you guys are more indicated to say yes you are or you are not.

And if you are not, what are you doing to be, you know, what you claim you are, as being the best?

MR. JUSTIN CHAN: Sure. Yeah. So, part of our plan this coming year is to collaborate with Manitoba Hydro a lot more. So, we haven't shared all these details with them yet.

In the past we've had conversations about reliability. But this data that you're seeing here today, we have to have more conversations.

MR. CHRISTOPHER HOST: But what we're really focussed on is actually trying to influence

them prioritizing reliability for their -- for their annual spending to be higher up and make sure that we're actually getting that utility grid stability going forward. That's what we really want to do.

THE CHAIRPERSON: So I've got a few questions. So I assume from your presentation that you support their rate increase.

Is that correct?

MR. CHRISTOPHER HOST: So we -- we're the engineers here. We -- we're not going to comment on anything to do with sort of rates, tariffs, or tolls. We're going to particularly talk about reliability and the engineering technical side.

THE CHAIRPERSON: Okay, but I note that you want increased budget capital and operating budgets.

MR. CHRISTOPHER HOST: I didn't say that. I said prioritized. We all have to live within our means --

THE CHAIRPERSON: Okay.

MR. CHRISTOPHER HOST: -- and we all have to spend money, and we're looking for reliability to be prioritized above other things. So that wasn't what we were saying.

THE CHAIRPERSON: Okay. So when you

have these outages, how do you find out the reason for the outages? I -- I know that you make adjustments internally --

MR. JUSTIN CHAN: Yeah.

THE CHAIRPERSON: -- but is it that Manitoba Hydro tells you the reason for the outages or what's the conversation?

MR. JUSTIN CHAN: So the data I presented here today from 2020 to 2022, for the 2020 and 2021 data sets, those would have been confirmed with Manitoba Hydro. So my electrical engineer would talk to the Manitoba Hydro engineer and they would check is this weather, what was the root cause, and have those conversations.

For 2022, we still have to look through them. We also have our control room logs which we can look in to see if there was weather events -- for example, an ice storm or snow storm in the area -- and we parse through event by event and try to find out what happened.

THE CHAIRPERSON: Right, but if it's -- if it's non-weather --

MR. JUSTIN CHAN: M-hm.

THE CHAIRPERSON: -- essentially, you're relying on Manitoba Hydro to say -- I mean,

you've got here degradation. This is your finding or them telling you?

MR. CHRISTOPHER HOST: That was -- that was us. So that was from their excerpt from their -- that was directly from their --

THE CHAIRPERSON: Yeah.

MR. CHRISTOPHER HOST: -- website.

THE CHAIRPERSON: Okay.

MR. CHRISTOPHER HOST: I think what we're trying to illustrate here today is that I don't think Manitoba Hydro captures outages less than five (5) minutes, and we're saying that outages of up to seconds can trip our stations and actually cause them to be down for half an hour to multiple hours.

So, yeah, that's what we -- we kept that frequency on --

THE CHAIRPERSON: Right.

MR. CHRISTOPHER HOST: -- on that data.

THE CHAIRPERSON: But it sounds like you're -- and I'm not saying this negatively, but it sounds like you're into reactive mode if there's an outage in that you made the comment about there haven't been discussions on long-term reliability.

Do you have any idea when those

discussions would occur? Who triggers the discussions? Is it you proposing to them? Are you waiting for them to propose, or is it you could potentially be in reactive mode for the near future?

MR. CHRISTOPHER HOST: So for us, we have been reactive to this stage. The importance of reliability for sure from Manitoba Hydro and for TC Energy is -- is very high, and the impact is very high.

So our next steps ought to be trying to come to the table and have more conversations around how we can have better reliability on the system.

THE CHAIRPERSON: Right, but --

MR. CHRISTOPHER HOST: Has yet -- to answer your question, has yet to happen. Will be our next steps, and we --

THE CHAIRPERSON: Okay, but is it --

MR. CHRISTOPHER HOST: -- we can (INDISCERNIBLE) for that.

THE CHAIRPERSON: -- next steps that you anticipate this year? It is this year?

MR. CHRISTOPHER HOST: Right.

THE CHAIRPERSON: Okay. That's great. Thank you very much. Thank you. We'll -- gentlemen, thank you for the presentation.

MR. CHRISTOPHER HOST: Yeah. Thank everyone for your time.

MR. JUSTIN CHAN: Thank you.

THE CHAIRPERSON: Okay. We'll move on next to, according to my list, a virtual presentation for Maple Leaf.

MORGAN CURRAN-BLANEY, Affirmed

MR. MORGAN CURRAN-BLANEY (by TEAMS): Okay. Well, thank you very much for -- for allowing virtual presentations. It's much appreciated for those of us out of province.

I would like to present on behalf of Maple Leaf Foods today. If we could go to the next slide.

So just to give some context around the importance of the Province of Manitoba to Maple Leaf Foods, we have significant assets and -- and investments and have made investments in -- in the province.

On the agricultural operations, the majority of our farms and feed mills reside in Manitoba. We also have the largest primary processing

plant in Brandon, Manitoba, which you can see pictured here.

And most recently we've made a large capital investment to expand our pre-cooked bacon processing line in the Winnipeg plant, creating the largest bacon manufacturing facility in Canada. All this to create approximately $753 million in direct and $1.2 billion in indirect benefits to the province.

So as much as Maple Leaf is -- is critical to -- to the Province of Manitoba, Manitoba is critical to the success of Maple Leaf. We are very much intertwined. Next slide, please.

Today I'd like to focus on the fresh pork side of the business. We operate in -- in a global commodity free market industry. The pricing of our meat is based off USDA market indexes. We create value in our -- in our business by converting cuts from their bone-in states to value-add finished goods either through additional trimming or usually we're making a boneless product and -- and portioning.

Manitoba, the -- the Province of Manitoba, produces some -- some of the highest quality pork for the Japanese chilled pork industry. This is a very labour-intensive and energy-intensive product requiring very strict cooling protocols and -- and

programs to be put in place. Next slide.

So just to give you a quick idea of -- of the process through the -- the Brandon plant, today we process approximately fifteen thousand (15,000) pigs a day with about two thousand (2,000) people.

We receive pigs through our -- our barn, harvest them through our front-end process, run them through our evisceration lines. Then we have a blast chill, and then they sit in the coolers for approximately -- oh, it's a -- it's a full day, so anywhere from sixteen (16) to eighteen (18) hours.

And then they hit our cut floor where we cut them up into -- into the pieces, box them, and -- and send them out in our shipping -- into our shipping dock. Next slide, please.

So I really want to focus today because, as an industry, we're facing unprecedented headwinds, and -- and I think it's -- it's important to note this. The impacts are real, and -- and we're starting to see the financial pressures leading to plant closures and consolidations.

And -- and I think I've put just the -- the few recent snapshots of -- of either some of the financial results that we've seen from our North American competitors, as well as some of the

casualties from -- from some of our North American competitors.

And I think it's really important to note the companies on this slide are not small players. These are -- are in many cases equal or larger than Maple Leaf Foods, and -- and we're not immune to the issues that are facing us in -- in the industry.

And our largest issue is the elevated feed costs which is driving up the price of hogs. If you go to the next slide, please.

So this -- this graph best demonstrates us, what we're experiencing. And you can see the blue line is the cost of -- of producing a -- a hog. The red line is the value of the cuts, and -- and the -- the black lines are what they call a packer margin.

You can see, starting late last year, these lines inverted. We -- we saw a spike in the -- the costs of the hog related to grain prices in early January. That has not come down. The value of meat has, and -- and we have seen this continue all the way into the first quarter.

So this is the -- the challenge that we're facing, and it's -- it's market driven. It's not following historical trends, and it's lasting much

longer than it -- it has when it has inverted in the past. Next slide, please.

When I look at our own business and -- and our own fresh pork, Hydro's one of our highest utility costs in the Brandon plant. It's used to power equipment but, most importantly, our refrigeration of the plant. In fact, the snap chill alone represents one-third of our hydro use. This is not something that we can modulate or throttle back on and off. This is something that is an on -- always on position for our product that we produce.

One (1) of the few remaining benefits that we have left as being located in Manitoba is -- is a reliable source of electricity at a reasonable rate. This is an advantage we can't afford to lose. Next slide, please.

And as I mentioned before, so the -- the impacts that we would see with rate increases, we -- we operate in a commodity-based market, and incremental costs we are not easily able to pass on if we are able to pass them on at all.

Canadian pork is viewed as a high-quality product internationally. So -- so, we're at an inflection point though today where we're not able to pass on the -- a price increase. And that -- that

price quality equation is -- we're starting to see tradeoffs being made, and it's impacting the volume of what we're exporting.

And this is not just a Maple Leaf issue, this is a Canadian pork issue. As zero-based budgeted company, any additional costs we must find within the system, and in the short-term, that's comes at discretionary spends. In the longer term, it -- it looks to fill the gap with alternate sources of power or looking at how do we reduce the load through the -- the Manitoba facilities and where else can we do that cheaper. The next slide, please. Thank you.

So, historically, we've -- we've had a very strong relationship with Manitoba Hydro. And again, we understand that many of the pressures facing our business are likely the same that are facing Manitoba Hydro and a reasonable rate increase may be needed to produce a reliable source of electricity.

But I -- I do want to put -- the caveat is we need to make sure that we take in and -- and consider the factors and the pressures of the ratepayers as well when we do this. And we're counting on the PUB process to do as such.

And -- and we've had a great partnership with Manitoba Hydro in the past. I expect

that to continue, but -- but we are really -- we're an industry that is under extreme pressure right now, and -- and I would ask that that be considered when we are looking at rate increases.

So, thank you very much. I -- I do appreciate the opportunity to present our concerns to the PUB.

THE CHAIRPERSON: Thank you, sir. Questions? Ms. Kapitany...?

VICE CHAIR KAPITANY: Thanks for the presentation. Are you able to take advantage of program -- of the Curtailable Rate Program at Maple Leaf?

MR. MORGAN CURRAN-BLANEY (by TEAMS): Sorry, the -- the --

VICE-CHAIR KAPITANY: The Curtailable Rate Program.

MR. MORGAN CURRAN-BLANEY (by TEAMS): I'm -- I'm not sure if we've been able to take advantage of that. I know in Brandon that we have not been able to take advantage of that.

VICE CHAIR KAPITANY: And what about time of use? Would that be of any use to your industry, to your plant?

MR. MORGAN CURRAN-BLANEY (by TEAMS):

It's very difficult, time of use, and -- and it would -- it would depend on -- on when that -- that cycle happens.

We're -- most of our facilities are twenty-four (24) hour --

VICE-CHAIR KAPITANY: Twenty-four (24) hours. Okay.

MR. MORGAN CURRAN-BLANEY (by TEAMS): -- facilities, and again, refrigeration being the biggest load. It's an always on source.

VICE CHAIR KAPITANY: Okay. Okay. Thank you.

BOARD MEMBER BASS: Is there still a hot processing plant operating in Neepawa, Manitoba?

MR. MORGAN CURRAN-BLANEY (by TEAMS): There is. There is. That's HyLife --

BOARD MEMBER BASS: Is that part of HyLife?

MR. MORGAN CURRAN-BLANEY (by TEAMS): Yes.

BOARD MEMBER BASS: Okay. And -- well, I just had two (2) other questions with respect to your slides. On slide 8, you talk about employee head count.

What's the total workforce in the

Brandon plant?

MR. MORGAN CURRAN-BLANEY (by TEAMS): The total workforce in the Brandon plant is approximately two thousand (2,000) people right now, and it fluctuates depending on -- on the hog volume. It can go as high as twenty-three hundred (2,300) people.

BOARD MEMBER BASS: And the next slide, in the third bullet, you talk about need for a reasonable increase.

What do you consider to be a reasonable increase?

MR. MORGAN CURRAN-BLANEY (by TEAMS): I think we've looked at the historical patterns. And again, I look at reasonable as -- as it has to factor in all of -- all of the forces that are impacting them.

I mean, having -- having really cheap hydro, it doesn't -- doesn't make a difference if -- you know, to -- to the TC Energy presentation before, if -- if there's a whole bunch of -- of service interruptions.

So -- so, I do think it has to factor in, you know, when I look at our -- our pattern rate increases in the past. And I think that does follow a

reasonable rate increase. But -- but again, I would -- I would say it factors in the -- the -- what -- what is facing the industry today, but is also what is facing ratepayers today.

BOARD MEMBER BASS: So understandably, I take it you don't want to name a number?

MR. MORGAN CURRAN-BLANEY (by TEAMS): No. I -- I will leave that to -- to the PUB to direct.

BOARD MEMBER BASS: Thanks.

BOARD MEMBER BELLRINGER: Thanks for that. In the event of an interruption, what do you do?

MR. MORGAN CURRAN-BLANEY (by TEAMS): It -- it causes significant challenges for us. It -- it shuts down our plant. So, you know, immediately we have anywhere -- on a shift -- we have about a thousand people a shift, and it depends on when it happens. But if it's during the shift, it'll -- it'll stop everything, and we have to restart and bring our systems back online.

From a refrigeration standpoint, we're able to shut our coolers and -- and shut our freezes, and -- and the insulation can -- can withstand, you know, a few hours without having any product impact.

Our -- our biggest challenge is from -- from the stunning area all the way to the evisceration area, there's -- there's about -- anywhere from two hundred (200) to two hundred and fifty (250) pigs. And -- and depending on the outage, we can -- we can have all of those or some of those sent into rendering, and -- and at zero value of which we paid for. And we've had that happen in the past.

(BRIEF PAUSE)

BOARD MEMBER SY: Yeah, that's for -- for the presentation. You indicated that your Manitoba Hydro cost is $5.2 million. Is that correct?

MR. MORGAN CURRAN-BLANEY (by TEAMS): Yes, in -- in --

BOARD MEMBER SY: Okay.

MR. MORGAN CURRAN-BLANEY (by TEAMS): -- in the Brandon plant.

BOARD MEMBER SY: In the Brandon plant, yeah. So, I hope I'm not asking too much here, but what percentage of the total cost is that?

MR. MORGAN CURRAN-BLANEY (by TEAMS): In the Brandon plant?

BOARD MEMBER SY: Yeah, yeah, yeah.

MR. MORGAN CURRAN-BLANEY (by TEAMS): From -- from a utility perspective, it's our highest. From -- from an overall overhead perspective, I -- I'd have to say that that would be confidential information.

BOARD MEMBER SY: Okay. Okay. That's what I thought. Okay. Thanks.

THE CHAIRPERSON: Sir, how many disruptions do you experience in a year?

MR. MORGAN CURRAN-BLANEY (by TEAMS): For us, they -- they've been -- they've been few, and it's most weather related. So -- so, those -- we have -- we do have a dedicated line into the plant, and -- and that I think has -- has helped reduce the number of interruptions that we've had.

THE CHAIRPERSON: Okay. During your presentation you made the comment that, if the -- if the rates go too high, you'd have to look at doing it somewhere cheaper?

MR. MORGAN CURRAN-BLANEY (by TEAMS): Yes. And -- and so, to clarify that -- that point, it's -- it's what kind of work -- what else -- where else can we go.

You know, obviously, the -- the primary processing side, it's difficult to do too far away

from -- from where the hogs are grown, which is in Manitoba.

That said, you know, it's -- it's a lot of the further conversion, the value-added type work, and we've seen that in the US. A lot of the US facilities will send, for example, all of their hams down to Mexico. We -- we have some competitors that will do that. And they take advantage of -- of lower -- lower costs to do -- produce a product down in Mexico, and then ship it back up into the United States.

We don't do that. We send all of our hams down to Winnipeg, and we -- we debone them there.

THE CHAIRPERSON: Okay. In terms of your planning cycle when you're projecting out, you know, costs and revenues, what -- what sort of go-forward term would it be? How long -- how long do you project ahead?

MR. MORGAN CURRAN-BLANEY (by TEAMS): So -- so, from a -- I'm not sure I'm answering this correctly, but I'll give it a shot. From a budgeting perspective, we -- we -- we're looking at --

THE CHAIRPERSON: You -- you did much better than I did.

MR. MORGAN CURRAN-BLANEY (by TEAMS):

Okay. So -- so, we're looking -- we do an annual budgeting process, but we also have a five (5) year strategic view.

THE CHAIRPERSON: Okay. So, as part of your five (5) year strategic view and you're looking at costs, I assume you're looking at labour costs and all sorts of -- all sorts of different costs.

What do you -- what do you put in for Manitoba, the increase in rates, if any, for Manitoba Hydro?

MR. MORGAN CURRAN-BLANEY (by TEAMS): So -- so, from both a budgeting perspective and -- and a strategic view, we will take -- we usually will operate on a five (5) year average.

THE CHAIRPERSON: About a five (5) year average. Okay. Thank you. That's very helpful.

MR. MORGAN CURRAN-BLANEY (by TEAMS): And again, with the caveat of any anomalies, you know, we'll --

THE CHAIRPERSON: Sure.

MR. MORGAN CURRAN-BLANEY (by TEAMS): -- we'll look at, but that's historically how we've looked at -- at utilities in general.

THE CHAIRPERSON: Yeah. That's --

thank you. Thank you very much, sir. That was -- that was very helpful.

MR. MORGAN CURRAN-BLANEY (by TEAMS): Okay. Thank you.

THE CHAIRPERSON: So, Rachel, we have, I guess, I understand virtual, Canadian Kraft Paper.

(BRIEF PAUSE)

DAN HOTEL, Affirmed

MR. DAN HOTEL (by TEAMS): Good morning and thanks for having me. I'll give a little presentation about what our business is up here in The Pas and how Hydro impacts our operation. So if we could go to the first slide.

So I'd like to respectfully acknowledge that our operation is located on Treaty 5 territory, traditional lands of the Swampy Cree, Saulteaux, and Metis Nations and its people.

So we're a leading manufacturer of unbleached high performance sack kraft paper. We've been located and operating here in The Pas since 1971.

Our annual capacity is 165,000 prime tonnes of paper per year. We employ three hundred and

fifty (350) directly. And we also have a partnership, a fifty-fifty (50-50) partnership, with the Nekote. And that's the Nisokapawino Forestry Management Corporation. And that's part of our hundred and eighteen (118) woodlands contractors. Roughly seventy-four (74) are Indigenous.

So we're a manufacturer of grade 'A' kraft paper. A strong sustainably managed northern Canadian fibre, results in top tier product offerings.

We have our own sales team, Canadian Kraft Sales and Marketing. They're located in Kelowna. And we're a highly regarded technical service and product development. We have our own mill-based technical customer service. We have a full range of paper testing and services with our onsite testing and research lab. We have a network of leading Forestry and paper industry academics. And our product development team and advisory services are offered to our customers.

And then, for logistics, we try to optimally use rail, truck, and ocean freights. Next slide.

So for diversion equity and inclusion, CKP strives to create a diverse organization that's reflective of our surrounding communities where

culture, ethnicity, race, gender, orientation, religion, age, education, and varied backgrounds are respected and valued.

We're committed to promoting a fair and equitable work environment where all employees are valued and provide opportunities to grow within our organization.

We aim to create an inclusive work environment that fosters creativity, innovation, promoting engagement through awareness, and inclusivity.

We have an environmental responsibility as a business. We're committed at all levels of the organization to protection of the environment for the benefit of the present and future generations. Through internal monitoring and external audits, we continually assess our environmental performance and take necessary corrective actions.

We adhere to regulatory and compliance standards and legislations, and also any voluntary commitments. We continually manage operations to minimize pollution, waste, and ensure environmental commitment. And we use sustainable forest management through our sustainable forest management policy.

So to make our paper, what makes it

world class, is the strong northern fibres up here in northen Manitoba. It's the slow-growing northen boreal forest provide long, slender, flexible fibres that have exceptionally high strength. And further, high consistency refining results in high tensile strength development.

This is a line of our products we make. I won't go into too much detail. But we make regular unbleached paper, and also our extensible paper, which has certain stretch and porosity to it. And also wet strength paper for food products that have some moisture.

About 50 percent of our paper ends up becoming cement bags. So that stretch and porosity allows them to fill it rapidly, keeping the dust under control. Next slide.

So we're recognize world-wide for our strength, consistent quality, and excellent customer service. Our focus remains on the development, production of world-class industry leading kraft paper products.

About 80 percent of our product is shipped within North America. And the remaining 20 percent to other areas of the world.

We're ISO certified, 9001 for quality

management; 14001 for environmental CSAZ809 sustainable forest management; PEFC chain of custody; ISEGA certification of food compliance packaging; and CME safe work certified. We're also a member of FPAC (phonetic) and, as of a year ago, we're also Made Safe certified in Manitoba.

So our economic impact to Manitoba is about $120 million; ninety-two (92) of that in the north; twenty-eight (28) in the south.

We also have impacts of 20 million in Saskatchewan and seventy-eight (78) in other areas of the country.

So a high level overview of our process. We're very energy intensive with the consumption being in the form of electricity and steam. We have a chemical recovery boiler that burns the black liquor. Our power boiler is a biomass boiler. It burns hot fuel, which is the bark, limbs, saw mill residuals.

We have our own 28-MVA back pressure turbine. It lowers the steam pressure to the operational requirements while extracting the energy to produce electrical power.

So the steam is used by our pulp mill to cook the wood chips. It's used for the paper mill

on the paper machine for drying the paper. And we use it in the steam plant for our multi-effect evaporators for concentrating that black liquor for the boiler.

Then our large users of electricity are the paper machine drives, the pulp washers, our boiler, auxiliaries, and air compressors. And then our fibre refiners, which include a 10-megawatt high consistency refiner.

So our longstanding relationship and service from Manitoba Hydro is important to the success of our business. And these are the key priorities that affect our mill the most.

For reliability, we are a 24/7 operation and any interruption to the power supply is an interruption to paper production and lost profit.

Even a momentary interruption would require hours to restart the production and the losses would easily exceed $100,000 per occurrence.

We do have our own turbine, but it's not designed to carry the plant load. And in the -- in a Manitoba Hydro outage, it also trips offline, resulting in a blackout to the plant.

In the winter months, it's even more important. We need to get things going so we don't start freezing up.

For our customer service, we've always had good customer service with Manitoba Hydro; that needs to continue. We usually get timely responses to billing inquiries and they have worked with us before in providing information on new and green technologies as we strive to decarbonize our operations.

As far as the rate structure, pulp and paper is a very competitive industry. Very low margin production. And any large changes to our service rates directly impacts our bottom line.

And Canadian Kraft Paper, we are a disadvantaged mill compared to most other mills in the country. We have no access to natural gas, so most of our auxiliary fuel is bunker 'C'.

And for the rate design, the alternative rate options, such as time of use, do not work for us. We have no flexibility in our operation to utilize them. Because our turbine is a back pressure for the processed steam, the electricity we generate from it is purely based on production. There's really no flexibility to increase or decrease.

And the current demand model -- oh, sorry, just wanted to -- the current demand model is adequate for us. But it could be improved if there's concessions for short plan maintenance. We have had

times where we have a small oil leak on our turbine. And even to take it down for a couple hours to address, we end up having to pay the full demand peak for the month, which increases our costs by $100,000 usually per occurrence.

That's all I have, if anyone has any questions?

THE CHAIRPERSON: Ms. Kapitany...?

VICE CHAIR KAPITANY: Just on your slide where you had talked about your turbine. And so, you said that you have a turbine. If it trips, then there's a power outage in the plant.

I didn't quite understand the use of the turbine and then what you said afterwards about how it fits into your operation and how it relates to Manitoba Hydro.

MR. DAN HOTEL (by TEAMS): So it's -- it's a back pressure turbine, so our boiler steam is 750 psi and the turbine reduces it to one sixty-five (165) and sixty-five (65) pounds for use in the process.

So, any electricity we generate off of that, we do carry about half our plant load, just internally generated. But we don't control how much electricity it makes, it's -- it's just a function of

the steam demand of the plant.

And, on the other note, we're synced into Hydro, so when Hydro trips, the turbine trips off-line.

VICE CHAIR KAPITANY: Okay. And so you don't have any back-up source of power that would be reliable then?

MR. DAN HOTEL (by TEAMS): No, we -- after an outage if it were to be a long duration, we can fire up parts. We can start up a boiler and run the turbine to keep parts of the plant warm, but it's not sized to actually run the -- the operation in full production.

VICE CHAIR KAPITANY: Thank you.

THE CHAIRPERSON: So, Mr. Sy...?

BOARD MEMBER SY: Yeah, thanks for sharing this presentation, really fast.

I guess the -- the -- I -- I'm just trying to understand the relationship that you and other MIPUG uses have with Manitoba Hydro.

When you sit down and make your case, you know, not, for example, not increase the rate or do you share all the information with Manitoba Hydro so they know exactly your case, or you're sort of trying to say this is confidential, I can't share this

information with you.

Ans -- an example. I mean you talked about low marginal operation. How -- how -- how granular are you when you are sitting down with Manitoba Hydro to tell them that this is a low margin operation?

MR. DAN HOTEL (by TEAMS): I don't have an exact answer to that. I don't know how specific we are with them at time. I'm fairly new to the role, so I -- I haven't sat down with Hydro that much for negotiations.

THE CHAIRPERSON: How frequent are the disruptions?

MR. DAN HOTEL (by TEAMS): It's been good for a while. Last summer there was definitely three (3) or four (4) complete plant outages due to weather.

THE CHAIRPERSON: Okay.

MR. DAN HOTEL (by TEAMS): As mentioned before, they were -- they were momentary, but same thing, even a couple second outage our -- our paper machine is twenty (20) feet wide, it's a football field long and the paper is moving at 30km an hour, so when you dump the power to all the drives, it's hours of clean-up.

Same thing in the pulp mill, they're moving fixed stock through the lines and a hard stop on the pumps, the lines become plugged. Even a momentary outage for us is five (5) to six (6) hours to get everything back to normal to begin production.

THE CHAIRPERSON: Okay. But if -- if the outage is caused by weather, is there anything that can be done?

MR. DAN HOTEL (by TEAMS): Not to my knowledge.

THE CHAIRPERSON: Yeah. You haven't put forward a position for the company on the rate request of Manitoba Hydro.

So, we're -- what -- the -- this hearing is to confirm a -- an interim rate of 3.6 percent and then a rate of 2 percent starting September 1st and a further rate of 2 percent starting April 1st of next year.

Does the company have a position on the rate request?

MR. DAN HOTEL (by TEAMS): Not at this time.

THE CHAIRPERSON: Thank you, sir. That was -- that was very helpful. We appreciate your participation. We appreciate the participation of all

of the MIPUG members today.

We're going to adjourn for lunch. Before we do it, if I could just direct a comment to Ms. Fernandes who's -- who actually learned how to type without looking at the keys.

There was a lot of information, a lot of evidence this morning. I'm not giving you direction, but Manitoba Hydro may wish to review this information and address it either during, you know, the rest of the hearing, or -- or in closing submission. It's up to you, but, you know there's a lot of information that came forward this morning.

MS. ODETTE FERNANDES: We've heard all the presentations this morning and we've started having discussions on how to --

THE CHAIRPERSON: Yeah. And I noticed how much you were typing.

So, okay. We appreciate it. We're going to adjourn until one o'clock for lunch. Thank you.

--- Upon recessing at 12:10 p.m.

--- Upon commencing at 1:02 p.m.

THE CHAIRPERSON: Ms. Fernandes, do

you -- would you like to introduce the panel?

MS. ODETTE FERNANDES: Thank you. Good afternoon, Mr. Chairman, Madam Vice Chair, and Board members. We are excited to kick off the -- this GRA with our Export Hydrology and Drought Panel.

I thought I would actually allow the individual members of the panel to introduce themselves and provide you with a little bit of their background and what areas of the application they would be speaking to.

MANITOBA HYDRO EXPORT, DROUGHT, & HYDROLOGY PANEL

HAL TURNER, Affirmed
KEVIN GAWNE, Affirmed
CHERYL SANCLEMENTE, Affirmed
NIKHIL KARANWAL, Affirmed

THE CHAIRPERSON: Thank you. So, are we starting with Mr. Turner?

EXAMINATION-IN-CHIEF BY MS. FERNANDES:

MR. HAL TURNER: All right, I can do that. Thank you. And good afternoon, Mr. Chairman, Ms. Vice Chairman, and members of the Panel. My name

is Hal Turner, and I am Vice-President of asset planning and delivery. And I'm also a member of Manitoba Hydro's executive team.

I -- I'm a registered professional engineer in Manitoba. I hold a bachelors of science in mechanical engineering from the University of Manitoba. And I started at Manitoba Hydro in 1995.

Prior to my appointment as vice-president in November of 2021, I held a variety of positions within the Company and, most recently, I was the director of asset management. And this is my second time appearing on behalf of Manitoba Hydro at the GRA. Thank you.

MR. KEVIN GAWNE: Good afternoon, Board Chair, Chair -- Vice Chair, Board members, Board counsel and staff, Interveners and counsel, experts and members of the public. My name is Kevin Gawne. And I'm a registered professional engineer in Manitoba.

And I hold a masters of science in the areas -- areas of water resources and hydraulics. I have twenty-five (25) years of experience with Manitoba Hydro. And for the last thirteen (13) years, I've managed the energy operations planning department.

In 2021 to 2022 time frame, I was manager of energy supply planning, which was a merged group consisting of energy operations planning and resource planning.

I last appeared before this Board during the -- the 2021 interim rate application in December of 2021. My current responsibilities include overseeing the operation of Manitoba Hydro's major reservoirs and energy resources.

I oversaw the preparation of our forecast of net expert revenues for the test years and the balance of Manitoba Hydro's twenty (20) year financial scenario.

I look forward to assisting the Board in matters related to reservoir and energy operations, supply planning, and this panel's contribution to forecasting of net export revenues.

MS. CHERYL SANCLEMENTE: Good afternoon, Mr. Chairman and members of the Panel. My name is Cheryl Sanclemente, and I hold the position of acting manager of the wholesale -- wholesale power trading department.

I am a chartered professional accountant and I have a bachelor of commerce degree from the University of Manitoba. And I've worked at

Manitoba Hydro for twenty-five (25) years. I have worked in the wholesale power trading department since 2002 in the (INDISCERNIBLE) day-ahead merchant and forward markets in Canada and the US.

For the last seventeen (17) years, I have managed the day-ahead desk and forward financial physical trading operations.

Currently, I lead the team of power trading professionals that optimize Manitoba Hydro's assets twenty-four (24) hours a day every day throughout the year.

As well, I manage the deliver of energy and capacity under our portfolio of long-term export contracts. I was part of the teams that navigated through the droughts of 2003/'04 and '21/'22 and Manitoba's entrance into the MISO day 1, day 2 ancillary service markets, as well as those in Ontario, Alberta, and the southwest power pool.

In addition, I participated in the negotiations of several of our long-term export contracts. This is my first experience testifying on behalf of Manitoba Hydro in a regulatory hearing, and I'm here to assist the Board in topics related to energy trading, operations, and energy hedging. Thank you.

MR. NIKHIL KARANWAL: Good afternoon, Mr. Chairman and members of the Panel. My name is Nikhil Karanwal, and I hold the position of Director energy markets.

I'm a registered professional engineer with a masters of engineering and MBA from the University of Calgary.

Prior to my employment at Manitoba Hydro, my experience was in the private sector in other volatile commodities like oil gas, leading operations, business development, risk, and strategy.

I've led these functions both in Canada and internationally, including countries like the United States, Argentina, China, and Malaysia. My responsibilities include wholesale power trading, marketing, gas supply, and a strategy development for energy markets division.

I direct Manitoba Hydro's activities in both the Canadian and US wholesale gas and electricity markets, including the administration of its contractual relationship as a buyer and seller of electricity and natural gas in both the short and long-term time frames.

I've held the responsibilities for the past about two (2) years. This is my first experience

testifying on behalf of Manitoba Hydro in a regulatory hearing. Thank you.

MS. ODETTE FERNANDES: Thank you. Mr. Chairman, the CVs for this Panel have been filed and have been marked, I understand, as Hydro Exhibit 29. And for the record, I'm Odette Fernandes. I'm legal counsel for Manitoba Hydro. And seated directly behind me is Deanna Hiebert who will also be acting as legal counsel for this Panel.

Quickly, in terms of the back row, starting to my far right we have Phalguni Pathak, who's a power trading analytics section head. And we have Chris Guttormson, who's a day-ahead power trader in the wholesale power trading department.

Beside him is Kelly Bertholet, who's the market operations and access manager. Then we have Phil Slota, who's a hydrological engineer in the hydrology and climate section. And finally, we have Kelly Hunter. Oh, sorry, Kelly is before Mr. Slota. He's the senior market and resource -- resource engineering in the energy resource planning department.

I understand that Manitoba Hydro's direct evidence presentation was emailed out to the parties. And so, with leave, Mr. Chairman, I would

have -- ask that the Panel go through their direct presentation.

MR. HAL TURNER: Okay. Thank you. I forgot to mention, in asset planning delivery, our responsibilities include planning and delivering, and managing Manitoba Hydro's generation, transmission, distribution, and natural gas assets.

As well, we're responsible for delivering Manitoba Hydro's first integrated resource plan which will be out later this summer.

I'd now like to spend a few moments to provide the Board with some background information on the Manitoba Hydro system and an indication of the areas of the application this Panel is responsible for. Next slide, please. Thank you. Oh, no, sorry, back one. Thank you.

Unlike most American and Canadian utilities, Manitoba Hydro is a large hydroelectric utility with over 90 percent of our capacity coming from sixteen (16) generating stations. Most of our energy is generated in Northern Manitoba.

The most recent addition to our generating fleet is the Keeyask station which went into service over the last couple of years. Because we are a hydroelectric utility, our system is highly

affected by precipitation amounts and river flows across Western Canada and parts of Northwest Ontario, Minnesota, and North Dakota.

In normal weather river flows at our generating stations are more than enough to meet most of the province's electricity needs, and we have surplus available to export to other markets.

But what we must be able -- but we must be able to provide our customers' needs under abnormal weather conditions, such as extended drought or a winter polar vertex -- polar winter vortex, excuse me.

So, we plan accordingly such than when these abnormal events occur, we are prepared and emergency conditions are averted. Being prepared means managing the operation of the generation and reservoir system following well-established priorities and procedures consistent with industry standard practice.

With these in hand, we are always prepared to deal with whatever mother nature throws at us. This panel is responsible for forecasting expert revenues and generation and purchase power under the full range of possible river flows.

These areas are very significant to Manitoba Hydro's financial position. For example, in

the fiscal '22/'23 year, export revenues were forecast at $1.28 billion, or 40 percent, of electric revenues while generation and purchase costs were forecast at 220 million, or 8 percent, of electric expenses.

Manitoba Hydro refers to these items in aggregate as net export revenues. We provide our forecasts as inputs to Manitoba Hydro's financial forecast scenario.

I would like to note here that the PUB's expert advisor, Daymark, has reviewed our forecast included -- and concluded that they were reasonable.

In our testimony today we will provide you with updates on water and market conditions since we prepared the application last fall as these conditions influence net export revenues. At a high level, water conditions are normal for this time of year, but we want to caution you that it is too early to know with confidence what type of water year we will have.

We are comfortable saying we don't expect extreme drought or -- or extreme flood conditions. But the amount of rain we receive over the next ten (10) weeks across our drainage basin typically determines to a great extent what type of

water year we will have. However, as we saw in the fall of 2019, significant precipitation can happen throughout the year.

In the meantime, our best estimates of net export revenues for the two (2) test years are based on an analysis of a broad range of possible flow conditions. It won't be until well after the GRA hearing that we will be able to start to significantly reduce the uncertainty in our net export revenue forecast for this year.

In addition to the uncertainty in water supply, we also face significant uncertainty in the export market. The uncertainty is a double-edged sword.

If we have surplus energy and market prices increase, that would result in a favourable outcome. However, if we enter a period of low water and imports are required and market prices spike, that would not be a good thing.

Fortunately, for Manitoba Hydro's customers, in most years we have excess electricity available that can take advantage of market prices.

In addition to price uncertainty, Manitoba Hydro depends on the economic regulatory and political climate of the US. Uncertainty --

uncertainty in these areas adds to the challenge of predicting export revenues.

Our panel will speak in more detail about the US market and its evolution in response to the expected effects of decarbonization and the increased penetration of low cost renewables, such as wind and solar. In anticipation of these effects, our revenue forecast reasonably addressed this shift.

In addition, we expect these market trends will eventually transform the capacity needs in the US market from being a summer-peaking region to a winter-peaking region.

We expect this will reduce the amount of diversity between our peak and the peak demand of our US neighbours. Reducing or even eliminating the opportunity to engage in seasonal diversity swaps. Seasonal diversity capacity swaps, excuse me.

Should loss of diversity occur, it will have a significant impact on our need for capacity resources in the future.

Another significant point our panel will make is that we anticipate that our future resource additions will be smaller and more frequent than they have been in the past. We don't expect to be adding large blocks of hydro capacity and energy

and growing into them over decades, as we have historically.

As a result, our total supply of capacity and dependable energy will grow more gradually, closing leading future demand increases.

A consequence of this is we will no longer be able to engage in new high value long-term export contracts. However, there will remain an opportunity for market export sales for the foreseeable future. And we have appropriately valued those market sales in our export revenue projections.

A significant point I would like to make is that our net export revenue forecast assume that the performance and capacity of the existing system will be maintained through ongoing investments.

That is, we are assuming that we will be able to properly invest in existing generation, transmission, and high voltage direct current systems as they age so they continue to produce electricity and deliver electricity to our customers at a high level of reliability.

Lastly, as Ms. Grewal pointed out yesterday, Manitoba Hydro has continued -- is committed to continuous improvement.

We have provided evidence in our

Application of the -- about the significant improvements our group has made in short-term forecasting, hydrologic modelling, energy operations, and long-term planning.

This panel is available to elaborate on those activities, if desired.

I'd now like to turn the mic over to Mr. Gawne. Thank you.

MR. KEVIN GAWNE: Thank you, Mr. Turner. We are now at slide 3 in the presentation.

Manitoba Hydro operates an integrated system of reservoirs, generation, HVDC, transmission, and interconnections to our neighbouring markets. Therefore, Manitoba Hydro applies a system approach to our operations planning, long-term planning, and export revenue forecasting.

Our operations planning engineers and resource planners use sophisticated energy system models to simulate the operation of our systems.

Key inputs include the Manitoba customer load forecast, system capabilities and limits, flow forecasts, and the entire hydrologic record. And the export market force -- price forecast.

Manitoba Hydro is obligated to supply

Manitoba firm customers. And you can see the box on the left in this slide.

So when it comes to operating and planning our system, we don't have the option whether to serve these customers; rather, we must supply the amounts that they need when they need it.

You'll notice the graphic includes a small image of a balance in the corner. And why is this shown? A fundamental aspect of power system operations is that supply must always balance with demand; every second, every day, every year.

So how do we achieve that at Manitoba Hydro in operations and in planning? In essence, there's -- there's three (3) ways.

First, we operate our reservoirs to adjust the generation when customer demand changes.

Second, we physically export power or import power to or from neighbouring markets. Essentially, this is like our pressure relief valve, if you will, which is particularly important for Manitoba Hydro in managing our water variability. And Mr. Turner spoke of that earlier.

So normally, we're -- you know, we plan our system to sustain our reliable operations through drought. But normally, we're not in a drought

condition, which is why we're, on average, an exporter of electricity.

So you only need to look back as far as 2021 and 2022 to see the significant role that our market interactions play in balancing our supply and demand. For example, our physical exports -- that's energy leaving the province -- in '22/'23 was roughly 9 terawatt hours more than in '21/'22. And that -- terawatt hours is a million megawatt hours. But just from a rough perspective, that's about 40 percent of the electric demand in Manitoba year over year change in our export activity.

So the third way we balance supply and demand -- and this only applies to long-term planning -- is by adding new resources to our system.

So given that we're predominately hydroelectric system, our system is planned and built to reliably supply our customers under drought. And as -- as I said, when we're not in drought, we usually have surplus energy which is why we are typically exporting energy to our neighbours and this is why we need to look at it from a system approach when we're forecasting our net export revenues. Next slide, please.

So a little bit more on net export

revenues. Explained by Mr. Turner, our panel is representing the groups who are largely responsible for forecasting export revenues and generation costs. And in aggregate, Manitoba Hydro refers to these items as net export revenues.

We provide these forecasts as inputs to Manitoba Hydro's financial forecast. And as you can see here on the slide, net export revenue is, essentially, export revenues minus generation costs.

On the export revenue side -- and I won't go through all these in detail, but just the key ones. The two (2) main components are the long-term contracts, which are multi-year contracts with counter parties who've, in often cases, elected not to build other resources but instead, purchase power from Manitoba.

And those -- those long-term contracts include both energy and capacity obligations on Manitoba Hydro.

Our opportunity revenues -- opportunity revenues are primarily market energy sales that will change with water conditions. So on this slide they are marked with this water drop icon. And -- and that's to help understand what parameters really do move around with water conditions. So there's other

components to this balance that identify where water is a big factor.

On the generation costs side, we have water rentals. Clearly, those are dependent on water because it's directly a function of how much hydroelectric generation we produce.

Then we have purchased energy, which includes imports and market purchases, which are highly dependent on water conditions. Again, to balance supply and demand.

And then, we have our wind power -- power purchase agreements, or wind PPAs, for wind farms located in Manitoba. And those also fall under power purchases.

And lastly, while we seldom run our combustion turbines, we may do so under very low water conditions or for reliability purposes.

All these costs are modelled using our system approach that I discussed earlier, when we're arriving at our net expert revenue projections. Next slide, please.

Before I get into an update for the Board on current water conditions, the Board has expressed an interest in reviewing Manitoba Hydro's drought management. So I will provide an overview of

how Manitoba Hydro plans its energy and water operations. Next slide, please.

So we are now at slide 6 in the presentation that addresses our operations planning processes, technology, and expertise.

Manitoba Hydro's reservoir and energy operations also -- I'll also refer to them as operations planning or that function -- uses long-established priorities. These priorities are used -- pardon me, these priorities are used to guide a large team of experts from across the enterprise.

And you'll see those listed here. I won't go through them in detail. But I'll note that this -- this team of professionals was referenced in Daymark's report as their Reservoir Planning and Production Scheduling Team, at page 78 in their report.

Now, the process depicted on the right involves a weekly cycle of continuous monitoring updating planning and communicating that is repeated regardless of water conditions. So this is happening week after week.

Every week, our operations planning team collects and reviews observed data from across the system and meets with our hydrology team who

updates Manitoba Hydro's inflow forecasts.

The team then assesses conditions and, with feedback from stakeholders involved, adjusts plans for major reservoir releases. And at the bottom of the cycle, those plans are then communicated broadly throughout the Organization. And lastly, at the nine o'clock position, the decisions in the plan are executed by our operators.

So, for example, we recently decided, using this process, to reduce outflows from Lake Winnipeg, and that decision was implemented when our operator up at Jenpeg lowered a gate on the spillway at Jenpeg to reduce outflows from the lake. So that's executing the decision. And then we get to the top of the cycle and -- and kind of get back into the -- into the routine.

The last point on this slide is water conditions and energy outlooks are regularly communicated to our senior leadership within Manitoba Hydro. And when conditions are extreme such as severe drought or -- or flooding conditions, our team will involve executive directly.

For example, during the drought of 2021, we engaged the executive team of VPs and directors who met twice monthly throughout the drought

to receive updates, to review our operating plans, and provide guidance on major decisions. Next slide. Thanks.

I'd like to now expand upon our operating planning priorities and how and when they are applied. So this is fundamental to our operations planning process, and we've been planning our reservoir and energy operations according to these priorities for decades.

Our number 1 priority is safety -- safety of the public and our staff. Following this, energy supply is our next priority where we plan and operate our system to avoid prolonged outages to our customers which could have devastating social and economic impacts, particularly during a cold winter season.

Then we prioritize energy reserves, and that refers to protecting reservoir storage for the future in case drought con -- continues. Manitoba Hydro would deplete those reserves only to avoid curtailing Manitoba firm customers for extended periods or for safety reasons, and those being the higher priorities.

Short-term reliability, that -- that refers to avoiding the risk of system-level outages

but for short durations.

Stakeholders and the environment, number 5 in the priorities, refers to avoiding significant impacts on resource users. And we affect most of the major waterways in the province, and that's a -- a serious consideration for our operations.

And lastly, we have economics where we operate our system to maximize net revenues. Most of the time we're operating for economics. However, depending on conditions, we may move up the scale where our operations are driven more by higher priority concerns.

These priorities apply under all water conditions. For example, in a flooding condition, we may have to forego economic operations to minimize high water level impacts on our stakeholders.

At the other end of the water supply spectrum, drought, Manitoba Hydro's operations may be governed by conserving energy reserves to protect our -- protect storage for continued drought. Next slide, please.

So Manitoba Hydro has made improvements. So we've -- we have those long-standing operating priorities that have been around for

decades, but that doesn't mean that nothing's changed over the years.

Manitoba Hydro has implemented many improvements related to operations planning in general and, more specifically, drought operations. We have also made improvements in the area of long-term resource planning.

Our response to Manitoba Hydro-PUB Round I 168 provides an overview of the numerous improvements we have made into our operations, how we participate with the market, our practices and tools we use in our operations planning and long-term planning, and ultimately the net export revenue forecasting that we're preparing for our financial forecasts.

As it relates to drought, the system improvements include the addition of the 500 kV Minnesota -- or, pardon me, Manitoba-Minnesota transmission project which came into service in June of 2020. And that increases our ability to import energy during drought or emergencies.

Market participation enhancements includes provisions in Manitoba Hydro's export contracts to supply a large portion of the energy obligations in those contracts through what's called

market settlements, or using the market to supply the energy which, ultimately, reduces Manitoba Hydro's physical energy obligations under severe drought conditions.

In terms of practices, since the 2003/'04 drought, one (1) example where we've seen improvements or have made improvements is Manitoba Hydro has formally documented its drought operations processes and assumptions used in operations during drought. And this is available in Appendix 5.3 of our Application.

Recently, Manitoba Hydro has implemented new tools as well used for near-term inflow forecasting, and Manitoba Hydro has also replaced its long-term generation planning software. And this is -- this replacement was with a model produced by a third party industry-leading vendor with specific expertise in hydro system modelling. Next slide.

We are now at slide 9. Our filing reviewed how water conditions can impact revenues, and this Board has shown interest in understanding our hydrology forecasting methods. So, as noted in the scope of the work from our board -- pardon me, the PUB's independent expert consultant. So here I'd like

to briefly describe Manitoba Hydro's current inflow forecasting system.

It's described in greater detail in section 1 of Appendix 5.4 of our Application, but just at a high level, we've made significant advancements over the past several years to improve our short-term inflow forecasting by implementing what's called physically-based hydrologic models.

This -- and essentially, that's trying to reflect the hydrologic cycle that we all learned about in science in grade 7. It's -- it's trying to model the science of the process of hydrology.

This brings our forecasting methods to a level that is consistent with industry-best practices. These new models simulate the water cycle and use data on current basin conditions and forecasted weather to produce inflow forecasts which helps to reduce the short-term uncertainty to our inflow forecasts compared to purely statistical methods used prior to 2020 by Manitoba Hydro.

To make this happen, Manitoba Hydro invested in its weather and water data networks, formalized data sharing agreements with partners in neighbouring regions, and leveraged the use of satellite-based information. This was made possible

through years of participation in industry working groups, in collaboration with academia, other peer agency -- and other peer agencies.

The forecasting framework is based on a modern industry standard platform called FEWS -- and that's F-E-W-S -- and the meas -- the methods used have been reviewed by both Manitoba Hydro's external expert, Dr. Rene Roy and the PUB's independent expert consultant Daymark Energy Advisors.

I would like to take actually this -- just to step off this for a bit and take an opportunity to address a topic raised by Board Member Sy yesterday during the policy panel session where he had asked about Manitoba Hydro's use of artificial intelligence and machine learning.

The industry standard hydrologic models that Manitoba Hydro uses are fund -- are fundamentals-based models that simulate the physical processes that you see on the left in this slide, you know, things like the hydrologic cycle, soil, moisture, evaporation, snow melt, for instance.

However, the use of machine learning is starting to take hold in some applications and flow forecasting. Manitoba Hydro is actively following this, and we've been in discussions with entities like

our peers in the industry essentially employing this technology in hydrology for a few years now.

Unfortunately, the industry standard platform that I just spoke of, that FEWS platform, has the ability to essentially pull in forecasts produced by machine learning algorithms and vendors that are out there selling machine learning-based systems.

But just -- I'll add that our -- our approach is to use and focus on fundamentals-based modelling first while following the -- the developments in -- in AI. And -- and this is in line with the recommendations of Dr. Rene Roy, our expert peer who had reviewed this at Appendix 5.4.

And the last point on this slide that I would like to add, is -- it's a bit of a caveat. Here we've done all these improvements in our flow forecasting system and invested a -- a tremendous amount of effort to develop our short term flow forecasting. But these are that -- these are developments to improve our short term flow forecasting.

This has helped inform year term decisions in our operations, however, it's impossible to reliably forecast precipitation and river flows over the multiple months in the future, which will

ultimately impact our hydro-electric generation for the next year and when we're forecasting that export revenues.

Seasonal to inter-annual weather forecast products, they do exist, however their skill and reliability, and particularly for -- the watershed that supplies our system or not at -- at the level that we can rely upon them.

So, put simply, we know droughts will occur, but we can't predict with any certainty when they will occur and how severe there will be.

Therefore, Manitoba Hydro prudently plans for the repeat of the worst drought on record in our operations and also in our long term planning.

That said, we remain actively involved in research in this area and Dr. Rene Roy has attested to that in his review at the back end of our Appendix 5.4. Next slide please.

Okay, water conditions and hydraulic generation. I'd like to now update the Board on current water conditions and our anticipated hydraulic generation for this current fiscal year. Next slide please.

Okay, this is a pretty messy looking slide, but I wouldn't be a good engineer if I didn't

try and show a bunch of charts to you. So, I'll do my best to explain this. It's similar to what we've seen in the past.

But water conditions have -- have changed dramatically over the last few years. Last year, 2022, was a great example of how flows can change from one extreme to the -- to the next.

To illustrate, if you look at this chart of daily flows for the Winnipeg River, okay, Winnipeg River is being shown because it's of importance to our system.

Flows from this watershed contribute to just over a third (1/3) of the total hydraulic generation, as this water flows down the Winnipeg River, through the six (6) hydro stations of ours on the Winnipeg River, into Lake Winnipeg. Out of Lake Winnipeg and through another six (6) stations before it gets to the Hudson Bay.

So, water in the Winnipeg River if -- if we're not spilling, can go through twelve (12) of sixteen (16) of our stations. So, it's very important that we look at that basin.

So, we call this chart here a spaghetti plot and I'll -- you can guess why. In the background there are several gray traces and that shows the daily

flow conditions for each of the past forty (40) years that's plotted here.

So, water levels in cubic feet -- or pardon me, flows in cubic feet per second and the horizontal axis is days of the year, starting in April.

There's also a thick black line shown there, and that's the average value calculated from these forty (40) traces of flows.

'21/'22 and '22/'23 are highlighted in purple and blue, respectively. In our current year, '23/'24, you see the beginning of it there in red. Also plotted are '25 or pardon me, 2005/'06, which was a high water year and then 2003/'04, which was our last major drought. And those are shown there for reference.

So, clearly, 2021 was a significant event, with flows being the lowest in over forty (40) years, when Manitoba Hydro filed its 2021 Interim Rate Application in November of 2021.

So, if you just take your eyes to where 2021/'22 is labeled there, around November, that's around when we were sub -- filing our application for the Interim Rate Application and flows were a record low.

And the Winnipeg River basin was experiencing some of the areas that were monitoring precipitation, recorded the lowest precipitation since the late 1800's, I believe.

And we did include, I'm going off a bit here, but we did include in our application a -- a link to the Lake of the Woods Control Board. And they have a video and if you want to spend another three (3) hours listening to an engineer talk about water levels and grass, I -- you know, it's -- it's a good one to watch. It really does share the problems of water management and dealing with uncertainty and extremes.

Okay. So, back to flows from Ontario here. They increased through the winter and that was largely due to reservoir release decisions by the Lake of the Woods Control Board.

However, there was a remarkable turnaround in conditions in the -- in the spring, driven primarily by a series of large rainfall events through April and May of 2022.

You'll recall, I think it was in Winnipeg -- I think May of 2022 was an absolute record high month for -- for rain in -- in Winnipeg.

And we -- and we had a new peak flow

records that were set throughout much of the watershed. Through the summer and into the fall, leading into our filing of this GRA, flows have receded back towards average conditions.

Now, while this type of turn around in flow conditions is extreme, there's no doubt if you look, going from the lowest in forty (40) years to an absolute record high, it's extreme. But, it's not necessarily unexpected.

We know flows can change dramatically from season to season and these changes are driven by weather events, but unfortunately, those weather events can only be forecasted a few weeks out.

So, what we do when we prepare our financial forecast, is we simulate the operation of the system on -- over a whole range of water supply conditions, 'cause we can't say for sure in the next number of weeks how -- how flows will materialize. New slide please, next slide.

This chart illustrates the total potential energy in reservoir storage in major reservoirs in Manitoba and upstream of our borders. It's important because it really tells us how much gas we have in the tank for hydro generation, so to speak, so one would expect to see water levels on the side or

cubic feet of water. But what's plotted here is a term, in terms of energy or terawatt hours or millions of megawatt hours, that's a terawatt hour.

So, what we do is we convert the water levels at the various locations around the system. We're monitoring all these levels in these lakes that ultimately drain to us, the big ones anyway. And we convert that into an energy equivalent number, based on how much generation in our system is located downstream of that reservoir.

For example, every drop of water in northwestern Ontario could eventually make it through those twelve (12) hydro stations downstream. So we weight that water of, if you will, higher than water that's located further down the system, say at Kettle generating station, which is our third (3rd) last station.

So, it's a way to look at flows and aggregate for the entire system and it's a -- a weighting based on the production potential. And it's -- we use the term potential because in many cases, or certainly in cases where water conditions are above average, we may be forced to spill a lot of this water because we simply don't have the ability to pass this much water through our turbines.

But our system modeling, fortunately, accounts for all of this. So, we understand the capability of our hydro stations and -- and the modeling that's behind the financial forecast accounts for that.

And that was the case in 2022, where inflows took off and storage rose quickly and Manitoba Hydro transitioned relatively quickly from operations for drought, during the winter of '21/'22, to changing to a -- managing a major flood.

As you can see the red line now, so we're in '23/'24 as tracking back close to the black line, which is the average. So, storage conditions are close to average. Next slide please.

System Inflows. Yes. Thank you. So, system inflows are close to average. Previously I showed you a chart of Winnipeg River flows and this is kind of like the same view, but now weighting things by energy and looking at all the tributaries across the entire system, not just in Manitoba, but the major flow points upstream of our province.

It's another spaghetti chart, but the idea is, in terms of flows into the Manitoba Hydro system, this is where we're sitting relative to averages and relative to previous years.

So, similar to the Winnipeg River flows, you can see the stark contrast in conditions between 2021, in purple, towards the bottom and -- and then -- in blue, '22/'23 where we completely transitioned to a flood.

And much like storage, currently flows are close to average for this time of year. That's the red line. Next slide please.

There's a lot of information on this slide. I won't spend too much time on it. But, the idea here is to summarize how things look for the last sixty (60) days for precipitation across our system. And this chart, by the way, is taken from that fused system that I mentioned earlier or hydro -- hydrologic modeling system.

So, last few slides illustrated that storage and flows are close to average for this time of year, however, precipitation, over the last few months, has been below average, throughout the majority of the watershed. So, that's where you see the browns and reds and the very dark red is, you know, 5th percentile precipitation conditions, for example, and we account for this. We account for this now with our hydraulic flow forecasting system. Next slide.

Okay. System in-flows and this chart has been put in front of this Board in the past but it's now updated to include actuals for '22/'23 and our latest projection in green.

So, the -- the last few slides illustrated the storage and -- pardon me, that was precip. It's not possible to reliably forecast flows many months into the future. Manitoba Hydro's operations and forecasts of hydro-electric generation are based on a range of potential flow conditions, as I explained earlier, and, as of a few weeks ago, our projection is relatively close to the long-term -- long-term average for system in-flows.

As you can see on the chart, the green bar is pretty close to the dashed red, which is 100 percent of average. However, there is still -- it's still highly uncertain as to how much flows we're going to have for this entire year and Mr. -- Mr. Turner was alluding to that.

Now, we're just -- we're just in spring, and May through August is when we tend to get the -- the most water into our system. That's traditionally the wettest time of the year, and rainfall through these months contributes significantly to the overall volume of water that we

receive in our system. Next slide, please.

This slide is getting pretty involved. We won't have to spend too much time on it but the -- I'll just try and highlight a few points. That's Slide 16.

So, I would now like to provide an overview of our projected hydro generation for the year and the level of certainty of that projection. So, the figure shown on the left is a plot of the amount of energy produced by Manitoba Hydro's hydro-electric generating stations on an annual basis. So, by fiscal year.

So, the blue columns show the actual amount of energy produced in the last few years. So, for '21/'22, '22/'23.

Now, the orange boxes, those show the range of hydraulic generation that was included in the materials that we filed in 2021, when we did our interim rate application. Okay? So, that was the range of uncertainty back when we did that application, in November of '21.

The green boxes, they show the range in annual generation that underlies the net export revenue forecast that we filed with this application last November.

We went and added the yellow box and that shows '23/'24 range of projected hydrolog -- hydraulic generation, based on conditions updated just to the last few weeks that we went through just a few slides ago.

So, what you can see here is because -- because the future is uncertain and our ability to predict flows with certainty is limited as we move through time, there will always be a range of uncertainty in the forecast hydrolic -- hydraulic generation in each of the future years and this range of uncertainty is really shown by the length of those boxes. Where the top of the bar represents the maximum and the bottom is the minimum.

But, looking at '23/'24, specifically, that grouping of orange and green and yellow boxes, what you can see is the range of uncertainty is narrowed, as we have approached this year and, now, that we're in it, but there is still a considerable amount of uncertainty is how much hydraulic generation can produce this year, however, the averages haven't changed that much. It's just more the -- the range of uncertainty.

So, this concludes the update on water conditions and I will now hand over the presentation

to Ms. -- Ms. Sanclemente.

MS. CHERYL SANCLEMENTE: Thank you, Mr. Gawne. Next slide, please. Okay.

I would now like to provide an update on electricity prices in MISO since the application was filed last fall. The chart on the screen shows the -- the MISO market prices in Manitoba Hydro's pricing node from April 2012 up to May 1st, 2023.

This is an update to Figure 3 from page 6 of Appendix 4.2 of the application. The chart shows average on-peak and off-peak monthly prices for electricity that Manitoba Hydro either sells at or buys for.

On the right-hand side of the chart, you will note the dramatic run-up in market prices that occurred in the spring of 2021 and the subsequent decline this past winter. Prices have continued to soften over the last few weeks and are now back to the price range experienced prior to the war in Ukraine. Next slide, please. Thank you.

Okay. So, this slide compares the MISO prices to the price of natural gas over the last three (3) years. You will note how highly correlated the two (2) prices. Although there are several factors that influence electricity prices, the primary price

driver in MISO is currently the cost of natural gas. When gas prices rose dramatically in 2021, electricity prices rose in tandem and, now, with gas prices back to the $2 (US) range, electricity prices have dropped accordingly.

Fortunately, for Manitoba Hydro, the high prices in 2022 corresponded to one of the highest export years on record, which helped off-set the cost of drought in the previous year. Next slide, please. Thank you. Okay.

So, similar to the previous slide, this chart is an updated version of Figure 4, page 8, from Appendix 4.2 of the application. It compares long-term export contract prices to on-peak opportunity prices, from 2012 to May 1st, 2023.

Opportunity prices include energy sales to MISO but, also, sales to other markets, such Ontario, Alberta, and the southwest power pool, and all short-term export contract prices are -- excuse me, export contract sales to utilities.

So, the red line on the chart represents the export contract prices. Over the last few months, export contract prices have continued relatively constant -- constant in the $140 per megawatt-hour range or .14 cents per kilowatt-hour.

To the extent that there are short-term variations in contract prices, they are mainly the result of variations in the U.S. exchange rate, however, their gradual rise over time is the result of inflationary price adjustments and the commencement of several new, high-value contracts tied to Keeyask.

The blue line on the chart shows the on-peak opportunity prices. You can see that on-peak oppor -- or, sorry, that opportunity prices have been significantly lower than export contract prices, on average, except for a few brief periods, such as the winter of 2021/'22.

The reason for this is that export contract prices reflect the all-in cost of the buyer's alternative capacity resource, whereas opportunity prices are mainly the function of natural gas prices. For this reason, power sold under the long-term export contracts is providing significant additional value, price stability, and price certainty to Manitoba Hydro, compared to selling power in the opportunity markets.

Thank you. This completes my direct testimony. I'll pass the mic over to Mr. Karanwal.

MR. NIKHIL KARANWAL: Thank you, Ms. Sanclemente. Now, I would like to brief the Board

about the conclusions of the review Manitoba Hydro conducted in 2021 into its long-term export contracts. Next slide, please. Thank you.

When I began my Director's duties about two (2) years ago, I inherited responsibility for Manitoba Hydro's portfolio of export contracts that had been negotiated over the last 14 years.

As part of Manitoba Hydro's Strategy 2040 initiative, our review was important to determine if these contracts were still expected to provide the best value to Manitobans, given the uncertain future the company was facing, and whether there were any opportunities to improve on them.

The conclusion of the reviews were that the contracts were performing well, compared to the MISO market, provide Manitoba Hydro with revenue certainty in an uncertain market, provide value in keeping Manitobans' electricity rates lower than they otherwise would be.

And, now, I would like to provide a status update on many Manitoba Hydro's marketing activities with its export customers.

Manitoba Hydro's marketing team maintains frequent contact with its wholesale customer base in Canada and the U.S. Although we have limited

excess firm power available, there are always opportunities for entities to work together for mutual benefits, such as the sharing of surplus seasonal capacity, which could defer the needs for new capacity resources by both sides.

Since the last GRA in 2017, Manitoba Hydro has negotiated four (4) new long-term contracts. As shown on the slide, various types of power was sold. The contract, with Basin Electric is for capacity. The one with Dairyland is a seasonal diversity capacity swap, while the sale to SaskPower is a system power.

Each of these contracts reflects the unique needs and capabilities of the utilities. The revenues from these contracts are included in our Revenue Forecast provided in the application. Ms. Schubert, next slide, please. Thank you.

This slide illustrates Manitoba Hydro's winter capacity position until the 2042 time frame. Actually shows the time frame there. It shows our existing planning capacity supply and compares it to the capacity required to serve the forecast domestic load.

The required (INDISCERNIBLE) resolves and our winter export capacity obligations to various

wholesale customers. I'm showing this slide to highlight the impact of the expiration of our seasonal diversity contracts with Excel Energy in 2025/'26 and Grey (INDISCERNIBLE) Energy in 2030 and '31 on the need date for new capacity resources.

The end of this contracts potentially puts Manitoba Hydro in a capacity deficit position in 2030/'31, assuming the net Manitoba load forecast remains the same as shown on the chart. And that load is growing every time.

For this reason, we are actively pursuing replacement seasonal diversity arrangements. Success in finding replacements would mean deferring the need for additional capacity resources by several year. However, as we've described in our filing, the opportunities for capacity swaps are diminishing, which will add to the challenge.

Finally, I would like to describe the status of Manitoba Hydro's activities with Midcontinent Independent System Operator, that is MISO. Thank you. The next slide.

MISO is a non-for-profit member-based organization that, among other things, operates one (1) of the world's largest energy markets. In comparison, MISO has thirty (30) times the installed

capacity as Manitoba Hydro.

The MISO market is very important to Manitoba Hydro, as we are connected to it through large transmission lines, allowing us to export as much as 3,000 megawatt and compete with higher cost generation.

And in the times of need, these lines allow us to import up to 1400 megawatt from surplus operation in MISO. As such, Manitoba Hydro has a strong interest in the MISO market rules and participating in the evolution.

Likewise, MISO recognizing the unique base load and storage capabilities of Manitoba Hydro's renewable resource, values Manitoba Hydro's input. Significant changes are currently underway in MISO involving capacity degradation and the planning (INDISCERNIBLE).

Changes in these areas are affecting Manitoba Hydro's wholesale customer base in MISO not and will impact whether our sub resources can quality in serving the needs.

As a result, Manitoba Hydros staff continues to be active in all areas at MISO, ensuring our interests, capabilities, and plans are known and understood, and that barriers to trade are eliminated,

or at least minimized.

Thank you. And that completes my direct evidence. I'll hand over back to Mr. Gawne.

MR. KEVIN GAWNE: Thank you. Thank you, Mr. Karanwal. So, I'm going to switch gears a little bit here and talk more long term. I talked to you about short-term water forecasting previously, and now looking at the longer term outlook of supply and demand.

So, I had introduced the concept of using a system approach and the basic problem of balancing supply and demand. And this section of the presentation addresses supply and demand balance over the longer term and the anticipated need date for new resources.

So, we plan to reliably supply our firm customers in the long-term and we do that according to energy and capacity planning criteria, and those are provided in appendix 5.5 of our application.

Consistent with industry practice, we must plan to have sufficient capacity to supply peak total load. The chart on the left illustrates capacity, supply and demand where the blue shaded areas Manitoba customer demand at the time of winter peak, but a planning reserve margin.

The green shaded areas are capacity export obligations. The solid red line is the total capacity supply of the system. As you can see, we are projecting the capacity falling below -- our capacity supply falling below demand in the '30/'31 time frame, indicating the need for capacity at that time.

The chart on the right now -- so, the chart on the left is capacity. The chart on the right is dealing with energy. And given our dependency on water supply, Hydro has an energy planning criteria and that where -- we plan to have enough dependable energy to supply our firm obligations, even in the most severe drought.

And so our dependable supply includes our Hydro generation, including the reservoirs -- reservoir operations that we can perform in a drought. The wind generation that exists in Manitoba, the generation from our thermal plant in Brandon, and a reliable quantity of energy from the import market, or -- that we can import from neighbouring markets.

As highlighted in the chart, Manitoba Hydro anticipates the need for new energy resources in the 2033/'34 time frame. Next slide, please.

Okay. So, this graphic now shows the scenario that underlies our net export revenue

forecast for the long term. A financial scenario included with the application. So, given those anticipated need dates that I showed you on the previous slide, we have developed a resource scenario to support this application.

In terms of capacity, the 2022 scenario assumes that Manitoba Hydro will be maximizing the capacity of our existing system through refurbishment and what's called supply site enhancements.

This is the drop -- this is the drop of water shown with the plus sign in it, denoting the potential to uprate the megawatt output capability of units on the lower Nelson River.

This potential resource is discussed in greater detail in tab 5 and tab 7 of our application. And we will be undertaking more detailed study to confirm the economics of this resource. This scenario also assumes continued use of the Curtailable Rates Program, as well as additional demanding programming.

Starting in the late 2030s, the supply demand scenario assumes growing capacity needs will be met with a dispatchable capacity resource. And for the purposes of this financial scenario, this capacity resources are soon to be met with combustion turbines, where the cost of operating those turbines is assumed

to include the cost of greenhouse gas offsets.

In terms of energy, so the chart on the right you'll see a little grouping of wind turbines shown in the 2033/'34 time frame, which is the beginning of this scenarios addition of wind to this system.

So, our -- our GRA scenario assumes that we meet those energy needs, primarily with wind generation starting in that '33/'34 time frame. So, there's just a few key points I want to make off this slide.

And first, and Mr. Turner alluded to this in the -- in the opening remarks. Manitoba Hydro anticipates that supply and demand will be mostly balanced in the future, which is different than what we've experienced in the past in many settings like this, where large generation stations such as, you know, a -- a large hydro station like Limestone we're added to the system.

We had a relatively long period of time where we had surplus capacity and energy which we monetized, Manitoba Hydro monetized through long-term export contracts. And this is not the outlook going forward, not that you're seeing here.

Instead, we anticipate having smaller

resource additions along the way as Manitoba load grows.

The second point is opportunity energy exports will continue into the future. So, a lot of this analysis of when do we new energy is based on dependable supply and demand balance, but we don't have that critical drought year every year.

We often have surplus water, and that -- - in -- can be monetized through opportunity energy exports. So, you'll notice that there's two (2) additional lines on the chart to the right. The average supply is in black and the maximum total supply is shown in light blue, and this depicts the potential range of supply based on different water conditions.

When supply exceeds our firm load obligations, and back to that supply/demand balance I was talking about earlier, that surplus energy goes to the export market in the form of opportunity energy exports. And those will continue so long as we're a major hydro operator and we're using the export market to help balance supply and demand.

Third, the supply/demand scenario shown here and anticipated in our financial scenario assumes the reliability of the Manitoba Hydro system will be

maintained. So the chart prior to this showed our existing system, and the underlying assumption in these long-term scenarios is that our existing system will be maintained at the level of reliability that we currently have. Next slide, please.

Okay. This is the last topic that I'll be presenting on. I'd like to provide an overview of the long-term outlook for export market prices that is used in forecasting net export revenue for Manitoba Hydro's financial forecast scenario. Thank you.

So the export market price is projected to be in slight decline in real terms. Notable changes here is the shape or slope of the long-term energy price forecast which drives the value of surplus opportunity energy and the costs of our energy imports.

This forecast is the consensus view of five (5) external forecast providers, and while in previous years the energy price forecast had a slight upward trend in real terms -- in other words, with inflation effects removed -- now the energy price forecast is a slight downward trend in real terms.

And why is that? The large amount of wind and solar generation now being built in the MISO market and in the US market in general is displacing

higher variable-cost thermal generation. And that's effective at reducing emissions, but it's also reducing energy prices, and we're seeing that in this long-term projection. Next slide, please.

And this is my final slide. The MISO market and power markets in general are undergoing a foundational change largely driven by decarbonization as introduced by Ms. Grewal in her opening presentation yesterday.

Higher-cost thermal resources are being replaced with low-cost variable renewable resources, primarily wind and solar generation. In the US, the change has been driven in part by both state energy policies and federal tax credits, the latest iteration of which is the Inflation Reduction Act which has hundred of billions in subsidies for wind, solar, and batter -- battery storage systems.

Wind and solar produced about 17 percent of MISO energy in 2022, and I'll -- I'll add that the proportion of wind in northern MISO, you know, south of our border, was much higher -- higher concentration of wind generation in that portion of the MISO footprint.

In the recent MISO Regional Resource Adequacy -- or, pardon me, Resource Assessment

projected that this could approach 30 percent within five (5) years. So within five (5) years, going from 17 percent energy from wind and solar to 30 percent within five (5) years, and then 60 percent by 2041.

New generation within MISO must request -- another indication here in the next bullet is, new generation in MISO must request transmission interconnection through a process that's called the MISO generation interconnection queue.

And as of April 1st, 2023, this queue is at 243,800 megawatts, the generation interconnection requests, and that includes 131,000 megawatts for solar generation and 81,500 megawatts for battery storage and solar storage hybrids.

So much of these requests -- like we acknowledge that much of these requests will not in fact be built. There's excessive amounts of requests for what will actually be built. But even a fraction of this in terms of solar and wind coming on to the system will have dramatic change in the MISO market.

And the last bullet here is the load in MISO is also evolving. The highlight section of the MISO future's report provided insights into the MISO system, and I'll quote:

"Once it transforms to dual summer

and winter peaking as renewable energy and projected demand increase."

So this is an antici -- an expectation of a lot of the planners. April 2021 MISO Futures Report, which was intended to be used for several years with minimal updates, was updated only eight (8) months later. And then, by the end of 2022, work had already begun on providing a new update.

So these outlook revisions are a sign of how rapidly the transition is occurring, and the evolution of the MISO load profile is challenging -- is changing significantly. And this evolution, as Mr. Turner was alluding to, may affect our ability to exercise and leverage seasonal diversity contracts with MISO counterparts.

Manitoba Hydro will continue to monitor the evolution of the resource mix and load -- and load in neighbouring markets, and the vendors who provide the forecasts that we use to prepare our net export revenue will continue to update their forecasts and reflect these anticipated changes.

And lastly, Manitoba Hydro, as we've heard from Mr. Karanwal, we'll continue to engage with our counterparties in these markets to understand

their needs. To the extent there is surplus power that is not required for Manitobans, or there is the potential to leverage seasonal diversity with export customers in the future, Manitoba Hydro will work to secure those contracts that provide value and benefit to our domestic customers.

And that -- this concludes my direct evidence and our presentation of our panel. Thank you.

MS. ODETTE FERNANDES: Thank you, Mr. Gawne. In terms of housekeeping, I'd like to have this presentation marked as Manitoba Hydro Exhibit 30, and the panel is now open for questions.

THE CHAIRPERSON: Thank you.

--- EXHIBIT NO. MH-30: Manitoba Hydro Presentation

THE CHAIRPERSON: Did you want to start, Mr. Peters, or should we have the afternoon break? I don't -- I -- I don't know if you can divide your cross.

MR. BOB PETERS: My cross is always divisible. I'd like to start --

THE CHAIRPERSON: Okay.

MR. BOB PETERS: -- and we'll go until the Panel wants to take a break, or the witness panel wants to take a break.

THE CHAIRPERSON: Certainly.

MR. BOB PETERS: Thank you.

CROSS-EXAMINATION BY MR. BOB PETERS:

MR. BOB PETERS: Good afternoon, witness panel. First matter of business is to check up on my colleagues, Ms. Fernandes and Ms. Hiebert, to see if they've been doing their job.

So you should have received a volume 2 of Board counsel's book of documents about a week ago, just a few extracts from the proceeding. And I see some of you reaching for it, so I suspect you -- you have it. You've got it, Mr. Turner? You can speak at this time?

MR. HAL TURNER: I have it, yes.

MR. BOB PETERS: And I'll also indicate -- and again, if Ms. Fernandes and Ms. Hiebert were doing their jobs -- and I'm almost sure they were -- if I have questions for one (1) witness and somebody else thinks they have something to add that would assist the Public Utilities Board, you're invited to -- to provide it.

Put another way, if one (1) of your witness panel mates screws up and makes a mistake, don't hesitate to jump in and correct it right away so that we've got it on the record as to Manitoba Hydro's best answer.

So with that, let's turn to Exhibit PUB-19-2, which is the book of documents, and let's start with page 5, please, the Total Precipitation Forecast Flow.

Mr. Gawne, this -- for some reason, I think you and I will be talking, but your colleagues will jump in as I've invited them.

You're familiar with this chart, sir?

MR. KEVIN GAWNE: Yes.

MR. BOB PETERS: And to orientate ourselves and the Board on this Figure 1, it starts in September of a particular year and then goes through for fifteen (15) months, correct?

MR. KEVIN GAWNE: Correct.

MR. BOB PETERS: And the drought year was the 2020/'21 year, which you've got with the red bars.

Have I got that right?

MR. KEVIN GAWNE: Yeah. That chart was prepared to provide information on the

precipitation conditions kind of leading up to that year of very low hydro generation. So we went back to start in 2020, September of 2020.

MR. BOB PETERS: I'm not sure what you mean by that. You're saying you could have gone back earlier, or you just --

MR. KEVIN GAWNE: No. The point of -- of that response was to indicate that the effects of our hydro generation in '21/'22, which is what people are calling our drought year, you have to kind of look back a little further and -- and see how the conditions were leading up to that.

MR. BOB PETERS: And so you're telling the Panel, the -- the Board Panel, that your fiscal year 2021/'22 was the drought year?

MR. KEVIN GAWNE: That's where we saw the -- the majority of the effect on our finances, yes.

MR. BOB PETERS: Okay. And you've got three (3) different precipitation plots shown here on the -- on the graph. The grey bars represent normal or average, and the green bars are going back to 2002/'03, correct?

MR. KEVIN GAWNE: Correct.

MR. BOB PETERS: And you plotted

2002/'03 just for relative purposes?

MR. KEVIN GAWNE: Yeah. That was plotted to give us reference to the last major drought Manitoba Hydro experienced prior to 2021.

MR. BOB PETERS: And that was the largest financial loss in Manitoba Hydro's history heretofore?

MR. KEVIN GAWNE: I'll say, yes, subject to check. On a relative basis, I can't speak to our total finance but we -- our -- I believe our -- the impacts of that drought year were around $600 million relative to budget. And I think it was $436 million loss we reported in 2002/'03, subject to check.

MR. BOB PETERS: I think that's a fairly good memory, Mr. Gawne, so we'll accept that subject to your checking it.

If we turn back the clock to September of 2020, as you've done on this chart, Mr. Gawne, Manitoba Hydro was experiencing lower than normal precipitation at that point in time, correct?

MR. KEVIN GAWNE: In September of 2020?

MR. BOB PETERS: Yes, sir.

MR. KEVIN GAWNE: Yeah, that's --

MR. BOB PETERS: That's seen by the red bar?

MR. KEVIN GAWNE: Yeah, the red bar is a little below the -- the grey bar, which is the average.

MR. BOB PETERS: And we see that on a month-by-month basis, the precipitation stayed below normal?

MR. KEVIN GAWNE: Stayed below normal on a cumulative basis? Yes. You can check how the bars change from month to month. You may see a month where things were covered a little bit, but it didn't climb above the average because it's a cumulative chart, but, yes, it stayed below average.

MR. BOB PETERS: Now that you say that, it never even got above the 2002/'03 levels, did it?

(BRIEF PAUSE)

MR. KEVIN GAWNE: You're referring the -- the -- sorry, the 2020/2021 year did not exceed the 2003 -- leading into the '03/'04 drought, 2002/'03 record, correct, they didn't lap. Cumulative total was -- was below.

MR. BOB PETERS: And I'm not going to get hung up on the word 'cumulative', Mr. Gawne, but these aren't cumulative, this is month by month, correct?

MR. KEVIN GAWNE: Oh, so, how you construct this chart is it's -- like, September is the absolute amount of precipitation that our system received on a -- across the whole 1.2 million square kilometres that we're looking at and all collapsed into one (1) bar.

So, we show in -- in, for instance, 2020 of September, roughly 40 millimetres. And then in October, we didn't receive -- that bar is plotting at about 75 millimetres. We never receive 75 millimetres in October. It's --

MR. BOB PETERS: No, I --

MR. KEVIN GAWNE: The difference between the two (2) is just -- is cumulative. Okay.

MR. BOB PETERS: Yeah, I -- I understand. And I -- I appreciate that. You've -- what you're doing is you're adding the precipitation every month and the bars are getting larger based on -- on that accumulation of precipitation?

MR. KEVIN GAWNE: Correct.

MR. BOB PETERS: And in all of those

instances, the accumulated actual precipitation in the 2021 year were always below the actual precipitation accumulated in 2002 and 2003?

(BRIEF PAUSE)

MR. KEVIN GAWNE: That's correct.

MR. BOB PETERS: So, as we go down the -- the 'X' ax, as somebody referred to it this morning, and we get over to February and March, and then we look again for this red bar, we're seeing that in February and March we're still -- we're still below normal, and certainly below even the drought year of 2002/'03, correct?

MR. KEVIN GAWNE: That's correct.

MR. BOB PETERS: Would it be fair, Mr. Gawne, at this time, to suggest that -- at this point in time, was Manitoba Hydro concerned that it might be entering into a drought period?

MR. KEVIN GAWNE: Like I said in the outset in the presentation, we're looking at this information every week. So, certainly as we see, you know, months and months of consecutive precipitation being below average, then, you know, we're -- we're alive to the water conditions all the time.

So, where we'd be coming concerned, we were projecting, you know, generation at the point -- once we got into March, April time frame, we were projecting a hydro generation for fiscal year '21/'22 to be below average, but we were also advising executive and others that there's still a lot of -- you know, there's the springtime.

So, there was -- as I had said in the outset, March through August is when we typically get the most water in our system, so there was a lot of time left in the rain season to see the conditions recover.

So, yes, we had -- storage conditions were about -- on April 1st, I think, overall storage conditions were about 80 percent of average and our flows I think were about 80 percent of average, and that was partially a product of -- of low snow melt runoff and the cumulation effect of a drier fall.

So, we are aware of that, and we are -- we are planning accordingly with the understanding of our storage and -- and flows and the -- the state of the basin.

MR. BOB PETERS: So, I take your answer to mean Manitoba Hydro was aware of the conditions, certainly but, at that point in time, it

was too early to be considering that there was a drought upon -- upon Manitoba?

(BRIEF PAUSE)

MR. KEVIN GAWNE: I think we've heard Mr. Cormie explain this in the past, that a flag of there's a drought or there's no drought really is -- is kind of difficult thing to -- to answer to. It's not like a switch is flipped and we're now in drought.

So, yes, we are looking at conditions. And we were well aware that conditions were below average, and our planning accounted for that.

But, as Daymark has confirmed with us I think to a question -- responding to a question by the Board where they characterized the use of our operating priorities, and those priorities I walked the Board through earlier today, is those priorities apply under all water conditions. And where we are in those priorities kind of may be driven by water conditions.

So, we are looking at, you know, the chance of drought according to those priorities at all times.

MR. BOB PETERS: We'll come back to

those priorities, Mr. Gawne, in a bit. Turning the page to page 6 of Board counsel's book of documents, we see hydraulic energy from inflows. And I suppose, because it's a spaghetti chart, it's also drawn by an engineer. Have I got that right?

MR. KEVIN GAWNE: I think we use a computer for that, but, yes, an engineer designed that chart, no doubt.

MR. BOB PETERS: No doubt. And even with the low precipitation that you've told us about on the previous page, Hydro is seeing on the red line that the hydraulic energy from inflows is approximately average to above average through early April?

(BRIEF PAUSE)

MR. KEVIN GAWNE: Yes, that -- the aggregate level is -- is close to average there, yes.

MR. BOB PETERS: And the energy in storage also on page 6 of the book of documents, but at the bottom, if we follow the blue line from 2020, in September and October, all the way through and switching to the red line for the change in calendar years to March, April of 2021, the energy in storage

is near average.

Would I have that correct?

(BRIEF PAUSE)

MR. KEVIN GAWNE: Yeah, it was slightly below average, but -- terawatt hour below average. Yeah. Just one (1) sec.

MR. BOB PETERS: And -- and a point that I wasn't clear on in your --

MR. KEVIN GAWNE: One (1) sec, sorry.

MR. BOB PETERS: Oh, I'm sorry.

(BRIEF PAUSE)

MR. KEVIN GAWNE: Sorry, Mr. Peters.

MR. BOB PETERS: And, Mr. -- Mr. Gawne, I want to make sure I understood something you said in your direct evidence when you were reviewing your -- your PowerPoint.

On the screen in front of you, even if I could, if I counted those light grey tracings, that would represent forty (40) -- forty (40) tracings?

MR. KEVIN GAWNE: I believe, yeah. So, the -- the -- if you look at the legend at the

top, it says, "1981 to 2019." And then you add on a few more years. So, that gets you -- it's roughly the forty (40) year record.

MR. BOB PETERS: And would the Board be correct in understanding that each of those lines has been drawn assuming the water and storage will also run through Keeyask generation -- generating station, which was not in place or in service until after 2020?

MR. KEVIN GAWNE: This chart is from the Interim Rate Application and -- just bear with me one sec.

(BRIEF PAUSE)

MR. KEVIN GAWNE: I don't know if it's possible to pull up the same energy and storage charts that I just showed, in parallel. Like, if you can pull the two up side by side?

(BRIEF PAUSE)

MR. BOB PETERS: Slide 12, I think, Ms. Schubert.

(BRIEF PAUSE)

MR. KEVIN GAWNE: Testing the limits of our -- all different systems here.

But so, yeah, the range estimates on those storage charts -- and, of course, one starts in April and the other ones starts in -- it's a calendar year, so it does make the comparison a little different -- difficult.

But they both bottom out at around 5 terawatt hours and they peak out at around -- of course, unfortunately, back in the Interim Rate Application, which is the charts that you see on the left, that blue line didn't exist. We didn't know that was going to happen.

But -- so there's no peaky (sic) blue line there. But the -- that topped out at about 32 terawatt hours.

So, you know, we -- we did our conversion. Once Keeyask units started to come online, we basically flipped over to an assumed set of production. And we're -- we're just showing this on an equal basis. Like, there's flow years here back from the '80s where we never had, you know, Wuskwatim and Limestone.

So when we presented this chart to the Board at the Interim Rate Application, I'm quite certain that we had already factored in the addition on Keeyask in our charting.

MR. BOB PETERS: All right. And, Mr. Gawne, I think it's important for the -- for the Board to understand that -- maybe try it this way.

You -- you mentioned that -- one of the witnesses mentioned that the Winnipeg river system is important because a bucket of water in the Winnipeg river system is going to flow through fourteen (14) of -- of sixteen (16) Manitoba Hydro generating stations. Right?

But forty (40) years ago, maybe all sixteen (16) of those generating stations hadn't yet been constructed, but you still have a spaghetti line on your chart.

And what I'm wanting you to explain to this Board, or to confirm for this Board, is that you've now adjusted this chart to assume that prior years' energy and storage is flowing through all of the generating stations that it would flow through today.

MR. KEVIN GAWNE: Confirmed.

MR. BOB PETERS: Okay. Thank you for

that.

MR. KEVIN GAWNE: If I could just add, Mr. Peters, this is a representation of our storage. The detailed modelling that I spoke of earlier, we're accounting for what generators are there or not there. And whether a unit at Keeyask has been commissioned or -- or is still -- you know, still being worked on being built or out of service.

So this is just an aggregate picture. Maybe not the big -- you know, the big, single dashboard metric that we might look at. But it's -- it's a level deeper, but it's -- this is not used directly in our operations planning.

We're -- you know, we're remodelling the system in great detail.

MR. BOB PETERS: A minimum. You've summarized it for presentation to third parties, including this Board. Probably your own Board?

MR. KEVIN GAWNE: That's correct.

MR. BOB PETERS: All right. And Mr. Gawne, it appeared in -- I'm going to ask you to take this one away. In minimum filing requirement answer number 37, Manitoba Hydro also filed energy and storage.

And it appears, to -- to my eyes and

maybe even Mr. Hacault's fading eyes, that the information is stated the same way as it was at the Interim, which leads us to, again, ask for your confirmation that both were updated to reflect Keeyask being in service in these -- in these charts.

MR. KEVIN GAWNE: Yeah, I don't have that MFR in front of me. However, I'm quite certain -- you're speaking of MFR 37 with this rate application?

MR. BOB PETERS: Yes, sir.

MR. KEVIN GAWNE: Yes, it should --

MR. BOB PETERS: All right. We'll take that as a yes, subject to check. And I'll -- I'll afford your counsel an opportunity to correct it if it's wrong. But thank you for that.

All right. Let's -- let's pick it up here, Mr. Gawne, and look at page 6, the hydraulic energy from inflows, again, at the top. And let's look on the red line.

Come May -- in May of 2021, in three (3) weeks, it appears that the hydraulic energy from inflows falls from -- I'm sorry. Yes, if we could -- I think we can stop the split screen and we'll go to -- to the top of that page, please. To the graph at the top. Yes, there we go. Thank you.

So on this hydraulic energy from inflows chart, and we picked the 2021 red line, and we get over to May of 2021, is it correct that in an approximate three (3) week period, it falls from above average to a low point, almost a record low for that time of year?

MR. KEVIN GAWNE: And that's correct. And I think that what we're seeing there -- subject to check -- is it was above average, but maybe because our melt was a little earlier, so we saw a little bit of a pulse of water coming in the runoff. And so, that red -- the red line and kind of early April/May time frame, crept above the average. And then, it quickly receded below, after the -- what snow was on the ground had melted.

MR. BOB PETERS: All right. And by the time we see that red line take its dip, if you can -- if I can call it that -- in -- into May, the snow melt would have already been accounted for?

MR. KEVIN GAWNE: I mean, there may have been some -- still some snow up north to -- to turn into water, but for the most part --

MR. BOB PETERS: All right. Mr. Gawne, in your offices every day, you're meeting and talking about this.

Does this now -- this three (3) week trend -- suggest to you that there's a drought that's looming?

MR. KEVIN GAWNE: In the May time frame, where -- we -- we were -- like, our communications were that conditions were below normal. And we were projecting below average precipitation -- pardon me -- below average hydraulic generation, assuming average precipitation for the remainder of the year.

So technically, whether a drought was looming or not, we're aware of that condition. And the runoff -- the spring runoff was definitely below normal.

MR. BOB PETERS: So I'm taking, in your world, Mr. Gawne, you don't -- you don't lose sleep at night whether it's raining or not raining. Like, this is all part of -- every day you just go in and incrementally update where you are on -- on the hydrology of the Corporation.

MR. KEVIN GAWNE: We don't lose sleep over night -- we look at this and it's -- we take it very seriously.

So, you know, to say I don't lose sleep overnight sometimes might be a bit of a stretch, but

we're updating the conditions regularly. And we have a plan to address things. We know drought will happen. Our system is planned for drought and we operate according to the procedures that we have in place. And -- and, you know --

MR. BOB PETERS: So --

MR. KEVIN GAWNE: -- the independent consultant, Daymark, had reviewed our operations and we followed those procedures accordingly.

So I am confident in our procedures and the team that we have providing the information to guide our operations. So that's -- that's certainly not what keeps me up at night.

MR. BOB PETERS: All right. So by the end of May in 2021, I think you indicated that you certainly knew your hydraulic energy from inflows was below normal. And if that -- you only had normal precipitation for the balance of the year, you were going to -- you were going to have reduced hydraulic energy, correct?

MR. KEVIN GAWNE: That's correct.

MR. BOB PETERS: And, at the end of May, did you and your team make -- make Mr. Turner and his executive team aware of where this -- the Corporation was in terms of its hydraulic energy and

the expected generation capabilities?

(BRIEF PAUSE)

MR. KEVIN GAWNE: If I could ask Ms. Schubert to pull up the Appendix 5.3 please.

This is our Drill Management Planning document. If you could go to page 28 please. That's not the page I was looking for. It's a -- it's a table -- the table on page -- it might be page 28 of the document -- the -- the PDF. There we are.

So, and we're not going to read through every line here, Mr. Peters, but the intent of this graphic is to give a little more detail as to the comment that I was providing on the outset about our continuous -- communication of -- of conditions.

So, every month Manitoba -- like our team and the water team that works with us, we're reporting on conditions in the system. And if we look at the second kind of chunk of data in here, starting at forecasts issued, pardon me. The first -- the -- the beginning of the table.

Operating groups and -- operating groups and senior executive and so you can look at the various types of reports that are produced and the

frequency of those reports and where -- RX denotes reported to executive.

We're reporting on flows, reservoir levels, system potential energy and storage system potential energy in -- inflows and precipitation to executive on a -- a monthly basis at minimum. So, that information does get conveyed.

You look for the RX in the top portion of that table and then go across, that's the type of information that's going to our executive team.

MR. BOB PETERS: And so where it says minimum frequency, you're saying minimum on a monthly basis, Mr. Turner would have been made aware of what you're just telling us?

MR. KEVIN GAWNE: Well, Mr. Turner was not vice president -- my vice president at that time, but yes, it went to Lauren Midford (phonetic).

MR. BOB PETERS: Does this table tell us, Mr. Gawne, whether your then -- oh, I'm sorry --

MR. KEVIN GAWNE: Pardon me, go on, sorry.

MR. BOB PETERS: I was just going to say, does this table that you have -- had put up on the screen, tell us whether -- by the end of May this situation that we see developing on page 6 of Board

counsel's Book of Documents, had been reported through to the executive or was it reported some time later?

MR. KEVIN GAWNE: Those are regular reports that are produced on a monthly basis, but, you know, there was additional reporting that was being prepared, updates to our projected hydro-electric generation, in that May time frame.

MR. BOB PETERS: Is it month-end report, is that --

MR. KEVIN GAWNE: Generally, yeah, it's a monthly report so.

MR. BOB PETERS: All right. Well, the May 2021 precipitation and hydraulic energy from inflows was -- as -- together with the energy in storage were below normal, Mr. Gawne.

There were also some regulatory proceedings before the Public Utilities Board referred to as a status update process requested by some of Manitoba Hydro's ratepayers and Interveners.

Were you aware of that, sir?

MR. KEVIN GAWNE: Not in detail.

MR. BOB PETERS: Was anybody on the panel aware of that regulatory proceeding going on?

MR. HAL TURNER: We were aware that it was going on, we wouldn't have been -- would not have

been involved in great detail, so if the members of the Rates and Regulatory Panel would obviously have a lot more information and detail of what happened at that -- or what was happening at that time.

MR. BOB PETERS: All right. Then -- this might go quicker. The -- on page -- excuse me, on Book of Documents, page 7, Manitoba Hydro sent a letter to the Public Utilities Board dated June 9th.

Did anybody on the panel contribute to the composition of that letter? Can you recall?

MR. KEVIN GAWNE: I believe -- I believe there was an appendix to this letter.

MR. BOB PETERS: At -- and -- you are correct and we'll -- we'll come to that, it's on page 13 as an extract from it, Mr. Gawne, but I didn't put the whole appendix in. If you need it to --

MR. KEVIN GAWNE: So, for instance, on page 2 of this letter, our group would have been involved in -- in characterizing the current water conditions.

So, at page 8 of the PUB's Book of Documents, you see a series of summary information provided by Manitoba Hydro. Where at four (4), we explained the current water conditions storage and range of net export revenues were provided, I believe,

in that -- as an appendix to this letter.

MR. BOB PETERS: All right. And on page 10, of Board Counsel's Book of Documents, there's a heading near the bottom. It says,

> "Too early to speculate and draw conclusions on the impact of low waters."

MR. KEVIN GAWNE: That's correct.

MR. BOB PETERS: Did you author that, Mr. Gawne?

MR. KEVIN GAWNE: I don't know if I authored that title specifically, but Appendix 4 which provides a discussion of the water supply conditions for '21/'22 and our energy outlook.

So, all of -- sensitivity analysis, our group would have been involved in preparing the technical information behind that.

MR. BOB PETERS: All right. On top of page 11 of this Board counsel Book of Documents, the same letter from June the 9th, by Manitoba Hydro to the PUB, there's a state -- a statement that for the 2021/'22 forecast period:

> "Overall system flows are approximately 80 percent of average for this time of year and hydraulic

generation is projected to be 5 percent below normal, well within the typical year-to-year variability."

Correct? I read that correctly?

THE CHAIRPERSON: Actually, Mr. Peters, it says 5 percent below budget, not below normal.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Sorry, Mr. Gawne, let me rephrase my question. On the top of page 11, in the last -- last sentence of the first full paragraph:

"For the 2021/'22 forecast period, overall system flows are approximately 80 percent of average for this time of year and hydraulic generation is projected to be 5 percent below budget, well within the typical year-to-year variability."

I read that correctly this time?

MR. KEVIN GAWNE: You did, Mr. Peters.

MR. BOB PETERS: Thank you. And --

MR. KEVIN GAWNE: Just to add a little bit of context to that. If you recall, and I was speaking about it in our direct that, you know, we don't have the ability to forecast in -- precipitation in a -- on a long term -- long range basis, so we prepare our estimates of hydraulic generation, as well as the export revenues, based on a range of potential flow conditions.

So, when we state here that, based on -- on system inflows, based on overall system flows, are approximately 80 percent of average for this time of year, so that set the stage, and we were accounting for the storage that we had in reservoir storage at that time.

Hydraulic generation is projected to be 5 percent below budget, but that five (5) -- that number is the average of the range of water conditions that we were projecting for the remainder of the year.

So, there would have been cases where that -- that are baked into that 5 percent below average number that they would have been lower, so just so we're clear. That's based on an average of a -- a multitude of potential flow conditions from that point forward.

MR. BOB PETERS: Can I summarize your

answer Mr. Gawne, by a -- you're telling the Board that, at that point in time that we're referring to here in this June 9th letter, Manitoba Hydro saw that they were 80 percent of average on the water and 5 percent below on the generation side?

MR. KEVIN GAWNE: Yeah. Our storage condition was the 80 percent of average for that time of year and our projections for the year were 5 percent below budget.

MR. BOB PETERS: I'm wondering, Mr. Gawne, when we look at that sentence again and we see that overall system flows are approximately 80 percent of average, we're not talking about storage there, are we?

MR. KEVIN GAWNE: That -- in that statement, we're -- we're talking flows. If -- if I said storage, I misspoke.

MR. BOB PETERS: Thank you.

MR. KEVIN GAWNE: I think an important thing to consider here, and we went through this in -- in considerable detail, in the interim rate application, where, again, you can -- you can be cautious at looking at these aggregate numbers. It doesn't tell necessarily the entire story, but our modelling accounts for where the storage is and where

the flows are in the system, relative to our generation.

I think, in our -- if you were to read the appendix to this letter, Appendix 4, where we provide a discussion of our water conditions, I think we explain that there the conditions were quite varied across the entire basin. The southern portion of the basin was drier than the north. The Churchill River Basin was actually in flood.

MR. BOB PETERS: Okay. Thank you, Mr. Gawne. If we go back to page 6, though, and we look at this hydraulic energy and storage -- I'm sorry -- sorry, let's look at the -- yes, the energy and storage chart.

Why is hydraulic generation only 5 percent below budget in June of 2021, when energy and storage is well below normal?

MR. KEVIN GAWNE: I believe the -- first of all, I believe the simulations that were behind these projections in -- in this letter of June 9th were based on runs done, subject to check, in mid-May time-frame.

So, it is probably more appropriate -- appropriate to go back to the mid-May, where, at that time, I think, our storage condition was -- and this

is the storage condition across the entire Nelson-Churchill River Basin, if you look at the numbers, let's say 12 1/2 terawatt hours, relative to, you know, now visually, just trying to estimate about 12 1/2 terawatt hours and, on average, they would have been about 15 terawatt hours. Okay. So, that's, let's say, 2 terawatt hours below average, and our hydro system average is in the range of 36 terawatt hours.

So, you know, storage is very important, but the bulk of our generation comes from the flows that are coming in to the system and they're used in that year. So, I think -- I think that's -- if that helps with the -- with the answer, Mr. Peters.

MR. BOB PETERS: The energy and storage is about 25 percent below normal at that point in time, isn't it, using your numbers of 12 terawatts compared to 16, approximately?

MR. KEVIN GAWNE: Yeah, subject -- yes, I'll go with that. Again, I'll have to look back at when the actual runs and simulations were prepared for this memo. That's 80 percent or 75 percent of total storage, just eye-balling off that chart.

MR. BOB PETERS: All right. Let's turn to page 14 of Board counsel's Book of Documents.

This is a July 6th letter that Manitoba Hydro wrote to the Public Utilities Board, apparently, in response to Intervener comments that had been filed, and, at the bottom of page 14, I guess the -- the last sentence, the --

> "This information clearly establishes that there has not been a substantial change in Manitoba Hydro's financial circumstances [and it goes on to the next page] since Orders 59 of '18 and 69 of '19, when the PUB approved just and reasonable rates."

Do you see that sentence, Mr. Gawne?

MR. KEVIN GAWNE: I do.

MR. BOB PETERS: And you will acknowledge that, by July 6th of 2021, Manitoba Hydro's financial circumstances had turned negative, due to lower than normal precipitation?

MS. ODETTE FERNANDES: Mr. Peters...?

MR. BOB PETERS: Yes?

MS. ODETTE FERNANDES: In terms of the financial circumstances, I'm thinking these questions are better placed for the Revenue Requirement Panel, who can speak to those financial circumstances.

MR. BOB PETERS: Well, thank you, Ms. Fernandes. We'll -- we'll follow that up, then, with them.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: But let's, then, turn, Mr. Gawne, when the generation is below normal, you're expecting financial circumstances to likewise be below normal. Correct?

MR. KEVIN GAWNE: Well, all else being equal, yeah.

MR. BOB PETERS: It follows?

MR. KEVIN GAWNE: Yeah.

MR. BOB PETERS: Okay. All right. So, we won't get too engrossed in the math, but there was on page 20 of Board counsel's Book of Documents, under the "Conclusion from Manitoba Hydro," there's a sentence that, Manitoba Hydro submits, and I'm just under the word "conclusion" in that paragraph. Yes.

> "Manitoba Hydro submits that the Coalition, as applicant, and all Interveners, have failed in their collective efforts to establish, on any factual basis, that there has been a substantial change in

Manitoba Hydro's circumstances."

At that point in time, Mr. Gawne, leaving aside what the Interveners are saying, is it your view that based on the water flow situations, there would have been a change in Manitoba Hydro's financial circumstances?

MS. ODETTE FERNANDES: Mr. Peters, once again, this is -- this letter was written by Mr. Czarnecki and he was basing comments around a legal test that needed to be established. So, I don't think it's a fair question for this witness.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Would it be correct, then, Mr. Gawne, that, come July of 2021, you and your team were not aware as to what would be the effect of the lower than normal energy and storage would have on the Corporation's financial circumstances?

(BRIEF PAUSE)

MR. KEVIN GAWNE: Mr. Peters, we do our group forecasts and net export revenues and we're accounting for water supply conditions in our modelling. So, we would have had an understanding of

how our projections are looking, relative to budget, but that's one (1) component of our entire financial operations, so, I can't speak to all the other pieces that go into the financial operation of Manitoba Hydro. I -- I think --

MR. BOB PETERS: And I'm not --

MR. KEVIN GAWNE: -- as far as I can go is -- is to --

MR. BOB PETERS: I'm not asking you to, Mr. Gawne. I thank you for that, but, in terms of forecasting net export revenue, you knew that that was going to take a hit because the water flows were down?

MR. KEVIN GAWNE: Assuming -- assuming a range of future water supply conditions from that point forward, the projection was we were going to be below budget on hydrology -- or, pardon me, on hydro-electric generation.

And, as I had said earlier, all else being equal, we'll be -- that would put us in a below-budget position, but, as I said in my outsets, the majority of the water that we receive in our system comes between March -- March and August, or even early fall.

So, there was considerable uncertainty in the water supply conditions still, at that time,

despite having below-average storage, and we've seen rapid turnarounds in water conditions. So, hesitant to say I knew -- we knew that we would be below average -- or I'm not correctly repeating your words, but hesitant to -- to -- to give that level of certainty.

We also know that water conditions can change dramatically, and we saw that in -- in 2018 and 2019 in the fall time frame when conditions changed from almost a pretty severe drought to record high for the fall period.

MR. BOB PETERS: You told the Board this morning -- I'm sorry, I guess it was this afternoon, Mr. Gawne, that in March there's a ten (10) week period that is important for precipitation for Manitoba Hydro, correct?

MR. HAL TURNER: Actually, Mr. Peters --

MR. BOB PETERS: That was you?

MR. HAL TURNER: That was me.

MR. BOB PETERS: Okay.

MR. HAL TURNER: And I -- I said that the -- typically the next two (2) weeks are important, but I also made a point --

MR. BOB PETERS: Ten (10) weeks?

MR. HAL TURNER: Ten (10) weeks, excuse me. Yes, my apologies. Typ -- typically the next ten (10) weeks are important. That's historically when we've seen the majority of our precipitation.

But as I mentioned, in 2019, and Kevin talked about in 2018, we saw significant precipitation in the fall. So, it's not a hard and fast rule.

MR. BOB PETERS: Okay. And -- and make no mistake, you're not -- things change, they change daily, and if the -- if the skies opened up and the precipitation came, a lot of these graphs and charts would look a lot different than do now.

I mean that's understood, correct?

MR. HAL TURNER: Correct.

MR. BOB PETERS: Now, let's just deal with what we had at the time. And, Mr. Gawne, I think you've -- you've gone as far as you can by saying that net export forecasting was going to be negative relative to budget at that point in time?

MR. KEVIN GAWNE: Yeah, assuming normal precipitation for the remainder of the year.

MR. BOB PETERS: And is it -- is it correct, and I'm not sure we've said this, that Manitoba Hydro's largest risk, biggest risk is that of

drought?

MR. KEVIN GAWNE: Drought is among the enterprise risks. I believe it's in the list of top nine (9), divided in tab 2 of our application.

MR. BOB PETERS: What's the top risk?

MR. KEVIN GAWNE: I'd have to look at that list, but I don't think I'm on it.

(BRIEF PAUSE)

MR. BOB PETERS: Mr. Turner, you weren't part of the executive, I think is what I heard, back in July of 2021?

MR. HAL TURNER: That is correct.

MR. BOB PETERS: When did you assume your Vice President's position? And I apologize, I haven't seen your CV that --

MR. HAL TURNER: It's fine. It was November.

MR. BOB PETERS: Of '21?

MR. HAL TURNER: November of 2021, yes.

MR. BOB PETERS: Thank you, sir. Well, let's turn to a new document that you may have seen, Mr. Turner and that would have been on page 29

of Board counsel's Book of Documents.

This is Manitoba Hydros publically released First Quarter Financial Report.

Would you have seen that, Mr. Turner? Mr. Gawne, would you have seen that?

(BRIEF PAUSE)

MR. KEVIN GAWNE: I saw that in your Book of Documents, yes. I do want to retract a comment that I made earlier about top enterprise risks. It does appear that drought is listed at the top of this list. I'm not sure if it's ranked, but --

MR. BOB PETERS: And you're number 2?

MR. KEVIN GAWNE: Interest rates. I have nothing to do with interest rates, no.

MR. BOB PETERS: No. Thank you, Mr. Gawne, we -- we have that. I wasn't going to -- I'm not testing your memory. I'm not holding that against you --

MR. KEVIN GAWNE: Thanks.

MR. BOB PETERS: -- but thank you. What I will hold against you is if you haven't seen, in real time, the Manitoba Hydro first quarter report found on page 29 of Board counsel's Book of Documents.

I appreciate you've seen it in the Book of Documents, but I take it you would have seen it, possibly, at the end of June or early July of 2021, Mr. Gawne?

(BRIEF PAUSE)

MR. BOB PETERS: Mr. Turner, feel free to jump in if -- if your memory is clear on this point.

MR. HAL TURNER: Mr. Turner is challenged by these mics. I apologize.

We see our financial rep -- performances reported on a regular basis, so yes, we would have seen these reports, or I would have seen these reports. I can't speak for Kevin --

MR. BOB PETERS: No.

MR. HAL TURNER: -- whether or not he actually saw it at that time.

MR. BOB PETERS: And I appreciate these come out every quarter and -- and there's lots of them, but I'm going to draw your attention to the paragraph that's highlighted on the screen in front of you, that we've got a Q1 report and this is issued as of June 30th.

The Corporation is telling the world

that Manitoba Hydro is projecting a break-even net income for the 2021/'22 fiscal year. Do you see that?

MR. KEVIN GAWNE: Yes.

MR. HAL TURNER: We do.

MR. BOB PETERS: Yeah, and it's break even. I take that to mean zero dollars.

Is that what you take it to mean?

MR. HAL TURNER: That is how I would interpret it as well.

MR. BOB PETERS: And it was compared to a budgeted net income of $190 million, correct?

MR. HAL TURNER: Correct.

MR. BOB PETERS: And the reason for that loss of projected net income of $190 million is relative to export sales as a result of unfavourable water conditions. And so, Mr. Gawne, Ms. Sanclemente, Mr. Karanwal, you would all have been aware of that situation.

Would I have that correct?

MR. KEVIN GAWNE: Yes.

MR. BOB PETERS: And this page 29 would have been a consolidated report.

Would that also be your understanding, Mr. Turner?

MR. HAL TURNER: It would.

MR. BOB PETERS: Now, Mr. Gawne, you asked about appendix to a June 9th letter, and I'll turn back, please, in my Book of Documents to page 13. And we see a part of that appendix 1, do we, Mr. Gawne? That's the one you're referring to?

MR. KEVIN GAWNE: I thought it was appendix 4 to the letter.

MR. BOB PETERS: I'm sorry, sir, I think your mic -- you were looking at appendix 4 I think you said?

MR. KEVIN GAWNE: I think -- I think the letter we were discussing earlier referred to appendix 4, which was an update on water conditions.

MR. BOB PETERS: All right. I've got your point, but looking on page 13 of Board counsel's Book of Documents, we look to the bottom chart, we have just seen in the quarter, Q1 report, there was a budgeted net income of $190 million for the 2021/'22 year, but that was on a consolidated basis.

So, on the electric basis, would I be correct, Mr. Turner, that the projected net income, the budget net income was $177 million?

(BRIEF PAUSE)

MR. HAL TURNER: Correct, subject to check.

MR. BOB PETERS: All right. And so if I'm -- I'm trying to connect the time line dots here in that on June the 9th, on page 13, Manitoba Hydro was telling the Public Utilities Board that the forecast budget net income is 177 million on the electric side and then some three (3) weeks later, or the end of the Q1 report, that 177 million has disappeared, is lost, correct?

(BRIEF PAUSE)

MS. ODETTE FERNANDES: Mr. Peters, again, I -- I'd suggest that these questions be better posed for the Revenue Requirement Panel.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Okay. Ms. Fernandes, let me ask your witness, if you'll allow it, the question to Mr. Gawne.

At the time -- did -- did you or your team, Mr. Gawne, have any input into the information that goes into Manitoba Hydro's Q1 report from 2021/'22?

MR. KEVIN GAWNE: The Q1 report that's at page 29 of your Book of Documents?

MR. BOB PETERS: Yes, sir. And I think I've only -- I've only just put in a -- one (1) page of it, but yes.

MR. KEVIN GAWNE: Thank you. We would have had input to that in terms of projected net export revenues, the timing of which -- the timing of, I can't say for certain the timing of when we prepared our estimates versus when these reports are prepared, exactly line up.

I -- I would have to go back and -- and look into that, but --

MR. BOB PETERS: But -- but, Mr. Turner, these quarterly reports are being prepared

MR. HAL TURNER: I was -- I was actually going to ask you, Mr. Peters, if you know the date that this quarterly report was published. I'm not sure that's a safe assumption.

MR. BOB PETERS: Okay. I -- I don't have that, so why don't you take that as a takeaway, and -- and maybe you can get that back to us.

MR. HAL TURNER: Sure.

MR. BOB PETERS: All right. So, let's -- let's elevate the questions a little bit higher

here and keep Mr. Fernandes's hands away from the microphone, if we can, that it appears that Manitoba Hydro in its Q1 report is suggesting that -- it says 190 million, but we know that it was 177 million of electricity net income is not going to materialize under the new forecast at the end of Q1 of 2021, correct?

MR. HAL TURNER: I -- I just have to -- I don't agree with the word 'we know'. As we've spoken to many times, we -- we can't predict the weather. Things can change rapidly.

So, we're forecasting that but, Mr. Peters, I -- we don't know that.

MR. BOB PETERS: Okay. That's a fair correction, Mr. Turner. What you're saying on page 29, if we can go back to it, of Board counsel's book of documents, is that, based on what had been budgeted for the year of 2021/'22, the entire net income, or profit, has now been downgraded to zero dollars.

That we know, do we not?

MR. HAL TURNER: I think the key word there is the fifth word, which is 'projecting', current -- or and the fourth word, 'currently projecting'.

MR. BOB PETERS: Okay. Thank you for

that.

MR. HAL TURNER: So, as -- as we talked about in the past, in 2018/2019 we saw significant fall precipitation that had material impacts to our net export revenue forecast.

So, again, all -- all we can do at this time is say, based on average conditions going forward, this is what we are projecting.

MR. BOB PETERS: Thank you for that. As we know -- as we know, Mr. Turner, a breakeven net income for 2021/'22 would be $260 million better than what actually happened?

(BRIEF PAUSE)

MR. HAL TURNER: Subject to check on the 260 number, I -- I believe you're correct, yes.

MR. BOB PETERS: I remembered that from your president, so I'll -- I'll, of course, blame her if I'm wrong, but thank you for that.

All we know now is that the Q1 projections had been downgraded, and that's where it stood, correct?

MR. HAL TURNER: Correct.

MR. BOB PETERS: Without going too

many times backwards in this book of documents, back on pages 5, 6, and 7, if -- if, Mr. Gawne, you were to look at the July 2021 numbers and charts, would you agree that the precipitation is still below normal?

Would you agree that the potential hydraulic energy from inflows is also well below normal?

And you would -- would you agree that the potential energy and storage is likewise below normal on those pages, 5 and 6 of the book of documents?

MR. KEVIN GAWNE: Asking about July 2021? I would agree, yes.

MR. BOB PETERS: Yeah. It's not getting better, is it?

MR. KEVIN GAWNE: No. And the rain season was coming --

MR. BOB PETERS: To an end.

MR. KEVIN GAWNE: Well, we were getting well into the rain season. And I would add that July was an absolute dry month. And July 2021 was an extremely dry month where we experienced record low precipitation over some of those key locations in the basin.

And we were experiencing in the

July/August time frame extreme amounts of evaporation from our reservoirs. If you even look back to -- we may be able to pull it up from the interim rate application, but our energy from inflows for the Winnipeg River basin was actually below zero.

So, what does that mean? All those tributaries that are flowing into the lakes and rivers aren't keeping up with the amount of evaporation that's going back into the atmosphere from the lake, so there's -- it was an exceptionally, exceptionally dry July. And -- and, you know, that's one (1) of our highest reset months. And we went through that month experiencing an extreme -- extremely dry month.

MR. BOB PETERS: No, I appreciate the recall on that, Mr. Gawne. Thank you for that.

Would you agree, Mr. Gawne, that if we repeat that same examination of the figures on pages 5 and 6 of the book of documents for the months of August and September, the Board will see that lower precipitation and lower hydraulic energy from inflows and lower energy and storage persisted through those months, as well?

MR. KEVIN GAWNE: We remained below average, but a little bit of caveat on that. If you look at how -- so, the red bars are the 2021 --

2020/'21 period. And if you look at the step between July and August, you know, you're looking at an accumulation of about 70 millimetres, let's say. It goes up to 400 millimetres from 330, roughly.

So, if you look at the slope between those two (2) bars, it's actually steeper than the average. So, our August -- we got a bit of a pulse of water in August. You know, it wasn't -- it wasn't extremely low. August wasn't too bad.

MR. BOB PETERS: But still lower than normal, as I suggested?

MR. KEVIN GAWNE: Didn't recover. It didn't recover to average.

MR. BOB PETERS: Okay. I'll accept that. Back to pages 22 to 26 of Board counsel's book of documents, we see the best photocopy I could find of a government press release.

And this press release I think was dated September 22 of 2021, and I think it references a ministerial directive for Manitoba Hydro to seek an interim rate increase from the Public Utilities Board due to recent drought conditions.

And do you see that?

MR. KEVIN GAWNE: I do.

MR. BOB PETERS: So, we go from the

July discussions we've had and the -- including the Q1 financial report. We now see that in September of 2020 -- sorry, September 22 of 2021 the government has directed Manitoba Hydro to seek an interim rate increase from the Public Utilities Board due to drought conditions.

So, from that, does it appear that the government believes that Manitoba Hydro's financial circumstances have changed substantially?

(BRIEF PAUSE)

MR. HAL TURNER: I wouldn't want to speak to what the government was thinking at that time, Mr. Peters.

MR. BOB PETERS: All right. But from Manitoba Hydro's perspective, you've got the government telling you to go see the Public Utilities Board for a rate increase.

Is that what you -- you make of this?

MR. HAL TURNER: That's what I see there, yes.

(BRIEF PAUSE)

MR. BOB PETERS: And if this directive, Mr. Turner, was issued to Manitoba Hydro on September the 17th of 2021 with a press release a few days later, can you explain why it took from the release of this press release until November 15th for Manitoba Hydro to file its interim General Rate Application?

MR. HAL TURNER: I think, Mr. Peters, that's a question best answered by the Rates and -- Regulatory Rates Panel. Thank you.

MR. BOB PETERS: All right. Let me ask it this way of Mr. Gawne. Mr. Gawne, was there any hydrological reason for the delay between September 17th, 2021, and the -- the interim 2021/'22 GRA being filed on November the 15th, 2021?

(BRIEF PAUSE)

MR. KEVIN GAWNE: No. We are pertain -- we're looking at water conditions every week, so I don't think there's a hydrologic reason that I could come up with for that, the timing of -- of these letters versus our rate application.

Certainly as we get close to winter, then there's more and more certainty in water supply

conditions and how things will play out for the fiscal year.

Maybe Ms. Schubert could pull up our interim rate application at page 20 where we speak to how our uncertainty and projected hydraulic -- pardon me -- how our projected hydraulic generation evolved through that year.

But as far as all the work that has to happen between -- in order to go and get a rate -- to appear before this Board for a rate increase and -- and when that actually occurred, that involves multiple areas of the Company and I imagine approvals of the financial projections and -- and the like that's well beyond our area.

Sorry, it's I believe page 20, please, Ms. Schubert. Yeah. And this is kind of an odd looking chart.

MR. BOB PETERS: We're going to come to the -- we're going to get to it in my book of documents, so don't steal my thunder here, but go ahead if you have to.

MR. KEVIN GAWNE: Well, no. The intent here is to explain how our projection for hydraul -- hydraulic -- hydroelectric generation in the fiscal year '21/'22 was evolving as we were

getting closer and closer to that fiscal year and -- and closer to the end of calender 2021.

So, you know, back in January of 2020 when we were running our simulations of all these ranges of hydrologic conditions, we were estimating that hydro -- hydroelectric generation could be between 22 terawatt hours and about 42 1/2 terawatt hours.

MR. BOB PETERS: Mr. Gawne, is that based on forty (40) years of flow data, approximately forty (40) years? Is this -- is that what this is?

MR. KEVIN GAWNE: In January of 2020, that projection would have been based on...

(BRIEF PAUSE)

MR. KEVIN GAWNE: Quite certain that was when we were using forty (40) years of record, so that was the range of the most recent forty (40) years of record to establish that range of uncertainty.

So then as we approached and got into summer, you know, our -- our ranges tightened somewhat, but still quite broad. And so -- so you can put your eyes to March of 2021. Despite having below-average storage and kind of a dismal snow pack, we

were still assuming quite a broad range of potential hydro generation, you know, looking at about -- well, I'll let you read the numbers off there, fifteen (15).

MR. BOB PETERS: And -- and the point, Mr. Gawne --

MR. KEVIN GAWNE: The range was tightening, but one (1) -- one (1) thing I'd just like to close with on this -- on this chart, Mr. Peters, is -- and May conditions kind of narrowed. But then, as you can see, things actually dropped a little bit in terms of absolute value.

Once we got past that July -- July month, it was extremely off, kind of outside the range of -- of the historic conditions that we had used to simulate. So -- so the whole cloud kind of takes a bend there in the July time frame after July when we prepared that forecast.

And then of course, as we get closer and closer to that Interim Rate Application, we had greater certainty on hydroelectric generation for that '21/'22 year.

MR. BOB PETERS: Are you drawing a link between that July downtown or that collapse on this cone to the -- to the Q1 report, Mr. Gawne?

MR. KEVIN GAWNE: No. The Q1 report

wasn't driving any of this. It was our hydro -- our simulation of our hydroelectric operation.

What I was trying to explain, Mr. Peters, was, after we got -- after we experienced that June and through July extremely dry period, the range -- the -- the bottom end of hydro generation actually dropped.

So one might think, oh, you're going to have this cone of uncertainty and it's going to start really wide and you're going to end up somewhere in between those ranges. And it should always just get closer and closer to where you end up.

But my point was, as we were going through that summer of 2021 and, you know, we were seeing these precipitation accumulations lower than was experienced prior to like 1897 or something, our range kind of dropped. The whole -- the whole range shifted 'cause we were losing water through evaporation and inflows were low and stuff like this.

MR. BOB PETERS: All right. I -- I thank you, Mr. Gawne. I have -- I have your point.

I want to turn back to -- to my point and see if you still agree that -- I mean, I'd referred you back in my book of documents on page 5 and 6, which I don't need to go through now in detail.

But can we accept that, for -- for 2021, we can generalize and say that precipitation was below average, precipitation was below the 2003 drought levels, the hydraulic energy from inflows was certainly below normal, and the energy and storage was also below normal?

Would you -- would you come that far with me, sir?

MR. KEVIN GAWNE: Yes, agreed.

MR. BOB PETERS: All right. So then if we turn to page 27 in the book of documents, I want to turn to a new topic dealing with Manitoba Hydro's operations during the drought of 2021.

THE CHAIRPERSON: Sorry, Mr. Peters. If we're turning to a new topic, I -- I know how time flies when you're having fun, but it flew. So I'm -- I'm wondering if we can take a break until a little after 3:30. Thank you.

--- Upon recessing at 3:21 p.m.

--- Upon resuming at 3:36 p.m.

THE CHAIRPERSON: Mr. Peters...?

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Thank you, Mr. Chair. Ms. Schubert was able to find a document that I'm going to get to in a minute, but I have -- I have three (3) requests I'll put to Mr. Gawne.

One that I'll speak to Mr. Turner about because I think he has some information. And then, I'm going to get to what's on the screen in front of us, if I could.

So Mr. Gawne, we talked about the May 2021 situation. I showed you your spaghetti charts. And you indicated, by reference to Appendix -- I believe it was -- 5.3, the reporting time lines that you gave to the executive.

Do you recall those questions and those -- your answers?

MR. KEVIN GAWNE: I do.

MR. BOB PETERS: And I had suggested to you that your report to executive would have been at the month end, at the end of May.

And you, at least tacitly, agreed with me, correct?

MR. KEVIN GAWNE: Yeah. It might take a couple weeks to get those.

MR. BOB PETERS: Could you -- could you take that away and perhaps confirm the date that

you would have reported that through to your executives for the month of May?

MR. KEVIN GAWNE: For May of 2021?

MR. BOB PETERS: Yes, sir.

MR. KEVIN GAWNE: Yes, we can look at that.

--- UNDERTAKING NO. 1: Manitoba Hydro to confirm the date that time lines were reported to executives for May 2021

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: All right. And while I've got you on that, so agreeable.

Mr. Gawne, we looked at the June 9th letter that your counsel had sent to the Public Utilities Board and ...

(BRIEF PAUSE)

MR. BOB PETERS: And, Ms. Schubert, sorry to do this to you, but on page 7 of Board counsel's book of documents is the front page of that June 9th letter.

And the June 9th letter, on page 7 of

Board counsel book of documents, talks about appendices.

And you had mentioned, Mr. Gawne, that Appendix 4 was one that certainly had your fingerprints all over it, correct?

(BRIEF PAUSE)

MR. KEVIN GAWNE: Our -- our -- sorry, Mr. Peters. Our group in energy operations planning would have been involved in the preparation of summary of water conditions and hydro generation, yes.

Whether my fingerprints were on it specifically, I can't say.

MR. BOB PETERS: So -- so Mr. Gawne, on the screen in front of you there's a listing of four (4) -- four (4) matters that the Board wanted Manitoba Hydro to report on.

And the fourth one dealt with the forecast of net export revenue and net income to incorporate water flow conditions updated to at least March 15th, 2021.

Do you see that?

MR. KEVIN GAWNE: Yes.

MR. BOB PETERS: And in a previous

answer you gave me before the afternoon break, there was uncertainty as to the date that the -- how current was the information that Manitoba Hydro was providing to the Board in its June 9th letter.

And while the Board requested at least what they've said here, could you check again and confirm how current of information you were able to provide to support that June 9th letter?

MR. KEVIN GAWNE: Yeah. We can undertake to determine that.

MR. BOB PETERS: Thank you, sir.

MR. KEVIN GAWNE: The undertaking is to come back to the Board with the response detailing when -- when the runs -- or sorry, when our projections of hydraulic -- hydroelectric generation were prepared that underlie the letter of June 9th, 2021. Does that sound --

MR. BOB PETERS: That's close. I would like the -- the timing of the water flow conditions that you used to generate that. I think maybe that was implicit in your -- your statement, but that's what I was really focusing on.

So you would do that for me, sir?

MR. KEVIN GAWNE: Yes.

--- UNDERTAKING NO. 2: Manitoba Hydro to confirm timing of water flow conditions used to generate the letter dated June 9th, 2021

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: All right. Thank you. Mr. Turner, you too were busy over the break, I expect, checking to see when the Q1 of 2021 financial report was publicly released.

Were you able to -- to find out what that was?

MR. HAL TURNER: The date I was given was September -- late September -- around the 21st.

MR. BOB PETERS: So September 21st of 2021 is when the first quarter financial report would have been publicized?

MR. HAL TURNER: That -- that is the date I was given at the break. And I think that date reflects some of the governance, right, with that -- that report would have been reviewed by the executive leadership team. It would have also been reviewed by our Board.

And so, that would be why -- you know, the first quarter ends in end of June and it would

take a number of months for all that governance to happen.

MR. BOB PETERS: Rather than speculate, Mr. Turner, maybe we can ask Mr. Gawne to provide the Board with a further -- a third undertaking this afternoon. And that is to provide the Board with the dates of the water flow data that were used in the Q1 report.

Would that be possible to do?

MR. KEVIN GAWNE: Yes.

MR. BOB PETERS: All right. Thank you for that, Mr. Gawne.

--- UNDERTAKING NO. 3: Manitoba Hydro to provide the Board with the dates of the water flow data that were used in the Q1 report

MR. KEVIN GAWNE: Mr. Peters, if I could, just on a separate topic. And I'd just like to wind back to a discussion before the break where we pulled up -- and I kind of beat you to the punch and pulled up that blue cloud chart. Thank you.

THE CHAIRPERSON: Sorry, it's just that when we have motorcycles behind, what happens is

the reporter says she's heard nothing but roars.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Okay. So Mr. Gawne, Mr. Chair, I'm going to ask Ms. Schubert to pull up page 41 of Board counsel book of documents.

You tell me, sir, if it's the same document you were thinking of or --

MR. KEVIN GAWNE: Correct.

MR. BOB PETERS: Is it the exact same?

MR. KEVIN GAWNE: It is, yeah. And you had asked me before the break, Mr. Peters, if the range of uncertainty that was projected for -- for calendar -- pardon me -- for fiscal year 2021/22, when that range was prepared back in January of 2020, you had asked if that was based on the forty (40) years of record.

And I had agreed, but I was mistaken and corrected at the break.

That was based on the hundred (100) plus year record. And I'm quite certain, if we look back to the material or the text around this chart in the Interim Rate Application, we would have explained that.

MR. BOB PETERS: All right. And in my

-- my apologies, I missed that as well.

But while we're looking at this same page 41 of Board counsel book of documents, this -- we call it a cone.

Is there a period of time when the Corporation -- the Manitoba Hydro switched from the -- from the one hundred (100) flow year records in developing their -- their forecast down to forty (40) years? Do we see that on this cone, Mr. Gawne?

(BRIEF PAUSE)

MR. KEVIN GAWNE: It's not shown explicitly what the crossover was. But once -- essentially, at that time, if we are in -- in fiscal year '20, say we're in March of 2020 and we are projecting revenues for '21/'22, we would still have been using the hundred (100) year record, because it's more than a full fiscal year away, but once we stepped into, say, September of -- or October of 2020, then when we were projecting our hydraulic generation for fiscal year '21/'22, then we would have been the -- using the forty (40) year record.

MR. BOB PETERS: All right. I'm not going to hold you to it hard and fast on that, Mr.

Gawne, 'cause I'm not sure anything turns on it --

MR. KEVIN GAWNE: No.

MR. BOB PETERS: -- but -- I appreciate your -- your -- bringing it up.

MR. KEVIN GAWNE: No. I -- actually on that point though, this business of the forty (40) years versus the hundred (100) years, I know has been a source of great confusion, I think, and I think it's helpful to go and take the time to look at Appendix 5.4. It's quite a heavy appendix, but there is quite detailed analysis done by our hydrologic experts on analyzing the difference between those periods of record and the suitability of the use of that shorter record for our -- our operations planning and for our financial budgeting purposes.

And I -- if I'm not mistaken, I think there is twenty-two (22) different indices to test, you know, the difference in the hydrology and the like, but ultimately it landed on using the forty (40) year record provides a suitable range for the purposes that we were using at that time.

And -- and Dr. Rene Roy has -- confirmed that, so we're trying to bring some closure to that issue and we're trying to improve our modeling by using more recent data and high resolution data.

It's not to avoid any specific portion of the historic record, it's just trying to do things better.

And, part of the source of my confusion about what's the history that was used and I'm -- I'll steal a phrase from our president and CEO to use yesterday and I'm probably mess -- mix it up, but I think she said performing while transforming or transforming while performing, one of the two (2) and -- and that's what we're trying to do here.

Is we're evolving our -- our systems to better reflect the uncertainty in hydrology and our budgeting and our operations. And we're kind of in that transition state right now, where we're starting to build out these systems and -- and unfortunately, we happened to have a drought right in the middle of it and it created a lot of confusion.

But, hopefully, that appendix that we included in our application helps to clear that up.

MR. BOB PETERS: And Mr. Gawne, I'm going to give you a -- I don't know if it's going to be late today, it'll probably be the first thing tomorrow morning, an opportunity to try to convince the -- this Board to bring closure to that issue. So, I've got some questions for you on that at that time,

so if it can wait till then, sir?

Mr. Gawne, there was something else you had mentioned this afternoon in your evidence and in response to the Board. I believe that you referenced from Manitoba Hydro's direct evidence, which was Exhibit Manitoba Hydro 25, back in the 2019/20 GRA, you were talking about how circumstances with precipitation changed relatively quickly.

Do you recall your giving answers to that effect, Mr. Gawne?

MR. KEVIN GAWNE: Yes, I do. Sorry, and this chart here was taken, I apologize, I missed that, this chart was provided in the 2019 GRA. Is that correct?

MR. BOB PETERS: Yes, it -- yes, that's where we -- we found it in -- as Exhibit Manitoba Hydro 25, of the direct evidence. It would have been a powerpoint chart that Ms. Fernandes and Ms. Hiebert would have helped orchestrate with you.

MR. KEVIN GAWNE: Right and -- and then I had referred to this, in my testimony, in -- in our 2021 Interim Rate Application.

MR. BOB PETERS: No, Mr. Gawne, I understood that you were telling this Board that Manitoba Hydro is cautious and Mr. Turner called me up

on it and made sure I was understanding it was projected because precipitation can change relatively quickly.

Do you recall discussion to that effect?

MR. KEVIN GAWNE: Yes.

MR. BOB PETERS: And, you indicated that, back in the, I think it was in the 2018/'19 time period, there was precipitation that caused Manitoba Hydro's fortunes to change relatively quickly.

Did I understand you correctly?

MR. KEVIN GAWNE: Yeah, and we were specifically referring to later in the season precipitation, or I was and --

MR. BOB PETERS: All right. So, we're looking at precipitation over the full year are we not?

MR. KEVIN GAWNE: Well, we're looking at flows over the full year. The -- the spaghetti chart you see on the top is the total system flows, in terms of energy. So, we're pro-rating things, like I spoke of earlier.

And then below that is the Winnipeg River, which I -- that I had mentioned earlier, was an important part of our basin, so it's just now looking

at the Winnipeg River and the flows that were coming into that basin in terms of energy, so weighting it by all those generators downstream.

And you see that we had a -- a -- kind of bust for a snow melt run-off in the beginning of the year and not much through the summer, and then things really turned around, starting in August. And we ended up being above average towards the -- the back end of that water year.

So, that was the point when -- when some of these estimates are prepared and the March time frame, or even June, that things can turn around rather quickly and -- particularly from dry to wet.

You know, that transition can happen rather quickly and even more dramatic -- and I don't think we have a chart anywhere to show you, but I could probably tease out which of the gray little lines it is from an earlier chart.

But in 2019, the Winnipeg River went from -- in August I think it was, you know, about let's say 40 percent below average and it transitioned to absolute record high by October, where flows increased by a factor of four (4) or times, so --

MR. BOB PETERS: But not in 2018/'19 -

-

MR. KEVIN GAWNE: Not in '18/'19, so I didn't. I don't think we had the -- this is fiscal year 20 --

MR. BOB PETERS: The point --

MR. KEVIN GAWNE: -- nine (9) -- this is 2019/'20, so sorry, but if we would have plotted the rest of that red line, we had a dramatic flip again in conditions in the fall of 2019.

MR. BOB PETERS: Okay, the underlying point you're trying to make to the Board, Mr. Gawne, is that Manitoba Hydro's precipitation can change in a relatively short period of time and that will have a significant influence on Manitoba Hydro's financial performance.

MR. KEVIN GAWNE: Yes, thank you for summarizing. I appreciate that help.

MR. BOB PETERS: Okay, well I've got your point.

MR. HAL TURNER: And I -- I think that was my evidence and I apologize. I'm -- I'm not a hydrologist, I'm a Winnipeg River cottager, so I tend to -- I tend to anchor these things to events that happened at the cottage.

And at -- the point I was trying to make is that, while, you know, the next ten (10) weeks

is typically when we see a lot of precipitation, it's not the only time we see a lot of precipitation. I wasn't going so far as to say that will impact our financial situation. It may, but it was just more that the weather is what the weather is and we don't control it and it can happen at any time.

MR. BOB PETERS: Thank you for your points. I'd like to turn -- I'd like to -- oh I'll -- this -- this document, just because we referred to it, we'll put it as PUB Exhibit 22, if we could, just so that it's in the record and people will wonder where it's from that -- and what we're referring to. So thank you.

--- EXHIBIT NO. PUB-22: Chart

CONTINUED BY MR. BOB PETERS:

Let's turn to PUB Exhibit 19-2, page 27, which is the Book of Documents. And we're going to talk about Manitoba Hydro's operations during the drought of 2021, if we can. And, again, it's open to the panel to assist as I go through this topic.

Before the -- before the afternoon recess, Mr. Gawne, I think you had agreed with me that for 2021 precipitation was below average, the

hydraulic energy from inflows was below normal and energy storage was also below normal in that year. Correct?

MR. KEVIN GAWNE: Correct.

MR. BOB PETERS: And so when it came time to export energy in April and May of 2021, does Manitoba Hydro have to be cautious about how much energy it exports. Either Mr. Gawne or Ms. Sanclemente, I'm not sure where this will fall.

(BRIEF PAUSE)

MR. KEVIN GAWNE: Let me try to help with this response and we'll see where we -- we go.

MR. BOB PETERS: Yeah. Always and it's welcome. Anyone else can interrupt, as they -- as they choose and, as we've said, but -- but, so, let's -- let's start off, then, Mr. Gawne, by -- by just taking a step back.

Would it be correct for the Board to understand that most of the peak exports that Manitoba Hydro would have been doing in -- in April and May of 2021 would have related to, I'll call them, locked in contractual obligations, recognizing we're getting close to a -- a confidential line that we don't want

to cross?

(BRIEF PAUSE)

MR. KEVIN GAWNE: I believe that's correct. We might have to dig out those numbers to look at monthly resolution, but, yes, --

MR. BOB PETERS: Yeah. I think, if we did that, we'd be into some confidential information, and I'm not -- not intending to go there.

And, then, would it be correct that, for off-peak exports, those would be of the opportunity export sales that the -- the panel talked about in their direct evidence?

MS. CHERYL SANCLEMENTE: Yes. That's correct. Yes.

MR. BOB PETERS: Now, I don't know what it is, when you give engineers a box of crayons, they make lots of graphs with colours. But let's look at this busy graph at page 27, and see if we can understand -- Manitoba Hydro has overlaid their reservoir outflows with their import and export operations.

Correct, at least according to the title?

MR. KEVIN GAWNE: Yes. Flows in this chart are shown as the lines and they -- so the solid blue line and the broken blue line, and those correspond with the axis -- the right axis -- the right vertical axis.

MR. BOB PETERS: And we're talking April 2021 to August of 2022. Correct?

MR. KEVIN GAWNE: Correct.

MR. BOB PETERS: And both exports, that's both the on-peak and the off-peak, are colour-coded in the bars, in the dark green and the light green, respectively. Would that be true?

MR. KEVIN GAWNE: Correct.

MR. BOB PETERS: And the imports, again, both on-peak imports and off-peak hours of imports, are mostly from the United States and are in colour-coded bars of red and yellow/orange, respectively?

MR. KEVIN GAWNE: Correct.

MR. BOB PETERS: All right. Again, I just -- be mindful that we're not asking you to disclose any information that Manitoba Hydro wants kept off the public record and, if needed, we can address it in an in-camera session.

When we're looking at the light green

bars, in April and May of 2021, it appears Manitoba Hydro is increasing its off-peak opportunity exports.

Would I -- would that be a correct interpretation by this Board?

MR. KEVIN GAWNE: Yep. That's true. The May exports in the off-peak were higher than April.

MR. BOB PETERS: And this is at a time, Mr. Gawne, when you've already told the Board that there were indications that the water was going to be -- was more limited than it had been normally and, certainly, it had been in 2002/'03 drought?

MR. KEVIN GAWNE: That's true, Mr. Peters. We do realize -- just if I can provide a little bit of context, that our system is not necessarily so nimble as to be able to just stop the flow wherever in the system you're looking.

Can I explain this? The releases from like Winnipeg take a number of weeks to reach the lower Nelson River, which is the bulk of our system, and that can drive our net export position. So, releases out of Lake Winnipeg that are arriving towards the Nelson River -- the majority of the Nelson River, in May, like, those are a function of release -- releases that were made in -- in the March time-

frame, and you also have local snow melt runoff, that you can't, you know, take back and put up in Lake Winnipeg. It's going to come to those stations, whether you want it to or not.

So, again, in my out -- opening comments that the export market was the balance of supply and demand, I can't speak to Manitoba load conditions, you know, I forget, frankly, whether Manitoba load conditions were below forecast in May, and that could contribute to sur -- more surplus.

So, there is a number of pieces moving here, but your observation is, yes, May net export revenues, on a physical basis, were higher in -- in the month of -- than the month of April.

MR. BOB PETERS: And, if the March releases of water from your reservoirs is what enabled Manitoba Hydro to have those off-peak exports, Mr. Gawne, those releases would have been, you've suggested, up to six (6) weeks earlier?

MR. KEVIN GAWNE: There's probably hydraulics folks in our Company, listening to me right now, and I'll estimate four (4) to six (6) weeks -- four (4) weeks, I think, it would be a --

MR. BOB PETERS: All right. So --

MR. KEVIN GAWNE: -- better estimate.

MR. BOB PETERS: -- but four (4) to six (6) weeks before May, Manitoba Hydro had all -- sorry.

Mr. Gawne, four -- four (4) weeks below -- sorry -- four (4) weeks before the May off-peak exports, shown in the green bar, on the month of May of 2021, Manitoba Hydro had already seen, from your group, that water was below normal and below average. Correct?

MR. KEVIN GAWNE: That's correct.

MR. BOB PETERS: And the decision was still made to release the water, flow it down the river, knowing it would go through the turbines -- or the generators. Thank you. You educated me --

MR. KEVIN GAWNE: Turbines --

MR. BOB PETERS: 'Turbines' is a better word. And, then, it would produce electricity that would end up being exported, if not used in Manitoba?

MR. KEVIN GAWNE: Correct --

MR. BOB PETERS: All right, and -- and sorry?

MR. KEVIN GAWNE: -- and, again, that -- those decisions to release that water from Lake Winnipeg were made with the full understanding that

the outcome of that hydrologic year or the water year, starting in April, is very uncertain. There was this wide range of like --

MR. BOB PETERS: -- unknown, unknown.

MR. KEVIN GAWNE: So, the decisions to release that water are based on we were operating and that's according to our priorities, that we talked about earlier, and we were in a -- it was an economic decision to release that water, and other factors, as I mentioned earlier, snow melt, run-off, and all this stuff so.

MR. BOB PETERS: Okay. Well, let me just catch that last point you made, Mr. Gawne, that the economic decision was, here's an opportunity to make money, so we're going to release water because there's no reason we shouldn't, according to those who are operating.

MR. KEVIN GAWNE: No. It's not that there's no reason we shouldn't. Our -- our modelling accounts for the fact that we might actually get a very dry year and it would have -- had we known the drought of '21 was going to occur, then the decision would not -- have been likely to reduce flows out of Lake Winnipeg sooner.

But we didn't have that perfect

foreknowledge, and we made the best decision, with the information we had at the time, and with the like -- high likelihood that, you know, there's a whole year ahead of us, in terms of precipitation, right, and we saw such a turn-around in -- occur in 2022. We had a major event in April and May. It completely flipped the water situa -- situation.

MR. BOB PETERS: Okay. Mr. Gawne, if we turn to the month of June of 2021 on this chart on page 27. And, again, we look at the off-peak exports, we see, in the light green vertical bar, that, while Manitoba Hydro has throttled back a bit on their off-peak exports, they're still exporting at a -- at a pretty significant rate. Correct?

MR. KEVIN GAWNE: I guess that depends on your definition of 'significant', Mr. Peters. Like if we look over to a year, to June 2022, where off-peak experts (sic) were about 900 gigawatt hours, that light green line, correct?

MR. BOB PETERS: Yeah, I'll go --

MR. KEVIN GAWNE: Double -- about double, right. So, significant, yeah. We were off exporting in the off-peak in the month of June.

MR. BOB PETERS: But we can -- we can see the scale of the gigawatt hours on the left, or

the Y-axis, correct?

MR. KEVIN GAWNE: Correct.

MR. BOB PETERS: All right.

MR. KEVIN GAWNE: Yeah.

MR. BOB PETERS: So, if Manitoba Hydro was still exporting off-peak over 300 gigawatt hours in the -- in that month, correct?

MR. KEVIN GAWNE: That's correct.

MR. BOB PETERS: And -- and June was the month which is the end of Manitoba Hydro's first quarter report, correct?

MR. KEVIN GAWNE: Yes.

MR. BOB PETERS: And we saw on the first quarter report that Mr. Turner reminded us was being -- didn't get publically released until some months later.

But the information for that first quarter report led Manitoba Hydro to believe it was going to lose $177 million of net income due to drought, correct?

MR. HAL TURNER: I -- I think that's incorrect, Mr. Peters. The -- the drought situation evolved rapidly. So, to say as they were making their decisions in -- in June, that we knew -- you know, that we -- at that point we're projecting to break

even for the year.

I don't think that's an accurate statement. So I think you're -- you're inferring a little bit more foresight than we may have had at that time.

MR. BOB PETERS: All right. Wasn't it Manitoba Hydro's report that said they're down $177 million or $190 million due to low water flows?

MR. HAL TURNER: The report that was published in September?

MR. BOB PETERS: Yes.

MR. HAL TURNER: Correct.

MR. BOB PETERS: And they were preparing the first quarter report contemporaneous with the end of the first quarter, I would assume?

MR. HAL TURNER: I -- I think that's an incorrect assumption. There's a time lag there. It takes time to collect all your actual data, compile it, you know -- it -- it -- to think that it's June 30th at midnight and Kevin sends his numbers over to the finance folks and the report is done the next morning, it's not quite that simple, sir.

There's -- there's lots of moving parts. This is one (1) component of -- of the things that we consider in our financial outlooks. And so,

there is that time lag there.

And so to infer that we know exactly where we're going to project to be in -- as they're making these decisions in June, that's -- that's not correct.

MR. BOB PETERS: But the Q1 report -- my -- my point is that the Q1 report only reports to the end of June, correct?

MR. HAL TURNER: That is correct.

MR. BOB PETERS: And if Manitoba Hydro -- you're saying Manitoba Hydro doesn't know -- doesn't have the systems in place to know by the end of June or in the next few weeks after that, where it -- where its situation is? They have to wait three (3) more months in to September?

(BRIEF PAUSE)

MR. HAL TURNER: Mr. Peters, I think there's -- as I mentioned earlier, there's a -- there's a time lag.

So, decisions that we're making real time in June and then all of the information that gets com -- to think that the -- the group that's making those real time decisions has the benefit of knowing

all of that aggreg -- aggregate information that gets compiled in that quarterly report, that's -- that's not a fair characterization.

So, earlier you asked for some undertakings on the different dates that -- that -- where the information made these reports, I would suggest it may be better for us to be able to give you that answer and then we can have a -- a clearer discussion on what we knew and didn't know.

But -- but to say that, you know, the team, when they were making these decisions on how to operate the system and how to engage with the export market in May and June that they had all the information and knowledge that is contained in the Q1 end report, that's -- that's not correct.

MR. BOB PETERS: Well, let's wait until we get those dates, but are you telling me then that the June 30th, Quarter 1 end date data is not based on data that occurs in the first quarter, but it's based on data that arrives and is calculated after that?

MR. HAL TURNER: We -- I think that's a question, actually, that the Revenue Requirement Panel can best answer. Mr. Tess will have a lot more knowledge in that area than I do.

MR. BOB PETERS: Okay. I've got your point. Let's move on. Stay with --

MR. KEVIN GAWNE: Mr. Peters, if I could just add one (1) -- one (1) small comment, that these projected volumes that you see in the April, May, June time frame, the preceding text before that figure in our application starting at page -- page 24 that it kind of goes through the chronology of our operations.

We explained with -- you know, right at the beginning with the below average snow melts at page 25 of our tab 5 of our application. In spring '21, storage releases were being reduced, resulting in export volumes being below budget.

So, just so we're clear, yes, there was exports happening and they may have been opportunity exports, but we were acting. And -- and these operations were reviewed by the Public Utility Board's independent consultants and -- and confirmed that we -- you know, Manitoba Hydro's operations were consistent with their policies and procedures.

MR. BOB PETERS: It does show, Mr. Gawne, on page 27 of Board counsel's Book of Documents, if go to the summer of 2021, which for me would have been the June, July, August Manitoba Hydro

is reducing the amount of off-peak exports, correct?

MR. KEVIN GAWNE: That's correct. We also were operating -- when you look at -- I think it's quite indicative here if you look at Cedar Lake outflow, that's our Grand Rapids generating station where we can kind of respond quite rapidly to conditions.

We are basically operating the outflow from that reservoir. Our second largest reservoir almost at zero once we get into the August time frame.

MR. BOB PETERS: I'll -- I'll come back a little bit on that, but I -- I've got your point. Thank you.

Perhaps you can assist the Board in understanding a point that was appearing in the Daymark Public Report. It's on page 28 of Board counsels Book of Documents and you've obviously reviewed the Daymark report, Mr. Gawne.

There's a ranked list of priorities and constraints as to how Manitoba Hydro will operate under adverse water conditions.

Have I got that right?

MR. KEVIN GAWNE: These are -- these our -- these priorities shown here at page 77 of the Daymark Report are what we used to guide our

operations under all water conditions, not just under drought.

MR. BOB PETERS: I'm sorry, you trailed off. I lost the last --

MR. KEVIN GAWNE: Sorry, we -- these operating priorities apply under all water conditions, not just drought. I think you had suggested that --

MR. BOB PETERS: I was reading the first sentence of the paragraph under 'priority and constraints', because drought operations are, in fact, ordinary operations under adverse water conditions.

I'm assuming that these are the priorities and constraints that apply under adverse water conditions? We might be saying --

MR. KEVIN GAWNE: Yes.

MR. BOB PETERS: -- the same thing --

MR. KEVIN GAWNE: Yeah.

MR. BOB PETERS: -- Mr. Gawne.

MR. KEVIN GAWNE: The -- under adverse water and under normal.

MR. BOB PETERS: All right. And -- and how do you define adverse water? Is that drought or is that below normal, or is it a certain percentage below normal?

How do you define adverse water?

(BRIEF PAUSE)

MR. KEVIN GAWNE: These words are from Daymark, so I'll -- you know, what they're referring to adverse water, but I would say below average, well below average would be an adverse water condition in my mind as the water manager.

MR. BOB PETERS: Okay, we'll go with below average or well below average, okay, and that's...

Is the list that's on the screen in front of you numbered 1 to 6 in rank order of the highest priority to the lowest priority?

MR. KEVIN GAWNE: Yes.

MR. BOB PETERS: Higher priorities, Mr. Gawne, take precedence always over lower ranked priorities?

MR. KEVIN GAWNE: Yes, I believe that's fair.

MR. BOB PETERS: Is there subjective judgment involved as to whether a lower priority should trump a higher priority? Poor choice of words, but...

(BRIEF PAUSE)

MR. KEVIN GAWNE: There's professional judgment involved in -- in operating according to these priorities, certainly.

MR. BOB PETERS: All right. I had used 'subjective judgment', and you're just correcting me to say 'professional judgment', which still is subjective, correct, but based on professional knowledge and experience?

MR. KEVIN GAWNE: I'll accept that.

MR. BOB PETERS: So, in times of adverse water or well below average water, is the economic health of Manitoba Hydro the last concern acted upon?

(BRIEF PAUSE)

MR. KEVIN GAWNE: We may be confusing things here between economic health of the organization and economics in terms of optimizing near term net export revenues.

So, the folks that are charged with operating, you know, our energy system, our reservoir operations, are -- economics here refers to maximizing net export revenues.

It's certainly held -- that

responsibility is taken very seriously. And normally, under most conditions, we're operating in that zone of economics, if that helps.

MR. BOB PETERS: Well, I -- let's see if it does. On page 27 on that colourful graph that we went through you had suggested to me in May of 2021, in one (1) of your previous answers, that your team was maximizing the economics.

Did I understand your answer correctly?

(BRIEF PAUSE)

MR. KEVIN GAWNE: Yeah, based on the range of potential water supply conditions, we were -- the decisions that were made with the information that we had at the time were such that releasing water, as we did, was the economic thing to do, Mr. Peters.

MR. BOB PETERS: So, by the time -- in -- in the month of May of 2021, your team was satisfied with respect to safety, energy supply, energy reserves, short-term reliability, citizenship and environment.

And the last priority on which you were acting was to maximize net export revenue?

(BRIEF PAUSE)

MR. KEVIN GAWNE: I can't speak exactly to all the considerations that were made at that time but, for instance, you know, if someone came along and said, you know what, we're going to have a drought this year, and it's going to be record low inflows, and so the pure economic thing to do at that time -- or the reliability thing to do at that time might be to put the brakes -- put the brakes on the release of water from Lake Winnipeg.

But we still will be tempering our outflow operations with consideration of the impacts on stakeholders. So, I can't say for certain that stakeholder issues were not a consideration at that time; quite certain they were, in fact.

MR. BOB PETERS: These six (6) --

MR. HAL TURNER: Mr. -- Mr. Peters, sorry, if I may add. I think -- I'm getting the impression, and I apologize if I'm getting the wrong impression, that you're under the impression that we sort of started the list and checked them off, and it's not quite that simple.

So, for example, and -- and Kevin will correct me if I get the details a little bit off,

there'll be times in the spring or the fall where there'll be resource users on the river, and so we may limit changes in flow to minimize the impact to the resource users.

But we will still try and maximize the economic benefit, you know, by generating electricity as economically as possible. So, we are considering these things -- multiple things at the same time, and they can -- each of them can -- can have a constraint.

But it's not that we just start at the top, any safety concerns, no, how is energy supply, good, no, right. Like, we think about all these things and try and balance it. I hope that's helpful.

MR. BOB PETERS: Well, it -- it is. You're telling the Board that there is this subjective professional judgment involved when it comes time to act on these priorities and constraints?

MR. HAL TURNER: That, and that we have to consider all of them. We think about all of them all the time. There may be times when we're less worried about some and more worried about others. There's going to be times when we're not worried about -- may -- maybe safety isn't an issue whatsoever, but the team is thinking about all of these things in totality.

MR. BOB PETERS: Okay.

MR. HAL TURNER: We try to balance them.

MR. BOB PETERS: Thank you, Mr. Turner. That is helpful.

And May of 2021 -- on the chart that's on the screen, in May of 2021, water is released down the river regardless of whether there is citizenship or environmental concerns at that point, correct, Mr. Turner?

MR. HAL TURNER: I wouldn't -- I'm not sure I agree with regardless of whether there's citizenship concerns. We would have considered all these things. And they would have made a decision based on their modelling that -- making those releases.

And then, of course, the corresponding generation and sale was the right thing to do considering all of these priorities in totality.

MR. BOB PETERS: All right.

(BRIEF PAUSE)

MR. BOB PETERS: Mr. Gawne and Mr. Turner, was there a factual situation in the spring of

2021 when Manitoba Hydro would have wanted to hold back water in its reservoirs to maximize the future economic benefit but holding back the water in the spring of 2021 would have caused detrimental effects to citizens or the environment downstream of Lake Winnipeg?

Can you recall that happening or you can't recall that happening?

MR. KEVIN GAWNE: Mr. Peters, I cannot recall directly that happening in that spring of 2021, but I can speak in general terms.

If we're to do reductions of flows, particularly large flow reductions during the winter, you can have situations where it'd be referred to as hanging ice or pockets of ice in the shorelines along the rivers and lakes downstream of Lake Winnipeg where you have ice that's bridging to the centre of the lake and there's actually air below it and it's no longer being floated by the water because flow reductions have been made. And that can create a challenge for resource users to access the river.

So, those -- you know, those are the considerations. And -- and I would like to kind of maybe correct the interpretation of the use of professional judgment that we talked about earlier, is

it's not -- it's not that there's professional judgment as to whether we want to apply this priority now or not, it's whether we're -- are we -- are we -- is it now governing because it requires analysis and understanding and experience in operating to know whether we're kind of into that level of priority, if you will.

Because we don't -- you know, we don't -- our operations impact the waterway users. We understand that, and that's -- that's a fact. But when we're looking at stakeholder impacts, are we looking at is this operation our of experience for this time of year, is this an extreme type of operation.

And we'll try and evaluate that and -- and use our operating experience to understand though, no, this is -- this is somewhere we don't want to go because this is not a typical type of operation.

And that's where this stakeholders and environment concern can start to bind our operation when we're saying, no, this is -- this is not typical. We've looked at how we operate in the spring. We don't normally do reductions of this degree. We've only done reductions this severe say 10 -- 10 percent of the time in history, so we're not going to -- you

know, we're not going to make reductions bigger than that.

So that's the type of analysis and judgment and experience that's required to -- you know, to operate the energy system guided by these priorities.

MR. BOB PETERS: So that's more a question of what did we do before, and unless there's a reason not to do what we did before, we'll do what we did before.

MR. KEVIN GAWNE: I -- I wouldn't say it's that simple. Like when we -- I think Daymark had reviewed it quite -- quite well when they explained, when we engage with other professionals across the organization and we have these -- it's referred to production scheduling meetings, and there was this cycle that I'd showed in our initial presentation.

But at those meetings, we have folks involved from, you know, the water managers, our hydrologists, our -- our training group, our control centre folks, representatives of our Indigenous and community relations staff, people that are dialled into those calls from northern Manitoba from our northern generation system.

So we're taking in that feedback and

that input into our decision-making process, so it's not as simple as, well, we've done this before so let's just keep doing it. It's -- it's more complex than that and it's considering our -- the impacts of our operation.

MR. BOB PETERS: There's nothing that comes to your mind, Mr. Gawne, that would cause you in May of 2021 to do anything differently than you had done in the past that you can recall?

MR. KEVIN GAWNE: I cannot recall anything from that period, but I'll have our folks look at our operations log and see if there's anything noteworthy, and I'll bring that back to the Board.

MR. BOB PETERS: All right. On page 28 -- maybe this is getting near the end of the day, and let me ask the question this way:

If your group, Mr. Gawne, Mr. Turner, determined that there was -- and I'll make it a hypothetical and I'll exaggerate it just for the effect.

If there was a one dollar ($1) detrimental effect to citizenship or the environment downstream, would that stop Manitoba Hydro from holding back water which would have a million dollar economic benefit if you flowed it down the river?

MR. KEVIN GAWNE: Sorry. You're saying if there was a one dollar ($1) impact on stakeholders?

MR. BOB PETERS: Yes.

MR. KEVIN GAWNE: This is --

MR. BOB PETERS: With a million dollar benefit if you did release the water or if you held back the water under whatever circumstance, would -- would the dollar amounts dictate what Manitoba Hydro would do?

MR. KEVIN GAWNE: I -- I ...

(BRIEF PAUSE)

MR. KEVIN GAWNE: I -- I think we're trying to make a complex problem simple by putting dollar values on impacts that we simply don't have that information. But I will -- I will offer, Mr. Peters, that, in our operations -- and maybe by way of example it will help.

We have the licence -- our Lake Winnipeg Water Power Act licence allows us to change flows at Jenpeg -- this is the main control point out of Lake Winnipeg -- by 15,000 cubic feet per second in -- in twenty-four (24) hours. So we can shift the

flows by 15,000 cubic feet per second.

Today, I believe, subject to check, we're releasing 47,000 cubic feet per second out of Jenpeg, so tomorrow we could go down to thirty-two (32), and the day after that we can go down -- you know.

So we can do these changes by licence, but we don't do that, and we recognize that those -- those types of changes can have impacts on stakeholders. So we purposefully temper our operations.

And so the question is, well, you know, if you could make another million dollars and you can't say is that a dollar impact to downstream or is it ten dollars ($10)? We don't know. We can't make that judgment. But we do take the long view in these sorts of things because, ultimately, we have a licence to operate, and those licences can be changed.

So the economics of all our customers, the Manitoba customers, are being -- the right thing to do is to consider those impacts 'cause in -- in the long term, our flexibility could be restricted. Before it was just operating, you know, purely considering economics and not thinking about impacts on stakeholders.

So, you know, to -- to simply say, well, we could -- we would have -- you know, we would have impacted downstream users by a dollar and we're going to spend a million dollars to avoid that is -- is overly simplifying the problem.

MR. BOB PETERS: All right. I think I have your point.

Mr. Chair, in light of the hour, I'll ask that maybe that's the end of my questions today. I'll pick it up tomorrow morning first thing, and I'll spend some time tonight culling through my notes so I can keep us moving tomorrow.

THE CHAIRPERSON: Thank you. I have a question, though.

There were a number of undertakings given today. If we don't receive the undertakings tomorrow, they -- depending on what the undertakings are, would you bring this panel back?

MR. BOB PETERS: I don't think there's any need.

THE CHAIRPERSON: Okay.

MR. BOB PETERS: The questions are factual dates, and that'll help us complete our -- our knowledge on it, Mr. Chair.

THE CHAIRPERSON: Thank you.

MR. BOB PETERS: I -- I don't foresee that. If I -- if I did, I would speak probably first to Ms. Fernandes and Ms. Hiebert and we'd see if we need to do that, but --

THE CHAIRPERSON: Okay. Thank you.

MR. BOB PETERS: -- at this point, no.

THE CHAIRPERSON: Okay. Thank you. We'll adjourn until 9:00 tomorrow morning. Thank you.

--- Upon adjourning at 4:31 p.m.

Certified Correct,

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Wendy Woodworth, Ms.