Good evening, and welcome to Manitoba Hydro's Annual Public Meeting. I'm Scott Powell, director of corporate communications and marketing here at Manitoba Hydro, and I'll be your humble host and moderator for this evening's presentation. We have about an hour together this evening, and during that time, we'll be sharing an update on Manitoba Hydro's operations, some of our financial results over the past year, and also taking some of your questions.

Before we get started, I have a few housekeeping items I just wanna go through. First, for those of you who are hearing impaired, we've enabled closed captioning. You can turn it on by clicking on the Caption icon, as shown on the slide up on the screen right now. It should be on the top right of your screen. Second, all cameras and microphones for attendees have been muted for this evening's presentation. If you have a question, please ask it using the Question and Answer module, which you can access by clicking the Q&A icon at the top right of your screen. The window to enter your question should open to the right of that. You can click on the bubble where it says Ask a Question and type in your question. Please be sure to click on the Ask button, which will submit your question to our system here at Manitoba Hydro.

We're gonna do our best to answer all of your questions in the hour we have. And finally, we do have French language translation available. If you're more comfortable asking a question in our second official language and have it answered in French, simply type in your question in the language of your preference. Your question will be read in both languages by our interpreter, who will also translate our response into French. After tonight's meeting, we're going to be publishing a What We Heard document, summarizing the questions we've received along with all the responses.

We'll also be adding an American Sign Language translation to the recording of tonight's show, and we'll be posting both that recording and the What We Heard document to our website in the coming weeks.

This evening, I'm joined by our President and CEO, Allan Danroth, Manitoba Hydro's President and CEO, which I already said. We're also joined by Franck, our French language interpreter, who'll be helping us with French translation as required. At this point, I'll now turn the microphone over to our president and CEO, Allan Danroth, for an update on Manitoba Hydro's activities over the past year. Allan, welcome, and over to you.

# Allan Danroth:

Thanks, Scott. It's great to be here. I wanna thank everyone for joining us here this evening. And before we begin, we'd like to start with a land and territorial acknowledgment. Manitoba Hydro has a presence across the province on Treaty One, Treaty Two, Treaty Three, Treaty Four, and Treaty Five lands, the original territories of the Anishinaabe, Anishininew, Cree, Dakota, and Dene peoples, and the traditional homeland of the Red River Metis. We also acknowledge the ancestral lands of the Inuit in northern Manitoba. We acknowledge these lands and pay our respects to the ancestors of these territories. The legacy of the past remains a strong influence on Manitoba Hydro's relationships with Indigenous communities today. We remain committed to establishing and maintaining strong, mutually beneficial relationships with Indigenous communities as we move forward in the spirit of reconciliation.

Collectively, many of us typically talk about Manitoba Hydro in the context of affordability. We should be changing that refrain when we talk about Manitoba Hydro to safety, reliability, and then, and only then, affordability. This was never more apparent than on my third day when one of our employees died while repairing a downed power line. I attended the scene that day, and it's not something I wish on anyone. As such, it has been my firm and unwavering commitment to the employees and customers of Manitoba Hydro that safety will be at the forefront of our mindset now and forever. This tragedy forced a review of our procedures and safety culture that is ongoing. While no new hazards or systemic issues have been identified, this review will remain ongoing with the goal of reducing the risk of this ever happening again.

Gas is not delivered and power is not provided without people, and I'd like to call out the great work being done every day by the 5,000-plus Manitoba Hydro employees across our province. I continue to be impressed by their dedication to serving their communities and their professionalism on the job. And I'm grateful for the warm welcome extended to me. Whether it is planning, maintaining, and upgrading our natural gas or electricity systems, our employees are at the heart of everything we do.

The diversity of our workforce is also a great strength, where 20% of our overall workforce is Indigenous, and over 47% of our northern workforce is Indigenous. Almost 25% of our workforce are women, as is over 34% of our management team. As part of our ongoing economic reconciliation efforts, Manitoba Hydro encourages the participation of Indigenous businesses and people in its procurement. In 2023/'24, 83 contracts were issued to 46 Indigenous businesses totaling 78 million in value. I've had the opportunity during my first few months here to meet with many of our First Nations and Metis partners and attend several ceremonies and assemblies. I look forward to continuing our reconciliation efforts with Indigenous communities impacted by our past developments in the spirit of mutual respect. Reconciliation is a critical aspect of our business, and it must continue.

With that said, I'd like to give you a brief overview of the past year at Manitoba Hydro, starting with our financial results. Manitoba Hydro had to contend with low water conditions again this past year for the second time in three years. In the fall of 2023, water inflows to our system basin-wide were among the lowest we've seen in 40 years. While our system is designed and operated to ensure continuous, reliable energy for all Manitobans and to meet our firm export commitments even in drought, the lack of surplus energy to sell on the spot or opportunity, export market, has a negative impact on our finances.

As a result, we reported a consolidated net loss of \$157 million for the fiscal year ended March 31st, 2024. As mentioned, the drought was the second in three years. The 2021, 2022 drought resulted in a net loss of \$248 million, but just the next year, higher precipitation led to record high water levels and a net income of \$650 million, allowing us to begin making progress reducing our debt. All of this is to say the situation can change significantly from year to year based on precipitation. Our system typically generates 97% of our electricity from hydroelectric sources. To put it simply, when it rains, we make money, and when it doesn't, we do not. Unfortunately, low water conditions have persisted into the current fiscal year, resulting in lower revenues through the second quarter. We now expect to report another loss for the fiscal year that ends on March 31st, 2025.

The dramatic change in water flows from one year to the next and the potential significant impact on our finances does demonstrate the need for moderate predictable rate increases in the future, as

Manitoba Hydro's net income is highly dependent on factors the utility cannot control. It also highlights the need to diversify our generating portfolio to make it less susceptible to drought impacts.

We know Manitobans are already struggling with higher prices for everything, and while there will not be any electricity rate increase in the 2025 calendar year, Manitoba Hydro will, as required by the Manitoba Hydro Act, be filing a general rate application with the Public Utilities Board by April 1st, 2025. As always, any decisions on rate increases will be made by the Public Utilities Board through their established public and transparent process. In terms of reliability, last year, Manitoba Hydro invested \$664 million in renewing, maintaining, and expanding our electricity and natural gas systems to ensure the safety and reliability of our existing assets. While that sounds like a big number, given that our installed asset base is valued at \$31 billion, this \$664 million is at the low end of what we should be investing in our existing generation, transmission, distribution, and gas infrastructure to ensure reliability according to generally accepted metrics for heavy industry. To be clear, this need to reinvest in our aging infrastructure is not unique to Manitoba. Around the world, utilities are facing the need to modernize their systems, so we're not alone in this regard.

One of the added challenges and opportunities facing Manitoba Hydro that is layered on top of this reliability issue is the energy transition and a growing demand for electricity. The way utilities deal with this is through an integrated resource plan, or IRP, which is effectively a modeling exercise done by utilities specific to the region in which they operate, in our case, Manitoba, to understand and prepare for the energy future. This past year, we published our first IRP, showed that electrical demand in the province could more than double in the next 20 years and that new sources of electricity will be needed in Manitoba within the next decade. Building on that base of knowledge, Manitoba Hydro, working with interested parties across the province, is currently developing our second IRP to be issued in 2025. This IRP will include a development plan that will outline potential new sources of generation and energy efficiency programs that will allow us to meet the growing demand for electricity, ensuring the most affordable, reliable, and low-carbon energy future as outlined in our province's Affordable Energy Plan released last fall.

Concurrently, we just completed a clear, concise, and actionable three-year strategic plan that will both incorporate the results of our IRP and ensure we meet the objectives set out in the province's Affordable Energy Plan. This includes a new strong path forward towards reconciliation through majority Indigenous-owned wind energy partnerships that will add 600 megawatts of wind generation to our system in the years to come. Our strategic plan focuses on a set of primary goals. These goals and the actions we take to ensure we meet them will ensure we will be there to meet our customers' needs not only today and tomorrow but well into the future with safe, reliable, affordable energy, energy for life.

In addition to executing on our new strategy, we have several major projects underway designed to ensure the reliability of our network and meet growing demand going forward. The Southwest Winnipeg Transmission Improvement Project is replacing dozens of large transmission towers and high-voltage power lines serving south and central Winnipeg to enhance capacity and improve reliability. This \$62 million project saw 50% of the total hours worked completed by Indigenous people, and 75% of all apprentices and trainees were also Indigenous people. The Portage Area Capacity Enhancement, or PACE, project continued with construction of the new Wash'ake Mayzoon substation near Portage la Prairie. This \$84 million project will take 72 months to complete and will enhance reliability and

increase capacity in central and southwest Manitoba to help support economic growth. Construction of the Wash'ake Mayzoon station included significant Indigenous business contractor and subcontractor participation. 29% of the total hours worked so far were worked by Indigenous people, and 45% of apprentices and trainees are also Indigenous. As part of the project, Manitoba Hydro is also implementing an Indigenous women's on-the-job training program in the trades, including electrician apprentices and site administrators.

Also, the \$308 million Pointe du Bois Renewable Energy Project, otherwise known as PREP, is also underway. The retrofit of our oldest 110-year-old generating station involves the installation of eight new turbines and will extend its operable life to at least 2055 and allow us to power an extra 35,000 homes in Manitoba. 25% of total workers hired to date on the project are Indigenous, with Indigenous people making up 52%, 56%, rather, of the apprentice positions. The project also includes an Indigenous women's on-the-job training program.

Maintaining and upgrading aging infrastructure is one of the greatest challenges facing Manitoba Hydro. One of our primary goals is to move forward on work to replace certain components of our high voltage direct current or HVDC transmission system, many of which are already well past their design lifespan. This system is key to the reliability of our network, as the HVDC system carries over 70% of the electricity Manitobans use every day from our northern generating stations to customers in the south. We've already started this work by sending out letters to critical parties who may in the future be impacted by this work. These parties include First Nations and other key interested parties near our HVDC converter stations. We're also in the process of selecting an HVDC equipment manufacturer to help us determine what might be the best way to ensure the reliability of this critical system going forward. Is it replacing our old equipment within our existing stations, or is it building new stations? Our goal is to ensure any work we do is cost-effective, in the best interest of our customers, and ensures reliable, safe, and affordable service well into the future.

All of this is to say it was a busy year last year and will continue to be going forward. In closing, I'd like to say what a privilege it is to be leading Manitoba Hydro at this exciting time. Thank you again to our employees. Every day, often in very challenging conditions, they serve Manitobans and make all of us proud. And thank you for your time this evening. I look forward to your questions.

## Scott Powell:

Thank you, Allan, interesting presentation. And now, we look forward to answering as many of your questions as we can. So we'll go online, see what we have here. First question from anonymous. Thank you, anonymous. Allan, the question is, "How will you make enough power if all buses are electric, and we have 400,000 more residents in 20 years or so?" Good question.

# Allan Danroth:

It's an excellent question. And so I mentioned earlier that we are working on what we call our integrated resource plan or the IRP, and this plan, for the first time, is really going to set out a 20-year development pathway. And we consider all possibilities as we develop this plan. We consider a low-growth, a medium-growth, and a high-growth scenario, and we have development plans tied to all of that. And so, you know, the answer to this really is it's going to be in the IRP plan when it's released later this fall.

Great, another question, just let me scroll up here. Pardon my slowness with the touch pad on the mouse. "You talked about aging infrastructure." This is also from anonymous. "You talked about aging infrastructure. Will our grid be able to support an increase in electric vehicles and the charging stations needed for those electric vehicles?"

## Allan Danroth:

Well, so there's sorta two things to talk about there. So the latter part of it, can we support all the electrical vehicles coming in? So, really, again, that's something that we're planning for in both our low, medium, and high-case scenarios. The energy transition is here, if you will. Grids everywhere are experiencing this, this increased demand presented by electric vehicles, and so it's something that we contemplate in the IRP. The first part of the question related to the grid and the infrastructure and the age, I said earlier in the presentation, we invested \$664 million, and that's really at the low end of what we need to invest. We have an aging infrastructure, most notably our HVD system. Our HVD system has a 35-year life. It's currently at 55 years, and it's probably gonna be closer to 60 or 65 years by the time we finally replace all the parts we need to. And so, it's an excellent question. Reliability, and throughout the presentation here tonight, we talk about affordability, but we also talk about reliability and safety and all three are paramount and three things that we need to stay focused on.

## Scott Powell:

Question here from Joe Newman. Joe, thank you for your question. "Allan, you mentioned modernizing. Can you provide a few examples of how you plan to modernize grid generation and customer systems? Where does the money come from for this outside of the rate increase or any rate increase?"

## Allan Danroth:

So, again, two parts to that question. So the first part about, you know, the infrastructure and the metering, we're one of the last jurisdictions in North America that has not gone to what we call AMI, advanced metering infrastructure, AMI.

#### Scott Powell:

Is that smart meters?

## Allan Danroth:

Essentially smart meters. And, you know, some jurisdictions are actually on their second generation of smart meters and moving towards their third, and we've yet to go there. We need to do this work. And what that's gonna allow us to do is it's going to allow us to troubleshoot grid problems quicker. It's going to allow us to not have to physically go up and read meters, and it's gonna make us more efficient and better. So, you know, that's really the key to the metering part. And sorry, Scott, forgive me, but there was a second part to that question, but.

## Scott Powell:

Which I already scrolled by. Where will the, I believe it was, where will the dollars for this come from outside of any rate increases going forward?

## Allan Danroth:

So we make revenue principally two ways. We have our rates, and, you know, we can increase rates, although we're, you know, really trying not to do that, and as I mentioned, we won't be doing that in 2025. And we're really focused on that affordability piece as well as the reliability and safety piece. The second way that we can raise money or generate revenue is by exporting power. So we export power currently to the US. I'm smiling because we've all seen the news today, and, you know, obviously, there's a lot of uncertainty at the moment. But historically, about 20% of our revenue has been through the export of power, either on firm contracts where we're selling power in bulk or on the spot market where we're selling much smaller bits of power for much smaller timeframes.

## Scott Powell:

And one thing about that spot market, that's really only something we sell energy on when we have excess water.

#### Allan Danroth:

That's right, that's right. So our system is designed to meet our firm commitments even in a drought year, but we do not, you're exactly correct, we do not send power down to that market if we're in, you know, a bad position, if you will, a bad drought position or whatever.

## Scott Powell:

Now, this sorta ties into our next question from anonymous, "Why do we need to look at new sources of energy in Manitoba when we already export our existing energy? Can't we just stop exporting and focus on meeting our own needs?" You sort of answered that a little bit in terms of the revenue.

# Allan Danroth:

Yeah, it's really, you know, we have some contracts in place, and we're a good partner, and we need to honour those contracts, you know, to the very, very best of our ability. That's the right thing to do. And, you know, in spite of current things that we're seeing, you know, I expect that that's an activity that will continue, you know, in the future. It may go through a few ups and downs, but, you know, ultimately, I think we'll always be able to do that to some degree. And it's a good thing to do. If we have the excess power, you know, it helps us keep the rates down for the folks here at home.

# Scott Powell:

Good answer. "How much will the 10% tariff reduce revenue from exports of electricity to the US?"

## Allan Danroth:

So, on that question, I'm gonna deflect on that question, and I would ask the person that asked the question if they wanna reach out through our usual channels and provide their email, we can provide an answer more directly. As you can appreciate, very turbulent times and very early days, and, you know, we're only a Crown corporation. These are things that are happening at the government-to-government level, and really that's just something, you know, beyond our mandate. Obviously, you

know, I'd like to think we're a very smart operator. We run scenarios and ideas and contemplate different things, but it's really for internal consumption. And I don't really wanna comment too directly, especially now. You know, some of this is firm contracts, and it brings in a lotta lawyers and a lotta different things, and so it's probably best just to deflect on that question.

different things, and so it's probably best just to deflect on that question.
Scott Powell:
It is pretty early to speculate on what those potential
Allan Danroth:
Really is.
Scott Powell:
impacts could be at this time. So I know we're continuing to monitor that situation going forward, so.
Allan Danroth:
Yeah, we are.
Scott Powell:
Okay, I wanna make sure I'm not missing anybody here, and I'm not great with this touch pad. Note for next year, bring a mouse. "What specifically," this is also from anonymous, "What specifically is Manitoba Hydro doing to encourage co-generation of electricity in large buildings, for example, hospital complexes and industrial users that use natural gas during peak winter demand?" That's a great question.
Allan Danroth:
Mm-hmm, yeah, so, you know, co-generation is something that we look at on a case-to-case basis where it makes sense. And one of the areas that you see it quite often, you know, you'll see it a lot in the forestry industry and in the pulp industry and different jurisdictions, and it's definitely something that we look at. You know, if we have a large-scale user, can we work with them? Can we understand what their needs are not only now but in the future? And is there anything that we can do to optimize? And those opportunities are hard to find. You know, it takes a lot. You have to find the right partner and the right set of circumstances to act on that, but it's certainly something that we keep an eye on whenever we can and try to advance that.
Scott Powell:
And we've got one here, "What are the key pillars of your new three-year strategic plan?"
Allan Danroth:
Great question.
Scott Powell:
It's a great question.
Allan Danroth:

So our previous strategic plan was for 2040, and it was, you know, very, it was a good plan, but this plan is a little bit different in that we've simplified it and we brought it down. In terms of communicating the exact pillars here tonight, what I'll say is that we are required to publish our strategic plan on our website and supply it to the government in the not too distant future, at some point in the spring. So it's done. We've presented it to our board. We've received approval. We've started to talk to our leaders internally about what it is and that, and our answer on that is just stay tuned. We'll have that published here shortly, so.

Scott Powell:

Very exciting, though.

Allan Danroth:

I think it's gonna be really exciting. It's gonna be a really simple, clear, concise bit of messaging. You know, on any given day, there's a lotta things that we focus on, but this is gonna narrow it down to a set number of goals that are really going to be the primary drivers for our business going forward to ensure that we have, as I've said it before, and I'll continue to say it throughout tonight and everywhere that I get the opportunity to speak, safe, reliable, affordable energy.

Scott Powell:

Question from Michelle here. Back to the tariffs again, and I figured this would be a hot topic today with what's been going on in the news with our friends in the United States. "Is Manitoba Hydro worried about the tariffs and how this is gonna impact the corporation in any way?"

Allan Danroth:

I think like every big business, you know, that has a significant part of their business exporting, you know, we're worried, and we're concerned about that. And again, we run a lotta different scenarios. We have one shareholder, which is the government, and we work with our shareholder and our board a lot to really try to understand the different scenarios and communicate that through. And, you know, we are concerned, but I think that, in some ways, we're insulated in a bit. You know, it's part of our revenue, but it's not the sole part of our revenue, and I think it's something that we can endure as these things unfold between the two governments.

Scott Powell:

And more tariff questions. It's tariff talk with Allan Danroth.

Allan Danroth:

I'm not sure if I have a whole lot more varied answers at this point, but I'll try.

Scott Powell:

Well, that's true. I think we might hear, I don't know, "Given Trump's tariff war launched today, is Manitoba considering restricting exports of electricity as Ontario and Quebec might be?"

You know, it's not really for me to comment or anyone at Manitoba Hydro to comment. This is really, you know, something that's occurring at the national level on a nation-to-nation basis. You know, we are a part of Team Canada. You know, we are very much in lockstep here to support the Manitoba government any way that we can any way that we're asked. And currently, right now, as I said, we just run a number of different scenarios and provide the information, and we're on standby to do whatever we need to do, you know, going forward. And hopefully, cooler heads prevail, and everything settles down here, and...

Scott Powell:

Certainly would be our preference.

Allan Danroth:

It would be definitely our preference. Make our life a little bit easier, so.

Scott Powell:

Here's a question, and we may not have this number in front of us, but I know there is a figure, "How much did," from anonymous. We've got a lotta you folks out there, anonymous. "How much did Manitoba Hydro spend last year dealing with zebra mussels?" Everybody's least favorite invasive species.

Allan Danroth:

Yeah, you know, Scott, I'm gonna have to put that one to the team and provide an answer. If anonymous, one of the many anonymous people tonight, can provide their email, then we can get that answer back. Otherwise, perhaps we can look at publishing something...

Scott Powell:

Yep.

Allan Danroth:

...on our website or in one of our, you know, social media tracks that we have. I don't have the number on top of head. You know, I know it's a reasonable amount, and we put a lotta effort towards it, but I can't comment specifically on the number.

Scott Powell:

We'll make sure that we, for those of you out there, if we don't have that information, we'll make sure we get that also put in the What We Heard document and summarize that. I know the figure's out there, but like Allan, I know it's out there, I just can't remember where I saw it. So we'll get that and put it in the What We Heard document for sure. This is a great question, actually, and something I've wondered about, "What is Manitoba Hydro doing with regard to the production or sale of renewable natural gas, RNG?"

So another good question. You know, there was a small team that was taking a look at this for a little bit. And as always, at Manitoba Hydro, we look at a lotta things, and you'll see this in our IRP, where we look at a lotta different sources of power and power generation, and this is something else that we've looked at. Currently, you know, it's not really something that we're targeting, factoring on, but it's certainly something that as the technology evolves and moves, then it's something we'd wanna look at. I think it's a good question, though, because it allows the opportunity, if I made a comment on something, you know, we really are a Crown corporation, and we're entrusted, you know, to do the best by our ratepayers, our stakeholders, our shareholders, and the people in Manitoba, so we never wanna be, wherever possible, we never wanna be, you know, serial number one on anything or a really early adopter on things. We wanna take our time and watch what's happening elsewhere in the market and what other folks are doing so that when we do it, you know, it's really proven technology, and we really clearly understand the pros and cons of going in that direction, so.

#### Scott Powell:

That's a good answer. Now, we've got a long question here, and I'm gonna try and get through it. I may have to break this up.

Allan Danroth:

Sure.

## Scott Powell:

"Please explain that presently there is plenty of wasted power keeping lights on at night and that this practice could easily charge a great many EVs. Plus, there is plenty of sunshine and wind power, which can certainly power EVs. And comment that there should be plenty of city buses using electricity, which should happen because this was a thing." I remember those trolleys. "We should rediscover EV buses need not be battery-powered." That might be more of a question for the city, but maybe we can address the first part of that around lights being on, and, you know, this great amount of sunshine and wind power, apparently, which...

# Allan Danroth:

Yeah, so the lights being on, so it's really important that folks understand, there's two Crown corporations, there's us, and there's Efficiency Manitoba. We're in charge of the gas and electrical system, the generating and transmission of electricity and the transmission of gas. And then the efficiency component, it's not to say that we don't deal with efficiency, but the lead, really, the lead Crown, if you will, is Efficiency Manitoba on that one. We work closely with them. We work very well with them. They have a great leader, great CEO in Colleen. And, you know, we have a lotta discussions, but it's really them that lead the charge on things like trying to get consumers to dim lights or diminish the use of lights in the evening in places like the tower and whatnot. And in terms of the wind and the sun, you know, what I can say is on the wind side of things, we do have the call to power, the 600 megawatts of Indigenous-owned wind, which we think is just gonna be a great project. It's gonna add some really good renewable resources to the overall grid system. And we're very excited to get that expression of interest out and evaluate the proposals coming back and award the power purchase agreements to the successful applicants, you know, in due course here. And we really are gonna pressure ourselves to try to move that project at pace. Obviously, lots of other entities. You know, we'll

have to rely on the proponent to also move at pace and also rely on our government partners to make sure that they can get permits and different things. But, for the part that's our role in this, we're really, you know, wired up to try to move at pace on this as quickly as we can.

Scott Powell:

Pedal to the metal, as it were.

Allan Danroth:

Pedal to the metal on this one. Yeah, you bet.

Scott Powell:

And on the second part of that around plenty of city buses should be using electricity, which did happen. The question obviously refers to some of the, you know, I remember the, I don't, I don't remember the street. I'm not that old. I don't remember streetcars, but I remember electric trolley buses. And I know Manitoba Hydro was involved in a pilot program with New Flyer Industries and others on the battery-powered electric buses. Is that something Manitoba Hydro gets involved in? Is it more of a city decision? How does that work, or do you know?

Allan Danroth:

You know, I mean, the electrification, like you think of the electric buses in some of the old systems, at least, you know, in Vancouver the last time I was there, they might've been all been phased out by now, but they certainly were around not too long ago. You know, that's really a city decision. Happy to work with, you know, any partners around on electrification. But really, you know, it's up to the, the R&D's up to the developer of the buses, and the procurement decision is up to the city, whether it's, you know, Winnipeg or Portage or Brandon or wherever. And, you know, anything that we can do to play a role in that alongside Efficiency Manitoba, we're happy to do that.

Scott Powell:

Another question, we're going back to our old thermal plants here from anonymous, "Is Manitoba Hydro considering a retrofit of the decommissioned Selkirk generating station?"

Allan Danroth:

Great question.

Scott Powell:

That is a great question.

Anonymous, I don't know if it's one person or many this evening. Is it just one of you, or are there a lotta you out there?

Allan Danroth:

I'm not really sure. So, yeah, I actually went out and toured that facility, and my technical area of expertise is actually around steam boilers and steam turbines, and so it was a real privilege and an honor to go out and look at that facility. It's an old facility. You can see that it was very, very well-

maintained, and, you know, just, it was neat to sorta go back in time and take a look at that. And look, there was some good work that was done in the recent years just to try to do some retrofits and stuff, but at this point, no. You know, from an efficiency perspective, what I understand from our engineers is it's just not, you know, viable and not what we need, and there are, frankly, some challenges with that plant. There's a fair bit of asbestos in that area. So, you know, it's not factoring into our thinking right now. You know, never say never, but it's really not on our radar at the moment. But it was great to go out and tour it and see what that facility was about. It was probably a pretty neat facility in its day.

Scott Powell:

I was there when it was running many years ago. It was a pretty cool place.

Allan Danroth:

Yeah.

Scott Powell:

Pretty straight ahead answer there. Still with the thermal plant theme. "How many days in the past year was the Brandon generating station producing electricity?"

Allan Danroth:

Oh.

Scott Powell:

Now, I know we are not gonna have that number in front of us, but-

Allan Danroth:

I don't have that number. Some, is some an answer?

Scott Powell:

Just so people know, typically, we run that when we need to meet peak demand, usually, in the cold winter or if we have a transmission emergency or voltage support. But that's something I think we can get that information, and we'll put it in our What We Heard document, so.

Allan Danroth:

Yeah, our commitment coming outta that. We'll absolutely do that. Again, I hope people appreciate, you know, with 5,700 employees, and we got 31 billion in assets, there's some things that we pay attention to and some other things that others pay attention to, and I just don't have that number off the top of my head, so apologies for that.

Scott Powell:

Anonymous, we'll get that, put it in the What We Heard document, so look for that to come. Slide to our next question. Okay, this one's very technical.

Oh, boy.
Scott Powell:
All righty, this is a good question, "What has Manitoba Hydro done in the past year to prepare for a corona mass ejection event?"
Allan Danroth:
Wow.
Scott Powell:
I think that's a sun, I think that's a solar flare.
Allan Danroth:
I don't know.
Scott Powell:
I'm getting a nod from behind the camera.
Allan Danroth:
I don't even wanna speculate. I don't know. I really don't know.
Scott Powell:
We'll look at what we've done. I know our system, you know, is designed to, you know, work in a number of environments, but I've never seen a question like that.
Allan Danroth:
No, that's a great You know what? I gotta say that, obviously, my first time doing this, but the quality of the questions coming through, like, I really appreciate the quality of the questions coming through. And, you know, it's not, you know, here to try to deflect too many things, but we don't wanna ever speculate either. And, yeah, a corona mass ejection event.
Scott Powell:
Corona mass ejection event. We'll find out what we've done, and we'll get something in our What We Heard document.
Allan Danroth:
Clearly, you and I missed that day in science class.
Scott Powell:
I'm the PR guy, not the science guy, so sorry about that, everyone. Well, it's a great question, though.
Allan Danroth:

Where is Bill Nye the Science Guy when we need Bill Nye the Science Guy or something?

Let me go to new posts here. Trying not to miss anybody. And again, I apologize. Okay, "How can Manitoba Hydro spend billions building up its generating capacity and fixing its aging infrastructure while keeping a handle on its debt without raising rates extensively as soon as the rate freeze is over?" Sorry, I didn't mean to bust that up. I had to click the More button, so. Again, "How can Manitoba Hydro spend billions building up its generating capacity and fixing its aging infrastructure while keeping a handle on its debt without raising rates extensively as soon as the rate freeze is over?" It's a good question.

## Allan Danroth:

Yeah, it's a great question. So, look, there's a big balancing act here, right? You know, and trying to balance all of those things, the safety component, the affordability, the reliability component, very much things that we've talked about here throughout the evening, you know, and we're looking at that. We're looking at what a future rate path looks like, and we're working very closely with our board and with our owner to do the right thing and the best thing by the people of Manitoba. As I mentioned, we are required to file a general rate application for electricity, and we have to do that by April 1st, so, you know, really within the next month, and at that point, those answers will be there. You know, we've got a great team that's running a lotta different financial models and a lotta different puts and takes. They're taking input from the IRP team, and it's going to the financial modeling team, and we are running these models constantly, both the IRP models and the financial models just endlessly to try to figure out what the right path forward is. And the right time to announce that to the public is when we file that document with the Public Utilities Board, so.

Scott Powell:

It's a very broad question, but I'm not sure if-

Allan Danroth:

Yeah, it's a great question.

Scott Powell:

That's a great question and a great answer.

Allan Danroth:

They're all really good questions, yeah.

Scott Powell:

Yeah, very high-quality questions. Thanks for submitting them, folks. We're doing our best to get you an answer here. From anonymous again, "There's always lots of talk about the end of fossil fuels. What is the current horizon for the end of this energy choice?" I think that might be something broader than what Manitoba Hydro can answer.

Yeah, that's beyond us. I mean, that's really a question for government, both provincially and federally, and then really, frankly, it's a global question as well. What I can say is, you know, right now, our generating portfolio is 97% renewable, and we don't expect that to change substantially. You know, we really wanna try our best to hold the line in there as best we can. And that's something, frankly, you know, that the folks in Manitoba should be very, very proud of. I mean, leaders going way back in the history of Manitoba. What a visionary thing, and what a great thing, and it's something just to be really, really proud of that not, you know, just because it's now the current way of thinking and the current way of doing things but really, Manitoba's been there for 30, 40 years, you know, having this great renewable portfolio. And so, you know, and that's not to overshadow. I mean, there are some legacy issues, and we're very focused and committed on reconciliation, and I mentioned that at the outset, and I say that with great meaning, you know, and a great commitment. And it's a commitment, I know, of our premier and of our minister and of our board and of myself. We take it very, very seriously. That being said, you know, if you just step back and look at the source of power and how it's generated in this province, it's really incredible what Manitoba has done in that regard.

## Scott Powell:

Absolutely true, Manitoba should be proud. It's a good question. I don't know if this would be more for us or Efficiency Manitoba. Thank you, anonymous. We are gonna ask it. "Has Manitoba Hydro conducted a demand analysis determining the commercial, industrial, and residential users who use more power than average for users of their size during peak winter demand?"

## Allan Danroth:

Yeah, I would ask Efficiency Manitoba. I think that that's something, and again, we'll put that in the What We Heard document. I don't wanna... What I'll say is this. We have a lotta people, both here and at Efficiency Manitoba, which, again, is a separate Crown, working really hard on usage and demand and different things, and we'll continue to do that. And I can tell you that our integrated resource plan, again, our IRP, which is gonna be published in the fall, has a number of different scenarios, you know, sort of a low, medium, and high-case scenario, base case scenario, and a low and high, if you will, and they contemplate a certain amount of efficiency, being, you know, how they see usage growing, and how they see users in the future five, 10, 15, 20 years out using power and using power responsibly, in an efficient way, if you will. So it's contemplated there, for sure, but then, you know, it's also contemplated, I'm sure, over at Efficiency Manitoba as well, yeah.

## Scott Powell:

Another great question here. I don't think we're gonna have this number in front of us, but it's certainly something I think we'll be able to get back to the questioner on. "How much electricity was sold back to Manitoba Hydro under net billing during this past year?" I think perhaps our customer group may have that information. Certainly not something I have in front of me.

# Allan Danroth:

Yeah, yeah. We'll get our VP in that area, Alex Chiang, you know, a really bright VP on our leadership team. He'll look into that and get that number back. But again, we can post that in the What We Heard document, yep.

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SCOIL	POWEI	I.

What We Heard document. For sure, we'll do that.

Allan Danroth:

Sure.

Scott Powell:

This is a question, again, I wouldn't wanna speculate on this answer. It's a good question, though, or an interesting question. "Do any of the primary US customers of Manitoba Hydro use utility-grade electrical storage?" And I'll assume by that you mean battery storage. I wouldn't wanna answer on behalf of Xcel or Minnesota Power or anybody, but certainly an interesting question. I don't know if we have any knowledge if they're using any at all.

## Allan Danroth:

Yeah, I believe that there's a few, but again, I don't wanna get into the specifics of who it is and what they're doing. Like, some of that, some of that stuff is proprietary, and I'd rather that the actual people comment on it than us comment on it, especially when we're in cross-jurisdictional situations and talking about contracts and stuff. And it's always, one of the reasons, and I think is, again, it's something that people might find interesting. You know, a lot of our customers are publicly traded entities, right? And so we become aware of information, but, you know, we don't always know what the public knows, right? Or if the public knows it. And so, the last thing we wanna do is say something in this forum, and it triggers some sort of insider trading issue or some other market issue that the law of unintended consequences. So, again, we can, you know, do a little bit of a survey of our customers and maybe perhaps not get into the specific customers, but we can sort of provide a general assessment of what's happening in that area. And that's, again, another very, very good question.

## Scott Powell:

Yeah, we're never fans when people speak for us, and we don't wanna be speaking for others. So, but it's a great question, so back...

# Allan Danroth:

Exactly. But, you know, again, I think that, you know, that's a question that's reflective of the times that we're in... and the changing things that are happening, you know, with our grid and what's going on with the grid. You know, if you took this back 15 years ago, I don't think you'd probably get a question like that, right?

And now, you know, it's now something that actually people are thinking about, and not just people in the hallways of Manitoba Hydro, but people everywhere are thinking about that. So I think that that's great. That shows that we've got, at the very least, we've got some engaged consumers that care and should care in these times, right?

## Scott Powell:

Yeah, absolutely. Got a great question. And, Andrew, thanks for putting your name in. We appreciate it. Question from Andrew, and this is a really good one. And, "Can you help us understand the benefits

that could come from encouraging reduced peak demand during winter months and how this could be accomplished, or should we focus simply on generation?"

Allan Danroth:

Sorry, Scott, can you read that question again?

Scott Powell:

Yeah, "Can you help us understand the benefits that could come from encouraging reduced peak demand during winter months and how that could be accomplished, or should we just focus on generation," essentially?

Allan Danroth:

No, no, so, again, we'll go back to the IRP. And I really like this question.

Scott Powell:

It's a great question.

Allan Danroth:

We'll go back to the IRP. You know, we look at demand, we look at the different profiles of demand, and we try to model that out. And again, as I mentioned previously, we work with Efficiency Manitoba on it. But why that's a really great question is because we had a peak demand in place for about the last five years, and then on around I think it was December 18th, we set a new peak, and then I think about five weeks later, we set a new peak. So if you think about that, right, the previous peak was in place for five years, and I'm sure there was more than a few cold winters here during those five years. And I'm told that this winter is not as cold as normal, and yet we set a peak, you know, just before Christmas, and then about five weeks later, we set another peak. And so, if you think about that, you can see that things are starting to change, right? And I think it's a great question that, you know, it shows the need to continue to work with Efficiency Manitoba, which, you know, good Crown, good leadership, good partner of ours, the need to do that work and the need to really model that in our IRP. Because, you know, I think what the user is perhaps implying, if you will, is that, you know, the easy thing to do is just add generation, add generation, but that costs, right?

Scott Powell:

Yep, yeah, for sure.

Allan Danroth:

That costs. You know, you wanna add, you know, 250, 500 megawatts, you know, it's gonna cost well over \$1 billion, right? And so, why spend that money? I mean, that's the money of the people. Why spend that money if, you know, we can focus better on efficiency and getting people to reduce consumption, you know, just generally across the board. The earlier question about the lights in the towers and different things like that when people aren't around, those are kinda things that what you can almost categorize a little bit as an easy win, right? Nothing's easy in this business, but you know what I mean. Like, it's certainly easier than taking the next five years to try to build, you know, a bunch of generation, right, so.

Yeah, certainly, when we reduce that peak, we can push that need out a little bit, which is-

Allan Danroth:

Yeah, you know, in this business, you know, as a CEO, you know, you wanna try to kick that can down the road. And you don't wanna kick your reliability issues down the road. You wanna deal with them now, but you wanna try to kick that peak down the road as far as you can, and you do that through a number of ways. You do that by adding generation. You do that by adding transmission in the right spots. So, you know, earlier, there was a question about co-generation. Maybe you do a little bit of co-generation. You do some things on, you know, what we call DSM, demand side management, you know, things at home, rooftops, solar, different things, and it all kinda comes together, right? It all knits together and into this sort of blanket of power and this blanket of power usage. You try to knit that all together and just make the best decisions that we can to, once again, have a safe system. You know, I'm just focused, we're not gonna hurt someone else. We're not gonna lose another life. And a reliable system and an affordable system. And that's, you know, really, you know, the risk of just repeating it endlessly is people really need to understand that that's really the three things that are driving everything that we do.

Scott Powell:

It's a good answer. Vicki sent us a question. Vicki, thank you very much. "Why not have trolley buses on Portage and Main streets fed by local buses? Does Hydro work with the city on tech issues like this?" Thanks, Vicki.

Allan Danroth:

So...

Scott Powell:
I admit, I like trolleys. I remember them.

Oh, yeah, yeah, that's great.

Scott Powell:

Allan Danroth:

You know?

Allan Danroth:

I mean, right, you're in San Francisco or something, and you hop on the trolley, it's a fun experience, right?

Look, I don't wanna speak for the city. We've got a great mayor. That's up to the mayor and council to decide what they wanna do there. But what I will say is we do work with the city. We work with the city on different events. You know, if there's things that are, you know, gonna happen where we're gonna close a couple streets down for a Grey Cup parade or Stanley Cup parade maybe later this year.

Or the Manitoba Hydro Santa Claus Parade.

Allan Danroth:

Oh, or that, too, the Santa Claus Parade. Then we work with the city, you know, to provide power for those events. And so we're in discussion. We have a team that's working with them quite regularly on different things as best we can, so.

Scott Powell:

Certainly, we would be right there if that was something they decided they wanna look at more seriously, I mean. Yeah.

Allan Danroth:

Yeah, yeah, absolutely. You bet.

Scott Powell:

Great question, Vicki. Thank you very much. Slide up to our next one here. Okay, this is anonymous, "Have you considered different rates for hydro consumption in households during peak and off-peak hours? I know, living in the Netherlands, this has been done." Maybe this person's in the Netherlands, hello.

Allan Danroth:

Ah, they're in the Netherlands, that's great. That shows that you've expanded your reach here, Scott.

Scott Powell:

Reaching one person in the Netherlands.

Allan Danroth:

Well, good for you. So the question was have we looked at it?

Scott Powell:

Yes.

Allan Danroth:

You know, as an organization, at different times, you know, we've looked at a lotta things, and, you know, so I would be not being truthful if I didn't say, at some point, somebody in the organization has looked at that. Is it on our radar currently, no. As I mentioned, we've got a really aging grid. We're one of the last, if not the last, jurisdiction to adopt AMI. As I mentioned earlier, we've got folks that are taking a look at third generation, and we haven't put it in for ourselves. So we really need to look at smart metering and just get that in place and do the basics of smart metering. And then, you know, if that's something in the future that, you know, it's to look at, it's something that we would not decide in isolation. We would talk to our board, we would talk to our shareholder, and certainly, they would help inform whether or not we're doing that, so.

Scott Powell:
And any change in our rate structure would need to go through the PUB process, correct? I mean, that's
Allan Danroth:
Correct.
Scott Powell:
They would be the ones to do that.
Allan Danroth:
Correct.
Scott Powell:
Now, we're running low on time. But that's a great question. And you can't do any of that time of use without smart meters anyways.
Allan Danroth:
No, we've gotta get the smart meters in place. And so, you know, again, it's something that we've got on our plan, and we'll certainly wanna look to do here in the not too distant future with any luck.
Scott Powell:
Okay, this is a great question, interesting. "Is Hydro looking at nuclear as an option?" Good question, interesting.
Allan Danroth:
So when you talk nuclear, a couple things to understand. So when people are talking nuclear these days, they're primarily talking about SMRs, small modular reactors, so SMRs, and there are a lotta different jurisdictions that are looking at them. Frankly, there's even some big companies that are

Technology agnostic.

Allan Danroth:

It's technology agnostic. We use a very sophisticated modeling system. It's a system that's in use in 70 other countries in the world. It's from a reputable provider. It's not an in-house system. It's a system that we bought that we brought in to do this very purpose. And so we'll do a broad market scan to look at things. Are we specifically embarking on a project like that? No, not at this point. As I said earlier, you know, I think the right thing to do for the people in Manitoba is be aware of what's happening around us, but not be an early adopter. Let other folks do it. There's a SMR pilot that's being built in Darlington

looking at doing it. So, it's all the rage, if you will, at the moment. It's trending, as folks would say, in the energy industry. Our IRP is gonna look at all forms of generation, and we will look at that to a small

degree. You know, a good IRP contemplates everything. It's a broad scan.

in Ontario. Some of the other jurisdictions in Canada are looking at it. Certainly, jurisdictions in the US are looking at it. And when the time's right, we'll do more than just a cursory look at it. We'll do a dive into it, provided that that's something that our board and our shareholder, which is the government, thinks is the prudent and right thing to do. But, you know, other than just at sort of that cursory level, it's not really something that we're doing at this point. It's not the right time.

## Scott Powell:

Question here, everybody's favorite canceled hydro project. "What is the state of Conawapa hydroelectric plant? This project was canceled." I was here when that happened. "Are there discussions on restarting this project?"

## Allan Danroth:

Not at this time. You know, again, that's a very big, big project. That project would probably, well, definitely would take well over a decade and maybe close to two decades to finish. It would be many, many, many billions, probably in the double-digit billions. And so those projects are big. You know, if you look at our balance sheet, we talk in the industry, financial people will talk about the fact that we'd probably have to park a big part of our balance sheet, right? And put our funding towards that. And, you know, it's just not something that we would do on our own. You know, we'd have to do that in extensive consultation with our board, with our shareholder, with the public. So it's not really on our radar at this point. If you go back to what I said, Conawapa's roughly about 1,400 megawatts, and if you're gonna take definitely a decade and maybe closer to two, then there's probably other things that you can do to spend your time on. There'll be other technology that emerges that you could invest your time and energy in. So, again, I'll go back to the IRP. You know, we're gonna look at everything. We're not discounting it, but I can tell you that, at this moment, we're not putting a lotta resources into the development of Conawapa.

## Scott Powell:

I'm just looking. How are we doing on time here? We've got some good questions here for you. We've got two minutes here, but let's take another question or two before we wrap it up.

Allan Danroth:

Sure.

## Scott Powell:

There are some good questions here. I'm going through these, and I apologize if I'm missing anybody on the scrolling. There's a lot of information here, and I'm doing what I can to... This is a question from Peter. Thank you, Peter, for this. "Does Manitoba Hydro have any suggestions for household power generating methods?" I guess self-generation in the residential. "Are there any technologies that you know of that can produce electricity from energy that may be produced by a wood stove? Does Manitoba Hydro have any other suggestions for small-scale generation to help during a low power generation or peak times?" Interesting question.

Yeah, that's a great question. You know, I'll throw a caveat out there. I'm not a technical expert on that part, but I'm not aware of any technology that you could attach to a wood stove to self-generate. Obviously, there's some jurisdictions that have done rooftop solar. And if you're fortunate enough to have a sufficient amount of space in a windy regime, you know, you always see the odd farm somewhere that some people are doing some form of microgeneration. But I'm not aware of anything that would attach to a wood stove. But I think, you know, again, it's another great question. It shows that a lotta people are thinking and thinking about their use and how they use and what other options are, and I think that's great. That's the kinda thinking that's gonna allow us to, as we talked about, kick that peak demand...

Scott Powell:

Right down the road.

Allan Danroth:

...down the, down the road.

Scott Powell:

Great, Peter, thank you for that. And this'll be our last question before we wrap 'er up for the evening. And I'd like to thank everyone for joining us. This is a good question here. "Glaciers are the source of our water to generate power, but this is under some stress due to climate change and also the proposed Saskatchewan irrigation plan. Manitoba Hydro needs to consider long-term threats. Drought is a serious thing." It's more of a statement rather than a question.

Allan Danroth:

Well...

Scott Powell:

Yes, we do need to consider drought.

Allan Danroth:

Well, let me just answer that. I think you're right. It's a good observation. Again, perhaps more of a statement, observation than a question. But, you know, drought is something that we do, and we have a lot of hydrology folks, engineers that look at that, look at historic water levels, look at historic evaporation. You know, we track this constantly. We track the levels constantly because, you know, we do have a lot of our eggs in one basket, right?

And so, for us, you know, climate change is very real, and glacier evaporation is very real, and so trying to understand what the effects of that, then we can go back. The fine folks at Hydro are able to track this back, you know, decades and decades and decades. And we've seen the numbers. We've seen the real lows, and we've seen the big flood years, and just lots of things that always factor into our thinking and, you know, trying to diversify where we can. And again, Indigenous winds. 600 megawatts of Indigenous wind is a great way to take the first step towards really diversifying our portfolio. And so, I think this is a good way to end the questions here this evening, if you agree.

Scott Powell:

Absolutely, well, I just wanna say thanks to everybody. It was a good discussion, and we are out of time. I know we've got more questions here. I appreciate everybody sending them in. We are going to put together, as I mentioned earlier, a What We Heard document summarizing these questions and responses, and also take the recording of this video, having a ASL translation on it, and upload those to our website in the coming weeks. So look for that. I wanna thank everybody again, and I wanna thank Allan for participating in his first public accountability meeting here for Hydro. You'll be around for many more.

Great. I hope to be.

Scott Powell:

And, yeah, that's what we're all hoping. And wanna thank you again for participating. So thanks to everybody out there, appreciate your support, and have yourself a good night.

Allan Danroth:

Thanks, everyone.