MANITOBA CLEAN ENVIRONMENT COMMISSION

MANITOBA-MINNESOTA TRANSMISSION PROJECT

VOLUME 1

* *

Transcript of Proceedings
Held at RBC Convention Centre
Winnipeg, Manitoba
MONDAY, MAY 8, 2017

* *

CLEAN ENVIRONMENT COMMISSION
Serge Scrafield - Chairman
Laurie Streich - Commissioner
Reg Nepinak - Commissioner
Ian Gillies - Commissioner
Cathy Johnson - Commission Secretary
Cheyenne Halcrow - Administrative Assistant
Mike Green - Counsel

DEPARTMENT OF SUSTAINABLE DEVELOPMENT
Elise Dagdick
Tracey Braun

MANITOBA HYDRO
Doug Bedford - Counsel
Janet Mayor - Counsel
Shannon Johnson
Maggie Bratland
Glen Penner
Shane Mailey
Jennifer Moroz

PARTICIPANTS

CONSUMERS ASSOCIATION OF CANADA (Manitoba chapter)
Gloria DeSorcy - Executive Director
Joelle Pastora Sala - Counsel
Max Griffin-Rill

SOUTHERN CHIEFS' ORGANIZATION
James Beddome - Counsel
Grand Chief Daniels

PEGUIS FIRST NATION
Jared Whelan
Wade Sutherland
Den Valdron - Counsel

MANITOBA METIS FEDERATION
Jason Madden - Counsel
Megan Strachan
Marci Riel

MANITOBA WILDLANDS
Gaile Whelan Enns
Douglas Tingey - Counsel

PARTICIPANTS

SOUTHEAST STAKEHOLDERS COALITION
Kevin Toyne - Counsel
Monique Bedard
Jim Teleglow

DAKOTA PLAINS WAHPETON OYATE
Warren Mills
John Stockwell
Craig Blacksmith

INDEX OF PROCEEDINGS

INDEX OF EXHIBITS

INDEX OF UNDERTAKINGS

MONDAY, MAY 8, 2017
UPON COMMENCING AT 9:30 A.M.

THE CHAIRMAN: Good morning everyone. We'll get started, and we will be starting at 9:30 every morning.

So I'd like to welcome all our participants, to the representatives and proponents of the project, and Manitoba Hydro, and to other people present today.

My name is Serge Scrafield. I'm the Chair of the Clean Environment Commission and I'm also Chair of the panel that will be conducting the review of the Manitoba-Minnesota Transmission Project.

I would now like like to ask the members of the panel to introduce themselves and we'll start on my right.

MS. STREICH: Laurie Streich.

MR. NEPINAK: Reg Nepinak.

MR. GILLIES: Ian Gillies.

THE CHAIRMAN: Thank you. The staff present today include the Commission secretary, Cathy Johnson. That's the person you go to if there are issues to discuss. Our Commission's

administrative assistant is Cheyenne Halcrow, who is sitting at the back of the room and you may have met her on the way in. Our legal counsel is Mike Green, also sitting over to my left. And also at that same table on the left is Bob Armstrong, who is our writer.

I would also like to ask that you silence the ringers on your phones. And the participants, when you're speaking or questioning, you will have to come up to the mic at the small table here in front of me. And please remember to turn on the mics when you speak so that our transcriber, who is sitting on the far, at least my far right near the wall there, so that they can understand and record everything that's being said. I think you are all aware that we do transcribe the entire process.

Most of the hearings, as you know, will be here in Winnipeg with a couple of sessions in La Broquerie. The transmission project is, for the most part, located in east Manitoba, and we hope to hear from the residents of that area and their various communities that make up the area over the course of the next four weeks.

I would like to also acknowledge that

the project is within Treaty 1 territory. I believe the whole project is, and that's home to a number of First Nations. Several of those communities are participants in this process. And we will be hearing from them.

The area is home as well to members of the Metis community, who will be represented by the Manitoba Metis Federation and, of course, we'll also be hearing from them over the course of the next few weeks.

Is there anyone here who would like to do an opening prayer before we continue? All right. We'll certainly leave that open as a way to start other days of this process. So if there is someone who would like to do it later in the week, that would be fine.

In terms of a little background, we're here today because on December 31st, 2015, the Minister asked us to hold public hearings to review the Environmental Impact Statement prepared by Manitoba Hydro for the Manitoba-Minnesota Transmission Project.

We are guided by amended Terms of Reference issued to us by the Minister on February 15th, 2017. Under those Terms of

Reference, we are to review the Environmental Impact Statement, hold public hearings, and prepare and file a report with the Minister. This report is to outline the results of the Commission's review, what we heard, and to provide recommendations for the Minister's consideration. In particular, the Minister asked us to recommend whether an environmental licence should be issued to the proponent, and if so, to recommend any conditions that should be included in that licence.

The Minister also requested that we include consideration of the effect on First Nations, Metis, and other Aboriginal communities of any changes to the environment. And we will be doing that, of course.

And that's why we're here today, the first day of our hearings. These hearings will go on now for up to four and a half weeks. We have hearings in Winnipeg this week and next week. The third week we will split between Winnipeg, where we will hear presentations from participants seated at the tables here in the room -- and we will spend part of the week in La Broquerie, where we will hear from residents of those parts of the

project area that are further from the city.

During the final week, or up to a week and a half back in Winnipeg, we will hear the remaining presentations, a rebuttal from Hydro, as well as closing arguments from all participants and the proponent.

Anyone who has an interest in this project is welcome to attend these hearings and also welcome to make an oral statement. There is no requirement that you make a statement, but if you wish to do so, we ask that you just let Cheyenne Halcrow, who I introduced at the start of my remarks and who is at the reception table when you entered, if you would let her know so that we are aware that you wish to speak. The oral statement is a chance for you to give those, present your personal knowledge, your views, as well as any concerns which you might have about the project.

I would note that you could give your oral statement in indigenous language, if you wish. We would ask, though, that you have someone who can translate for you, for the benefit of those in this room and on the panel who may not speak the language.

We would also welcome statements in French. We ask only that you let us know at least a few days in advance so that we can arrange for a translator.

Members of the public who make an oral statement will not be subject to questioning. The panel may ask for clarification, but only if there are one or two things that we have not understood. But generally there will be no questioning of members of the public who make presentations.

I would also note that if there is anyone in your community or generally from the area who is unable to attend our sessions, or if there is someone who doesn't really want to speak in public but they want to let the panel know their views, they are more than welcome to provide us with a written submission. A written submission may be by way of a letter, or an e-mail, or they can even go to our website and send their comments to us directly.

The panel will read all these written submissions that are received before noon on May 29th. Those written submissions will become part of the record and carry the same weight as if the party were here and made them in person. So we more than welcome written submissions and they will be

viewed equally strongly by the panel members.

For the formal participant groups, we have a schedule and an order of appearance for opening statements, closing statements and questioning. That is what we will be following and I believe you are all aware of that.

All of our hearings are recorded, as I said earlier. This is a requirement of the Environment Act. Transcripts are produced very quickly. By going to our website you can read copies of the verbatim transcript of whatever we heard on previous days, the day before and all the previous days.

We will be starting our morning sessions promptly, as I said, at 9:30, and our afternoon sessions also promptly at 1:30. So be ready to go at those times. We will include a short break in the morning and another one in the afternoon, and we'll do that at times that are opportune for breaks in the schedule.

Again, I just want to remind you to use your microphone when you speak, that will be up at this small table in front here, and to identify yourselves so that our transcriber can properly attribute your remarks.

I think that's all I have to say by way of opening comments and I would now like to turn to Tracey Braun, Director of Environmental Approvals, to provide an overview of the provincial licensing process. Thank you, Tracey.

MS. BRAUN: Thank you, Mr. Chair. My name is Tracey Braun, I'm Director of the Environmental Approvals Branch for Manitoba Sustainable Development. And the purpose of my brief presentation today is really to provide a summary of the regulatory process to date. It's also to provide a regulatory segue to the hearings that are starting today.

Here's the outline of what I'm going to talk about. I'm going to start with a very high level review of the jurisdiction that covers this project, the Manitoba to Minnesota transmission line. And I'm going to give a summary of key regulatory milestones that have happened to date and then what's ahead.

This project is an international power line, and as such it is federally regulated by the National Energy Board Act and the Canadian Environmental Assessment Act of 2012. The NEB Act, however, does allow for a provincial process

to take precedent, if it's done through an order in council, and that is what the proponent has chosen to do. And the OIC has been completed. And the reasoning behind that is we felt that this would better facilitate public participation in the hearing portion of the process.

The provincial legislation is the Manitoba Environment Act. And in the classes of development regulation, this project is a Class 3 development, which means it is a Ministerial licensing decision under Section 12 of the Environment Act. And in this particular case, as the Chair has mentioned, the Minister has asked for the Clean Environment Commission to hold hearings for the project.

Because this is a federally regulated process, the process that we follow here in Manitoba must meet all of the requirements of the federal process as well. For Manitoba, a Class 3, it's very common to have Clean Environment Commission hearings. I think in the last 10 years, we have only had two Class 3 projects that did not have Clean Environment Commission hearings. But this case, for this project, it is absolutely a requirement because it will be in

lieu of the Federal NEB hearings.

So the proposal was actually filed with us, the Environmental Approvals Branch, November 21st of 2014, in the way of a draft scoping document. And the purpose of the scoping document is to confirm the expectations for the Environmental Impact Statement, which would be filed later. The draft scoping document was advertised in newspapers, posted on the public registry, and comments were invited to February 9th, 2015. The draft document was reviewed by government's internal Technical Advisory Committee, the public, and also staff at the National Energy Board. We wanted to make sure that they were satisfied that the scope of the scoping document was broad enough to meet the federal requirements.

So the scoping document was finalized in June of 2015. The final version was posted on the public registry, and it did include comments and endorsement from the National Energy Board members. We did get comments from the public at that stage in the process, five of them, and they were primarily surrounding land values and basic process questions.

So the Environmental Impact Statement itself was filed September 22nd, 2015. It also was placed in the public registry. It was also advertised, and comments were invited to November 30th, 2015. Comments were received from TAC, the public, and also the Federal Government.

As is often the case with projects of this scope, it was a very iterative process, consisting of information requests back and forth between people commenting and the proponent that took place from October of 2015 to April 2016. And the final responses to information requests were provided to us on April 29th, 2016.

With that information, the Environmental Approvals Branch of Sustainable Development prepared a summary of the process to that point in time, and finalized it, put it in the public registry in October of 2016.

So the next steps, after the review, departmental review is done, we advised the Clean Environment Commission that our staff process was now complete and that we were of the view that issues raised during the review were either addressed in Manitoba Hydro's responses to the information requests, or that they could be

addressed in various licensing conditions.

And I've just put this slide up because I believe copies of the presentation are available somewhere in the room, and so if you wish to access the materials that we've prepared so far, this is where you can find them.

And now we go on to today, the next steps in the process. We're starting with the CEC hearings, and we expect a Ministerial report will be due 90 days after the hearings are complete, which hopefully will include licensing and non-licensing recommendations. We are also expecting a consultation report, which our consultation process is happening in parallel to this. And then finally, the Minister is to make a licensing decision, and that licensing decision would be informed by the Environmental Approvals Branch process which I have described to you today, the Clean Environment Commission recommendations report which is in the future, and the Crown Indigenous Consultation report, which also is in the future. So all of those three things will help the Minister make a licensing decision.

And before I close off, I would like

to thank the Clean Environment Commission for all their hard work so far to date, and ongoing. And I really look forward to your report and recommendations. And I would also like to thank all participants for their contributions to this process. Thank you.

THE CHAIRMAN: Thank you for that summary, Tracey.

So we'll move now to opening statements and we do have an order we're following. So we will begin with Manitoba Hydro.

MR. BEDFORD: Good morning, Commissioners, Commission staff, participants, colleagues from Manitoba Hydro, consultants and members of the public.

My name is Doug Bedford. I am one of the legal counsel to Manitoba Hydro at this hearing. To my immediate left is Ms. Shannon Johnson, the manager of the Licensing and Environmental Assessment Department in the Transmission Group of Manitoba Hydro. Next to Ms. Johnson is my colleague from the legal department, Ms. Janet Mayor. Next to Ms. Mayor, Mr. Shane Mailey, the vice-president of the transmission group at Manitoba Hydro. And at the

table immediately behind me, on the far left, another colleague from the legal department at Manitoba Hydro, Ms. Jennifer Moroz. Next to her, Ms. Maggie Bratland, who has played an important roll in the development of the Environmental Impact Statement in Ms. Johnson's department. And next to her, Mr. Glenn Penner from the transmission group. Mr. Penner will be largely responsible for constructing this project when it's licensed.

Ms. Mayor, Ms. Moroz and I are the primary counsel at this hearing to Manitoba Hydro. We will, however, at certain stages be joined by two other lawyers who have provided advice to Manitoba Hydro on particular issues regarding this project. Those lawyers are Mr. Bob Adkins of the firm of Thompson Dorfman Sweatman, and Mr. Brenden Hunter at the firm of Fasken Martineau.

The planning, engagement and development of the Manitoba-Minnesota Transmission Project owes much to the Bipole III project. A number of the individuals who worked on Bipole III have worked on the project that you are reviewing here. Like Bipole III, this project requires the selection of a right-of-way, the construction of

towers, and the stringing of conductors. Like Bipole III, it is a 500-kilovolt transmission line. But unlike Bipole III, it will carry an alternating current of energy with the current changing direction from positive to negative to positive 60 times per second, just as it is in this room. Bipole III, of course, will carry a current of energy that flows in only one direction, north to south.

The Manitoba-Minnesota transmission line to be presented here is designed to run for 213 kilometres from the Dorsey Converter Station northwest of Winnipeg to the Village of Piney at the American border. Ninety-two of these 213 kilometres are to be located in existing right-of-ways around and to the immediate east of the City of Winnipeg; 121 of the 213 kilometres are new and are to be found in southeastern Manitoba. These 121 kilometres of new right-of-way will occupy 36 kilometres of Province of Manitoba Crown land and 85 kilometres of privately owned land.

Manitoba Hydro will have to acquire the legal right to place the right-of-way on private land. In order to operate this new line,

Manitoba Hydro must make modifications to both the Dorsey and Riel converter stations, and must make changes to the Glenboro station which is located hundreds of kilometres to the west of Winnipeg.

The Manitoba-Minnesota transmission line will connect to a 500-kilovolt alternating current line presently being built in northern Minnesota. The line will carry energy to Minnesota, and it will carry energy generated in Minnesota and other northern states to Manitoba. Although Manitoba Hydro is a net exporter of energy and has been such for over 30 years, many Manitobans do not know that we must at times import energy. We certainly do this each year in the coldest months. We expect to do so when the next drought visits us.

Bipole III casts a long shadow. This Commission reviewed and recommended it be licensed. Your recommendations also influenced heavily the planning, engagement and development of the Manitoba-Minnesota transmission project. You told us in non-licensing condition 7.1 to your Bipole III report that you believed a more open and transparent route selection process was possible, and you said that you wanted to see more

use of quantitative data. We tried to do that with this project.

You told us in non-licensing condition 7.2 to your Bipole III report that you wanted to see more participation of affected public and indigenous communities in the canvassing of alternative routes and route selection criteria. We tried to do that with this project.

This will be my fifth hearing before the Clean Environment Commission. When we completed the Wuskwatim hearing in 2004, I observed in the remarks I submitted to your predecessors on the panel that we had much room for improvement in how we go about integrating indigenous knowledge and western science. Since 2004, all of us have watched the work of the Truth and Reconciliation Commission of Canada and have received its report. Call to action 45 of that report, although directed specifically to the Government of Canada, has some useful guidance for our work here. It recommends that indigenous laws and legal traditions be recognized and integrated in processes that involve land claims and other constructive agreements.

At Manitoba Hydro we have tried to

improve our recognition and integration of indigenous knowledge in our work. We have, arguably more than with previous projects, tried to listen and to avoid impacting lands that indigenous people told us were of a special value to them. It is no easy task to understand another culture's legal traditions when one does not speak the language and knows little of the history.

I have learned that Anishinaabe law is about relationships. These relationships, person to person, nation to nation, mankind to mammal, mankind to flora, mankind and water, give rise to rights and their corollary responsibilities and obligations.

Each person in Manitoba is a participant in an Anishinaabe legal relationship to co-exist peacefully and to share the land as confirmed in treaties. Anishinaabe legal tradition, as I understand it, provides that we must not leave all responsibility for the future to those not yet born to whom some day the future will belong.

The work we at Manitoba Hydro have done, and the work you will do, has much to do with satisfying ourselves that this project will

not result in any significant loss to the environment for future generations, and that it will help to provide for the future energy needs of all of the people of this province.

As with every project of this magnitude, the final decision to recommend to Manitoba Hydro's board that the project proceed to licensing was the responsibility of our senior management. Like you, they had an obligation to inform themselves sufficiently about the project in order to be comfortable in sending it forward.

This is not an easy time to be leading Manitoba Hydro. Everyone present here will know that we are losing colleagues whose jobs are being eliminated, that we are struggling to manage the costs of projects underway, and that we find we have to ask for rate increases that are higher than Manitobans have come to expect.

However, we are confident that as you hear more about this project, you will find that what has not changed over the years is the commitment my colleagues, our consultants and I have to professionalism, to hard work, to learning from thoughtful recommendations and informed criticism, and to getting the job done properly

and well.

In Manitoba, we at Manitoba Hydro are the most experienced in building and operating electrical transmission systems. We do not claim to be the most competent in assessing and predicting the environmental impacts of our projects, but we are getting better.

Your purpose is to review our work, the Environmental Impact Statement, and the public consultation we did, to consider the effects on indigenous peoples of the changes in the environment that the project will cause, and to make recommendations

When you are done, we are confident that you will recommend that the Manitoba-Minnesota transmission project merits licensing, and we expect that you will also match the hard work and professionalism of your predecessors, and provide the Minister with practical, thoughtful recommendations that will enhance the construction and operation of the project. Thank you.

THE CHAIRMAN: Thank you, Mr. Bedford. Next we will turn to the Consumers Association of Canada. Thank you.

MS. PASTORA SALE: Good morning Mr. Chair, members of the panel, and others. My name is Joelle Pastora Sale and I work as a lawyer at the Public Interest Law Centre. I'm here on behalf of the Consumers' Association of Canada, Manitoba branch, who I will refer to as CAC Manitoba throughout these hearings.

With me here today and seated at the CAC Manitoba table is Ms. Gloria DeSorcy, Executive Director of CAC Manitoba, as well as Max Griffin-Rill, who is a law student and is a summer intern in my office. My co-counsel Byron Williams will also be joining me at times during the hearing process. And in the audience also joining us is Dr. Patricia Fitzpatrick, who you will be hearing from later in the hearing.

Before I begin, I would like to acknowledge that we are gathered on Treaty 1 territory and home of the Metis Nation.

CAC Manitoba is a non-profit volunteer organization that works to inform, empower and represent consumer interests in Manitoba. CAC Manitoba provides evidence-based advocacy to ensure that consumers can have access to accurate, verifiable information in accessible formats, and

the skills and knowledge necessary to make sound, sustainable choices.

Those of you who may not be familiar with CAC Manitoba may wonder why consumer rights advocacy organization is participating in an environmental assessment process of the Manitoba-Minnesota transmission line. CAC Manitoba is guided by eight consumer rights and principles, including facts and information, the right to have opportunities to get the knowledge and skills we need to be informed consumers, a role in making government policies for the market-place, and a healthy environment now and into the future.

Guided by these rights and principles, CAC Manitoba has been involved in several environmental assessment hearings at the Clean Environment Commission. While there may be several definitions of environmental assessment, CAC Manitoba understands environmental assessment to be a proactive planning process which allows us to identify and mitigate, where possible, the potential negative impacts of proposed development projects.

From CAC Manitoba's perspective,

environmental assessment must be guided by principles of transparency, inclusivity, informed deliberations and meaningful consumer participation.

Environmental assessment is not a stagnant process. As consumers and citizens, our expectations of environmental assessment is that it will change over time, based on experience, available knowledge and technology.

As evidenced by the need for a review of a federal environmental assessment process, public trust and legitimacy are necessary elements of an effective environmental assessment process. As we're all aware, the environmental assessment and licensing process in Manitoba is guided and directed by the Environment Act. We know that at its core, the intent and purpose of the Environment Act speaks to the need to protect the environment as to ensure high quality of life, including social and economic development, recreation and leisure for this and future generations.

The Act also reinforces the importance of public participation in environmental assessment and recognizes the important role of the Clean Environment Commission in this respect.

Within the context of hydro development, the Clean Environment Commission is the only way that consumers can have their voices heard, because we are subject to a monopoly. The CEC is therefore necessary for the realization of consumers rights.

I am on page 6. CAC Manitoba has been involved in major environmental assessment proceedings since the early 2000s. This includes the environmental assessment hearings relating to Wuskwatim, Bipole III, Keeyask generation, as well as the hearings within Lake Winnipeg Regulation and the Need For and Alternatives To assessment of Manitoba Hydro at the Public Utilities Board.

Page 7: With the assistance of experts, CAC Manitoba has accumulated knowledge about the impacts of development projects in a variety of aspects, including human and community health, the economy, traditional land users, elders and knowledge holders, as well as cumulative effects assessment and monitoring and follow-up.

Thanks to the funding from the CEC, CAC Manitoba has learned about best practices within these areas.

As we read in the EIS, Manitoba Hydro has also learned from past projects. The Manitoba-Minnesota transmission project is being reviewed at an interesting time, as was referred to by Mr. Bedford. In some respects, the MMTP represents a closing of a loop, as it is likely to represent the last in a series of applications by Manitoba Hydro for Class 3 development project licences.

However, given best practices and environmental assessments will continue to evolve, consumers expect continual learning will lead to better management of environmental effects of projects.

Page 8: Challenges of Manitoba Hydro. While CAC Manitoba certainly acknowledges Manitoba Hydro's desire to learn from past projects, our clients will suggest that Hydro continues to require improvements, including within the area of transparency and inclusiveness of consumers in decision-making, monitoring and follow-up. The silos within Manitoba Hydro and the Manitoba regulatory process, cooperation and coordination among provincial, federal and indigenous jurisdictions, the acknowledgment that best

practice environmental assessment is always evolving and that regulatory compliance is not sufficient, and its relationship with indigenous nations and people.

Page 9: As we go through the next few weeks of hearings, CAC Manitoba will be focusing on the review of Manitoba Hydro's monitoring and follow-up plans, its ISO compliance, and its plan for adaptive management.

For CAC Manitoba follow-up and monitoring programs are critical components of good environmental assessment, and adaptive management serves as best practice for the design and implementation of follow-up and monitoring programs.

Whether we are, or represent consumers, indigenous nations, governments, proponents, or regulatory bodies, monitoring and follow up provides a powerful opportunity for collective observing, verifying, learning and adapting. CAC Manitoba seeks to build on improvements made in EIS before the CEC in recent proceedings and to ensure that MMTP is consistent with best practices.

Page 10: Over the last decade or so,

the CEC has gained a reputation across Canada for innovative recommendations which have set standards for best practice. The recommendations of the CEC for Bipole III and Keeyask projects reinforce the iterative nature of the monitoring design, but it also set the stage for appropriate regulatory and industry practices in follow-up and monitoring programs. But environmental practices and standards have already evolved since these hearings. MMTP offers the CEC an opportunity to enhance its reputation and make recommendations which will exceed past standards and practices. The bar is being raised for environmental assessment across Canada. Not only do consumers expect that Manitoba Hydro has learned from the past, but consumers believe that Manitoba Hydro has the responsibility to continuously enhance its practices in a transparent, inclusive, informed and meaningful manner.

Within the Terms of Reference in mind, CAC Manitoba hopes to assist the CEC panel in its deliberations regarding the public interest of the Manitoba-Minnesota transmission project.

We thank the Clean Environment Commission panel for this opportunity and look

forward to the dialogue over the next few weeks. Thank you.

THE CHAIRMAN: Thank you, Ms. Pastora Sale.

Our next opening statement will come from the Southern Chiefs' Organization. Thank you. Chief Daniels.

MR. BEDDOME: Good morning Mr. Chairman, other members of the panel, madam secretary and other CEC staff, and representatives of the proponent, Manitoba Hydro, and all other people who may be in attendance today.

My name is James Beddome, I am legal counsel for the Southern Chiefs' Organization. It's my honour to be joined here today by Grand Chief Jerry Daniels. Just to give you a quick outline, Grand Chief Daniels will be speaking a little bit about who Southern Chiefs' Organization are and why they are here today. And then following, I will give a brief outline of the evidence we intend to call.

So without further adieu, Grand Chief Daniels is a member of Long Plain First Nation and he was recently elected the Grand Chief of the Southern Chiefs' Organization in January of 2017

CHIEF DANIELS: Good morning everyone. Good morning, Mr. Chairman, panel members and attendees and participants.

The Southern Chiefs' Organization is an assembly of 33 First Nations of Southern Manitoba. Southern Chiefs' Organization is an independent political forum to protect, preserve, promote and enhance First Nations peoples' inherent rights, languages, customs and traditions through the application and implementation of the spirit and intent of the Treaty making process.

SCO members include signatories of the Treaty 1, 2, 3, 4, 5, and Dakota Nations who did not sign Treaty with Canada. This represents about half of the First Nations in Manitoba. Our population is over 70,000, both on and off reserve, with many in Winnipeg.

The objectives of the Southern Chiefs' Organization include assist member First Nations in the advancement and achievement of their goals as mandated by the chiefs meeting in summit; provide a common front for initiatives mandated by the chiefs meeting in summit; promote and assist member First Nation in providing good government for their First Nations; assist member First

Nations in promoting and defending Treaty and Aboriginal rights as mandated by the chiefs in summit; assist member First Nations in holding the Crown and holding the Federal and Provincial Governments responsible for fulfillment of their fiduciary duties and other responsibilities and obligations.

In 2004, at Dakota Tipi, the chiefs in summit passed resolution 16 on environmental stewardship, which resolved that First Nations must protect -- participate as active partners in any public and private environmental stewardship programs and initiatives, Southern First Nations perform their own environmental research studies in regards to environmental stewardship on their traditional lands and territories, and I as Grand Chief, to support and lobby financial support from the Federal and Provincial Government to participate fully in all environmental stewardship programs and initiatives.

SCO is here to support our member First Nations based on the 2004 resolution 16 and the decision at the SCO summit in September 2016.

MR. BEDDOME: Just before I move on, I realized I forgot to acknowledge and want to thank

the Commission for acknowledging that we are on Treaty 1 territory, as well as the homeland of the Metis Nation, and also on the traditional territories of the Dakota people who did not sign Treaty.

I just quickly want to outline the seven main issues that Southern Chiefs' Organization intends to address in the hearings.

Firstly, we want to explain who Southern Chiefs' Organization is, and we also want to explain a little bit about Treaty territories and indigenous rights.

We also want to talk a little bit about the historical loss of Crown land over time.

Thirdly, we want to talk about the impact on habitat, animals and other species from the project.

Fourthly, we want to look at hunting, fishing, gathering medicinal plants and other traditional use and land base practices and concerns that member nations have.

Fifth, we want to talk about the potential impact on Southern Chiefs' Organization member nations.

And sixth, the potential effect on the

ability for First Nations and indigenous peoples to exercise their rights on the remaining Crown land in the region.

And seventh, improving Manitoba Hydro's engagement with First Nations. We will be calling one expert witness, being Dr. Petr Cizek. Dr. Cizek has considerable experience in geotechnical mapping and land use planning. He has appeared before the panel before, so I think you're familiar with him. But he's going to utilize available map sets and with that he's going to be able to map the study area from between 1930 and 2016, and will show the change in land use patterns. And particularly what will be shown is a net decline in forest covered areas, and at the same time a substantial increase in linear features and linear developments.

The Southern Chiefs' Organization will also be bringing forward a panel that will include the Grand Chief, who sits beside me, and other representatives from Southern Chiefs' Organization communities. The panel will present a cross-section of perspectives. And this will serve to highlight the fact that particularly in

Southern Manitoba, it's becoming extremely difficult for indigenous people to exercise their traditional rights due to the increased industrialization, which has decreased the amount of unoccupied Crown land and wildlife available for harvesting.

They will also demonstrate that the traditional territories of indigenous people occupy large areas and people may travel hundreds of kilometres to exercise their traditional rights based on seasonal and other natural patterns. They will demonstrate that indigenous rights are not confined to a single Treaty area, but in fact indigenous people can hunt on any unoccupied lands anywhere in Canada. Moreover, they will highlight that many indigenous people live away from their own home community, but they are still able to exercise their indigenous rights on unoccupied lands close to where they do live.

And they will also demonstrate that indigenous people have local and traditional knowledge that could benefit Manitoba Hydro, the Clean Environment Commission and the Government of Manitoba.

We thank you very much for allowing us

to participate and for your time, and we look forward to the proceedings.

THE CHAIRMAN: Thank you, Chief Daniels and Mr. Beddome.

Our next presenter, or participant presenting an opening statement will be from Peguis First Nation.

MR. SUTHERLAND: Good morning, Mr. Chairman, Commissioners of the Clean Environment Commission. Good morning to the proponent and all participants. Good morning to our Aboriginal brothers and sisters in the room.

My name is Wade Sutherland and I'm a duly elected councillor of Peguis First Nation. One of my portfolios is lands and environment. I am responsible for the consultation and special projects office. Our consultation and special projects office has worked on several projects related to the MMTP, that being engagement with Manitoba Hydro about MMTP, land use and occupancy interviews, our current Manitoba Crown Aboriginal consultation, this Clean Environment Commission hearing, and we intend to be involved in the National Energy Board process and Federal Crown Aboriginal consultation.

Peguis First Nation appreciates this opportunity to participate in this hearing and make opening comments. Our aim is to participate in these hearings, inform the CEC, and bring our knowledge and skill to the hearing. Some here will know Peguis First Nation participated in the three previous CEC hearings about Manitoba Hydro projects; those include Bipole III, Keeyask dam, Lake Winnipeg Regulation. We also have begun to participate in the National Energy Board hearings about projects which affect Peguis access to land and territory.

Welcome to Treaty 1 and Peguis traditional territory. We are a short drive from our original reserve when we were the St. Peter's band up to 1906. Peguis First Nation traditional territory and modern land use by our members stretches through the region where the Manitoba-Minnesota Transmission Project would be located. We are a signatory to Treaty 1, signed in 1871. There are no distinguishing clauses in the Treaty document for land outside of Treaty 1 area. As a result, Peguis First Nation members can exercise their right to land inside and outside the Treaty 1 area.

When Treaty 1 was being negotiated in 1871, some chiefs stated that they have to speak for the land because the land cannot speak for itself. We were asked by the Creator to be stewards of the land. This is our duty.

In conclusion, Peguis First Nation is hopeful that our input at this hearing will provide a viewpoint and position that the Commission will consider seriously and appreciate. We hope for a fair and just report from the CEC. Meegwech.

MR. VALDRON: Thank you. Good morning to the Commission, to more fellow participants, to Manitoba Hydro. My name is Den Valdron. I'm going to be the legal counsel representing Peguis First Nation on these Clean Environment Commission hearings with regards to the Manitoba-Minnesota transmission line project.

Peguis has always been a leading First Nation in Manitoba. The people of Peguis were farmers in the region before Europeans even came here. When settlers came, it was the people of Peguis that sheltered them from the fury of the fur traders. The Peguis people signed the first Treaty and then they signed the numbered Treaty.

They were the people of the crossroads and they travelled as far north as Hudson's Bay and as far south as the lower reaches of the Red River. The people of Peguis were known and respected through the region.

Now today Peguis is a nation of 11,000 people. It continues to be a leader among First Nations. In these sessions you will hear evidence from Peguis about our culture or traditions. You'll hear evidence of land use of Peguis members throughout southeast Manitoba and in and around the areas affected by the project.

Now, before I touch on that, I want to address two misconceptions that are quite common. These are proximity and exclusion. There is a notion that if a project isn't in close proximity to a First Nation, i.e. on its doorstep in some fashion, sometimes even, you know, touching on a specific reserve land or piece of reserve land, then the First Nation doesn't have an interest or may not have an interest. And there's a notion that if an area is primarily private land, then no indigenous interests are at risk. They are taken up, and taken out, and that in this act of taking up indigenous interests are excluded entirely from

the region. Both of these are false and our evidence is going to show that. I say to you, you cannot rely on these misconceptions. In fact, we will show that the history of Peguis past and current land use extends across vast areas of the province and, in fact, into the region in question. The southeast corner of the province is the site of extensive use by Peguis members.

Now, keep in mind that Peguis is not just a reserve. There are 5,000 Peguis members in and around Winnipeg. The region in question is literally the only accessible area that they can practice traditional activities, southeastern Manitoba, that corner is their preferred area.

As to exclusion, we want to point out that no taking up is ever total or complete. There's always leftover lands, there's patches, there's islands, there's riparian areas and road allowances. Over the last century, Peguis members have learned to practice their traditional areas in the modern context, in the margins of private property and through negotiations with private property owners. Even in areas dominated by private land, there remain patchworks of wild or public land and situations and area where

traditional rights are exercised.

Now, in support of these points, we bring two expert witnesses. Mike Sutherland, Director of Consultation Special Projects Unit for Peguis. He's a trapper, a hunter, a former councillor, a former Natural Resource officer, a teacher and a leader within the community. He possesses an unparalleled breadth of knowledge and will speak to land use activities and cultural importance of the area, and the impact of the MMTP on those traditional activities.

Our second expert witness is Dr. Niigaan Sinclair, a well-respected academic who will be speaking of the larger context of indigenous historical, national and traditional activities in southeastern Manitoba to provide information and background for the cultural knowledge and traditions in the areas covered by the MMTP.

Finally, we will have a panel of Peguis members to testify as to the community, the culture, traditions and use. They will speak about the MMTP project area and the impacts and potentials for impact for the members of the First Nation.

And assisting the panel will be Jared Whelan, who will be acting as technical support. And I believe he will be providing technical support to Mike Sutherland as well. Also, he is not an expert himself and he is not a member of the panel.

Now, why we are here? Why is Peguis here? The answer is simple. Our objective here is the preservation of our way of life and the manner and places in which we choose to live it. It is not satisfactory to say have your way of life, just practice it somewhere, because elsewhere turns into nowhere. It is not satisfactory to say have your way of life, we're just going to impinge on it a little bit, because impingement turns to termination.

For the people of Peguis, our ways of life are intimately tied to the land. There is no distinction between land and people. It is through the land, through hunting, trapping, fishing, gathering, through spiritual activities, and recreation, and simply being there, relating to and working on and persisting on the land that identity is formed. You cannot have culture without that land.

We are here to see that our rights are respected and not subverted, that our views are heard and not ignored, that our lives and advocations that the lands for which we are guardians are protected as set out in the Treaties.

Our rights will not be subordinated. Our rights, our values, our way of life is as relevant, as valuable, as significant and important a value as any other interest or claim. We do not subordinate, we do not accept other priorities as higher.

This hearing is about monitoring, mitigation, compensation, adjustments. These things will all be part of these discussions and we want to be part of these discussions. We will accept the need for accommodation and we will accommodate, but we must be accommodated. We are prepared to listen, but we will insist on being heard. And we are here to speak for our rights. Thank you.

THE CHAIRMAN: Thank you very much for that statement.

Our next opening statement will come from the Manitoba Metis Federation.

MR. MADDEN: Good morning, panel. My name is Jason Madden. I am legal counsel for the Manitoba Metis Federation. I'm here today with Meagan Strachan from our firm, as well as Marci Riel, the Director of Infrastructure and Energy at the Manitoba Metis Federation.

I'm going to focus my presentation and opening comments to just set out the legal framework and to draw the Commission's attention to what we think are very important key issues of all of the evidence that the Manitoba Metis Federation is going to provide and feed into over the hearing.

I'm going to start with who is the Manitoba Metis Federation. It's their self-government representative of the Manitoba Metis community and it represents over 100,000 Metis within the population of Manitoba. It's participated in past CEC hearings such as Bipole, Keeyask and others.

And I just want to start by saying that the history of the Metis and reconciliation -- or these hearings are actually reconciliation in action. Lots of people talk about it. Reconciliation is thrown around, it's

kind of like a consultant speak word, like synergy or horizontal management now. It has to have meaning. It has to have meaning in practical and real ways. And the Commission is obliged, and I'm going to outline a bit on that, to affect that. And it's not just saying, well, we're listening better but we're not changing what we're doing and it's status quo. It has to change.

So the legislative framework that the CEC is under, or guided by, is actually very unique to Manitoba. And I think this is why you're going to hear a lot of different types of evidence from the indigenous representatives generally, as well as the Manitoba Metis Federation specifically.

So first you have the Environment Act, and it's unique to Manitoba in one particular way, it assesses the effects on people. That does not exist in other jurisdictions across this country in relation to environmental assessment. And environment is defined as air, land, water, plant, animal life, including humans. So understanding the effects of a project on a people, including Aboriginal people, is absolutely necessary. It is within your mandate. We accept the principle that

the duty to consult process is separate and apart. But what you're hearing, as past presenter indicated, is that you can't separate indigenous people from the land. And the evidence being put forward is contextually around that.

Second, Manitoba is unique in all of Canada with its Path to Reconciliation Act. And we don't think that legislatures pass legislation which are kind of empty vessels or meaningless. And in fact, this unique piece of legislation actually mandates each Minister to advance reconciliation in section 3.2 of the legislation. And reconciliation refers to the ongoing process of establishing and maintaining mutually respectful relationships between indigenous and non-indigenous peoples in order to build trust, affirm historic agreements, address healing, and create more equitable and inclusive society. You are legislatively bound by that. That's not a common law principle flowing from the duty to consult and accommodate. This was passed by the Manitoba Legislature and you are obligated to ensure that your ultimate decision is advancing this.

And as I indicated, section 3.2 of the

section says each member of the executive council, which is essentially Manitoba Cabinet, is to promote the measures to advance reconciliation through the work of the members' department and across government.

So I'm going to talk to you a little bit about the people that I represent, which is the Manitoba Metis community as a part of the larger Metis Nation. And you know them well, but I want to give you a context, because reconciliation is about telling the true story of Canada. It's about actually understanding our history. I always viewed it as it's "his story" usually. It's written from a different perspective. And it is usually seen as essentially driving over indigenous languages, indigenous cultures, indigenous territories. It's kind of like a virus in a computer. It infects and it rewrites the code. It's no longer that lake of what we used to call it, it's someone else's name on it. And the process of decolonizing or reconciliation is acknowledging that we don't know our own history as a country and that we have to do better. And it's not about blaming, and it's not about unringing the bell, or

going back and doing redos, it's about trying to do better through the recommendations that this Commission will make to advance reconciliation, but also fulfill its mandate under the Environment Act.

This is the map of Canada that everyone kind of knows and there's intrinsic biases based in there, right? Canada is this little rump of a country at the east coast, there's this, you know, go west young man. And this concept that there's not peoples there with their own governments, their own languages, their own cultures and their own traditions. And that narrative has essentially, and colonization has took hold for 150 years. But in Manitoba there was no way Sir John A. could get his vision of creating a country from coast to coast to coast without dealing with the Metis Nation in the Red River Settlement.

Back in 1869, '70, there is 12,000 people living along the banks of the Red River, and in the settlement 10,000 of them are Metis, 7,000 of them are children. Think about that. That's what this province used to be, and this territory that you're on currently, as well as

other indigenous groups who will speak about their own histories.

I just want to say this is Canada's perspective, this is deconstructing colonization. Here's Canada's perspective in 1869. This is from our Prime Minister of the day. It will require considerable management to keep those wild people down. Those are my people, the Metis. In another year, the present residents will be altogether swamped by an influx of strangers, who will go with the idea of becoming industrious and peaceful settlers, and essentially the homeland of the Metis will be swamped by others and taken away by others. This is Riel's vision, or the Metis perspective at the time.

When the government of Canada presented itself at our doors, it found us at peace. It found that the Metis people of the northwest could not only live well without it, but it had its own government, with its own free, peaceful, well-functioning, contributing to the work of civilization in a way that the company from England could never have done without a thousand soldiers. It was a government with organized constitutions, whose junction was more

legitimate and worthy of respect because it was exercised over the country that belonged to it. That's Riel in 1885.

And what is forged is a Treaty relationship. There were two societies who treatied together. One was small, but in its smallness had its rights. The other was great, but in this greatness had no greater rights than the rights of the small.

And this is what comes out, the promise of 1.4 million acres of land for the children of the half breeds. So when that influx of settlers came, the Metis wouldn't just be a footnote within history.

And those are the lands that were talked about, about what the half breed grant was supposed to be. And of course, what I think we now know from the Supreme Court of Canada's decision in 2013, is that was undermined and delayed in order to ensure that that promise to the original Treaty partners was never fulfilled. And ultimately the court saying that the Crown breached the honour of the Crown in implementing section 31 of the Manitoba Act.

That's our history. That's where these lands,

where this project is, that's what happened. The Metis story here is a story of dispossession. It is past the point of infringement. The thousand little paper cuts have already happened, and you're going to see that from the evidence. And so it's not going to just solely be about, well, here's where they hunt and here's where they trap, because they are not doing that any more because colonization won. Colonization was extremely effective.

And we have to talk about reconciliation, which is about how do we rebalance? If we're sincerely committed to reconciliation, how do we rebalance those relationships? So it's not just more taking, more dispossession, and one more little paper cut. This project, of course, you'll hear from proponents always saying, but that's not our project, we can't solve this giant thing. Well -- but we can. We can do better. And other jurisdictions do better on it. And I think that we are going to hear from the evidence that we need to do better if reconciliation is going to matter, or we're going to achieve it.

So why does all this matter in the

hearing? You can't understand the potential effects on the people without understanding who they are. And you're going to hear from indigenous peoples about who they are. They know who they are and they want to tell you who they are. You can't understand the context of what's already happened to a people -- or understanding the context of what's already happened to a people is necessary to appreciate how this future development is going to appreciate them. You can't minimize and say, well, it's already passed. You can't just -- the context is important in order to understand how we can advance reconciliation. And you can't advance reconciliation if you're just going to repeat the indifference and exclusion of the past. It must be real and it must have meaning.

And there's examples out there, other jurisdictions, whether it's revenue resource sharing, whether it's meaningful accomodation agreements, that's standard in other jurisdictions in this country. It's not always in Manitoba. And I hope that by the end of the hearing, we're going to be able to illustrate to you of how that is actually being achieved in relation to this

project, or needing recommendations in relation to that. Because it's not just about Aboriginal communities, or Aboriginal peoples and nations cannot be just narrowed down to harvesting or trapping or -- all of those things are fundamentally important, but they also need to become what they were originally envisioned to be, partners in Confederation.

And with that, thank you very much.

THE CHAIRMAN: Thank you very much, Mr. Madden. I think we'll take a short break, 15 minutes to stretch your legs. So we'll be back here at 10:55. Thank you.

(PROCEEDINGS RECESSED AT 10:41 A.M. AND RECONVENED AT 10:57 A.M.)

THE CHAIRMAN: Welcome back everyone. Our next participant opening statement will be Manitoba Wildlands. And thank you, Ms. Whelan Enns.

MS. WHELAN ENNS: Good morning. Good morning participants, legal counsels, plural, Manitoba Hydro staff, indigenous peoples, and the CEC panel and CEC staff. My name is Gaile Whelan Enns, I am the Director of Manitoba Wildlands.

Previously I have managed

environmental programs and campaigns in Manitoba for Nature Canada and for the World Wildlife Fund Canada. I was also a board member and advisor to Sierra Club Canada over a 15 year period. Currently I am on the board of Climate Action Network Canada for Manitoba, a position I have held for almost a decade.

So here we are again, the fourth CEC hearing regarding a Manitoba Hydro project since late 2012. Manitoba Wildlands has been a participant in each of those Hydro CEC hearings. And I and various of the environmental and public advocacy roles that I occupy have been an attendee or participant for every CEC hearing regarding a non-Winnipeg decision since 1993. The Winnipeg wastewater hearings for the CEC are the exception. This may mean that I've been part of more CEC hearings than anyone else here today. I haven't taken a poll.

My professional relationship with the origins of the Clean Environment Commission and our Environment Act are a matter of record and are detailed in the Manitoba Wildlands response to the two reviews of our Environment Act. And that document is in the public registry, of course, and

also posted on the Manitoba Wildlands website. In short, I was a staff person for the political policy committee, which initiated the need for a Manitoba Environment Act more than 30 years ago. And then I was on the advisory committee to the Minister when that Act was written, tabled and passed third reading.

The proclamation of the Act was left to the government elect of 1988. The independence of the CEC was central to all policy discussions, and the language that lead up to the Act as is that independence central today.

I may also be the only person in Manitoba who has consistently appealed Class 3 licenses under the Environment Act. This step is taken as a citizen and as an advocate who continues to believe that Manitoba is not quite doing a good enough job in its standards for Environmental Impact Statements, scoping documents and licensing conditions.

We certainly are not paying enough attention to the life cycle of infrastructure that may be in place for as long as a hundred years. And to date do not have regulatory requirement for reviews of the operation, licensing and

environmental effects for such long-term projects. We will return, that is Manitoba Wildlands will return to the subject of the Environment Act, environmental assessment and cumulative effects assessment in Manitoba as part of our contribution to the review to the MMTP.

For this hearing, there are some firsts. We have a new chair of the CEC, and we wish Mr. Scrafield the best as Chair of his first CEC hearing. We also have a panel of three, panel rather where three of the four panel members for this hearing are new to the content and the context for a Class 3 hearing regarding a Manitoba Hydro proposal under the Environment Act.

I would recommend -- I'm sort of known for recommends when I get to the mic -- I would recommend that you may want to read sections of the Keeyask Generation Station transcript, that will assist you in your learning and your deliberations. And your colleague on this panel, Mr. Nepinak, could probably suggest some relevant sections to take a look at.

One of the other firsts for this hearing was having one of the two lead Manitoba Hydro legal counsel for the MMTP hearings present

and participating in the interviews to assess participants' proposals for funding. To the best of my knowledge, that's never happened before. I would advise you that the technical and regulatory teams inside Manitoba Hydro do not necessarily talk to each other about regulatory matters, that is as far as I had ever been able to tell. That is they do not share what they heard or learned or committed to during each of the separate regulatory hearings. This is one the biggest eccentricities of our utility and its planning and management structure.

I would concur with the use of the word "silos" from one of the previous participants this morning. This was most evident during the Lake Winnipeg Regulation hearings, when the team responsible for our huge lake, our huge reservoir, who had never dealt with a public review in 40 years, seemed to have no context or knowledge regarding any of the other regulatory reviews, even when the content was relevant to their responsibilities.

You may wish to consider the certainty demonstrated already this morning about First Nation and Aboriginal participants in CEC

hearings, starting with Louisiana Pacific hearings in 1996/97, with the first ever presentation by a First Nation during a CEC hearing, and then moving to the Wuskwatim hearings in 2004. One thing is certain about a CEC hearing now, the majority of the participants are likely to be First Nation and Aboriginal.

Starting with the Wuskwatim hearings then, our office has been active in supporting and assisting First Nation and Aboriginal participants in CEC hearings and proceedings.

There are also, each to their own, but there are also myths about CEC hearings, and a little myth busting may be a better way to start the weeks, best way I can think of this morning in terms of the weeks we're going to be working together. So here's two comments from the point of view of being a participant in multiple hearings. The participants here in the hearing are not the only organizations or the only communities affected by the project. And the participants are those then who have navigated the steps to be present and participating with some funding support.

Another myth that comes up from time

to time that might need a little bit of busting is to basically point out that there's no parity in the process. That is those who are paid for each day and all of their activity connected to the MMTP proceedings and hearings are not the participants. A look at the provisional order for the MMTP hearings tells the same story. Call it volunteer or pro bono work, as one of the legal counsel has recently, the participants whose role it is to inform the CEC and bring independent analysis and external experts about the subject matter that the CEC panel hopefully needs to and will consider, are the ones here today who are not fully compensated. Simply put, the participants are providing the content, questions and advice to the CEC possible within the funding arrangements for their participation. Most of us in this room then are aware that various independent experts who could have been here to inform and assist the CEC were not funded.

The only CEC hearing that came close to parity was the Keeyask hearing. The quality of content and significance of independent experts' contributions to that proceeding lives on. And Manitoba Hydro will be relying on certain of those

experts' contributions in this proceeding.

No doubt some other myths may emerge while we work together for the next month.

I wanted to basically thank the MMF this morning for the references to the Path to Reconciliation Act and point out that it was passed unanimously in the legislature. It's not a point in time and it was unanimous.

As per the outline for evidence filed, Manitoba Wildlands in these hearings will be aiming to shed light on the EIS for the MMTP, in particular what approach for EA, cumulative effects planning, sustainability, and preferred standards for Class 3 projects are possible and needed in Manitoba's environmental protection and environmental assessment process, including the regulatory steps.

We will also be aiming to shed light on the missed potential in how to protect the environment, plan a transmission project, and look at the options for that project in the context of this environmental regulatory process.

We will also be aiming to shed light on the non-linear changes in our weather and climate system which Manitoba Hydro needs to pay

more attention to. It is becoming tired when the utility continues, or keeps suggesting that there really aren't any climate change impacts or risks to worry about until 2050. Our presenters, experts and content will aim to inform the panel and those here in the room through the hearings about the MMTP.

As always, the opportunity to participate is appreciated. Thank you.

THE CHAIRMAN: Thank you, Ms. Whelan Enns. And hopefully you'll be sharing your long history with the CEC with all of the participants over the course of these hearings. Thank you.

Our next participant will be the Southeast Stakeholders' Coalition.

MR. TOYNE: Thank you very much, Mr. Chair.

My name is Kevin Toyne and I am the lawyer for the Southeast Stakeholders' Coalition. The Coalition is a group of affected and otherwise concerned landowners in southeast Manitoba. And I apologize in advance for the brisk and less than comprehensive pace, but I do have only 10 minutes, so I shall do my best.

So the coalition will be making three primary points throughout this hearing. First that Manitoba Hydro has relied on a flawed methodology to select the proposed route for the MMTP.

Secondly, the Coalition will be attempting to convince you that using that flawed methodology, Manitoba Hydro then selected a flawed route for this transmission line.

And finally that there is a better alternative that is available and that is an alternative that should be recommended by this Commission.

And I'll touch on each of those three points briefly in my opening remarks. And if the Commission agrees with the Coalition's position, the Coalition's submissions with respect to the proposed outcome of this hearing are as follows: First you should decline to recommend that a licence be granted to this project until such time as Hydro has selected a more appropriate route for the line. Second and in the alternative, the first and final thirds of the line are less objectionable than the middle third, and that perhaps they could be licensed while Hydro redoes

the middle third of the line. But finally I'm going to explain to you why that alternative outcome should not be pursued by the Commission.

So first turning to the methodology. So as you'll hear, Manitoba Hydro is relying on something called the EPRI-GTC methodology. And it's the first time that this Commission will have an opportunity to assess that methodology. And I anticipate that you're going to be told that that methodology is scientific, it's objective, it minimizes biases inherent in human decision making, and it reflects various perspectives and inputs. Nonetheless, I will be asking you to reject though this methodology. Why? Simply put, this methodology can perhaps best be described as the Donald Trump of routing methodologies. It's arbitrary decision-making based on faulty assumptions, bias, and it derives its respectability and credibility from its impressive sounding title. It significantly undervalues some of the key principles that govern routing decisions in Canada, and it suffers from two of the primary criticisms that this Commission levelled at the methodology used in the Bipole III hearing, false precision and subjectivity. I'll

talk very briefly about each of those now.

So with respect to false precision, as you'll hear, one of the final stages of this methodology is something called preference determination. Basically a small number of routes get ranked 1, 2 or 3 on a series of criteria, and then some weights are applied to those criteria. And much like golf, whichever route has the lowest score wins. Now, unfortunately, the use of that weighting can really magnify and really distort the differences between those scores.

So I'll use an example that I hope works, an example from the 2016 Rio Olympics. You might remember a fellow named Usain Bolt who won in the 100 metre dash, and a Canadian, Andre De Grasse came in third and he won the bronze. There was .1 of a second difference between two of them. That's all that separated one from three. But as you'll hear, the methodology that Manitoba Hydro is using would try to convince you that Andre De Grasse actually took three times as long to get to the finish line as compared to Usain Bolt, when the actual difference is only .1 of a second. That's an extraordinary distortion of the differences between those two individuals.

Now, with respect to subjectivity, you will also hear that this methodology, it's like a funnel, there's even a diagram in chapter 5 of the EIS, and that all sorts of inputs and bits of information and analysis get put into this funnel. And the funnels run a number of times. And as the funnels run, routes get eliminated. And you don't go back and reconsider routes once they have been eliminated. So, for example, once the border crossing was selected, it eventually gets shifted, and some potentially viable routes to that revised border crossing that had previously been eliminated, they still might have been viable, but nonetheless Hydro did not go back and reconsider them because the process says you don't do that. And conceptually that's one of the prices that you pay for this particular model is the elimination of potentially viable routes, regardless of change of information or circumstance. I suspect you'll hear that's an acceptable price to pay given all of the other alleged benefits you'll be told about. But some routes that are eliminated are like zombies. No matter how many times they get eliminated, they keep coming back to life.

And that brings us to the final

preferred route that Hydro will be asking you to bless. It's based on one of those zombie routes. So the final border crossing was selected and the routes that went to it was a route called AQS, and that route forms the foundation for the final preferred route. But in round two of the process, there were a number of alternatives variations on that AQS route that you'll hear a lot about over the coming days. And after various engagement activities, both with the public, First Nations, Metis, other activities that were undertaken, a number of variations of AQS make their way to the preference determination stage.

And there's four finalists. Two of those finalists you'll hear a lot of evidence about, at least when I'm at the microphone, AY and SGZ. There were two other routes that also made it to the final four. One of the routes, however, that was eliminated was a route called SIL. But even though it was eliminated, someone at Hydro suggested that it be put back in. So instead of four routes going to the final stage, five routes went. And the process worked the way it was supposed to. Various scores of 1, 2, 3 were attributed, various weightings were applied. And

wouldn't you know it, SIL comes in third. Two routes beat it, including one of the routes that the Coalition will be speaking a lot about, AY.

So you would think at this point, having been eliminated twice, the SIL route would be off the table. But like any good zombie in a movie, SIL just won't stay dead. Someone suggests that it get put back in, and notwithstanding that it's already been eliminated twice, and the scores are redone so that SIL is the successful route.

Now, rather than endorsing the zombie route that Hydro will be asking you to accept, there's a better alternative that's available, and it will be one that will be discussed when Bob Berrien, who has presented before this Commission before, appears. That route will be a modified version of AY and SGZ. And that alternative route, at least in our respectful submission, better reflects and respects accepted routing principles in Canada. It will have less impact on landowners in Tache and La Broquerie, and it may very well result in less delay than the current proposed route.

You'll hear a lot of talk about delays that were taken into account by Hydro. You'll

also hear about delays that were not taken into account by Hydro. And those are delays that resulted from landowners exercising their rights. Those are delays that were intentionally excluded from consideration by Manitoba Hydro. And that when those delays are taken into account, the alternative being proposed by the Coalition may actually result in less delay than some of the other routes that Manitoba Hydro has considered, and less delay that the route that they have actually put forward here today.

So if you agree with the Coalition's position, we will be asking you to refrain from recommending that Manitoba Hydro receive the Class 3 licence until such time as they have selected a more appropriate route. Put differently, there should be a round four so that some of the outstanding issues and concerns that I'm sure you may hear about from some of the other participants, and from Hydro themselves, from the alternative that's been suggested can be taken into account.

Alternatively, you could suggest that the first and the final thirds of the proposed route be licensed, while Hydro does a truncated

round four to correct the flaws and deficiencies in the middle third of the route. But I told you I'd tell you why you shouldn't do that, even though you can and perhaps will do that, and that's because the Commission needs to send a message to Manitoba Hydro.

So Manitoba Hydro does not have permission to construct the route along the current proposed route. But you wouldn't know that from the way that they're acting. Land surveyors are out, easements are being offered to landowners, money is being offered. They have even started to purchase houses along the route. And they don't have permission to build there yet. Even this morning you heard Mr. Bedford say, "when it is licensed." Well, that's treating this process like it's a mere formality, like the outcome is a foregone conclusion. You aren't a rubber stamp, and it almost seems that's what Hydro is counting on. You have a statutory mandate and you have heard some people talk about that this morning.

So given your blessing, at least in the Commission's perspective, to this flawed routing methodology, that's going to be put before

you, you will be doing a tremendous service to Manitobans, and that if the Commission simply rubber stamps what Hydro is asking both with respect to the routing methodology and the route itself. The message that you're sending to Manitoba Hydro, it's the wrong message, and that message would be "Ask and you shall receive."

The Coalition is asking that you send a different message to Manitoba Hydro. And it's twofold: First, that the Commission demands better from Manitoba Hydro, and that's because Manitobans deserve better.

Thank you very much.

THE CHAIRMAN: Thank you, Mr. Toyne. Our next participant opening statement will be from Dakota Plains Wahpeton Oyate.

MR. MILLS: Good morning, Mr. Chairman. You're probably anticipating that we're getting out early.

My name is Warren Mills. I and my business partner, John Stockwell, assist Dakota Plains Wahpeton Oyate. Sitting to my left is Craig Blacksmith, who is a spokesperson for Dakota Plains.

On behalf of hereditary Chief Orville

Smoke and his council of elders, we have been asked to listen to and understand or attempt to understand what Manitoba Hydro is up to, and provide that information to the Chief's council of elders, and respond with their comments, thoughts and concerns.

We wish to thank Mr. Bedford for Hydro's opening comments, and we certainly heard some language in there that is of interest to us and we look forward to reading those transcripts tomorrow and confirming, in fact, what he said.

We must open by commenting that we certainly appreciated your acknowledgment that we're on Treaty land and that we're within the Metis territories. We are also, Mr. Chairman, on lands that the Dakota Sioux have ceded or vested to the Crown by any agreement whatsoever. And Dakota Plains, to be very clear, is one element, one group of the Dakotas. And we don't pretend, nor do we have authority to speak on behalf of all of the Dakotas per se. Chief Smoke wanted me to be crystal clear that we are here on behalf of the members of the Dakota Plains.

As you would know, Mr. Chairman, we come without legal assistance. My mother warned

me about taking a knife to a gun fight, but we will attempt to see what we can do.

The community of Dakota Plains, when we talk to them and when we listen to them, they ask us to voice several concerns. First and foremost is they question the authority of the Crown to access these never surrendered lands. The trade route between Red Lake and the Red and Assiniboine is a significant part of the Dakotas' territory and lands travelled. And Craig will speak to that shortly and provide some further description.

The members of the community indicate that Mother Earth is of significant concern to them. This Clean Environment Commission is going to hear talks of all sorts of things, routes and in matters of lands and path and direction. We enjoy and respect those discussions and we may participate, but our emphasis will be on Mother Earth and the Dakota Plains concern that it appears to be under continuous attack. And they ask us to make all efforts to ensure that the Clean Environment Commission includes in their recommendations firm, fair recommendations of care and concern as to Mother Nature.

We come here with no false expectations. We don't expect that the Dakota Plains community will cause this Commission or Manitoba Hydro to make substantive changes to what they do. But we do believe that there are numerous micro matters that we have concerns about and that we believe we can provide good inclusions in what we anticipate and candidly expect will be a long list of recommendations to the Minister.

We do have concerns as to the process itself. We enjoy and appreciate that the director and her team are here. We've often wondered if she hears us, Mr. Chairman, and we know that today she does. We observe that within the Environment Act, her Minister has two mandatories. The Minister must consider the greenhouse gas component of this project and the Minister must consider the energy efficiency of this project.

We intend to vigorously test the applicant's witnesses in regards to those two matters. And we expect that the witnesses they will provide us as to their EMF will be thoroughly tested and vetted. And we note with significant disappointment that once again the Clean Environment Commission will be asked to consider a

mandatory, within the Environment Act, that being greenhouse gas assessment, without the authors that Hydro relies upon being present.

We will, in their absence, test the value of the greenhouse gas information that Hydro provides, and we will also thoroughly test the air quality matters that Manitoba Hydro's consultants speak to.

In closing, Mr. Chairman, we appreciated Mr. Bedford's comments that Manitoba Hydro has learned from the past, as have we, and we intend to talk about matters before this Commission in relation to other work that Hydro has previously done. And we think that a lot can be learned from the conditions that this Commission applied to Bipole III. And I think that there will be, we trust that you will allow some discussion as to whether or not those conditions can be strengthened, or stiffened, or additional reporting to those conditions could be applied.

I realize that you'd like us to move along. I noted you checked your watch, Mr. Chairman. I'll ask Craig Blacksmith to speak to the Dakota Plains.

MR. BLACKSMITH: Good afternoon, Commission. Thank you, Warren. Fellow greetings to our fellow proponents.

My name is Craig Blacksmith and I'm from Dakota Plains Wahpeton Oyate. Our history as Dakota people basically hasn't been told properly by the Canadian Government through the education system. I'm going to read something from the Dominion Lands Act, which was passed in 1872. Any person, male or female, who is the sole head of the family, or any male, who has attained the age of 18 years, shall be entitled to 160 acres of unappropriated Dominion lands for the purpose of securing a homestead right.

Our Dakota people were never afforded this right. In the Dominion Lands Act on page -- what I read from was page 34. Page 43 they make mention of Indians.

We as Dakota people, we do not recognize ourselves as anything other than Dakota people. We are not indigenous or First Nation or Indians according to the Crown or the Government of Canada.

Our people were had economic sovereignty as late as 1956. 1956 food rations

first came to our people. And the Canadian government restricted the economic development of our people to the point where rations had to be delivered to our people. And these economic sanctions are being subjected to our people by the Indian Act.

We have records which we will make light to the Commission and to the other proponents that the Dakota people were never dependent on the federal government.

The name of this project is called Manitoba-Minnesota transmission. Our people had been deemed refugees by the Canadian government and this is what is being used against us and against our traditional leader, Orville Smoke, and our people. Minitopa (ph) was the name given to Portage la Prairie. Minitopa is Manitoba. Minishota (ph) is smoky water which is the name given to the State of Minnesota. North Dakota sits south of us across the 49th Parallel. And somehow our Dakota people were deemed to be refugees and we never crossed that imaginary line. Information and letters from the government which I will also make public.

My colleague Warren Mills stated that

we would not interfere or try and impede the progress. That's not the intent of our presentation. The intent of our presentation is to bring to light the history of our Dakota people. And we at one time had economic sovereignty.

The City of Portage la Prairie in 1911, March 27, 1911, passed a motion asking the federal government to remove Dakota people from Portage. In turn, Dakota people, some had moved to different communities but the core group stayed and were relocated to a neighboring First Nation. Land was purchased from the First Nation. This is where the Dakota people were moved to.

As I had stated that we had economic sovereignty up until that point and now the federal government has created a dependency on our people. We had never been given the respect of people, we had never been afforded the right accorded under the Dominion Lands Act, and this is something that has to be addressed.

In closing, I'm going to make mention of the Manitoba Hydro Act. We are not dealing with the regular corporation that registers itself down on Broadway and Kennedy. Manitoba Hydro was

approved by the Province of Manitoba, and it reads as follows:

"Her Majesty, by and with the advice and consent of the legislative assembly of Manitoba, enacts as follows:"

And there's provisions in here that Manitoba Hydro does not even need the approval of the people to do any of its projects.

We're sitting here without legal counsel because we have come to realize that legal counsel is always in a conflict of interest when dealing with issues with the government. Legal counsel has already sworn our allegiance to the Crown and as such are working as agents of the Crown.

A message from our Dakota people has said we would like our economic sovereignty restored. Thank you.

THE CHAIRMAN: Thank you, Mr. Blacksmith and Mr. Mills. That concludes the opening statements from the participants and the proponent and I think we have got time, if Hydro is willing, to begin the introduction and project description. Are you prepared to do that? Yes?

Thank you.

Before you begin your presentation once you are all up there, we will ask you to state your name and to affirm. Thank you. And it will just be the front row that needs to affirm.

MS. JOHNSON: Could you please state your names for the record?

MR. SWATEK: Yes, my name is David Swatek.

MR. MAILEY: Good morning, my name is Shane Mailey.

MS. S. JOHNSON: My name is Shannon Johnson.

MR. MATTHEWSON: My name is James Matthewson.

(David Swatek, Shane Mailey, Shannon Johnson and James Matthewson, sworn)

THE CHAIRMAN: Okay. Go ahead.

MS. S. JOHNSON: Good morning. Before starting, Manitoba Hydro would wish to acknowledge all the participants today, the people in the communities and the lands they represent. Both this hearing and the project, if licensed, are on the land they live on and utilize.

My name is Shannon Johnson and I'm the

manager of licensing and environmental assessment for Manitoba Hydro. And it's my pleasure to kick off Manitoba Hydro's presentation of the Manitoba-Minnesota Transmission Project.

One of the rules of licensing an environmental assessment department is to development environmental assessments for linear developments such as the Manitoba-Minnesota Transmission Project. And as such, I work with many of the presenters you will see over the coming weeks.

Manitoba Hydro appreciates the opportunity to take you on a journey of how we planned, routed and assessed the project, as well as how we incorporated feedback through the public and First Nation and Metis engagement processes.

While there are many familiar faces in the room from previous hearings, we also look forward to working with some of the new faces we see here today.

Manitoba Hydro will have nine panels with a variety of topics that we will be presenting over the next couple weeks. Today, myself, Mr. Shane Mailey, Vice-president of Transmission, Dr. David Swatek, Manager of System

Planning, and Mr. James Matthewson, Senior Environmental Officer in Licensing and Environmental Assessment, will be providing you with a high level overview of the project.

I will begin by providing background on how we got here. Mr. Mailey and Dr. Swatek will provide a high level overview of the project itself. And actually Mr. Matthewson is going to take us on a pictorial trip of what the route will look like. And with that, let's let the journey begin on how we got here today.

In order to proceed with the project, Manitoba Hydro needed approval through the Needs For and Alternatives To process, which reviewed the preferred development plans proposed by Manitoba Hydro. The plan included the construction of a 500 kV international power line, now known as the Manitoba-Minnesota Transmission Project. The hearing took place in 2013, and the Public Utilities Board issued a report recommending moving forward with the project. This was accepted by the province in June of 2014, and it authorized Manitoba Hydro to enter into agreements and take all necessary actions related to the construction and operation of a new

transmission interconnection.

The Needs For and Alternative process provided for a fulsome review of the need for the project and comparisons to alternative plans. This included detailed financial review, and as such these topics will not be covered as part of this process.

So now that we had approval to build an international power line, Manitoba Hydro had to determine where it would go, which began the environmental assessment process, which resulted in the Environmental Impact Statement we will be reviewing over the coming days.

The Environmental Impact Statement was based on four rounds of public engagement and Metis engagement starting in 2013, two year multi season, multi discipline biophysical field program starting in 2014, data requests and key person interviews with government departments, organizations and stakeholders. This resulted in the filing of a 24 stand-alone chapter Environmental Impact Statement in September 2015.

In order to proceed with the project, Manitoba Hydro will need approvals from both the Provincial and Federal levels, and as such

Manitoba Hydro developed the EIS to meet the requirements of both of these processes.

Now, let's talk a bit about the Provincial review process. Ms. Braun did a much better job than I can in one slide, and I think it's suffice to say that in October 2016, confirmation that the EA process was completed and that the CEC process could begin was given. And as such, that really takes us to where we are today.

Manitoba Hydro hosted a pre hearing presentation to facilitate the understanding of the routing process in January 2017, as part of this process. We have also completed a multi-round information request process with 795 information requests and close to 1,400 questions within those information requests from the CEC and the participants.

Now, while the number of information requests was large, it gave Manitoba Hydro the opportunity to provide further background on various aspects of the Environmental Impact Statement.

Manitoba Hydro filed the final round of IRs on April 13th, and we have now arrived at

day one of the hearing.

I'd now like to give a bit more detail on what we will be presenting over the coming days. I have already described what you will see today. The remaining presentations will be made by people with expertise in their field and will provide a more detailed explanation of the different facets of the project. The topics will include engagement, a review of both the public and First Nation and Metis engagement processes, routing. As mentioned, as part of the pre hearing activities, Manitoba Hydro provided background on the methodology. The presentations you will see in the coming days will delve deeper into the how and why of the decision-making associated with routing.

We'll have a presentation on construction, operations and property. The presenters here will show you how we will construct the project and the measures that we put in place to mitigate effects on the environment, including an overview of our vegetation management practices and our bio-security standard operating procedures. We will also talk about Manitoba Hydro's property policy. This will be followed by

methodology and approach, where we will give a background on how we approach the assessment itself and the process used to predict the environment and effects of the project on people and the environment. Then we will talk about electric and magnetic fields.

Dr. Bill Bailey will be here presenting for us, and he is one of the foremost experts in the field of electrical and magnetic fields.

We will then have presentations on the socio-economic environment, which will include topics such as agricultural and visual quality. This will be followed by a biophysical panel, which will include presentations on topics such as fish and fish habitat, and wildlife and wildlife habitat.

We will finish out our presentations with an overview of the environmental protection program, where we will talk about how we will protect the environment and then how we will monitor those activities so that we can validate the predictions in the environmental impact statement.

As we go through the presentations

over the coming days, you are going to see some themes. The first includes a team approach taken in the development of the EIS and in decision-making.

The EIS was developed using the expertise and perspectives from close to a hundred individuals from a wide variety of disciplines. While the number is simply too large to have every one of them here, many of them you will see presenting over the coming weeks.

As will be described in much more detail during the routing presentation, a team approach was used in order to leverage the expertise and perspectives from many of these individuals. This approach also included the public and First Nation engagement process.

All of this contributed to decision-making when it came to routing this project. Decisions regarding route selection were guided by a framework, and decision-making was made by a multi-disciplinary team leveraging the expertise and collective knowledge of more than 60 professionals.

One of the other themes that you are going to see in the presentations is transparency.

For example, in order to provide detail as to how this team approach worked and details into the background of the decision-making, Manitoba Hydro committed itself to a more transparent process such that we could better share information.

Manitoba Hydro made the decision to share the details through meeting notes of what transpired at milestones and key decision points during the routing process. The reasoning behind this was to provide background and try to create understanding on what drove these decisions. Manitoba Hydro also wanted to provide information and transparency through the public and First Nation and Metis engagement processes. And to do that, we engaged earlier and with a broader reach using a variety of communication tools.

We had four rounds of public engagement, notification to more than 25,000 individuals, including press releases, letters, postcards, e-mail campaigns, telephone calls, newspaper and radio advertising, social media posts and website updates. Public engagement involved more than 30 open houses and numerous meetings and stakeholder workshops with the establishment of several landowner information

centres.

The First Nation and Metis engagement processes involved 13 First Nations, the Manitoba Metis Federation, four Aboriginal organizations, and more than 90 leadership meetings, community open houses, information sessions, workshops and field visits.

Manitoba Hydro's engagement process has been evolving over the last several years. And that leads me to the next theme you will see both in the EIS and in coming presentations, commitments to lessons learned.

Manitoba Hydro has been constructing and operating transmission lines in the province for more than 50 years and has completed several environmental assessments on different projects. Part of that process is a review to see what went well and what could be done better. So you will see in the EIS references to learnings from past assessments and things that have been raised through previous EAs. Some of the results of that is adding more clarity in the analysis process, more inclusive cumulative effects assessment, a better integration of Aboriginal traditional knowledge, and more concise, plain language

approach to writing. Regulatory oversight has also provided an opportunity to learn and do better.

One of the recommendations that came from Bipole III from the Clean Environment Commission was to develop a more streamlined, open and transparent approach to route selection, making more use of quantitative criteria. This contributed to the routing methodology that we have done and what you're going to see in the coming days.

Manitoba Hydro looks forward to presenting the highlights of the EIS and answering questions. Manitoba Hydro is confident in the route that it is proposing, and after considering project effects and measures taken to avoid or lessen potential negative effects, Manitoba Hydro has concluded that this project will not result in significant effects to the biophysical or socio-economic environments. How we made that determination will be presented over the coming days.

I am now going to pass it over to Mr. Shane Mailey and Dr. David Swatek, who will describe the project itself to you.

MR. MAILEY: Good morning and thank you for this opportunity to present to the Commission.

I would like to start with a high level overview of the Manitoba Hydro system. Manitoba Hydro's existing supply resources can be divided into four resource types: Hydroelectric generation, thermal generation, wind generation and imports.

Hydroelectric power is by far the most significant resource in the Manitoba Hydro generating system, providing almost 90 per cent of the generating capacity that Manitoba Hydro owns, and typically about 98 per cent of electric energy.

Generating stations located along the lower and upper Nelson River contributes approximately 75 per cent of Manitoba Hydro's current hydroelectric capacity. Manitoba Hydro has 15 hydrogen rating stations on five river systems.

Manitoba Hydro has two thermal generating systems located in Brandon and Selkirk, Manitoba. Thermal resources offer important support in Manitoba Hydro's system. Thermal

resources can be used for capacity purposes to help meet peak loads during winter or when there are hydro generation outages. In a drought, thermal resources would be expected to produce energy. Thermal resources can also be used as a source of supply during major transmission or other outages, and for local area electrical requirements.

Manitoba Hydro has purchased the entire output of the St. Leon and St. Joseph wind generation farms in Manitoba. The combined maximum hourly generation capability of the two wind farms is 258 megawatts. Wind generation is an intermittent resource in that hourly wind generation can only be relied upon when wind resources are available, and are a function of the current wind speed.

Manitoba Hydro has four import contracts currently in effect, imports of energy from a large power market such as MISO, whose resources are predominantly thermal and pose very little delivery risk due to lack of energy supply.

There are two major components of the Manitoba Hydro system currently under construction, that being the Bipole III

transmission project and the Keeyask Generating Station. The Bipole III project adds 2,000 megawatts to Manitoba Hydro's high voltage direct transmission capacity, increasing our ability to deliver renewable electricity from hydrogen generating stations in northern Manitoba. Once completed, Bipole III will strengthen reliability and security in Manitoba's electricity supply by reducing dependency on existing high voltage direct current transmission lines and the Dorsey converter station. We currently rely on these facilities to deliver over 70 per cent of the electricity produced in the province.

The Keeyask project is a 695 megawatt hydroelectric generating station located approximately 725 kilometres north of Winnipeg on the lower Nelson River. When completed it will add approximately 4,400 gigawatt hours of renewable electricity per year to Manitoba Hydro's total supply.

This map illustrates the transmission system in Manitoba. The transmission system has two major components, the alternating current, AC transmission system, and the high voltage direct current DC transmission system.

As approximately 70 per cent of the existing hydro generation capacity in Manitoba is located on the lower Nelson River near Gillam, some 800 kilometre north of the major population load centre in Winnipeg, Manitoba Hydro's transmission systems features a major north/south transmission element, that being the HVDC system.

The existing HVDC system was designed to bring the combined output of the Kettle, Long Spruce and Limestone generating stations in the Gillam area, south to the Dorsey converter station northwest of Winnipeg near Rosser, Manitoba.

The existing HVDC system consists of Bipole I and Bipole II and connects to the northern collector system. Bipole I consists of the northern Radisson AC/DC converter station, a 500 kV DC transmission line from Radisson to Dorsey, and a DC/AC converter station at Dorsey.

Bipole II consists of the northern Henday AC/DC converter station, a 500 kV DC transmission line from Henday to Dorsey, and a DC to AC converter station at Dorsey. The two HVDC transmission lines which connect the Radisson and Henday converter stations to Dorsey are

approximately 900 kilometres in length and run on a single right-of-way.

The AC transmission system forms the bulk of the length of the transmission lines in Manitoba. The system delivers power from Manitoba generating stations and power supplied from the HVDC system at the Dorsey converter station to dozens of electrical stations around the province and to export market as well. From these stations, the power is generally delivered to end use customers through the distribution system.

This map illustrates Manitoba Hydro's transmission interconnections. Manitoba Hydro's transmission interconnections with adjacent provinces and states are a very important part of Manitoba Hydro's transmission system. These benefits include improving reliability by enabling imports during drought conditions and under supply contingencies -- an example would be temporary loss of a supply due to equipment outages -- and increasing revenues by enabling the export of surplus hydro power and import of market energy that costs lower than the cost of thermal resources available within Manitoba.

The import capabilities from the

interfaces are independent at the present time since no long term import capability is available from Ontario or Saskatchewan.

Manitoba Hydro's interconnections provide significant reliability benefits in several ways, including sharing of generation contingency reserves, sharing of capacity resources due to load diversity, importation of energy during drought conditions or extreme supply loss in Manitoba, and the ability to supply cross-border load when this load is isolated from the system.

The MMT project includes a 213 kilometre long 500 kV AC transmission line from Dorsey station to the U.S. border. Station upgrades are also required at Dorsey station, Riel and Glenboro station. The updates to Dorsey station are required to terminate the transmission line. The Riel station upgrades include adding a 500 to 230 kV transformer bank and associated equipment, which is required to transfer maximum power along the MMTP transmission line during an outage or bank failure at Dorsey or Riel. The transmission system needs four banks between the two stations once MMTP is in the system, and

currently there are only three banks.

Glenboro South Station upgrades include the addition of two phase shifting transformers and associated station modifications. A phase shifter is a type of transformer that is used to control power flow by adjusting phase displacement of the input and output voltage. When there's a certain amount of power generation in the system, electricity can inadvertently flow through Glenboro to Rugby line. These phase shifters are required to control power flow and manage congestion in the transmission system for maximum transfer capability along the MMTP transmission line. It is a congestion management tool to avoid overloading particular tie lines during maximum transfers.

The MMTP transmission line will increase our export capacity by 883 megawatts from 2,300 megawatts to 3,183 megawatts. It will also double our import capacity from 700 megawatts to 1,400 megawatts.

So this map illustrates what I just spoke to in the project overview. Up on the northwest side of Winnipeg is the Dorsey station where the line starts. It runs around what we

call the south loop, the south side of Winnipeg, passes by the Riel converter station on the east side of Winnipeg, and it runs east out towards the Riel-Vivian corner, and then proceeds south towards the U.S. border. Also out to the west there is a red box that you can see is labeled Glenboro South Station. This is where the phase shifting transformers I mentioned are located.

I'm now going to pass the presentation over to Dr. David Swatek, who will carry on, on the line components.

MR. SWATEK: Thank you very much. Good morning panel.

I'd like to say a little about the tower design we will be using for the MMTP. We are using a lattice steel tower design for minimal impact. The lattice steel design allows for long span lengths, which allows for fewer towers on the right-of-way. These long span lengths and fewer towers allow us to optimally locate these towers for minimal impact.

The tower design uses a compact Delta configuration tower head. This reduces the span length -- this reduces the width of the cross arms. And while being compact, this tower head

allows for electrical clearances to allow for line work. That's the ability to do maintenance on the line without taking it out of service, which is critical to the availability of this important tie line.

On this next slide, we have a map showing the various tower types used along the route. The MMTP transmission line route contains 92 kilometres of existing corridor and 121 kilometres of proposed new right-of-way. The existing corridor will use 100 per cent self-supporting tower structures, while the new right-of-way uses 50 per cent self-supporting and 50 per cent guyed towers. The guyed towers are used over non-agricultural land and swampier land where that type of tower construction is most advantageous. The self-supporting structure is used over agricultural land to reduce the footprint.

The right-of-way required for the self-supporting tower type is 80 metres, while the right-of-way for the guyed tower is 100 metres, which allows for the width of guyed wires.

So this slide just has some numbers that are an overview again of the transmission

line on the preferred route. The length is 213 kilometres in total, which now 43 per cent of that is existing right-of-way and 57 per cent will be new right-of-way. And of that new right-of-way, 30 per cent of that will be on Crown land, while 70 per cent will be on private land.

Now, I would like to say a little bit about the reliability requirements for this new line. Manitoba Hydro trades power into the MISO power pool. That's the Mid-continent Independent System Operator. And Manitoba Hydro is subject to NERC reliability standard requirements under Manitoba regulation 25/2012.

Now, these NERC transmission standards require the transmission system to continue to serve load following the loss of the single largest element that impacts that load. Now, this is referred to as a single contingency event, and there is a long list of single contingency events that get studied annually.

Now, currently in the MISO trading pool, loss of the M602F line, that's the existing 500 kV line for Manitoba into Minnesota, this represents the single largest, or this represents the largest single contingency event currently.

Now, covering for a single contingency event is what NERC refers to as category B in their standards. NERC also has a category C, which includes coverage for credible double contingencies, such as the loss of a double circuit line where two transmission circuits are carried on the same structure. If you lose the structure, you lose two lines.

Now, these are deterministic criteria, whereby we assume that any line can go down at any time, and the system must be planned for continuity.

Now, NERC also acknowledges the need for non-deterministic criteria in what they refer to as category D events. Now, these are low probability but high impact events. Now here NERC requires the planning authority, that would be Manitoba Hydro, to consider these low probability but high impact events and develop mitigating strategies as deemed appropriate.

Now, these two 500 kV lines, the existing line and the new MMTP, will represent the sum total of Manitoba's firm electric power import capability. So the simultaneous loss of these two lines was studied as a NERC category D extreme

event. And the separation between these two transmission lines was considered as mitigation.

Now, by comparison of these two transmission lines to other critical transmission corridors, particularly the recent work that had been done to establish the minimum separation distance between Bipole III and the existing Bipoles I and II that are on a common corridor for 900 kilometres, Manitoba Hydro had established a 10 kilometre buffer as being a reasonable mitigating strategy.

Now, following round 1 of the public engagements, there was strong desire to relax that 10 kilometre buffer to examine routes -- yeah, to be able to examine additional routes. So at this point, system planning revisited that 10 kilometre buffer. We decided that for the Riel-Vivian corridor, which is in very close proximity to Winnipeg, we would be able to respond very quickly to outages affecting that portion of the line. So it would be permissible to look at routes within the 10 kilometre buffer along the Riel-Vivian corridor.

However, for the remaining portion of the line which travels through some remote areas

that are harder to access, we insisted on retention of that 10 kilometre buffer. However, we felt it necessary to sharpen our pencils on that, and we commissioned a weather study to look specifically at extreme weather events in that southeast corner of Manitoba that could potentially take out these two lines.

Monte Carlo simulation of tornadoes was carried out. This Monte Carlo simulation involved randomly generating 1 million potential tornadoes being drawn from well-established probability distributions of tornado intensity, path length and direction of travel. And the result of that weather study showed us that a 10 kilometre separation along the north/south portion of the line is absolutely critical, as there is a 33 year return period for tornadoes whose strength and travel distance could take out those two lines.

This 33 year return period is significant, because in the North American western interconnection, a 30 year return period is considered their criteria for determining when something changes from a low probability but high impact event to a NERC category C, a credible

double contingency which you must protect for.

Manitoba Hydro's topology with long transition lines between generation and load centres is very consistent with the transmission topology in the western interconnection, which is essentially the western half of the North American continent.

Now, something else we learned from the weather study is that weather patterns in Manitoba, including tornadoes, they predominantly travel from west to east. Of course, this makes a north/south transmission corridor more vulnerable to being taken out than an east/west. And this validated our decision that we could relax the 10 kilometre criteria in the Riel-Vivian corridor, which is an east to west transmission corridor. The return period for a tornado that can take out the north/south portion of the line is 33 years, whereas the return period of a tornado that could take out Riel-Vivian was 93 years. So that was quite comforting.

So as a result, the 10 kilometre buffer was retained for the section of the line between Vivian and the U.S. border, while we allowed the lines to run on a common corridor

between Riel and Vivian.

I would now like to pass it on to Mr. James Matthewson who will show us what these transmission corridors look like.

MR. MATTHEWSON: Good morning, Commission and participants. I am going to play a video here, it's about 20 minutes in length. It is a fly-over simulation of the route from Dorsey station to the Canada/U.S. border. This simulation is not intended to render the exact landscape by which the transmission line will follow. It is intended only to give an overview of the different landscapes by which the transmission line will traverse from Dorsey to the border.

Due to length of this transmission line we couldn't render all the different components on the landscape. So the primary component that were rendered is tree vegetation that you will see in the video as we fly through it. And I will provide a bit of a narration as we go. There are several stops along the way in the video to illustrate some of the different components on the landscape that this transmission line is near.

(Video played)

The video is broken into three main components. There will be pauses between each one. One is the south loop transmission corridor. The next is Riel-Vivian corridor, as David talked about. And then the final preferred route, the new right-of-way in blue.

So as David mentioned, Dorsey converter station is the start point and Riel converter station is the point by which the transmission bypass is alongside.

This illustrates the expansion of the Dorsey 500 kV switchyard. And as we fly through, the orange line will represent the Manitoba-Minnesota transmission line, also known as D6O4I. The other lines that are in existence will appear on the right with labels. The red mark on the right-hand side is simply a way-finder and where we are in the south loop, as we fly through.

This is illustrating the self-support structures that Dr. Swatek mentioned and the parallel alignment with the existing transmission lines when doing tower spotting is also illustrated. So the two lines on the right are

existing transmission lines.

We're coming up to the TransCanada Highway and the Assiniboine River. So at this point we'll take a brief stop and illustrate some visualizations from each, from two different perspectives, the north and the south, to illustrate what the right-of-way will look like currently and what it will look like in the future, if this project is approved.

So again the two lines on the left are currently in place and MMTP is the line on the right.

On the left-hand side of the D604I is the future St. Vital to Letellier transmission line that was recently approved -- sorry, St. Vital to Laverendrye. So it's not been built yet, it's expected to be construction in 2019.

As David had talked about with the steel lattice structure, you can appreciate the longer span lengths that that design affords in these videos.

As we're coming up to the Red River floodway, and here is the point where the St. Vital-LaVerendrye goes left towards St. Vital station, and we've also crossed over the St. Vital

to Letellier transmission project future.

And now the next portion of the video will be a fly-through through the Riel-Vivian corridor starting adjacent to the Riel station. And this time MMTP is highlighted in yellow. And I'll just stop here briefly and Mr. Swatek will explain a key design criteria here.

MR. SWATEK: All right. Thank you very much, James.

Now, in order for the new MMTP line to share a common corridor with the existing -- yes, so in order for the new MMTP line to share a common corridor with the existing 500 kV line, we actually do a line swap where the new, to squeeze them on to the same right-of-way, the new towers are being built to the north of the existing 500 kV line. So that would require MMTP to cross the existing 500 kV line, run the 24 kilometre length of this corridor, and then to cross that line again to head south. Rather than have those two tower crossings, what we propose to do is to swap the towers at that point, to move the existing 500 kV line on to the new MMTP towers to the north, and to let the new MMTP line run on the existing M602F towers to the south. And then once we get

to the end of the Riel-Vivian corridor, the MMTP turns and heads south. This way, we avoid having to build two 500 kV line crossings. The tower types required for line crossings are much larger, more substantial, so it's a very nice thing to be able to avoid that.

MR. MATTHEWSON: And also to build on Mr. Swatek's comments, the transmission line crossings, it was one of the key decision criteria for the engineering perspective on any transmission line of the routes during the evaluation. So crossing of 500 lines is especially important.

On the left-hand side, you'll see this is the currently under construction Bipole III transmission project.

As David had mentioned, the accessibility of this corridor for, in the event of both lines being taken out of service at the same time, certainly lends itself to ease of restoration of service in a very effective and efficient manner.

And now we're approaching the turn to the new right-of-way, and this is where M602F reconnects to the existing structures in place.

So this is the same crossing point, we're just coming from the north now.

As we approach one of our paralleling opportunities of R49R, this is an existing 230 kV transmission line that we are paralleling. Also by paralleling this existing right-of-way, we are able to lessen the right-of-way requirement for MMTP, the additional right-of-way clearing requirement.

As David had mentioned, the cleared right-of-way width for this portion is 80 metres. And here we are reconnecting again with the opportunity of paralleling of the R49R transmission line again. Passing over the TransCanada highway near the community of Ritcher. And here is the point where we switch to a guyed structure, due to the wet terrain in the area we've moved to a guyed structure and the right-of-way is increased to 100 metres in width. And now as we enter back onto agricultural land, we switch back to a self-supporting structure along a parcel line.

This is the Quintro Road area which you will hear more about from the public engagement panel, with respect to the landowner

concerns. And where we develop mitigative segments to address those concerns during the routing process.

Also from the viewpoint from the town LaBroquerie, near the school, we wanted to illustrate there was lots of concerns from the RM of LaBroquerie, the town, from the perspective of the proximity of the transmission line. And you can illustrate the line will appear here and here in the final. So this is the view point from the school. It's approximately a mile, a mile and a half.

And this is the Seine River crossing, as well as a golf course by which we have retained the shelter belt on the right-hand side of it through routing to allow that visual barrier to exist.

This was again, we were offset alignment here to retain the vegetation adjacent to that home, which we will talk further about in our routing presentation. We're back to half a mile alignment.

As we move further south of La Broquerie, more industrial, agricultural operations exist, and we've been working with

those agricultural operators throughout the public engagement process, and the routing of the line as well, to mitigate their bio-security concerns.

We switch to guyed towers again. This illustration that we're showing you here is not showing any vegetation on the right-of-way to kind of give a full extent of what the right-of-way will look like immediately after construction. But as illustrated in several plans with respect to Golden Wing Warblers and Manitoba Hydro's integrated vegetative management plan, that right-of-way will return to a shrub, low growing under storey through management. And much of the right-of-way in the Golden Wing warbler area will be retained in the Golden Wing warbler plan.

This tower we're coming up here, this is an example of an angle structure. You can see we have switched from guyed to self-supporting. Due to the extra strain of an angle change, a much more robust structure is required.

Another key thing in this structure design you'll notice is the large frame in the centre, which as David mentioned was to facilitate the maintenance of the line and keeping the conductor separated to allow live line maintenance

crews to perform maintenance duties on parts of the line that need service. By spreading those conductors apart in that fashion we can facilitate that.

And here's some crossings of the wetter areas as we move south across the Rat River and the Caliento and Sundown bogs approaching.

This does illustrate the shrubs. We didn't illustrate the shrubs had been retained on river crossings as per our riparian buffer management prescriptions.

As we approach the Sundown Road, we come up to a key landowner consideration that was discussed, and I'll pause here for a second. This is the Ridgeland cemetery, which you'll hear more information about from the public engagement folks. And we have Loewen (ph) Sand Lake, over here. It's more of a wetland, the lake is more to the left, but it was a wetland area. So this was an area where, as you will note, we have changed back to a self-supporting structure to narrow the right-of-way to address concerns, both from a visual aesthetics perspective at the cemetery, as well as maintaining this side of trees to help in mitigation for bird wire contributions. So it was

a key area of discussion in the public engagement as well as the routing process, which we will hear about more later, as we go through the week.

This corner here represents the -- very close to the Watson P Davidson Wildlife Management Area, which you will see on many of our maps moving forward as kind of a landmark for this southeast corner of the province, by which you can find where the -- as a way marking on our maps.

This area is known as the Piney bog. Again, quite a bit of mitigative segments were developed in the routing near this area which you'll hear more about in the routing presentations and public engagements to come, the First Nation and the Metis engagement presentations.

And as we approach agricultural land again, we switch to a guyed structure across this landscape.

The routing of this entire portion of the line was done quite hand in hand with the landowner who owns a large portion of this area, in order to offset a lot of future plans that they had in place. Pine Creek. And this is the point at which the transmission line, Manitoba-Minnesota

transmission line will end and the Great Northern transmission line from Minnesota Power will start. Thank you. (Video finished)

THE CHAIRMAN: Would this be an opportune time to take our break?

MS. S. JOHNSON: Yes.

THE CHAIRMAN: Thank you very much. That certainly gives good perspective for the route. Thank you. So we will adjourn for one hour, so we will start again at 1:45. Thank you.

(Proceedings recessed at 12:42 p.m. and reconvened at 1:45 p.m.)

THE CHAIRMAN: Welcome back, everyone. I wonder if you can take your seats, and we will start here in about 30 seconds. Thanks.

All right. Before we turn to questioning, Manitoba Hydro has asked to make a clarification to this morning's presentation, so we will let them do that first.

Go ahead.

MR. SWATEK: Thank you very much.

With regards to the two international power lines, the IPLs, the existing M602F and the Harvey Glenboro 230 kV line, I just wanted to be very clear on what the modifications were.

With regards to M602F, Manitoba Hydro proposes to move a portion of the Riel IPL 45.7 metres north within the existing transmission corridor. This is between Riel and Vivian. Tower 6 of the Riel IPL will be removed, and the existing segment of the IPL from Tower 5 through 7 will be relocated. The Riel IPL will then continue eastward along a new section of the line. Existing Towers 61 and 62 of the Riel IPL, and approximately 1.07 kilometres of transmission line, will be removed and salvaged.

Now, with regards to the Harvey Glenboro 230 kV line, in order to accommodate the phase-shifting transformers, a segment of the IPL must be relocated. A portion of the IPL will be salvaged. A new segment of the IPL and one new permanent tubular steel tower will be built to connect to the Glenboro Station.

Thank you very much for the opportunity just to clarify those changes.

THE CHAIRMAN: Thank you very much for that clarification.

So at this point we will begin the questioning of Manitoba Hydro's introduction segment of their overall presentation. And I

believe that we've had a change in the order, which we are fine with. We have indicated to all participants if they would like to change the order of their appearance, with the agreement of a different participant, they are free to do so as long as you advise the secretary.

So now appearing first will be the Southeast Stakeholders Coalition, and they will switch places with the Consumers Association of Canada. Thanks.

MR. TOYNE: Thank you very much, Mr. Chair.

All right. So as I'd indicated just before we started, I have a series of questions that I suspect will be primarily directed at Dr. Swatek, and a series of questions directly primarily at Mr. Mailey, although I appreciate that you may answer questions collaboratively as a panel, but that's really what I'm planning to do.

Which one of you won the coin toss?

All right. Well, you know, why don't I start with Dr. Swatek, just because you are on the end there.

So my questions for you, sir, are primarily about the 10-kilometre buffer and the

reliability concerns.

Before your part of the presentation this morning, I'd understood that there were really three primary reasons for this buffer. First, the risk of weather impacts damaging both of those 500-kilovolt lines; second, concerns about the reliability of import capability if the HVDC lines were down, or if there was a serious drought; and finally there were concerns about the ability to repair the lines, given the distance from the City of Winnipeg.

But I now understand that there is a fourth issue, and that's this issue with complying with those NSERC or NERC reliability standards. Is that correct?

MR. SWATEK: I believe that those three points you made are -- that is substantially it. But the NERC -- well, the compliance with NERC TPL4, the Category Ds, this compels Manitoba Hydro to consider low probability, high-impact events. So as we are considering those, it is exactly with respect to those three points that you made, yes.

MR. TOYNE: So why don't we talk about those standards briefly, because for some of us

here today, they were new information today, and then we will move on to some of those other issues.

So the reasons why those reliability standards were engaged, you had said, is because the Province of Manitoba passed a regulation in 2012 mandating Manitoba Hydro comply with them. Is that correct?

MR. SWATEK: Okay. The NERC reliability standards -- NERC is the North American Electric Reliability Corporation; they make standards. Those standards are enforced in the U.S. by FERC, and here in Manitoba -- they are enforced by the Manitoba government, through legislation and regulation.

MR. TOYNE: And that's been the case since 2012.

MR. SWATEK: 2012 -- Regulation 25/2012, that's the current regulation. I would have to check to see if there was legislation prior to that.

MR. TOYNE: Okay, fair enough.

And the reason that you had said that those particular standards were engaged for this project was the impact that both of those lines

going down would have on Manitoba Hydro's ability to import power from Minnesota. Correct?

MR. SWATEK: We consider those standards for all projects. And in this case the particular concern was the simultaneous loss of those two lines during high-import conditions. Yes.

MR. TOYNE: Okay. And the standards that we are talking about, whether it is TPL3 for Category C events or TPL4 for Category D events, those standards require Manitoba Hydro to both assess risk and take steps to mitigate those risks; correct?

MR. SWATEK: Correct.

MR. TOYNE: And the step that was taken to address the tornado risk for this particular project was that 10 kilometre buffer?

MR. SWATEK: I will say yes. The 10-kilometre buffer gets the risk within a manageable range.

MR. TOYNE: Okay. Now, you had also made reference to a particular return period, and you'd indicated that the weather study that was conducted showed that there was a 33-year return period. And as I understand it, a return period

is just an estimate of how likely a particular event is.

MR. SWATEK: It's the probability. That means that in any given year, there is a 1-in-33 probability that those lines could simultaneously be taken down. Yes.

MR. TOYNE: So if the return period was 100 years, it would be a 1 per cent chance; is that right?

MR. SWATEK: That's correct, yes.

MR. TOYNE: All right. But of course you would agree with me that that particular estimate may not actually be borne out as time goes on. Right?

MR. SWATEK: That is the estimate produced by the expert we hired to do the study, Mr. Bob Morris. He was formerly with Environment Canada and one of the authors of the Canadian Building Code. There is really no one else more qualified to make that estimate.

MR. TOYNE: Okay. And I appreciate you may not have this up there in front of you; normally the panel -- but there is a figure in the EIS. It is the figure that has the tornadoes plotted all over it. Are you familiar with that?

MR. SWATEK: No. If you could point us to ...

MR. TOYNE: Sure. It is Figure 20-2. I don't know if the machine in front of Mr. Mailey can pull that up.

MR. SWATEK: One moment.

MR. TOYNE: Or perhaps a slightly more old-school form of pulling the figure up will happen in the row behind you. It is on page 20-7 of the EIS.

MR. SWATEK: I have that, yes.

MR. TOYNE: That's an illustration of the number of tornadoes in southeastern Manitoba from 1980 until 2009, correct?

MR. SWATEK: Correct, yes, right.

MR. TOYNE: And at least as I understand it -- and I'm not the expert; you are -- at least during that 29-year period, there were very few, if any, tornadoes in the area where line M602F is. Would you agree with that statement?

MR. SWATEK: I wouldn't -- I'm not sure how to categorize "very few."

MR. TOYNE: How about zero?

MR. SWATEK: In the zone of M602F?

MR. TOYNE: Yes. Because that's the line that the 10-kilometre buffer relates to.

MR. SWATEK: There are certainly tornadoes in that portion of the map. This is a map of southeastern Manitoba, and it shows a distribution of tornadoes. These tornadoes are fairly random, so the fact that there is not a tornado on a particular spot on the map isn't that relevant.

MR. TOYNE: Maybe a different way to ask the question is, when was the last time M602F was damaged by a tornado? Do you know?

MR. SWATEK: M602F has not been damaged by a tornado, no.

MR. TOYNE: And how long has that line been in existence for?

MR. SWATEK: That line has been in service since 1979.

MR. TOYNE: So by my math, that's 37, 38 years.

MR. SWATEK: That would sound right.

MR. TOYNE: Okay. The vulnerability of the north/south transmission lines to eastbound tornadoes, that's a fairly well-known vulnerability in the electricity sector?

MR. SWATEK: Weather patterns do tend to track from west to east. So a north/south line would have a higher vulnerability, yes.

MR. TOYNE: And you would agree with me that there is a number of steps that can be taken to address that vulnerability?

MR. SWATEK: Really, separation is the key, the key step. What other steps were you thinking of?

MR. TOYNE: Again, I'm not the expert; that's you. It struck me, if we are talking about tornadoes, the elements of tornadoes that could damage a transmission line would be, say, the wind speed of the tornado; how wide the path of the tornado is; and how long the path of the tornado is. Would those be the three elements of a tornado that could affect a power line?

MR. SWATEK: Those are, certainly, yes.

MR. TOYNE: Okay. And the 10-kilometre buffer that we are talking about, that only addresses one of those three factors: How long the tornado is. Right?

MR. SWATEK: And that's really all you can do. You can design towers for various wind

speeds, but these are straight-line winds. There is no design standard for tornadoes, so we look at the probability of a tornado with a particular path length, and that's the key mitigation, is separation.

MR. TOYNE: Okay. So a minute ago you had used the phrase "design standard," and I take it what you are referring to is that there is no sort of accepted industry practice for how much wind speed a power line or a tower should be able to withstand; is that what you were saying?

MR. SWATEK: No, that was not my comment. There are design standards for straight-line winds; there are no design standards for tornadoes.

MR. TOYNE: Maybe a different way to ask the question, then, is the towers that are being used on MMTP, have any steps been taken in the design of those towers and intended construction of those towers to address the risk posed by tornadoes? And if so, what are they?

MR. SWATEK: To address the risk posed by tornadoes, specifically, no. Those towers are designed to a 1-in-150-year return period for high winds. They are designed to a 200 -- those towers

are designed to a 105 kilometres per hour straight-line wind. Now, that's a 1-in-150-year return period. Yes.

MR. TOYNE: All right. So as long as the wind is not much faster than somebody traveling along the Trans-Canada Highway, there is not going to be any issues; is that sort of a rough-and-ready way to describe it?

MR. SWATEK: Yes, that would be fair.

MR. TOYNE: Are there ways to design or construct these towers to have a greater resistance to straight-line wind speeds?

MR. SWATEK: One important design aspect of these lines is they are designed -- the MMTP is designed using anti-cascading towers, such that if one tower falls down, it is not likely to bring down adjacent towers. That's a key mitigating strategy that has been employed or will be employed.

MR. TOYNE: And is that a recent innovation? Or would that have been done on the M602F as well?

MR. SWATEK: That's not a recent innovation, no.

We do not use -- I misspoke; I meant

to say we do not use anti-cascading towers on M602F. Thanks.

MR. TOYNE: The distance between towers, is that distance calculated -- sorry, let me rephrase that.

The distance between towers, does that distance take into account the potential widths of a tornado's path in any way, shape, or form?

MR. SWATEK: No, it would not.

MR. TOYNE: So the tornado that we are talking about, the one where there is a 1-in-33 per cent, or 1-in-33 chance every year, do you have any idea how wide that particular tornado is?

MR. SWATEK: I don't have that information on me, no.

MR. TOYNE: You also wouldn't know how many towers might get taken out by that particular tornado that's driven this 10-kilometre buffer?

MR. SWATEK: No.

MR. TOYNE: Although I guess that would really just be an issue with the M602F, as opposed to the MMTP, because the MMTP has the anti-cascading towers?

MR. SWATEK: Is that your comment, or

a question?

MR. TOYNE: I raised my voice at the end, so I guess it would be a question.

MR. SWATEK: I just want to go back to my previous statement, that for tornadoes versus straight-line winds, these are very different phenomena. You can't mitigate for a tornado with a particular tower design.

MR. TOYNE: Says who?

MR. SWATEK: Says transmission line designers across this great nation of ours.

MR. TOYNE: Right. And Manitoba Hydro hasn't made any reference to any of those people or their statements in the EIS. Right?

MR. SWATEK: The design standards are for straight-line winds for ice loading. That's what they are. There are no design standards for tornadoes for towers.

MR. TOYNE: My understanding -- and you can correct me if I'm wrong -- is that there's a part of the final preferred route east of Ste. Genevieve down to Giroux that's close to the 10-kilometre buffer, but just a bit outside; do you know the part of the route that I'm referring to?

MR. SWATEK: We are just going to check the map to see exactly what you are referring to.

MR. TOYNE: Sure.

MR. SWATEK: Okay. I do see that on the map. Yes.

MR. TOYNE: So as I understand it, that part of the route doesn't violate the 10-kilometre buffer, but in some areas it is starting to come close to the edge of the buffer. Is that a fair statement?

MR. SWATEK: That would be fair.

MR. TOYNE: Are there any concerns about that particular part of the line, given that it's close to the buffer, even though it is just outside?

MR. SWATEK: These concerns are about averaging, about averaging and averages, and I'm looking at a very small portion of the line that's -- that may be coming close there. For a good chunk of this line, it is actually beyond -- it is outside of that 10-kilometre buffer. I would not be particularly concerned with that small encroachment, given the averaging over the whole length.

MR. TOYNE: So let's sort of change direction just for a minute or two.

Does Manitoba Hydro monitor weather?

MR. SWATEK: Manitoba Hydro does not perform its own weather monitoring.

Okay, I should clarify. We don't do it on a long-term basis, but of course our system control centre is monitoring weather -- is monitoring weather on a daily basis to take appropriate action when required.

MR. TOYNE: So if conditions that are favourable to the development, say, of tornadoes start to arise in a certain part of the province where you have infrastructure, that's something that Manitoba Hydro would become aware of and begin to monitor; is that a fair statement?

MR. SWATEK: That is correct, yes.

MR. TOYNE: And once you are aware of those weather conditions, does Manitoba Hydro have any protocols or policies in place to start to prepare for potentially damaging weather conditions?

MR. SWATEK: Manitoba Hydro, through our system control centre, can posture the system if they feel there is a particular -- a particular

threat.

MR. TOYNE: And would one of those threats be tornadoes?

MR. SWATEK: It could be. Subject to check.

MR. TOYNE: So if a power line in southeast Manitoba goes down, where do the repair crews come from? Are they all Winnipeg-based?

MR. MATTHEWSON: I can answer that question.

So there are a variety of line maintenance crews stationed throughout the province. There are facilities in Lac du Bonnet, in Winnipeg; so there are -- Steinbach -- there are a variety of locations for line maintenance crews to respond to any outages in the system.

And those responses are started by the employment of Manitoba Hydro's corporate emergency management plan, and that's the trigger by which emergency response procedures are initiated and those particular crews are called to action.

MR. TOYNE: So if one or more of the power lines in the Riel-to-Vivian transmission corridor goes down, would the repair crews be coming from Winnipeg, or would they be coming

up 12 from Steinbach? Or potentially both?

MR. MATTHEWSON: It depends on staffing availability at the time; the time of day. It could be coming from both. Likely there would be -- all available assets in close proximity may be mobilized to restore service as quickly as possible.

MR. TOYNE: And where M602F starts to ebb southeast from that transmission corridor, if that line was damaged, where would the repair crews be coming from?

MR. MATTHEWSON: Likely from the City, and Lac du Bonnet.

MR. TOYNE: What about from Steinbach?

MR. MATTHEWSON: Possibly from Steinbach, because as well, there is a variety of different crews.

I'm just looking at the map behind you to see who is closest to the response area, so that's where I was basing my information from.

MR. TOYNE: Right. Well, as I understand it, this 10-kilometre buffer was particularly problematic, from Manitoba Hydro's perspective, for the routes that started to -- they went a little bit further east and began to

turn south at Vivian, and then head a little bit more east than the current final preferred route.

I guess what I'm trying to figure out is if you had two power lines in that area that were close to one another, where the repair crews would come from. Potentially, all three, again: Winnipeg, Steinbach, and Lac du Bonnet?

MR. MATTHEWSON: Yes.

MR. TOYNE: And right now, for M602F, if one or more towers on that line go down, how long would it take for Manitoba Hydro to put them back up?

MR. MAILEY: I would say that it depends, because of the exact location, time of year, access, because some areas are more easy to access than others. It also may have to do with some of the electrical configurations, because we have to secure and make it safe before staff can actually go in there. So it can vary.

MR. TOYNE: And when we are talking about damage to these lines from tornadoes, that would be something that would be either -- what, spring, summer fall, as opposed to winter?

MR. MAILEY: Yes.

MR. TOYNE: I'm not familiar with

tornadoes in the winter, but --

MR. MAILEY: No.

MR. TOYNE: So, again, going back to what I initially understood, one of the concerns about the lines coming down would be if the HVDC lines were out. And the HVDC lines, that's Bipole I, Bipole II, and Bipole III; correct?

MR. SWATEK: Correct.

MR. TOYNE: And when this 10-kilometre buffer was requested, Bipole III wasn't licensed yet. Correct?

MR. SWATEK: Bipole III was licensed at that point, yes.

MR. TOYNE: I understood that the buffer was requested in 2012, and Bipole III wasn't licensed until 2013.

MR. SWATEK: That sounds -- well, the buffer was requested in late 2012, and we got our Bipole III licence in 2013, so very close, yep.

MR. TOYNE: Okay. And the reason that's important, at least maybe to me, is because at the time the buffer is requested, if the HVDC capacity went down, then Manitoba Hydro would have a pretty serious challenge in supplying power to the province of Manitoba. Correct?

MR. SWATEK: That is correct, yes.

MR. TOYNE: But now, once Bipole III comes into operation -- I think sometime next year, 2018?

MR. SWATEK: Yes.

MR. TOYNE: -- if Bipole I and II go down, there is far fewer concerns about Manitoba Hydro's ability to supply to the province of Manitoba; is that correct?

MR. SWATEK: We are certainly helped by Bipole III, but we still depend on the imports. If Bipoles I and II go down, we are depending on Bipole III and the ability to import power from the U.S.

One of the other reasons we are dependent on imports is in low water years, as a hydro utility with 98 per cent of our resources coming from hydraulic generation, we do plan for drought, yes.

MR. TOYNE: I was going to ask a series of questions about that in a minute or two, but I will go there now.

Just to go back to that slide, I think, that Mr. Mailey was talking about, that showed where your different generating stations

are --

MR. SWATEK: Okay.

MR. TOYNE: -- the hydroelectric generating stations that you have, they are really on three river systems. You have the Nelson, the Churchill, and the Winnipeg. Is that a fair statement?

MR. SWATEK: We don't have anything -- they are on Nelson, the Burntwood, and Winnipeg.

MR. TOYNE: Right, yes.

MR. SWATEK: And --

MR. TOYNE: I meant Saskatchewan.

MR. SWATEK: And Laurie River on the Saskatchewan.

MR. TOYNE: Right. That's what I meant.

So really, those -- Manitoba Hydro's hydroelectric generating capacity is on three river systems?

MR. SWATEK: We believe it's a total of five, yes.

MR. TOYNE: Okay. Okay. So what sort of drought conditions on those five river systems have to be in place so that Manitoba Hydro would be required to import power as opposed to export

power?

MR. SWATEK: The technical nature of the drought, I'm not sure how to characterize that. But we have certainly, in my history, we have had drought conditions where we have been dependent on imports.

MR. TOYNE: And how often has that happened?

MR. SWATEK: The last significant drought was 2003, 2004.

MR. TOYNE: If we can go back to this return-period concept that you were referring to earlier. What is the return period for the type of drought that would require power to be imported? Do you know?

MR. SWATEK: We don't believe they are characterized by a return period. We look at worst-case historical droughts, and we plan for continuity.

MR. TOYNE: So tornadoes, it is probabilities; droughts, it is worst-case scenario?

MR. SWATEK: Yes.

MR. TOYNE: I think that's the bulk of the questions that I had for you, Doctor, so now I

will turn to the questions that I suspect will be primarily answered by Mr. Mailey.

Sir, as I understand it, you were in your current position, which is VP transmission, when the decision to adopt the EPRI-GTC methodology was made. Is that correct?

MR. MAILEY: The actual adoption of the methodology was prior to my current role, just by a few months, or a year.

MR. TOYNE: Okay. So when did you become vice president transmission?

MR. MAILEY: Approximately three and a half years ago.

MR. TOYNE: So which month in 2013?

MR. MAILEY: It would have been July.

MR. TOYNE: Okay. All right. So by that point, then -- well, I guess, maybe a different way to ask it is: Were you involved in the decision to adopt the methodology?

MR. MAILEY: I was part of the transmission senior management team, so I was aware of what was ongoing with it, for sure, yes.

MR. TOYNE: For some reason I'd thought that you were personally involved in that decision, and I was going to ask you some

questions about it; but if you weren't personally involved, then I don't have any questions for you about that.

MR. MAILEY: I can try my best to answer to my knowledge how it transpired, and certainly the team can help correct --

MR. TOYNE: You know what, why don't we try a few, and if it is going poorly for one or both of us, I will just move on.

MR. MAILEY: No, I mean, I can try to answer the question that you posed.

So after the Bipole III CEC hearings, certainly there was feedback from the Commission to which we were to seek out a more transparent and quantitative methodology in our line routing, to which then Manitoba Hydro took that very seriously and went out with a request for proposal to seek different methodologies that would meet that criteria, to which then our licensing and environmental staff brought forth something through to the senior transmission business unit staff, to which then it was evaluated and piloted and tried on another transmission line in Southern Manitoba before the MMTP project.

MR. TOYNE: Now, as I understand it

from the information that was provided in response to the IRs, Manitoba Hydro started investigating alternative routing methodologies as early as January 2013, and the Bipole III recommendations come out in June 2013.

Assuming that is right, why was Manitoba Hydro on the hunt for a new methodology even before the Bipole III report came out?

MR. MATTHEWSON: So the investigation for alternate routing methodologies, or a different approach, was initiated prior to the Clean Environment Commission report. I initiated that investigation and investigated, looking at different uses of geographic information systems to augment the routing system as that technique, which was part of my background, wasn't utilized as thoroughly as it has the potential for.

So that's why I investigated, looking at different options to utilize geographic information system and the data that they create for helping in the transmission line routing process.

MR. TOYNE: Why was it that that investigation started in January of 2013? Was there a particular triggering event?

MR. MATTHEWSON: Nothing in particular that I could recall. Perhaps my position within the department, and the roles and responsibilities that I was undertaking, may have had a factor in that.

MR. TOYNE: Right. And I understand that as those efforts to identify a new methodology were ongoing, that Manitoba Hydro reached out to nine other entities in the -- either generation or transmission industry. Does that sound right?

MR. MATTHEWSON: Yes, that sounds correct. Yep.

MR. TOYNE: It seems to me there was a much larger number of entities that Hydro could have reached out to. Was there a reason why you just spoke to nine other utilities, as opposed to some larger number?

MR. MATTHEWSON: The utilities that we reached out to were simply through connections that Manitoba Hydro had with those utilities, through personal relationships. So that formed a good entry point to discuss with those utilities.

Also, when -- subsequent, during that process, we had gone through a request for a

proposal, which was a nation-wide request for routing transmission line proposals. So we had the breadth of knowledge of a whole variety of different contractors and consultants in transmission line routing.

MR. TOYNE: And the decision to adopt this particular methodology, that was made in and around March 2013?

MR. MATTHEWSON: Yes, I believe that's when the request for approval of routing consultants, awarding of the routing consultants, was put forward.

MR. TOYNE: Did any of the Canadian utilities that you reached out to, did any of them recommend this methodology to you?

MR. MATTHEWSON: None of the Canadian utilities at the time had utilized the EPRI-GTC methodology, but several U.S. utilities had. And other utilities that we had talked to were investigating other -- investigating the EPRI-GTC methodology and other geospatial routing technologies at the time.

MR. TOYNE: Right. Okay. Just to go back to a point that Mr. Mailey had made earlier, this methodology was used on the

St. Vital-Letellier line, and then a decision was made to use it on this particular project. That's right?

MR. MATTHEWSON: Yes.

MR. TOYNE: Now I think my questions will go back to Mr. Mailey at this point.

You are familiar with the preference determination stage of this particular methodology?

MR. MAILEY: Yes.

MR. TOYNE: And that's the stage where Hydro employees assign scores 1, 2, or 3 to a series of criteria, and then those scores are weighted in accordance with a formula; that's the preference determination model?

MR. MAILEY: My understanding is it would be the entire project team would be partaking in that part of the process in the methodology.

MR. TOYNE: So Hydro employees and other consulting staff who are part of the project team are scoring, and those scores are then weighted; it gets added up, and eventually you've got a winner. Right?

MR. MAILEY: That would be a

high-level summary of how the process worked.

MR. TOYNE: Yes. For those that have worked with me before, high level is about as good as it gets with me most of time.

As VP transmission, it was your responsibility to pick the team that was going to identify the criteria and set the weights. Is that accurate?

MR. MAILEY: Could you clarify that? Are you asking with respect to the preference determination application, those people? Or the staff to whom would have determined the criteria and the weightings?

MR. TOYNE: The latter.

So were you responsible for selecting the team that set the list of criteria and assigned weights to those criteria? So not actually assessing individual routes, but coming up with the criteria and the weights?

MR. MAILEY: Well, how that transpired, our project team brought forth that this was obviously something that's required for the EPRI-GTC model. I and the senior transmission representatives whom to which are responsible for operating, designing, planning, and constructing

transmission lines in Manitoba, were part of the senior management team that I chose, yes.

MR. TOYNE: Okay. So you are the one who picked the other three members of the team of four that set the criteria and then assigned weights to those criteria?

MR. MAILEY: We are the senior transmission team, and we were the people who did assign the weights and pick the criteria.

MR. TOYNE: Okay. Let's talk about who those folks are.

You have got a civil engineering background; is that right?

MR. MAILEY: Yes.

MR. TOYNE: As I understand it, you've worked at Manitoba Hydro since you graduated from the Faculty of Engineering?

MR. MAILEY: That is correct.

MR. TOYNE: And you have had a series of increasingly more senior roles since you joined the organization?

MR. MAILEY: Yes, in different areas of transmission.

MR. TOYNE: Right. Okay.

Now, one of the other individuals who

was on this team is Glenn Penner. Correct?

MR. MAILEY: That is correct,.

MR. TOYNE: And he's -- at least he was earlier -- sitting over there?

MR. MAILEY: He is sitting directly to my right.

MR. TOYNE: I will ask him some questions when he's up later in the week. But I understand he also has a civil engineering degree?

MR. MAILEY: Yes, he does.

MR. TOYNE: And he graduated from the Faculty of Engineering a year after you did?

MR. MAILEY: No, same year I did.

MR. TOYNE: Oh, okay. And like you, he's spent his career at Manitoba Hydro?

MR. MAILEY: Correct.

MR. TOYNE: Okay. And he is the division manager of transmission, construction, and line maintenance?

MR. MAILEY: That is correct.

MR. TOYNE: That was your job before you got promoted to VP?

MR. MAILEY: Yes, that's correct.

MR. TOYNE: And does Glenn report to you?

MR. MAILEY: Yes, he does.
MR. TOYNE: The third member of the team is Gerald Neufeld?
MR. MAILEY: Gerald was another member of the team, yes.
MR. TOYNE: Right. I don't mean anything in who is what number, but he is the third member of the team that I'm discussing right now, so -- he is also an engineer?
MR. MAILEY: Yes, he is.
MR. TOYNE: But unlike you and Glenn, he is an electrical as opposed to a civil engineer?
MR. MAILEY: That is correct.
MR. TOYNE: And he's spent his entire career at Manitoba Hydro?
MR. MAILEY: That is correct.
MR. TOYNE: And he is the division manager, transmission planning and design?
MR. MAILEY: Yes.
MR. TOYNE: And he reports to you?
MR. MAILEY: Yes.
MR. TOYNE: The final member of the team is Anthony Clark?
MR. MAILEY: Yes.

MR. TOYNE: Like Mr. Neufeld, he is an electrical engineer?

MR. MAILEY: Yes.

MR. TOYNE: And he also has spent his whole career at Hydro?

MR. MAILEY: Yes, I do believe so.

MR. TOYNE: And he is the division manager, transmission systems operation?

MR. MAILEY: That is correct.

MR. TOYNE: And he reports to you?

MR. MAILEY: Yes.

MR. TOYNE: All right. So the team that set the criteria and established the weights consisted of two civil engineers, two electrical engineers, all of whom who have spent their entire careers working at Manitoba Hydro?

MR. MAILEY: Yes.

MR. TOYNE: And I understand that as you were trying to come up with the criteria and the weights that could be applied to them, that you didn't take steps to consult with people outside of your particular unit of Manitoba Hydro?

MR. MAILEY: During the process, we did get inputs from the project team, to which was part of our process. But if your question is, did

we seek others outside of the transmission business unit for this specific task, no; that was bestowed upon us. That's our jobs.

MR. TOYNE: All right. But there's other aspects of your jobs where you will go outside of your unit to get advice and input from other departments or units within Manitoba Hydro?

MR. MAILEY: It could occur, but with respect to this specific task, no.

MR. TOYNE: All right. And I understand that you and the other three engineers came up with a list of five different criteria: Cost, community, schedule risk, environmental concerns, and system reliability?

MR. MAILEY: That would be six.

MR. TOYNE: I've only got five here, but -- regardless, the largest -- the largest, I guess, weighting that was assigned was to the cost criteria?

MR. MAILEY: Yes.

MR. TOYNE: And that was 40 per cent?

MR. MAILEY: Yes.

MR. TOYNE: And then there was a risk to schedule criteria. Now, originally that had a 10 per cent weighting, but it eventually came down

to 5?

MR. MAILEY: Could you clarify what change you are referring to specifically?

MR. TOYNE: The schedule risks criteria, when you and the other three engineers originally assigned a weight to it, you assigned a weight of 10 per cent; you subsequently changed that to 5 per cent.

MR. MAILEY: Are you referring to when we piloted with the St. Vital-Letellier project and assigned that criteria?

MR. TOYNE: Sure. If that's what I'm referring to, then yes.

MR. MAILEY: Do you have a specific table you are referring to that I can reference, so I could clearly answer your question?

MR. TOYNE: Sure. It's page 5A-28 of the EIS. It is a brief summary of the work that you and the three other engineers did.

MR. MAILEY: To answer your question, yes. With respect to Section 5A.5, the preference determination model, on the page you referenced, that does reference the criteria and weightings that were used for the St. Vital-Letellier. And subsequently, specifically for the MMTP project.

We did re-evaluate for the MMTP, and which is why when I said "six," you said "five," that's the clarification, I believe.

MR. TOYNE: Okay. So in other words, on literally the same page, the cost, the schedule risks, and the system reliability criteria, whether for the St. Vital-Letellier or for MMTP, those three criteria add up to 55 per cent?

I think my math is right on this one.

MR. MAILEY: With respect to the table you are referring, yes.

MR. TOYNE: All right. And I will see if you'll agree with me on this one.

You'll agree with me that those would be the types of concerns that you would expect a team of engineers to come up with, if they were the ones who are establishing criteria and assigning weights?

MR. MAILEY: I would say that these are important criteria when, certainly, developing a transmission line. And the team that came up with these were the senior management team that's responsible for all the operations that we discussed earlier, and the ongoing management and operations. So it is not strictly an engineering

perspective.

MR. TOYNE: You would agree with me that there is a variation of the -- there is a range of variations of these different weightings that would still result in a reasonable route being selected?

For example, if "cost" and "community" were switched, that would still be a reasonable set of weights to go forward with this particular model? Would you agree with that?

MR. MAILEY: We based our decision on the specific MMTP project and the importance thereof, and certainly cost was identified as the highest.

MR. TOYNE: Right. I took that point. What I'm wondering if you will agree with or not -- and I get the sense you won't -- is that if the weights were different, that a reasonable route could still be generated by this model. Do you agree or disagree?

MR. MAILEY: I would suggest different routes could be determined from this model. Whether it is reasonable or not with respect to the criteria we were applying, I couldn't answer.

MR. TOYNE: Okay. But you would agree

with me that the criteria that you and the other three engineers set, and the weights that you and the other three engineers assigned to those criteria, they played a very significant role in selecting the final preferred route?

MR. MAILEY: It certainly was a part of the process that the management team of transmission took seriously, and it was definitely part of how the EPRI-GTC model works, yes.

MR. TOYNE: If you will bear with me for just 15 seconds, I have been going for about an hour, and I just want to make sure that I'm done.

All right. Thank you very much.

MR. MAILEY: Thank you, sir.

THE CHAIRMAN: Thank you, Mr. Toyne.

All right, the second participant to undertake questioning will be the Southern Chiefs' Organization.

MR. BEDDOME: Good afternoon. James Beddome, for the Southern Chief's Organization. Just for the record, B-E-D-D-O-M-E.

I will just say good afternoon to all of the panelists. I'm going to be a little bit shorter than my learned friend before me, so that

might make you very happy, although he did have some good questions for you.

Similar to Mr. Toyne, whomever wishes to respond can respond, but I'm going to direct at least my first couple of questions to yourself, Ms. Mayor, because you are the one that presented those slides.

MS. S. JOHNSON: My name is Ms. Johnson.

MR. BEDDOME: Ms. Johnson; I'm sorry. I'm sorry. I'm confusing Ms. Shannon; I apologize.

MS. S. JOHNSON: But if Ms. Mayor would like to take the questions, I'm fine with that.

MR. BEDDOME: I guess I'm even with our chairman there from our second pre-hearing conference. Okay.

THE CHAIRMAN: You are right; I did make the same or a similar mistake.

MR. BEDDOME: Similar names. I apologize.

The first question I just have is, it would be fair to say that the planning for the MMT project began in 2007. Correct?

MS. S. JOHNSON: I believe we actually have an IR on that, where we do indicate that the planning commenced in 2007.

If you give me just a minute, I'm just going to pull that up.

MR. BEDDOME: I can reference it for you.

MS. S. JOHNSON: Yes. Okay.

MR. BEDDOME: It is SCO IR 4, at pages 67 to 105 of IR package 6 from the first round.

MS. S. JOHNSON: Yes, I've got it.

MR. BEDDOME: So you would agree it started in 2007?

MS. S. JOHNSON: Yes, I would agree with that.

MR. BEDDOME: Okay. And now I notice in your outline of your presentation, though, you begin with the "needs for and alternatives to" process in 2013.

MS. S. JOHNSON: I think there is different processes, from a planning standpoint, and where the project becomes a vision or a thought. And certainly, from a Manitoba Hydro standpoint, there is environmental assessment; there is the NFAT process; but there is also the

process that happens in the system reliability area and in the system planning area. And these are all different processes that will take place at different times.

MR. BEDDOME: Perhaps you can start me back at 2007 and go over some of these processes that might have occurred between 2007 and 2013.

MS. S. JOHNSON: I think there was a follow-up question that SCO provided, and I think in our response to SCO IR 31, we gave a bit more detail in regards to what began in 2007, and it was -- the request for transmission service between Manitoba and the U.S. was submitted between May 27 and April 2008, and engineering planning studies began in the fall of 2008 to define potential transmission options that could fulfill these requirements.

MR. BEDDOME: But there were no public engagement sessions between 2007 and 2013, then; would that be correct?

MS. S. JOHNSON: No. There would not have been any at that point in time.

MR. BEDDOME: Why did Manitoba Hydro wait roughly six years before initiating any public engagement?

MS. S. JOHNSON: One of the things when -- we found in -- in working on other projects, is in order to engage feedback from communities, whether it be through the First Nation and Metis engagement processes or the public process, having a idea of where the line might be and where a route might be tends to elicit more feedback and provides, I guess, a better venue for conversation with people that are interested in the project.

Going out with just a general idea, or a concept, without any idea as to where the line might be, is sometimes difficult, and you may not really garner participation or attendance at open houses.

MR. BEDDOME: So is it fair to say you don't think that the public has an interest in putting their input in where a route would run, if -- notwithstanding, I know it is at an earlier point of the vision, but wouldn't there be some public interest, don't you think, in where that line would run?

MR. SWATEK: I do want to go back to the 2007/2008. That would have been when we -- when transmission had received a request to

provide transmission service.

Now, at that point, this is -- we are really examining a concept of -- how could Manitoba Hydro provide service for a particular transaction? And at this point these transactions aren't even nailed down.

So I think where Ms. Johnson was going there is there really wasn't a project to take to the public at that point. It is all concepts for discussion.

MR. BEDDOME: But at that point you would have been aware of the concept of connecting a transmission line to what is now known as the Great Northern Transmission Line in Minnesota; that would have been what you would have been planning. Correct?

MR. SWATEK: No, there were various interests competing for that line. It could have gone -- it could have gone down through North Dakota. We may not have transacted with Minnesota Power.

MR. BEDDOME: Were you looking at other potential power utility companies to do an agreement with on that?

MR. SWATEK: There was no point of

termination, and it was not clear exactly which utility it would even be terminating with. It didn't become a solid concept until 2013.

MR. BEDDOME: Okay. Thank you.

So I just want to quickly address -- I think this should be a pretty easy yes or no -- that Section 2(2)(1) of the scoping document, there is a reference that all relevant legislation and policies will be reviewed as part of the EIS.

Would anyone on the panel be able to confirm that that's accurate? I can find the specific reference, if that makes it easier for you.

MS. S. JOHNSON: If you can tell me what page it is on, I have the scoping document right here.

MR. BEDDOME: Sure.

So I have page 10 of 39, although that's a digital PDF, so let me just double-check to make sure that matches the pagination.

2.2 is at the bottom of the page, and it goes up, but there is a line at the bottom of 2.1: "Other relevant Provincial legislation will be reviewed as part of the project EIS."

And if you go up above, in reference

to Federal legislation, there is a similar line.

MS. S. JOHNSON: Yes.

MR. BEDDOME: And then if you kind of reference back to the EIS, it is in Section 2(3)(2)(2), pages 2-3 to 2-7 for Provincial legislation and 2-7 to 2-13 for Federal legislation. You may wish to just turn yourself to there.

It is just a long table of relevant legislation. I think the table keeps going on for quite a few pages.

MS. S. JOHNSON: If you could repeat it to me again, I think I have got it here.

MR. BEDDOME: Yeah. Sure. Starting at 2-3, all the way to 2-13, is several concordance tables, I guess you would say; one of Provincial legislation, one of Federal legislation.

MS. S. JOHNSON: Okay, I've got them.

MR. BEDDOME: Thank you.

And I want to thank Mr. Bedford in his opening remarks for referencing the need for reconciliation and the TRC, as well as Mr. Madden, for recognizing the Path to Reconciliation Act, and I think Manitoba Wildlands also acknowledged

it, so ...

Mine is just a quick question. I recognize that that Act wasn't passed until 2016, which would have been after the EIS was drafted. But is it fair to say that the Path to Reconciliation Act should be listed in those other statutes, as having relevant guidance?

MS. S. JOHNSON: I guess the answer in this would be if the Act is included under the regulatory framework, obviously it is something that we would adhere to. I think Manitoba Hydro is committed, as Mr. Bedford made comment in the opening statement, to working towards that, and I believe, as evidenced in the EIS, certainly Manitoba Hydro has made strides and continues to do so.

MR. BEDDOME: Yeah. I guess, just to give you a little bit further clarification, your tables seem to talk about Acts where a permit is required, and then guidance only; and it would just seem to me that the Path to Reconciliation Act would fit well in the "guidance only" legislation. Would you agree or disagree with that statement? If you were to draft the EIS today, let's say?

MS. MAYOR: I believe my learned friend is asking for a legal conclusion as to whether this Act is applicable and should have been included in the EIS. I'm not sure that that's an appropriate question to be put to the panel, and perhaps that's something that we can take under advisement and advise later on, and we'll take a look and consider it.

MR. BEDDOME: As the manager that prepared the EIS, I'm just simply asking whether, if they were to redo it today, that Act would have been included in their "guidance only" references.

That's really the reason I'm asking. If the answer is they are not sure, that's fine; but that's the reason for the question.

MS. MAYOR: And I think we are saying we would have to review it and advise.

THE CHAIRMAN: Could you give us just a minute on this question? Thanks.

So our understanding is that the Hydro response is that you are going to have to consider that question; is that right?

Okay. Is that satisfactory to you?

MR. BEDDOME: Would I be able to get an undertaking to get a response on that?

MS. MAYOR: Yes, that's fine.

THE CHAIRMAN: Okay, good. Then from our perspective, that's the way to go too, so thank you.

(UNDERTAKING # MH-1: If Hydro were to redo EIS today, would Path to Reconciliation Act have been included in their "guidance only" references)

MR. BEDDOME: And I don't know if they have the same thing, but I also notice, in looking at those tables, the Natural Resources Transfer Act is not listed, and I'm wondering if you would be able to provide an answer as to why.

MS. S. JOHNSON: I think we will have to take that as an undertaking. That would be outside of our ability.

MR. BEDDOME: I will accept that as an undertaking, if legal counsel can confirm.

MS. MAYOR: Yes, that's fine.

MR. BEDDOME: Thank you very much, Ms. Mayor, and thank you, Ms. Johnson.

(UNDERTAKING # MH-2: Advise why Natural Resources Transfer Act is not listed)

MR. BEDDOME: Just bear with me as I look over my notes really quickly.

If I could draw your attention to

Slide 16 in the presentation. And that lists the existing transmission inter-connections, both with the U.S. and with Ontario and Saskatchewan.

You may or may not need it up, but I just -- so you know what I'm referencing.

Really easy question there: I note that there is no import from Ontario and Saskatchewan, but my question is whether Manitoba Hydro has done any feasibility studies of, in the event of a catastrophic failure of one form or another -- I'm not going to say whether it be, you know, Bipoles I and II or Bipoles I and III -- what would be our ability, if any, to import power from either Saskatchewan and/or Ontario for reliability purposes?

MR. SWATEK: When we considered this for Bipole III, we were in the same boat then. The firm import capability was only 700 megawatts, but we like -- but to be a little more optimistic, we included an extra 200 megawatts for what we considered a likely emergency import of 900. And subject to -- now, I would have to refer back to the inter-connection team to determine if they believed that was coming up from the U.S. or from Ontario, but certainly not from Saskatchewan.

MR. BEDDOME: So there is no capacity to get any from Saskatchewan, is your sense of it?

MR. SWATEK: We have no firm import capability, no.

MR. BEDDOME: Oh, really? So the lines to Saskatchewan only go one way? Am I understanding that correctly?

MR. SWATEK: It is that the systems can only support power flow in one direction. Power flow is not symmetrical; it depends on the strength of the system on either side. And Saskatchewan is not able to supply firm power to Manitoba.

MR. BEDDOME: Thank you very much, Doctor. It is appreciated, for a lay person like myself.

But Ontario, there is capacity for firm imports?

MR. SWATEK: No, we have no capacity for firm import from Ontario. From -- it now -- now, under certain system conditions, there may be possible to get some non-firm. This is typically non-firm from the U.S.

If you are asking about Ontario, this is something that I would have to check on. We

certainly have no firm -- no firm import from Ontario.

MR. BEDDOME: Thank you. I really appreciate that.

I will quickly ask this, but I think my learned friend asked it before. It is difficult -- you were talking about how some of the lines that were less than 10 kilometres were easily accessible; you figured they could be repaired quickly. But it's next to impossible, I guess, too much variability, too many factors for you to give rough ballpark estimates of how fast you think that crews would be able to respond to something like that.

MR. SWATEK: No, it would really depend on the -- on the circumstances.

MR. BEDDOME: Fair enough.

This may be a question better asked for the routing panel, and if it is, I apologize. But it was I think Mr. -- Mr. Matthewson, I think, briefly mentioned this.

When we were going over the video, you pointed out the corner angles that would be subject to blasting. That's correct; right?

MR. MATTHEWSON: Sorry, can you repeat

the question? Was it subject to blasting?

MR. BEDDOME: It was a brief comment as you went through the video, and you noted -- you said -- "Here is one example of one of the corner guys where blasting would be required." Right?

MR. MATTHEWSON: No, just --

MR. BEDDOME: Angle towers, I think --

MR. MATTHEWSON: They are angle towers, and they are wider and have a larger footprint. I don't think I referred to any type of blasting, but if I did, I would like to correct that, is that they are subject to stronger loads because of the change of direction. So you have the conductors, and the weight of the conductors pulling at two different angles, whenever you have an angle structure. So they have to be stronger, more robust. There is no connection to blasting activities particularly for an angle structure, any more than any other structure.

MR. BEDDOME: Okay. It must be my mistake, but I just would refer you to Southern Chiefs' Organization information request number 34, which is a follow-up from information request number 5. And we had asked questions

about the implosions there. And it indicated that angle towers on major crossing locations are identified on the construction and environmental protection plan, and that's one of the places where implosions would occur. I just wanted to confirm that that was accurate

MR. MATTHEWSON: The IR that you are referring to, it is implosions for splicing of conductor cables will occur intermittently between angle towers and crossing features.

So it is where the end of a cable reel, which is approximately three miles long, it's when they are spliced together.

MR. BEDDOME: Perfect. Thank you. Sorry; I misunderstood. I thought there was going to be blasting at the angle towers to get foundations in. And I was aware of the splicing, which was my follow-up question.

I noticed you had a video from the Tyndall transmission of Manitoba Hydro, but you will have to forget -- dumb lawyers like me are curious about trying to understand the splicing process; how much noise it might take, whether there is any risk of debris, et cetera.

MR. MATTHEWSON: Sorry, can you repeat

the question?

MR. BEDDOME: I'm just wondering -- it is fairly open-ended, but just -- the splicing process is interesting to me. I did go on your website and find you guys have a video for Tyndall transmission. Whether you can just help -- as I said, dumb lawyers aren't electrical engineers, don't know all of this.

There is a couple of subsequent questions. Maybe give a quick description; I think it might benefit.

MR. MATTHEWSON: I think I will pass it to Mr. Mailey, our civil engineer. He has a lot of experience in construction, to explain it.

MR. MAILEY: To skip some background, as stated, it's a splicing technology to which -- either at the angle tower or a dead-end tower, where the conductor terminates, or where we are joining a conductor, it is a sleeve, and there is actually an implosive charge in it that melts the conductor together.

Traditionally, or still to this day, you can also use a compression methodology. This technology is an advancement; provides a better solution, and it's more cost effective.

So there is no debris that comes from this; it is completely contained. That being said, it is an implosion, so there is quite a force on a blast, and it is loud, so there is a safe distance to which the workers have to stay when it actually is enacted.

MR. BEDDOME: How far away would -- like, the audibility, I suppose, would depend somewhat on wind conditions; but how far away would these implosions be heard, roughly? Give or take.

MR. MAILEY: As you stated, it could vary, depending on wind and atmospheric conditions.

The other factor I would share is sometimes there is multiple splices that are done at the same time. I can give you a lay answer: It is loud, and it could certainly traverse some distance.

But I would have to check what that variation could extend to. I don't know that exact distance.

MR. BEDDOME: Well, I very much thank the panel for your time. You will be happy to know, I think that's all of the questions I have

at this time.

MR. MAILEY: I was just going to add, we do notify the public in advance of those audible noises, and then we also sound a bell alarm or a horn system in a local area. So in populous areas, we certainly give advance notice, so people aren't frightened or scared. We also notify authorities; we do a public communication on that to try and get the word out what this loud noise is.

MR. BEDDOME: Thank you.

MR. SWATEK: Before you wrap up, I do want to clarify that that extra 200 megawatts of non-firm, non-firm import, that was from the U.S., not from Ontario. So we don't have anything from them.

MR. BEDDOME: Thank you for asking that question, because I just had one last follow-up for you, Doctor --

MR. SWATEK: Oh, good. Oh, you want the -- okay. Fair enough.

MR. BEDDOME: Just a quick question.

You were looking at the tornado map with Mr. Toyne there, and looking at the likelihood of it. Would it be fair to say, with

climate change, the risk of tornadoes in Manitoba are going to increase?

MR. SWATEK: With climate change, I'm not an expert. But if the risk of tornadoes were to increase, we would certainly want a greater-than-10-kilometre buffer, yes. Thanks.

MR. BEDDOME: Thank you.

THE CHAIRMAN: Thank you, Mr. Beddome.

We will take a ten-minute stretch. Normally it is 15, but we are slightly behind, not much, so let's make it ten minutes, and we will come back. Thanks.

(Recessed at 3:10 p.m.)

THE CHAIRMAN: Okay. We will start in a minute here. Thanks.

Okay. Welcome back, everyone, and we will resume our questioning with Peguis First Nation. Thank you.

MR. VALDRON: Thank you.

For the record, once again, my name is Den Valdron, representing Peguis. And you will be pleased to hear I have got only a very few questions, starting out, so I suspect this will be brief and quite painless for everyone.

First off, let me say that I really

admired that video presentation. I thought it was just spiffy, which is not a legal term. But no, it was quite good, and quite delightful, and very informative.

I guess the first question is going to be a softball to the group there: Is this video available on your website?

MR. MATTHEWSON: It will -- we have to work out some technical issues to get it on our website, but we will be filing the video as part of the CEC Commission hearings.

MR. VALDRON: Excellent. Do you have any idea when it'll be up on your website?

MR. MATTHEWSON: It -- no, I don't have any idea how long it could take. Like I said, the video itself is 2 gigabytes in size; it is going to take some figuring to get it available to the mass public for viewing.

MR. VALDRON: Okay. Would it be possible to make arrangements to have this video shown to communities like Peguis?

MR. MATTHEWSON: Absolutely.

MR. VALDRON: And you would be the person we would contact to try and make those arrangements?

MR. MATTHEWSON: Yes I can, or Ms. --
MR. VALDRON: Who would you recommend?
THE WITNESS: Ms. Sarah Coughlin, who is leading our First Nations MMT engagement process, has ongoing connections, discussions with the community, so she would probably be the best point of contact.
MR. VALDRON: Excellent.
Now, with respect to that video, I just have a couple of questions. Like -- as I was watching it, for instance, I noted that -- you know, as the yellow line moved through, it would be passing through areas of furrows, and I take it these would be agricultural lands. Correct?
MR. MATTHEWSON: Correct.
MR. VALDRON: Okay, good. Sometimes the furrows seemed different. Did that represent different crops in those areas, or different uses of agricultural land, or ... ?
MR. MATTHEWSON: Yes, likely. There was different crops, different stages of crop growth.
MR. VALDRON: Okay. And I saw trees there. Those weren't actual trees being represented, were they? It was just kind of

groups of trees, just to say, in this area right here, if you have got a tree, there is some trees there. Right?

MR. MATTHEWSON: Yes. As I mentioned at the start, it was just a simulation; it was not intended to be a realistic, exact example of the existing environment.

MR. VALDRON: Right. Not intended to be detailed or literal.

But I noticed that with respect -- at least passing through one area, it was referred to as a pine swamp; do you remember that reference?

THE WITNESS: I believe there was a reference to "piney bog."

MR. VALDRON: Pine bog; yes. You are correct. I guess that's a marshy environment, correct?

MR. MATTHEWSON: Sorry, can you repeat the question?

MR. VALDRON: Pine bog, that's -- if it is a bog, it's marshy, or wetland?

MR. MATTHEWSON: Yes, that's correct.

MR. VALDRON: As I was watching this, the non-agricultural land didn't seem to be really specified as anything else. If there weren't

trees, it was hard to determine what that land was.

MR. MATTHEWSON: It would have been a mixture of grasslands and shrublands.

MR. VALDRON: Grasslands, shrublands, possibly marsh swamp, et cetera?

MR. MATTHEWSON: Yes.

MR. VALDRON: Your video couldn't distinguish between those different sorts of wild lands?

MR. MATTHEWSON: The underlying imagery, under the video, it would have been discernible; but we didn't model the exact shrubs showing there. But the imagery that was on the -- that everything was placed on top of was the latest available aerial imagery that all this was done on top of.

MR. VALDRON: Um-hum.

MR. MATTHEWSON: And it was perhaps not as discernible because of the resolution of -- when developing a very large video like this, we had to scale the resolution of the imagery down, which causes it to be a little more grainy and not as clear. But in the agricultural area, due to the large expanses of different terrain, it is

easy to discern the imagery; but when you got into the shrubs and the grasses and the wetlands, it was difficult; correct

MR. VALDRON: So it was just difficult to discern, in terms of the Crown land, what that Crown land was and how meaningful that Crown land was in terms of different categories?

MR. MATTHEWSON: It was difficult to visualize the exact land cover that was on that landscape, not its land use.

MR. VALDRON: Okay. Now, on that point, I guess, one thing that I was watching, and that might have been really interesting for me, was if there had been some way to distinguish between Crown lands, per se, and other forms of land, like private land. Was there any thought given to that?

MR. MATTHEWSON: There wasn't any thought given to that in this presentation. We do have quite a few different maps coming up in future presentations that illustrate just that.

MR. VALDRON: Okay. Could you do it within the context of this video?

MR. MATTHEWSON: Could I have illustrated Crown land versus private land?

MR. VALDRON: Could it have been done?

MR. MATTHEWSON: Yes. Yes, it could have been done. Correct.

MR. VALDRON: Would it be possible to do that in the future? Or is this video basically cast in stone at this point?

MR. MATTHEWSON: It is technically possible to do. I'm not sure by which timelines we can have that done, whether it would be able to be incorporated during the length of this hearing. That video took over two months to produce.

MR. VALDRON: Wow. Okay.

So when was that video completed?

MR. MATTHEWSON: That video was completed at 6:30 on Sunday. Literally. That's when I received it in my inbox. There was many, many, many drafts and corrections and adjustments.

MR. VALDRON: Just coming right down to the wire; well, I admire that. All right.

One thing I wondered about was whether you could have done this video, say, on Google Earth, or with real-time photography, or satellite mapping, something like that, rather than a CGI overlay. Would that have been possible?

MR. MATTHEWSON: Yes, that would have

been possible. We have done that on other transmission projects.

MR. VALDRON: Why not on this one then?

MR. MATTHEWSON: We felt that adding the third dimension to the project would help visualize the right-of-way width and clearing that isn't illustrated. When you just lay the towers on top of a Google Earth image you don't get an understanding of the width and location of the right-of-way --

MR. VALDRON: Okay.

MR. MATTHEWSON: -- to the same degree.

MR. VALDRON: All right. So you were sacrificing some level of detail in some area to try and get a better concept in terms of the three-dimensional aspect?

MR. MATTHEWSON: Yes, correct.

MR. VALDRON: Okay, all right.

Now, with respect to Slide 8 of your Hydro presentation, this document here.

MR. MATTHEWSON: I would like to add to that information on Crown.

So Manitoba Hydro, on its public

website, right now which you may not be aware of, is there is a map viewer on the website with the project aligned on it, on a Google Earth-type environment, with imagery, and it does have the Crown layer available to be turned on and visualized at that time too.

MR. VALDRON: Thank you. That's good to know. I will definitely take a look at that.

All right. As you can see, what I'm interested in is, of course, representing Peguis, the whole issue of Aboriginal engagement and Aboriginal participation. So we have a special interest with respect to, say, Crown lands, and in terms of Aboriginal use, what kind of land you are looking at. Whether it is grassland or scrub brush or forest is obviously very important to us.

Now, turning to Slide Number 8 of the overview presentations, I believe it is titled "Overview of Presentations." What I was curious about is you've listed a number -- and I'm not saying you, specifically; I'm just addressing it to the group of you -- introduction, project description, engagement routing, construction, methodology approach, socio-economic, biophysical and environmental protection.

Can you identify for me more specifically which of those presentations deal with First Nations content particularly?

MS. S. JOHNSON: It is actually in several of the presentations that you will see. Obviously it is in the engagement presentation. It will be in the routing presentation. It will be -- there will be a flavour of it in the socio-economic, and I believe the biophysical, subject to check; just give me a second.

And it is in construction as well.

MR. VALDRON: Okay. And can you tell me if any of these five items provides -- has more to do with First Nations content? Or is it just spread evenly through? Where is the First Nations content focusing within these five?

MS. S. JOHNSON: I guess First Nations content, you are going to have to be a little more specific.

MR. VALDRON: Relating to consultation, relating to involvement with Aboriginal traditional knowledge, relating to land use.

MS. S. JOHNSON: I think, again, it will be peppered through; but the engagement

presentation is where we will summarize the process and the information that we heard. I think you will also see in routing where some of that information has been incorporated into routing. And traditional land use will be part of the biophysical panel.

So it really is peppered throughout many of the preparations we have. But specific to engagement with the First Nation and Metis through that process, it will be in the upcoming presentation.

MR. VALDRON: Okay. Thank you.

Now, with respect to Aboriginal engagement, I note that there was new terms of reference the EIS issued -- or for the CEC hearings issued in February of 2017, and those new terms of reference basically seem to add simply a paragraph that some issues were going to be addressed: Health and socio-economic conditions, physical and cultural heritage, the current use of lands and resources for traditional purposes.

And I note that these updated terms of reference came out in February of 2017. The prior terms of references, which didn't mention that, were in 2015.

Has this new -- have these new terms of references changed your perspective, or imposed a perspective? Or does this simply cover all the -- or do these new terms of references for you simply cover all the things you were doing or committing to in 2015?

MS. S. JOHNSON: The terms of reference didn't change the EIS.

MR. VALDRON: Okay. All right.

And I guess one last question, and this is just kind of a little clarification. You mentioned the -- somebody mentioned the Riel/Vivian IPL. Can you tell me when that was licensed? I'm just trying to make sure all of my Ts are crossed here.

MR. SWATEK: Yes, we have that here. The existing IPL in the Riel/Vivian corridor, that -- it was originally constructed as Line D602F, and it was licensed in -- sorry, it was -- excuse me; it was built in 1980. The line was redesignated as M602F when it was re-terminated at the Riel station in 2014.

MR. VALDRON: Okay. Precisely when in 2014?

MR. SWATEK: I believe it was October

of 2014. The exact date in October, I don't recall offhand.

MR. VALDRON: So it would have been licensed in 2014?

MR. SWATEK: The Riel sectionalization was a change to a existing IPL. Exactly when it got its licence, we would have to check that.

MR. VALDRON: Okay. Could I get an undertaking on that, then?

MR. SWATEK: Yes, we'll --

MS. MAYOR: I can do better than that. I'm advised that it was licensed by the National Energy Board in 1977.

MR. VALDRON: All right. Do you recall -- I guess you can't recall, but do you know specifically when in 1977?

MS. MAYOR: September 6.

MR. VALDRON: September 6. Sorry to be so pedantic.

I want to thank you all, and I appreciate you taking the time out and being so patient with me as a new person to this process. And my thanks to the Commission.

MR. SWATEK: And thank you very much for your questions.

MR. MADDEN: Jason Madden for the Manitoba Metis Federation. I just have two short questions.

I want to go back to the period from 2007 to 2013. And you talked a bit about the Minnesota Transmission Line being -- examining a concept at that time, and not necessarily undertaking consultation or engagement on it. At that point in time, did you have the general understanding, though, that the line, from a concept perspective, would still be in southeastern Manitoba?

MR. SWATEK: No, that would not have been known at the start.

MR. MADDEN: Can you explain to me -- so it is the idea of -- that there is no -- there is no idea that it would actually be from Winnipeg to Southern Manitoba, or ... ?

MR. SWATEK: It would have gone from Winnipeg to a terminating station in the U.S., but at that point the ultimate termination for that line had not been determined. Right.

MR. MADDEN: So from a concept, is that analogous to at a strategic -- you are at a strategic planning level at that point in time?

MR. SWATEK: We were examining multiple transmission service requests, meaning there were multiple requests for Manitoba Hydro's power. A line would need to get built, but exactly to where had not been determined. We were engaged in some joint studies with MISO at that point, the Midcontinent Independent System Operator. So at the onset, it was not clear where that line would have terminated.

MR. MADDEN: Although the understanding would be it would be in the United States?

MR. SWATEK: It would be in the U.S., yes.

MR. MADDEN: So that would naturally mean it would be going through Southern Manitoba, not Northern Manitoba?

MR. SWATEK: Correct, yes.

MR. MADDEN: At that time, were there any discussions with the government in relation to what interrelation to engaging stakeholders, indigenous groups, or others, about that, at the strategic -- or a concept level?

MR. SWATEK: At the concept level, no, because we are still working with the MISO pool at

that point. It is a matter of working out who wants the power and how much power do they want. That was not -- that was not finalized until I believe October 2013.

MR. MADDEN: Those are all the questions I have. Thank you.

THE CHAIRMAN: Thank you very much.

Do we have questions at this time from Manitoba Wildlands? Ms. Whelan Enns.

MS. WHELAN ENNS: Staying on this time. I expected a few more questions from the MMF, Mr. Chair. Maybe we all did.

For those who are not used to me arriving with lots of tags, I'm sort of known for that approach to cross-examination. Feel free to tell me if I've already asked one before, because I have two sequences, handwritten notes with tags and your slides also. I'm going to basically go into my notes first. Okay. They are, then, in the order of presentation.

I was going to ask about Slide 17, but we have just had a fair bit of information about the Riel/Vivian line, and I'll come back to it later.

I just wanted, as a point of

information, to let you know that Slides 18 and 20 are quite hard to see in the room. Now, we are working on a smaller screen sometimes, but I have brand-new glasses, so I thought I would just basically let you know that.

Mr. Toyne has asked the questions I was going to ask about the NERC regulation. I am very interested, though, in Manitoba Hydro's policy in terms of what you provide publicly on website with respect to everything to do with FERC, NERC, and MISO or MISO, however you want to pronounce it.

In our office, we have often had to in fact go to the American sources for this information.

MR. SWATEK: All of the information relating to NERC and MISO is posted on Manitoba Hydro's OASIS website. That's a -- it is the open access real time in force -- Open Access Same Time Information System. Manitoba Hydro has a page on there; that's where all of the MISO utilities post their information, for transparency.

MS. WHELAN ENNS: And in Canada, then, that includes the Saskatchewan Power Corporation and Manitoba Hydro, in terms of the region for

MISO?

MR. SWATEK: SaskPower has a relationship with MISO. They apply the NERC standards in their own way, as do other Canadian jurisdictions, yes.

MS. WHELAN ENNS: Fair enough. It is good to hear about OASIS.

Going back to my first question on this, is there a specific link on your website with the information about MMTP, in order to find the information about MISO, NERC, and FERC, through OASIS? This would include, for instance, presentations that Manitoba Hydro has made in those forums regarding this project over the last -- and transmission and capabilities and import and export capabilities over the last several years.

MR. SWATEK: I do not know if our website has a direct link to OASIS. I tend to go directly there, myself.

MS. WHELAN ENNS: The question, of course, is from a participant trying to access information and asking questions about that access. So I would strongly recommend that whenever a Manitoba Hydro project is involved with

those regulations and those reporting requirements into the United States, that there be a link on that project, with that project's information.

But thank you. Okay. That one has been asked.

I was following to the best of my ability everything that was being said about the weather report, the weather study. Is the weather study available to the CEC and to the participants?

MR. SWATEK: There is a summary of the weather study in the EIS. The entire study, though, had not been filed.

MS. WHELAN ENNS: Is that a matter of Dr. Moss's preferences, or Manitoba Hydro's preferences, as in how was it contracted that it is not available?

MS. S. JOHNSON: To clarify, I don't think that we said we wouldn't file it. We just said that it wasn't filed as part of the EIS, and that a high-level summary was provided in the EIS, and that impacted some of the commentary in the EIS. I don't think that we indicated that we were not willing, or wouldn't.

MS. WHELAN ENNS: Fair enough. You

recall tracking it is accurate, Ms. Johnson, so then the request stands; will you make it available?

MS. S. JOHNSON: Yes, we will.

MS. WHELAN ENNS: Thank you. That's great.

Again, in terms of my learning at the back of the room and what we heard about this study, it sounded to me -- and correct me if I got it wrong -- that most of the emphasis with this weather study had to do with the risk of both lines in the MMTP project going out. So I couldn't tell from what I heard today whether you also did the same amount of analysis in terms of only one line going out, or the lines going out alternately, depending on what might be increasing in our world these days, which is a combination of extreme weather events of different kinds.

MR. SWATEK: The weather study was commissioned to develop the design for the transmission line. It's standard practice. The original scope of the weather study dealt with extreme winds and icing. The information required to design the 1-in-150-year tower.

When we became concerned about the

buffer and what the minimum requirements might be there, we went back to Bob Morris and requested that he expand the scope of his study at that point to include extreme weather events that could take out two lines.

But the original scope of the study was exactly what you had asked for. It was what do we need to know to design this new line.

MS. WHELAN ENNS: I appreciate that, and thank you for the correction on his name. There are lots of names, acronyms, and terms in the coming months.

I think that we had an earlier question from a previous participant that's probably Ms. Johnson. And it is an obvious one, but then perhaps it is relevant to have it on the record.

In terms of the steps with the scoping document, to arrive at the final scoping document for the MMTP, do you see any challenges between what is in the final scoping document and the new terms of reference for these hearings?

MS. S. JOHNSON: No, I think the updated terms of reference are still met through the EIS, as described in the scoping document.

MS. WHELAN ENNS: Thank you.

When the scoping document process began, were there any basic table of contents, ingredients or assumptions for that scoping document exchanged between Manitoba Hydro and our Environmental Approvals Branch in Sustainable Development Manitoba?

MS. S. JOHNSON: Not to my recollection was there dialogue prior to the -- in specifics of the table of contents or what it would include. To the best of my knowledge, it was filed, and comment was provided back.

MS. WHELAN ENNS: So does that mean that Manitoba Hydro drafted the first version of the scoping document based on your experience with EIS products for transmission in Manitoba? Or were you in fact at that point considering your methodology for routing, et cetera?

MS. S. JOHNSON: It was certainly based on that, as well as the requirements under the NEB Act as well.

MS. WHELAN ENNS: Thank you.

Mr. Chair, this is just a point of information. We were talking about the Manitoba Hydro Act -- I'm sorry, I think I'm missing a word

in the name of the Act -- and the regulation from 2012.

So I took a look online, both in the consolidated and listed regs, both ways, and there does not appear to be anything prior to that 2012 regulation with the same objectives, unless it is prior to what is online. What is online goes back to sort of about 1990.

So again, a point of information: I couldn't find anything additional.

We had some information based on the questions that Mr. Toyne was asking this afternoon about the last significant drought in Manitoba being in 2003/2004. And it occurred to me that it might be worth asking, for all of our information, then what happened the next year in terms of drought or the alternative in Manitoba? Another way of asking this question would be what Manitoba Hydro's profit was in 2005.

MS. MAYOR: I'm sorry, I'm not sure of the relevance of that question in terms of Manitoba Hydro's profits in 2005, if that was the question. And I apologize if I misunderstood.

MS. WHELAN ENNS: No, it's okay; I was just wording it a different way. I was trying to

basically bring some attention to extreme weather patterns that affect our province and affect the operations of Manitoba Hydro.

So in 2005, we had more water in Northern Manitoba than we'd had in 300 years, and so that of course positively affected the bottom line. But it also is a direct contrast from one year to the next, which is again why I was trying to word the question.

Thank you for the help on that. I wasn't getting to profits; I was getting to the contrast in weather.

We were told in the workshop regarding your routing methodology that Manitoba Hydro decided not to bring the methodology experts that assisted you in using this methodology to the hearings. Two of the interns from our office attended a very early workshop regarding MMTP where at least one of those individuals were present. So I would appreciate if you would tell us again why we don't have access to them.

MR. MATTHEWSON: So my question was -- or my response when I was asked that question on January 19th was that we would take it under advisement on whether those experts would appear

before this panel. And in fact, Manitoba Hydro will be presenting those experts in the routing panel in the upcoming days. One of those experts, Jessie Glasgow, from Team Spatial.

MS. WHELAN ENNS: Thank you. Take the correction, and that's good news. Thank you.

I would like to return to the subject of the video. We have a schedule that -- there's a break at 12:30. I had a meeting today, so I had not seen the video. And I'm very curious. Okay. And I have heard various positive comments sitting back in the room.

But we also have a video now that is in fact in evidence, but we don't have the video. So what I -- and I have two experts that need this video yesterday or tomorrow, and it is not going to be on the website. It is also going to be -- if it is viewing only, that's a problem for experts who are out of province. So I would appreciate knowing whether or not we will have CDs or DVDs, and how soon Manitoba Hydro has done -- taken this same approach in terms of providing CDs and DVDs of videos in past hearings.

MS. S. JOHNSON: We do have the video on USB sticks that are available to the

participants.

MS. WHELAN ENNS: Is there a supply here now?

MS. S. JOHNSON: Currently, we have nine.

MS. WHELAN ENNS: I would appreciate a couple so I can send them this evening.

MS. S. JOHNSON: You know what? I will provide them to Cathy.

MS. WHELAN ENNS: This is also good news. Thank you.

We've just had a discussion, because we are all working on understanding the -- the history of the Riel/Vivian line. And there were a couple of things that I think perhaps our chair, in his past responsibilities, and I and a few others in the room might well know about.

So let's try this again. We are talking about a line that was built in 1980. In 1980, there was no Environment Act or environment licensing in Manitoba. When the Act was proclaimed, much of -- well, Manitoba Hydro's infrastructure, but a lot of infrastructure in this province was grandfathered under the new Act.

I'm hoping that the chair will stop me

if I misstate anything in this sequence.

The issue, I think, at hand is whether, then, in 2014, there was anything issued by Environmental Approvals under the Environment Act in Manitoba in relation to this infrastructure having been grandfathered, when the Act was proclaimed.

And if so, we need the paper. We would like to know exactly -- because this is quite usual, if I may; if you have got a grandfathered plant, mill, operation, or infrastructure, under the Environment Act in Manitoba, then it is often fairly straightforward, perhaps too simple a process, when something is changed, added to, or altered in that infrastructure years later.

So I very much -- I think it is relevant to this proceeding, and to the regulatory process overall, to know what occurred in 2014, Provincially, if anything, under the Environment Act. I understand what you've said about the NEB.

MS. S. JOHNSON: It is my understanding that the sectionalization of the line was covered as part of the Provincial process.

MS. WHELAN ENNS: Which is a reference to the 2014?

MS. S. JOHNSON: Yes, and I think the licence -- no, sorry, what was your question again?

MS. WHELAN ENNS: Are you saying that sectionalization is the 2014 process, or is it another year?

MS. S. JOHNSON: The licence was issued for the Riel sectionalization in 2009, not in 2014.

MS. WHELAN ENNS: And the changes, then, in 2014 will in fact have been what are referred to as minor changes under the Act, based on the 2009 licence, would be my guess.

MR. MATTHEWSON: Just -- so when you refer to 2014, are you referring to the Bipole III licence? I'm --

MS. WHELAN ENNS: No, I was not.

MR. MATTHEWSON: Okay. So, the Riel international power line has been -- portions of it have been incorporated into a variety of different impact statements. The Riel sectionalization statement of 2009 incorporated the sectionalization, as Mr. Swatek commented,

when it was -- and sectionalization, for simplistic terms, is where the line is reterminated to a station. Previously it was called D602F, which went from Dorsey to Forbes. When it was sectionalized, it was sectionalized at Riel and became M602F.

During that sectionalization, it was licensed -- the re-termination of that line at Riel was licensed under the Riel sectionalization project in 2009. In -- the next time that transmission line was modified was with respect to the Riel converter station improvements at the Riel site as a result of the Bipole III project, in which the Riel line was -- its termination into the station was adjusted, or modifications to the transformer banks and structure yards were adjusted.

MS. WHELAN ENNS: Thank you. I appreciate the thoroughness of your answers.

Given that we are not able to ask the Director of Environmental Approvals questions in these proceedings -- I know that this seems to be a little bit offside, but there are various participants in this room who are very interested in both that sequence and the geography, and then

some of us who are also trying to understand and learn about the NEB. So thank you again.

I'm switching. Different set of yellow tags. And I have a request. This one I've made before. It is not a complaint; it is a request.

I really would recommend and request, from today going forward, that Manitoba Hydro put the name of the panel and the name of the speakers on the top page of each of these. We find in our office that five years later, it really matters. You know, we don't have the answers to who said what without going to the transcript.

So that's a request. And it is not a request for an undertaking; it is just a request.

I am on Slide 5. And I would like to know -- and I take direction in terms of what I may have missed in the EIS, but I would like to know which environmental and conservation organizations in Manitoba were engaged by Manitoba Hydro regarding the MMTP.

MR. MATTHEWSON: That information, in detail, can be found in appendix 3A.

MS. WHELAN ENNS: I guess the question one should ask at coffee break, so that one is

better prepared. But thank you.

The reason I'm asking is because I know that Manitoba Wildlands was involved in fairly thorough engagement in terms of Lake Winnipeg Regulation, and I'm drawing a blank on MMTP. So that's where my question is coming from.

MR. MATTHEWSON: Yes. Manitoba Wildlands was included in the engagement process.

MS. WHELAN ENNS: Thank you. I will read up about MISO. Okay. Thank you.

I'm on slide 6, and I honestly don't know the answer to this question, so it is always best if you do before you ask, but did Manitoba Hydro in any way participate in the two reviews of the Environment Act that were conducted, one through the Commission and one through the Environmental Approvals Branch in the Manitoba Government, now Sustainable Development Manitoba.

MS. S. JOHNSON: Manitoba Hydro did provide feedback and comment.

MS. WHELAN ENNS: Did you, in that feedback, note the areas that we are all working on here for a month or so in terms of the Environment Act? For instance, not having a specific regulation on environmental assessment,

or cumulative assessment?

MS. S. JOHNSON: I can't recollect as to what was shared in regards to those topics.

MS. WHELAN ENNS: Fair enough. Appreciate -- appreciate the stage we're at on that. We may find we have to come back to it.

I'm now on -- I think probably the list of presentations in Slide 8, but I became interested, again, in the discussion from previous participants' cross-examination about weather events. So I would like to know whether or not Manitoba Hydro used the Western Canadian climate data at all in arriving at the contents of the EIS, or in the work with Dr. Morris.

This is a University of Winnipeg endeavour, which I believe you support financially.

MS. S. JOHNSON: I think this question might be better addressed through the biophysical panel.

MS. WHELAN ENNS: Fair enough. We will come back to it, then.

On that point, Ms. Johnson, what I'm going to do, if I may, is indicate that we will have questions that are broader than the

10-kilometre buffer in terms of tornadoes, and questions about how many there have been in the entire region or regions affected by this project in set periods of time.

I have outrun a couple of tornadoes that have been in that region in the last five years, so I'm very interested in how much more information Manitoba Hydro has about tornadoes.

I'm on Slide 11 and 12 now. And I'm going to ask another question about location and the EIS. I have our consultants in B.C. taking a look today also, because the areas that I have read, the chapters I have read that I'm most interested in, I didn't catch the learnings. So are they written into the text, or are they actually all in the same pattern and same identifiable sections in the chapters in the EIS? Learnings from past assessments in each EIS chapter?

MS. S. JOHNSON: I believe it is -- in the first three to four pages of each chapter, there is an actual heading on lessons learned.

MS. WHELAN ENNS: Fair enough.

MS. S. JOHNSON: So they should be consistent to the EIS.

MS. WHELAN ENNS: I will take another thorough look. And there is one more question left.

Oh, and we've answered it. It is Riel/Vivian again.

Thank you. All of you, including the back row.

THE CHAIRMAN: Thank you, Ms. Whelan Enns.

MS. WHELAN ENNS: Thank you.

THE CHAIRMAN: So next we will be turning to the Consumers Association of Canada. Thank you.

MS. PASTORA SALA: Thank you Mr. Chair.

Good afternoon. For the record, my name is Joelle Pastora Sala. I will also try to be brief with my questions this afternoon, as I only have one area of questioning for you.

My questioning relates to the "Journey to Today" portion of the PowerPoint, which canvasses the environmental assessment process. I believe most of my questions, if not all of my questions, will be for you, Ms. Johnson.

So for your information, I will be

referring to the excerpts of the CEA Act, which I provided, and everyone should have a copy. So that would be Sections 4(1)(c), as well as 18.

Ms. Johnson, I will also be referring to the letter dated of April 19, 2017, from Sheri Young, who is the secretary of the National Energy Board, which was addressed to Jennifer Moroz, counsel to Manitoba Hydro, as well as to Jason Madden, counsel to the MMF.

Before I ask my questions, I just wanted to be very clear that while I will be referring to some Federal legislation in my questions, I am not seeking your legal opinion, but I am simply looking for your knowledge of the regulatory process, given your position.

So, Ms. Johnson, you are the manager of licensing and environmental assessment for transmission with Manitoba Hydro. Correct?

MS. S. JOHNSON: That is correct.

MS. PASTORA SALA: And you have been in this position since 2012?

MS. JOHNSON: Yes, I have.

MS. PASTORA SALA: And as such, you would have knowledge of the environmental assessment and regulatory process for the

Manitoba-Minnesota Transmission Line project?

MS. S. JOHNSON: Yes, I would have knowledge of that, along with the many people that worked on this EIS as well.

MS. PASTORA SALA: Yes. Thank you.

It is my understanding that the EIS for the Manitoba-Minnesota Transmission Project is meant to meet the requirements of the Provincial environmental assessment process under the Environment Act, as well as the Federal process under the National Energy Board Act and CEA Act, 2012. Is that correct?

MS. S. JOHNSON: That is correct.

MS. PASTORA SALA: In other words, Manitoba Hydro requires authorization under Section 58.1 of the NEB Act to construct, operate the international power line because it will connect to the Great Northern Transmission Line in the U.S. Correct?

MS. S. JOHNSON: That's correct.

MS. PASTORA SALA: And information for the Manitoba-Minnesota Transmission project can also be found on the electronic filing on the NEB website?

MS. S. JOHNSON: That would be

correct.

MS. PASTORA SALA: I would like to now take you to page 2-8 of the EIS.

And my apologies; I forgot to tell you I was referring to that page as well.

MS. S. JOHNSON: All right. We have got 2-8.

MS. PASTORA SALA: If you go to the third paragraph under the subtitle -- or the title "Primary Requirements," or the last paragraph before the next section.

So under 2.3.3.1, the last paragraph. The paragraph that begins with "Notwithstanding Federal ..."

Are you there?

MS. S. JOHNSON: I'm there.

MS. PASTORA SALA: Okay. So it says:

"The Province of Manitoba issued Order-in-Council Number 00386-2013 under the authority of Section 58.1(7) and Section 58.2 of the NEB Act. The Order-in-Council designated the Minister of Conservation and Water Stewardship as a Provincial regulatory agency for the proposed IPL."

Do you see that?

MS. S. JOHNSON: Yes, I do.

MS. PASTORA SALA: And the Minister of Conservation and Water Stewardship, I guess, would now be what we would refer to as the Minister of Sustainable Development?

MS. S. JOHNSON: That's correct.

MS. PASTORA SALA: So my understanding of this statement is that within the Provincial Government, the Minister of Sustainable Development is the responsible regulatory authority for the Manitoba-Minnesota Transmission Project. Is that consistent with your understanding?

MS. S. JOHNSON: Can you please repeat that?

MS. PASTORA SALA: Yes. So within the Province, the Minister of Sustainable Development is the responsible regulatory authority for the MMTP?

MS. S. JOHNSON: That would be correct.

MS. PASTORA SALA: Now, I would like you to take you to the excerpt of the CEA that I had provided, and Section 4(1). And if you could go to section 4(1)(c).

Are you there?

MS. S. JOHNSON: I'm there, yes.

MS. PASTORA SALA: It states that one of the purposes of CEA 2012 is:

"To C, promote cooperation and coordination action between Federal and Provincial governments with respect to environmental assessments."

And then if we go to Section 18, it states:

"The responsible authority with respect to a project must offer to consult and to cooperate with respect to the environmental assessment of the designated project with any jurisdiction."

I don't need to take you there, but then in Section 2(1) of the Act, it defines jurisdiction as to include a province.

Are you still following me?

MS. S. JOHNSON: I think so.

MS. PASTORA SALA: Okay. We can come back, if you -- if once I get to my question, you are not sure.

Now let's go to the letter from Sheri Young to Ms. Jennifer Moroz and Jason Madden.

Do you have a copy of this letter?

MS. S. JOHNSON: I do.

MS. PASTORA SALA: Are you familiar with the contents of this letter?

MS. S. JOHNSON: Yes, I am.

MS. PASTORA SALA: So let's go to page 5 of the letter.

Under the heading "Timeline," in the second paragraph, at about the middle of the paragraph, it says:

"The Board expects to make a determination under CEA 2012 and to decide to either issue a permit or make a recommendation to the Minister under Section 58.14, if the board determines that this is warranted in 2018."

Do you read that?

MS. S. JOHNSON: Yes.

MS. PASTORA SALA: Is it your understanding that this means that the NEB will be making a determination of whether or not they will be conducting a public hearing on the MMTP following the completion of the CEC hearing?

MS. S. JOHNSON: I'm not sure I'm the right person to be asking in regards to what the meaning is of this. But my understanding is that

in 2018, the Board will determine whether or not it will issue a permit.

MS. PASTORA SALA: So right above that, it talks about:

"The Board has determined that it will not commence the environmental assessment under CEA 2012 until after this CEC public hearing is completed for the proposed MMTP in order to reduce any duplication of the environmental assessment required by each of the Province of Manitoba and the Board."

And then it talks about waiting until the completion of the hearing. Is that --

MS. S. JOHNSON: Yes, that's my understanding, according to the letter.

MS. PASTORA SALA: Okay. So we heard a presentation this morning from Ms. Tracey Braun of the Environmental Approvals Branch, and during her presentation, Ms. Braun stated that the CEC hearings are being held in lieu of the NEB hearings. Does Manitoba Hydro share Ms. Braun's understanding?

MS. S. JOHNSON: My understanding in the letter that we received from the NEB is that they haven't formally made a determination as to

what they are going to do. But insomuch as Ms. Braun's presentation, I think her understanding of it is -- and her understanding of the process is better asked to her.

MS. PASTORA SALA: So this would be the first time that you've been made aware that the CEC hearings are happening in lieu of the NEB hearings?

MS. S. JOHNSON: Yes. I believe Manitoba Hydro's hope is that the CEC process will be robust, such that it may allow for the NEB to look at this process. But determination of whether or not a NEB hearing would be required isn't up to Manitoba Hydro.

MS. PASTORA SALA: Okay. Let's talk about something that might be within Manitoba Hydro's control.

Given that we are all learning this today, what is Manitoba Hydro's intention in terms of addressing the significant change in process?

MS. S. JOHNSON: The change in process -- I guess, from a Manitoba Hydro standpoint, we are going through a CEC hearing; we are going to provide information to the panel, and the process, from a Provincial standpoint, will

take place after that. I don't believe it's changing our actions at all.

MS. PASTORA SALA: But this would be the first time that you've been made aware that this CEC hearing may be happening instead of or in lieu of the NEB hearings?

MS. S. JOHNSON: Whether or not they are happening in lieu of doesn't impact the presentations we are going to be making, or actions on our part.

MS. PASTORA SALA: Would you agree that transparency in decision-making is a important feature of environmental assessment?

MS. S. JOHNSON: Yes, I would.

MS. PASTORA SALA: Would you agree that availability of information to the public in a timely manner is also an important feature of transparency in decision-making?

MS. S. JOHNSON: Yes, I would.

MS. PASTORA SALA: Thank you. Those are my questions.

THE CHAIRMAN: Thank you very much.

Mr. Mills, I would have a question of you, given the hour. It is 4:25. Do you have any estimate for how long you might be?

MR. MILLS: Five or ten minutes.

THE CHAIRMAN: Go ahead, then. But in ten minutes or so I will call it, and we will continue in the morning if you need it.

MR. MILLS: We will try and hustle along.

THE CHAIRMAN: Okay. Thank you.

MR. MILLS: Good afternoon.

I have never met a last name that I couldn't butcher, so I'm going to speak to Shannon, Shane, James, and David. And respecting the chair's concerns about timing, I think what I may do is ask questions, and ask you to be prepared to answer them at the specific panels as we roll through the next few weeks.

Shannon, the terms of reference, the revised terms of reference indicate that this process is to review the EIS, and it makes the statement that a technical review will be completed by Provincial agencies and Federal specialists, and documents produced during this assessment should be considered by the Commission as input for the hearings.

I think, as some in the room know, we have concerns as to the adequacy or transparency

of the TAC process.

Shannon, in your review of the documents that we've received, is it fair to say that the documents produced by the TAC committee and provided to Manitoba Hydro have been made available to this process? And if you would like to think about that, we can talk about that later on.

We get the sense that there is information missing. We see correspondence from the TAC response on the public registry that refer to -- I'm paraphrasing, but further to discussions and information provided to us from Manitoba Hydro, we have no concerns with this issue at this time. And it seems to us that the terms of reference that we are all working under indicate that those documents, prior to acceptance by a TAC member, are documents produced during the assessment, and that they should be available to the Commission as input for the hearings.

So could I ask you to have your team consider if there is TAC correspondence that is not in the public registry and has lead up to TAC conclusions? Because we believe that the terms of reference that we are all required to work under

indicate that that information is to be considered by the Commission as input to these hearings, and we get the sense it hasn't been.

We may be wrong, but we will ask you to have a look at that, and we will come back to it.

Shannon, as you know, in our IRs and directly in person, we've asked you if the panel will include the Pembina Institute, to allow us to review the greenhouse gas life cycle analysis. That is one of the two mandatories that we find within the Environment Act, and we observe, again and again, that the Pembina Institute doesn't seem to have been made available for any prior Clean Environment Commission hearing.

So will the Pembina Institute be made available for their GHG LCA to be reviewed?

MS. S. JOHNSON: While the Pembina Institute will not be part of this hearing, we will have a Manitoba Hydro employee with expertise in that area to take on those types of questions for you.

MR. MILLS: Okay. Will their CV be made available to us, or has it been? And if they are going to be on your panel, shouldn't it have

been?

MS. S. JOHNSON: It is. On the panel, I've got the first name; I can't remember his last name. We have a couple of Mikes. I will tell you who it is in a minute.

MR. MILLS: Okay. We'll get back to that. Could you also --

MS. S. JOHNSON: No, just give me two seconds.

MR. MILLS: Okay.

MS. S. JOHNSON: Let's finish this off, because --

MR. MILLS: All right.

MS. S. JOHNSON: -- there's a lot of "I've got to get back to you on," so let's see if I can put this one to bed. Just give me a minute.

MR. MILLS: I'm fine with you getting back.

MS. S. JOHNSON: With a team of over 100 people, it is sometimes a little difficult to keep all of the names straight. We will get back to you as to the individual. And his CV has been provided.

MR. MILLS: Okay.

We haven't found, within any of the

CVs provided, anyone with specific life cycle GHG analysis credentials. Is Manitoba Hydro aware that the Canadian Standards Association certifies life cycle analysts?

MS. S. JOHNSON: I would probably defer that question --

MR. MILLS: To the panel?

MS. S. JOHNSON: -- to the panel with the expertise.

MR. MILLS: Okay.

MS. S. JOHNSON: I don't have expertise in that area.

MR. MILLS: I respect that, and I would rather too.

Which panel will that be? Which panel will speak to greenhouse gas?

MS. MAYOR: I can assist. The individual --

MR. MILLS: Is that biophysical?

MR. MILLS: The individual is Mike Shaw, and he will be on the biophysical panel.

MR. MILLS: He isn't currently listed on your biophysical panel. Is that an oversight, or a recent addition?

MS. MAYOR: He is in the back row.

And his CV has been provided.

MR. MILLS: Okay. Could he be brought to the front row?

MS. S. JOHNSON: If the questions warrant it, yes.

MR. MILLS: Great. Thank you.

Does Manitoba Hydro vet the CVs of your team before they present them to this process?

MS. S. JOHNSON: No, we don't.

MR. MILLS: You don't. Okay.

Who will speak to the Stantec air quality report, and what panel will that be on? Again, will that be biophysical?

MS. S. JOHNSON: I believe that will be the biophysical panel.

Or not; let me double-check.

I believe it's the socio-economic panel dealing with the health issues.

MR. MILLS: So many panels and so little time.

Would that be Butch Amundson from Stantec, would speak to that?

MS. MAYOR: It is Dr. Bryan Leece.

MR. MILLS: Dr. Bryan Leece?

MS. MAYOR: Yes.

MR. MILLS: Okay, great. Thank you.

When it comes to EMF, will Mr. Bailey be your only EMF witness?

MS. S. JOHNSON: Yes, he will be.

MR. MILLS: Thank you.

David, on the climate issues, Manitoba Hydro has a very powerful document that no one seems to reference or mention, but we found it. It is your Manitoba Hydro climate change report.

Regrettably, on the website, the last time you've released it was 2014, 2015; but we draw to your attention that within your own information, you were projecting some very substantive flow increases within your system.

And I'm sorry, I have -- and we will come back to this during the panel discussions, but I'm going to ask you to speak to the fact that you show runoff increases on the Red River basin in the foreseeable future of 19 per cent; in the Nelson-Churchill watershed, you show runoff increases of 10 per cent. And yet you seem to continually come back to the great fear of drought in the system, and that being part of the very good reason why this project needs to be built.

And so if you could produce a more current copy of that information, Hydro indicates within it that they have a team that employs the Watt flood analysis. We are familiar with that; we enjoyed that information on Bipole. But if you could draw that information forward and have it available for that panel, we would appreciate it.

Shane, Mr. Mailey, our client is concerned about Mother Earth, and the references to 80 and 100-metre-wide right-of-ways jumps off the page for us. We go comparative shopping, and we note that the Muskrat Falls 750 kVA line was 60 metres wide. We note that you have existing 500 kVA transmission inter-connections of close to half the width of this right-of-way.

And it is not for today, but when we come to the construction panel, if you could have answers to what are the widths of other right-of-ways that Manitoba Hydro has developed, and why does this one need to be so much larger.

And I sense it is a multifaceted answer, so I would just like to table it today and ask you if you could bring it to your construction panel.

MR. MAILEY: They will be prepared to

explain that.

MR. MILLS: Great. Thank you.

We would also like a further understanding. We think it is germane, as we look at this connection, to understand the other connections that you have with the United States. So if you could bring to that panel an understanding of those other connections, including tower heights, tower spacing, and right-of-way widths.

We are trying to understand why you are building this the way you are. And if you have had issues with other lines that you can explain to us require more, bigger, we would respect that. But we haven't found it in your EIS. So if you could bring that information to that panel.

As I said, we are particularly concerned about a right-of-way that's 40 per cent wider than Bipole III; arguably twice as wide as the existing 500 kVA connection to the United States. And we are wondering, in the face of the concerns of Southern Stakeholders and all of the Aboriginal indigenous groups to what you are doing to the landscape, if you could provide us with

some rock-solid explanations as to why this needs to be twice as wide as, for instance, what B.C. or Saskatchewan have recently required for similar 500 kVA lines. We would like to have a healthy conversation about that.

James, when you do that fly-by -- and again, this dovetails into our concerns about the width of the scar that we are going to cut through Manitoba -- would it be possible for the paint that chases the line to actually show the width of the right-of-way? You tell us that it may be 80, it may be 100; it depends on guyed towers. Hydro will use some discretion in that regard.

I'm not asking you to commit to the width, but I think it is disingenuous, when you show us that painted followed line, and it doesn't really indicate the width of what you are doing.

So if you could consider that. And otherwise, thank you very much for working until 6:30 on Sunday; that's a great presentation.

David, the transmission interconnect slide that you had, showing the quantities of interconnect, could you pull that back up, just for a brief minute?

And I'm just a few more minutes,

Mr Chairman. We're trying to hustle.

That's it. Without -- and I know contracts are sacred documents, but we don't understand why down an AC line, an export quantity can be so significantly greater than an import quantity. Is it the contracts of the product you are selling and buying? Or is it the design, the technical design of the line itself?

MR. SWATEK: It is neither of those. The transmission line, the transmission line itself, is exactly that. It is some wires in the air. The difference is the electrical systems on either side of that line.

If you have a very strong system on one side and a weaker system on the other, then you will be moving more power in one direction than the other. If we wanted to increase the import capability on that 500 kV line, that would take system improvements in the U.S., and they would have to want to do that.

But the -- yeah, the asymmetrical power flow has everything to do with the system capabilities on either end.

MR. MILLS: For both ends; thank you. I didn't understand that.

Shane, Mr. Mailey, we've been -- we've stumbled upon Hydro's YouTube videos on Bipole, and we've been enjoying them, and we acknowledge all of the information that you are getting to us. But by most cases, when you show us something, it also causes us to ask some questions.

Recently we watched the YouTube, and we went down and witnessed the Erickson heavy-lift helicopters that were lifting the towers into place. Would it be Hydro's intention to use a similar technique in this project?

MR. MAILEY: It would be determined after we award contracts. It certainly would be up to whomenever gets that piece of the tender contract to determine in their construction. So we don't necessarily prescribe it, so it wouldn't be known for some time. It is a potential; it could be a potential.

MR. MILLS: Thank you.

The Sikorsky helicopters -- we called Erickson, and we had a chat with them about fuel burn. We are concerned about greenhouse gas, and we are concerned about the accuracy of the greenhouse gas information you provide us, because the Minister requires a mandatory thorough and

complete understanding of that. And when we extend the fuel consumption of the Jet A-1 kerosene that those birds use, and we compare it against your Bipole greenhouse gas predictions, I'm not sure -- and I'm going to come back to this under your construction technique -- but if those helicopters are used, I'd suggest that your greenhouse gas life cycle analysis in this project is understated by as much as half.

Our information is those things consume as much as 700 gallons per hour, and our information is that the fuel they burn and the additives within them have a very high GHG contribution.

So it is a healthy discussion about greenhouse gas. Again, I get back to my first question: We wish the authors of your GHG report were here to explain to us why burning of slash and 1957 technology, massive turbine engines consuming thousands of litres an hour for hundreds of days, aren't included in your greenhouse gas analysis.

And we say again, and I'll ask for the last time, we really think that the authors of the GHG life cycle analysis should finally appear.

And they are in Calgary; it appears that they are available. And WestJet says it is 400 bucks.

Lastly, Shane, Mr. Mailey, we are concerned about electromagnetic fields. And I reread the questions that we asked of your expert for Bipole III, and I understood his answers.

Since then, we've done more research on that regard, and Shane, we are going to ask your construction folks to describe what, if any, techniques they incorporate into the design of this line to reduce greenhouse -- pardon me, to reduce electromagnetic fields.

There is some good information that we've found that indicate that the configuration of the line, the bundling of the conductors, the diameter and quality of the conductors, the height of the towers, we've seen information that indicates the davit or delta towers significantly reduce EMF.

We know that -- or we anticipate that Mr. Bailey will tell us that EMF is -- I love his quote, he indicates that he is more concerned of his children contacting Lyme disease than of EMF affecting them.

So I think we know where Mr. Bailey is

going to take us. But the fact that five northern states require EMF monitoring of projects of this size, the fact that the -- as an example, the Great Northern permit requires the utility to provide pre and post-construction EMF monitoring reports, we wonder if Manitoba Hydro couldn't do a better job of analyzing and attempting to reduce, or showing us that you have attempted to reduce, the EMF produced by this line.

David?

MR. SWATEK: Yes, I can answer your question, or at least speak to part of it.

MR. MILLS: Great.

MR. SWATEK: The delta configuration that the MMTP line uses does the most to minimize both electric and magnetic fields at ground level. The davit line that you refer to is simply a delta turned on its side.

Yes, the delta configuration that has the same separation between all three phases, as well as conductor bundling to increase the effective surface area of the conductors, these are all things that reduce the EMF at ground level.

MR. MILLS: And are these all things

that Manitoba Hydro incorporates in the design?

MR. SWATEK: Yes, these are incorporated into the design of MMTP.

MR. MILLS: When we look at your guide and your self-supporting lattice towers, those are what you believe to be the best configuration for the reduction for EMF?

MR. SWATEK: The delta configuration is, yes.

MR. MILLS: The heights of that delta configuration, and the distance between the bundles, as they say?

MR. SWATEK: The distance between the conductors, that's determined by electrical clearances within the tower. They are as tight as they can be while still allowing safe live line work to be carried out. And the height of the conductors is -- is to meet -- is to meet standards at ground level for induced currents on vehicles, which is a result of electric fields.

So yes, I would -- okay, coming from where I am here, I think the guy you really want to ask is the expert, Bill Bailey, on the EMF panel. But I would say these lines incorporate low EMF designs, yes.

MR. MILLS: I will leave it for the Southern Stakeholders to consider whether -- I will leave that alone and move on.

I guess, in summary, those are sort of the Coles Notes of the discussions we would like to have with your panels with regard specifically to greenhouse gas.

Shane, we will want to talk about your procurement policies with regards to particularly the metals that you use. Your greenhouse gas report indicates that 50 per cent of the GHG is contributed as a result of the manufacturing of conductors, and you indicate that you look to China and India as the sources of your steel; probably the most egregious sources of materials available in the world.

We would like to talk about what value your procurement policy puts on the environment.

We would like to talk about information we've received from other jurisdictions.

Small items: We have some sense of how you do this work, having participated in some of it. The Muskrat Falls project instituted a no-idling policy on all equipment. We would like

to see an accurate assessment of the greenhouse gas contribution that these Sikorsky helicopters truly contribute.

We observe that there is no discussion anywhere as to how your procurement policies view greenhouse gas and its -- and its role in this process.

And finally, we would also -- we would like you to be able to talk fully as to how you propose to dispose of the biomass that this project creates. We are going to point out that both Sandilands and Providence College are in your immediate jurisdiction, and they both rely heavily on biomass as an alternate fuel source.

We would like to talk about whether or not you intend to burn the slash that's created in the right-of-way clearing. We observe that it is just -- the Provincial crop-burning regulations say it is illegal, period, to do what Manitoba Hydro does with their slash, and I think the farmers of the Southern Coalition may wonder about that.

So we would just like to close by saying that thank you very much for creating tens of thousands of pages that have -- that we've had

to read, and that have torn apart our NHL experience this last few weeks.

But seriously, on a positive note, we commend Manitoba Hydro for the quality of the information you've provided us. We sincerely do. It is -- you know that it is significantly better than the previous product.

Having said that, we agree with CAC's observations that the bar needs to be continually raised. And we would like to talk about Mother Earth, and things that we can do in this project, and in the conditions that this Council provides to the Minister to further improve on how you do what you do. So we look forward to that.

I think my friend Craig has some questions that he would like to ask very briefly.

THE CHAIRMAN: I wonder if I could interrupt, just for a second. We are now at five to five, so I'm going to have to call -- you will be able to talk in the morning, unless it's very brief. But you can have all the time you need.

MR. BLACKSMITH: It is very brief. Very brief.

THE CHAIRMAN: Okay.

MR. BLACKSMITH: In going over the IR

requests -- there is over 600 of them, I believe, and again I'm reiterating that our Dakota people don't have any agreements with the Province of Manitoba, or Canada, or the Crown. So we are kind of on the outside looking in.

So I'm looking at this procedure, and I'm wondering, where does Manitoba Hydro get its authority from? It seems to have carte blanche to do anything that it wants. So, looking at the Manitoba Hydro Act, I come across 15.2 and 18 in the Manitoba Hydro Act, which outlines the powers of the corporation in expropriations, where they can basically, with or without the consent of the owner, enter, remain upon, take possession of, use any property, real or personal, erect, make, or place thereon any structure, installation, or excavation and flood.

Is there an agreement with the U.S. on the Minnesota side of the border that can be made available to the public?

And I'm saying this: If I'm running an extension cord to an outlet in a wall, I expect there to be infrastructure on the other side that would provide for or enable power. In listening to the proponent, the legal counsel from the

proponents, there seems to be an implication or -- that this project hasn't been approved. But I'm sure that on the Minnesota side of this line, they are not going to build a transmission line if there hasn't been prior approval.

So if there is an agreement with Minnesota, will that be made public?

THE CHAIRMAN: Okay, I'm going to take this opportunity to interrupt and ask Hydro to provide that answer in the morning. We are almost at -- we are very close to 5 o'clock, so I'm going to call it. I'm not responsible for the lights here, but -- I want to thank whoever is.

So thank you all. We will be back here at 9:30 tomorrow morning.

MS. JOHNSON: Mr. Chair, before we finish, I have to put some exhibits on record here.

THE CHAIRMAN: Yes. Go ahead.

MS. JOHNSON: Okay. CEC Number 1 is the letter from the Minister. CEC Number 2 is our terms of reference. MSD Number 1 is the presentation we saw today from the Department. MH001 through 023 will include the EIS, TAC responses, supplemental information, IR responses,

witness lists, and the presentations we saw today from Manitoba Hydro. CAC Number 1 is their opening statement, 002 is the Canadian Environmental Assessment Act, and 3 is the letter from NEB regarding MMF. MMF001 is their opening statements.

(EXHIBIT CEC-1: Letter from the Minister)

(EXHIBIT CEC-2: Terms of reference)

(EXHIBIT MSD 1: Presentation)

(EXHIBIT MH001 through 023: EIS, TAC responses, supplemental information, IR responses, witnesses lists and the presentations)

(EXHIBIT CAC-1: CAC opening statement)

(EXHIBIT CAC-2: Canadian Environmental Assessment Act)

(EXHIBIT CAC-3: Letter from NEB regarding MMF)

(EXHIBIT MMF-1: Opening statement)

THE CHAIRMAN: Okay. Thank you. With that, we will close it until 9:30 tomorrow morning.

(Adjourned at 5:00 p.m.)

OFFICIAL EXAMINER'S CERTIFICATE

Cecelia Reid and Debra Kot, duly appointed Official Examiners in the Province of Manitoba, do hereby certify the foregoing pages are a true and correct transcript of my Stenotype notes as taken by us at the time and place hereinbefore stated, to the best of our skill and ability.

Cecelia Reid

Official Examiner, Q.B.

Debra Kot

Official Examiner Q.B.