

# STANDING COMMITTEE ON CROWN AND CENTRAL AGENCIES

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#### STANDING COMMITTEE ON CROWN AND CENTRAL AGENCIES

Mr. Tim McMillan, Chair Lloydminster

Mr. Buckley Belanger, Deputy Chair Athabasca

> Mr. Denis Allchurch Rosthern-Shellbrook

Mr. Fred Bradshaw Carrot River Valley

Mr. Dan D'Autremont Cannington

Mr. Randy Weekes Biggar

Mr. Trent Wotherspoon Regina Rosemont

## STANDING COMMITTEE ON CROWN AND CENTRAL AGENCIES January 20, 2010

[The committee met at 10:00.]

#### **Inquiry into the Province's Energy Needs**

The Chair: — Well I'd like to welcome everyone here this morning. This is the 12th day of our meetings of the Standing Committee on Crown and Central Agencies, the inquiry into Saskatchewan's energy needs. I'm Tim McMillan, Chair of the committee. I would also like to introduce the other members. We have Mr. Weekes, Mr. D'Autremont, Mr. Allchurch, and Mr. Bradshaw. We have Mr. Belanger, Mr. McCall, and Mr. Taylor.

All of the committee's public documents and other information pertaining to the inquiry are posted daily to the committee's website. The committee's website can be accessed by going to the Legislative Assembly of Saskatchewan website at legassembly.sk.ca. under "What's New," and clicking on the link to the Standing Committee on Crown and Central Agencies.

The hearing will be televised across the province on the legislative television network, with audio streaming available for meetings outside of Regina. Check the website for information regarding locations, cable companies, and channels. The meetings will also be available live on the website, with past proceedings archived on the website as well.

Before we hear from our first witnesses, I would like to advise witnesses of the process of presentation. I'll be asking all witnesses to introduce themselves and anyone else that may be presenting with them. Please state your name and, if applicable, your position within the organization you represent. If you have written submissions, please advise that you would like to table your submissions. Once this occurs, your submission will be available to the public. Electronic copies of tabled submissions will be available on the committee's website.

The committee is asking for submissions and presentations that are in answer to the following question: how should the government best meet the growing energy needs of the province in a manner that is safe, reliable, environmentally sustainable, while meeting any current and expected federal environmental standards and regulations and maintaining a focus on affordability for Saskatchewan residents today and into the future?

Each presentation should be limited to 15 minutes, and we have time set aside for question-and-answer to follow. I will direct questioning and recognize each member that is to speak. Members are not permitted to engage witnesses in debate and witnesses are not permitted to ask questions of committee members.

I would also like to remind witnesses that any written submissions presented to the committee will become public documents and will be posted to the committee's website for viewing.

With that said, I would invite our first witnesses to introduce themselves. And please proceed with your presentation.

#### Presenters: Cameco Corporation and Areva Resources Canada

Mr. Neuburger: — Thank you, Mr. Chairman, members of the committee. Cameco Corporation and Areva Resources Canada appreciate the opportunity to present our views to the Standing Committee on Crown and Central Agencies on behalf of the uranium mining industry. Our comments will focus on the needs of the uranium industry and the challenges with the electrical infrastructure in northern Saskatchewan.

My name is David Neuburger. I'm vice-president of mining with Cameco Corporation. And joining me today for the presentation is Jim Corman, vice-president of operations with Areva, Roman Strzeszewski who is manager of mill projects with Areva Resources Canada as well, and Ken Gullen, director of technical services with the mining division for Cameco Corporation.

Jim Corman and I will share the presentation, and all four of us will be available for questions following that. We have tabled the written presentation and our presentation essentially follows through that written submission.

Mr. Corman: — Thank you, Dave. About our industry. Canada is one of the world's largest producers of natural uranium, supplying approximately 22 per cent of the global total production. Cameco and Areva currently supply all of the Canadian production from mines and mills in northern Saskatchewan. The Government of Saskatchewan has made the development of northern Saskatchewan and the growth of uranium exploration and mining major priorities. Cameco and Areva continue to make valuable contributions in both of these areas to assist the province in achieving these goals.

In 2008, the latest statistics available demonstrate what the uranium industry means to Saskatchewan. Total direct employment by the uranium industry in Saskatchewan, including contractors, was around 3,700 people. Employment at the mines themselves stood at approximately 2,700 people. Roughly half of these employees are residents of Saskatchewan's North, most of whom are of Aboriginal ancestry. In fact the Saskatchewan uranium industry is among the top Aboriginal employers in all of Canada. It was further estimated that the uranium industry also generated an additional 7,000 spin-off jobs, for a total of 11,000 jobs created in Saskatchewan.

The uranium industry spent about \$250 million on salaries, wages, and benefits for its direct employees. Industry contractors paid out an additional 150 million to their employees, most of whom were from northern Saskatchewan. The value of goods and services purchased in 2008 by the uranium industry was \$961 million. Direct taxes and royalties of 150 million were paid to the province of Saskatchewan, 95 million was paid to the federal government, and another 4 million paid to local governments, totalling about a quarter of a billion dollars in taxes in 2008.

The provincial government's recent response to the Uranium Development Partnership and Perrins reports confirms that facilitating continued growth in the uranium sector is a key objective for the people of Saskatchewan. One of the fundamental requirements for industry to operate and thrive anywhere is a stable, secure, and dependable supply of electricity. This is also true for the uranium mining industry in northern Saskatchewan. The appendix attached at the end of the submissions shows the locations of the uranium mines and mills in northern Saskatchewan and several of the potential new mines. The figure also shows the electrical generating stations and transmission lines serving those facilities.

Electrical generation in the North is provided by several small hydro generating stations located near Uranium City, producing approximately 15 megawatts, and the Island Falls generating station near Creighton, which provides about 100 megawatts. The Far North transmission system consists of the 394 kilometre long, 115 000 volt Athabasca transmission line running from Uranium City to Rabbit Lake and the 428 kilometre long, 138 000 volt line running from Island Falls generating station to Points North, where it connects with the Athabasca transmission line. There is also a transmission connection from Island Falls to the southern transmission system via a line running through Manitoba and back into Saskatchewan near Creighton.

Construction of the Athabasca transmission line was completed near the end of 1988. The line was built under arrangement whereby SaskPower purchased the small hydro generating stations from Eldorado Nuclear and built the transmission line from Uranium City to Rabbit Lake as part of the purchase agreement. At that time, the line served Uranium City, communities along its route, and the Rabbit Lake uranium mine and mill. Rabbit Lake was the only major industrial customer served by the transmission line. The construction cost of \$39 million, minus 2.5 million contribution from the federal government, was recovered by SaskPower primarily from power consumed by Cameco's Rabbit Lake operation by charging the diesel generating rate of approximately 25 cents per kilowatt hour when, at the time, southern electrical rates were around 3 to 4 cents per kilowatt hour.

Construction of the Island Falls to Points North, or I2P line, was completed in 1991 and connected to the Athabasca transmission line at Points North. This new line served the Cigar Lake, McArthur River, and Key Lake facilities which were operated by Cameco. The line also served Areva's McClean Lake operation and Claude Resources' Seabee mine. The line was later extended to supply power to the community of Wollaston Post. McClean Lake is served off the Athabasca line but additional capacity was required as the electrical load increased on the Athabasca system.

The construction cost of this line was \$47 million. SaskPower contributed two years of anticipated revenue of \$17.85 million from the projected future power sales to customers served by the line. The remainder of the cost was paid by charging the diesel rate for customers served by the line. The two largest consumers of power from the line, McArthur River and Key Lake, paid the majority of that cost. This was a great benefit to the residential and commercial customers through the Lindsay Lake substation and at Points North who are also served by the I2P line. Likewise any industrial customers that connected to the line after it was paid for did not contribute directly to the original construction cost.

Requiring industrial customers to pay the cost of construction of backbone network transmission lines is unprecedented in the province. Like the majority of the northern road network, it is one of the little-known and unrecognized contributions that our industry has made to the development of northern Saskatchewan, its communities, and its people. In contrast, any network transmission lines constructed in southern Saskatchewan were paid by SaskPower and the cost shared by all customers in the province, including southern industrial and mining operations, simply through their standard electrical rates.

In 2009 the electrical load or demand on the Far North transmission system was approximately 70 megawatts. Working with the current and potential new customers, SaskPower projects the load to double by 2016 and reach nearly 180 megawatts by 2019. The I2P system was designed for an electrical load of 40 megawatts with an absolute steady state capacity of about 70 megawatts. This transmission line has therefore reached its capacity and must be upgraded quickly in order to sustain the industrial activity that it currently facilitates, particularly in the uranium mining sector, and provide the required power for new projects to proceed.

Furthermore, as the load increased, the reliability of the line has decreased, creating equipment trips and more outages. The reliability of this transmission line is already much poorer than all southern transmission lines. Lightning storms passing over the I2P line caused more than 30 outages in a typical year due to the north-south orientation of the line and the poor ground conditions for dissipating the electrical, the lightning energy when it strikes.

At Key Lake operation alone, it is estimated that the loss of operational capacity due to these outages has cost the equivalent of about \$55 million in uranium production in the last two years. Key Lake previously had some flexibility in its production schedule to absorb this downtime, but an approved increase in the mill's production limit means that each outage now directly translates into a reduction in the site's annual output. Of course there is also a corresponding loss of taxes and royalties to the province of Saskatchewan and a loss of revenue to SaskPower as a result.

SaskPower currently does not provide any electrical power supply to the northwest part of the province. In light of the future potential resource development such as Areva's Shea Creek project and the oil sands projects, the Far North transmission system will require an expansion into this part of the province as well.

It should be emphasized that the uranium industry is not only looking to increased energy consumption to meet its future operational requirements. We are also investing millions of dollars to make our operations more energy efficient and lower our demand. Both Cameco and Areva have conducted energy assessments at all of their operational sites, and we have and will be implementing a number of measures both large and small to reduce consumption. Everything from the construction of LEED [leadership in energy and environmental design] compliant residences, steam recovery projects, improved lighting controls, and major heat recovery initiatives have been completed or are in the works.

While our companies will continue to strive and invest to make each individual operation as energy efficient as possible, it is unavoidable that the future production growth we anticipate and the province desires cannot be met without an overall increase in electrical consumption from our industry.

I'll turn it back to Dave.

**Mr. Neuburger**: — We have three recommendations we'd like to share with the committee. From the perspective of major industrial customers with significant operations in the province's North, Cameco and Areva would like to submit the following recommendations regarding meeting Saskatchewan's future energy needs.

Our first recommendation is that SaskPower and the province of Saskatchewan move forward decisively and aggressively to put the comprehensive plan for upgrading the Far North transmission system into action. Continued economic and social development in northern Saskatchewan and ongoing growth in the province's uranium industry are stated goals of Saskatchewan's policy-makers. A major factor in both of these objectives is the provision of an adequate and reliable electricity supply. SaskPower has developed a comprehensive plan for staged upgrades to the Far North transmission system to meet the electrical load forecast. Translating this plan into concrete action must now be made an immediate priority for the province.

Due to the lengthy period required to complete these projects, SaskPower and the Government of Saskatchewan need to assure their customers that the timelines developed for the upgrades will indeed be met. The implications of lost production and the possibility of limiting future growth and related employment due to power restrictions or increased reliability issues are significant.

Our second recommendation is that SaskPower and the province of Saskatchewan work together to evaluate and pursue the development of potential projects that can meet the electrical generation needs of the province's North in the timelines required to address future load growth projections.

There is a total generating capacity in the North of about 115 megawatts before any system losses between the Island Falls generating station and the small generating stations near Uranium City. SaskPower's electrical load forecast shows that this generating capacity will be exceeded in 2014, only four years from now. New electrical generating plants can take considerable time to complete, particularly in the North where distance and isolation can complicate project schedules.

[10:15]

SaskPower has the capability to transfer load from southern generating stations to the northern system via the transmission tie through Manitoba. However transferring power from the southern system to the Far North system will increase the outages on the network, and electrical losses from transferring electricity over a long distance will be high.

One option to increase the northern power supply is the potential development of the Elizabeth Falls hydro generating

plant in partnership with the Black Lake First Nation. This possible new generating station located northwest of Points North could supply an additional 40 megawatts to the Far North system. It would increase the reliability of the system, decrease electrical losses on the network, and support a northern First Nation community in developing a business opportunity.

There are other potential hydro generating sites in the North that have been identified by SaskPower and should also be considered to meet the future power needs of northern Saskatchewan. Like nuclear, run-of-the-river hydro provides a clean, environmentally friendly source of electricity. However the proposed Elizabeth Falls project would appear to be the most advanced and therefore capable of becoming operational in the shortest time frame, which is becoming increasingly important with each passing month.

Finally we recommend that provincial pricing policies for electricity be applied consistently throughout Saskatchewan so that northern customers are treated the same as customers in the South. Since the northern customers have already paid for the construction of the Far North transmission system, any upgrades to the network should be treated the same as upgrades to the southern network, whereby SaskPower pays the cost and then recovers it through the rates charged to all customers in the province. Past practice has seen individual northern users singled out for disproportionate cost recovery.

I'd like to conclude with a few comments. In the 1950s, the people of Saskatchewan shared a vision that developing an electrical infrastructure in the province would lead to investment, economic growth, and prosperity. Cameco and Areva are confident that today's provincial decision makers likewise recognize the importance of infrastructure and will place a similar emphasis in this area, particularly in the interest of developing Saskatchewan's North and facilitating growth in the province's uranium industry. On behalf of Cameco and Areva, we thank you for the opportunity to present our views to you in this important process. We look forward to any questions you may have.

The Chair: — Well thank you very much. Thank you very much for your presentation. I've got a question to lead off here. You, I guess, have identified that a key component from your company is that you're initiating, is you're personally setting reduction targets and looking for efficiencies in the homes you build and in your mechanisms of mining. Do you have a target? That's been a common theme through our hearings, is SaskPower's got reduction targets and plans. Does your company or companies have a target of what percentage of current usage could be saved? I realize it's probably tough because you're increasing your mining capacities, but do you have anything that we can wrap our minds around?

Mr. Corman: — On behalf of Areva, we don't have a specific target value. We've done the overall energy assessment. On the basis of that, we've identified opportunities that we can take advantage of. The one was, the one that we've realized is the construction of a LEED-compliant dorm facility, 190-some rooms for one of our camps, and it itself reduced our equivalent energy consumption by about 30 per cent compared to our previous facility. So we recognize a significant savings there.

Project by project, some opportunities arise that will save some significant energy consumption, but we don't have a specific target for the group. As you said, our production levels vary and fluctuate, so on a year-to-year basis, it's difficult to compare apples to apples.

Mr. Neuburger: — From a Cameco perspective, we have set some very ambitious general targets, but I wouldn't translate them yet into a percentage that we expect to be reduced by a given point in time. But we have a whole environmental leadership thrust as a company, and one of the focuses of that has been energy and the requirement for energy efficiency and energy reduction. We have recently carried out energy audits at all of our Saskatchewan sites as part of that, and it's unearthed and identified some further opportunities for reduction, building on some energy efficiency projects that we have done in past years as well.

We have a couple concrete examples of work we're engaging in right now. And we will be, basically we'll be installing a heat recovery system in our freeze plant at McArthur River. And that is expected to have a significant reduction in our heating requirements for the ventilation air at McArthur River mine. That's a savings in propane. It'll be a resulting savings in greenhouse gas emissions as well. It won't change the electrical load for us, but it will certainly be energy efficiency in terms of our propane use.

Similarly at our Key Lake operation, we'll be insulating some outside thickeners to again reduce our steam requirements, which directly reduces our propane consumption.

The Chair: — Okay. Thank you. Mr. D'Autremont.

Mr. D'Autremont: — Thank you for your presentation this morning. I noted in the beginning of your presentation that you talked about the need for a secure and reliable supply of electricity. In the SaskPower forecast of going from 70 megawatts to 180 megawatts over the next 10, 15 years, there is obviously going to be a huge need for further generation.

One of the things that we're hearing before this committee is the need for alternate energy sources. Hydro would be one of those possibilities. But also there has been a number of calls for use of biomass as well as wind and solar and cogeneration. Would any of those, do you believe, fit into the needs of your corporations? Could they supply the additional electricity energy needs that you have?

Mr. Gullen: — Ken Gullen, for the record. Cameco has looked at other alternatives for supplying power into our operations, one of which was a biomass with another company. The challenge we have is that the cost of the electricity is substantially more produced with biomass compared to hydro power or other, even coal-generated power. So it's an economic penalty that we would have to pay to operate those kinds of plants in the North.

The other challenge we have is everything has to be shipped in. If it's propane or diesel or even wood waste has to be all shipped in to the North, so it's very expensive just to get the products up there. So I think the key is that for industry is it has to be economically viable and to keep the industry competitive

with other companies in other parts of the world.

Mr. D'Autremont: — One of the things that we're hearing from a number of people doing the presentations is that there is a cost, whether it's direct financial or environmental cost, and that in all likelihood there will be an increased cost based on carbon emissions so that the prices for certain kinds of energies will rise, making them into the ballpark with perhaps some of the higher cost forms of generation that are available.

Have either of your companies looked at the impact of a carbon cost and how that would affect your operations and your electrical usages?

**Mr. Neuburger**: — Dave Neuburger. Sorry. I'm used to appearing in front of the CNSC [Canadian Nuclear Safety Commission]. I was going to say Dave Neuburger for the record.

From a Cameco perspective, I'll just speak to that briefly. We haven't directly been looking at the impact of possible carbon taxes or other measures on our operations. We do try to keep our ... We have a group that tries to keep informed of the emerging policy on that front, and I think we recognize that the cost of energy is going up. I think SaskPower have communicated that as well.

So regardless of the mix, even just the requirements to increase the infrastructure in the province will have an impact over the next decade, that we can expect probably electricity prices as well as other energy forms to increase in cost. I'd say that that's another reason for us to ensure that we're building the energy efficiency projects into our sites to make sure that we're minimizing, for what we're doing, we're minimizing or optimizing the amount of energy we're using.

**Mr. D'Autremont**: — The transmission system in the North, would it be capable of carrying the increase to 180 megawatts? Or does the whole system need to be upgraded?

**Mr. Gullen**: — Ken Gullen. The existing transmission line, the I2P line, is at its capacity right now. As more and more load gets added, the outages will increase. The reliability goes way down, so that there's a whole new line has to be built.

As mentioned in the presentation, SaskPower has developed a very comprehensive plan that allows for a staged upgrade to that transmission line as the load grows. And so we're pleased to see that; as mentioned also in the presentation, we just would like to see that aggressively going forward. Their plans are, as a first stage, to twin the line from Island Falls generating station to Key Lake and tie the lines together at that point. That would give, you know, several more tens of megawatts of capacity which would facilitate in the near term.

**Mr. D'Autremont**: — We did have a presentation in La Ronge — I believe it was from Black Lake — about the Elizabeth Falls project. So we have heard of that and that is part of the presentations that were made to us.

The Chair: — Mr. Belanger.

Mr. Belanger: — Thank you very much. And thanks for your

presentation. I just want a couple of questions, and I'll try to keep them as brief as I can. When you spoke about the deal that was discussed and you pointed out some of the contributions made to the transmission lines in the North, who did you negotiate that deal with at that time? Do you remember which government was in power? What year was that?

**Mr. Corman:** — The original Athabasca transmission line was completed in 1988. So probably negotiations of that would have been done three to four years before that, so whatever that would work out to.

**Mr. Belanger**: — And I'm to understand ... And it's absolutely, I think, good to recognize the contribution of Cameco. And I think at the time it was called, was it Amok at the time?

Mr. Corman: — Yes.

**Mr. Belanger**: — And the whole notion that the power rates for northern Saskatchewan, I've always advocated that they were quite high. And the response we get back from SaskPower is the rates are the same but the consumption is greater.

And as we know, a lot of Indian bands — Black Lake, Fond-du-Lac, Wollaston Lake — they have a system where they, like the province, they administer social services programs. And a lot of their money in the social services program is spent on power bills, a significant amount because people are heating their homes with electrical heat. Would you have any idea as to what is being spent by them and by the corporate sector? Have you done any of that analysis?

**Mr. Neuburger:** — Dave Neuburger. In visits in the North, I too have heard concerns from communities about the high cost of power. We don't know how much they're spending versus what we're spending. So no, we haven't done any of that analysis.

And I would note, the rates that we pay for the power are southern rates. The difference that has been for our companies compared to a southern company is we've also paid for a transmission backbone in the past, as you correctly noted. So that's where the real significant additional cost has come for us, that we paid higher rates for a period of time until that backbone was paid. And now when SaskPower notes that we're paying the same as the southern rates, that is technically true now, once we had paid off the infrastructure piece.

[10:30]

**Mr. Belanger**: — The other question I have, Mr. Chair, is the note of the . . . I realize this is alternative energies discussion. That's what we're looking at. And I note that it does seem odd, and I say that from a very benign perspective, that the uranium company is proposing hydro development in the North. Again it's under the alternative energy symposium, so to speak.

But I note that the whole issue of the uranium or the nuclear power issue, a couple of the representatives of your particular industry — well, our industry in northern Saskatchewan — has indicated that the cost of a nuclear power plant is tremendous and that really doesn't offer much value. And this statement is a

precursor to what I have to say in terms of the alternative energy scenario.

So I just wanted to maybe clarify, just for my own purposes, again just for information: is it practical to look at the huge power generation of a nuclear reactor versus the alternatives that you discussed today such as hydro development?

**Mr. Corman**: — Jim Corman. Certainly for the mines in the North, the power consumption is significant. And we're promoting additional hydro capacity for the North, given that it would be properly sized to meet our needs plus the needs of the communities in the North as well.

Current reactor designs are such that they would be too large for what the needs, particularly in the North, would be. That being said, there is certainly advancements and credible designs being brought forward in regards to smaller or mini-reactor technologies that potentially could be quite beneficial and useful and economic in the future. But certainly right now that technology at that smaller size doesn't exist.

So we're suggesting that hydro is the right choice for the additional capacity needed in the North. Hydro, like nuclear, is a non-greenhouse gas emitting contributor to power, so that's where our focus is. It's a power source that can be brought on in a relatively reasonable period of time as well.

Mr. Belanger: — And my final point — and of course will be a question to that point — is that when you negotiated a deal to bring transmission power, talking to Amok and Cameco, when you negotiated the deal to bring additional power and a steady supply to the North, there was obviously a lot of lessons learned of the value of such of those deals and how we'd proceed with future deals. Like, we're advocating, certainly from the official opposition side from the 1970s, development of the nuclear or the development of the uranium industry. We've mined and milled and gone a long way. The last hurdle of course is the issue of the reactor.

So as we go down this path, we want to make sure industry itself understands that we wanted to look at the alternative energies as a basket of potential opportunity for power generation — biomass, solar, wind, so on and so forth. That being said, if we're able to develop that basket through this process of public hearings, the whole intent is to bring power to our customers, be it the business community or the private sector. We want to bring power to those people so that we are able to generate jobs and get the economy going. Common sense.

Now what we want to try and figure out from our perspective is that, if we do that, we want to make sure the costs are lower, that the costs are low for our corporate customers and for our residential customers. And this is why we're looking at the alternative energy scenario, not putting our eggs in one basket, so to speak, under the UDP [Uranium Development Partnership] process. So I'm glad you're participating in this process even though you're a uranium industry. And our whole notion is that if you're going to bring the cost down for customers, corporate customers, you have to make sure that you incorporate the cost of transmission line, the cost of power production, and of course your profit line.

So we're watching very carefully what happens because we're hearing from the government there's going to be increased costs of power. People are going to pay more for their power. We're saying, okay, biomass, hydro, wind, they should all be cheaper and thus keep the cost in check.

Now I challenge the corporate sector that they be very careful because when we hear of increased cost from the government representatives, we want to make sure it's increased cost for power use and the creation of a good, solid SaskPower Crown corporation. So we afford them as much opportunity to develop alternative energies as possible, thus bringing down the cost of power.

If we see SaskPower is ratcheting up the rates and the cost and everything else just to generate bigger and higher profits which could then be sucked out of the Crowns to cover a deficit so to speak, then we would ask industry to watch that particular scenario that may unfold in the future. Because we want to pay for power, we have to pay for power, but we want to make sure it's a fair, consistent practice in the North as it in the South, and it's not simply a vehicle in which we could justify taking hundreds of millions of dollars out to cover a deficit problem somewhere else. So I would challenge the corporate sector to be very careful of that and to watch that. And this is the reason why we are engaged in this process.

So my argument is, you bring biomass and hydro, in theory going to cost you more. But how much more? Because if there's a ratcheting of all the cost which you pay and many of my northern constituents pay, if all it is is a debt surcharge hidden amongst all that stuff or a deficit surcharge, whatever you want to call it, then that's not fair to the corporate sector, and it sure in the heck isn't fair to my constituents.

So I would encourage as a corporate citizen of the North to be very careful and to watch that, saying, well these options should be fair, consistent, and applied right across the province, North or South, and that there be consideration for some of the issues that we raise in the North and so on and so forth. So would you have any comment on that?

Mr. Neuburger: — Dave Neuburger. I'll just respond that we have been active participants in the SaskPower rate review process over a number of years. And I think that's where we ensure we play our role in terms of ensuring SaskPower carries accountability and that the rate increase is challenged and it is justified. We see our role as being one to continue to challenge and explain the impact of increasing power price and power cost to us despite our . . . And that's not despite but, you know, on the other hand we recognize, as you noted, that there are pressures that are expected to increase power costs over time. But we'll be keeping those in check every year with our participation in the rate review process or any time SaskPower proposes a rate increase.

Mr. Belanger: — Thank you.

The Chair: — Mr. Weekes.

**Mr. Weekes:** — Thank you, Mr. Chair. Welcome. Thank you for your presentation. I guess I've got a number of comments to make. It's interesting to note that your industry, as you stated,

has paid for the north transmission system through higher costs, electrical costs. And your industry certainly has been very important to Saskatchewan and to the economy. You stated, you know, the billion-plus dollars of investment and taxes that you've paid into the province. So that certainly is very important to the economy of Saskatchewan.

Just going back into history, if you could just enlighten us. Your two companies or the uranium mining industry worldwide or mining worldwide globally, what is done as far as investments in remote areas as far as what's happened with you in northern Saskatchewan? The cost of infrastructure for power, but it'd be also roads and other infrastructure assets that would develop, what is the norm I guess in with your experience anywhere else in the world, or your competitors or other mining interests in the world, as far as companies paying for infrastructure in more remote areas or even not remote areas as far as power and roads and those types of issues?

Mr. Corman: — Jim Corman. I can't speak with much certainty on this. I know we certainly have operations worldwide. They're always in remote locations. The power generation at some of these sites is a mix of grid system that we're tied into the provincial or the country grid system, or site-generated power where we would use diesel power generation. So if it's a diesel power generation facility, we build it and operate and pay for the cost ourselves. If we're tying into the country grid system, which I believe that we have done some of that in Africa, similar to what has developed here in Saskatchewan because in the mining industry, our mines in that country in a remote location, infrastructure has been built by the government and we've tied into it.

So it varies from country to country. And we could probably get back to you with maybe a little bit more detail historically when we go out and talk to our operations and see what, how that has developed over the years.

**Mr. Weekes**: — Yes, I would appreciate that information, if you could supply that. Thank you.

The Chair: — Mr. McCall.

**Mr. McCall**: — Thank you very much, Mr. Chair. And thank you, gentlemen, for your presentation and some thoughtful grist for the mill. With apologies to Areva, I'm reminded of the campaign on with Cameco right now, where's Cameco? And here you are.

So I guess the first question I'd have to ask is in terms of the SaskPower plan that has been developed. Does that line up with the timelines that you've put forward in the presentation today in terms of what you need to meet load growth if there isn't going to be some kind of major problem for the system?

Mr. Neuburger: — Dave Neuburger. I'd say that the plan, it does line up, but just. The load growth over the last number of years has taken the . . . It's really now a situation where the annual demand is really at the capacity of the transmission of that line, so if the line isn't twinned in very short order, then there will be challenges. So I think SaskPower has worked hard to pull the plan together, as we believe there needs to be strong encouragement to ensure that that plan is actually completed —

at least the first stages of it, the first two steps of it — to the point where there is a twin line in the timeline that's foreseen within the plan. As if there's slippage to that plan, then there's likely a big challenge to the industry.

**Mr. McCall**: — I guess in your dealings with SaskPower, have they mooted a price tag for that project? And how do your respective corporations piece into the plan?

Mr. Neuburger: — They do have an estimated cost for the transmission upgrade, and I think therein lies one of the challenges of staying to the time frame because there is no certainty on policy of how they'll move forward on that. They're still wrestling with the issue, and I think probably looking for direction from the policy makers in terms of whether it should be paid similar or funded similarly to transmission upgrades that are required in the South, funded by the general funds of SaskPower, or whether they are saying to industry, you have a part to play in paying this. And then that's probably one of the large risks to the project moving forward on the timelines that are required.

Mr. McCall: — Well certainly when you talk about \$55 million in lost productivity, that's a fairly bracing number. As it happens, yesterday Mr. Belanger and myself had a chance to visit with various of the northern leaders at the New North gathering in Prince Albert. One of the leaders of course was from Wollaston, and in discussing with her how thing are going in Wollaston, the first thing she talked about is the outages and the impact that has on her community and her hope that this will be sorted out.

[10:45]

So I think there is a pretty strong consensus coming out of the North in terms of the upgrades that are needed to the system if it's going to serve industry and individual communities in a better fashion than it has to date.

So again in terms of providing some thoughtful recommendations and information for the committee's hearings, I thank you very much.

The Chair: — Mr. Taylor.

**Mr. Taylor**: — Thank you, Mr. Chair. And from my chair, welcome gentlemen, and thank you for the fascinating presentation. I just want to pick up from where my colleague from Regina started his question.

The nature of the brief, the presentation that you made to us today, and the fact that you are here today leads me to believe that there's some urgency to getting some certainty on this matter.

Mr. Neuburger, you just said to my colleague there needs to be strong encouragement. It leads me to the question of ... Because I know that the industry and maybe some of you at this table actually work closely with SaskPower on an ongoing basis. You know what they're doing; they know what your needs are. The fact that you're here and there seems to be some urgency or there needs to be or you're directing us to direct some strong encouragement towards SaskPower, do you believe

there's some problem within SaskPower that may be a misunderstanding or a lack of understanding or a lack of capacity or ability to respond quickly to either their plans or your needs? I just want some clarification as to the real nature of the urgency and the requirement to provide strong encouragement to SaskPower.

**Mr. Neuburger**: — Dave Neuburger. I think the biggest challenge is in terms of ensuring that there is clear direction on policy for who pays, and that potentially can derail it as to my response before. So I don't see a, you know, a particular problem in terms of them not being responsive, not wanting to implement the plan, or any issues like that. I don't see any signs of major capacity issues within SaskPower on that front.

I do note that there is ... SaskPower, like many of us have faced, faces a challenge of significant growth. It's not only for them but the pressures of the economic growth that we've been very fortunate to have in Saskatchewan coupled with a power infrastructure that really had showed very slow growth in demand over time and is an older infrastructure then that was sufficiently supporting us in the province for many years.

The growth projections we have are similar to projections in other areas, such as the potash corridor and other things. And so there's a strong demand for them to be working on many different fronts. And I have no doubt that challenges them in terms of finding the resources, both internal within SaskPower and probably external, consulting engineering and contracting resources to be able to complete everything that needs to be done

But the biggest fundamental challenge, I think, that ... [inaudible] ... risk to the project would be that if there is big questions and differences on how it's going to be funded, that can very quickly derail movement of the project.

**Mr. Taylor:** — Okay. Thank you for that. And just then to clarify for our purposes when the committee meets without you present, you've got three recommendations. I'm assuming all three recommendations are equally important to you, but based on your last answer, your recommendation on no. 3 is the one that you need to see some reference in our committee report to in order for the other two recommendations to actually happen. Am I catching you correctly?

Mr. Neuburger: — Yes. I think that's a fair conclusion, that no. 3 carries the greatest urgency, and then there's the urgency of making sure those timelines get met. And the generating piece, it's part of a longer term solution. So the recommendation in terms of being supportive of the hydro generation in the North, that's part of the ultimate solution, but it won't ... Before that is in play, there needs to be the upgraded transmission line up to the North. So yes, that's the, I'd say, of the greatest urgency.

**Mr. Taylor**: — Okay. I'm cognizant of the time. Do I have time for two more questions perhaps, or one for sure? The Chair is giving me an indication. I do have time for one for sure.

I don't know if you can answer this question directly but . . . And it kind of follows on Mr. Belanger's starting comments with regards to the Uranium Development Partnership. The

government started this process to take a look at supporting the uranium industry, put the team together that eventually became the Uranium Development Partnership. And of course one of their recommendations was the development of nuclear power generation in the province.

That started a whole round of a whole lot of things, but one question that I haven't found anybody to provide me with a specific answer to comes out of Bruce Power's feasibility study which says, to provide support in Saskatchewan, about 1000 megawatts, and to make it feasible for them to produce another 1000 megawatts for export. So they're looking at 2000 megawatts of production.

Can you give me any idea of what that would mean to the bottom line of the uranium-producing companies? If we had a 1000-megawatt generating station, does it mean very much in terms of revenue for the uranium industry in the province of Saskatchewan?

**Mr. Neuburger**: — To clarify, is your question with respect to the fuel that would supply?

Mr. Taylor: — Yes, fuel.

**Mr. Neuburger**: — Dave Neuburger. I don't have the numbers in front of me of how much fuel, how many pounds of uranium fuel a 1000-megawatt reactor . . . But it wouldn't be material in terms of the per cent of the total production from Saskatchewan.

So the total production from Saskatchewan is in the order of 25 to 30 million pounds of U308 per year these days. Yes, 25 million pounds the last couple of years, in that range. And that's supplying approximately 20 per cent of world supply which is feeding a reactor fleet that's a little bit more than 400 reactors. So the math from there works that if, effectively that if we added one more reactor in the world, that has an impact of . . . I'd have to do the math but it's not overly material in terms of the amount of pounds that it would supply. But it's certainly a positive piece for our production.

Mr. Taylor: — All right. Thank you very much. I appreciate it.

**The Chair**: — Well thank you. We're now at 5 to the hour, which is what we traditionally are taking a five-minute recess to see our next presenter get set up. So thank you very much for your presentation and taking the time to answer our questions. The committee now stands recessed.

[The committee recessed for a period of time.]

The Chair: — Welcome back. Before we hear from our next presenter, I would like to advise witnesses of the process of presentations. I will be asking all witnesses to introduce themselves and anyone else that may be presenting with them. Please state your name and, if applicable, the position within the organization you represent. If you have a written submission, please advise us you would like to table your submission. Once this occurs, your submission will be available to the public. Electronic copies of tabled submissions will be available on the committee's website.

The committee is asking each submission to be in answer to the

following question: how should the government best meet the growing energy needs of the province in a manner that is safe, reliable, and environmentally sustainable while meeting any current and expected federal environmental standards and regulations and maintaining a focus on affordability for Saskatchewan residents today and into the future?

Each presentation should be limited to 15 minutes, with questions to follow. I will direct questioning and recognize each member that is to speak. Members are not permitted to engage witnesses in any debate and witnesses are not permitted to ask questions of committee members. I would also like to remind witnesses that any written submissions presented to the committee will become public documents and will be posted to the committee's website.

With that I would ask our presenter to please introduce himself and go ahead with your presentation. Thank you.

## Presenter: Meadow Lake Tribal Council Resource Development Inc.

Mr. Voss: — Good morning, committee, and thank you, Mr. Chair. It's a pleasure to be here again. My name is Ben Voss. I'm the CEO [chief executive officer] of MLTC [Meadow Lake Tribal Council] Resource Development company owned by the nine First Nations of the Meadow Lake Tribal Council. I'm here representing them with respect to our ambitions to pursue the development of power generation opportunities in our region.

And today I'm presenting an update from the presentation that we provided the committee in La Ronge earlier in the preceding sessions. And so I'm going to have brief comments, and I wish to emphasize a few follow-up points that have emerged since of our last presentation. And there are new committee members here that weren't at our last presentation, and I look forward to updating them as well on our activities.

We have a short PowerPoint presentation which we'll present right now.

Our focus has been on looking at northern power generation opportunities, and in particular looking at opportunities in the near term that address the growing needs of power generation in northern Saskatchewan. So I'm going to give you a short overview of why we're here, an update on our progress and development of our projects. I'm going to narrow a little bit in on one project in particular that we're focused on today, which is developing a power plant in Meadow Lake. We anecdotally refer to that as the Meadow Lake energy centre. And I'm going to speak a little bit to challenges and opportunities that we see in front of us going forward.

This is again referencing back to our presentation we gave in the fall of '09, but MLTC has identified reliable, low-cost, and environmentally preferred power solutions for northern Saskatchewan. It should be noted that the question raised by the committee, seeking low-cost and environmentally preferred, reliable power solutions is, I think, exactly what we're working towards.

MLTC and its partner, Pristine Power, have the expertise and capabilities to implement these projects. We've invested a lot of

time, money, and effort into the feasibility and understanding of the process to bring projects to fruition. We think that the Government of Saskatchewan can play a leading role in facilitating these projects moving forward. That may not be all that obvious, but we view the fact that the government is the shareholder of SaskPower and therefore very influential in the policy and the decision making that occurs at SaskPower. So we encourage the government to continue to pursue a leading role in the policies that unfold.

We think that the potential for major power generation near Meadow Lake and in the northern mining belt is the focus of our development activity and we see huge opportunities there.

Now I was able to listen in a little bit on the Cameco presentation earlier and I think some of the commentary and recommendations that they have put forward support and, I think, further emphasize what we're proposing. So I will address some of the comments that they've made in my presentation today, but I think that clearly there's an acknowledgement that the North is growing, that there's a demand for more power, and that we need more supply and reliable supply.

We believe that our projects need to be put forward as independent power producers. So in other words, what that means is we are proposing to own and operate power plants. We want a power purchase agreement with SaskPower. In other words, our company would be a shareholder, operator, supplier, and it would substantially affect the economic development of our nine First Nations.

Owning these investments are the key to the future development of our people and the wealth creation model that we've developed. So having the secure contract with SaskPower is key. Without that, none of these things can move forward.

Our Meadow Lake energy centre, as we refer to it, is in a detailed proposal format that we have submitted to SaskPower in early December of '09. We have included an executive summary of that project to our submission today.

A little bit of background for those that aren't overly familiar with MLTC. We're the nine First Nations in northwest Saskatchewan — 12,000 members, very young population, and we have a great track record in business.

Pristine Power, which is our power development partner, is a private company, TSX [Toronto Stock Exchange] listed, based in Calgary. They have extensive experience in power development and operation. Their management team has been working with some of the largest utilities in Canada from West Coast Energy, Epcor, TransAlta, TransCanada Pipelines, etc., and they have several power plants in operation today. Have raised hundreds of millions of dollars in private markets and invested those in power plants. Their focus has typically been on biomass, natural gas, run-of-the-river hydro, and now they're looking into wind as well.

In terms of our approach, we think that our power opportunities for Saskatchewan are the right power in the right place at the right time. Now the investment that we've made into these projects required a substantial amount of engineering, financial analysis, and optimization of the design to come up with the lowest cost power development options that we could think of.

We've incorporated biomass into our designs, which means that we have some of the most environmentally preferred power available today. On top of that, it's the most reliable power available today. Unlike other forms of renewable power such as wind and hydro which depend a lot on nature to provide the resource, biomass is in our control, as is natural gas. So we have the ability to turn on and turn off this power generation when it's needed, and ramp it up and ramp it down as it's needed. So those sorts of options make this highly attractive and, as you'll see further in our presentation, our economics are very attractive.

So we have been very active in working with SaskPower, co-operating everywhere we could, to engage in a process of submitting our proposal. We followed the recent bid process which hasn't been announced yet but is expected to be announced shortly in terms of what SaskPower has decided to do on the bid process. It's our view that the bid process will not meet the needs that SaskPower has addressed in its plan, and they will need additional power options such as the projects we're proposing to meet growing demand requirements.

We also view that pending legislation which is being developed by the Ministry of Environment to control greenhouse gas emissions will require projects like ours to help SaskPower meet its greenhouse gas reduction targets. So it's important to think about our project from a number of different perspectives.

Furthermore we would look at the fact that we're developing not only the financing — in other words we're not asking the province for any capital — the profits will stay in the province through the fact that MLTC is based in Saskatchewan, and we think that our power rates are going to be lower than anything you're going to see for quite some time. That is in part because capital costs are lower than they've been for many years.

So with all those factors combined, timing is pretty important. We can't wait many years to put this together. Costs will go up, then our power rates will go up. So if we are able to implement this in the next two years, we will have an attractive project for the province.

#### [11:15]

So just to put a little more detail into that discussion, we have two projects that we're specifically focused on. One is the Meadow Lake energy centre. It's an 84-megawatt power plant — 69 megawatts of that is natural gas based and 15 of it is biomass based. Biomass would be supplied by our forestry operations today.

And number two would be several small-scale biomass-only power plants in the northern mining belt. As you heard from Cameco and Areva, they've got expansion plans and demand requirements, and we see small-scale biomass power plants as an excellent way to meet that demand and to even perhaps . . . I think it's important to consider that the cost of new transmission lines could be deferred because of the ability to put on-site distributed generation in place. The other major benefit with small-scale biomass is that you can recover the

heat and offset the use of propane at the mine site. So those factors I think contribute greatly to our feasibility.

So just to summarize, we agree with the fact that Saskatchewan needs more power, particularly in the North, and the expanding mining sector is going to demand that power. We have the ability to supply fuel to small power plants in the North and we think that the reliability of those will be a big advantage in the future.

A little bit more of an update on the details of our Meadow Lake energy centre project. This is the detailed proposal we've already submitted to SaskPower in December. It is a \$174 million project. We have invested in the engineering to the extent we are confident in the costs within 10 per cent — in other words, we call that a grade 10 specification — so we are very confident in the capital cost numbers.

With the cost base that we've developed, we have proposed a power price of 7.4 cents a kilowatt hour. Now that is substantially lower than what you'd see today from other development proposals, particularly when you consider the greenhouse gas benefits, the renewable component, and the fact that it's very, very flexible power generation.

One of the very unique features of this hybrid technology of combining biomass and natural gas is that we can run it at a baseload of as low as 15 megawatts and ramp it up incrementally up to 84 megawatts at a moment's notice. So it's very attractive to SaskPower's grid management system because they can increase and decrease power production as demand goes up and down.

So that means we could build the plant in a short period of time and, as demand increased, we could continue to increase the output of the plant. That is a very unique feature to power generation, particularly at this cost base. Normally peaker supply generation, as it's commonly called, is expensive power. That means to pay for the standby charge while it's not operating means you pay more for the electricity. So for the ratepayer and for the projected increases in power rates, a project like this would have a good balancing effect in terms of keeping power rates low and reducing the amount of capital required for SaskPower to continue to do its investments in its fleet expansion.

The other benefits I'll just highlight is that our site has all the infrastructure and land available to do the construction. We don't require an extensive period of time to move this project forward. And number two, we've done a preliminary transmission study, and that shows that the grid is more than capable of handling this type of facility in its current form. We would not need to see a lot of capital investment into the grid to handle it in Meadow Lake.

The power plants in the North: this is where I will spend a little bit of time addressing Cameco and Areva's comments. They were asked if they had been looking at it, and they did indicate that yes, they had looked at it, but their view was that it's expensive. And our response to that would be, it depends on how you're looking at it.

And our view is that that transmission line expansion in the

North is going to be very expensive and Cameco has asked that they would not bear the cost of that. I think that's unrealistic. Hundreds of millions of dollars into transmission lines is going to have an impact on their power rates. So it is not fair to compare biomass — 100 per cent renewable, very reliable power at the mine site — without considering the cost of the transmission line.

Secondly, the reliability factors will not improve by building a transmission line. So I think it's important to ask what is it costing Cameco and Areva today when power is off. So that factor needs to be considered in the economics as well. When we build these small power plants beside the mines, their power reliability goes to near 100 per cent. So that is a huge effect on their productivity and their economics. The heat recovery component and the offsetting use of propane which they noted is very important also in the economics.

So we're interested in seeing what SaskPower has announced yesterday in terms of their green power procurement process because our 9-megawatt, 10-megawatt biomass facilities fit into that window which we would possibly see that as an opportunity. But I can say that SaskPower has been reluctant to support these initiatives going forward because it's their view that they would prefer to, I think, import power from the South rather than build distributed power in the North. So we would prefer that the government encouraged a policy for expanded distributed power generation in the North that acknowledged the fact that it's more expensive — we're not denying that — but compared to what? That's what needs to be asked.

So the question is then — I'm nearing the end of my presentation — what do we need to move these projects forward? And I'll repeat what I said in the previous presentation in the fall. We need a power purchase agreement from SaskPower. That has not changed. We submitted our proposal in December, and we're encouraged by recent discussions with SaskPower. They have acknowledged the attractiveness of our project. The economics are self-explanatory in terms of attractiveness. We're going to be going through several technical and planning meetings with them in the next weeks and months ahead. We think it will take those meetings to move it forward.

But in terms of our approach to this, there needs to be further emphasis on policy respecting the fact that First Nations and Aboriginal people, particularly in the North, need to be engaged in the economy, and we think power projects are an excellent way to do that. We see this happening across the country in other provinces. Ontario in particular is very aggressive about giving set-aside agreements to First Nations for power development. So we're interested in participating in discussions with the government about how that could happen.

So just to wrap up, we can't emphasize enough our confidence in our projects as being capable of meeting the needs of the province, now and in the future. And we feel we directly answer the question this committee has put: how do we best meet the needs of the future, economically, environmentally, and reliably? We've got a great solution to that. We've put a tremendous amount of investment in development of our projects to answer technical and feasibility questions, purely on a leap of faith that we're going to be able to move them

forward.

So we have, combined with our partner we've put close to \$1 million into development costs. Well if we don't get a contract at the end, that's lost. But we have done it because we're so confident in our projects.

And we think, from a provincial point of view — from the ratepayer, for the taxpayer — this is a great way to see more economic development occur in the province, see the profits remain here. We will see an engagement of the First Nations people in the economy which is second to none. We will reduce the burden on the province to support the capital requirements to SaskPower. And with the costs that we're proposing, it'll mean we can reduce the power rate increases. So all these factors, we don't see a downside to moving this forward.

So if you have any questions, I'm happy to answer them and look forward to further discussions.

**The Chair**: — Thank you very much for your presentation. And we do have several members with some questions. We'll start with Mr. Belanger.

**Mr. Belanger**: — Thanks very much for your presentation, Ben. That was very well done. And your points are well made in terms of the economic opportunities and utilizing wood waste and biomass.

Just for the record, Mr. Chair, I want to point out — and Mr. Voss may not be aware of this — but there are two other groups in the Northwest that are also looking at this thing, and I want to be fair and open and honest that we did have a meeting with one of them. And just so if there's any intellectual property you want to protect, you ought to know that, you know, we've met with one of them and we're meeting with the second proponent of a similar project.

But the question I have, Mr. Voss, and I say it in the most positive light, why just MLTC? Was there any approach for some of the other communities or, as an example, some of the Métis communities that operate in the area?

Mr. Voss: — Well as the member knows — thanks very much for the question — MLTC has been, you know, in business for many years and the impact of our business investments have been fairly broad reaching. And at times, especially in forestry, the Métis community has benefited substantially from those operations through the diversified business operations that occur.

I can tell you that the chiefs have made it very clear that we have an open door policy when it comes to our business investments, and we're not excluding anybody from the process. So if other groups can bring capital and value to the table, well certainly we'll, if you would, syndicate our opportunities to those groups. But let me be kind of clear. The chiefs have also said, we don't ... There are no gifts and giveaways, so we don't simply gift our equity and our investment. You know, our hard work and time that goes into the projects is because we've risked our own capital and our investment into the development. So we like partners that have alignment in our vision and our values when it comes to

development of the projects. We have an open door in terms of welcoming others that want to participate.

The reason we haven't had any detailed discussions with other groups yet isn't because we're secretive about it. It's because the projects aren't secure yet. So it's a little premature to start discussing a partnership when we don't have a contract yet.

So simple answer, if the government gave us a contract through SaskPower, we would be delighted to talk further with others on partnership.

In terms of the other groups that are working on other biomass opportunities, yes, we're familiar with many of the initiatives. There are actually probably more than a dozen ideas in the North in terms of people talking about biomass opportunities, right from east to west, north to south.

But my view is there's a difference between what we're talking about and what others are talking about, and we've invested a lot. I'm not trying to diminish the opportunities that others have, but I wouldn't compare the kind of calibre of investment and partnership that we've put together to others. I think it separates us a little bit.

**Mr. Belanger**: — I guess the other question I'd have, in terms of tying into the transmission system, is it easier in Meadow Lake or can you pretty much tie in anywhere that SaskPower has lines?

**Mr. Voss:** — It is very difficult to tie into the grid anywhere you want. The location of a tie-in is . . . I mean, anything is possible; it's just expensive. So the best locations are those that have the infrastructure in place already for a tie-in. It happens to be that at Meadow Lake there's an excellent way of doing that.

In the North, we've proposed smaller facilities that tie to the grid very easily without a lot of transmission upgrades. Not to get too technical, but the biggest difference on the northern facilities is that you have to tie them in in a way that integrates with the facility use as well. So it's not a stand-alone power generation that just feeds the grid, and then you have the mine using the power. There has to be some thought and design into how it ties to the grid yet also supplies the mine demand.

**Mr. Belanger**: — My final question in terms of the cubic metres of wood biomass that you would need. Have you got an estimation of that?

Mr. Voss: — We do. It's in our previous submission, but I'll highlight it for you. If we were to build all of the five proposed facilities in the North and our Meadow Lake project, we would require approximately 600 000 cubic metres of biomass to supply the fuel. A portion of that does come from our saw mill operations, but a large amount of it would have to come from new harvesting and processing operations. And we're proposing that would be in the North, not necessarily in the Meadow Lake

The Chair: — Mr. Bradshaw.

**Mr. Bradshaw**: — Thank you. Thank you very much, Mr. Voss. It's good to see you back here again, and interesting. And

actually Mr. Belanger asked some of the questions which I was kind of interested in. And I can't remember, and it may have been in your previous report, but what did you come out with your biomass Rankine cycle? What was your kilowatt price on that?

Mr. Voss: — Well it's as I said earlier. It is dependent on a lot of factors. And based on what we know, we were coming in with a price of around 12 cents. That's sharper than what we had when we presented in La Ronge. We were higher priced than that in La Ronge. We were talking about 16 cents. We've come up with a better price based on the heat recovery aspects. The opportunity to sharpen that further does exist, knowing that could we integrate it further and have more cost savings by working closer with the mining companies.

[11:30]

So we presume that our facilities have to be operated stand-alone, that there's, you know, there's a lot of operating costs associated with that, constructed as a stand-alone. We haven't looked at the synergy benefits of integrating them with mining operations or their sites, so there's cost savings there.

You know, to be fair, Cameco has commented that they feel the cost is because we have to transport the pallets, that kind of thing. That is not the reason why the power rates are higher. The reason is because it's in the North and it's remote and it's expensive to do that — the small scale, north, and remote. The thing they omitted from that comment was that what does it cost them to run a diesel backup generator, and most industry officials would tell you that's between 35 and 40 cents a kilowatt hour.

So what's more economic, a 10- or 12-cent-a-kilowatt biomass facility or a 35- or 40-cent diesel backup that is clearly one of the worst greenhouse gas emissions systems that you could put for power generation?

So I would encourage Cameco and Areva to work, you know, sharpen their own pencils and find the synergy opportunities to keep reducing cost, because it's there if we can form a partnership to do it. But it won't work without SaskPower involved. That's pretty clear.

**Mr. Bradshaw**: — My next question would be, how many cubic metres do you need to operate per 9-megawatt plant? Like I mean you said 600 000 cubic metres for everything, but . . .

Mr. Voss: — Yes.

Mr. Bradshaw: — But what does it take . . .

**Mr. Voss**: — It's about 60 to 70 000 cubic metres of wood. It depends on, you know, wet wood and moisture content and things like that, but generally about that. So 30 to 40 000 tonnes, dry tonnes, of wood.

**Mr. Bradshaw**: — And you feel that there is the capacity of the wood close to the lines that would make it feasible, or . . .

Mr. Voss: — Yes. Our intention wouldn't be to harvest it right at the mine site and supply it. It would be to ... because the

quality of the wood, right, in the Far North isn't as good. There are pockets of it, but it's not necessarily ideally suited for something like this. We would probably be proposing to go after some of the forestry territories that were active many years ago where roads and planning had been built, and this is now too distant from operating mills. But those pockets of forestry land that were active many years ago could be revived, and I'm talking about areas north of Beauval, Pinehouse, and in even La Loche, Buffalo Narrows area.

Mr. Bradshaw: — And then it would be pelletized at site?

Mr. Voss: — Yes. Our current design and our current economics are based on building a separate pelleting operation that would harvest the wood, dry it, pelletize it, and then ship that to the site. We compared two scenarios — the scenario I just described, and then an alternate which was to haul roundwood to the mines and then directly process it into the power plants. And the economics weren't as attractive as the option we're pursuing now. It was more expensive to haul roundwood up to the mines and process it right at the power plants.

Mr. Bradshaw: — Okay. Thank you.

**The Chair**: — Mr. McCall.

**Mr. McCall**: — Thank you very much, Mr. Chair, and thank you, Mr. Voss. I of course wasn't here for the first one, but it's good to catch the sequel.

I guess the first question I'd ask you is, in terms of the proposal that has been submitted to SaskPower, has SaskPower made an undertaking in terms of when they'll conclude their consideration of that proposal and respond to MLTC and yourself?

**Mr. Voss:** — Obviously this isn't public information, but the proposal we submitted was an unsolicited proposal, which means that they're under no obligation to respond in any way other than the fact that it's a good opportunity. So they would pursue it on that premise.

That being said, in good faith they have responded verbally by indicating that they need some time to complete the current bid process that's under way, which is set to be announced. And once that is finalized, they would then pursue discussions in detail with us. That being said, we have already had some of those discussions with them but no commitments and no promises. Which is fair; I acknowledge that they have to go through their processes, but we obviously would be excited about a commitment right away.

Mr. McCall: — I guess a second question, if you could further expand on the experience in other jurisdictions. You'd mentioned Ontario and British Columbia in terms of using the power industry and power production as a means by which to better engage First Nations, Aboriginal people, in the economy. British Columbia and Ontario, you'd mentioned a set-aside. I was wondering if you could expand on that a bit for the committee.

Mr. Voss: — I don't have the details with me and I'd hesitate

to misquote. But anecdotally Ontario has implemented some bold policies around seeking non-traditional power generation options. Hydro is a big part of their focus and they have hydro potential. But as an example, they've made big commitments to not produce power with coal and to look at other alternatives. So they have been building several biomass generation facilities and they've gone through several procurement processes to seek the private sector to build those and then supply the Ontario Power Authority.

The facilities that are available to be constructed in the North almost always have First Nations partnership as part of their procurement policy to encourage that. So even if it is a non-First Nations or non-Aboriginal partner that's developing the project, they've shared at least 50 per cent, and in some cases Ontario Power Authority has provided loan guarantees to allow the First Nation to borrow up to \$50 million to invest in the project.

So we're not proposing that. That would be fantastic. But we're not suggesting the taxpayer should support the investment. We'll go and raise the capital privately. But you can just see what other jurisdictions have developed is very bold, and almost saying if you don't have a First Nations partner, it's not going to happen. And here's the capital and here's the power price and everything.

So they've just said, okay, we're going to pay you 11 cents a kilowatt hour, so build it. There's no coming up with, you know, a competitive process to try to determine who's the cheapest provider. They've just said this is the feed-in tariff; build it to that spec. You decide if you can make a profit or not and if you want to move forward. So they're much more advanced in this than we are. Whether it's right or wrong is up for debate, I guess.

But I think also Ontario has a lot bigger market so they have the ability to absorb some of these things a little easier than Saskatchewan does. That's what SaskPower might argue. But interestingly enough, when SaskPower engaged in a procurement process, they hired a fairness advisor from Ontario who had designed the procurement system for the Ontario Power Authority. So obviously they acknowledged some wisdom occurred there and that it was worth seeking that to help SaskPower in its processes.

**Mr. McCall**: — In terms of the, I guess following on that, in terms of the work of that fairness advisor, has that evidenced itself in any way in terms of measures being made to better engage First Nations and Métis people in these projects?

Mr. Voss: — No. At this point, no. The first step for SaskPower was to implement a procurement system that allowed them to just get privately developed power projects into the generation pool, and they wanted to make sure there was no potential for influence on the process. So the fairness advisor is an independent auditor, if you will, to ensure that the way they choose, the way they implement the projects is transparent and defendable in the long term, basically ensuring the taxpayer has best value. But the policy side of that, to influence how they maybe choose projects that have First Nations participation as an example, would not have been in the mandate at this point as I understand it.

Mr. McCall: — Yes, I guess I find it interesting. I think also the experience in Quebec for example, Manitoba Hydro, some of the work they've done in engaging First Nations, Métis communities. And again particularly as it pertains to the North, it only makes sense. These are the communities that are affected in terms of the . . . Be it with a hydro project, or as has been often expressed in this province, there is a need to better engage First Nations and Métis people in the economic life of this province. So it would seem that there's a very large opportunity here that's not being taken up on. Thank you very much for your presentation, Mr. Voss.

**Mr. Voss**: — You're welcome.

The Chair: — Mr. Weekes.

Mr. Weekes: — Thank you, Mr. Chair. Welcome, Mr. Voss. Thank you for your update. I'd just like to speak to the concern or question about costs of power generation. Just going back to your comment about SaskPower is reluctant to go into projects in the North. They'd rather ship it from the South, where it's cheaper, to the North.

I guess the one thing that I've really got out of these public hearings is, I believe, the reality of the increased cost of power generation. It doesn't matter what form we're looking at. I mean the cheapest is the dirty coal shovelled into the back of a truck, but that's not going to continue because of the whole greenhouse gas concerns. And as one presenter said earlier in another community, you know, if we don't do anything, the cost of generation, if we don't do anything, there'll be a cost to the environment. And initially it'll be a cost to people's health and welfare, but ultimately it will be dollars and cents as well.

And every now and then it's raised — it was raised by my colleague, Mr. Belanger — that alternative energy is going to be cheaper. Well I don't see any, in the future, power generation to be cheaper in whatever form it is.

Could you just expand on that, on the costs of power production in the future? Now you're saying your project will cost more. But I guess could you just expand on that and hear more of your thoughts on that cost of power production?

**Mr. Voss:** — Sure. Thanks very much. Just a small correction. There's two projects. And the Meadow Lake project, we're very adamant that that is much cheaper than any option really available today. So 7.4 cents a kilowatt hour, I would challenge that there's not even coal options available today that would meet that.

As an engineer, I could do a whole presentation on why power plants cost more for different technologies. And when it comes right down to it, we in our profession spend a lot of time looking at every cost, whether it's labour or materials or whatever it is that goes into conversion of fuel into electricity. And there are only so many ways to do that, and at the end of the day the owners are the ones that decide which way they want to go and try to do it as low cost as possible with the best profit. So our initiatives have been developed based on a full analysis of every option available and trying to come up with the cheapest option.

So our northern proposals, yes, they're more expensive than our Meadow Lake proposal, but it's got to be compared. You can't go . . . Obviously as you said, coal in the South is going to be cheaper, but it's going to have environmental effects compared to biomass in the North. But the cost isn't because it's biomass. The cost is because it's in the North. So construction costs are higher. You've got higher labour costs. You've got all the aspects of operating that plant in the North that would contribute to the bottom line.

So as I said, you want to compare it to what's the alternatives. So building transmission lines would be very expensive compared to building small power plants. That's what needs to be looked at, not building another coal plant in the South and then shipping it up north. And what's the total life cycle cost to that?

And it's more complicated than what my simple answer, that SaskPower has a desire to simply export power from south to north. There's so much that goes into the consideration of what you want to do. And I think it's really that someone needs to just pull the trigger and make decisions because there's always going to be uncertainty.

#### [11:45]

You know, when you build a power plant, it's a multi-year investment. And the circumstances will change from the day you decide to build it to the day it's up and running because you base your decision on load growth and customer decisions and all those things. Well those decisions change because it takes you three or four years to build it. So you have an economic principle you build it on when you decide, and then three years later, that's all changed.

That's the reason why we're facing our conditions we're in today. We're behind the eight ball in getting power generation going because no one thought we'd have all this growth in the province. We didn't need to build more power plants because we can handle it with what we've got. And now we add all the growth, and now oh geez we've got to catch up with more power generation, and then on top of that environmental considerations and all the rest.

And I agree with your comment earlier that whatever option we're going to build, it's going to be more expensive. So if it's coal-based technologies which will be part of the mix, the greenhouse gas costs, the additional capital costs, we can't build a coal plant today for what we built it in the '80s. It's two or three times more expensive just because of inflation. Stainless steel costs more. Labour costs more. So that means that that asset is going to have to have a higher power price than the old assets that are running today. That's just the fact of the matter. That is why SaskPower has said they need 8 per cent annual increases. It's to support the additional costs of building new facilities today.

The argument that alternative energy is more expensive and therefore shouldn't be the preferred choice is a bit flawed because I remember when we bought our microwave; it was \$1,000, and now they're 50 bucks. Okay, well that's because it wasn't adopted technology. It wasn't common; it was more expensive.

So the more common that alternative energy becomes, the cheaper it's going to be. That's just a fact. And until you make bold policies to implement it, you never get there. And there might be a bit of pain initially, but the long term is intended to pay off. I think smart policy is that you don't put all your eggs in one basket. You try to deliver as many solutions as possible that will balance out at the end of the day.

So I don't believe we should just invest in wind or just hydro or just clean coal. I think SaskPower needs to do everything. And I don't think that our project is the only solution. To be honest with you, the North is going to need, you know, several hundred megawatts of power, and the whole province is going to need several thousand megawatts of power. So 84 megawatts out of 4,000 isn't a big percentage. So now let's look at all the other solutions.

And that's why we're supportive of Black Lake. We're supportive of James Smith, the other hydro developments. They're good projects. They take longer to implement. They don't have the same characteristics or economics that our project has, but they're still part of the mix, and they make sense. So we're not competing with them, but we need to plan this together and move it forward together.

Mr. Weekes: — Thank you.

**The Chair**: — Mr. Taylor.

Mr. Taylor: — Thank you very much. And thank you, Ben, for the update, the presentation. This is very useful. And it is most useful to have you in front of us on the same day that Cameco and Areva were here because it tends to allow us to focus a little bit on the overall challenge that the committee is facing. As the Chair indicated at the beginning of the day, our question is how should the government best meet the growing energy needs of the province, etc.

You and Cameco and Areva have both indicated that the North is different from the rest of the province. And in fact, your presentation today, slide no. 11, to quote your presentation today, "The North needs to be viewed differently." So that's the essence of my question today.

When SaskPower, and they've met with this committee twice, have provided some projections, forecasts about future energy needs, they haven't been real clear about dividing out southern Saskatchewan from northern Saskatchewan. Your presentation, some other presentations we've had about biomass and geothermal have also given us reason to believe that it could be useful to view the North differently than the rest of the province.

And some of our presentations indicate to us solar and wind are best in the southern part of the province. Coal exists in the southern part of the province. Hydro and biomass are great opportunities for the North. And Cameco and Areva have indicated to us that the growing needs in the North are primarily resource-based — in their case, uranium. And perhaps if this resource cycle changes, forestry will also be back in place.

So on your comment about the North needs to be viewed differently and the challenge that's faced by this committee

about writing a report on the future energy needs of Saskatchewan, should we be actually looking at a separate chapter on the North, a separate section that specifically deals with the North? The needs of Saskatchewan may be different. We may need to ask SaskPower to forecast growing needs in the North versus growing needs in the South. Perhaps we need to look at things, not necessarily from a provincial perspective, but from a North and South perspective about the future needs. Do you have any thoughts or comments in that regard?

Mr. Voss: — Thanks, Mr. Taylor. I appreciate the comments and the question. And I will never turn down an opportunity to get special attention to the North, so our chiefs and our community members would be delighted to host and be part of ongoing detailed discussions about our specific needs. My point about saying the North is different is based on a lot of technical, economic, and other statistical information that we all know. I mean it's a giant territory that's very, very remote and has not the same type of infrastructure that the South has.

So just a simple reason why Cameco would say the North is different is it's an 800 kilometre transmission line from point A to point B, and the lightning hits that thing multiple times a day. That does not happen in the South. So reliability is something they've grown to or they've learned to live with, the fact that their power won't be the same as in the South. It will always be intermittent. Northern residents have to deal with the realities that they can't just get everything that other citizens in urban or southern population areas can get. We'd like to have all the same standard of living, and we'd like to have all the same amenities that are in the South, and we'd like it at the same cost.

The reality is that it costs a lot more to build stuff in the North. It's bigger distances. The infrastructure's not in place, so roads and other supporting services to allow that construction to occur at the same cost as the South, yet the North is where so much of the resources are. So much of the wealth for the whole province is extracted from those valuable commodities in the North.

So when you're an individual who lives in the North, you sort of sit back and go, hey the South is getting all this great revenue and economic activity based in the North, and we're not getting any of the benefits. Why don't I have the same things that the people in the South have? So our whole strategy with building and owning this power plant is to try to correct that, to try to get more economic activity that we own so we can recover some of that value and see it reinvested.

But for long-term planning purposes, to address your question more specifically, I think there is a lot of special thinking that needs to go on in the North. It has been that way for many years. So when they built that transmission line, as it was discussed with Cameco and Areva, they had to cover that cost to a certain extent. Now they don't want to do that anymore because they'd like to be treated the same as any other company operating in the South, which is a fair comment. But the rest of the province would have to bear the hundreds of millions of dollars through rate increases to support that capital expense. Now that's the reason why SaskPower's reluctant to pursue that strategy. But there's a balance here and I think it can be developed.

Do we need more hearings to do that? Like I said, I will never

turn down the opportunity to be consulted in what happens, but I don't want to see decision making extended for years because of consultations when we have immediate things that we can move forward on. And it isn't that hard to make some decisions quickly on allowing these, and what I would call low-hanging fruit opportunities to move forward.

**Mr. Taylor**: — Okay, thank you. Then my point, I guess, was if we understand the needs of the North are different, then maybe the way in which we meet those needs are different as well. So the more we understand the better.

I agree with you. In some cases urgency is necessary. Cameco and Areva certainly gave us reason to believe there's some urgency necessary. You've given us reason to believe that moving quickly allows for reduced costs in doing something that may ultimately need to be done and supported anyway. So I do believe that we have to do things right and spend the time it takes to do things right because we are committing this province to quite a considerable amount of time into the future. And so speedy decisions, if they can be made prudently, are important. We've got to package that up.

But my thought was, we're getting a lot of information, if we can actually divide it out so that the public thinks a little bit differently. Part of our — I don't want to make a speech here because I have one last very short question, I think — but part of our thought process last year was focused because of the nuclear power. And the presentation was essentially we meet Saskatchewan's future energy needs by building one megaplant kind of in the centre of the province and then new transmission lines all over the place. You know, is that the best way to meet the needs of the future of Saskatchewan, north or south? And lots of people have concluded for various reasons no, that's not. Perhaps if we look at the needs of the North, they are different than just looking at Saskatchewan as one blank canvas.

My point or my question was, when you forecast the energy needs of northern Saskatchewan, are you forecasting a resurgence in the forestry sector — forestry as a resource commodity that could indeed create some new economic opportunities? Are you forecasting any resurgence in the forestry sector in the next, you know, 15, 20 years?

Mr. Voss: — A quick answer would be we're very optimistic about the future for forestry, particularly using new technology and embracing a lot of the new thinking that's gone around forestry globally. The next few years are going to continue to be very difficult times. The last three years have been very difficult times. We've seen virtually a totally reinvention of the forest industry in the province with new players and a lot less players.

To say that we achieve sort of the heydays of massive expansion and megaplants, if you will, in forestry, I think that's unlikely. We're forecasting probably more modest expansions of existing facilities and possibly some new, smaller niche facilities.

Those aren't necessarily going to be big power users. And in fact most of the models you see around the world are, how do you build those facilities to be energy self-sufficient, using all their waste streams to generate their own heat and power? That's what's being done in most other jurisdictions around the

world now.

So it doesn't necessarily mean that you need to build more transmission lines to supply industry expansion. I think it's a combination of how can we do some distributed power generation and how can we upgrade transmission lines to allow best management of that. And we incrementally see that occurring all over the place.

I'm not going to comment on nuclear. I think we have a great relationship with Cameco and Areva through many of our other companies. We support unanimously the continued development of uranium in the North. And we weren't an active proponent of nuclear power generation because it wasn't proposed in our region per se, but we're not opposed to it either.

So we don't want to open up another debate on nuclear, but I can tell you that we see a lot of the benefits from uranium mining and development. And we want to see that continue to occur.

Mr. Taylor: — Thank you very much.

**The Chair:** — Well thank you very much for your presentation and taking the time to answer our questions. It's very beneficial to our committee, so thank you. With that our committee will stand adjourned until 10 a.m. tomorrow morning.

[The committee adjourned at 11:59.]