

# **Standing Committee on Natural Resources**

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## **EVIDENCE**

Tuesday, June 5, 2012

Chair

Mr. Leon Benoit

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● (0845)

[English]

The Chair (Mr. Leon Benoit (Vegreville—Wainwright, CPC)): Good morning, everyone.

We're here today to continue our study of resource development in Northern Canada. We have three witnesses here today, starting with the Canadian Electricity Association's vice-president of policy development, Francis Bradley. I want to apologize to someone else from your company for having to reschedule the meeting. These things happen around here, probably more than they should, but that's the way it is.

Secondly, from Qulliq Energy Corporation, we have Peter Mackey, president and chief executive officer. We also have by video conference from Fort McMurray, Alberta, Melissa Blake, the mayor of the Regional Municipality of Wood Buffalo.

Welcome to all of you. Thank you very much for taking the time to come today. We're looking forward to your presentations and then to answering questions directed from all parties here at the table.

So let's get right to it, in the order that you're listed on the agenda, with presentations of seven minutes.

First will be Francis Bradley from the Canadian Electricity Association.

[Translation]

Mr. Francis Bradley (Vice-President, Policy Development, Canadian Electricity Association): Thank you, Mr. Chair and members of the committee for having invited me here today to discuss the opportunities and challenges of resource development in northern Canada.

[English]

My remarks today will focus on the integral role of electricity as a critical enabler of this development.

[Translation]

Every day, the members of the Canadian Electricity Association, or CEA, produce, transport and distribute electricity to industrial, commercial, residential and institutional clients throughout Canada. The energy we produce, transport and sell is essential for our activities at home, at work and for the entire economy.

I want to mention, for the purposes of your study, that the Northwest Territories Power Corporation and Yukon Energy are active members of the association.

[English]

When it's their turn to host CEA meetings, it's always a highlight for our members and my colleagues who are fortunate to travel to Canada's north and experience first-hand one of the most breathtaking and amazing places in the world.

Today, I'll focus on resource development in the north, but in the context of challenges faced by Canada's electricity system at large.

I think it's also important to note that these challenges north of 60 are not dissimilar from those faced by CEA members who operate in northern, and sometimes remote, regions of geographically vast provinces where significant resource development is under way, particularly in the mining sector, which I know the committee has already been examining.

Canada's electricity is a fundamental pillar of our economy.

[Translation]

We often talk about natural resources as being at the heart of the Canadian economy, but we rarely talk about the crucial role of electricity. Canada's bulk power system is the largest and most complex interconnected system in North America. It's safe, sturdy and very reliable. Our competitive rates, which are lower than those of most other countries in the world, continue to be one of the dominant aspects of our system and ensure a formidable competitive advantage for Canadian companies.

[English]

This advantage is a product of the foresight of our parents' and grandparents' generations who built the electricity infrastructure that has served us so well for decades.

In that sense, electricity policy in Canada has been a de facto industrial strategy for many years.

So what is the electricity profile of Canada's north? If you refer to the transmission map on the first page of the materials that we circulated, you'll notice immediately that Canada's north is isolated from the North American high voltage grid. Most of the north relies on self-contained grids.

The graph on the next page provides an overview of the different types of electricity generation currently used in the north. The vast majority of generation in Yukon and a significant portion in the Northwest Territories comes from hydro. Nunavut almost exclusively uses diesel generation.

#### [Translation]

A bit of solar and wind energy is currently produced in the three territories, but it is a very small part of the electricity picture in the north, so little that Statistics Canada did not include it in the data used to produce this graph. Nevertheless, there is a little bit.

Reliance on diesel in the north has significant consequences on price, reliability and the environment. It is also a huge energy challenge for the north, in particular for remote communities. The three territorial governments have expressed a commitment to increasing the use of renewable resources like wind, solar and tidal energy.

#### [English]

However, while they are important, these generation sources are not well suited to support major resource development projects that require larger, more dependable capacity.

To power major resource development projects in the north, a new and expanded electricity infrastructure will be required. As the map I provided illustrates, connecting to the continental grid to access the supply would require the construction of major transmission infrastructure.

New baseload generation capacity in the north, a hydro project for example, would constitute a major electricity infrastructure project that would also require new transmission capacity to service multiple communities and projects.

#### **●** (0850)

## [Translation]

In both cases, we are talking about big projects. Any discussion on major expansion of electricity infrastructure in the north must also include a discussion on similar challenges in the rest of the country.

According to a recent report by the Conference Board of Canada, 347.5 billion dollars would have to be invested between 2011 and 2030 to meet electricity needs and ensure Canada's energy future.

## [English]

This is a priority for our association and for Canada's electricity

The barriers to this infrastructure renewal are magnified for projects in the north, particularly in terms of cost and, most importantly, social licence. I'm referring primarily to the many aboriginal communities in the north whose acceptance and participation in projects are absolutely essential.

The primary impediment to electricity infrastructure renewal in Canada is increasing legislative and regulatory complexity. There are two components.

## [Translation]

First of all, there are the neverending and often duplicative regulatory processes for new projects.

Second of all, there are the inefficient and disparate regulatory requirements for the facilities in place.

In the documents that were distributed, there is also a chart, created by the Major Projects Management Office, which provides an interesting visual representation of the regulatory processes that can apply to new energy projects.

For new electricity projects, the excessively complex federal approval process often leads to pointless delays. That is due to the lack of coordination among federal departments and the frequent requirements to provide information that was already provided during similar provincial processes.

#### [English]

This process duplication results in no additional environmental protection. I'll note that since its creation in 2007, the major projects management office has made progress in reducing inefficiency and delays between the federal entities involved in project approvals. However, there is a limit to improvements that can be made within the existing framework. Real change requires a legislative and regulatory overhaul.

CEA members have developed extensive proposals to improve many of these processes while ensuring that environmental protection is paramount. CEA members seek regulatory predictability, consistency of application, and, in every instance, positive environmental outcomes.

#### [Translation]

I would like to discuss two other major challenges that concern increasing the capacity for electricity in the north to allow further development of resources, including funding, and the risks posed by projects, specifically those associated with mining projects.

## [English]

A proposed mine that will require the construction of new electricity infrastructure to operate provides a good example of a key risk element associated with project life. Most mines have a life cycle of approximately 15 years. Electricity infrastructure on the other hand often operates for 40 years or more.

So who will be responsible for a stranded electricity asset when it's no longer needed for a mine? One possibility is the development of micro or mini grids linking multiple smaller generation facilities, hydro for example. When these grids are no longer required to provide electricity for a mine, they could tie into larger grids and supply renewable electricity to communities currently using carbonintensive sources like diesel. This is just one example.

### [Translation]

We are talking about the type of options that have to take into consideration communities, electrical utilities and governments when comes the time to determine the benefits of each of the resource projects. For the purposes of the study you have undertaken, an important issue to consider is the following: what role does the federal government play in order to encourage and facilitate resource development in the north?

Even if the members of the CEA are not asking for federal funding for the renewal of electrical infrastructures, but rather regulatory reform as I just described it, in the case of electrical production projects in the north, let us not forget that several of these projects are in remote regions and are simply not profitable.

## [English]

The federal government had recently invested in these types of projects. Upgrades to the Mayo B hydro generation facility and further developments to the Carmacks-Stewart transmission line are two recent examples.

#### • (0855)

[Translation]

On closing, for any project aimed at increasing resource development in the north, we must first recognize the need to proceed with a major expansion of electrical infrastructures. We must begin by eliminating obstacles that currently exist across the whole country, with respect to renewing electrical infrastructure, before going forward with any new major project. Recent government proposals for regulatory reform are a step forward, but certain concerns remain.

[English]

Finally, increased resource development in the north requires experience and leadership to bring parties to the table, particularly affected communities and aboriginal peoples. Provincial governments, regulators, and licensing authorities, who have responsibility for electricity system planning and administration, must also be part of any long-term vision for resource development in Canada's north.

Merci. I look forward to your questions. Thank you.

The Chair: Thank you very much, Mr. Bradley, for your presentation.

We go now to Mr. Mackey, president and chief executive officer of Qulliq Energy Corporation.

Go ahead, please, sir, with your presentation.

Mr. Peter Mackey (President and Chief Executive Officer, Qulliq Energy Corporation): Thank you, committee members and Mr. Chair. I'm pleased to be here today to speak with the House of Commons Standing Committee on Natural Resources. I thank you for the invitation.

My opening comments today will give you some background on Qulliq Energy Corporation as well as our involvement in energy resource development in Nunavut.

On April 1, 2012, Qulliq Energy Corporation celebrated 11 years as Nunavut's own electrical utility. Qulliq Energy is responsible for supplying the electricity needs to the 25 communities in Nunavut. Nunavut is the only jurisdiction in Canada where 100% of the power being generated comes from fossil fuel generators. Unlike our southern neighbours, none of our communities are connected to a grid system. Each community is a stand-alone grid. QEC operates in an inhospitable environment for a utility company, with the added pressure of providing service to an area that is one-fifth of the land mass of Canada, across three different time zones.

Electricity generation in the north has traditionally relied on diesel generation, given its record of long service. However, with the increasing costs of fossil fuels, diesel generation in the long term will not be economical or sustainable. Currently the Government of Nunavut pays approximately 80% of Nunavut's energy costs, either directly or indirectly. Energy costs are subsidized in Nunavut

through subsidy programs but also through underinvestment in the replacement of our existing capacity, much of which is at or near the end of its life cycle.

The costs of fossil fuels combined with the infrastructure replacement requirements result in Nunavut having the highest rates for power in all of Canada. Current residential energy costs average about 75 cents per kilowatt and range from 52 cents per kilowatt in Iqaluit to over \$1 per kilowatt in Kugaaruk. These rates are only sufficient to maintain but not replace the existing infrastructure.

QEC is limited in the resources that are available to generate power, due to the risks associated with living and working in the north. Safe, efficient, and reliable power is a must when the temperature is minus 40 and the wind is blowing. The need for diesel generators in the north will not go away for many years, due to the requirement of having reliable backup systems and a consistent supply of power.

With Nunavut having high power rates, this effectively lowers the bar on the business case for renewable energy. However, at the same time, the cost of renewable energy infrastructure is raised due to the distance involved and the environmental conditions in which the infrastructure needs to be installed. The core business of QEC is to provide safe, reliable, and efficient electricity through responsive and respectful interaction with all stakeholders. Given the limited financial resources of QEC and the Government of Nunavut, which is our only shareholder, QEC cannot afford to be a research and development company. This does not mean that QEC is antialternative energy. However, with limited resources, the focus of the corporation must be on the core business. Funding for alternative energy initiatives would need to fall outside of core funding requirements of upgrading and replacing existing infrastructure.

QEC has applied to various federal programs for different alternative energy projects with various degrees of success. Our most recent successful efforts include 50% of the funding required to develop a smart grid for the City of Iqaluit. This project will move the distribution infrastructure to be in line with grid systems in the south and improve the service to our customers. The one project where QEC has been unsuccessful in obtaining funding is the development of hydroelectric power. Hydro is a proven technology in northern climates and is the best hope for reducing Nunavut's dependency on fossil fuels quickly, sustainably, and affordably. There are numerous power plants across the circumpolar world and in the Northwest Territories, the Yukon, Alaska, and Greenland.

Iqaluit is the largest community in Nunavut, with a population of just under 7,000 people. A hydroelectric development has been studied for the past few years and is now at the completion of the pre-feasibility stage. Funding in the estimated amount of \$8 million is required to complete the feasibility and engineering studies. This project would provide the City of Iqaluit with clean, renewable energy for the next 100 years and reduce diesel fuel consumption for electrical generation alone by 14 million litres per year, at the current rate of consumption. The capital cost of this project is currently estimated at \$300 million to \$500 million for development.

The borrowing ability of QEC is tied to the Government of Nunavut, as all of QEC's debt is considered part of the Government of Nunavut's debt cap. The Government of Nunavut's debt cap was recently increased from \$200 million to \$400 million. This still places a hydroelectric project beyond the scope of financial possibility for the Government of Nunavut and QEC.

#### (0900)

Alternative financing arrangements have been researched, but without a completed feasibility study, no plans can be made to bring the project to fruition.

A daily occurrence in the northern news is the talk about various mining developments. Nunavut holds vast deposits of minerals that require large amounts of power to develop. QEC has been in discussion with various mining proponents to explore synergistic opportunities for the development of diesel and hydroelectric power for these projects.

The characteristics of development lead time, regulatory conditions, and project lifespan all play a part in how a resource project can be linked to renewable or alternative power. Renewable energy, such as hydroelectric power, typically has a 50-year-plus lifespan, but only after an eight- to twelve-year development program, which includes all geology, economic, socio-economic, and environmental assessments in the building of the project.

Mines, on the other hand, have much shorter development programs and usually have shorter lifespans. The Meadowbank mine, operated by Agnico-Eagle, had an original lifespan from 2010 to 2019. Only recently did we learn from the news that the lifespan has been shortened, with a new end date of 2017.

The economics of mining require that the companies that own and operate the mines must be sensitive to changing conditions. These changing conditions complicate the synergistic opportunities that could be gained with energy resource development. Stable conditions and contracts are what are required for an energy resource development. Geographical location is also a fact to consider.

Most of the resource developments are occurring in locations that are not in close proximity to the communities within Nunavut. This is further complicated by the locations of potential hydroelectric sites not being in proximity to communities or resource development projects. In the majority of the sites the need for distribution infrastructure, either to a mine site or a community, must be factored into the development.

Energy infrastructure in the north, similar to that in most other provinces and territories in Canada, is at or near the end of its designed service life. The situation in Nunavut is that we have 17 out of 25 power plants that are at or near the end of their designed lives. To add to the stress on the power plants, economic and population growth are putting a strain on the existing systems, and a plan is required to address the upgrading and the replacement of infrastructure that provides an essential service to the residents and businesses of Nunavut.

Since the creation of the company until 2010-11, the capital plans only addressed the increasing capacity or generation needed to meet the growing demand, but did nothing to replace infrastructure. The

total capital plans per year were in the \$10 million to \$13 million range. The cost to construct a single medium-sized diesel power plant in Nunavut is \$12 million to \$15 million. With 17 of the 25 power plants at the end of their lives, a cash infusion to support a replacement program is required.

Nunavut's utility ratepayers alone cannot pay for the cost of new infrastructure. The current capital plan for QEC is estimated at \$25 million per year for the next 10 years. For the most part, this replaces and upgrades generation infrastructure only. Additional funding is required to replace and upgrade distribution plant infrastructure. Most community distribution systems have been added to, and/or portions have been replaced on an ad hoc basis because of limited funds. Many of the distribution systems are as old as the generating plant within the community and need to be addressed in a fashion similar to the power plants. It will require \$2 million to \$3 million per year for a period of 10 to 15 years to address this distribution issue.

In summary, energy resource development in the north should be accompanied by a stable and healthy power infrastructure as well as a predictable regulatory environment. QEC works hard at staying in touch with the stakeholders for resource development to ensure the maximum advantage for any new opportunities that are presented. The ties to our stakeholders as well as to industry provide for a flow of information to facilitate QEC's being a prime stakeholder in resource development.

QEC's focus is very much on the current infrastructure legacy, and plans must be in place to ensure many years of safe, reliable, and economical viable power is provided to Nunavummiut. The greatest challenge we have is operating with limited funds in the face of a growing population, a growing economy, and an aging infrastructure.

Mr. Chair, I would like to thank you and the committee members for the invitation to appear. I look forward to answering any questions you may have.

#### • (0905)

The Chair: Thank you, Mr. Mackey, for your presentation.

For the third and final presentation today, we have Her Worship, Mayor Melissa Blake from the Regional Municipality of Wood Buffalo.

Go ahead with your presentation, please, Mayor.

Mrs. Melissa Blake (Mayor, Regional Municipality of Wood Buffalo): Thank you.

Good morning, honourable members. Thank you for inviting me to address your committee on natural resources regarding development in the north.

Alberta has the third largest reserve of oil in the world, and the vast majority of that is found within my municipality. My region is large. It's larger than the entire province of Nova Scotia and it is spread over some 66,000 square kilometres of northeastern Alberta. Within my municipality, there are nine rural hamlets and one larger urban area known as Fort McMurray.

According to our 2010 municipal census, our total population is 104,000, and growing rapidly. This number is much higher than what the federal census indicates, which is a cause for concern because services and funding are provided on the basis of population. While our census concerns warrant discussion, I am omitting them now in the interest of time.

Because the oil sands are really in my backyard, so to speak, there is an immense amount of growth that's here. Our population has doubled in the last 10 years and is expected to double again in the next 20 years.

One of my main concerns is creating a high quality, liveable community for all residents, regardless of whether or not they are working in the oil sands. My experience has shown that the government and industry are very eager to capitalize on the energy resource, but the systems needed to support the people who carry out that work and the region in which it is carried out is often overlooked. It is a constant struggle for us to keep pace with oil sands development. We face a shortage of land for residential, commercial, industrial, and really all growth. Our infrastructure is aging and inadequate and our residents are lacking in amenities and services.

As more and more people come to Wood Buffalo, more schools will be needed, more health centres and more recreational opportunities. A civic centre, proper transportation networks, especially including the twinning of Highway 63 to prevent a tragedy like we experienced at the end of April, as well as infrastructure upgrades and expanded government services are needed too.

One government service of particular concern relates to immigration and temporary workers. While we appreciate the recent budget announcements for expedited processing for temporary workers, it would be an immense asset if we not only had customs at our airport but also if there were immigration officials directly in Fort McMurray for visa processing and other related issues. This is not only of benefit to our labour force, but it helps with our goal to create a welcoming and inclusive community.

We are not a nine-to-five community. Many of our people work long hours over a variety of shifts, and taking time off to travel to Edmonton or Calgary for such services can be very difficult. This concern is of particular importance as labour demands increase in Wood Buffalo. If we are to progress to the point that is expected in oil sands production, upwards of several million barrels per day, then the community that supports that work cannot be neglected.

We are not a temporary makeshift town. We are a community with hard-working and ambitious people from across Canada and around the world who deserve a higher quality of life. We have a long history as a key transit point to the north, and people have made their livelihoods here for many generations. To properly invest in the oil sands means our community must also be invested in.

To that end, the Province of Alberta has committed some \$2.4 billion in infrastructure building and upgrades in my community, and I'm hopeful we will see something similar from the federal level.

But while other major cities have had decades of significant funding to help build their communities, we are building ours now and paying almost 100% ourselves, without any kind of assistance. For example, our airport is being rebuilt to meet the demands of our community. Last year we led the nation in airport growth, at just under 7%. In the first four months of this year we continue to lead that growth with 9%.

Opened in 1986 and designed to carry some 250,000 passengers a year, we estimate that this year we'll have over 820,000 people using our little terminal. While the municipality is contributing to the project, the airport authority is still looking for a funding commitment from both the provincial and federal governments. And I should point out that given the federal government's longstanding involvement and commitment to airport construction, this is a project that is ripe for assistance. Our airport is an essential project, connecting us not only to the rest of Canada and the crucial labour supply, but to the rest of the world.

It's also an illustration of the important fact that for the energy sector to advance and grow in the manner that is predicted, the infrastructure has to be in place to support it. This means oil sands development may actually be constrained by a lack of development or investment in my community.

While on the topic of airports, I would also like to mention the recent letter that we received from Transport Canada indicating that federal funding for the operations of Fort Chipewyan Airport is now being discontinued. Fort Chipewyan is the oldest settlement in Alberta, located about 250 to 300 kilometres north of Fort McMurray, and the only way to access it from December to March is a winter road. That airport is the exclusive transportation hub for the community of nearly 1,300 residents. I am very disappointed by this decision, as it will strain residents and businesses. I ask the federal government to reconsider their decision.

**•** (0910)

I am hopeful that as more money is invested in the oil sands a similar investment can be made in my municipality. Given my previous points of the link between project and community development, it's not so much a wish as a necessity.

The final issue of concern that I'd like to address is the perception of my reality. It's an ongoing challenge for us to deal with the many misrepresentations we experience as a community. I recently read a letter to the editor in a Florida newspaper in which the author, a self-identified Canadian, wrote that the air quality in For McMurray was so bad that most parents didn't let their children play outside. I'm the mother of two boys, eight- and three-years-old, and I can assure you that this is a preposterous statement. Our environment is monitored continually by the Wood Buffalo Environmental Association, an organization independent of government and industry. On average, the air quality in our communities is found to be better than that of most major cities.

However, I anticipate as oil sands growth increases, environmental criticisms and false exaggerations like the preceding example will only increase. I'm hopeful that this can be offset by an increased commitment by government and industry to independent, open, and transparent monitoring and enforcement.

As we did for many green initiatives, we supported the January 2012 announcement of the joint federal-provincial oil sands monitoring program, and we go further in proposing that an institute be established right here in Fort McMurray to fulfill this commitment. An independent monitoring institute or facility would further show the federal and provincial governments' commitment to the environment and offer us a unique opportunity to diversify our economic base into a knowledge base.

In conclusion, the issues of the livability, labour, funding, and perception of our area are just a few of the concerns that we have about energy development in our part of northern Alberta. While I'm speaking on behalf of my region, energy development here has a widespread effect on our entire country. Depending on which expert group you talk to, the oil sands are currently estimated to provide 6% to 10% of Canada's gross domestic product. That is only going to grow.

The Canadian Energy Research Institute reports that in the next 20 years, investments, operations, and expenses in the oil sands will contribute some \$2.1 trillion to Canadian GDP. Over the next 25 years the oil sands will provide some 905,000 jobs, including full-and part-time jobs, direct, indirect, and induced. It is estimated that for every \$1 million in capital invested or spent in operations, 5.6 jobs are created across Canada.

Energy in northern Alberta is a benefit not just for Alberta but for the whole of Canada, through jobs, materials, services, and construction. For businesses and entrepreneurs, this is a real Canadian opportunity from coast to coast.

This Canadian opportunity has the chance to be a part of a new vision for our country, a new national dream reminiscent of Sir John. A. Macdonald's railway that brought our nation together geographically and politically. So as you consider the concerns of energy development in Canada's north, I ask what is our new vision? Who will be the new Sir John A.?

Thank you.

**●** (0915)

The Chair: Thank you very much, Mayor, for your presentation.

We go now to questions and comments, starting with sevenminute rounds.

Mr. Daniel, you have up to seven minutes. Go ahead please.

Mr. Joe Daniel (Don Valley East, CPC): Thank you very much, Chair, and thank you, witnesses, for being here.

Mayor Melissa Blake, clearly this development is good for Canada, as you have stated. In your experience, how has your community reacted in terms of employment and resource development for the indigenous people of Alberta in particular?

Mrs. Melissa Blake: We are a region that's vast in size, but we have five first nations included within our boundaries. The reserves

are affected differently, based on their proximity to the oil industry. If you look to the one closest to the heart of the oil sands development, Fort McKay, they have transitioned from probably more of a traditional living to one that embraces the economic opportunities.

They have had strong mentorship for at least 20 years coming from the industry itself, going from more than just employing aboriginal people to making them strong entrepreneurs. So they're benefiting from, if I recall correctly, almost a billion dollars a year being spent on contracts and services throughout aboriginal businesses.

We have a very strong Northeastern Alberta Aboriginal Business Association, which represents different first nation and Métis groups involved in a lot of construction, janitorial, and fleet maintenance work. Aboriginal companies are providing a variety of services.

If you get farther away from the oil sands, it has been a little bit more challenging. If you go to Chipewyan Prairie Dene First Nation down towards the south in Janvier and Conklin, those areas are just coming under the influence of more development, with the SAGD, a steam-assisted gravity drainage type of initiative. They're going to see something different perhaps for business opportunities from what the guys in the mining operating areas actually do. I don't think they've had the same length of time to develop and figure things out, but there's a very strong business orientation coming out communities like Conklin. Janvier is finding its way.

In the Anzac area, I recently had a meeting with the Fort McMurray First Nation. In the years since I was elected in 1998, I never had communications from them. But they've got a new chief and they've got some very new direction that really does seem to be embracing the opportunity for economic advancement of the people in that first nation.

Mr. Joe Daniel: Thank you.

Your Worship, these aren't just traditional trades-type jobs? They're actually permeating right through the organizations and being entrepreneurs themselves? Is that correct?

Mrs. Melissa Blake: Every opportunity is available, from your social service workers, which seems to have an appeal.... You've got just such a variety of opportunity, but, again, when the companies empower aboriginal people to create companies that bring on more of the folks from their own areas, I think it benefits everyone for sure.

Mr. Joe Daniel: Thank you.

May I ask Mr. Bradley a quick couple of questions now.

Certainly the map that you've shown shows us the grid for the 245 kV grid, but it gives the impression that there's no electricity distribution in Canada. Do you have the 55 kV distribution map, and how far north does that go in supporting some of the development up there?

**Mr. Francis Bradley:** Yes, you're quite right. We wouldn't be able to fit the map on the wall here if we wanted to go down and show you what North America looks like from a distribution standpoint. So this is indeed just the high voltage.

I mentioned earlier the Carmacks-Stewart transmission line. That doesn't show up on this map because it's 138 kV.

We can certainly provide more detail in terms of some of that information, but the key message here is that when you get into the service territories of companies like my colleagues' here at the table, they are not connected to either the eastern interconnection or the western interconnection. So the connection is, indeed, not made at all.

Mr. Joe Daniel: Is there any reason why?

**Mr. Francis Bradley:** Yes. Principally, it's a question of geography and economics. You're talking about some pretty harsh environments that you have to cover and the cost of building significant transmission is enormous. It's more a matter of having an economic case to be able to build such long transmission.

● (0920)

**Mr. Joe Daniel:** As a regular Joe, when I look at my electricity bill, I have a huge amount in there for transmission costs. Where is that money going?

Mr. Francis Bradley: Depending upon-

**Mr. Joe Daniel:** In other words, is it not going into developing some of these longer transmission lines in areas that are less—

**Mr. Francis Bradley:** As an individual, the bill that you're paying is for the transmission system that delivers the kilowatt to your home. You as a resident of Don Valley are not paying—

Mr. Joe Daniel: Yes, but that already exists. Right?

**Mr. Francis Bradley:** You are not paying for a transmission system in Nunavut when you're in Don Valley. What you're paying for is the maintenance and upgrade of the current transmission system.

For example, in the case of Ontario, the transmission system that you're paying for increasingly is expanding to bring in new sources of renewables as Ontario moves away from coal, for example, and brings in other renewable sources of energy. Those sources are not in the middle of the backyards of people in Toronto; they're often in more remote locations. So that's what you as a customer are paying for in your transmission charge.

Mr. Joe Daniel: Right, because I think it's quite a lot of money when you take into account each household.

**Mr. Francis Bradley:** It's significantly less than the actual cost of the electricity itself. Your delivery charge is less than what it costs to actually produce the electricity for the commodity.

**Mr. Joe Daniel:** Going to Mr. Mackey, clearly in remote areas there's a sense that we should actually try to do more renewable resources. You've talked a little bit about the cost of putting those into place to support your infrastructure there.

Can you talk a little bit more about that.

Mr. Peter Mackey: I certainly can. Thank you for the question.

Just to put things in perspective, I've been working with Northwest Territories Power Corp., Nunavut Power Corp., and now Qulliq Energy for 17 years. I came out of hydro before that, spending some six or seven years with hydro. During my tenure with those three companies—they're all in the same location—we

attempted to install wind on several occasions, largely through funding we received outside of the core funding for the corporation.

We installed windmills in Kugluktuk. In order to install them, we had to ship up a crane to do the install, because you don't have the resources available in the community to do that. That increases the capital cost for the infrastructure you're putting in. We installed them in an area with a good wind regime. The community didn't like how close they were to a cemetery, so we moved them again. They preferred them in a valley. We put them in a valley where we didn't get a lot of wind. The end result of that over the life of the operations was that we deferred about \$35,000 worth of fuel costs.

We've installed them in two or three other locations. We've been successful in keeping a windmill operating throughout its life in only one location. It's infrastructure life was about 10 years in the environment we were in, keeping in mind that it's an older technology. During that timeframe, the displacement of fuel costs didn't cover the capital outlay cost, let alone the operating cost.

The Chair: Thank you, Mr. Daniel. Your time is up.

We go now to Mr. Julian, for up to seven minutes. Go ahead, please.

Mr. Peter Julian (Burnaby—New Westminster, NDP): Thank you, Mr. Chair, and thanks to our witnesses.

I'd like to ask Ms. Blake a question. Your Worship, we really appreciated your warm welcome for Tom Mulcair and our delegation last week. It was good to be in Wood Buffalo and Fort McMurray again. As I mentioned, we'll be going up again this month, so it will be my third or fourth visit to Fort McMurray and Wood Buffalo. We've appreciated your accessibility and your willingness and that of so many residents to share the challenges you're facing up there.

I wanted to start by asking you about the funding for the airport. The airport is very small and cramped. As you know, the volume going through the airport is tremendous.

I'm wondering about two things. You seem to indicate there has not been a federal funding commitment for the new airport, the new terminal that's being built across the runway. You also mentioned cutbacks in federal funding to Fort Chipewyan.

Could you comment a bit more about those two elements. They're surprising to me.

Mrs. Melissa Blake: The first one that I'll address is the expansion. We are moving to a terminal that should be able to accommodate 1.2 million passenger movements through the year. We're already exceeding by far the capacity of the current one. The airport authority's premise in thinking about the opportunity for three-way funding is that the authority and the municipality would come up with \$50 million for the project and try to leverage that against similar contributions of \$50 million from the provincial and federal government. We've had difficulty in securing any funds from any other source.

We think it is an ideal opportunity. The reason for it is that they are undertaking a very expensive project. It's just under \$200 million, if I remember properly. Ultimately, the airport improvement fees are at the highest end of the spectrum. We have a very busy airport and we don't foresee that declining in the future. I think the assurance that would come from having some offset of the capital project cost is that it would ensure that we don't bill the passengers excessively.

The second one is the Fort Chipewyan airport. If you need more on that one, that's no problem.

• (0925)

**Mr. Peter Julian:** Just to be clear, the federal government is not allocating any funding right now?

Mrs. Melissa Blake: I don't believe any contributions for the capital project have come in. No.

Mr. Peter Julian: Thank you for that. Now Fort Chipewyan.

Mrs. Melissa Blake: Fort Chipewyan. This is news to me as well. We had a letter that came in very recently indicating that funding would be discontinued. We have 1,300 residents or so up in the region, with lots of activity back and forth. Again, these are participants in the oil sands economy as well.

The troubling part of this is that the winter road only exists between December and March, and the discontinuation of funding will create hardship. Again, it will probably mean a greater expense for the passengers who are trying to get from that community to medical appointments, whether in Fort McMurray or farther up beyond. It's troubling and we would love to see it reinstated.

**Mr. Peter Julian:** Is it possible that you could share that letter with the committee?

Mrs. Melissa Blake: I'm sure we could, yes.

Mr. Peter Julian: Thank you for that.

I want to move on to the infrastructure issues. You raised the fact that you're looking for \$2.4 billion from the Alberta government and an equal amount, another \$2.4 billion, from the federal government. Has the Alberta—

Mrs. Melissa Blake: No. What I will say is that we have secured \$2.4 billion in road works, in health care expansion, in child day care. We've had wage supplements from several years back now. The municipality received \$103 million for expanding water and waste water treatment capacity. When you tally up all of these things, the bridges and the overpasses, they would have been a provincial responsibility anyway, but they've finally come to the table and made those investments.

We're suggesting that it would be appropriate to see some investment coming from the federal government. When you look at the distribution of wealth coming from the oil sands, the provincial government, through corporate and personal taxes and the like, tends to take a higher percentage of the oil sands revenues.

**Mr. Peter Julian:** Yes, it's quite shocking to me, Your Worship. Certainly in Ottawa the federal government seems to be talking about revenues coming in from your region, yet it's surprising and quite stunning to me that we're seeing a cutback in funding for Fort Chipewyan, and no real commitments by the federal government to

fund what are the huge infrastructure challenges I've seen every time I've gone up there.

I'm quite stunned by this. This is important information you're providing to us. At this point—

Mrs. Melissa Blake: Let me be clear that there have been contributions. I think \$150 million was recently allocated for the road works, in concert with the province. We have seen some, but in many cases the municipality's side of the balance sheet just isn't eligible for some of that. It usually will funnel through the province, and that's where I go back to the census.

If we look at per capita distribution, whether gas tax revenue or municipal sustainability funding in Alberta, if we're underrepresented in that census, we will also be short-changed in the distribution of any additional funds allocated.

**Mr. Peter Julian:** I'd like to move on to your suggestion of an independent monitoring institute. From speaking with residents of your municipality, I certainly know that a lot of people have raised concerns about a lack of long-term health monitoring. How do you perceive this institute as functioning? Are you in active negotiations or discussions with the federal government and provincial government about setting this up?

Mrs. Melissa Blake: No, this is a new idea just for the script that we created for your standing committee. But I think it is something that would be well served by both the federal and the provincial government. Indeed, an on-the-ground facility residing in the municipality would draw in the independent monitoring and give the people in the community an opportunity to interface directly with it

I have very high regard for our Wood Buffalo Environmental Association. They do a very good job of presenting information to the public. Many of us don't take advantage of that, except to say that it's much more comfortable to have somebody in the community, breathing the same air and drinking the same water, responsible for that independent monitoring.

• (0930)

**Mr. Peter Julian:** At this point, the municipality has raised the issue. Have staff at the municipality done any study of what funding would be required?

**Mrs. Melissa Blake:** We have not, but if there's a genuine appetite for it, we'd be happy to take that on.

**Mr. Peter Julian:** Well, in conversations I've had up in Fort McMurray and Fort McKay, there seems to be a real interest and appetite for that kind of monitoring. It's certainly an idea that we'll follow up on, on our side of the table here.

The Chair: Thank you, Mr. Julian.

Your time is up.

Mr. Peter Julian: Thank you very much.

**The Chair:** We go now to Mr. McGuinty, for up to seven minutes, please.

Go ahead, sir.

Mr. David McGuinty (Ottawa South, Lib.): Thank you, Mr.

Good morning, everyone, and thank you for being here.

I'll begin with Mr. Bradley from the CEA.

Mr. Bradley, I went through your materials looking for some kind of study or projection of energy needs in northern Canada over the next 25 to 50 years. Does the CEA have one? Have you seen one performed by a national or a provincial government?

Mr. Francis Bradley: Specific to northern Canada?

Mr. David McGuinty: Yes, northern Canada.

**Mr. Francis Bradley:** We don't have one. We haven't produced one specific to northern Canada.

We have included it in some of the work we've done jointly with the Conference Board of Canada, so it's part of the rolled-up information that we provided. For example, the \$347.5 billion in investment over a 20-year period that I referenced earlier is for Canada as a whole and does indeed include, at the margins, northern Canada. I'd also note, though, that it's a figure based on business as usual, and we know that business will not be as usual over the next 20 years.

**Mr. David McGuinty:** If you frame it in economic and dollar terms, can you carve out a projection for this committee on what the northern Canadian energy needs will be for the next 25 to 50 years?

Mr. Francis Bradley: We can dig into some of the work that we've done previously and get back to the committee with that information.

Mr. David McGuinty: Can you do the same thing with respect to circumscribing what we call the oil sands? Are you in a position to advise this committee, or help us understand, what the energy needs will be, given the rapid pace of expansion in the oil sands according to a lot of the testimony we heard from Her Worship—which is very revealing in terms of pace? Do you have anything that could help us understand how much juice we're going to need, how much energy we're going to need, in that region over the next 25 to 50 years?

**Mr. Francis Bradley:** At the association we have not done anything specific with respect to the energy requirements for the next 25 to 50 years.

**Mr. David McGuinty:** Have you seen anything out of the federal government—Natural Resources Canada—or the Alberta government? Is there some place we can go to locate what the projected energy needs going forward will be?

**Mr. Francis Bradley:** I would suggest speaking to the project proponents. They would likely have done that sort of work.

**Mr. David McGuinty:** The companies that are exploiting the oil sands? Okay.

Your Worship, have you come across anything in your travels and in your work? Do you have a projection to help us understand how much energy is going to be required in your immediate area going forward?

**Mrs. Melissa Blake:** No, I'm afraid I don't. I know that increasing the capacity coming into the region is an important thing. In the past, we've actually had a number of operators with cogeneration facilities, who actually take care of their needs that way. Some are burning byproducts in their processing to create the heat they need. I

know, as we get into the steam-assisted gravity drainage type or in situ types of development, their needs are going to vary dramatically.

I think the previous suggestion about working with the individual proponents is important. But we have something in the community called the Oil Sands Developers Group. If you contact them, they will probably have an overarching perspective, which could give you the answer you're looking for.

Mr. David McGuinty: Okay.

So from your planning perspective.... What I heard throughout your testimony this morning was that you are struggling to keep up with the pace of development.

Mrs. Melissa Blake: As a community?

Mr. David McGuinty: Yes, as a community.

Mrs. Melissa Blake: As a community, it's things like housing, road capacity, health care, schools—

Mr. David McGuinty: Right. You made some very important points about the need for some sort of institute to monitor both environmental and health effects; you've talked about the notion of localizing immigration and customs in your region, which I think would unprecedented in Canada, as I don't think we've ever seen that before for very large development projects. You've also talked about expanding the airport, about infrastructure and roads, and I'm sure the list goes on and on.

Let me put a question to you right now as the person on the ground who's there and struggling to manage these realities. Is the pace of development too slow, too fast, or just right?

• (0935)

Mrs. Melissa Blake: I have long been an advocate for making sure that whatever we're doing in oil sands development, the community keeps pace with that. We're still short of land and we're still short of road capacity at the largest point. We've made huge advances in a lot of the planning during the more recessionary times. As we move forward, if we continue to.... I couldn't even put a dollar value to it. Is \$25 billion a year the right number? Is \$100 billion in investment a year the right thing? I can't identify that. All I can tell you is that if you're bringing in 10,000 new people to the community, you'd better have 3,000 new houses at the ready.

Mr. David McGuinty: You're not getting that, are you?

So the pace of development then, we can conclude from your testimony, is too fast.

Mrs. Melissa Blake: It has been too fast in the past, yes.

Mr. David McGuinty: All right.

Mrs. Melissa Blake: But we have remedied some of that.

Mr. David McGuinty: So when former Premier Lougheed says that we should stop here and take stock, we should not only look at the effects on the ground in the immediate vicinity of the expansion but also, for example, at what's going on in Washington today, where the Americans are now focusing on shale gas and are talking very aggressively about converting much of their energy grid and system to natural gas. When the Chinese are finding massive shale gas deposits in the southeast of China and talking about double tracking a pipeline to the industrial heartland of China, wouldn't that have a bearing on the pace of investment and development in the oil sands?

**Mrs. Melissa Blake:** I think the biggest...[Inaudible—Editor] comes from the cost of the commodity, the value that can be received from the development, whether it's profitable and the extent of that profit. The goal and the demand are not diminishing.

Right now we're producing about 1.5 million barrels a day. As we continue to experience demand for the product, we would probably be best served to capitalize on what those opportunities are. We're constrained in our opportunity to access markets outside of the region. As you see debates raging on about pipelines—east, west, north, south, wherever they end up going—those things will have a more significant influence over the pace of development, I suspect.

**Mr. David McGuinty:** To what extent has there been serious discussion in your region examining the possibility of constructing and building a nuclear power plant?

**Mrs. Melissa Blake:** There have been trial balloons floated. It doesn't give people a warm, fuzzy feeling. I'm not one who has an opinion one way or the other. I think the unfortunate incident in Japan has really put a damper on it. When you have countries like Germany eliminating nuclear, it doesn't seem there will be a huge appetite left.

**Mr. David McGuinty:** In terms of the most pressing issues, then, just to recap for folks who are following, what are the top three? Given the pace of development, which you've just acknowledged as being, frankly, too fast, what are the top three challenges you're facing on the ground?

Mrs. Melissa Blake: They're access to land, improved transportation, and the labour supply that will be constrained in the future....

**Mr. David McGuinty:** Have you examined the possibility of asking the project proponents and the companies operating in the oil sands to pick up a larger share of this?

**Mrs. Melissa Blake:** Yes, repeatedly. However, I have really evolved my thoughts on that. Companies have a responsibility to pay their taxes and their royalties, and if we're not charging enough for that, then that's our own silly fault as governments, frankly.

So in my community I have raised my tax rates coming from industry to the point that I can maintain a healthy balance, I believe, in the community for the expenses borne by homeowners versus industry and versus the commercial interest. Their taxes are very high and I tell them I need that to be able to produce the output we're looking for.

The Chair: Thank you, Mr. McGuinty.

We'll start the five-minute rounds now, beginning with Mr. Jean, the member of Parliament for Fort McMurray and area.

Go ahead please, sir.

Mr. Brian Jean (Fort McMurray—Athabasca, CPC): Thank you, Mr. Chair.

I think it comes as no surprise that I'll be asking Mayor Blake most of my questions, if not all.

Mayor, congratulations on getting up at Alberta time. It's fun going back and forth between Alberta and Ontario and having to change time zones. I also want to congratulate you on your Queen Elizabeth II jubilee medal. It's well deserved for all of your hard work over the past years in northern Alberta.

I don't know if you had a chance to read the budget brief that I sent you about a month ago, outlining the Canadian government's new budget. But if you have you will notice there have been a lot of changes in relation to how we deal with unemployment and employment and some of the issues there. I will deal with that in due course.

But I do want to make reference to some of the funding for infrastructure that has been put in place since we came into government in 2006, including of course \$150 million to twin a large portion of Highway 63 and invest in the two overpasses. Of course, we're excited about the two most recent ones that are almost open: Thickwood and Confederation interchanges. Of course, there are the hockey rinks and other things we did in Canada's economic action plan. Some \$500 million has been contributed over the last six years to the municipality of Wood Buffalo from the federal government.

But what I would like to talk about is not land and not road capacity, because both of those are obviously within the jurisdiction of the provincial government and are their responsibility, and that all we can do is to deal with them as a funding partner at their request. Indeed, I want to let you know as well, of course, that we've been talking to Scott Clements. He is the CEO of the airport and made a pitch to the Alberta Conservative caucus some months ago in relation to customs, immigration, and indeed the funding proposal for the expanded airport. So that is with the government and, of course, that is going to be dealt with accordingly.

I have been working on those two files for about two years now—and over a year with Scott. And he is doing a great job for the airport as well. I think most Canadians don't realize that although we have 850,000 passengers in our airport, we also have 1.6 million in our airspace who land at the other airports in northern Alberta. So it's quite a few.

But what I'd like to talk about is the "Tim Hortons" issue.

• (0940)

Mrs. Melissa Blake: Can you see my Starbucks cup?

**Mr. Brian Jean:** The issue of course is employment. I think this budget is a budget for northern Alberta and northern Canada, in particular. The number one complaint I've had in my riding is employment and finding people, keeping older workers employed, keeping apprentices encouraged to work harder, and to change the EI program so that it reflects what actually takes place in northern Alberta versus the rest of the country.

I don't know if you've had a chance to look at those things in this budget, but if you have, you will see a tremendous amount of investment in those things, as well as in expanding first nations' employment credits, etc. Have you seen those things in our budget?

Mrs. Melissa Blake: It was a while back, but yes, I recall them.

Again, the only difficulty for me in this region is making the direct correlation. So the programming certainly is an enhancement.

**Mr. Brian Jean:** Of course, we know that NAABA, the aboriginal organization, has somewhere around 380 businesses a members in Fort McMurray. And I don't think that many people recognize that Syncrude and Suncor both have pro-aboriginal hiring policies. I think Syncrude has somewhere around 14% of their total workforce. Is that correct?

Mrs. Melissa Blake: I think it is a bit lower than that. When I was in recruiting there, 10% of the population was aboriginal, and they wanted 10% of their workforce to be aboriginal in order to reflect what the community looked like.

I don't think they ever achieved a rate as high as 14%, because they made everybody an entrepreneur instead.

**Mr. Brian Jean:** Indeed, and there are tremendous success stories in that region among aboriginal businesses, reflecting the tremendous growth and advantages that the entire population has through employment in the region. Would that be fair to say?

Mrs. Melissa Blake: That would be, yes.

**Mr. Brian Jean:** I don't know if you've had an opportunity to see some the changes that we've made in the foreign qualification recognition in 2012. I just wanted to ask you, do employment opportunities exist in northern Alberta, particularly for dentists, physicians, K-12 teachers, medical radiation technologists, and engineering technologists?

Are all of those jobs and people needed in that area?

Mrs. Melissa Blake: I would say that they all are, yes.

**Mr. Brian Jean:** Indeed, engineers, medical lab technologists, occupational therapists, pharmacists, physiotherapists, registered nurses, all those people are needed in northern Alberta?

Mrs. Melissa Blake: They're needed. Yes.

Mr. Brian Jean: Well, I want you to know, Mayor, that we have reflected those changes in our budget through the foreign qualification recognition, and, indeed, with our new changes we're able to fast-track those people into our region more quickly. For example, rural doctors are put on a fast track to go into areas have particularly high needs. Does that sound like good news?

**Mrs. Melissa Blake:** It would be great if we could get about 10 more doctors today.

The Chair: Thank you, Mr. Jean.

Unfortunately, your time is up. We go now to Mr. Galipeau for up to five minutes, please.

Mr. Royal Galipeau (Ottawa—Orléans, CPC): Thank you very much.

With your permission, Mr. Chair, I'll share my time with Mr. Anderson.

I have a question for Her Worship. You got up before the rooster this morning.

• (0945)

Mrs. Melissa Blake: I got up at an hour that's unusual for me, but everybody else in Fort McMurray gets up at that time.

Mr. Royal Galipeau: Did you get to hug your kids?

**Mrs. Melissa Blake:** I didn't. If I don't get home until late tonight, I won't see them for a day.

**Mr. Royal Galipeau:** You have a problem that many mayors would like to have. It has to do with how you manage growth or how you manage development. How many jobs do you expect will be created in your district over the next five years?

Mrs. Melissa Blake: I do population anticipation. I would say that in the next 20 years, I'm looking at a population of about 230,000. The population itself is divvied up between those who live and remain in the region versus the ones who come in for a temporary work assignment, if you will. There are commuters who come from all parts of Canada, and the number in my 2010 census was 23,000. This year it's 35,000 who live in camps and are here for temporary shift work.

When I look at a population of 230,000, again, many of them are here as commuters.

Mr. Royal Galipeau: Thank you very much.

The Chair: Mr. Anderson, go ahead, please.

Mr. David Anderson (Cypress Hills—Grasslands, CPC): Thank you. I don't have a lot of time here, but I think Mr. Daniel talked to Mr. McKay about the strong mentorships. Perhaps it was the mayor who talked about this strong mentorship in Fort McKay, and I'm just wondering if you could talk a little about what that looks like when you see a community that's done very well in this situation.

We've had quite a bit of testimony from further north, from communities that are really uncertain about how they will move ahead and engage with the economy, how they will move ahead and advance the education of their people so they can get employment.

Can you give us a bit of an overview of what the Fort McKay leadership has done so that their people can really enjoy the benefits of what's going on in your area?

Mrs. Melissa Blake: I'm going to do it from the perspective I had when I was just a kid getting into the workforce. At the time, our leaders in the organization were Eric Newell and Jim Carter. Eric was passionate about being able not only to employ first nations individuals but also to give them the economic opportunity that would advance them.

In the community of Fort McKay, it's a tough reconciliation. The time is not long past when traditional living was very much a part of the everyday life for members of the first nation. I think a dramatic shift in interest came from understanding that the land was going to change before them and that adaptation was what was going to ensure survival.

The necessity in the region has always been about having completed at least grade 12 education. You wouldn't be able to get a job on-site unless you had that qualification. This automatically, if you were looking for those opportunities, forced a higher completion rate for high school.

There are still struggles with that. The way they got students engaged was to bring in some incredible people—the principal at the school, the teachers they brought in. There was a period of time when they had very strong school support that helped the youth be able to step into that situation.

When I go to the community I look at elders. These elders have actually lived the lifestyle, as I say, of the past, but they're also the business company owners who are bosses of all these folks who are part of the band and others who come in for the opportunity. For me, having watched that transformation, really in about the last 20 years, has been phenomenal.

**Mr. David Anderson:** It seems from the conversations we've had here that encouraging the young people to stay in school and getting them through to that grade 12 level is really the key to the future development of the communities in the next generation.

Is it realistic to say that?

Mrs. Melissa Blake: I would say it is, absolutely. One thing is starting earlier in the schools. They have something called the registered apprenticeship training program. If students are interested in pursuing trades, they get the first year of their journeyman certificate as they complete their high school. It's a marrying up of the two initiatives, school and work, at the same time.

Mr. David Anderson: Thank you. That has been a topic of conversation a number of times.

Mr. Bradley, I'd like you to talk a bit. You mentioned the future of micro or mini grids. I wonder if you could tell us a little about how you see their being constructed and used. Perhaps Mr. Mackey could also talk to this. You were talking about these little grids that would be set up. You have great distances. How do you see that system working?

**The Chair:** You'll have to make the answer short, please, Mr. Bradley.

Mr. Francis Bradley: Yes, absolutely.

This is fairly new technology. This is work that relates as well to what is being referred to as a smart grid. We have newer, more efficient technologies coming on line that will assist in lower- as well as high-voltage transmission, but also in the distribution system. It's a question of taking some of those technologies that are being developed for urban areas and adapting them for these sorts of circumstances.

• (0950)

**Mr. David Anderson:** How do you see the adaptation for rural, small, isolated communities? I guess that's what I'm interested in.

**Mr. Francis Bradley:** It's going to be a question of the economics, but I believe there's a great deal of potential, and not just for our northern and rural communities in Canada. The sorts of systems we will be developing here would be technologies we would also be able to export around the world.

The Chair: Thank you, Mr. Anderson.

We go now to Mr. Nicholls for up to five minutes.

Mr. Jamie Nicholls (Vaudreuil-Soulanges, NDP): Thank you, Mr. Chair.

Your Worship, thank you for appearing here today before the committee.

I have to say that as deputy energy critic for the NDP, I'm looking forward to visiting the Wood Buffalo district later this month. I had a friend in the planning department of Fort McMurray, Cole Hendrigan, whom I used to talk with about Fort McMurray at length.

You mentioned earlier in your testimony the airport. It's ironic, because we have a town in Quebec that doesn't want an expansion of an airport—Neuville—and here we have a municipality that desperately wants expansion of their airport. In both cases the federal government doesn't seem sufficiently engaged in the process.

I'd like to ask you about any other services you're having challenges with in Wood Buffalo, or in Fort McMurray specifically. Could you elaborate on services and infrastructure required for your town in the next five years?

Mrs. Melissa Blake: Again, when you look to the increasing population—and we on our part had a doubling of population—any facility that would have been in federal jurisdiction would have experienced what every other association in the community has experienced. You only have so much space, so much staff, and so much capacity to process what comes in; but if you double, triple, and then eventually quadruple that population, you're going to require four times the service capacity that existed before.

I don't think we're looking for a host of new services, other than the potential to have immigration officers in the community. I have the most incredibly multiculturally diverse community. When you look at our school system, we have no less than 100 different countries represented in our public school system. I think I've heard numbers of 127 different countries in the community. Many of them will go through the citizenship ceremonies right here in Wood Buffalo. The necessity for all the transactions that occur forces them to go out of town to get those things addressed.

That would be a new service, and even if it's an exception for a unique place in Canada, it's not about the temporary labour and not about just being able to satisfy oil sands; it's about the combination of all of those entities that would really benefit from having something locally.

**Mr. Jamie Nicholls:** That brings me to my next point. The census for your community in particular doesn't seem to be the appropriate tool that you need to assess funding. I assume there is a high amount of temporary foreign workers and Canadian workers who consider home somewhere other than Fort McMurray, perhaps the Atlantic or other regions of the country.

One of the members across the way mentioned that they're fast-tracking the people, but without the service funding being fast-tracked as well. This is posing particular challenges for your community. Do I understand that correctly?

Mrs. Melissa Blake: I would say that is accurate. When I look at the census numbers that we give for the region, I said there were 104,000 people in 2010. The federal census tells me that it was 65,000 for that same period—or I guess their numbers are for 2011. So there is a dramatic difference for the overall region.

In Fort McMurray they claim that 61,000 are a part of my community. In 2010 I had demonstrated there were 76,000. The difference between those two is how much you put into developing the community and the services. I may be overbuilding some things, but I can prove to you by waiting in traffic for the duration that I do that we have more people than are reflected in that census.

Mr. Jamie Nicholls: Thank you.

You said the following in 2010:

Therefore, it is imperative the Provincial and Federal Governments join with the Regional Municipality of Wood Buffalo to achieve managed growth for the good of the oil sand industry and its surrounding areas. Anything less is chaos as we have experienced short years ago.

Could you please describe what you were referring to when you said "chaos" in those years?

Mrs. Melissa Blake: Again, when you have more people than capacity in anything.... I can go to a Tim Hortons lineup—which was a joke from my member of Parliament—but, seriously, we've had to reconfigure how they go through a Tim's line so they're not blocking traffic flow on our two streets where they exist.

If you go into any of the shops or services you'll find, what I'm going to call, a deplorable state. Stock can't get on the shelves quickly enough, because of the volume of sales that are happening and the lack of staff able to manage that.

If you go to the health spectrum, we've made some big improvements in getting doctors into the community. I'm a 30-year resident here, and I still have trouble trying to get a doctor for my family.

These kinds of things are what I would call, maybe not so much chaos as, a good Friday night in town. We have enough policing services now, but honest to goodness, the population is so much greater than capacity in almost every respect.

We're in a better position now. I will say that up front. The two years of the recession gave us an opportunity not only to plan for what we were experiencing but also to hire staff. Frankly, the municipality itself has never been better staffed because of that time.

● (0955)

**Mr. Jamie Nicholls:** What role would you like to see the federal government take to achieve managed growth, as you've talked about in the past, going forward?

Mrs. Melissa Blake: At that time, I'm sure I was referring to the pace of the oil sands approvals. Every time a company announces a \$10 billion project, for example—which is commonplace in this region—it draws a population that comes with it. What we're not capable of managing is what happens when people come and are not adequately prepared for the cost of housing in the community. We end up with more people having to utilize shelter services and the like.

Again, what we want to make sure of before those transactions occur is that we're sufficiently capable of managing the inevitable effect of the population coming to support those transactions.

The Chair: Thank you, Mr. Nicholls.

Mr. Trost, for up to five minutes.

Mr. Brad Trost (Saskatoon—Humboldt, CPC): Thank you, Mr. Chair.

I believe it was Mr. Bradley in his testimony who talked about how he felt that the regulatory reforms the government has taken have been a good, positive step. I forget how you worded it, but they weren't sufficient or weren't fulfilling everything, and there were still some concerns about things that needed to be done. Could you elaborate on that more for a minute or two?

Mr. Francis Bradley: Yes. As an association and on behalf of our members, we've provided some recommendations and suggestions on some of the specifics to, for example, the subcommittee of the finance committee that is studying on Bill C-38. We have some suggestions for fine-tuning some of the approaches, and we'd be delighted to provide that information to this committee if required.

Broadly, we're supportive of the direction we're heading in. For the longest time we have been concerned about regulatory processes that are both duplicative and sometimes overlapping, so anything that moves to address those sorts of issues is something that we would support.

**Mr. Brad Trost:** Is that a particular concern in the north—and Mr. Mackey can answer this too—or is it more of a generalized concern affecting both the south and north equally?

**Mr. Francis Bradley:** Yes, I would suggest that it's something that's universal. It's an issue that isn't specific to the south; it's something that is a concern, really, across the country.

**Mr. Brad Trost:** So as far as your industries are concerned, there aren't any particular hurdles in the north for the two groups you're representing?

**Mr. Francis Bradley:** No, it's the same issues that we see in the south with respect to regulatory efficiency.

**Mr. Brad Trost:** I'm getting a head nod, so I would see agreement there, too.

Mr. Mackey, as we've seen here in committee, various industry groups come in and talk about different ways of generating electricity with new technologies, etc. As your company looks forward, do you see any realistic possibilities of replacing your diesel-based system with something more economical? Or is diesel the only real possibility in the foreseeable future for producing electricity for the mines and communities of Nunavut?

Mr. Peter Mackey: I don't look at diesel as being the most economical method. A better alternative, from our perspective, is hydro. We've had discussions with several mining groups that are looking at mine development. We've identified the areas with hydro potential within the vicinity of the mine that potentially give us the ability, if we're able to go through the regulatory process and approval process concurrently with them—

**Mr. Brad Trost:** If hydro is the way to go, what's holding that back for you?

**Mr. Peter Mackey:** Do you mean as Qulliq Energy, in terms of our being able to develop hydro?

Mr. Brad Trost: Yes.

Mr. Peter Mackey: As I referenced in my presentation, our ability to borrow for a capital project, a hydro project, is limited by the debt cap of the Government of Nunavut, which is \$400 million. And they're utilizing their whole budget just for the infrastructure needs of the communities within Nunavut, which are short. I've had discussions with different banks, including various energy banks, that look at these large-scale projects. They'd be quite happy to sit down and loan us the money to go ahead with the Iqaluit hydro project, but we can't borrow that money because we fall under the same debt cap.

**●** (1000)

**Mr. Brad Trost:** I'm asking this fairly deliberately. Would it be useful to you if this committee recommended either making some sort of exception or change in the debt limit, raising it with some sort of proviso about capital projects, energy projects, backed projects, whatever you'd want to call them?

Mr. Peter Mackey: I would strongly recommend and support moving energy infrastructure projects in the north outside of the debt cap of the Government of Nunavut, which is looking at the needs of Nunavut from the perspective of the hospitals and schools. Those will always take a higher priority over building a hydro project to feed a mine and two communities. When they're looking at building a hospital to get some health things done, it's going to win every single time.

**Mr. Brad Trost:** I'm not asking you to go too far out of your zone here. If I asked that question of the political leadership of Nunavut, would they give a fairly similar answer? I know you're hesitant to speak for the political leadership, but would your best guess be that they wouldn't disagree with you?

**Mr. Peter Mackey:** Certainly, they're the loan shareholder for Qulliq Energy Corporation. If go to them and say that we have an excellent opportunity for a hydro project with a mine and ask them if we can do it, their response is, "It's not within our debt cap. Let's go to the federal government to see if we can do something with it." There have been discussions about moving large-scale infrastructure related energy projects outside of the debt cap within the GN. I'm not

sure if the GN itself has gone to their federal counterparts with that recommendation or request.

The Chair: Thank you, Mr. Trost.

We go now to Ms. Liu for up to five minutes. Go ahead, please.

[Translation]

Ms. Laurin Liu (Rivière-des-Mille-Îles, NDP): I would like to thank all the witnesses for being here.

I would like to begin by asking Mr. Bradley a question about labour. When talking about electrical projects in remote regions, would you agree that access to labour is a major challenge? Have you any comments about that?

[English]

Mr. Francis Bradley: Yes, absolutely. In fact, we've been addressing human resource challenges for the electricity industry for a number of years through the association. Jointly with Human Resources Development Canada, we launched a HR sector council a number of years ago. We've been attempting to address a significant shortage of both skilled and unskilled labour over the coming decade. As with a lot of other sectors, we're seeing significant numbers of people in our sector moving towards retirement, and so we're actively seeking ways to ensure that we have the human resources that we're going to need. This is not an issue specific to the north; it's an issue that we're seeing right across the industry. But clearly, it is further exacerbated not just the north but in any remote community. The human resource challenges are only increasing; they're not getting any easier.

[Translation]

Ms. Laurin Liu: Thank you.

You mentioned that an aging workforce was a major issue. It was with great interest that I read a report published in 2008 entitled "Powering Up the Future". I only have the English version of the report with me, so I will read you the following passage:

[English]

An aging workforce, impending retirements of 28.8% of the workforce between 2007 and 2012, competition from other industries and utilities, and a growing economy, coupled with aging infrastructure and the need to build new facilities, threatens the reliable generation, transmission and distribution of electricity to Canadians across the country.

[Translation]

I would like us to focus on one of the points made in that quote, that is competition with other sectors. Which other sectors are competing with you to hire skilled labour?

[English]

Mr. Francis Bradley: That's an excellent question.

We see parallels, not just in terms of people but also in terms of equipment and supplies. Any industry that uses the same sorts of skill sets that we have would also include, for example, any other resource development, any other energy development, and so on. So we're looking at the same kinds of pools, on the one hand.

On the other hand, as the industry increasingly moves toward more automation, we're facing a future that will be characterized by smart grids and electric vehicles, and so on. There's a part of the business that's also increasingly becoming high-tech. Not only are we competing, for example, with other construction projects on our hard assets, but we're also competing with Google and Intel for some of the smartest people we're going to need to be able to develop that smart grid for the future.

The challenges are really across the board. It isn't just the people who are pouring the cement but it's the people who are going to be developing the apps that are going to really manage our energy use in the future.

**●** (1005)

[Translation]

Ms. Laurin Liu: That is an interesting point of view.

Would it be reasonable to say that the oil exploration and extraction sector is competing with your sector?

[English]

**Mr. Francis Bradley:** Oh, yes, absolutely. As I say, every industry does, to one degree or another, both in terms of people and equipment. There's only so much rebar in the country at any given time. There's only so much cement that can be poured in any given time. It is an issue of both the people who are going to be doing some of that work and the equipment that is required.

But, yes, clearly, these are not the only sectors that are chasing after the same sort of people, but they're certainly among them. But it really would be every sector in the economy, right down to IT and high-tech.

[Translation]

**Ms. Laurin Liu:** Do you believe that could cause an increase in wages?

[English]

Mr. Francis Bradley: To a certain extent, in some of these sectors you would see salaries being pushed up, but it's just natural supply and demand. By the same token, if you look back to 1998 and 1999, if you were an IT specialist and you knew something about the Y2K phenomenon and were able to work in that domain, you were able to demand a pretty significant premium for a short period of time just because it was a matter of supply and demand. If that was your particular skill set on January 2, 2000, that skill set was no longer much in demand.

But, yes, that's the natural ebb and flow of demand, so that, as there are increasing demands in some of those specific areas, there's upward pressure on price.

By the way, it isn't just between different industries here in Canada. It's also more of a North American phenomenon as well. We'll train power line technicians here in Canada. We also have to compete, for example, with companies in Florida that are facing shortages.

Ms. Laurin Liu: Is there a brain drain or-

The Chair: Thank you, Ms. Liu. Your time is up.

We go now to Mr. Allen, for up to five minutes.

**Mr. Mike Allen (Tobique—Mactaquac, CPC):** Thank you very much, Mr. Chair, and good morning to our witnesses. Thank you for being here.

Mr. Mackey, I'd like to ask you a couple of questions.

When you were talking about your attempt to install wind power, you installed it and then it was too close to a graveyard, and so you had to move it to an area which didn't have as good a wind regime.

Let's take that to your next level with your hydroelectric development. What is the potential for hydroelectric megawatt development in your area?

**Mr. Peter Mackey:** We carried out a study near Iqaluit specifically, given that it's our best chance of displacing the largest amount of CO2 in fossil fuel use. We looked at 14 different sites around that area. We've identified, on a cost basis, the best location for us in terms of the infrastructure. We're looking at being 60 to 70 kilometres away.

We've since been in discussions with a mine that is looking at development near Iqaluit and we're looking at an alternative hydro site, in large part because the capital infrastructure is paid for over the life the mine if we have a power purchase agreement with the mine, even if the infrastructure is initially more costly to develop. So it varies.

Mr. Mike Allen: How big a project would that be in megawatts?

**Mr. Peter Mackey:** We would build the hydro project to match the requirements of the mine plus the city. For Iqaluit we're looking at 30 megawatts.

**Mr. Mike Allen:** You talked about one being three.... Is that the one for which you're talking about \$300 million to \$500 million for development of the project, or is it a different project? You were talking about doing one with a pre-feasibility study and looking for \$8 million. Is that a different project?

Mr. Peter Mackey: That's a project for which we've completed the environmental baseline studies and pre-feasibility study, near Iqaluit. That's the one we are attempting to develop on our own, without a synergistic relationship with the mine. In order to complete the feasibility study, which includes the geo-technical engineering design and the regulatory process, we're looking at \$8 million. In a capital budget of \$25 million that we have and are using to try to replace power plants, we don't have the \$8 million to spend on it.

(1010)

**Mr. Mike Allen:** Would that be a lake system or a run-of-river system?

Mr. Peter Mackey: That would be run-of-river.

Mr. Mike Allen: So you're not talking about—

**Mr. Peter Mackey:** Just for clarity purposes, it's not a run-of-river system; we would have a reservoir tied into it.

**Mr. Mike Allen:** There would be a little reservoir, somewhat like in New Brunswick, where you have a bit of a hybrid and some reservoir.

Let me ask you the question, then. When you look at the situation you had with wind, what do you think the reality is in terms of lead time to develop this project? Do you anticipate any major hurdles in getting a project like this even approved?

Mr. Peter Mackey: We've done a tremendous amount of work in providing positive feedback in communications, not only with Iqaluit but with all the communities that are in the area. We have tremendous support for the hydroelectric project and a genuine desire from the citizens of Iqaluit to see this proceed. From that perspective, I think it bodes well for us. We've also kept the regulatory bodies aware of our attempts to develop this hydroelectric project. We've done tremendous amounts of analysis in terms of what the regulatory steps are. We have a clarity process map so that we know what needs to be done.

We don't foresee any kind of issue in terms of bringing it to development other than the issue of capital infrastructure dollars to proceed.

**Mr. Mike Allen:** To turn to Mr. Bradley's point—and I'll bring Mr. Bradley in on this too—you talked a little bit about the stranded investment aspect. Stranded investment is always a concern when you're doing utility construction, because the mining project has a certain life and a utility asset has a much longer life.

Do you see, Mr. Mackey, any issues in terms of stranding of some of the asset you're talking about? I see that in the power purchase agreement you would want to factor this in, but in the development that you're pursuing on your own, do you see any stranded investment issues?

**Mr. Peter Mackey:** We do not. Unless the city of Iqaluit is going to disappear within the life of the hydroelectric project, no, we don't see it as an issue, because the capacity that we're earmarking for development is to meet the requirements of the city of Iqaluit on a go-forward basis.

Mr. Mike Allen: And to replace the diesel-

Mr. Peter Mackey: Absolutely. It's to shut them down.

**Mr. Mike Allen:** Mr. Bradley, you talked about the project management office. Do you see, from a member's standpoint, when you any talk about the relationship with the major project management office—and there's also a northern major project management office....

We've heard some testimony previously that the northern major project management office may not be as well developed as the regular project management office. What are you and what are your members seeing in terms of these two organizations?

**Mr. Francis Bradley:** At a national level as a national association, our dealings have been with the major project management office, not with the northern office. I wouldn't be able to contrast and compare the two. As I said in my comments, since the establishment of the NPMO, we have certainly seen benefits as a result of it, and greater clarity.

The Chair: Thank you, Mr. Bradley.

We go now to Monsieur Gravelle for up to five minutes.

Go ahead, please, sir.

Mr. Claude Gravelle (Nickel Belt, NDP): Thank you, Mr. Chair, and thank you to the witnesses for being here today.

My first question is going to be for Mayor Blake. I'm not sure whether I heard correctly, Mayor Blake, so I'm going to ask the question again. Did you say that the funding for the Fort Chipewyan airport was cut?

Mrs. Melissa Blake: It has been discontinued, yes.

Mr. Claude Gravelle: By whom was it discontinued?

**Mrs. Melissa Blake:** The federal government made a contribution to that airport in perpetuity, until the recent letter telling us that they would be removing that funding.

Mr. Claude Gravelle: Do you know how much was cut?

**Mrs. Melissa Blake:** Do we have a number?

I'm sorry, I don't know what the exact funds were.

Mr. Claude Gravelle: Can you forward that figure to the committee?

Mrs. Melissa Blake: I absolutely will, yes.

**Mr. Claude Gravelle:** And what kind of effect is that going to have on the Fort Chipewyan airport?

**Mrs. Melissa Blake:** My belief is that funds that get cut will have to be replaced somehow, presumably from the municipality. So either my expenses are going up or the cost of airline travel will be going up to offset what those expenses were.

**Mr. Claude Gravelle:** So the chances are that taxpayers are going to have to pay for the extra funding that's being cut.

**Mrs. Melissa Blake:** Taxpayers? It will be taxpayers or travellers or a combination.

**●** (1015)

**Mr. Claude Gravelle:** You mentioned several times that you had problems getting access to land to expand your municipality. Who owns the land you're talking about? Is it crown land, private land...?

Mrs. Melissa Blake: It is crown land held by the province.

**Mr. Claude Gravelle:** So by withholding that land from you, the province is not helping you in developing your municipality.

**Mrs. Melissa Blake:** That would be true. We have certainly tried to initiate a new deal, so to speak, with them as well. We have a memorandum of understanding that was signed last year. The new government is just trying to find ways to execute it. We have an anticipation that this will change in due course.

**Mr. Claude Gravelle:** You also mentioned several times that you believe that the census is wrong. Why do you believe that?

Mrs. Melissa Blake: I'm not saying it's wrong; I'm just saying it's inaccurate.

Mr. Claude Gravelle: Well, if it's inaccurate, it's wrong.

**Mrs. Melissa Blake:** No, the difference is that because we host so many people from other parts of Canada, they cannot legitimately say they live in Fort McMurray, if they have a home in another province; therefore, they're counted in their home community.

So overall the Canadian number is correct. The Fort McMurray number underrepresents our population, because so many people are still in the community for the bulk of the time, using the services that are here. The temporary—

Mr. Claude Gravelle: How does that affect your municipality?

**Mrs. Melissa Blake:** That's a funding problem. So when you look at funding and planning—except that I know they're here, so I plan for them anyway.

The difference is that if you have gas tax revenues going to the province, they are distributed on a per capita basis. If I'm 40,000 people short in the number I'm receiving funding for, it's a shortchanging of what I have for expenses against what I'm doing to serve the people who are here.

Mr. Claude Gravelle: Thank you, Mayor Blake.

My following questions are for Mr. Mackey.

I'm looking at the information you have given us. I see that Nunavut is 100% dependent on diesel fuel. How many litres of diesel fuel does Nunavut use in a year?

**Mr. Peter Mackey:** Purely for electrical generation during this sealift supply year, we've purchased 45 million litres.

Mr. Claude Gravelle: And what would the cost be, roughly?

Mr. Peter Mackey: The cost...we're still incurring it, because some of it we purchase in bulk, and some of it we purchase through the Government of Nunavut through their petroleum products division. This isn't the straight cost per litre, but the cost to pay the contractor and the community and various other costs. I expect our budget for the 45 million litres to be somewhere around \$55 million.

Mr. Claude Gravelle: That's \$55 million per year, roughly?

Mr. Peter Mackey: That's per year—and growing.

**Mr. Claude Gravelle:** I see also in the information that was given to us that the city of Iqaluit is expecting to grow over the next several years, and I also see that geothermal is a process that could be used.

Have you thought about any new homes built in Iqaluit being heated with geothermal?

**Mr. Peter Mackey:** I think about all opportunities for alternative energy within Nunavut, and certainly within Iqaluit, seeing that it's our largest consumer of diesel fuel. Unfortunately, it's limited to thinking, because when I get beyond thinking, in terms of trying to do some investigation beyond that, I need the dollars to do it, and we put the limited capital budgets that we have into replacing engines rather than looking at alternative sources of energy.

**Mr. Claude Gravelle:** If you were to heat more homes with geothermal, that would decrease the cost of diesel. Is that correct?

**Mr. Peter Mackey:** The 45 million litres of diesel that I talked about is purely for electrical generation. Diesel for heating homes is a separate volume of diesel. But yes, if you were able to do it....

We do that. The only single alternative energy that we have working right now is district heating systems that we've installed in 13 different communities. These take the heat from the diesel engines, as well as the exhaust gas heat recovery, and we use it to heat large buildings within the communities.

We've recently created a small group within Qulliq Energy Corporation whose sole focus is to expand those district heating systems throughout all the communities, in large part because we're moving forward aggressively with the replacement for the 17 plants that are at or near the end of their design life. Incorporated within the new designs are district heating systems to provide heat throughout all the communities, to displace the need for diesel-fired boilers and use the heat from the engines....

The Chair: ...[Technical difficulty—Editor]....

• (1020

**Mr. David Anderson:** Is there any openness to that in the territory? Is it anything realistic in terms of cost, do you think? I know that they talked about using them in mine projects. Perhaps communities could benefit as well. Have you looked into that? Do you have any thoughts on that?

**Mr. Peter Mackey:** I have looked into those on several different occasions. I've had discussions with various proponents of those. They've come in and provided presentations for us.

If these met federal and territorial regulations in terms of their being allowed to be installed, these would certainly be something we'd be interested in looking at. Given the potential, I think our ability to get a regulatory process through for hydro is going to be much quicker than getting a process through to install mini-nuclears in different communities.

**Mr. David Anderson:** Does the price point look as if it's practical?

**Mr. Peter Mackey:** It's substantially better for mini-nuclear over hydro.

Mr. David Anderson: Okay. That's interesting.

Mr. Bradley, do you have any comment on the development of these mini-nuclear reactors as power supplies?

**Mr. Francis Bradley:** I don't have anything specifically on those, but generally, we're seeing a lot of innovation taking place broadly, not just in the electricity system around the world but also here in Canada.

An example of a really innovative project that may have application elsewhere is a project that Newfoundland and Labrador Hydro has been working on, specifically for remote communities served by diesel. This is a project called Ramea. What they've been doing is integrating wind, hydrogen production, and diesel. It's an example of an innovative approach. In effect, when the wind is blowing, and it's producing more electricity than required by the remote community, excess electricity is used to produce hydrogen. Then when the wind isn't blowing, the hydrogen is used to produce electricity.

What we've developed here, as an example of some really innovative technology in Canada, is a system for controlling that. It's something that probably will be adaptable in terms of a control system for any variety of different types of remote communities and different types of generation.

**Mr. David Anderson:** It fits into your earlier discussion about a smart grid, and you looked like you wanted to react to that.

Mr. Peter Mackey: Yes, I do. Thank you.

We've actually put a proposal in to the federal government for a similar project. We've partnered with WEICan out of Prince Edward Island's PEI Energy Corporation. They have a prototype working for a hydrogen/wind district heating diesel system already in place in P. E.I. We've expanded that into a large scale project for Cape Dorset within Nunavut. We've made a request to the federal government for development funding for that, moving it from a prototype to reality in the community.

As you've indicated, the difficulty with wind in any community is that if tie it into a diesel system and the wind dies off, you don't have sufficient diesel spinning capacity and you lose power in the community and have to reboot back up. What we were looking at there was the creation of hydrogen storage, then using the hydrogen within the diesel-hydrogen generator sets. Excess wind from that also goes into a heating system, so the district heating system for the whole community is fed off of all of that.

The benefit of this type of system is that it provides stability. You're not worried if the wind dies off or if you don't have sufficient diesel-generator sets on to provide the heat for the communities, because you're storing that heat from the wind.

**●** (1025)

The Chair: Thank you, Mr. Anderson.

Mr. Calkins, you have up to five minutes.

Mr. Blaine Calkins (Wetaskiwin, CPC): Thank you, Chair.

Thank you very much for coming in here today. Mr. Bradley, I would like to ask you a few questions first.

I spent a little bit of time in the Northwest Territories when I was a much younger man and I was impressed with the vastness of the area up there and the large distances between the communities. There are a lot of issues pertaining to the Arctic and subarctic regions when it comes to development.

It's one thing to build a dam in the Rocky Mountains and then have your transmission lines going around. We can put transmission lines anywhere; it's amazing what we're able to do. We go through all kinds of terrain, crossing rivers, and so on, and it's great stuff. But there are some challenges in the Arctic and subarctic if you're going to do this. There's permafrost, and there are other types of issues.

For the benefit of the committee, could you speak to some of those challenges, and to the nature of the environment up there that might make it difficult to do some kinds of larger developments, especially when it comes to transmission?

## Mr. Francis Bradley: Sure.

If you look at some of the developments that have taken place in remote locations, for example in the James Bay region, and look at the challenges that they had there in developing large hydroelectric power in that region, and multiply that by four, that's basically what you're looking at.

When you get up farther north, those problems are just further exacerbated in terms not simply of just running the project, but in fact building the project. There are challenges of moving equipment, of building access to those facilities, and things as simple as Mr. Mackey mentioned earlier, such as not even having cranes in some of these areas. First off, there is the challenge of getting equipment up to these locations, and then there is the whole issue around the geography itself, which is clearly more challenging than it would be in the south.

On the other hand, the benefits are significant. While we were talking earlier about whether or not it's economical to do some of these projects, specifically on a strict business case basis, we need to look beyond that. We need to look more broadly at overall, holistic impacts. It isn't just a question of the cost, for example, of putting in a hydro facility in the north and there being a reduction in the cost of diesel.

There's a greater benefit, not just to the customers who would be getting supplied with a source of more reliable and cheaper power, but there's also a benefit to the airshed as a whole if we're moving away from diesel. So that isn't just a benefit to the people in the north, it's a benefit to Canadians and, in fact, to people all around the world.

Mr. Blaine Calkins: Thank you very much.

Mr. Mackey, I'm going to ask you a quick question just for my own personal amusement.

When I was a fishing guide on Great Bear Lake—and that's what I was doing in the Arctic when I was a younger man—we had a fully self-contained lodge and a couple of diesel electric generators, and it was noisy. We had a noise abatement wall, but given the confined space.... Do we have any issues of noise or any of those air quality issues from diesel generation in any of your communities?

I can't imagine what the size of these diesel generators would be to power communities of 7,000 people; they must be absolutely huge. Given the fact that around December 21 there's no natural light at all, there must be a huge demand for electricity in those particular seasons, probably the coldest and hardest seasons to keep diesel generators going. Could you speak to some of the quality of life issues that might affect people who rely on diesel generation?

**●** (1030)

Mr. Peter Mackey: There's a variety of things there.

One, within the design that we utilize for the diesel power plants, obviously, we're looking at reducing the noise as much as possible. As well, we have to look at the exhaust systems and particulates and ensure that they aren't brought in or ingested by any other building nearby. Typically, it's a struggle. We want the power plant in the community because of the ability it gives us to take heat from it and heat some buildings and reduce fossil fuel consumption, but then we're also sticking it in a community. We have the noise that's there.

Speaking as a person who is responsible for electricity, I like to hear the sound of the power plant. When I don't hear it, then I'm nervous as heck because it's 40-below and we have trouble.

Some hon. members: Oh, oh!

Mr. Blaine Calkins: You know there's a problem.

## Mr. Peter Mackey: You're right.

But these power plants within the communities are second nature. They've always been there. The sound isn't an issue.

**Mr. Blaine Calkins:** It's like having a train in town. Everybody gets used to it after a while.

Mr. Peter Mackey: You do, yes.

The people in the community only become alarmed when it's quiet, and then they know there's an issue and they had better go and check what's going on.

So it's normal. It's everyday life. It's been that way forever.

Mr. Blaine Calkins: I have a question for both of you.

During this study of northern development we've heard a lot about some of the issues pertaining to the whole regulatory process, when we hear from mining companies, when we hear from those who are seeking to make investments. They would be no different from your organizations.

If I go to the handout that you have given us, Mr. Bradley, I see this chart, going from left to right, from planning, through the environmental assessment process, to permitting, and the follow-up. We have so many different streams that have to be managed, depending on what you have to do, whether it's the Canadian Environmental Assessment Act, the National Energy Board, the Nuclear Safety Commission. The list here is quite exhaustive.

What percentage of the costs of any new development or any new exploration of such comes from just navigating the bureaucracy and paying for all of the requirements, the legislative requirements, that the Government of Canada has in place?

The Chair: Mr. Calkins, your time is up.

So, gentlemen, perhaps you could give extremely short answers, please.

Mr. Francis Bradley: Okay.

The cost of the regulatory process will be different for every single project, so there isn't a specific percentage. Different types of projects have different types of costs.

The other point, though, is that this chart only deals specifically with our industry and the federal government. There are often also provincial processes that take place. Particularly with respect to the environment, they often duplicate each other. What we're doing federally is duplicating a process that is taking place at the provincial level.

The Chair: Okay, thank you.

We go now to Mr. Julian, for up to six minutes, please.

Mr. Peter Julian: Thank you, Mr. Chair.

I'd like to come back to Ms. Blake. Your Worship, I just wanted to clarify a few things.

First off, because the federal government has not confirmed funding for the airport expansion at this point, does it mean that the municipality is actually borrowing the additional funds that are required for the full cost of the airport expansion? I ask because that

work has already been undertaken, has already started. So I imagine that if the federal government is not there, you're borrowing to finance its portion.

Mrs. Melissa Blake: That is what's happening. It's not under municipal jurisdiction. Last year we created something called the airport authority, which gives them independence in seeking out financing. That's where we've come in as a contributor. But, honestly, the rest of it will be by debenture borrowing.

**Mr. Peter Julian:** That does put additional pressures on the municipality, does it not?

Mrs. Melissa Blake: I would suggest not. They have a business case that justifies not only the need for it but also its financial viability. If the economy takes a turn like it did in 2008 and 2009, there may be some risk associated with the debt that they're carrying for the duration of that loan. The concerns that they have are about what expense or burden would be borne by the travellers themselves. So in terms of being able to get some relief on the capital side of things, it just makes their business plan even more secure as they go into the future.

**Mr. Peter Julian:** Putting it another way, if the federal government were involved it would make a difference to getting the project through to realization?

Mrs. Melissa Blake: It would. The security of the project, because of the expense, is something that's concerning.

Mr. Peter Julian: I'll just move on to another subject.

You mentioned that you'd love to have 10 more doctors today. Is that your estimate of the shortfall right now in physicians in the Wood Buffalo municipality?

**●** (1035)

Mrs. Melissa Blake: It isn't. I don't speak for health, but I predicted that because of the population growth that we've been experiencing, there's been a better representation of doctors. Many of them, again, are probably coming through immigration programs. So we have a lot of doctors who have come to the community. I'm not sure what their longevity will be here. If they're looking for opportunities in other parts of Canada, we may lose some over time. Attrition is just a usual part of the process.

In terms of the needs for and the access to specialists, it's another area. So when I say 10 doctors, it's a bit of a flippant response because I don't represent the health region. But it just seems from the commoner's perspective that it would make sense.

Mr. Peter Julian: Further on health care, I've spoken to people in the health care sector in Fort McMurray. They told me that one of the problems the health care system is experiencing is that subcontractors are not providing health care for the workers they're bringing in from outside Canada. Of course, Canadian workers have access to our universal medicare plan. But the foreign workers, if they're not covered by health insurance, can in many cases rack up huge bills when they go to the hospital. So they're unable to pay those bills, and because the subcontractors have not provided health care insurance, the health care plan does not pay. In other words, taxpayers pick up the tab. Is that a problem and pressure that you're familiar with?

**Mrs. Melissa Blake:** It's not anything I'm familiar with at all. I know that many companies have doctors on site. If they're large enough, they typically have a physician, but they are not for your regular maintenance. They are for back-to-work type of analysis.

I would hope foreign workers are able to purchase programming on their own. I have a live-in caregiver that I don't provide health care for, but I know that she's accessed Blue Cross and is taking care of her own needs that way.

**Mr. Peter Julian:** I'd like to move on to the twinning of Highway 63.

How much of the area to Fort McMurray has actually been twinned? I think it's 500 kilometres in all, is it not? What percentage of it has been twinned at this point?

Mrs. Melissa Blake: The full length between here and Edmonton, south of Fort McMurray, is about 450 kilometres. Highway 63 goes to junction 55 at Grassland and Lac la biche. That is about a 250-kilometre stretch. About 18 kilometres, if I remember right, are paved and functional right now. About another 30 kilometres should be paved and operational for next year. The other stretch in that area just hasn't come to any semblance of being usable in the near term. The time it takes to get a drivable road is one of the things we're combating right now. We have a huge community outcry to see that road twinned as expeditiously as possible.

Mr. Peter Julian: Thank you for that.

I'd also like to talk about schools and other infrastructure, because you've raised that in previous testimony before this committee.

When you look at the education sector and some of the social services as well, back in 2006 you raised real concerns about the funding in those sectors not keeping up with the growth of the municipality.

How would you evaluate that today? Start with the school system and teachers and the funding needed to make sure that schools in Fort McMurray and Wood Buffalo are adequate for the population.

Mrs. Melissa Blake: I'd like to think that change occurred because of the case that we pleaded before the Energy and Utilities Board in 2006. The first funding announcement in 2007 from the government of Alberta included a cost-of-living adjustment available to those workers. Whether in child care, teaching, or health care, they receive an additional \$1,040 a month to offset the additional cost of living in the region.

We have developed the Housing Development Corporation, and a portfolio exists to accommodate some of those similar workers in more affordable housing spaces. If you have a single income as a teacher, nurse, paramedic, emergency services person, or policing staff, you'll have access to some of these housing units. We don't have enough of them, but certainly have some that helped keep teachers in the community.

The Chair: Thank you, Mr. Julian.

We go now to Mr. McGuinty, for up to five minutes.

(1040)

Mr. David McGuinty: Thank you, Mr. Chair.

Your Worship, I have a quick question on health care.

Are there private international health care companies operating in your municipality now providing health care services for folks working in the oil sands sector?

Mrs. Melissa Blake: Not that I'm aware of. We do have independent medical laboratory testing facilities, so if you're going for pre-employment tests, some of these facilities are obviously private.

**Mr. David McGuinty:** Is that outside your jurisdiction or municipality?

**Mrs. Melissa Blake:** Yes. These are just businesses. They'll do pre-employment testing for things like hearing, lung functionality, and drugs and alcohol before people get on-site for their jobs.

**Mr. David McGuinty:** International SOS out of Philadelphia and Singapore is running and building clinics and staffing doctors in Kearl Lake. Aren't they providing clinics and health care services for residents and workers there?

**Mrs. Melissa Blake:** Again, if it's on the site, I don't necessarily know anything about it, and if it's in the health spectrum, it's not something I have responsibility for.

Mr. David McGuinty: Thank you.

Mr. Bradley, can I go back to some of the remarks you made, prompted by Mr. Anderson, about regulatory reform and duplication and triplication? There has been an awful lot of talk about this.

Last week, media reports based on access to information requests indicated that the federal cabinet was briefed by the Canadian Environmental Assessment Agency. The officials there at the time told the Minister of Natural Resources and his colleagues that there was no serious problem with duplication across Canada when it came to environmental assessment.

Let me ask, has the CEA done an analysis of these duplication challenges? Do you have a text or research document you can provide for us on behalf of your members?

**Mr. Francis Bradley:** We have done some work but it was prior to the creation of the major projects management office. It would be dated, but we can certainly get that information to the committee if it would be helpful.

I think that a number of my members would respectfully disagree with the view that there isn't duplication. Clearly, there is, for example, between federal and provincial processes. We don't see why there needs to be direct and straight duplication of a federal process when the provincial process has already taken place or is taking place.

**Mr. David McGuinty:** In this budget bill document that we're dealing with now in the House, the government has put in a huge swath of change under the rubric of regulatory reform and improvement.

Were you invited to participate in any kind of consultation process to provide your members' good experience and front-line learning to help inform that policy?

**Mr. Francis Bradley:** For years we've been discussing with officials in the department and with members of Parliament—

**Mr. David McGuinty:** In the last year, was there a meeting that involved, for example, a multi-stakeholder deliberative process or an outreach? Was CEA asked to provide a brief, say a 10-page brief, on the practical changes that ought to be contemplated by legislators?

Mr. Francis Bradley: I'm not certain if we formally provided a brief specifically in that context within the past year. It has been included, for example, in some of our pre-budget consultation documents over the last number of years. We've addressed issues of regulatory duplication, and at every opportunity and meeting that we've had with government officials it's something that we've discussed.

As I say, it's not an insignificant issue. Again, regarding the suggestion that a provincial process is somehow inferior to a federal process, I would suggest maybe talking to some of the proponents who have appeared before—at least in my home province—the [Translation]

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in Quebec. They would suggest that the process they've gone through, the BAPE, has been fulsome and complete.

The Chair: Thank you, Mr. McGuinty.

Our time is up for the meeting today.

Thank you very much to all of the witnesses today for providing us with some very useful information for our study.

We will return to this study on Thursday.

A point of order, Mr. McGuinty.

**Mr. David McGuinty:** On a point of order, Mr. Chair, could we have the clerk follow up on Mr. Bradley's commitment to bring the research documentation he has on the northern Canadian energy demands going forward? We talked about hiving off some work that was done, and I'm not sure if Mr. Bradley would be able to pull that together for us.

Can we make sure that we follow up on that?

**(1045)** 

The Chair: That will be followed up on.

Thank you again, Mr. Bradley, Mr. Mackey, and Mayor Blake.

The meeting is adjourned.



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