

# Legislative Assembly of Alberta The 27th Legislature Second Session

# **Standing Committee on Resources and Environment**

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\* substitution for Diana McQueen

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# Standing Committee on Resources and Environment

# Participants

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Glenn Hennig	
Al Nagel	
Merv Rockel	
Independent Power Producers Society of Alberta,	
Capital Power Corporation, Enmax Corporation	RE-191
Evan Bahry	
Gary Holden	
Brian Vaasjo	

#### 6:30 p.m.

### Wednesday, November 4, 2009

[Mr. Prins in the chair]

**The Chair:** Well, good evening, everyone. I'd like to call to order the meeting of the Standing Committee on Resources and Environment. What we'll do first is introduce ourselves for the record. Those members that are attending as official substitutes, I'll just ask them to indicate that on the record as well.

A couple of things. You don't have to touch your mikes – *Hansard* will look after that – and keep your BlackBerrys off the table because it interferes with the mikes.

I'll start. My name is Ray Prins. I'm the MLA for Lacombe-Ponoka.

**Ms Blakeman:** Thank you, Ray. My name is Laurie Blakeman, and I'd like to welcome each and every one of you to my fabulous constituency of Edmonton-Centre.

Mr. Hehr: Kent Hehr, MLA, Calgary-Buffalo.

**Mr. Taylor:** Dave Taylor, MLA, Calgary-Currie. This is where it gets a bit confusing because I'm actually substituting for Kent Hehr tonight. He won't be here for the entire meeting, he tells me.

Mr. Jacobs: Broyce Jacobs, Cardston-Taber-Warner.

**Mr. Dallas:** Good evening. Cal Dallas, Red Deer-South, substituting for Diana McQueen.

Mr. Denis: Good evening. Jonathan Denis, Calgary-Egmont.

**Dr. Massolin:** Good evening. I'm Philip Massolin. I'm the committee research co-ordinator for the Legislative Assembly Office.

Mr. Hinman: Paul Hinman, MLA for Calgary-Glenmore.

**Mr. Boutilier:** Guy Boutilier from the oil sands capital of the world, Fort McMurray.

Mr. Berger: Evan Berger, MLA, Livingstone-Macleod.

Mr. Drysdale: Wayne Drysdale, MLA, Grande Prairie-Wapiti.

**Mr. Oberle:** Good evening and welcome. Frank Oberle from Peace River.

Mrs. Sawchuk: Karen Sawchuk, committee clerk.

**The Chair:** Thank you, everyone. I'd like to move on to the next item on the agenda, and that is approval of the agenda. Before I do that, I'm just going to give notice that under other business I'll be raising an issue of reporting, so there might be a short discussion at the end about reporting this meeting. That'll happen at about 8:55.

With that, I would like to have a motion that the agenda for this evening, November 4, 2009, be accepted as circulated.

### Mr. Oberle: So moved.

**The Chair:** All in favour? That's carried. Thank you very much. The committee is meeting this evening to hear from groups who are presenting on issues within the committee's mandate as set out in the standing orders. That specifically is Standing Order 52.08(1): "A Policy Field Committee may hold public meetings on any matter within its mandate." That's the purpose of the meeting tonight. The committee does not currently have any bills before it for review, so it is expected that the presentations being received this evening are matters of general interest to the committee within the scope of its mandate.

I think our first presentation will start right now, and it'll last till 7 o'clock. We'll have a five-minute break after the first presentation before we move into the second one.

Our first presentation is by the Alberta Federation of Rural Electrification Associations. Gentlemen – and I believe it's Mr. Glenn Hennig – I would ask you to start your presentation. I think you've got about 15 minutes to present this document. I believe it's handed out, is it not? It might be handed out, or it'll be on your overhead.

Mr. Hennig: That's the one that should match up to the overhead.

**The Chair:** I'll give you a little warning when we're just about done, and then we'll take questions. I'll look after the question list. Go ahead, please.

#### **Alberta Federation of Rural Electrification Associations**

**Mr. Hennig:** Okay. Thank you very much, Mr. Prins. With me here today are the president of the Alberta Federation of REAs, Merv Rockel; one of the board of directors of the Alberta Federation of REAs, Harvey Yoder; and our chief executive officer of the Alberta Federation of REAs, Al Nagel. When it comes to the questions, they'll be assisting me and taking some questions as well.

The presentation is very quick. We wanted to get into some questions and answers, so we'll just get right into it. We're talking about the electricity market in Alberta. The electricity market in Alberta is very, very unique. There's no other market like it. By unique I mean it's really unique in that one amazing factor of the Alberta market is that it has what's called an 82 per cent load factor, which means that at any given time 82 per cent of the electricity in Alberta is being used.

Quite often in our discussions with the different people who have tried to come in and talk about the electricity market, they've always talked about what they do in Texas or what they do in Florida or Cal Ed, California Edison, but all of these other markets have 12 million to 15 million meters. Alberta has just around a million meters. So it's really a different market.

Alberta is an island. We're very, very poorly connected to any other jurisdiction. That prevents us from taking advantage of some offsetting advantages in our market that other jurisdictions can provide us with. Some of the offsetting advantages are related to time of day, time of use, and peak consumption hours. Because of our limited connectivity to other markets, we're really islanded here in North America, and that's quite different than many other jurisdictions.

Price in Alberta is driven by uncertainty factors, factors that are completely unpredictable. Basically, the price, the wholesale price or the pool price, in Alberta is driven by two factors. One is wind generation. When the wind starts to blow, prices come down, and that's completely unpredictable. The other is coal outages. Our coal fleet is getting older, and coal outages are, again, completely unpredictable. When they go out, the price goes up. There is no correlation between time of day, season, peak demand. Alberta is just very, very unique in that respect. So solutions for an effective and functioning market have to have unique Alberta solutions. We can't import solutions from any other market, be it California, New Jersey, Texas, and we hear quite a lot of that.

In the RRO market here, the regulated rate option, who are the providers? There is a list of them: the Battle River REA, Central Alberta REA, the city of Lethbridge, Direct Energy, Duffield REA, Enmax, EPCOR – they're all in alphabetical order – Ermineskin REA, Lakeland, Manning, Mayerthorpe, Niton, North Parkland Power, Peigan, Rocky, South Alta, and the Wild Rose. In the RRO provision world you can see that the REAs handily outnumber anybody else, and that's something we take a lot of pride in. The asterisks on this page denote companies that also offer fixed-price contracts. I will say that when it comes to affiliated retailers, Battle River REA, just out near Camrose, was actually the first retailer licensed in Alberta, so the REAs have been leading the way in trying to develop the electricity market in Alberta.

Competitive retailers. This goes back to 2004. I'm missing a few, but these are the major ones. There was Alberta Energy Savings – that was the old EPCOR retail book – BP Canada energy, Constellation Energy, Coral Energy, Direct Energy, Enmax, EPCOR Merchant and Capital, IQ2, Nexen Marketing, TransCanada, and Valeo Power. We're only talking about electricity here. There are some other niche players. I think some of the cattle feeders and some in the AAMD and C had specialty retailers that helped them with their power purchases.

There has been a large amount of consolidation in the competitive retail area, and if you just follow the dashes, Alberta Energy Savings has changed their name to Just Energy. They sell dual fuel only contracts, no more electricity, just dual fuel, gas and power. BP Canada about two years ago sold out to Enmax. BP Canada used to sell to a lot of the Hutterite colonies, and they had a whole bunch of other business around the province. Constellation Energy sold to Nexen just this February. Coral Energy has withdrawn out of the market. Direct Energy is dual fuel only. You can't buy an electricity contract from Direct Energy anymore. Enmax, EPCOR Merchant and Capital withdrew. IQ2 is out of the market. They were a niche player. Nexen Marketing is still in business but actively being shopped. TransCanada has withdrawn out of the retail market, and Valeo Power sold out to Enmax, oh, about three or four years ago.

In the competitive retailing area the only retailer that's left offering electricity contracts is Enmax and Nexen Marketing in the commercial and small-industrial market. So choice has kind of gone way down to the left, and I think that's a concern for everybody when you don't have a heck of a lot of choice in the market to have some checks and balances. I think that people should really be concerned.

Competitive retailers. Every retailing sector has retailers that migrate in and out, and that's normal. Retailers enter markets based on business risk, potential for profit, cash-flow requirements, stability of market structure, and where barriers do not artificially favour incumbents. When risk liability and the opportunity for a profitable return are not in balance, retailers close up shop and leave. I will say this: I believe that the Alberta electricity market is not in a normal state.

#### 6:40

Just one observation, and these are mine. The competitive market has been compromised by one dominant player. Predatory pricing has caused all participants to exit the Alberta market. Please note that this current player, I believe, cannot continue on their chosen path unless they achieve further competitive advantages. I don't think the scenario is sustainable. These are my concerns.

Market power. Some of the things that have gone on. In August of this year there was a 240 kVa line proposed in southern Alberta,

and Enmax intervened. I don't know why because they had wind generation in the area. The only thing I can think of is that if they keep constraints in the system, it'll make their investment in wind more secure.

Bill 50 campaign. In October '09 Enmax organized the publicity campaign to defeat Bill 50. In my opinion, this is not about transmission at all. I think that if you retain the constraints in the Calgary-Edmonton line, which is the major Bill 50 focus, you make proposed generation in Calgary more valuable, and I think that would end up in giving companies market power.

These are my observations. Why do they seek market power? This was given to me by a Calgarian. Since 2003 Enmax sales have doubled; however, net earnings remain flat. Dividends paid to the shareholder are the same, at \$50 million, with no increase. The interesting thing that this Calgarian showed me was that the long-term debt has increased, from about \$161 million to about \$1.025 billion. Enmax isn't alone in this. If other companies had similar opportunities, I believe other companies would try similar tactics. What I'm getting at here is that the government cannot allow any business – and it doesn't matter what the name of that business is – to influence government policy for selfish corporate interests. It really doesn't matter what the name of the company is. The big loser here is the consumer, and they lose on two fronts. They lose in the area of choice, and they lose in the area of cost.

Rural electrification associations are at risk. The 13 areas of retail are under increasing threat from a competitor that doesn't seem to follow the same rules of accountability. In REAs we can compete very well with competitors that use the same sound business practices. In my opinion, the Alberta government is at risk here, too. Decisions always have to be made in the interest of the public good. I think you have to be concerned about a municipality taking on more debt. I think – well, I know – that your industrial base is also at risk with reduced competitiveness in the electrical market, and ultimately your consumers are at risk.

The curtain is closing fast. The deregulated electricity market will soon need to be reregulated. I will say this: unwinding deregulation will only be accomplished at tremendous cost to the government and Alberta consumers. Should you want to unwind it, it's difficult to believe that all the past work can be undone and dismissed as just a fruitless experiment. A return to regulation will bring many demands from companies for compensation. I think costs will be very, very high to exit the system, and Alberta's reputation would be irreparably harmed if we ever tried to turn back the clock.

I want to get on to the green sheets. What needs to be done? I would suggest that the government should take a strong autocratic hand to address underlying market problems, take control instead of continuing with the current process that has stalled market development. If a competitive market is not restored, our industrial base will be at risk, too.

Small retailers can continue to develop this market. Encourage them. Don't put up barriers. Allow REAs to sell electricity outside of their boundaries. Encourage the use of self-retailing as a viable option. I think the Department of Energy must abandon their fixation with fixed-price contracts as the only solution for customer salvation. Continue the RRO after 2011. Reduce prudential requirements for all market participants to prepay and maintain on deposit with AESO a sum equal to one month's power pool invoice. Reduce the size of prudential for retailers at Service Alberta relevant to the size of their customer base.

Market participants today. There's Battle River, all the REAs, EPCOR, Enmax. There's a new one, just a couple of weeks ago, called Spot Power, a little guy who wants to sell to 2,500 customers.

The REAs' role in this. I would say that if you look at the list of the number of participants, REAs are in the best position at this time to carry market development forward. These 13 REAs in the province have the necessary infrastructure to do the job. REAs use sound accounting and risk management practices necessary to compete and survive in a fair marketplace. You know, REAs are very big business in the States. Montana, Minnesota, North Dakota, and Alaska all depend on REAs for their power.

In summary, there's no excuse for delaying any longer. Delays only play into large corporate interests that will eliminate competition and choice. Develop unique Alberta solutions. Imported solutions are allowed. REAs through the Alberta Federation of REAs will assist in leading the growth of Alberta's retail market. We're here to work toward those goals.

I end here for questions.

**The Chair:** Thank you very much, Mr. Hennig. We'll go directly to questions. The way it works is that we'll have a government member and then an opposition member and alternating back and forth.

We'll start with Mr. Broyce Jacobs.

**Mr. Jacobs:** Thank you, Mr. Chairman. Thanks for the presentation, Glenn. Really interesting. I believe I heard you say at one point, to begin with, that when the wind blows, the price of electricity goes down. Did you say that?

Mr. Hennig: Yes, I did.

**Mr. Jacobs:** Well, where I live in southern Alberta, electricity should be free because the wind blows almost constantly.

Anyway, my question, then, relates to transmission. You know, is it true that wind development in southern Alberta has been limited because of a lack of transmission?

**Mr. Hennig:** Yes. That's the information that I have. That's true. The information I also have is that there are about 11,000 megawatts of proposed wind generation for the province. That's almost equal to our current supply. But when I talk to the AESO, they say that one of the major problems is transmission, getting it into the grid.

**Mr. Jacobs:** Then could you elaborate further on the need for increased transmission not only in southern Alberta but in Alberta and especially in light of how it would benefit REAs?

**Mr. Hennig:** Well, it benefits REAs in that, you know, if there are more players in the market, the market gets more competitive. If there's more wind, it's probably likely that the price will be driven down more. In that way the REAs that retail, like Lakeland and a number of the others, the list that I had shown up there on the last slide, would certainly benefit as would any other member of the public.

**Mr. Jacobs:** Can we continue to function without more transmission?

Mr. Hennig: No.

**The Chair:** Okay. Thank you very much. Mr. Guy Boutilier.

**Mr. Boutilier:** Thank you very much, Mr. Chair. Thank you for your presentation. I found it very interesting, and we look forward to all presentations tonight.

Mr. Chair, through you as a question. It has been indicated from the Minister of Energy's office -I think it was the parliamentary

secretary – that this committee meeting, in actual fact, could have an impact on the bill that's in front of the Legislature right now, Bill 50. In light of the comments that were made earlier, I just need some clarification on that because, again, what I read in the media was that this committee tonight will be a process that could perhaps play a role in Bill 50, that's in front of the Legislature. I appreciate your comments at the beginning indicating that there are no bills. Could you help clarify that issue for the benefit of everyone that is here based on comments that were made?

**The Chair:** Well, there are no bills currently before the field policy committees that have been referred from the Legislature, so the debate on Bill 50 will happen in the House.

**Mr. Boutilier:** Thank you for that. The question, "Is there an expectation that this proceeding tonight will have an impact on what is in front of the House?" is what I had read.

**Mr. Oberle:** Mr. Chair, if I might interject, I guess, on a point of order, and that is that Bill 50 is before the House. It's not referred to the committee, as you stated. Given that, it's improper for us to debate Bill 50 here. The chair said that we will be forwarding a report to the minister, and it's up to him how he's going to deal with that. But the debate on Bill 50 cannot happen in this committee because the bill is not referred. The debate happens on the floor of the House. All we can do is entertain presentations and forward to the minister.

6:50

**The Chair:** That is correct. The information that's presented tonight is just information related to transmission and electricity in Alberta. Any member can take home from it what they want. We will most likely present a report, depending on the motion at the end of the meeting, but tonight's meeting is not about any bill.

**Mr. Boutilier:** Okay. I appreciate that. I wasn't quite sure what the point of order was, but maybe the member could indicate what that point of order was. I was looking for clarification in my comment to the chair.

**Mr. Oberle:** Sorry. It may be incorrect terminology. Not point of order. Point of clarification or something. I'm just trying to help out.

**The Chair:** It's not a point of order. Okay. Is that clear? Go ahead with your question.

**Mr. Boutilier:** The most important question today, if I understand correctly, is you talked about if, in fact, the government were to get involved in going back from deregulating to reregulating was the term.

Mr. Hennig: I suppose, yeah.

**Mr. Boutilier:** It's not often we hear that because I think we all know what we think of regulation. Having said that, in 30 seconds give me a road map of what you mean. What would be the next step of the government if they were to proceed in that manner?

**Mr. Hennig:** The next step would be trying to get a whole bunch of retailers involved in the market, and it is an extremely small market. You know, only 18 per cent of the power is really traded between consumers.

Just a comment. I didn't mean to talk about Bill 50 in terms of Bill 50 and transmission. It was in terms of without proper infra-

structure you will run the risk of companies gaining market power, which you don't want.

**Mr. Boutilier:** Thank you. Thank you, Mr. Chair.

**The Chair:** Okay. That's your question? Mr. Paul Hinman.

**Mr. Hinman:** Well, that kind of answered it. My first question was going to be: if Bill 50 isn't about transmission, what is it about, then?

**Mr. Hennig:** Bill 50 is about transmission. I believe the opposition to Bill 50 is about market power.

Mr. Hinman: Okay.

The Chair: Are you finished?

Mr. Hinman: Yes.

The Chair: Okay.

**Mr. Jacobs:** I was interested in your comments about the competitive market versus reregulation/deregulation. You know, some of us actually believe that deregulation would make a more competitive market. I think there are some benefits to deregulation. In Alberta we pay for the electricity when we use it. There are other jurisdictions who actually subsidize electricity in other ways. But in Alberta we intended to create a good market for electricity. I wonder if you could elaborate on the comment you made about the competitive market versus deregulation/reregulation. I didn't quite understand exactly what you meant by that, so could you elaborate on that, please?

**Mr. Hennig:** Well, if you were to go out today and wanted to buy an electricity contract for your home, there is only one company that sells it, one. If you only have one company in the business, I'm assuming that you would probably in the future want to start regulating a monopoly because that's what it appears to be out there.

Mr. Jacobs: If I may, one supplemental.

The Chair: Go ahead, please.

**Mr. Jacobs:** Explain to the committee, please, how REAs function. We have several REAs in Alberta. I've always had a great deal of respect for the work REAs have done. As a matter of fact, you know, in rural Alberta they were the guys that actually formed coops and started getting electricity to rural people. Some people have kept those co-ops intact. I, unfortunately, don't live in such an area, but I know many who do, and they actually get very good service and very good power rates. When you say that we only have one supplier, I thought REAs supplied. You know, you have several REAs. How do you justify or reconcile your statement of one supplier when you have many REAs?

**Mr. Hennig:** The REAs currently are restricted to only offering competitive contracts within their REA. That doesn't apply to the affiliated retailers across the province. The REAs that do sell competitive contracts do sell only within their own boundaries.

The other point that you raised I think speaks to another issue, and that's the issue of electricity as a product or a commodity. Retailers only sell products. Wholesalers and other companies sell products. When it comes to the REA world with your service, your connectedness with your customer, we've turned electricity and that whole bundle of services that are connected with it into a product. I had a discussion with the UCA a little while ago, and they were talking about the commodity. I reminded her that if you're dealing with consumers and retailers, it's products. There's a different mindset around that that has to be gained.

The one thing I have not found in the Department of Energy or anything around electricity deregulation is one single person in the government who has any retail experience. We're talking about retailing. There's not a single retailer in the group. Should be one.

**The Chair:** Okay. Satisfied? Thank you very much. Mr. Dave Taylor.

**Mr. Taylor:** Thank you very much, Mr. Chair. Mr. Hennig, I'm trying to wrap my head around one thing that you said here, which goes back to your slide on the Bill 50 campaign that Enmax organized last month. You said that "Enmax wants to retain constraints in the Calgary/Edmonton line, making their 'proposed' investment in generation more valuable, and giving them market power in the fastest growing part of the province."

Now, I am still trying to wrap my head around many things having to do with the science or witchcraft of electricity. I'm not sure which it is. But it would seem to me that if deregulation is working at all – and the power producers seem to think that it is at the wholesale level – this constraint issue wouldn't even come into the picture. If generating close to load makes sense for Enmax, I can't understand why it wouldn't make sense for EPCOR or anybody else who wanted to get into that game. If Calgary is the largest, most attractive, fastest growing electricity market in the province – and Enmax apparently seems to think so because they want to build more generating capacity in the Calgary area – what's to stop the other generators from doing the same thing? If they were, you'd get a competitiveness at that level, and it would seem that you don't need the tremendous transmission capacity that's being proposed by the AESO in those north-south lines between Calgary and Edmonton.

**Mr. Hennig:** Right. And if I'm in Vegreville, which was the site of the third power utility in Alberta, and I want to get my power to Calgary, how do I do it if there are constraints in the system? I will be shut out, effectively shut out, unless there are going to be some different tariffs for different things. I don't know. But, you know, I'm not talking about Bill 50 and transmission. I'm talking more about how it affects the whole electricity market. I don't see why you'd want to shut out generators from any part of the province, and that would effectively do it.

Mr. Taylor: Okay. Thank you for that.

**The Chair:** We have one minute left, and I'm going to give it to Evan Berger.

**Mr. Berger:** Thank you, Mr. Chair. A couple of quick questions. One would be on the wind generation in the south and all the different companies. Now, is that bought up by one major supplier, then, and then remarketed to you under one or two of the companies? That would be the first question. The next one would be: could you briefly touch on wheeling charges so that we can get a little bit of an understanding of that, if you can do that briefly? **Mr. Hennig:** I'll defer that question. On wind generation we deal with a couple of wholesalers in the market. Where they source it from is up to them.

On wheeling charges, I'll let Merv answer that question.

Mr. Rockel: Could I have another hour?

The Chair: No. You've got about one minute.

**Mr. Rockel:** Okay. Many years ago, when the lines were first installed, the utility company had major lines throughout, and REAs started building the lines out to the various people within their REA. Over the years Calgary Power or whatever company would actually take possession of some of these lines for payment for doing some work. There's always been the understanding that they would use our lines and we would use their lines and that there would be no charges. They would be able to tap off our lines for their oil well services, and we would tap off their lines.

### 7:00

The reason for that was that we'd prevent line twinning. So one company didn't put the line down one side of the road, and the other REA would have to put it down the other side of the road. It was an economical decision. It was always promoted by various people within the government and regulations, and that was accepted by the utility companies.

However, now there are some people who would like to say: well, if the REAs are going to use the utility lines, they should pay for them and vice versa. Right now Fortis is saying: well, we use their lines more than they use ours. We are disputing that in many areas. I'm sure Fortis uses more.

So some of the other intervenor groups would like to see more money being paid by the REAs than they would. There is only so much money, and phase 1 goes to the utility companies, and they would think that because REAs do have a monopoly in their REA, we should pay some of that money. We pay for our lines, and they pay for their lines.

Al, if you have anything to add to that.

**Mr. Nagel:** I don't think so, Merv. You've pretty much summed it up.

**Mr. Rockel:** I tried to do it really fast, but if you want, I'll talk to you later.

**The Chair:** Okay. Thank you very much, gentlemen. That brings us to 7 o'clock. We're going to have a five-minute recess as we change presentation groups. We will reconvene at about 6 or 7 minutes after 7 o'clock. As guests you may stay and listen to the next presentation as well.

Thank you very much.

Mr. Rockel: Thank you for giving us the opportunity.

The Chair: You're welcome.

[The committee adjourned from 7:02 p.m. to 7:07 p.m.]

**The Chair:** Good evening, everyone. I'd like to call this meeting back to order. This is our second presentation this evening. It's by the Independent Power Producers Society of Alberta, or IPPSA, as well as Capital Power, EPCOR, and Enmax.

I'll again ask that we go around the table and introduce ourselves for the record. My name is Ray Prins, MLA for Lacombe-Ponoka. **Ms Blakeman:** My name is Laurie Blakeman. I know there are some people from outside of my fabulous constituency of Edmonton-Centre, so I want to welcome you all, each and every one of you, to my fabulous constituency of Edmonton-Centre tonight.

Mr. Hehr: Kent Hehr, MLA, Calgary-Buffalo.

**Mr. Taylor:** Good evening. Dave Taylor, MLA, Calgary-Currie, subbing in tonight for Kent Hehr, who's here. If anyone wants to stick around after the presentations, I'll explain to them how that works.

Mr. Jacobs: Good evening. Broyce Jacobs, Cardston-Taber-Warner.

**Mr. Dallas:** Good evening. Cal Dallas, MLA, Red Deer-South, substituting for Diana McQueen.

Mr. Denis: Jonathan Denis, Calgary-Egmont.

**Dr. Massolin:** Good evening. I'm Philip Massolin. I'm the committee research co-ordinator, Legislative Assembly Office.

Mr. Hinman: Paul Hinman, Calgary-Glenmore.

**Mr. Boutilier:** Good evening. Guy Boutilier, Fort McMurray-Wood Buffalo.

**Mr. Berger:** Good evening. Evan Berger, MLA, Livingstone-Macleod.

Mr. Drysdale: Wayne Drysdale, MLA, Grande Prairie-Wapiti.

**Mr. Oberle:** Good evening and welcome, all. I'm Frank Oberle from Peace River.

Mrs. Sawchuk: Karen Sawchuk, committee clerk.

The Chair: Thank you very much, everyone.

What we'll do is go to the Independent Power Producers Society. They'll have about a 20-minute overview, or presentation. After that it'll be Capital Power and Enmax, each for about 10 minutes. I'll just let you launch right into it, and when we're about three minutes from the end, I'll give you a little signal so that we'll stay on time. After that we'll just go to questions. We have till about 8:55.

Go ahead, please.

## **Joint Presentation**

# Independent Power Producers Society of Alberta, Capital Power Corporation, Enmax Corporation

**Mr. Bahry:** Wonderful. Thank you very much. Joining me is IPPSA's chairman, Mr. Sterling Koch; also, a board member of IPPSA, Mr. Ken Kunz. I'm Evan Bahry, the executive director of the Independent Power Producers Society of Alberta.

Thank you very much for the opportunity to present this evening. The purpose of our presentation is to provide the committee with an overview of Alberta's restructured electricity market. In terms of our key themes we believe that consumers have benefited by Alberta's move to competition. This is supported by three key facts. Number one, power supply has met demand, the fastest growing demand in Canada. Number two, competition has worked to keep wholesale prices in check. Prices are at or below replacement cost for new generation. Today's spot wholesale power market is, indeed, a buyer's market. Number three, consumers no longer face the risk of stranded generation investments. In regulated markets consumers bear the risk of inefficient investments. In open markets investor risk drives innovation and efficiency.

In terms of the contents of my presentation I'll briefly describe who we are. I'll spend the bulk of the presentation discussing our 15 years of restructured history in our power market. I'll speak briefly about transmission and its role in the open market, and I'll offer some concluding comments.

IPPSA was founded in 1993 as a forum for generator dialogue and as an advocate for competition in Alberta's electricity market. Since the market opened, competition has brought new suppliers, new innovation, new choices, and a downward pressure on wholesale prices. IPPSA has about a hundred members. Our board includes Canada's leading independent power producers and power suppliers.

Fifteen years ago the government of Alberta released its blueprint on how to restructure Alberta's electricity industry. One of the goals of the policy was to "introduce industry structure and regulatory reforms that preserve and enhance the Alberta advantage of competitive electricity [rates]."

I will now discuss what has happened since this paper was introduced 15 years ago last month. In 1994 Alberta's power market had three vertically integrated utilities: TransAlta, ATCO, and EPCOR. Each owned generation, transmission, and provided service to their customers within their service territories. Today we've unbundled the utilities. The utility generators now compete with new entrants. All power at the wholesale level is bought and sold through the spot market operated by the Alberta Electric System Operator.

I've intentionally used dotted lines in the presentation between suppliers and the AESO because it's only the cheapest generation located anywhere in the province or even out of the province that is dispatched to meet our demand. This means that a generator in Pincher Creek may be turning on a TV in Edmonton if its offers are lower than those of the plants nearby. Industrial customers and large commercial customers can buy their power straight from the wholesale market. Residential customers can choose to sign contracts for their power or to stay on the regulated rate option. Either way, the prices they pay are related to wholesale market prices.

Just for edification, in contrast to the previous presentation our focus is on the wholesale side of the market. The gentlemen from the REAs today I believe spoke principally about the competition and choices at the residential and REA level. So if a distinction helps, there is kind of a crude market, so to speak, and a gasoline market. One is on the wholesale scale, and one is kind of the residential product, if that analogy helps differentiate what we're talking about.

In addition to operating the spot market, the AESO also plans the transmission grid to ensure that power can flow between Alberta's generators and all consumers.

From the 1994 paper comes an interesting snapshot of our market 15 years ago. This graph shows the forecast of retiring generation, in the dark grey, stepping down in this graph. It also shows the rising demand forecast in the line graph. The footnote, that you may or may not see – that's about a two font – shows load growth estimated at 1.8 per cent on an annual basis.

The forecast suggests that Alberta would hit 10,000 megawatts of demand by 2023. In reality Alberta's demand hit about 10,000 megawatts last year, a full 15 years ahead of forecast. While demand has grown, so, too, has our supply. Thanks to the open market, new supply has met and exceeded demand by building over 5,200 megawatts in 15 years.

Fundamentally, the open market has attracted a power plant building boom in Alberta. We had 8,500 megawatts of installed capacity 15 years ago. Today we have over 12,500, plus we've retired over a thousand. That's a 61 per cent gross increase in capacity and a 47 per cent net increase in generation capacity in the past 15 years. For comparison, our 5,200 megawatts of new build is well in excess of Saskatchewan's entire 3,600 megawatts fleet.

Alberta's open market has met the fastest growing demand for power in Canada by far. This shows you a comparison of the rate of consumption increase across Canada, with Alberta the obvious leader. Alberta's consumption has grown an average of 3.5 per cent from 2000 to 2008, which is twice the North American average. While load growth has softened over the past 18 months, you may recall that the forecast in the DOE's paper had us at about half that, or 1.8 per cent.

7:15

Fundamentally, no market can add supply more quickly than one that is open and competitive. A restructured market does not require the regulator to determine whether power plants are needed. This is done by investors taking their own risk. The speed with which generation can be added is extremely important, considering how fast our economy has grown. If we'd remained regulated, it is not clear whether we could have met demand growth. I say this by pointing out that in a regulated market generators would go to the regulator and demonstrate need for a project. They'd have to determine and prove need. They would show the load forecast, that I demonstrated earlier, and try to justify the plant being added. Once the plant is added under regulation, all of its costs are covered.

The regulatory process does take considerable time. We see that in the transmission analog. For us to have built 5,200 megawatts of generation in 15 years, that's roughly the equivalent of, say, 12 Genesee 3 coal plants. To have gone to the regulator and had each one of those approved through the process and then constructed and then another plant subsequently filed and applied for, it's hard to fathom whether the regulator could have handled that degree of rapidity of approval of generation that we've seen in the wholesale market.

What we have seen when the market was open was exercise of customer choice. Industrial customers exercise that choice by building cogens on their on-site facilities. Cogens provide for power and steam needs for a host of industrial processes: oil sands in Fort McMurray, petrochems in Joffre. We've had combined cycle plants built in Calgary, peakers built in Edmonton, and, of course, a fivefold increase in wind capacity in the south as consumers have exercised choice for those projects. Again, those are built at investor risk without the need of demonstrating need before a regulator. That, again, is aided by the rapidity with which we can add supply in our province, which, as we've seen from the phenomenal load growth, has been a key element of our restructured market.

In addition to the rapidity of the investment, we've also modernized our generation fleet. The open market has contributed to this. Because investors are now at risk, we build the most efficient plants we can. Three-megawatt wind turbines have replaced 300-kilowatt, supercritical coal has replaced subcritical, and modern combined cycle and cogen plants have replaced gas-fired steam turbines. Whatever happens to our market going forward, this restructuring has left a profound legacy in terms of the efficiency of the fleet that we have today.

Our open market has also attracted a host of new players. As I mentioned, 15 or so years ago we had three utilities dominating the market. Today we have dozens of new suppliers, and the market itself has over 200 participants. These are all competing in, again,

the spot market and aiding with competition and the downward pressure on price.

That, of course, brings me to the downward pressure on price. In this graph the vertical bars represent the cost of generation for the fuel and capital costs for cogeneration, supercritical coal, wind, and a combined cycle gas unit. The orange line that bisects this graph represents Alberta's historic power prices and the spot market and near-term forecast prices. The first thing you will note in the bar graphs is that the costs are all generally rising. All the bar graphs are going up over the five years of the study. This tells you that power prices would have risen for consumers regardless of the market design, whether they remained regulated or not. Alberta needed new supply, and as this graph illustrates, the cost of building new supply keeps rising.

What's also important to note is that thanks to the open market and strong competition, generators cannot always recover their costs from spot market prices. The 2009 example shows a dramatic disconnect between cost and price for a host of fuel types. This is in part due to flat demand and to falling natural gas prices. Residential consumers have seen benefit in these falling wholesale prices through falling RRO prices.

Again, in a competitive market we build these plants at our risk. There's no recourse to recover the difference from consumers. We simply built in anticipation of rising demand, which makes sense, two years ago, three years ago. In light of the boom of that period generators came on for 2009. However, of course, the recession has impacted that, and we're still left with a very healthy reserve margin. Therefore, as you have excess supply, you should have lower prices. That's fundamental economics 101.

So I guess we take the good with the bad, and this year, in particular, again prices are reflecting a significant value to consumers. A circumstance, of course, where prices are below cost only exists in competitive markets. In regulated markets generators are kept whole for all their costs. Plus you're provided a regulated rate of return.

Also, another interesting development of Alberta's restructured power market is its impact on our emissions intensity. The advent of so much gas and wind generation has reduced our emissions intensity with the tonnes of carbon per megawatt hour electricity we emit. System-wide total emissions are expected to climb as we build more power plants to meet future demand – that's the rising navy line – but the intensity has fallen thanks to wind and gas. Importantly, this is being driven by market forces – in other words, customer choice – and, through the advent of wind, being able to sell the wind power to consumers who want the offset, et cetera. This is not being done through policy edict such as renewable portfolio standards of other markets.

Finally, the open market has returned over \$2.75 billion in residual value to consumers. This is represented by the credit against power prices that appears on your monthly bill. The \$3 billion is roughly equivalent to providing every Albertan with half a year of free electricity, to put that in context. We cannot examine power prices without considering the offsetting value of these funds. Residual value is captured from the PPA auctions in 2000 and from market receipts from the remaining unsold PPAs. These units are managed by the Balancing Pool. In light of this history IPPSA believes the restructured market has been a significant success for Alberta consumers over the past 15 years.

I'd also like now to add a note about transmission. IPPSA supports the government's intent to build more transmission. Unconstrained transmission benefits consumers by enabling the greatest number of suppliers to enter the market, enabling the greatest degree of fuel diversity possible, enabling the greatest degree of price competition possible, enabling the system operator to dispatch a number of suppliers should a contingency in the system occur. These benefits are not possible in a transmission-constrained market.

In conclusion, no market is better able to introduce new supply, new participants, new efficiencies, new choice, and the downward pressure on price compared to one that has embraced competition. For these benefits to continue, we encourage the government to support appropriate transmission development and to let the wholesale market work.

Thank you very much.

The Chair: Thank you very much.

We'll go directly to our next presenter, which would be Capital Power.

**Mr. Vaasjo:** Thank you very much, Mr. Chairman. I appreciate the opportunity this evening to address you and your colleagues in the Legislature. I'll just wait for my slides to turn up there. I believe you all have a copy of the slides in front of you.

We are headquartered in Edmonton, and Capital Power operates 31 power plants in three Canadian provinces and eight U.S. states. Our power comes from a diverse range of fuels: conventional fuel sources such as coal, natural gas; innovative facilities that capture waste heat and convert it into electricity; and renewables, including biomass, landfill, gas, small hydro, and wind. Last year more than 20 per cent of the power we generated came from renewable and recycled sources. Over the past 10 years we've built more power generation in Alberta than any other company, and Capital Power alone has invested nearly \$2 billion in new Alberta power generation.

As we look to develop new sources of power for our customers in Alberta, one of the biggest issues we face is the need for investment in power transmission, both to catch up to the growth that's happened already over the past 20 years, which I think you've just seen, and to prepare for the future. I think Mr. Bahry has covered the policies and the evolution quite well this evening. The cornerpost of the power generation business in the province of Alberta is the stability of policy direction. Policy stability is what enables generators like Capital Power to make these long-term investments. Generators build where the fuel source is. It's cheaper to move electrons than to move coal, biomass, and even natural gas, and of course in the case of wind and hydro you can't really move them at all.

#### 7:25

Transmission infrastructure allows us to optimize the use of these natural resources, and unfettered access to transmission ensures that Albertans get access to the least-cost power available to them at any time of the day. The province needs fundamentally different transmission policies to sustain a competitive market than you need from a traditional local monopoly situation. A competitive market shifts the risk of investment to the generator from the consumer. For that to work, there must be a level playing field for all generators, facilitated by access to transmission.

The alternative to the current market is to have consumers take the risks increasingly for power generation. As many of you may have seen recently, Capital Power has announced that our Keephills 3 power generation plant cost has gone from \$1.8 billion to \$1.9 billion, and just to underscore the point, that \$100 million dollars is at our risk. It will at no time ever turn up on a customer's bill. It's our cost, and it's our risk, and we recognize that.

A level playing field is what we ask from a transmission standpoint. That will facilitate continued, appropriate allocation of capital to where it should be as well as create an opportunity for greater diversity in fuels, including the greener options, which I think you heard about earlier this week. As soon as the province starts subsidizing plants to build in lieu of transmission, the risk and the cost shift back to the consumer. This creates significant uncertainty and certainly distortions in the marketplace.

The alternative to building transmission is subsidizing power generation through transmission must-run payments. Subsidizing local generation totally upsets the level playing field that has been created in the province. Transmission must-run payments are a poor substitute for a robust transmission system and the reliability it brings. This isn't a new concept; it's not a great revelation. This type of potential has been in the Alberta market for years. It was certainly considered in 1995 with the development of the existing policies and the evolution of the policies. The Rossdale repowering plant was a potential to take must-run payments for the reinforcement of the grid in the city of Edmonton, and through discussions with AESO at that time it was contrary to policy and didn't make sense for the province of Alberta, and therefore it didn't happen. More recently, the potential for the Bow City development in southern Alberta was similar, looking for government handouts in order to subsidize the generation of power.

I'd like now to turn to the topic of interties. An intertie should be looked at as a generation plant on standby. It allows us to access alternative power during upset conditions. Alberta is a net importer of power. Why? One of the reasons is that some days the transmission lines within the province are so congested that we can't move our own power to some parts of the province, so we import instead. Some have distorted this effect and suggested that power generators want transmission lines built so they can export more power. That's simply not true. The transmission line that connects us to B.C. was built to serve the public interest. It makes our system more reliable. That's what the tie-line is all about. In fact, if you look at our neighbours B.C. and Saskatchewan, compared to peak demand, they have 25 per cent intertie capacity whereas we in Alberta have about 10.

In conclusion, transmission supports Alberta's policy directions and competitive market. Alberta's electricity transmission policy supports and promotes development of a competitive and greener electricity market. Policy stability has been the hallmark of the Alberta marketplace. Transmission limitation should not limit consumers' ability to access the least expensive power.

Lastly, what I'd like to do is maybe help unravel some of the dollars and cents that have been flung around in respect of the discussion on transmission. This is my own power bill for the month of October here in the city of Edmonton, and as you can see, the total bill is \$124. The transmission charge on that bill is \$11.20. If you fully implemented the transmission that's being talked about now in Bill 50, it would add \$6.07, which is a little bit different than the numbers AESO has been referring to simply because I consume a little bit more power than the average. That's \$6.07, which overall increases my power bill by less than 5 per cent as, overall, transmission is 13 per cent on the bill. If you go back to the early 1990s, transmission was about 20 per cent of the power bill, to put it into historical context.

The other thing, though, that I think is quite important in what I've been speaking to and what Mr. Bahry has been speaking to is competition. If you look at my overall energy cost, it's about \$70 for the month based on about 6 cents per kilowatt hour. If the impact of transmission stimulates greater competition or other actions don't prevent the free competition of power in the province, it equates to about half a cent a kilowatt hour in respect of the total cost of transmission. Another way of putting it is that for a simple half a cent, if there's an impairment in the overall competition in the province by balkanizing the system, that would more than offset what the cost of the transmission was. If you apply this to last year, it's a quarter of a cent based on much higher power prices.

I think this probably puts into context the overall discussion on, particularly, the cost of transmission in the province and what it means to Albertans. Thank you very much.

The Chair: Thank you very much, Brian.

We'll go next to the Enmax presentation.

**Mr. Holden:** Thank you very much. I appreciate the invite to be here tonight.

The Chair: Your name, please.

#### Mr. Holden: Gary Holden, for Enmax.

I'll start off by stating that we strongly agree with my colleagues here about the importance of a competitive market. In fact, we feel that of all of the larger companies in the marketplace, we've embraced retail competition more so than any of the others. We've been offering five-year contracts for residential customers across Alberta for about five years now, and in fact on a world scale we've sold more five-year contracts at a residential level than any jurisdiction on a percentage basis. We feel that's a great expression of competition in the marketplace. We're also a big wind generator. We sell green power in the marketplace at a retail level, and we, in fact, ranked number one in Canada for green energy sold at a retail level. We very much believe, like my other colleagues, that Alberta has benefited by having deregulation come into our marketplace.

We do, however, think more deeply about the importance of good policy around transmission and generation. We think that good transmission policy should incent generators to locate in optimal locations. We think that good transmission policy, if you look across the world, has a great deal to say about these matters and actually presents information to the marketplace to allow locations to be optimized. By optimized, I mean they get located so that transmission costs are minimized. It doesn't amount to a subsidy. It more amounts to transparent information so that generators know where to locate plants.

We've taken those signals that do exist here. There is a plant in Calgary that was built in 2004, run on natural gas, that has had a very positive impact on the transmission capacity system, constraint in the system. We just finished this month building a peaking plant at Crossfield, which will have a positive impact on the transmission capacity. We're building a power station in downtown Calgary. We're capturing the waste heat from that power plant and selling it to buildings to have a positive impact on the transmission capacity in the south. We, of course, see a lot of green benefit in using waste heat from power plants to displace boilers in buildings. We've announced an 800-megawatt power plant in east Calgary, where we would capture the waste heat from that power plant and sell it to a growing industrial base in the near location of that power station. All of these power plants will alleviate pressure on the transmission system and lower the cost of transmission over time.

#### 7:35

We think that transmission has now become very expensive. In fact, the cost of transmission is now as expensive as building a power plant. The capacity that we're talking about in recent transmission policy decisions would approximately equal the cost of building a power plant on a regular basis.

# Let me give you some numbers. They're quite different numbers than you heard because I'm going to talk about the value of transmission in total. The reason it's important to consider the total is because 60 per cent of the transmission costs that occur are picked up by our industrial customers. Another 20 per cent of those transmission costs are picked up by commercial customers. What you've often heard in the media is simply the 16 per cent of the costs that get picked up by residential customers. So the numbers are very easily distorted when you ignore industrial and commercial load.

To put some numbers into perspective, if we did \$10 billion worth of transmission, you would need something like \$1.3 billion every year to pay for that. Sixty per cent goes to industrial; 20 per cent goes to commercial. So industrial customers will be picking up 60 per cent of the \$1.3 billion. That has a material economic impact to society, in my view, and should be very deeply considered in the decision of what we do with transmission policy. To put that 900 or so million into perspective, you could build about a 500- or 600megawatt power plant every year with that kind of money. This is a very big issue.

If you allocate the kind of capital that we're talking about to transmission – and transmission doesn't generate any power, as you know; there are no additional kilowatt hours that get added because of transmission – if you add that kind of burden to the system, then you're missing a huge opportunity to slowly replace the existing capital stock, which has many negatives from an environmental point of view, with something cleaner. To the extent that gas-fired generation can also be located optimally from a transmission point of view and you can use the waste heat, it creates enormous opportunities from a carbon dioxide point of view.

Our view is that Alberta has done a great job in introducing competition. In fact, the plants that we're building near Calgary are a great expression of that. Our view is that there's lots of gas-fired generation that probably should still be built in the Fort McMurray area. We think that there's probably a great deal of need to build future gas-fired generation, to the extent that it's cogeneration, in the Edmonton area as the coal fleet needs to be replaced. Our view is that Alberta is a gas-based economy, and we have lots of gas available for this, and we should encourage that. We think that we've got a tremendous opportunity in the next 20, 30, 40 years to revitalize our gas industry by using some of it for highly efficient generation projects.

You've heard a lot about market power, and I think people are mostly talking about us. But the idea of building a power plant near load and somehow assembling market power is, in our view, a nonsense. The idea of dealing with generation being located near load by bolstering transmission from time to time is a very relevant concept and should be done. The positioning of it being all one way – in other words, let's build lots of transmission and forget about sending location signals to generation or building only generation and forgetting about transmission – is a nonsense. You need to consider a blend of the two, and you need transmission policy that allows for a blending of the two. There's no reason why you should be spending \$10 billion on transmission when maybe we should be spending \$10 billion on new generating plants. And we should locate those in good locations so that we minimize the impact.

We offered the AESO and the Department of Energy in 2007 an agreement that said that if we ever need generation in Calgary to support transmission, we'll do that at our cost. That doesn't sound to me like a company that's trying to generate market power.

In closing, we look at the picture in this way. We think that generators and retailers need to compete hard. We think that

retailers should be thinking about long-term contracts so that customers can insulate themselves from the long-term effects of rising prices or volatility even of those prices. We think that distribution companies should be thinking about controlling their costs over the long haul. In fact, you might recall that just last year Enmax went to the regulator in Alberta and offered a seven-year regulatory deal where we promised to beat inflation by 1.2 per cent. So we're offering flat energy contracts, we're offering inflationbeating distribution charges, and we think we have an opportunity in Alberta to continue a competitive market and do that without escalating transmission charges as well. That should be our challenge.

Thank you.

The Chair: Thank you very much.

Gentlemen, what we'll do now is we'll go directly into questions. Once again, I want to remind all members and the presenters that there are no bills before the committee for review at this time. So we're not discussing bills. We're just discussing the issues around transmission and electricity generation and moving it around the province. We'll go from government members to opposition, alternating. I would think that members can ask questions to any one of the presenters they choose.

We'll start with Mr. Frank Oberle.

**Mr. Oberle:** Thank you, Mr. Chair. I'm going to ask a question and, if you'll allow me, a supplemental afterwards. Mr. Holden from Enmax, I have a question. I'm going to refer you to a backgrounder document that Enmax put out. Maybe I should table the document for the benefit of the committee. You make a statement that "the \$3.1 billion worth of north-south lines from Edmonton to Calgary will do very little to bring wind power to the market from the Pincher Creek-Medicine Hat corridor." I don't think I at all understand that statement. You go on to say that "to help wind we need more dispatchable power plants." I certainly agree that natural gas is dispatchable power, but you allow later that so is hydro. There's a tremendous amount of hydro potential in the north that can't get anywhere if we don't have transmission. Could you elaborate on that for me, please?

**Mr. Holden:** Sure. The importance of thinking about transmission for wind is to consider, clearly, just getting the peak capacity of that wind farm into the grid, so the south expansion does do that. We know that in our system and, in fact, with any system wind and baseload coal plants fight each other for capacity into the system. We end up with quite a number of problems in the middle of the night if we have a lot of coal on the system and a lot of wind. The two solutions that come to mind are to increase export capacity so that you have a place to dump the power at night when wind and coal want to run coincident, or over time add more dispatchable gas so that when the wind blows, you can turn down the plant, and when the wind doesn't blow, you turn up the plant.

Dispatchable hydro is a very difficult thing to do if you don't have a lot of storage at the hydro. If you had a run-of-river hydro, there's very little capability of dispatching that, so a nondispatchable run-ofriver hydro plant would also fight with coal in the periods where demand is low.

We think that in order to expand the wind capacity in Alberta, we need to increase the number of gas plants that exist, and to the extent that those gas plants can exist in the southern part of the province, then there's a greater ability to do that without adding transmission costs.

## 7:45

**Mr. Oberle:** Okay. Although you do allow in the document later that natural gas and hydro are the only types of power that can be easily dispatched, and hydro can be easily dispatched.

Mr. Holden: If there is a huge dam associated with it.

Mr. Oberle: There is that potential in the north.

Mr. Holden: There is that potential in the far north, yeah.

## Mr. Oberle: Yeah. You're aware of that.

I'm going to ask you another question about this. I find this document kind of amazing. On page 5 there's a statement. You're talking about the fact that the transmission proposal there will create a "cozy arrangement," and "the potential for corruption is enormous," and "we would be engineering a 'playground for scoundrels'." I'm kind of curious as to the fact that you would refer to your energy competitors as scoundrels, first of all. Second of all, I'll tell you that from my point of view it looks to me like if we didn't build north-south transmission, Enmax would have an effective lock on the market in the south. I'm hoping that we could sleep soundly at night in the assurance that Enmax wouldn't behave as scoundrels, like your competitors.

Mr. Holden: Yeah. You can sleep soundly.

Mr. Oberle: I'm sure I can.

I just want to know: did the city of Calgary draft or approve of this document? I find it quite an astounding thing to be sent on to the government.

**Mr. Holden:** Well, first of all, let me address the content. The comment is a reference to the importance of regulation. If we take away regulation, you know, if you go back to the '20s and '30s when regulation was invented, it was invented for the purpose of keeping an independent body in between proponents of projects and proponents of asset-building endeavours from government so that independent body can properly evaluate the technology, properly evaluate the cost, and properly evaluate the need. If we take away the regulator from something as important as monopoly assets like transmission, then it's a theoretical reference to the fact that in the old days without regulators we had people that were quite happy to use lobbying as a main tool for getting business done. We're very much of the view that Alberta will be poorly served if we take away regulation on something that's so important.

# The Chair: Thank you.

**Mr. Hinman:** I'd like to direct my question to Mr. Vaasjo. You mention the importance of building these transmission lines, and you said, though – maybe the numbers are wrong – that a \$14 billion to \$16 billion expansion over the total amount that they're recommending with the upgrades would only double the cost of the transmission when the value right now of those lines is minuscule. To ask the question, though, if we're just going to build transmission lines, if Bruce Power was to get permission to build a nuclear plant right at the tip of Alberta, would Albertans benefit from having to build a power line to that plant in order to produce power down to southern Alberta?

**Mr. Vaasjo:** Well, if there was a power demand, that would certainly have a positive price impact on consumers in the province of Alberta. You know, the building of a nuclear plant or any large facility does have the impact of meeting demand and effectively reducing prices from what they otherwise would be. Certainly, it does have an impact.

You know, you see that throughout the province where transmission needs to be put in place to facilitate the effective utilization of power not only in terms of just the provision of electricity but also the nature of power. The last discussion was just on peaking facilities. Maybe to illustrate the point a little bit, we are just in the process of completing a 240-megawatt peaking facility on the outskirts of Edmonton, and that's utilizing the peaking technology. It's the first in Canada. It's more responsive and the greatest kind of peaking facility that you can get in the market today. In fact, it's the sixth serial number. It's, again, the best in Canada and, certainly, one of six in the world.

That peaking capacity is ideally suited for wind. There's no wind in northern Alberta, so why did EPCOR and now Capital Power build those facilities there? Well, because it was lower cost. In terms of altitude it's lower, so it provides for some 5 per cent more efficient generating capacity. In addition to that, it was on an existing brownfield site, there was water access, there were water facilities, natural gas facilities that could be reused. It's, you know, a very definite example of where low-cost generation can be put in place where it makes sense. It can complement the wind generation in southern Alberta perfectly when you have an abundance of transmission. That's the whole concept. It's not only just creation of power, but it's complementary power across a whole spectrum of different kinds of power from peaking facilities through to baseload facilities through to wind.

**Mr. Hinman:** I guess to further pursue that a little bit more, in the AESO report, I mean, they're looking under the critical transmission infrastructure at close to \$12 billion. It's always about your total capital to be cost-effective and things. I just don't quite understand. When you're talking about this, that capital seems so cheap at \$8. What's going to be the interest rate returned to Albertans on such a huge expense of \$12 billion versus a local plant?

**Mr. Vaasjo:** There are a couple of elements to that. Just to take it in pieces, first of all, that's for the overall whole group of four projects, four reinforcement projects, not just the north-south lines. When you take those capital costs, if you spent that today and you put that on your bill, that was what I was showing on my own power bill as a \$6 a month charge to me.

**Mr. Hinman:** Can you show the math, though, how that's figured? When I look at dividing it out, it goes up four- to eightfold instead of half of what it is. You say that it's \$8; we're going to spend \$12 billion and only going to go up \$6. When I do the math, it looks to me like it'll go up fourfold, maybe as high as eightfold, \$32 to \$64.

**Mr. Vaasjo:** That math is precisely the same math that the AESO has been utilizing and publicizing. The only difference between the \$6 that I used and the \$5 and some change that the AESO utilizes is that my demand is slightly higher. Those are well-documented numbers. You can find that in the AESO literature, and I'm absolutely happy to send that to you.

**The Chair:** Thank you very much. Mr. Jonathan Denis. **Mr. Denis:** Thank you very much, Mr. Chair. Just before I begin a couple of questions, I'd like to table a document, which I will pass over, just so everyone can take one.

The Chair: Thank you very much.

**Mr. Denis:** Mr. Chair, this is an Enmax bill from a Calgary consumer. It's been given with the consumer's consent, just as long as the contact information has been removed.

The Chair: Go ahead, please.

Mr. Denis: Okay. I just want it to get around, Mr. Chair.

Once again, just a couple of questions. This bill has 56 per cent of the cost as generation, 17 per cent as distribution, and 10 per cent as transmission. Is that a typical distribution, typical bill?

Mr. Holden: Is the question for me?

Mr. Denis: Yes.

Mr. Holden: It probably is, yeah.

**Mr. Denis:** Okay. On that bill I see a local access fee. What does the consumer get for that local access fee?

Mr. Holden: Local access fees. Let me just pull it up here.

Mr. Denis: It's on page 3 at the bottom. It's \$7.25 in this instance.

**Mr. Holden:** Local access fees, yes. Those are the regulated charges that get allocated to all users that are interconnected to the system. So if you had a generator in your house, you would still pay the local access fee.

7:55

Mr. Denis: Okay. Can you put me back on the list, please?

The Chair: You could probably have another question.

**Mr. Denis:** Okay. Now, you mentioned to me that the local access fee is regulated. Does the province set this rate?

Mr. Holden: It's through our regulated hearing process.

Mr. Denis: Okay. So this is set by . . .

Mr. Holden: The regulator, by the AUC.

Mr. Denis: Okay. If I could get put back on the list, please.

The Chair: Sure. Okay. Mr. Dave Taylor.

**Mr. Taylor:** Thank you very much, Mr. Chair. If you'll allow me, I'm going to do something a little unusual here. I'm going to put the same question to everyone on the panel and hear, perhaps, your different responses to it.

The Chair: Certainly.

**Mr. Taylor:** We're looking at a proposal to build two very highcapacity DC transmission lines, north-south transmission lines, between Edmonton and Calgary, which will have the effect if built, as I understand it, of tripling the capacity of transmission between the two major metropolitan areas, more or less, between north and south, let's say.

I'm given to understand from conversations that I've had with the AESO that if you're going to go that route at all, you need to build both lines so that there is, in simple terms, a sufficient backup to the one super high-capacity line. I'd like your varying comments and varying opinions on the notion of overbuilding transmission capacity, as to whether you think that that's even possible, as to whether there is, perhaps, inefficiency and excess cost to consumers built into, if I can use that term, the overbuilding, if that's what's going on in this transmission capacity. It is, no matter how you look at it, a massive increase in capacity if those two DC lines are built.

I'll let you all fight it out among yourselves in terms of who's going to answer first, but I'd be interested in hearing your various opinions on this.

Mr. Holden: I'll answer first, if I may.

The Chair: Okay. Go ahead, please.

**Mr. Holden:** The first thing I'd like to say is that you're hitting, I think, the essence of the problem. You know, we tend to get drawn into the wrong discussion when we talk about the impact on a residential bill because, as I said earlier, residential bills only pick up 16 per cent of these charges.

The document that I think is really important for everyone to ultimately access – and you can get it online – is the AESO's 10-year plan from 2007. It actually did a calculation of transmission charges and made the point that they are very interested in keeping transmission charges low and talked about the backbone of the system being about \$1.5 billion of cost. They rolled up the cost of that single backbone, and remember that at that time we were talking about one 500 kV AC line. There's actually a table – you can look at it online – that says that the revenue requirement increase of that single backbone would be \$443 million. Now, if you divide that into the industrial base and the customer base, they're actually taking a \$443 million base, and that's only on a single 500 kV line. We're talking about three times that amount in total, so that \$443 million will become \$1.2 billion or \$1.3 billion.

How that translates down to residential is far less important because we end up hitting our commercial and industrial base to a much greater degree than the residential base. The trickle-down effect in the economy of \$1.3 billion is dramatic, so the importance of not overbuilding cannot be underscored enough. We should have the prudence to only build what we need because the impact to the economy is so dramatic, and that's what a regulator does. A regulator will sit in place to make sure that, instead of building two lines, maybe we just build one and wait to see what happens later. Instead of building DC technology, maybe we build AC technology because it's 20 or 25 per cent cheaper.

These are the things that are on the table right now. I think overbuilding actually is the big question. You don't need to just build something because you can afford it, and I would argue that we can't afford it. We can't afford adding \$1.3 billion to this economy without a definite need. It should certainly not be built on speculation that we might build a nuclear power plant near Grande Prairie or a hydro station in the Northwest Territories. You don't need to speculate about that in this market. Those plants take 10 years to build. We've got lots of time to reinforce the transmission grid if we know those plants are going ahead. What we should be doing is making sure that overbuilding becomes the number one concern of our transmission policy. That's our view.

The Chair: Thank you.

Who would like to go next? Mr. Bahry.

**Mr. Bahry:** I'll be pleased to take a stab at the question. It's a very important question. Thank you for it. I'll try to summarize my responses in a number of ways.

We, too, would share a concern of overbuilding. We're in favour of prudent transmission, as is everyone. In fact, we look to the Electric System Operator, who are the planning experts. They are a statutory agency of the government of Alberta populated by transmission planners who know the grid and applying to a grid that can sustain what they need for reliability and for consumers and generators going forward. First of all, it's a question perhaps best directed to the AESO, but I will go through a few of the points that I think are valuable.

One element is not mentioned when we talk about the full-blown figures in the plan. We expect the transmission that will be approved either under Bill 50 or that which is filed to the AUC under normal means will be staged, will be built as the AESO determines its need. We don't see 4,000 megawatts being built north-south immediately. We see them, again, staging these projects over time, as is prudent.

We also want to mention that according to the planners the northsouth is indeed the backbone of our system. This brings with it engineering complexity, which, you know, is a bit beyond me, frankly. When the planning engineers talk about systemic risk or systemic failure of the system, they refer to the need to reinforce the north-south. It is, indeed, our backbone. So again a question perhaps for the planners as to why that is required.

What's of interest, I think, is what this market may look like in 10 or 20 years from now. We are challenged, for example, by climate change. So the coal fleet that we have today, the 6,000 megawatts of coal: what will happen to it in the next 10 or 20 years as climate change policy progresses? Where wind is incented to provide carbon offsets and power, gas would look attractive, but what of the coal fleet? When we look at the market today, we assume load, and we assume supply and where it's configured, but I can see a universe where we're moving power north and south not from the coal assets we have today but, rather, south to north with the advent of wind. The system operator has to prepare for eventualities of where a load is and where supply may come from.

Today in the paper we saw Syria announcing an estimated \$350 billion oil sands investment in this province over the next 35 years – \$350 billion dollars. That's going to require a whole lot of infrastructure to sustain that level of investment. I look at the staged transmission build and contemplate a province 30 years from now, and again I think that's what the system operator is trying to plan for.

That's kind of a quick summary of my observations on this. I invite others to comment as well.

The Chair: Go ahead, please, Mr. Vaasjo.

**Mr. Vaasjo:** Thank you very much, Mr. Chairman. In response to that, certainly, the staging process makes a significant amount of sense, but specifically around the north-south lines you do end up with a technical balancing between the two, which results in some significant gains, in not having power generation losses. Also, one of the things one can look at from time to time, whether you are building transmission facilities, whether you are building water facilities, natural gas or crude oil facilities in terms of transmission, there is a difference between prebuild and overbuild. Overbuild

refers to capacity that you don't need, that doesn't have any enduring economic value. What you have in a prebuild is a situation where you've laid the groundwork, where in the increments of capacity that you add you may spend a little bit more, but it's significantly reduced in cost on a go-forward basis.

I'll give you an example from a past life in the crude oil transmission business. You would put big pipe in the ground and small amounts of pumping stations. So the capacity was there, and as you needed to add capacity, you'd add pumping stations, which is relatively easy to do. That's the same way with compressor stations that the TransCanada system has been built on. The Enbridge system has been built on that same concept of doing some prebuild. I think, as you know from the material, those transmission lines have a significant ability to increase capacity with very, very little disruption to people along the line, to other stakeholders. It results in adding capital at either end of the line as opposed to building yet another line in a couple of years.

8:05

From time to time you do have to consider whether something is actually an overbuild or whether it is actually setting an excellent platform for future growth. In my view this is absolutely setting an excellent base for significant growth in the province with a minimum of cost and a minimum of disruption to stakeholders.

**The Chair:** Thank you very much. That's it? Okay. Mr. Jonathan Denis.

**Mr. Denis:** Thank you very much. Just a couple more questions for Mr. Holden here just dealing with the local access fee. You mentioned that this is a regulated fee. What would be some of the cost drivers behind that that you would submit to the board when setting this fee?

**Mr. Holden:** Well, nowadays, you know, we've gone to the board and agreed to a CPI minus X equation. From this point on through our seven-year cycle we'll be guaranteeing that these prices beat inflation by 1.2 per cent.

**Mr. Denis:** Okay. I don't think that answers my question, with respect. What are some of the cost drivers?

**Mr. Holden:** What are the elements of the cost? Well, it's all the substation costs and infrastructure costs that relate to facilities at a residential level.

Mr. Denis: Okay. Just one supplemental, if I may.

The Chair: Yeah.

**Mr. Denis:** This local access fee, would you say that in your estimation that's comparable to Edmonton's local access fee as well?

Mr. Holden: I'm not sure.

Mr. Denis: No? Okay. Can I get back on the list, please?

The Chair: Mr. Guy Boutilier, please.

Mr. Boutilier: Thank you very much, Mr. Chairman. For the benefit, the document that was circulated from Enmax, the

backgrounder, I'm just making reference to your second page, page 2 of 5, your question on there: "Will transmission lines also reduce loss on existing lines that is costing consumers more than \$240 million each year?" I go down to the comment where it says:

Losses are reduced in two ways:

(a) add more transmission wire or (b) add more generation at the other end.

You then go on to say that "adding wire is the most costly for consumers," which I understand. Then even further down - and my question is to Enmax and also to your equivalent at EPCOR - it says:

As a side note, EPCOR located a gas-fired peaking plant in Edmonton last year - a bad decision.

It's very seldom that you see a CEO making a comment about a bad decision of another CEO. Then you go on:

The plant increased losses as the power will flow to Calgary when running. EPCOR could have chosen to put [it] in Calgary, Lethbridge or Ft. Macleod. It did not make this choice because there was no signal from the AESO to do so!

You then go on by concluding:

Poor policies lead to poor economic decisions.

I would love to have a brief sense of what you mean by that and also, in fairness, a similar comment from AESO or EPCOR.

Mr. Holden: Fair enough. The bad decision comment wasn't a comment on the corporation's decision; it was a comment on an economic decision referred to later in the paragraph.

When you have a transmission policy that does not incent location of things like peaking plants, then you could get poor economic decisions because there is no penalty, if you like, to the decisionmaker for putting it in a location that ultimately taxes the transmission grid. In other words, if there's a constrained transmission grid, which a lot of people would say the Edmonton to Calgary line is, if you put that peaking plant on the other side of the constraint, then you free up transmission space. If you put it on the negative side of the constraint, then you take up transmission space. So it's clearly a decision of where you put the plant to help the transmission grid the most, and we make the point that it's Calgary, Lethbridge. Somewhere south of the transmission constraint is where peaking plants are best located because they relieve the pressure on the system, very much like many things that require capacity to move the product.

Mr. Boutilier: I see. So what do you think Don Lowry would respond to that?

Mr. Holden: Well, I think Brian actually answered the question earlier. My speculation is that Don would say: "You know, we located it. We had access to a brownfield site, we had a substation we could tie into, and we had access to water." But the transmission was free. If they had to pay for the transmission that they used for that peaking plant, they might have made a different decision.

Mr. Boutilier: Mr. Chair, is there anyone from AESO here?

The Chair: I don't think so, not tonight, but I'm going to ask Mr. Vaasjo to comment on that same question.

Mr. Vaasjo: Sure. Thank you. I think, Mr. Boutilier, you have probably hit the nail on the head. You know, as Mr. Holden has described, if you put in transmission policy that creates different zones or balkanizes the market, what happens is that generation decisions are based on things other than efficient generation of power.

As I described earlier, the decisions to put that plant there were decisions that would lead to the lowest cost generation. If we put that power plant in Calgary, not looking at the transmission implications, it would have had to have been on a new site. It would have cost more. Access to water is much more difficult. You know, the cost of operating that plant and even the efficiency of that plant at higher altitude would have significantly increased the cost of power from that facility. Instead, it is there in place where it's at because it yields the lowest cost generation. It's the same, sir, in your riding in Fort McMurray, where you have significant cogeneration facilities. That's where it's produced at its lowest cost, and surplus power is produced there and has the ability to move through the transmission system from time to time and reach other markets.

So the ability of generators to utilize biomass, hydro, coal, natural gas, and wind where it is the most efficient and cost-effective for it to be produced is the policy that's in place today in Alberta. And that's the policy that will lead in the long term to lower cost for not only consumers such as me but even for the industrial because, just to be clear, the industrial customers have the same relationship between transmission costs and their power costs. That's a linear relationship. So if my bill goes up 5 per cent, their bill goes up 5 per cent. You know, the fact of the matter is that, again, it's the difference between whether you differentiate transmission policy, create zones in a province which in turn create lower reliability and higher costs, or whether you have an open market and facilitate the proper functioning of that market with the transmission policies that are in place today in Alberta.

The Chair: Thank you very much.

Do you have any supplementary questions?

Mr. Boutilier: I guess it would have been to AESO, but it appears they're not here. I guess, in fairness to them, if it's agreeable to the committee, maybe we could ask for a response in terms of the commentary tonight.

The Chair: I'll take that as a comment. Mr. Wayne Drysdale.

Mr. Drysdale: Thank you, Chair. I'm a little confused. I've heard a lot of presentations in the last week: from the wind generators the other night and the Department of Energy and AESO and then, you know, Capital Power tonight and IPPSA. I've even heard some comments from you, Mr. Holden, but I'm not sure - I guess I'm just going to ask you straight out: do you think we need to upgrade the transmission system in Alberta? I'm pretty confused about what you're saying tonight.

Mr. Holden: I'm glad you asked that question because that is the most important question. The belief that we have is that . . .

Mr. Drysdale: Try and make it simple because you're dancing around there. Like, yes or no, I guess, basically.

Mr. Holden: Our view is very simple. The transmission cost is so large that there's lots of opportunity to optimize the system by locating generation in the south. It doesn't mean, though, that the transmission will never be required. You know, Calgary is only 1,600 megawatts. We move about 800 megawatts in from B.C. from time to time. North-south even the two DC lines are 2,000 each, so it's like three Calgarys that will be available based on just the two lines.

<sup>8:15</sup> 

We like the AESO's plan of 2007-2008. We think that was a very prudent plan. It had \$1 billion to \$1.5 billion of transmission in it. Consumers would be hit to \$400 million with a plan like that. That was a pretty good plan. We liked that plan. We liked it especially because the regulator stayed on the job, and we think that the regulator needs to continue to stay on the job because there are lots of options to these lines. So, yes, we think transmission will be needed, but we think it should be prudently managed over time.

The Chair: Was that just to Mr. Holden or to Mr. Vaasjo as well?

**Mr. Drysdale:** That was just to Mr. Holden. Everybody else seems to think we need to upgrade our transmission, and I think your answer was: yes, we need to upgrade.

Mr. Holden: Yes, we do, but with a very prudent, careful hand.

**Mr. Drysdale:** You know, you said that we need to build generating capacity, but I think that's up to the individual companies. Like, you could build the generators; just AESO and we are responsible for transmission.

**Mr. Holden:** Yes. And we made decisions to build generation near Calgary for this transmission reason. We made an offer to the AESO to make our generation available. You know, if a tornado ripped through the lines in central Alberta and our power plants were desperately needed, we made an offer that we would make those available to the system at cost. We know that other competitors – TransCanada looked at a power plant in High River. All these things need to happen, and it's just a question of making sure that when we come to transmission, we're doing it with a very careful hand.

**Mr. Drysdale:** I think there are lots of opportunity for green generation. Even in our area with mountain pine beetle or whatever, there are all kinds of opportunities for cogeneration with some of our big plants. I don't want to be left out in the cold up north. I think the public has gotten mixed messages, especially from your company, about whether it's actually needed or not.

**Mr. Holden:** Yeah. I think it's the magnitude and the removal of the regulator there that are the most concerning.

The Chair: Thank you very much. Mr. Kent Hehr.

**Mr. Hehr:** Just a couple of questions. I know that various characterizations of the upgrades that are going in have been made. One, I believe, was "overkill," and one was "prebuild." Just on those two terms, I guess, some estimates on the cost to the entire system of what that overbuild would be or even the prebuild. Do you know what I am saying? That portion of line that is not necessary right now that is scheduled to go: is there a cost estimate out there right now as to what that would be for the extra portion of the line that's being factored in right now under the proposal?

**Mr. Holden:** Well, the best indicator of that would be the AESO plan of 2007 because they talked about one 500 kV line as a prebuild for what might be needed in the post-2015 period. That was \$1 billion to \$1.5 billion.

**Mr. Hehr:** Just to follow up. This might be outside of the scope of this, but I'll ask it anyway. Are there, like, any technologies on the horizon or something that may make it actually redundant for us to

be needing all this transmission that is being proposed? Maybe you guys in the industry can comment on that, whether some of that is near or far away or is available, you know, in the next five years that may make a project of this undertaking unnecessary.

**Mr. Holden:** Well, from my perspective there is lots of technology that is coming. We think there will be a greater penetration of solar power on homes and a greater penetration of cogeneration in commercial buildings. We think generation inside the cities will grow at about the same rate over time as the load will grow. It's not unlike what happened in Fort McMurray. As Fort McMurray grew, generation capacity grew at about the same rate. In fact, in the numbers you saw earlier, most of the generation added to the system in the last 10 years was matching load; it was behind-the-fence generation.

Now, the AESO plan of 2007, the one that we think is the one we should follow, with the \$1 billion to \$1.5 billion of transmission spend, doesn't even contemplate in that \$1 billion to \$1.5 billion generation in the city of Calgary. So if you add the district energy plant that we're putting in downtown Calgary, you add the peaking plant at Crossfield, and you add the new plant out at Shepard, then even that \$1 billion to \$1.5 billion should be carefully analyzed. We don't think it's a wrong idea, but we think it's something that should go to a regulator and be reviewed. Then as these other technologies come in the next five, 10, 15, 20 years, maybe they'll have an equivalent impact of reducing the cost of transmission, and a regulator should hear each one of those ideas over time as well.

Mr. Hehr: Thank you very much.

The Chair: Thank you. Jonathan Denis.

**Mr. Denis:** Thank you very much, Mr. Chair. Just getting back to the local access fee again here: would it be fair to say that it would go into Enmax's general revenues?

**Mr. Holden:** The local access fee goes into the revenues of the regulated business.

**Mr. Denis:** Okay. It's not sent into a separate account is what I'm asking.

Mr. Holden: No.

**Mr. Denis:** Okay. Secondly, if I told you, like, that a typical bill in Edmonton with EPCOR had about half of the local access fee that the bill I tabled would, would that shock you at all?

**Mr. Holden:** I don't have any basis for comparison. Is that the case?

Mr. Denis: That's about the case that I have.

Mr. Holden: Okay.

Mr. Denis: Does that surprise you at all?

**Mr. Holden:** It depends entirely on how the systems were built over the last 50 years. It's hard to comment on that.

## Mr. Denis: Okay.

Can I get back on the list, Chair, please?

**The Chair:** Thank you very much. Mr. Paul Hinman.

**Mr. Hinman:** Thank you, Mr. Chair. I guess we've been reminded a couple of times that there are no bills in front of this committee. If there was no Bill 50 in front of the Legislature, I'd like to ask each of you: going back to our current system, if nothing was to change, would AESO's new one pass the needs test for these transmission lines in each of your opinions? If we had to go through a needs process again to show that we needed transmission lines, do you feel that it would pass in the current system that we have without Bill 50?

**Mr. Bahry:** I'll take a stab at that. My understanding is that the AESO has been consulting quite significantly on the north-south corridor as it was. They obviously, as you know, filed an application in 2004 for need.

Mr. Hinman: Yes. I have it here.

**Mr. Bahry:** It was approved in '05, and Alberta's demand for power has kept growing since then. They have been actively consulting with landowners along that right-of-way. As far as I understood it, they would have filed that to the regulator as they were prepared to do so.

In fact, one of the key pieces of critical transmission infrastructure which we pointed out to you, the \$8.1 billion of near-term CTI, in fact, went through the regulator. The south Alberta transmission reinforcement: the needs was filed and was approved this spring. That's \$2.5 billion or so out of the \$8.1 billion of CTI done through the old-school way. So the north-south would have been filed by the regulator. That was obviously a contentious area. I would think that they'd probably have an easier time with landowners and other issues applying for the Fort McMurray need or the Fort Saskatchewan need.

But I think the anxiety was: gee, from the government's point of view we had this need tried once; it was approved once; it's five years later. We have some anxiety about getting this stuff built and concern with how the landowner situation was progressing, perhaps, and they opted to say: listen, this is public infrastructure; we need to get this stuff done. We have a public agency that's defining need, which is the AESO, and we need to move this forward in light of the investments in this market that are to come.

**Mr. Holden:** Well, I would answer it this way. When the 10-year transmission plan in 2007 was tabled, there was contemplation of a project from Fort McMurray to the United States called the NorthernLights project. Specifically, in the 10-year plan the AESO said that proposed merchant interconnections are possible in Alberta and because "merchant interties are planned and advanced by . . . for-profit organizations optimizing their merchant potential," they must be carefully planned by the AESO. Any such project would not be paid for by Alberta consumers. It also goes on to say that in the event that the merchant intertie wanted to address specific needs identified by the AESO that were otherwise not required, the AESO would take such compensation for those lines to the EUB for regulatory review.

# 8:25

When you look at the projects now on the table, this merchant project is now included in the CTI projects, and they specifically said in the 2007 plan that it would be excluded. So if you follow that logic, it's likely that a regulator would probably question the need of putting a merchant line onto the backs of consumers. **Mr. Vaasjo:** I'm not sure that's exactly logic. In any event, if you look at the transmission systems that are being put forward, that is a technical solution to a congestion problem that's happening in the province of Alberta. If you go back a couple of years ago – and I do wish the AESO was here as well – they were suggesting that by this point in time our transmission system would be so fragile that it would be beneath North American standards. Those standards were set after the blackouts that took place in the eastern U.S. and in Quebec and Ontario. It's based on those standards that we are coming dangerously close to falling short of those standards.

I don't think that there is an issue of need on the north-south line. You know, to refer this back again through a regulatory process around need will run us dangerously close to a situation where we may well start having blackouts. We may well start having significant issues around the transmission system here in the province of Alberta. This isn't a situation where we can take our time trying to resolve it. It just is not possible in this time frame for us to go back and go through that process. I personally am commending the Alberta government for actually stepping up and saying: enough is enough; we absolutely need these facilities, and we absolutely have to put them in place.

Again, just to recognize that that's only the needs, that that does not in any way, shape, or form impact on the balance of the process that ensures that the rights of individual landowners and individuals are maintained. It's only the narrow issue of the need of the transmission facilities in the province. So from my standpoint the needs facilities, particularly as they relate to the north-south lines, is an exercise that will move Alberta closer and closer, where its already-fragile transmission system may well have some very, very serious problems.

The Chair: Thank you.

Mr. Bahry, would you like to comment on this as well or not?

Mr. Bahry: I prepared a comment earlier, so I'll let it go.

**Mr. Hinman:** If that threat exists that you're talking about in the system, is not the systems operator obligated to submit that report that we're in a critical or urgent situation? We keep hearing that we're in a critical or urgent situation, and that's the thrust, to my understanding, to this bill before the Legislature, yet there are no reports filed anywhere to show that need. I mean, there's a speculation that our lines are old, but the real lifespan is only halfway through. I don't understand the urgency. Yet there are no reports filed anywhere showing that need or that desperate situation. Can we not do a need with location of generation at the same time to see if we really need that need if we put both in there?

The Chair: Who wants to answer?

**Mr. Vaasjo:** Sure. I think the AESO has addressed that in terms of their most recent study, I believe released this summer, where they have identified those projects as being critically required in the province. Now, in terms of being able to specify and get into the specific details around technically that need, you know, again, I wish the AESO was here so they could respond to that because they are the experts in respect of transmission in the province.

**Mr. Holden:** My view on that is that there was a time in 2004-2005 where we felt quite strongly as an industry that we needed to build a 500 kV line from Edmonton to Calgary. The need was put forward, and we debated timing. That needs application was well vetted. The 2007 system plan that the AESO put out is an expres-

sion of the consequence, the aftermath of that discussion. The AESO at the time said that if we built the 500-kV line, that would carry us for a number of years, probably well into the 2015 period. The new plan adds about four times that capacity. Yet we had a recession. Calgary dropped by 2 per cent in the time frame. We've added generation in the Calgary area to unload the line. There's been lots of change, even against the one 500-kV line. So I think the AESO has expressed it except they've expressed it in another way.

The other thing I would draw your attention to is that just today the University of Calgary published a document from the School of Public Policy called Transmission Policy in Alberta and Bill 50. I apologize for talking about Bill 50, but this document specifically addresses the economic impact of two high-voltage DC lines from Edmonton to Calgary and suggests that if they cost \$2.2 billion, which is an approximate number, then they would have a negative NPV of \$1.9 billion, which is an expression to say that it's very difficult to see the economic benefit of two lines and that it's barely justifiable to do one. Now, I've said earlier that we would support one line from Calgary to Edmonton – we think that's a good decision – but it shouldn't be four times the capacity like this is.

## The Chair: Go ahead, please.

**Mr. Bahry:** I would like to add to this. Again, we're talking and I assume the paper talks about the whole enchilada of two 2,000-megawatt north-south lines, which is in the bill, but from our understanding from the AESO it is not to occur in the near future. They're planning a staged build. These plans and these projects are to come in as demand warrants. The approach that we understand will be taken is to incrementally build these projects in a staged manner over time.

I would also like to add – I mean, we're talking about economics. Alberta has a \$258 billion GDP. That's the value of our economy. We're expecting investments of \$350 billion over the next 35 years. We've got to figure out how we're going to manage and welcome that level of investment. I look at transmission and, in fact, at electricity. The electricity market is worth about \$7 billion a year. Wholesale transactions of electricity are \$7 billion a year. Just some extra math here for you at 8:30 at night. Let's put this investment and the projects in context of the economy that it's intended to serve over the next 20, 30 years.

#### Mr. Holden: Can I make a comment?

#### The Chair: Go ahead, please.

**Mr. Holden:** We agree with Evan's comment about incremental build. We think that that is exactly the right way to do it: build one line, make an assessment, see what generation occurs; take another line, see what generation occurs; build another line. Each time take that to the regulator, explain why you need it, make sure that it's not overbuilt, make sure that it's not gold plated. That's exactly what our position is, and that's exactly how it's been done for 50 years.

If the consensus is "Let's incrementally develop our system," we're one hundred per cent behind that, and we think the government should be a hundred per cent behind that. We think that if you read both the University of Calgary study and the AESO 2007 plan, they are as well. It's just that the new bill tries to do it all at once and take away the regulator.

# The Chair: Mr. Evan Berger.

**Mr. Berger:** Thank you, Chair. Kind of a selfish thing here. I come from the area of southern Alberta that has the most wind generation

in Alberta. Now, to go backwards a little bit, IPPSA's comments were on our fivefold increase in wind capacity. We went from a bunch of three kW to a bunch of three megawatts. We have a whole lot of locked-in power production there right now. We have many turbines that are not turning on days that they should be turning. That power was all locked in. We have many, many applications that have been approved that are not online because of capacity.

### 8:35

Now, as we go through this – and everyone has made the comment that you would generate where the wind is; that's an obvious assumption – I have to get back to the point that we were blocking that. Mr. Holden, you could probably answer this best. What would be the reason for blocking that in the summer and intervening in that 240-kV across the south? As to your own comments just now, to wait until the investment and the generation is built and then move it with transmission, why in the world, sir, would you be intervening to block that when we've got all that locked-in power, which is green power, in the south with wind generation? You know, a simple answer.

**Mr. Holden:** Yeah. This is very simple. We love wind projects. We think Alberta should get more wind, and we think it should have gas in the south to support that wind so that it firms it up, takes away the variability. We intervened on that hearing because we wanted to see it done in stages. We are very much an advocate of planning for wind but to do it in a prudent, staged manner. In the end that's what the hearing came up with as well.

**Mr. Berger:** Okay. What I'm saying, though, is the fact that the generation capacity was already there. Was it not needed to have the line right then to move that out? Otherwise, you're forcing that power in which direction? Export. There is no choice if there is anyone to take it up. So you're taking an Alberta resource and moving it somewhere else and at the same time saying that you would really like to keep it all localized if possible. I found that to be counter to your actual comments earlier.

**Mr. Holden:** No, it's not counter. We believe that more wind projects need to be freed up. We think that more regions of that wind resource need to be tapped into, fundamentally. Our advocacy, though, is to do it prudently, in stages, and hearings are for that purpose. Hearings are designed to allow people to have those opinions. We were also advocating for making sure that there's lots of scope in the system to firm up that wind generation with peaking plants or gas plants in the south. But we were not against wind projects at all.

**Mr. Berger:** So you actually do welcome that wind generation into that transmission and into the Calgary market?

**Mr. Holden:** Yeah. Absolutely. In fact, we hope to be one of the buyers of that power.

**The Chair:** Thank you very much. Mr. Dave Taylor.

**Mr. Taylor:** Thank you, Mr. Chair. I'll direct this question to Mr. Holden because I want to come back to what you were talking about in terms of future, I think, relatively near-term to medium-term technological improvements that you believe, if I heard you correctly, will change the electricity picture over the next 10, 20, perhaps 30 years. I'm not sure that I'm quoting you exactly here,

but you indicated that you think that generating capacity may very well grow locally to match the load. Is that correct?

# Mr. Holden: Yes.

**Mr. Taylor:** If that happens, I guess really three questions rolled up into one: do we need transmission capacity to be able to distribute the excess? Presumably, in 10 or 20 or 30 years, as local generating capacity grows to match the load, we're still going to have big generating capacity, whether it's in Wabamun, Genesee, wherever, perhaps your own 800-megawatt proposed plant in east Calgary, that sort of thing. What do we do with this proposed transmission system that the AESO is proposing right now if it turns out that it's not needed because local generating capacity has grown to match the load? Does this, then, require that one of the key parts of this whole proposal is to build the interties that we might need to export excess power?

**Mr. Holden:** I think that if you build power stations that need to run 24/7 and you want wind, you inevitably create a conflict between when the wind blows at night and when that generating plant needs to run. What we've done so far is that we've built an intertie to British Columbia to squeeze that power out. When that occurs, we squeeze it into British Columbia. We give it away to them at our variable costs, and we buy it back during the day. That is a consequence.

If we built a large-scale nuclear power plant and we built the transmission lines from that power plant to the market, in the middle of the night if there is not a demand because everyone has turned off their lights or there's a lot of wind blowing at that time, the only outlet for that nuclear power plant is to shoot it off into the export market. So if you have it in your mind and in your design to built nuclear power, then you have to built export lines. There's no choice about it.

But if you build plants that are dispatchable, that you can turn off at night, then you don't need the export lines to the same degree. Cogen may cause some of that must-run possibility, but we think that if we have a nice blend of cogen and dispatchable plants and wind plants, we can have a pretty nicely balanced system without a large expense on export lines.

Mr. Taylor: Okay.

Mr. Bahry: Can I provide a view on that question?

Mr. Taylor: Certainly.

**Mr. Bahry:** On the idea of locating generation close to loads or having it grow spontaneously, the downside of that, of course, is that there are few fuels that you can move. You can move natural gas fired generation. You can't move wind. You can't move the coal resources. That may get you into a circumstance where you're tied to one fuel type.

Transmission enables us to see in our marketplace the lowest cost power possible, wherever that's located in the province. Again, a wind farm could be lighting up TVs in Edmonton if it's lower, cheaper than offered in the plants operating nearby. So the optionality created by transmission helps us to again encourage fuel diversity from just gas, from wind, from coal to all. We're talking a lot about locating generation near load, but let's talk about the consequences of that as well. We think a robust transmission grid enables the most diverse fuel to enter the market and the most number of diverse players to enter the market.

# Mr. Taylor: Well, if I may, Mr. Chair, a quick supplemental?

# The Chair: Yes.

**Mr. Taylor:** Mr. Bahry, thank you for that. I appreciate your point of view. I do have to quibble with one thing, though, in that you said that coal cannot be moved. In fact, we do not move coal in the province of Alberta except maybe across the road from the mine to the power station, but in Ontario, which has no coal and still significant numbers of coal-fired generating facilities, in fact they move coal from great distances. They import it from I believe it's Ohio or Pennsylvania, somewhere in the northeastern United States, to power their coal-fired generating stations. So, you know, not to turn this into the issue of the night by any stretch of the imagination, but just for the sense of accuracy I do have to challenge your remark that coal cannot be moved.

**Mr. Bahry:** Okay. Well, I guess the coal facilities we've developed in our province are mine-mouth facilities, and that's, of course, a lower cost of doing so than trucking and shipping the coal. What do you want from generators? You want us to build the most efficient, cheapest-cost plants we can and get creative in finding locations for them. Coal has been mine mouth; peakers get built on brownfield facilities. We'd be then enabled, thus, to offer into the market a lower priced offer. That is then reflected in the wholesale market and passed on to you the consumer, again, by incenting us to build the cheapest plants we can and compete against each other.

Mr. Taylor: Thank you.

**The Chair:** Thank you very much. We'll go to Mr. Cal Dallas.

**Mr. Dallas:** Thank you, Mr. Chair. A little disclosure before we start: I was born in Calgary. I've always been a homer – a Stamps fan, a Flames fan – but I now am a proud resident of Alberta's third-largest city, Red Deer. I never get confused about from where wealth generation has resulted that has benefited my home city of Red Deer or, in fact, Edmonton or Calgary or any of the other great cities around the province. I know that that wealth generation is a result of innovation, a province that's blessed with resources, and a province that has an economic climate that attracts investment and optimism for the future.

I think we've found a number of things here that we can sort of agree to disagree on, at least amongst your panel, but I'm looking for some things that can agree on. If I'm listening to this well, what I'm hearing, I think, is that everybody in this room believes that Alberta has a bright future and that power transmission is a part of that future and that Albertans would have a reasonable expectation that the investment that would be made there would be appropriate to provide security of supply not just for their consumer needs but also to allow for further development and wealth creation in our province.

### 8:45

I'm wondering, you know, if the panel could comment on the idea that we agree on, substantial expansion. I think we could agree that Albertans would expect us to build this in a manner such that it wouldn't be referred to as pieced together with baling wire and in a manner that wherever the next great wealth creation occurs in the province or where that opportunity is, it can be a participant in the system. I think back to the days when I was a young boy and we talked about some of the potential that the oil sands might bring to Alberta, but really it was an unrealized dream at that point. Had we not provided opportunities there in a whole realm of areas, that dream would not be realized today.

I guess my questions are: are we really talking about the speed of implementation, or the build-in? Do we agree on the idea that this could be and should be incremental? Do we agree that all opportunities around the province should be taken into consideration as we consider an investment for Albertans going forward?

The Chair: Who wants to answer? Go ahead, please.

**Mr. Holden:** I completely agree with your comments. I'm glad you made them. I think we do believe that incrementalism is the answer. We believe a regulator should watch every step of the way. We think it should travel time so that when decisions are made for generation in certain locations, we adapt to that. I take our role in this market very seriously, and if I think we can save a billion dollars, we'll try to make that happen. If I think we can save \$2 billion, we'll try to make that happen. I think that in this case we might be saving \$10 billion or \$12 billion if we can do the incremental process well. We support that. We think the regulatory process that exists today will deliver that outcome.

**Mr. Bahry:** I, too, recognize your comments and think that what you're trying to achieve is a prosperous Alberta with a reliable power grid and a competitive market. Incrementalism, I think, is something that we would all support. Frankly, I think that's the plan, anyway, from the system operator.

One concern I do have, though – we talked a bit around this – is the idea of locating generation near loads. We haven't talked about the mechanics of that. How do you incent a plant to locate? Typically you incent them financially. Once you provide a signal to somebody to locate and that plant gets located there, they then compete in a market with what we would consider an unfair advantage. They have an element of their capital cost covered outside of the market signal. We're all in the market, and then one guy gets a cash payment to locate somewhere, which is one element of the design. That tips the playing field. Every other investor then says: well, hang on; I'm going to back out now and see what the next signal looks like, until I can see if I can capture a signal, too, because why would I compete in the same commodity market if somebody's receiving some kind of a signal?

Some generation can't move no matter what the signal. The wind, for example, only goes where the wind fuel is. You can send it a signal all you want to locate somewhere else, but they will be detrimentally impacted by that. That's not good for fuel diversity or economic development or, frankly, lowering our emissions intensity as per the energy strategy. The one dynamic here that we have to talk about is the consequence of this idea of locating generation somewhere and what that means to the market and also reliance on potentially one fuel type, which is natural gas.

**The Chair:** Thank you. Go ahead, please.

**Mr. Vaasjo:** Thank you, Mr. Chairman. I think it's very fitting that your preamble spoke to the oil sands and the development there because that took vision. That took a perspective by the Alberta government to do what it can to ensure that those developments take place, to enable developers to put forward appropriate regimes that provided them comfort that over a long period of time a regime would exist in Alberta where they could continue to develop those resources and they could profit from those resources.

Certainly, in looking at bringing in transmission, one can adopt a process of looking at it incrementally. But there is a principle that exists in transmission development today which is that there will be, basically, a postage-stamp rate. Basically, there'll be access throughout the province. The government in its wisdom over the last decade has consistently said: we will have generation built where it is most financially efficient, and we'll provide the transmission so that that power and the low cost of that power can be enjoyed by Albertans. That's very much a cornerstone of what the transmission policy is and what the power market in Alberta is based on. To me that's comparable vision. To stop at any point in time and say, "Here is a small, incremental decision" sends totally wrong signals to the market, eventually creates what I call a balkanized Alberta, and from a power market standpoint is horrendous.

You know, we've talked about the impact on the market today and so on, but think forward to what happens if we draw a line across at Red Deer and say: the south is a market, and the north is a market. Well, you'll have people in southern Alberta paying for wind and natural gas. You know, just to put it into context, each of the oil sands operators have cogeneration facilities of slightly over 500 megawatts; the Joffre cogeneration facility, 460 megawatts. That's for large, large industrial customers. Don't think you're going to have significant cogeneration in southern Alberta. I mean, there isn't the industry. Now, certainly, 50 megawatts to support warehouses and downtown offices, yes.

I have to compliment Enmax for their vision inside the distribution system, but outside the distribution system it makes no sense. It'll put southern Alberta on an island and face them in the long run with very high-cost power. That's the cost of incremental decisions as opposed to continuing with the vision that the Alberta government has had over the last decade.

The Chair: Thank you very much.

We're just about out of time. Go ahead.

**Mr. Dallas:** Just one quick comment on my comments around incremental. I don't think that there would be any argument that you should piece a system together on the basis of, you know, changing need or whatever. I strongly believe you have to have a vision for this. I don't think there is any proposal on the books that would suggest that you would build out a system all at once. I think that when I refer to incremental, I would be referring to the idea that you have a plan and that you piece together a time frame to that plan and you build it out.

The Chair: Okay. Thank you very much.

I have one question which Mr. Denis would like to read into the record, but there will be no opportunity for any answers tonight. If everybody is agreeable to that, I think we'll allow that. Go ahead, please.

**Mr. Denis:** Thank you very much, Mr. Chair. It's a question that just anybody can submit on; it's not for a specific individual. It seems to me that a strong business case could be made for building transmission now, looking forward to the future, looking forward to future growth, especially at a time when construction costs are lower, up to 40 per cent lower. I just would like some comments back on that if you could submit in written form.

**The Chair:** Okay. We'll just read that question into the record. For the record you could send a written answer to the committee through the clerk for all members if you wish.

That will bring this part of the meeting to a close. Thank you very much, gentlemen, for your participation. We have had a very interesting evening.

Just one or two more items for the agenda. I guess I'll ask the question: is there any other business that committee members wish to raise at this time?

8:55

**Mr. Oberle:** Mr. Chair, I would like to propose a motion with respect to a report.

The Chair: Okay. Could you read your motion?

**Mr. Oberle:** Okay. I have it written, so I'll read it. Moved by Mr. Oberle that

the committee's research section prepare a draft report summarizing the presentations heard by the Standing Committee on Resources and Environment on November 2 and November 4, 2009, for distribution to the relevant government of Alberta ministries and that the chair and deputy chair be authorized to review and approve the draft report on behalf of the committee.

The Chair: Thank you very much.

Any comments?

**Ms Blakeman:** Just a question: this is the same process that we used previously?

The Chair: Yes.

Ms Blakeman: Thank you.

The Chair: Any more discussion?

**Mr. Boutilier:** Mr. Chair, just on that point, I think it seems to have worked well in the past. I'd only ask that the draft report, the good work of the research, be forwarded, though, to all members of the committee. I don't think there's a downside to that.

The Chair: Absolutely. No. That's assumed.

Okay. All in favour of the motion? That's carried.

Do I have a motion to adjourn? Wait a minute. Before we do that, I'm going to also tell you that the next meeting with be at the call of the chair.

So now we have an opportunity for adjournment. So moved. All in favour? That is carried.

Thank you.

[The committee adjourned at 8:56 p.m.]

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