



Legislative Assembly of Alberta

The 28th Legislature
First Session

Standing Committee
on
Resource Stewardship

Ministry of Energy
Consideration of Main Estimates

Tuesday, April 9, 2013
3:30 p.m.

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First Session**

Standing Committee on Resource Stewardship

Kennedy-Glans, Donna, Calgary-Varsity (PC), Chair
Anglin, Joe, Rimbey-Rocky Mountain House-Sundre (W), Deputy Chair

Allen, Mike, Fort McMurray-Wood Buffalo (PC)
Barnes, Drew, Cypress-Medicine Hat (W)
Bikman, Gary, Cardston-Taber-Warner (W)
Bilous, Deron, Edmonton-Beverly-Clareview (ND)
Blakeman, Laurie, Edmonton-Centre (AL)
Calahasen, Pearl, Lesser Slave Lake (PC)
Casey, Ron, Banff-Cochrane (PC)
Fenske, Jacquie, Fort Saskatchewan-Vegreville (PC)
Hale, Jason W., Strathmore-Brooks (W)
Hehr, Kent, Calgary-Buffalo (AL)*
Johnson, Linda, Calgary-Glenmore (PC)
Khan, Stephen, St. Albert (PC)
Kubinec, Maureen, Barrhead-Morinville-Westlock (PC)
Lemke, Ken, Stony Plain (PC)
Mason, Brian, Edmonton-Highlands-Norwood (ND)**
Sandhu, Peter, Edmonton-Manning (PC)
Stier, Pat, Livingstone-Macleod (W)
Webber, Len, Calgary-Foothills (PC)

* substitution for Laurie Blakeman

** substitution for Deron Bilous

Support Staff

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Jeanette Dotimas	Communications Consultant
Tracey Sales	Communications Consultant
Liz Sim	Managing Editor of <i>Alberta Hansard</i>

Standing Committee on Resource Stewardship

Participants

Ministry of Energy

Hon. Ken Hughes, Minister

Sandra Locke, Assistant Deputy Minister, Electricity, Alternative Energy, and Carbon Capture and Storage

3:30 p.m.

Tuesday, April 9, 2013

[Ms Kennedy-Glans in the chair]

**Ministry of Energy
Consideration of Main Estimates**

The Chair: All right. I'd like to welcome everybody again this afternoon. Just to make sure you're in the right place, we're considering the estimates for the Ministry of Energy for the fiscal year ending March 31, 2014.

Again, for any of those of you who may have forgotten, the mikes are operated by *Hansard*, and please put your cellphones under the table.

I'll start with my vice-chair here to do introductions.

Mr. Anglin: Joe Anglin, Rimbey-Rocky Mountain House-Sundre.

Mr. Hale: Jason Hale, Strathmore-Brooks.

Mr. Bikman: Gary Bikman, Cardston-Taber-Warner.

Mr. Barnes: Drew Barnes, Cypress-Medicine Hat.

Mr. Stier: Pat Stier, MLA, Livingstone-Macleod.

Mr. Casey: Ron Casey, Banff-Cochrane.

Mr. Khan: Stephen Khan, St. Albert.

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

Mr. Hughes: Ken Hughes, MLA, Calgary-West, Minister of Energy.

I'm joined by several officials, all of whom I introduced last evening. In particular, here at the table joining me: Jim Ellis, deputy minister; Sandra Locke, ADM of alternative energy and carbon capture and storage; and Douglas Borland, senior financial officer. We have more support here as well that I introduced last evening.

The Chair: Thank you, Minister.

Ms Kubinec, we'll just keep going around the table.

Ms Kubinec: Maureen Kubinec, Barrhead-Morinville-Westlock.

Mr. Allen: Good afternoon. Mike Allen, Fort McMurray-Wood Buffalo.

Ms Fenske: Hi. Jacquie Fenske, MLA, Fort Saskatchewan-Vegreville.

Mr. Lemke: Ken Lemke, Stony Plain.

The Chair: All right. I'll note for the record that, Mr. Hehr, you're substituting for Ms Blakeman, and Mr. Mason is coming, and he'll be substituting for Mr. Bilous.

Just for the record I'd like to again note that the Standing Committee on Resource Stewardship has already completed three hours of debate on the main estimates for the Ministry of Energy. As we enter our fourth hour of debate, I'd remind everyone that the speaking rotation for these meetings is provided for in Standing Order 59.01(6).

We're now at the point in the rotation where any member may be recognized to speak, and speaking times are limited to a maximum of five minutes per member with a five-minute response from the minister. Members have the option of combining their speaking time with the minister for a maximum of

10 minutes. Please remember to advise the chair at the beginning of your speech if you wish to combine your time with the minister for a back and forth or take your five minutes as a block.

Just to recap, six hours have been scheduled to consider the estimates of the Ministry of Energy. I'll call a five-minute break near the midpoint.

Committee members, ministers, and other members who are not committee members may participate. Members' staff and ministry officials may be present, and at the direction of the minister officials from the ministry may address the committee.

As noted in the Speaker's memorandum of March 22, I'd also like to remind all members that during main estimates consideration members have seating priority at all times. I don't think that'll be an issue at this table, but if we have too many at the table and there are no seats available, staff seated have to relinquish their seats.

If debate is exhausted, or we're exhausted, prior to six hours, the ministry's estimates are deemed to have been considered for the time allotted in the schedule, and we will adjourn; otherwise, we'll adjourn at 6:30 p.m.

Points of order will be dealt with as they arise, and the clock will continue to run.

Any written material provided in response to questions raised during the main estimates should be tabled in the Assembly for the benefit of all members.

Vote on the estimates is deferred until consideration of all ministry estimates has concluded and will occur in the Committee of Supply on April 22, 2013.

Welcome, Ms Calahasen. I'll let you introduce yourself if you wish.

Ms Calahasen: Sorry I'm late, Madam Chair. Pearl Calahasen, Lesser Slave Lake.

The Chair: We do have an amendment that's going to be tabled this afternoon by the Wildrose caucus, so I will give you a little bit more information.

An amendment to the estimates cannot seek to increase the amount of the estimates being considered, just so you know, change the destination of a grant, or change the destination or purpose of a subsidy. An amendment may be proposed to reduce an estimate, but the amendment cannot propose to reduce the estimate by its full amount.

Vote on amendments is deferred until Committee of Supply on April 22, 2013.

Written amendments must be reviewed by Parliamentary Counsel prior to the meeting at which they are to be moved. Twenty-five copies of amendments must be provided at the meeting for committee members and staff.

I'll let the new entrants here – Mr. Mason, Mr. Sandhu – just introduce themselves for the record.

Mr. Mason: I'm Brian Mason, MLA for Edmonton-Highlands-Norwood.

Mr. Sandhu: Good afternoon. Peter Sandhu, Edmonton-Manning.

The Chair: All right. Thank you.

With that, I think we'll start. Last evening we had gone through the cycle of Wildrose, PC, Wildrose, so we're now at a PC member, and it's only a member, not the caucus. So I guess I would look to Ms Fenske.

Ms Fenske: Thank you.

The Chair: Do you want to do five and five or combined?

Ms Fenske: Combined, please, Madam Chair.

The Chair: The next speaker, just so you're on alert, is from the Liberal caucus.

Ms Fenske: Thank you, Madam Chair, and welcome again, Minister. I hope you had a great rest and have a lot of water over there to keep you going for another three hours.

I'd like to take some time talking about the new energy regulator that's going to be on the stage as of June 1. We know that the regulations are being worked on currently. I'm not sure if that will make a difference in what we can expect from the regulator, but maybe you can just give us some information as to what services will be available from that energy regulator.

Mr. Hughes: Certainly. Madam Chair, I appreciate the question. The services available from the regulator will include everything that is currently undertaken by the Energy Resources Conservation Board plus the regulatory function that is carried out by ESRD, the environment department, under the four pieces of legislation that apply to oil, oil sands, and coal. That's the nature of the services that will be available.

Of course, at the start-up here we're creating a whole new governance model that I think is really, perhaps, leading-edge in terms of its governance practices. It really reflects the experience of many people over recent years in governance both in the public sector and the private sector. We have a true governance board and then the commission panel from which commissioners will be selected to deal with any hearings that might be required in the process.

Ms Fenske: So when we look in the budget, will we find – I guess, where in the budget is this going to be funded? Is it under the ERCB line?

Mr. Hughes: It's actually the line that's currently identified as ERCB, which is on page 74 under operational expense, energy regulation: \$170 million.

Ms Fenske: Since this is a new regulator, how confident are you that that estimate is what we're expecting it to be?

Mr. Hughes: Well, it's not like we're starting from fresh or not working with a lot of good work that's already been done for an awfully long time. I'm very confident that that budget number will be a reliable budget number to predict what the organization would spend over the first year.

What we are doing – and I think it was in this forum that we talked about this previously – is we are also requiring industry to pick up the cost for the whole regulatory function as opposed to only part of it, which is what they currently do. So there's an additional \$41 million that industry will be paying through the levies on industry to pay for that regulatory function.

Ms Fenske: You know, it seems like a long time ago, but it was last night that that conversation took place.

If the regulator with its larger scope, if you guessed wrong, if you budgeted incorrectly – are any of the regulator's estimates in another department? Would we find any support there?

Mr. Hughes: No. This would be the accountability of the governance board, the chair of which we have just recently appointed, Gerry Protti. That new governance board will be responsible for all of the fiduciary duties that a board normally has

for any organization, which include setting a budget, having accountabilities appropriately discharged, ensuring that there's a clear mandate, and ensuring that there's clear guidance to the employees of the organization so that there's clear leadership on what the objectives are for the organization.

3:40

They will be responsible also for developing, you know, their three- to five-year plan, their budgets in the out-years, and ensuring that they stay on budget. The levies for conducting business on their part will be the responsibility of the board. Obviously, in governance-speak, as the shareholder of the organization – the minister acts in the place of the shareholder. There will be clear communication back and forth in terms of expectations of how the board will conduct itself, the fact that it will be expected to be reasonable in its budgeting processes and responsible. And I fully expect that to be the case.

Ms Fenske: Thank you, Mr. Minister.

Just switching gears here a bit. We have a line even on page 74, just below the energy regulator, for the orphan well abandonment. I'm sure you recall – I think it was with the AAMD and C in the bear-pit session, or it perhaps could have been with the co-ops – that the question came up from municipalities with respect to not just wells but pipelines that were perhaps abandoned. Is there something that the department will be able to do to assist municipalities with respect to that? Where would we possibly find that in this if it is in your department? Maybe it's under Municipal Affairs.

Mr. Hughes: No, no. The ERCB and the Alberta energy regulator would be equally responsible for ensuring – you're talking about the abandonment of infrastructure like pipelines?

Ms Fenske: Yes.

Mr. Hughes: Yeah. So the AER would continue to be responsible for ensuring that infrastructure, whether it's wells or whether it's subsurface pipes for pipelines, that all of that is appropriately rehabilitated and addressed at the end of its useful economic life. There are quite clear rules in place already that industry must follow in order to do that. Obviously, the resource development division in the Department of Energy develops the regulations and the policy around that as well.

Ms Fenske: Well, from my perspective, from the municipalities that I represent – one of them looks like a spiderweb has sort of been built underneath it. Even for smaller municipalities who have grown, the history isn't always available. They have called your department, and I would like to thank you for the speedy response that they have gotten. I'm appreciative that there is a program in place to be able to deal with that because that infrastructure certainly is aging and needs to be taken care of.

Mr. Hughes: Well, if you think about it, I mean, we've been drilling wells and putting in pipelines in this province for at least a hundred years if you go back to Dingman 1 in Turner Valley, 1914, which we'll be celebrating the anniversary of soon. You know, that's a lot of pipe in the ground and wells, some of it done well before we had the kind of regulatory structures we've had in place for the last 75 years.

Ms Fenske: Do we have a mapping? I mean, I've seen one for the municipality that I was a councillor of at one point in time, but I don't know how correct or how accurate it was with respect to

where, potentially, some of those orphaned wells happen to be. I just wondered if there's sort of a larger picture for the province.

Mr. Hughes: Yeah. You could go to the website operated by the ERCB and identify any abandoned wells in the province of Alberta. That's a tool, actually, that is useful to municipal governments if they're looking at a subdivision. In fact, now our colleague the Minister of Municipal Affairs has made some changes that require municipalities to take a look at that website first as part of their checklist before they actually get a subdivision approved so that there is clear disclosure on any historical wells in an area.

Ms Fenske: Thank you.

The Chair: Thank you, Ms Fenske.

Mr. Hehr, do you want to do five and five?

Mr. Hehr: That would be perfect.

Thank you again to the minister and staff for being here today to answer our questions. I have a couple surrounding our carbon capture and storage program. Clearly, it was once envisioned to be a force in reducing our CO₂ emissions. It's my understanding that we only have two projects on the go and that two have been cancelled. That would mean that, at least by my math, about \$760 million of the government's \$200 billion in CCS funding is now unallocated. Is this money just going to be returned to general revenues? Is there a look at other opportunities to do CCS? I guess that if you could give me an update on sort of where we are in the entire program, that would be good.

Mr. Hughes: Sure. I'd be delighted to. Thanks for the question.

The Chair: I understood that you were going to do five plus five.

Mr. Hehr: No. We're going back and forth.

Mr. Hughes: We'll go back and forth.

The Chair: Okay. Just to be clear, five plus five would be you speaking for five minutes and then the minister speaking for five minutes, so you really meant combined.

Mr. Hughes: We meant combined.

The Chair: You meant combined, right?

Mr. Hehr: Yeah. That's what I meant.

The Chair: Good. Thank you.

Mr. Hehr: All right. There we go. Perfect.

Mr. Hughes: Sorry. I think I must have read his mind.

The Chair: It's hard for *Hansard* to pick up telepathy, guys.

Mr. Hughes: The carbon capture and storage program is obviously one of those critical elements of initiatives that we're undertaking in order to ensure that we have the social licence to operate in this province, and that ensures that we also have access to markets both in North America and elsewhere. The original commitment was for \$2 billion, and that's over a 15-year period, so that's not all in one fell swoop or one year.

Of those four projects that originally started out with \$2 billion, two smaller ones have turned out, in the eyes of the proponents, not to be economic, and for different reasons, it would appear, the

two companies have chosen not to go forward although certainly the government of Alberta was fully prepared to commit should there be a participant that was willing to participate in that. It's between \$1.2 billion and \$1.3 billion that is still committed and will be drawn down on over time. That will have the effect of taking the equivalent of 550,000 cars off the road, which is like two-thirds of the passenger cars in Calgary, which is actually a pretty big commitment when you think about it.

Mr. Hehr: Well, let me just follow up. There appears to be – and maybe I just can't find it – relatively little public information available on the government's CCS grant agreements for the Alberta carbon trunk line and the Shell Quest projects. Can the minister shed some light on these? How easy would it be for, I guess, the ongoing funding to be modified? Is there any talk that these projects will be cancelled, or are you pretty confident they're going to go ahead and see the full light of day?

Mr. Hughes: We're quite confident that both of those projects are going ahead and meeting the carbon capture program goals that have been set out for them. In fact, I think you were also asking earlier about whether or not there's been any decision with respect to the 700-ish million dollars that was committed to earlier. There's been no decision about that since that time.

3:50

Mr. Hehr: I think I finally found out what I alluded to last night. In your line item 2.1, page 66 of your government estimates, it says that capital spending for revenue collection is estimated to be \$5.3 million this year, and that's supposed to be up \$4.5 million, or 85 per cent, from 2012-2013. Can the minister explain how this capital expenditure will work?

Mr. Hughes: Sorry. It was page 66?

Mr. Hehr: Yeah. That's what I have in my notes, page 66.

Mr. Hughes: Yeah. The question was? I'm sorry.

Mr. Hehr: Well, what is this going to be used for? What's going to be used to enhance revenue collection? Is this a response to the Auditor General's concerns that we may not be collecting all of our royalties? If you could just enlighten me on this seemingly large increase in the budget.

Mr. Hughes: Yeah. This is a capital investment that's largely focused on strengthening the information technology system software and other systems. You know, as in any large organization there are occasions when you need to step up to the next generation or the next capability of software. That's what's happening in this case.

Mr. Hehr: Okay. I guess, following up – and I believe you'd be able to handle some of this – you're working probably quite closely with the 40/40 initiative on reduction of carbon. Is that fair?

Mr. Hughes: I could certainly have a discussion about that if you wish to.

Mr. Hehr: Yeah. That's fair. Do you see this as a starting point? Is this a negotiating point? I know you're going to get some push-back. I know CAPP in the paper today pushed back, saying that a \$20 levy might be more appropriate. In my view, to be clear, I think it has some merit, the way the ministry is going, and clearly we do need a social licence. What's your role going to be in this

negotiation? What have you heard from partners? How much push-back is there and the like?

Mr. Hughes: Sure. Well, this is primarily an initiative led by Minister McQueen and ESRD. I'm providing support in terms of analyzing the economics of any of the options that are out there and ensuring – as you may know, I'm a numbers person, coming from business. There are many options out there today, and I probably won't be able to respond in much more detail than that that's all right. There are many options out there. We'll look at all of those options in light of discussions where Alberta is working closely with the government of Canada and with industry to explore our options in order to make the best of the opportunities that we have and ensure that we position ourselves as well as we possibly can so that we do have the social licence to operate and we do have the opportunity to get access to markets for our products.

Mr. Hehr: So this is essentially just a starting-off point. There's no commitment to a 40/40 number, as has been reported.

Mr. Hughes: You know, there are many options out there that are being looked at.

Mr. Hehr: Okay.

The Chair: We do the budget estimates next week for Environment and SRD, so you'll be able to ask those questions.

Mr. Hehr: Well, I know, but it's, again, two sides of the same coin, and I know the minister will be eminently busy working on that file as well.

I'm good. The next person can ask questions.

The Chair: Thank you, Mr. Hehr.

The Progressive Conservative caucus. Mr. Khan. Thank you. Would you like to speak for five minutes and then the minister, or would you like to speak 10 minutes cumulatively with the minister?

Mr. Khan: No. Ten minutes cumulatively would be my preference.

I think I'd like to pick up on a conversation that we began yesterday. We had a rather fulsome discussion about the Retail Market Review Committee recommendations, and I did very much appreciate your insights into where we're going in that regard. We talked so well that I didn't get to my supplemental question, so I beg your indulgence.

I'm referring to page 71 in the Ministry of Energy statement of operations by entity. In fiscal year 2012-13 operational expense for the Alberta Utilities Commission was \$2 million higher than operational revenue. In this year's estimate the revenue and expenses reflect a considerably smaller gap. I was wondering, then: could you be kind enough to explain why the expenses have dropped at the AUC? Is this somehow related to fewer projects being reviewed?

Mr. Hughes: I appreciate the question. This is actually, you know, related to the general theme of the whole budget of the province of Alberta, where everybody was asked to tighten their belt, and the regulators are obviously part of that as well. We specifically requested that the AUC take a 2 per cent budget reduction – that's a \$750,000 reduction – and then they can work within that context. They can make their own decisions in a normal governance context to achieve that reduction.

Mr. Khan: Thank you for that insight.

If I can shift gears just a little bit, I know that in the House yesterday, in the papers, and at my trade show that I had in St. Albert, where I had sort of door-knocking in reverse, meeting with a number of constituents all weekend long, a few of them – you know, there's always the topic of: are we upgrading enough, are we refining enough here in Alberta? I know opposition members from all aisles bring that up as an issue and a concern.

I'm also very keenly aware that Alberta has always been remarkable in terms of scientific research and very much leading the way in the energy sector in terms of developing new technologies, so much so that we see our friends across the 49th parallel using technologies developed in Alberta to produce more oil and gas than they ever thought possible. Along these lines I've been following with interest some of the new proposed technology in terms of on-site upgrading and where we are and projecting where we could be with that growing technology. Now, that, in my mind, could be a real game changer in terms of creating new markets, in terms of actually upgrading bitumen on-site and then moving that into broader markets without the enormous cost of building upgraders. Do you have insight as to where we are in terms of supporting our industry partners in moving in that direction?

Mr. Hughes: You know, it's a very interesting question. If you look at the history of the oil sands, it's been a remarkable technology story, just a fabulous technology story that actually hasn't been given its full due yet in terms of the remarkable work. You know, some of these engineers have performed exceptional accomplishments. As the technology has evolved, as people have learned how to develop steam-assisted gravity drainage, using other products to get the oil to flow, of course, there are a number of players out there with different proposals to do upgrading either in situ or close to the wellhead. We're meeting with all of those groups and exploring to see if there are – you know, some of them are at various stages in the technology development curve, some of them are test-tube projects in the lab, and some are trying it out in the field. We're following this very closely.

I think we've got some really interesting opportunities here to not only improve the technology but at the same time improve the economics and improve the greenhouse gas footprint as well. All of these are really important policy objectives for Alberta.

4:00

The interests are clearly aligned. People who are doing this want to reduce the use of water. They want to reduce greenhouse gas production. They want to improve the economics. These are pretty strong drivers, as you would know, in any technology development initiative. There appear to be a lot of forces at work, and I think it's just so exciting that it's what we're going to see over the next five years.

The thermal in situ technology actually looks like it does some upgrading underground, as one example. There's also electrical heating of bitumen as well. These are a couple of examples of technologies out there, and there's a pretty wide range of technologies. It's actually very exciting. There's a lot of very interesting stuff going on.

Mr. Khan: The part that excites me – I think it's been discussed at length – is that, you know, Alberta has a number of enormous advantages. However, in terms of building refining capacity and building upgrading capacity, we may be one of the most expensive jurisdictions in the world to build that. So rather than wringing our hands in regard to whether we need more refineries, whether we need more upgraders, I think that if we were to move in this

direction and encourage upgrading on-site, we could move past, literally leapfrog some of those challenges we have on the upgrading and refining side of things. Again, I could not echo your sentiments more strongly, Mr. Minister, in terms of: we do have remarkable science, and we do have remarkable research, particularly when it comes to energy. We literally are world leading. We don't take the time to promote it to the extent that we could or should. I share that opinion with you very strongly.

Mr. Hughes: You know, industry is moving and is supported by the government of Alberta in whatever way is meaningful and useful to push on the technology frontiers. At the wellhead is one example.

Also, you've spoken of one of the challenges that we have in this province, the high cost of big projects. I mean, we've got less than 5 per cent unemployment. Every new project leads to immense stresses upon the workforce in the province and the economy of the province. It puts us at risk of pricing ourselves out of business and out of the possibility of doing more upgraders.

One of the advantages that we have in Canada, though, is that there are many locations across Canada where upgrading and refining can take place. I would make the case as a proud Albertan and a proud Canadian that upgrading and refinery work done anywhere in Canada is good for Alberta as well for many reasons. It's pragmatic. It's economic. It's nation building. It's all of those reasons, and that's what we have been speaking of from the perspective of this government.

Mr. Khan: I couldn't agree with you more, and it was encouraging to hear Prime Minister Harper echo those sentiments last Thursday at the Klein memorial. Thank you very much for your work.

Madam Chair, that's the end of my questions. Thank you.

The Chair: Thank you, Mr. Khan.

Mr. Mason, you're next up. Do you want to do five and five, or do you want to combine your questions?

Mr. Mason: I would like to do the full five minutes, and I'll just read my questions into the record, as I did last night.

Mr. Hughes: Let me get a new pen.

Mr. Mason: You're going to need a new wrist, Mr. Minister.

All right. I was just starting a few questions on royalties, so I'll finish those, and then I will ask some questions on electricity.

According to the OECD international oil companies operating in Norway take home 22 per cent of net revenues from oil production. In Alberta they take home 53 per cent of royalties. Now, the Auditor General between 2007 and 2011 – that's Mr. Dunn – routinely challenged the government for missing or ignoring its royalty targets. The question really is: what is the royalty target? What is the target for the owner's share of the economic rent?

I'm just going to go on a little bit to Peter Lougheed, who substantially increased the take of the owner on oil revenues. He had a target of 35 per cent, and I'd like to know why the government has abandoned that as a goal and what it is now, what the goal is in theory and what is being accomplished with respect to that in practice.

I'd like the minister to comment on the suggestion that it would be advantageous to slow the pace of oil sands extraction and replace that economic activity with increased upgrading and refining, which could yield a more stable and less crisis-prone

economy while still providing more high-paying jobs for Albertans.

Just on that point, Madam Chair, I want to quote from a document which is a report called Keystone XL Assessment: No Expansion Update, prepared by EnSys Energy and Navigistics Consulting for the U.S. Department of Energy and the U.S. Department of State, the final report, August 12, 2011, part of the research and documentation that was prepared for President Obama to assist him in making a decision with regard to the Keystone pipeline. I'd like to quote from page 66. This section deals with the outcome if a Keystone pipeline was not built. It says:

To the extent that such upgrading capacity were to be developed and lead to . . . exports of the resulting products into the USA, the shift would have different economic, and thus jobs, as well as logistics impacts compared to increasing exports of the bitumen to U.S. refineries for processing. Upgrading to products in Canada rather than the USA would move upgrading/refining activity and investment to Canada from the USA; also "value added" revenues as the streams exported from Canada to the USA would have the value of refined products rather than low grade crude oil. The vision, to achieve higher levels of "value added," associated investment and jobs in Alberta . . . is an explicit aim of the Albertan government and lobbying groups.

They're not right on everything.

Given the long history with upgrading to synthetic crude oil (SCO) and successful operation of the planned Redwater upgraders, this route could, in principle, be used to process oil sands volumes well in excess of 150,000 b/d.

That's a report prepared for the United States clearly stating that if Keystone is not built, it will shift investment and jobs from the United States to Canada. I just wanted to put that on the record.

I have some questions about electricity if I may. I'd like the minister to please comment on whether or not his ministry has done any independent analysis of the potential effects on electricity prices that the most recent changes to the regulated rate option will produce.

I'd like the minister to please comment on whether or not he feels that having a middleman buying and selling energy in between the generators and the consumers has an impact on the cost structure to Albertans and what that is.

Could the minister please inform the committee as to whether or not a cost-benefit analysis of deregulation of electricity in the province of Alberta has ever occurred? [Mr. Mason's speaking time expired] Wow.

The Chair: Five minutes slid by.

Mr. Mason: That's fast.

The Chair: The minister gets a chance to respond in five minutes.

Mr. Hughes: Well, thank you, Madam Chair. Let me just try and deal with some of the many – the hon. leader was much more successful last evening in getting his questions on the table. Some of them I answered last evening.

Let me start here. One of the questions asked last evening was with respect to the Voyageur facility. The question was saying: Voyageur was shelved; as Suncor fails to ensure it meets the requirements, will the government implement the \$500 million penalty in the Fort Hills agreement? The answer to that question is that the Fort Hills lease substitution agreement contains an upgrading commitment.

4:10

When the Fort Hills production level exceeds materialistically 160,000 barrels, it must either build a new upgrader or use

underutilized upgrader capacity in the province. There's no obligation in the agreement, though, to build an upgrader, and no penalties can be imposed for failing to do so until production exceeds 160,000 barrels per day. That's only for noncompliance over and above a certain amount.

Now, there was some discussion going back and forth and a reference, actually, to one of the source documents, of course, the Bank of Montreal source document. That is one of the many sources of the advice that we put together in order to make our own assumptions as well.

Maybe I could talk about royalty targets a little bit. You know, in practice there are different royalty levels for different kinds of production. If you look at the oil sands, the royalty levels there start at a much lower level, and then after payout is achieved, the royalty levels jump quite dramatically. During the prepayout period it can range from 1 to 9 per cent of revenues, and after payout 40 per cent is the royalty that comes into play, which is pretty good. So if you take one snapshot in time, you'll get a different answer, depending upon the stage of development of various projects, and there are quite a few projects in the pipeline as well as this goes through.

The hon. leader spoke about a particular background document for the Keystone advice to the President. I'll bet there were a lot of documents that were used as backup for that advice to the President, but the particular point that the member makes is that somehow it's to Alberta's advantage if Keystone doesn't go through. I would say that nothing could be further from the truth. We need to get access to markets. Today we upgrade about 60 per cent of our bitumen production in this province. We have about a million barrels a day going through upgrading in this province. There are another 300,000 barrels a day, projects that are technically in the pipeline, on their way to be able to augment the upgrading and refining in this province. There's already very substantial value-added being provided in this province and commitments by the private sector to augment that as well.

Even with all of that coming on stream, we still need markets for more bitumen that's coming on stream over and above that amount. I think it's reasonable to assume that we're going to have a range of ways in which to market our products. The greatest bulk of it will be done as upgraded, and then the rest will be through another less upgraded status.

The Chair: Thank you, Mr. Mason and Minister.

Ms Johnson, you're next. Do you want to do five and five or back and forth with the minister?

Ms L. Johnson: We'll do back and forth.

The Chair: Okay.

Ms L. Johnson: Thank you, Madam Chair. I have a couple of different questions for you, Minister. I recently met with a constituent who was expressing his interest and support yet questions for the single regulator in that the corporate culture of the Energy department is to maximize the value of the resources for Albertans whereas the Energy Resources Conservation Board by its nature is more in regard to maintaining value and making sure that procedures are followed. His question to me, which I didn't have the answer to, which I will get from you now, is: how do you bring those two cultures together going forward?

Mr. Hughes: Well, thank you. In fact, what we're effectively doing is creating a new organization that has an environmental mandate as well, which is probably also part of the question from your constituent, I suspect. You know, the role of the Alberta

energy regulator is to find a balance amongst the social goals of the economic needs of the province, the environmental objectives, and the social community concerns as well. It's finding that right balance amongst those three aspects.

You know, from the perspective of public administration and public policy, it's probably entirely appropriate that what we're doing here is that we're forcing that balance to be found within one organization so you don't have competing regulators. Competing regulators can lead to greater burden for industry and other participants. If you instead have a way to get those issues all addressed at the front end of the process, if you identify if people within the one organization are well attuned to dealing with the differing pressures of environmental concerns, energy conservation concerns, landowner concerns, then that will be resolved within the regulator itself, I think, in a much more functional way.

Ms L. Johnson: Okay. Thank you.

Mr. Hughes: Can I just share with you the mandate of the regulator?

The mandate of the Regulator is

- (a) to provide for the efficient, safe, orderly and environmentally responsible development of energy resources in Alberta through the Regulator's regulatory activities.

That's the mandate.

Ms L. Johnson: Okay. Thank you.

Now on to budget consideration and sensitivities to revenues and different prices. In my previous life I was actually a cash-flow forecast model builder at Dome Petroleum, so we won't use that as experience for your department here.

Mr. Hughes: That was quite challenging.

Ms L. Johnson: It was very challenging, and actually it was our federal partners that caused the most challenge in building our models.

Is there a floor price where projects are deemed to not be making a profit and therefore there will be no Crown royalty share as we look at our bitumen projects?

Mr. Hughes: Well, if you're looking at the oil sands, the threshold actually would be a decision to be made by the private-sector investors, not by the government of Alberta. The private investors, if they felt that they were not going to get their return on their resource, are not going to make the investment. We set the rules of the game. It's up to industry players to figure out whether or not they can make a dollar at it.

Ms L. Johnson: We hope those rules and regulations will make sure that our income projections will be met as well.

Mr. Hughes: No, we don't hope that. I mean, we actually have a fairly high confidence level that the projections we've got for the next fiscal year are going to be met. If you plug into the financial model assumptions about what the western Canadian select price will be, then our assumptions deliver certain revenues in terms of royalty revenues from all of the projects that are going on in the province. That's how we do our calculating.

Ms L. Johnson: Okay. Thank you.

On to another topic. Last night you mentioned energy literacy, and I just came from a luncheon with literacy people. Under your performance measures on page 23 I see Albertans' assessment of their energy knowledge, a biennial survey, where the last actual, 2011, was 63 per cent to maintain or increase the previous year's

results. Can you advise us as to what the plan is to increase that target? Sixty-three per cent is a majority, but let's have a better majority.

4:20

Mr. Hughes: Yeah. Obviously, we're working on a number of fronts to improve energy literacy. One area in which we are working with industry is to help ensure that Albertans are well informed about the science of the energy industry. I'd say that we're building on a pretty good base, though, when you look at the scientific literacy in our school system in Alberta. It's actually exceptionally good. It's amongst the best in the world. When you compare 15-year-olds within the OECD countries, Albertan kids come out at number one in Canada by a long shot and number two in the world, right behind students from Shanghai. So we have a very strong base on which to build. Now, that's amongst kids who get through high school in Alberta, you know, and move on.

In general, in this province we have very strong literacy. We could be doing more to help others learn about it as well. Under the Canadian energy strategy one of the 10 areas of focus is to enhance energy information and awareness. There are three provinces that are leading the Canadian energy strategy: the Premiers from Manitoba, Alberta, and Newfoundland. Clearly, we're working with our colleagues across Canada to help raise the general awareness and understanding of energy and literacy about energy.

Ms L. Johnson: Okay. Thank you.

The Chair: Thank you, Ms Johnson.

Mr. Anglin, do you want to go back and forth?

Mr. Anglin: Back and forth is good. Thank you.

Minister, I didn't get a chance to ask any questions last night, but I want to thank your staff in particular for their professionalism and for having to endure what you and I get paid to endure on a regular basis.

Mr. Hughes: Thank you for that. I couldn't agree more. They're a very talented group of people who have a great commitment to public service, and we're all lucky to have them.

Mr. Anglin: I think so, too. Thanks.

I actually have a lot of questions. Basically, if I get them all in early, we get to go home early, and I'm going to shoot for that. I cannot speak for my other colleagues, and I'm not going to. I see another member shaking their head, and that's fine. I will get my questions in one way or another even if I jam them in in a 10-minute span.

I'm going to start off quite quickly with the Keystone pipeline, which you've had a lot of discussion about already. In particular, I've always felt it was eventually going to get approved only because it was logical in many regards. I followed it very closely before the election and even after the election. My question to you is simply this. If it is denied, will your ministry or will this government then use the court system under NAFTA? Have you sought any legal advice to basically enforce our rights under NAFTA to be able to sell our products abroad? I mean, this is a valid question. I'm just curious. Have you looked into this? Is this an option? If you could give me some sort of guidance on this.

Mr. Hughes: Under the oil market diversification strategy we have a team of 15 very talented public servants who are working away at all of the various options that we might face in all scenarios, not just Keystone.

Mr. Anglin: My question is really to Keystone on that.

Mr. Hughes: Yeah. On Keystone specifically, we are assessing all the options. We haven't landed on what our specific pathway would be at the end of the day should it be turned down, but we are looking at all options.

Mr. Anglin: Okay. I heard a lot last night with regard to how you project the one-year price of revenue using numerous economists, and I'm just curious, mainly because I don't particularly like economists. [interjections] That's okay. I was married to one.

But moving on, economists don't actually take the risk. What I would like to know is: if I really wanted to know what the market thought of my estimates, it would occur to me that if I were bringing in billions of dollars in revenue, I could easily go to the market with \$500 million or a billion dollars to hedge and ask the banks – Wall Street, the Canadian banks – what the value would be of hedging, say, a billion dollars, even half a billion dollars of projected revenue. Based on the discount or the premium that they would offer you, based on the price that you wanted to get, that would give you a much better sense of what the market thought about your price versus economists.

Now, I know the option is available to you. Would that make better sense to try to get an idea of what the market actually thought about your projected price versus economists?

Mr. Hughes: I believe that many economists, for all of their weaknesses, actually do use market signals of the kind that you're describing to try and understand where it's at. One of the data points that is used to inform the judgment about what the lists of financial advisers are – and they're not all economists. Some of them are, you know, hard-edged market-makers. That group of people is often quite well informed by exactly what is going on in the marketplace today. We've had discussions with financial houses that have talked to us about hedging as a tool as well. We're quite engaged in that conversation, just so that that helps us be well informed about what we're seeing being recommended or advised by the financial advisers.

Mr. Anglin: Just to follow up on that, if I understand you correctly, you've looked at this as a tool, but I don't find anywhere where we've ever done that, actually hedged, say, 20 per cent, 30 per cent of our projected revenues. I would never recommend hedging all of it or half or it. Certainly, there are market fluctuations. We're always at risk of loss, and also we're at risk of gain if the price takes off. It would make sense to me that if I were relying upon that revenue to hedge a portion of it – and you'd have to work out the actuaries on that, how much it would be worth. In that way, you would be paid up front, basically, for whatever that amount was that you hedged.

The whole idea of the hedge, of course, is not to take the loss, but you give up the gain for the fixed price based on the current value of the money that you are expecting. So there's a lot that figures into this. Is that something that this government should be doing, hedging part of that revenue because of the volatility?

Mr. Hughes: You know, I think that it's a very interesting and a very intellectually challenging question and one which I've actually talked to people about, people like Goldman Sachs and others who are specialists in this field. I look at it from an insurance perspective. What you're really doing here is that you're trying to lay off the risk, put the risk of oil prices onto some other party in return for you paying them money. Then you basically are creating this structure which is essentially an insurance offering.

In my view, given that I have substantial experience in the field, when you're buying insurance, what you're really doing is that you're paying a transaction cost in order to lay off that risk. The policy debate that one would have to have if one were to entertain this concept is: is it worth paying that transaction cost in order to lay off that risk on somebody else? Or given the fact that we are essentially long on oil and long on natural gas and actually have quite a robust financial capacity in this province, should we simply self-insure? I think that's a legitimate public policy debate that folks in business schools and public policy schools will debate at great length, and we'll all be informed by that.

4:30

Mr. Anglin: Okay. Expanding upon that, we talked a lot about the differential, bitumen versus WTI and WTI versus Brent, but the differential, the spreads, to me, will always be there. Even if we build market access to the west coast, to the Gulf coast, to the east coast, it costs more to upgrade bitumen, so there will always be, in my view, a differential between one price versus the other.

As we've seen recently, when we started with the bitumen bubble, that spread was actually quite wide. The argument was made in the press. I always chuckle at that, thinking that once that was made known publicly, we saw that spread reduced. Now we see that it's actually too narrow, and I think we'll see it spread again. So if I were trading that market, I would definitely be selling bitumen and going long WTI, waiting for the spread. I think it's normally around \$20, \$22, if I'm not mistaken, on a historical level. That's how that's normally traded.

My question is this: in our expectation of revenues, do we really expect the differential average to change over the long run? We always know it's going to fluctuate. My thought is that if we send it to the Gulf, there always should be a differential in the marketplace, just like there's the crack spread. The crack spread is the difference between the raw material and the finished product. I don't see that disappearing, and I used to trade that. I'm curious about your projections on the differential because sometimes when I hear the government, I get the sense that the government thinks that market access could make that disappear. I don't see that as a reality. Possibly, the average could change, but I don't know what the average would change to. I wonder if you could expand on that.

Mr. Hughes: Well, it's actually, again, a really interesting topic. If you look at Maya crude, which is a Mexican crude shipped to the Gulf coast, it's very similar in technical qualities to bitumen. [A timer sounded] I'll let that wrap up there.

Mr. Anglin: We'll get back to it.

Mr. Hughes: We'll get back to it.

The Chair: Mr. Anglin, you're going to go again for the Wildrose? Okay.

Mr. Lemke, do you want to go back and forth?

Mr. Lemke: Yes, back and forth, please. Thank you, Madam Chairman.

Good afternoon, Ken. You spoke last night about getting our bitumen to tidewater. We all know that the public perception around safety of pipelines is paramount. Certainly, every time we hear about a spill like the last couple of weeks in the U.S., the first thing we think about is how safe the pipelines are going to be. So my question is: what sort of steps have you taken on pipeline safety?

Mr. Hughes: Well, thank you for the question. This goes very much to the heart of our legitimacy and our social licence to operate. I'm very much of the view that we should be amongst the best in the world at managing pipelines, at responding to spills should they happen, and at operating pipelines. Last summer the government took on – first of all, I met with the pipeline industry and had a very hard-edged conversation with them about how it was time that we ensured that everybody performed at the very best possible level in every single circumstance. Subsequently, on behalf of the government I initiated a review of pipeline safety in this province.

We have some 400,000 kilometres of pipeline in this province. We have a lot, so we ought to be better than anybody else, probably. We have a lot more than any other jurisdiction in Canada, for certain, so we ought to be much better at this than anybody else is. We have commissioned a report through the ERCB. That report has come in and is being reviewed by the ERCB currently to address that and respond to it and prepare further advice to me with respect to that report.

You know, I can say that we're actually very attentive to the challenges of pipeline safety in this province. I particularly was concerned last summer about ensuring that we pay attention to how pipelines are operated, how pipelines cross water courses, in particular, and thirdly, how industry and government, if needed, respond to spills.

I look forward to sharing that report once we've had a chance to work our way through it, sharing it not only with colleagues around the table and in the House but also with industry as well so that we can identify if we have weaknesses. You know, in any industry there are always things to learn when you take a fresh look at stuff, and that's where I would characterize we're at.

Mr. Lemke: When I read about the pipeline catastrophes that we've had in the last few years, it seems that almost always the pipes are between 30 and 50 years old. Is there any requirement from the government or any regulatory process we can go through to ensure that those pipelines are properly inspected over time or replaced?

Mr. Hughes: Yeah. Actually, part of maintaining a high-quality, high-performing pipeline system is to ensure that, first of all, the technology is used to ensure that pipelines are regularly inspected. You'll hear people in the industry talk about using what they call pigs – right? – which is the technology that travels down the pipe and detects whether there are any weaknesses in the system as it goes from one end of the pipe to the other. That technology is used very robustly in this province. If pipelines need to be replaced because they're corroding or because they're old, then that's clearly part of the regulatory framework that they've got to work within in this province.

Just because a pipeline was installed 60 years ago, it doesn't mean that it's just got 60-year-old technology in it. It's like a house that was built 60 years ago. Some pieces of the house have been upgraded. Some of the technology and the fancy appliances that have been attached to it actually are much more current than that. So it's not completely a 60-year-old piece of equipment. It's actually been maintained, upgraded, improved in quality, or pieces have been replaced over time.

You're absolutely right. The one last week in Arkansas was a 60-year-old pipeline. Every jurisdiction has different standards. I'm not going to cast aspersions on the regulatory jurisdiction in Arkansas or other United States systems, but what I can tell you is that in Alberta we have a pretty high standard. We hold the

industry to a high standard, and they hold themselves to a high standard, too.

Mr. Lemke: Excellent. Thank you.

You mentioned last night that more and more bitumen or oil was being shipped by rail. What sort of regulations does the province have on filling terminals and railcar standards?

Mr. Hughes: This is a new phenomenon, actually, in Alberta. We're working very closely with the railways and with the trucking companies that deliver oil or bitumen to these inland terminals to ensure that they also are performing at the very highest levels. These are relatively new initiatives, actually. Historically most product moved by pipeline, which makes good sense. Everybody knows the rules of the game. In that case, though, Alberta Transportation is actually the lead on those kinds of terminals and the guidelines for safety and performance at these inland terminals.

Mr. Lemke: Just out of curiosity, where are the terminals?

Mr. Hughes: Well, there are several. I'm sure I don't know about all of them. I think in Lloydminster there are some. Certainly, there are railcars that leave the Fort McMurray area, I know, that travel all the way down to the Mississippi, and then the product is put onto barges to take it out to the Gulf coast.

4:40

There are proposals being explored in the Peace Country related to development in the Peace oil sands area. Some of the proposals for terminals actually haven't landed yet on where they're going to be, but I can anticipate that as trains become an increasingly important strategic way to move resources around the province before a pipeline is in place to move it, there will be more terminals.

So this is an important area. Obviously, the Alberta Petroleum Marketing Commission, which is our marketing arm for our products, is active as well in the marketplace. They also are working with parties to ensure that these terminals are positioned in a place that is strategically useful to multiple shippers.

Mr. Lemke: Good. Thank you very much.

That concludes my questions. Thank you.

The Chair: Thank you, Mr. Lemke.

Mr. Anglin, do you want to go back and forth again?

Mr. Anglin: Yes, please.

The Chair: Okay.

Mr. Anglin: Thanks. Just to change the topic a little bit, last year TransAlta issued its termination notice for Sundance A, which is Sundance 1 and 2, and those generators went offline. Through an arbitration process with TransCanada, they are now going to re-energize these generators. Now, what's curious to me is that they went public and said: we've issued our notice of termination. I'm curious as to why they do not have to then go through the process to get a licence through the Alberta Utilities Commission, through the very normal process which says: "That's fine. You issued your notice of termination. Done. Now if you want to turn those generators back on, you have to come to us for permission."

The Chair: Can I interrupt for just a minute? I just want to make sure we hook back to the budget, okay?

Mr. Anglin: You betcha. Right into the business plan. I'll get there in a second, at the end of my question.

The Chair: Thank you.

Mr. Anglin: It's going to have to do with carbon capture. But I'll get to it.

Mr. Hughes: Okay. I wasn't sure where it was leading, but now I'm pleased to know.

Mr. Anglin: No one was. I usually do that. But it wasn't designed to be a trick question.

Basically, having these two generators offline, if you look at the carbon it saves, straight up and down it's roughly 38,000 tonnes a year. If you believe in what the Pembina Institute did with the life cycle emission factor, it's roughly 700,000 tonnes a year. That's significant in our program for carbon capture when you really look at their figures. The interest of the province, in my view, should be the public interest. I'm not going to go down there just yet. We'll talk about that later.

Getting the approval to turn those generators back on – and it's not just turning them back on. They have to reconstruct these. They issued notice of termination to have these things destroyed, and they started that process. Through an arbitration process dealing with private interest, they have chosen to try to reconstruct these, but they're not coming back to the Utilities Commission.

The problem I'm having here is this. We're spending money on one side of our budget for carbon capture. We're going to allow this to happen without any regulatory process, which, in my view, they should have to because they issued notice of termination. In the whole process, even if they turn these back on with all that investment, they're only going to go back on for two or three years before they're offline for good because that's their actual life cycle date. It looks really problematic for me on the view that we're not consistent with our carbon capture program and we're not consistent with what I see as our regulatory process, which is the Alberta Utilities Commission. Should they not have to come to the Utilities Commission?

As I've asked this question, you've seen that I'm bouncing all over the place. The venue for that is in front of the commission. All these facts and figures can be part of that undertaking: are we meeting our goals as government, and does this meet what our government wants to do? I want your thoughts on particularly the issue of: should the Alberta Utilities Commission be the agency here giving the approval? They should not have the ability to just turn these back on or reconstruct them and turn them back on.

Mr. Hughes: Sure. Before I jump to that, can I just do a 30-second response to your earlier comment from the previous five minutes about light and heavy differential, on the principle that we can jump around? I believe there will always be a differential between light and heavy. As I was saying when we ran out time, you know, that's just a quality differential that exists. However, the price differential – if you look at the Maya as a proxy for Alberta bitumen, because it's very similar in quality, that actually has been very close to Brent price. While these prices move around according to the supply and the demand of each of the specific types and qualities and heaviness of oil, moving to tidewater actually takes us a lot closer to being on the Brent price, which is really very helpful to us.

If you look back three, four, five, six years ago, there was very little difference between the Brent price, the world price, and west Texas intermediate. In fact, the news stations would report Brent

as a proxy for oil in North America. That changed in the last half-dozen years, where there's been this differential that's grown because of the supply and demand factors on the Gulf coast. So the bottom line is that we've got to get to tidewater. We have to get our products to tidewater to get as close to Brent, as close to world price, as we possibly can. That's the differential question. You know, there might be a much closer gap. The differentials will by and large go away, but we'll still be on a global price, a floating price, that will vary.

Now, coming to the whole discussion with respect to Sundance A, Sundance A actually has six years to run, to 2019, from this point on.

Mr. Anglin: Okay. I thought it was 2018, but I'll go with '19.

Mr. Hughes: The break in the process in their moving forward – it's the arbitration decision between the two private parties that said: it's got to get back up and get going. There will of course be boiler inspection, an engineering inspection. There'll be a lot of inspection process and public interest protection in the course of this.

Mr. Anglin: I believe it's going to take them two years before they even get to the inspection stage.

Mr. Hughes: Yeah. As you know, the arbitration required them to get back up and going.

Mr. Anglin: But the arbitration is not imposed upon this government, is it?

Mr. Hughes: It's on the two parties, with the Power Pool being a party to that discussion as well.

Mr. Anglin: But they issued the notice of termination, and this government has always required any new generation to go on to get approval.

Mr. Hughes: That would be true if it was new generation, but this isn't new generation. This is like any source of electrical energy that has been interrupted. It doesn't need to apply to the AUC to come back online again.

Mr. Anglin: I understand you on that. Where I'm going with this is that if you sell me your house and actually sign papers, you can't change your mind the next day. I guess you can, but I may not change my mind and give it back to you. Where I'm going with this is that the point of the notice of termination that they've submitted is: "We're done. We've taken these offline. They're not just damaged, but we've taken them offline." That, to me, is the end of life, how I view it, and the way I understand you is that you're saying that it's not. They can just go ahead and rebuild without approvals.

Mr. Hughes: Well, effectively, arbitration has told you that you haven't actually sold your house. That's the difference here if you're using that.

Mr. Anglin: Well, the arbitration is between those two parties. Your government: that arbitration is not imposed upon you that I know of. Your regulatory authority is your regulatory authority.

Mr. Hughes: The notice of termination was actually not to the regulator but was to the PPA holder.

Mr. Anglin: Okay. Now, that clarifies it. I never realized they issued it to the PPA. I thought the issued notice of termination was to the regulator.

Mr. Hughes: No. I believe it's to the PPA holder.

4:50

Mr. Anglin: Could we check on that? I'd be really interested in that answer.

Mr. Hughes: We'll confirm on that. That actually makes sense to me, too.

Mr. Anglin: Okay. How much time have I got?

The Chair: You have a minute. I just want to make sure we stay on the budget.

Mr. Anglin: We're on the budget.

The Chair: Maybe you two are happy with that, but . . .

Mr. Anglin: Well, it is. It deals with the whole issue of carbon capture and keeping with the carbon program because we're talking about pulverization process. As you know, the new federal mandate for any coal plant is that at the end of its life cycle it has to meet the standards of combined-cycle gasification. That's the federal mandate. When I looked at the termination notice, fine. If they want to do anything new, they've got to meet the new standard because that's what was imposed, and I see them going around that. That's all.

Mr. Hughes: That was the feds' coal regulations, as you well know, and we're implementing those, but it was the federal coal regs that actually set the parameters for that.

Mr. Anglin: Absolutely.

Mr. Hughes: So are you suggesting that as a matter of public policy . . .

Mr. Anglin: I definitely want to answer this question.

The Chair: Then you probably can stick around.

Mr. Casey. Mr. Hehr, you're after that, okay?

Mr. Casey, do you want to go back and forth?

Mr. Casey: Yes, please.

Just on the budget – sorry to confuse this – I'd just like some clarification on some of the capital spending here.

Mr. Hughes: What page?

Mr. Casey: Well, various ones, but let's try page 71 because I guess that has them all. On page 71 we have a \$9 million capital expense for the Energy Resources Conservation Board. I'd just like to know what exactly the Energy Resources Conservation Board would be doing spending \$9 million on capital since they are, I thought, a regulatory board.

Mr. Hughes: That's for the upgrade in information technology, collecting the information in a robust way. Yeah, it's an upgrade. It's a very big upgrade on the capital front.

Mr. Casey: It makes me wish I was in IT, I guess.

Mr. Hughes: Well, but think about it. Think about the complexity of trying to track all these leases in a province this size, with every lease broken down at least to the quarter section, with several layers to that quarter section. It's a pretty complicated transaction to track.

Mr. Casey: For sure. Eighteen million dollars over the next three years.

Mr. Hughes: What's that?

Mr. Casey: The same thing. It's \$9 million per year of capital expense to the ERCB. Nine million dollars is robust.

Mr. Hughes: But don't forget that what we're doing is that we're stepping up to the next generation of regulator. We're involving the environmental considerations in that as well as monitoring. Think about the monitoring in northeastern Alberta that's going on that's got to be done with respect to air, water, soil, and biodiversity. We're now building out complex systems unlike anything that's ever been done before.

Mr. Casey: I can understand that as an operational expense because it's going to take a great deal of time for someone to monitor, someone to collect that data, but as a capital expense . . .

Mr. Hughes: Well, it's also a new technical build. I mean, you've got to build. I can tell you, from my lifetime of dealing with accountants, that . . .

Mr. Casey: Sorry. It's not always pleasant, I'm sure.

Mr. Hughes: Yeah.

. . . if you're doing new technology upgrades, that's a capital allocation, not an operating allocation.

Mr. Casey: Run that by me again.

Mr. Hughes: If you're doing a new IT upgrade – you're buying new software, all sorts of stuff – that's a capital allocation as opposed to operating.

Mr. Casey: Okay. The same kind of question here. Again, I'm assuming all these would be IT, then. So the Alberta Utilities Commission is the same thing, the \$1.5 million a year?

Mr. Hughes: The short answer to that is yes. Actually, what we're doing is that we're purpose-building these IT systems because there's nowhere you can go, like to an Apple Store, and buy them off the shelf.

Mr. Casey: Unfortunately.

Resource development and management: same thing, then?

Mr. Hughes: Yeah. That must be right. Is that right? You're talking about the \$6.3 million?

Mr. Casey: The \$6.3 million. But, again, all of these are \$6.3 million per year, \$9 million per year, \$1.5 million per year.

Mr. Hughes: Resource development and management: this applies to two or three categories of capital expenditures. It relates to things like furniture and IT as well, so it's basically the regular maintenance and upgrading of equipment in order to do the job.

Mr. Casey: The desks and the computers?

Mr. Hughes: Chairs, cubicles.

Mr. Casey: I guess The Brick is out.

The last question maybe – maybe – is on the operational costs for carbon capture, so \$2.3 million, then \$3.4 million next year, \$3.9 million the year after. I realize that there's some operational

cost to administering, really, these funds, but it starts to, you know, ring out pretty high here at \$3.9 million in three years.

Mr. Hughes: Well, when you're talking about the expenditure of up to \$1.3 billion over the course of 15 years, you're putting in place a tracking, monitoring, and auditing system that is actually pretty sophisticated. You know, while \$2.3 million is a big number, relative to the spend it isn't that big a percentage.

The other aspect of that is that the results that we're trying to achieve by the public policy of pursuing carbon capture and storage have to be validated by, like, engineering specialists who understand and can measure and track the actual outcomes as well. It's not like a financial audit, where you're just dealing with looking at paper and stuff. Actually, there's a lot more to auditing and tracking to assure Albertans that we're getting the outcome that we believe we're investing in.

Mr. Casey: Great. Thank you.

One last one. There may not be an answer to this one – surprise – but with Energy they have the climate change and emission management fund.

Mr. Hughes: That's the environment department.

Mr. Casey: That's right. I knew it wasn't you.

My question is in relation to your biofuel initiatives, that I know you're rolling down – you know, you're not taking any new projects on – and there didn't seem to be any funds there in order to do that. Both of these seem to be running not totally parallel but pretty close if you read in the fiscal plan about the intent of the energy fund. Have there been any conversations, I guess, with Environment about combining these two projects, these two initiatives together so that there's maybe an opportunity for some of the biofuel projects to continue beyond the next three years or to actually be able to accept some new projects within the next three years? Has there been any consideration of rolling those two together into one?

5:00

Mr. Hughes: There's quite a different mandate for the two programs. One, the biofuels, is to kind of prime the pump and get people going on a commercial basis with technology that is, by and large, commercially proven out or that gets proven out.

The CCEMC program, which is the funds from the levy, the technology fund, is for new technology. That's to take, you know, some technologically higher risk projects and invest in those and bring them closer to technological application. They are quite different stages of technology that those two different programs operate under. We're trying to achieve quite different outcomes with the two programs. Although they are both environmental and they're both, you know, trying to take us down the road of improving our greenhouse gas footprint, improving our environmental performance, they're tackling it from slightly different strategic vantage points.

So maybe at some point in the future there's a reason to have that conversation, but at this stage I don't see that happening.

Mr. Casey: Great. Thank you.

The Chair: You're getting very efficient here.

We're going to keep going here. We're at the half point, but I think we'll keep going. Mr. Hehr, Mr. Allen, then Mr. Mason, and then we'll have a break.

Mr. Hehr, do you want to go back and forth, or do you want to speak for five minutes?

Mr. Hehr: No. We'll go back and forth.

The Chair: Great. Thanks.

Mr. Hehr: I was very clear that time. There we go; we're making progress.

I'd just like to centre my questions in this set around the electricity system here in Alberta. In particular, I did a review of a Charles River report at one point in time. With you recently, I guess, obtaining knowledge around our electricity industry, you probably read that as well. In our system people send their power into the AESO. It then gets slotted in at various levels, depending on what people bid into that system. But every hour what happens is that everyone in the queue receives the highest price of what the last unit of energy was sold at. Everyone, despite what their bid is into the system, receives that price.

Now, one of the recommendations in the Charles River report was that other jurisdictions that have a deregulated market like we do do not allow competitors to see what their bid is so that no one knows what everyone else is bidding. In our system, of course, everyone can see every last bid that went in. There's some indication that this practice could – I won't say that it does, but it could – lead to collusion, of all things, and some sort of chicanery and hijinks when it comes to playing with electricity prices. Can you imagine that?

The recommendation in the Charles River report was that going to a blind system of bidding would kind of allow for a more even playing field and allow for better prices to be received by the consumer at the end of the day over the course of time they looked at this. I was wondering if the ministry has looked at this, whether they've evaluated this recommendation in the Charles River report and whether they've looked at the other jurisdictions that have gone to the blind bidding process.

Mr. Hughes: Yeah. Actually, it's a really interesting question for people who have an aptitude for this kind of stuff. In fact, the people bidding in, the participants in the marketplace, still bid blind. When they're bidding, they actually can't see what other parties have bid. When they do see it is two hours after the fact. So they can see trends. They can see some evidence not in real time but two hours after it's taken place. You know, at the time that that system was created, it was believed that that was a system that created enough transparency but avoided the risk of game playing by people bidding into the system.

You know, the market surveillance agency and the Alberta Energy System Operator, the AESO, are both actually doing some work on this exact topic – and this has kind of been the responsibility of the market surveillance agency – to see if the bidding system could be improved. I'll wait and look with interest on that advice and how that proceeds.

Mr. Hehr: Well, it's good they're looking into it.

I guess transitioning now to the recent report issued from the department, the 400-page report – I'm going to be honest. I only made it through about 200 pages.

Mr. Hughes: As you noticed, it took me months to read it.

Mr. Hehr: Well, I'm going to be honest. I only read 200 pages, and then I jumped to the conclusions and reviewed them as well.

It seems to me that the argument presented in that report was that for the deregulated market to work, the regulated rate option has to go. Otherwise, you're going to remain with 65 per cent of your people just not interested or just doing the safest option, and you will not, I guess allegedly, allow the private marketplace to work. If

that is the conclusion of their report, does the minister say: "Well, I'll try this for two years. We keep extensive tabs on this, and if you guys gerrymander the market, all that sort of stuff, I guess we're going to come down with a hammer and change this"?

I ask the question knowing full well I'm not an electricity expert. Just reading what that report said to me, you were left with the inescapable conclusion that that's what they say is holding back the deregulated market. I won't go through the history, but we probably should have never gone down this path in the first place and the like.

Mr. Hughes: Well, I would say, if I could detect a question in that comment . . .

Mr. Hehr: Well, I think you probably could. You're smart enough to figure it out.

Mr. Hughes: You know, one-third of Albertans have made a deliberate choice amongst the retail consumers, if I can call it that. That's the retail side of the business. Of course, in Alberta we have an unusually heavy industrial load relative to any jurisdiction in North America. Roughly 80 per cent of the consumption is by industrial or commercial players. This is sort of the other 20 per cent, roughly, of the consumers. Of those, a third have actually taken the time to understand their bill enough to understand what their options are and have made deliberate choices. We just didn't feel it was appropriate to force Albertans to have to make a decision about that if they with open and free will and opportunity for several years had never come to the conclusion on their own.

However, what we can do is that we'll provide tools to help Albertans understand the market better, understand their own choices. We've seen a good diversity of market players come into this retail part of the marketplace, and the offerings continue to grow and evolve by different retail players. There are some large players, and there are some small mammals, warm, furry mammals, running around growing and thriving very well in the marketplace out there, in the retail market ecosystem. So, you know, it's actually a reasonably robust and open market system for those who wish to take the time to understand it and seize the opportunity.

5:10

Mr. Hehr: One final question around electricity. Germany in the early 1990s went to tie-in feeds and had, I think, some overwhelming success with those. Ontario went down that path I believe around six years ago, and admittedly there were some bumps along the way, but these have started to smooth out. Texas, even with a deregulated energy market, has had success with tie-in feeds.

I guess my understanding is that these often work very well in getting your energy grid cleaner, greener, allowing for a more robust expansion of that opportunity. Yes, there is a cost associated. I'm fully well aware. Nevertheless, what are the minister's current thoughts on that issue? If you could just tie in: if the minister is not looking at that option, what else are we doing with wind and solar and the like to expand that marketplace or try to get to the place where we need to be in that regard?

Mr. Hughes: Yeah. It's a very interesting question. I mean, we have in Alberta historically shied away from feed-in tariffs as a policy tool to drive the development of, you know, specific kinds of energy. In the absence of any incentives like that driven by Alberta, we've seen over a thousand megawatts of wind developed in this province, which represents 7 per cent of our capacity in the province, which is actually pretty good. It's as good as any other province in the country in terms of wind development. So we actually probably don't need to do anything

special to encourage wind because we have plenty of it, and there are plenty of players who want to participate in that.

You know, I have asked the renewable energy industry to get creative and to bring me proposals, and I'm open to them all.

The Chair: Thank you, Mr. Hehr.

Mr. Allen, do you want to go back and forth?

Mr. Allen: Yes, back and forth, please. Thanks, Madam Chair.

Thank you, Minister. I guess, first of all, as the member representing one of the most significant economic drivers in the developed world in the fabulous and dynamic constituency of Fort McMurray-Wood Buffalo, obviously your department really has some significant interest to me and my constituents. I had a number of questions that have already been asked and answered, and I want to just comment that in this short period of time, less than a year, really, that you've been the minister of this portfolio, I'm very impressed with your demonstrated knowledge and dedication to this file.

With your indulgence, Madam Chair, I just have one series of questions, but I wanted to comment on one more thing. We've heard this a lot related to the budget. We hear in the House and we hear in question period and we've heard in here for the last five hours, really, about investments that are made. I wanted to suggest that our investments in BRIK for value-added product in the province, which does satisfy some of the requests of other members of other parties, but also the significant investment in carbon capture, if we tie those back – I've lived in Fort McMurray since, really, when the oil sands kind of started, and I've seen that growth. If we didn't have this province's investment in Syncrude, for example, keeping it viable back many years ago, and if we didn't have this government's investment in AOSTRA, which then ended up getting sold over to the private sector once it became viable, we would not be seeing the benefits that we do of having the Alberta advantage today, and if back then we hadn't made a big focus on paying off debt and getting into a better position, we would not be in the position we are in today. So I want to say that I don't think we're actually investing enough in some of these projects.

I look at other things on here such as the oil sands secretariat, where a year ago we had members of the opposition that were suggesting that it was a waste of money. Quite frankly, at \$3 million I think we should be spending more because of the return that we get not just in the Athabasca oil sands but also in what we're going to see in the Peace River area and in the Cold Lake oil sands.

That was just to comment and thank you for all of your answers so far.

My question is related to an item under the operational revenue. As much as I know about the area up there, this one line confuses me, and that's the bonuses and sales of Crown leases. It's funny. Up in the area if we take a map and we look at leases, it almost seems like there isn't a square inch of land in the Athabasca oil sands that doesn't have a lease on it now, but that number has been dropping significantly. I noticed that we went from \$3 billion in 2011-12 down to a budget of \$2 billion this year, and our forecast for the end of the year is actually about half of that. What is interesting is that that number is a significant portion of the overall forecasted income.

I guess my question, first of all, is: can you explain the difference between the sales of Crown leases and the bonuses of leases? Secondly, if we're looking at last year, for example, it was 5 per cent of the total government revenue. Are we relying too heavily on projected leases for our revenues in the province?

Mr. Hughes: Well, I appreciate the question. It's actually an interesting technical question as well. What happens in the industry – and we've seen this – is that when there are really good revenues, when prices are high and energy companies are making good money, in my experience, particularly with the Alberta-based energy companies, they tend to invest every nickel they've got back into the business to continue to grow it. That's certainly the history and the temperament of the entrepreneurial sector in the oil and gas industry in this province, and it's what makes this place special. What happens is that you go through remarkable cycles. What we do for our estimates is say: "Okay. What does the cash flow look like for industry this year? What are they going to have in order to continue to expand, to invest?"

A very high percentage of leases that are purchased – these bonus numbers reflect the whole province, right? – revert after people have either taken one crack at drilling a well, or maybe they ran out of money and couldn't develop it and couldn't prove it up in any respect, so the lease reverts back to the Crown. Over time what you see is land coming up. We've sold mineral leases throughout this province multiple times, probably, if you actually looked at the number of times when leases have been issued. The bonus has been paid. Essentially, the fee has been paid. People choose not to or find nothing, or they cut a line and do some surveying and do a little bit of research on the property and decide not to carry on, or they run out of money. There are a whole bunch of reasons why leases revert back to the Crown. Every time that happens, though, it creates another opportunity for us to create revenue if somebody else figures out there's something there they'd like to go after.

I think we're reasonably conservative in our assumptions about land sales simply because there tends to be a relationship between cash flow and the industry and their reinvestment back into new sales and putting leases up to go after them. We're actually getting reasonably good at predicting what those sales are like on a year-over-year basis. What you're pointing out is that this year, because of the low revenues overall from royalties, this has become a larger percentage of the overall revenues, but actually it's considerably less than it has been in the high years as well.

Mr. Allen: Right. I guess that was just where some of the concern was, even from this fiscal year that's just ending, with our royalties being considerably lower. The leases seemed to me to be a little bit more speculative than even determining what your . . .

Mr. Hughes: Except for one thing. You know, when you're looking at the bonus revenues, you're actually looking at something that is derived from revenue assumptions as well: this year's revenue, actual revenues, and next year's revenue assumptions as well for the industry. There's some art, but there's a lot of science behind the numbers as well.

5:20

Mr. Allen: There's a direct relationship, then?

Mr. Hughes: Yeah. There's a way to map it out that makes sense, actually.

Mr. Allen: Okay. Great. Thanks very much for that.

Mr. Hughes: Thank you.

The Chair: Thank you, Mr. Allen.

Mr. Mason, do you want to do back and forth or block time?

Mr. Mason: I've got three basic questions. Maybe we can try going back and forth.

First of all, I'd like to just start on royalties, and I have some numbers here. Social Credit got 17 per cent of the value. Peter Lougheed's goal was 35 per cent, but he actually exceeded the target. Since 1997 the government of Alberta has averaged only 9 per cent. Now, I don't know if the minister wants to make some comments with respect to that and on what the policy framework around what our fair share as the owners actually is.

Mr. Hughes: Sure. Well, the thing that's changed, actually – I'm sure you recall well the Social Credit era?

Mr. Mason: No, but my dad told me all about it.

Mr. Hughes: I heard all about it, too, at the kitchen table.

Clearly, in that era the resource was primarily conventional oil, some gas but mostly oil. The Lougheed era was around the time that natural gas also became a very important mix in the energy products from this province. Since 1997 – you've picked that date; I don't know exactly what the date is – if you look at the evolution, there's been an increasingly important market share of the production that is related to oil sands and bitumen production. In the early years of an oil sands production facility the royalties are much lower. Until you get a big stream of a bunch of different suppliers of bitumen, you'll probably have a depressed average, but at the end of the day over the life of the whole project you'll end up with a much higher calculation on the royalties.

Mr. Mason: Okay. Thank you.

The second question has to do with the electricity infrastructure that is now under way. They changed the rules back so that it has to go through a process now but only after all of the major projects for transmission infrastructure were approved under the old legislation, which was Bill 50. There were some leaks from WikiLeaks. You're familiar with that website. It was interesting. Some cables sent from the U.S. embassy in Ottawa in 2003 and 2008 showed that Alberta politicians at the time offered to export power to the United States, and shortly thereafter the proposal for the expansion of the infrastructure was begun.

I was in the Legislature when Ralph Klein talked about building coal-fired power plants and exporting the surplus power to the United States, and at that time they wanted just a billion dollars for a line that would allow that to happen. Murray Smith was the minister who was cited by the U.S. ambassador, Paul Cellucci, in the cables indicating that this was the position of the Alberta government at that time.

Since then there's been a lot of suspicion around why we needed to expand the electricity infrastructure so dramatically, many times more than the total value. I think it went from the existing value of the infrastructure at about a billion dollars, and I think that, all in, when it's all finished, it's going to be close to \$7 billion. Now, there were some proposals to build a tie-line into the United States, a proposal that has since been withdrawn or cancelled, but the concern and the suspicion remains that these large north-south lines, very expensive lines that have been put through, are not exclusively for the distribution of power within Alberta but could facilitate future exports of power to the United States.

I'd like to ask the minister what the policy is of the government with respect to that and what steps would have to be taken if a power company or a consortium of companies wanted to build a tie-line either through B.C. or directly into Montana for the export of large amounts of power from the province of Alberta and what the attitude of the province to that possibility would be.

Mr. Hughes: Sure. That's a very interesting insight, and the original research of going to WikiLeaks is actually quite creative.

I can't speak to the motives of the government of the day because at the time I wasn't there. I think that the realities of the market have actually changed quite dramatically since the 2005 era, around that era, between 2000 to 2005.

While I can't speak to the motivation of the government of the day, I can speak to the history and the reality in the marketplace. We have been a net importer of electricity every year for the last 10 years. In fact, in the last year we were a net importer of electricity on the order of magnitude of 4 to 5 per cent, I believe, 3 to 4 to 5 per cent, 4.7 per cent to be quite specific.

Mr. Mason: You have an amazing memory, Mr. Minister.

Mr. Hughes: That was the net import of electricity into this province. Part of that is just the real fact that stuff is going on here in Alberta. It's not going on as much elsewhere in the world. We're going to need to continue to import electricity to this province for, I think, as long as we can see today. While I understand the basis sometimes of conspiracy theories about what's really behind doing various things in life, the economic reality is quite clear. It's quite clear that there's nothing being exported. We don't have the capacity.

Mr. Mason: Let me just do a follow-up. I know nothing is currently being . . .

The Chair: Excuse me for a minute. I just want to remind everyone that we're talking about this budget, this year's budget. It was a bit of a stretch there.

Mr. Mason: Yes. Okay. Well, you know, there are major costs associated with the construction of these lines.

The Chair: I'm sure you're capable of making the connection; I'd just remind you to do that.

Mr. Mason: I'm trying to get at the motivation, ultimately, for this massive expenditure. I am just looking out for the taxpayers' dollars as we speak.

You know, I just want to correct one thing. It's not a conspiracy theory. These were actual cables sent by Paul Cellucci, the American ambassador.

The Chair: Mr. Mason, I'm sure you've got other questions that have bearing.

Mr. Mason: Yeah, I do. I do. If you don't mind, I'd like to get to them.

The question, though, is whether or not you're just saying that it's all what the market wants to do, and the market doesn't want to build these lines now. But if the market changed, what would be the policy of the government of Alberta?

Mr. Hughes: Well, I can't anticipate all future policies of the government of Alberta, but I can tell you that our policy today is that we want to ensure that we have an appropriate supply of electrical energy for the citizens of Alberta for as long as we can see into the future and that when you turn on the switches, the lights come on and that it's cost-effective. You know, that's the system that we have. It is cost-effective. We do import some net volumes of electricity from our neighbouring provinces, and I would expect we will continue to do that because the development of this province relative to our neighbouring jurisdictions is quite substantial. We're going to probably continue to need more and more electricity either developed here in the province of Alberta or imported.

Mr. Mason: Okay. Well, that will need more follow-up.

I'd like to just kind of segue into coal-fired electricity generation. The Pembina Institute has just done another report on the health impacts of coal. [A timer sounded] Is that the total 10?

The Chair: That's 10 minutes.

Mr. Mason: Wow. Well, do we count your interventions on my time?

The Chair: They were short and sweet.

We're going to take a break. When we get back: Ms Calahasen, Mr. Anglin, Mr. Sandhu, and then I think Mr. Anglin or Mr. Hale. Five minutes, folks. Thanks.

[The committee adjourned from 5:30 p.m. to 5:38 p.m.]

The Chair: We're in the home stretch here. We have 51 minutes left, and we're going to start with Pearl Calahasen and then Mr. Anglin and then Mr. Sandhu and then Mr. Anglin. I think the Liberal caucus and the New Democrat caucus have – well, I shouldn't say. They're not here at this point in time. I probably shouldn't say that. I should not point out that they're not here, so I correct myself. They're here in spirit.

Ms Calahasen: And I'm here in full force.

The Chair: Ms Calahasen, would you like to go back and forth?

Ms Calahasen: Sure. Back and forth would be great.

First of all, thank you for being here today and bringing great information. I'm just so excited about a number of things, but I'm excited because everything that happens in Energy affects Lesser Slave Lake. We've got so much activity there now, I mean, oil and gas and all sorts of development that's occurring. It's going to be the next area of development. People call it the Peace River oil sands, but it's actually the Lesser Slave Lake oil sands. I just want to correct that.

Ms L. Johnson: We'll tell the hon. Member for Peace River.

Ms Calahasen: Oh, it doesn't matter. He and I always argue about that.

Mr. Hughes: I would be pleased to inform the Alberta Geological Survey, which I recently discovered I'm kind of responsible for, of the important nomenclature oversight.

Ms Calahasen: Please. Oh my gosh, yes. Thank you.

On that point, then, I know there's a lot of activity happening. I was looking all over your business plan to see if you still are responsible for CRISP.

Mr. Hughes: Yes.

Ms Calahasen: I didn't see it anywhere in the estimates, and I'm wondering whether or not that's going to be applied and, you know, what kind of timelines you're looking at relative to the development of that CRISP especially. You call it Peace River. I say: call it Peace River-High Prairie oil sands. I don't care what you call it, but it's got to include that component because most of the oil sands activity is going to actually happen in my constituency.

Mr. Hughes: Actually, the oil sands secretariat, which is now within the Department of Energy, is responsible for this. It was amongst the expenditure budget items that our colleague from Fort

McMurray was referring to earlier as well. The CRISP reports for each of the three oil sands areas are at different stages of development. Clearly, Fort McMurray has been completed and is used as a guidepost by our municipal, school, transportation, and industry partners to ensure that they know what infrastructure is required as we start to build out in that part of the world. The Cold Lake area CRISP report was just released in the last month or so, and we're just starting the work as well on the Peace River-Slave Lake area.

Ms Calahasen: How long will that take? Do you know?

Mr. Hughes: That should take about a year to get to a point of having something that's useful for everybody to start working with.

Ms Calahasen: When you're looking at the CRISP and applying the recommendations from either Fort McMurray or Cold Lake, where are the dollars to be expended assumed when you're looking at the infrastructure needs of each area?

Mr. Hughes: The infrastructure strategic plans actually don't identify sources for infrastructure money to be allocated. What they do is identify the kinds of infrastructure that one can expect to need. Then you go to the specific line item departments. For example, Transportation would be a big part of it or Education or Health. Those line item departments actually have accountability for budgeting, preparing, and ensuring that the right infrastructure is planned for, built, and then operated.

Ms Calahasen: Well, that's good.

When I was looking at your goals and your business plan, I really liked the priority initiatives that you have identified. I look at the performance measures, and I see that there are some good performance measures. Some are, I think, really well done. The only issue that I have is on the monitoring and reporting of the effectiveness and competitiveness of Alberta's royalty system to incent development and maximize benefits to Albertans, page 22 of your business plan, 1.3 and even 1.5 because I think those are together in terms of dealing with development. I'm wondering: what kind of outcomes are you looking for in those specific areas, Mr. Minister? Those, I think, are the important components for Alberta and the development of what's going to happen in the resource sector.

Mr. Hughes: Yeah. When we were chatting earlier, there were some questions about capital expenditures that our colleague from Banff-Cochrane was referring to. That's really the kind of investment that you have to make as a public administration like we have in Alberta to ensure that we actually meet these goals, that the energy and mineral resource revenues are accurately calculated, collected, and reported. You have to invest money to make money, as my dad always used to say.

5:45

Ms Calahasen: Yeah. At one point in time I know that the Department of Energy was looking at being able to do the sales of leases in a better format. They were looking at using, I believe, online sales versus travelling to Calgary all the time. I don't see it anywhere here in terms of that management and how that's going to move over, unless it's in the IT improvements. I'm wondering how far we are relative to being able to do that versus having to go to Calgary all the time to be able to do these land sales.

Mr. Hughes: The good news is that it's done, and it all can be done online electronically, which is a big improvement in process.

It's cost effective for industries who want to look at this. It's cost effective for communities that want to track what's going on.

I want to say, Madam Chair, that I had a fabulous day in Gift Lake with the hon. member recently. You know, we want to ensure that every community in this province has the full benefit of the economic activity in their communities, and Gift Lake is a great example of that within the settlements. This hon. member deserves great credit for her hard work to help make sure that we're doing that for all Albertans.

Ms Calahasen: Thank you. Isn't he wonderful? He's so smooth.

On that note, then, Mr. Minister, I know you made a commitment to the Gift Lake community to make sure that they are also on par with what needs to happen in terms of mineral leases. I know that you made that commitment. Thank you very, very much for doing that and resolving that long-standing issue. It's time they also got onto a 21st century kind of platform as well, like everybody else. Thank you very, very much for that.

Now I want to switch tracks. On the bioenergy producer credit program you indicated that we have \$98 million in 2013-2014, but you said that you added an additional \$32 million into bioenergy. Can you explain that component to me in terms of where that's going to be added on? If it's \$98 million in 2013-14, is the \$32 million that you're adding going into '14-15, '15-16? Where is it at?

Mr. Hughes: The \$32 million is actually the increased expenditure this fiscal year relative to last fiscal year. So it's part of the \$98 million, and it's meeting our contractual obligations that we undertook in the first two rounds of the bioenergy program. It's in the program, and we're simply meeting our obligations under that program and meeting the objectives of the policy program itself.

Ms Calahasen: Thank you.

So can I go around and tell my people that they also have the funding coming for the second and third rounds?

Mr. Hughes: The first and second rounds only. For the third round we, of course, had to experience the restraint of all aspects of government, and this was one area in which we had to tighten our belt.

Ms Calahasen: That's unfortunate because I think that's really a good program, and it's really worked very well.

Mr. Hughes: Yeah. The first two rounds, obviously, are closed. Commitments have been made, and that's what's driving the \$98 million this year as opposed to \$32 million less last year.

Ms Calahasen: Now I want to go to electricity and the cost of electricity not only to Albertans generally but also to industry itself. I've heard some concerns from various industries in my constituency about the cost of electricity to be able to operate their operations, and I notice that in the budget you're talking about energy.

Mr. Hughes: There you go. The number is actually going down over time, the average pool price.

Ms Calahasen: So that'll help people in industry.

Mr. Hughes: It will help consumers of electricity, the price going down.

Ms Calahasen: Thank you.

The Chair: Thank you, Ms Calahasen.

Mr. Anglin, do you want to go back and forth.

Mr. Anglin: No. I apologize, Minister, but I'm going to have to do five and five and cram a lot of questions into five. I'll start off with the motion that I'm submitting.

Mr. Anglin to move that the 2013-14 main estimates of the Ministry of Energy be reduced as follows:

- (a) for the minister's office under reference 1.1 at page 66 by \$44,000,
- (b) for the deputy minister's office under reference 1.2 at page 66 by \$19,000,
- (c) for communications under reference 1.3 at page 66 by \$127,000,
- (d) for corporate services under reference 1.4 at page 66 by \$227,000,
- (e) for biofuel initiatives under reference 3 at page 66 by \$32,000,000, and
- (f) for costs of marketing oil under reference 4 at page 66 by \$3,100,000

so that the amount to be voted at page 65 for operational is \$196,566,000.

Submitted today, April 9.

The Chair: Thank you. Copies are being distributed right now.

Mr. Anglin: Thank you.

Minister, I want to start off with the issue of pricing on electricity, particularly with the RRO. As you said, you recognize that this is important, the charges on everyone's electricity bill. I'm curious. The original address to this problem was to freeze ancillary costs, but the committee didn't look at ancillary costs. They looked at the regulated rate option. That was their mandate. Why were ancillary costs not researched and reported back on, and will that happen? Why didn't the Retail Market Review Committee investigate transmission costs and how those costs would be allocated to consumers?

Are administrative costs piggybacked? In other words, with the various companies that load onto the bill for every consumer, are there multiple administrative costs from each of the different stages: from the transmission company, the wire company, the generator? How are these administrative costs actually loaded onto the bill?

The frozen ancillary costs have piled behind us and are now owed by consumers. Will those costs be visible to consumers so they know exactly what they're paying? In other words, when we unbundle the bills under the restructuring of the market, all these different charges now are spread out so consumers can see that. But we have 11 months now of ancillary costs that consumers have to pay for. Will those ancillary costs be identified on the bill so consumers know what they're paying today for what is owed today and what they're paying on those ancillary costs owed for the 11 months that they were frozen?

How do you explain distribution charges – and I'll use this as an example – to a farmer? A farmer was part of a co-op. He paid in advance for his distribution line – poles, wires, cables – and has been there for 20, 40 years, assuming that it's all paid for. But now he's watching the distribution costs rise. How does a farmer calculate or come to understand why those distribution costs are rising since there are no new infrastructures out there being built in that area? As you know, when there's a new development, those costs are borne by the developer. Clearly, there seems to be a disparity for a lot of the consumers out there.

How are they actually calculated on the bill? This is a real question that a lot of consumers are asking. They look at the bill.

They look at the price of electricity. They can understand that. What they don't understand is, based on the price of electricity, why those extra charges are going up. They can't figure that out. They go away on holiday, and when they come back home, they see these outrageous bills waiting for them. If they didn't go away on holiday, the extra charges are sometimes more than 50 per cent of the total bill.

These ancillary costs in many cases are unregulated. I think some are regulated. Could you explain, please, which part of ancillary costs are actually regulated by the AUC and which costs are completely unregulated and are just the costs you bear from either the wire company, the distribution company, the transmission company or, in some cases, the actual marketer? I think the marketer's administration costs are completely unregulated.

Last but not least on the ancillary cost is: what was the total of these ancillary costs to Albertans that were frozen and are now owed? This is important in trying to differentiate between what our current bill should be and what we're actually paying for the freeze. [Mr. Anglin's speaking time expired]

The Chair: You did well.

Mr. Anglin: I'll go faster next time.

5:55

Mr. Hughes: Well, Madam Chair, let me start with the question on the total of the ancillary costs. One can't actually answer that question today because the various applicants have to make their applications before the Alberta Utilities Commission. We have given the Alberta Utilities Commission greater teeth to use to oversee any costs that are submitted. The providers of transmission and distribution costs – all of the ancillary costs will have to be justified down to the penny. That's a process that's currently under way, which will become evident in the fullness of time.

The question about which ancillary costs are not regulated. On the normal bill all ancillary costs are regulated. However, if you live within an area where you're served by a rural electrification association, an REA, they have responsibility for overseeing the nature of what people see on their bills. So technically they're not regulated, but they're regulated by the boards of the REAs. That's the public interest protection mechanism in there.

You asked about one particularly narrow example with respect to a farmer who sees the distribution costs increasing on his bill. That would largely be governed by the REA board. However, there's a possibility that the farmer might have been, you know, as my family was when I was a kid, served in a rural area by an REA where the members of the co-op essentially had paid for and built the distribution system, the transmission system, locally. Sometimes those REAs get bought out by one of the transmission operators, but that means money in the pockets of the farmers of the former REA, which actually can be a substantial amount of money. Then, along with all the rest of us, they're on the system that is regulated by the Alberta Utilities Commission, and their costs are governed that way.

With respect to: will the frozen amount, as it's released over time to be invoiced, be visible on bills? We'll have to get back to you on that specific thing. It could be added as a rider, which is the most likely option, but we'll confirm that.

The question about why it was that the Retail Market Review Committee didn't speak to ancillary costs in the report itself. It's because the Alberta Utilities Commission oversight was there and was viewed to be an appropriate mechanism to protect the public interest. Not only that, but we then, of course, took the exceptional

next step, which you'll recall well from the announcement that I made, which was that the Alberta Utilities Commission has been given more teeth and a greater role and ability to oversee any review of ancillary costs as well.

There were six initiatives, actually, that we undertook to strengthen the cost oversight over transmission, one of which, of course, was giving the Alberta Utilities Commission greater oversight. There are other factors, like ensuring that there's a competitive procurement process for the Fort McMurray line and for such major new transmission projects. There's also . . . [Mr. Hughes' speaking time expired] Well, I'm out of time. There are many things I could have said on that.

Mr. Anglin: Me too.

The Chair: Mr. Sandhu, do you want to go back and forth with the minister?

Mr. Sandhu: I've got about three or four questions here.

The Chair: So do you want to just go back and forth?

Mr. Sandhu: Yes.

The Chair: Thank you.

Mr. Sandhu: Thank you, Madam Chair. Thank you, Minister. I think in the last five and a half hours we've heard every policy in the book and where you're going with the ministry. I think you're doing a very good job.

With my constituency in northeast Edmonton and, I think, the proximity to Fort McMurray I'm interested to hear about upgrading. I have just two or three questions back and forth on the upgraders. I'm interested in hearing what role upgrading will play in building the future of our province.

Mr. Hughes: Well, you know, it's an interesting conversation because, clearly, we want to capture as much value in this province as we can, but we want to do that in a way that doesn't overheat our economy so much that we price ourselves out of the business, that it becomes so costly to do things in this province that we actually can't do new upgraders or can't do new projects. Currently approximately 60 per cent of the bitumen of the province is upgraded in the province. Some of the initiatives, including the TransCanada pipeline going east, which is being proposed, will actually augment the volume of upgrading done in Canada. I'm sure you would agree with me that if we do upgrading in Canada, it actually adds great value to Alberta as well as that other community where upgrading is done.

Mr. Sandhu: You answered half that question. I want to try it again. What do you see as an economic trade-off of increased investment in bitumen upgrading in Alberta compared to investment in other sectors such as increased raw bitumen production? I'm going to keep asking you again and again.

Mr. Hughes: Yes. Can you run that by me again one more time? Let me just try and make sure I get it right.

Mr. Sandhu: I'd like to see another seven upgraders out there, so I'm going to keep asking you the same thing. Okay?

Mr. Hughes: Right.

Mr. Sandhu: What do you see as an economic trade-off of increased investment in bitumen upgrading in Alberta compared

to investment in other sectors such as increased raw bitumen production?

Mr. Hughes: There is some trade-off. No question. Our goal should be to try to capture as much value as we can in this province, but there's no point in trying to do so much upgrading in this province that we actually have such a costly employment structure that we can't possibly have enough people move here to do this. You know, even setting aside upgraders that are currently under construction, as you well know, the Redwater Sturgeon project, there's a whole new industry being created in this province by a company called Williams, which is looking at the propylene chain, which is completely new, adds great value here in this province, and can lead to the kind of value-added that the ethylene plants have created in this province going right back to Joffre and the history of where that started, in the '70s and '80s.

So there's a balance. It's a pretty complex balance because there are a lot of trade-offs. Our goal would be to upgrade as much as we can in this province, and I think that's consistent with where you would see us go.

Mr. Sandhu: I would like to hear your thoughts on the future of bitumen upgrading in Alberta to the best of your experience and knowledge. Do you see any opportunity for additional upgrading partnerships?

6:05

Mr. Hughes: It's a good question. I don't think we as a government should be trying to invest our money in running and operating and building a bitumen upgrader. But what we can do is what we've done with the North West Upgrader, which is that we can use our bitumen royalty in kind as a strategic resource to ensure that the plant goes ahead. You know, the North West Redwater partnership has been working on that. That will employ 8,000 people during peak construction. If we are approached by others, we'll certainly talk to them about using our BRIK barrels to explore additional upgrading in this province or additional value-added in this province.

I think we're all on the same page of trying to ensure that we get the maximum value out of these resources in this province to the extent that we can. Next best to that: maximum value in Canada to the extent that we can.

Mr. Sandhu: Right.

Mr. Hughes: Once we've optimized both of those objectives, the third objective is that if we've got additional bitumen to ship, then we can sell that on the global market, but we've got to get it to tidewater so we get world price.

Mr. Sandhu: In connection to the same thing how much risk do you think is too much risk for private business to take on in an upgrading partnership?

Mr. Hughes: I don't think the province of Alberta should be taking on the risk of actually financing and owning and operating an upgrader. The private sector can make their own judgment about what risk they're prepared to take. Clearly, different operators have different reasons. Sometimes it's related to their own balance sheet challenges. Sometimes it's related to their own cash flow. Sometimes it's related to the other opportunities they face to sell bitumen instead of upgrading it on their own account.

These are big projects. I mean, if you look at the Voyageur project, that was estimated to be an \$11 billion or a \$12 billion

project. These are big. That's high-risk, big stuff that only big players can participate in.

Mr. Sandhu: The last one, Minister: why aren't industries rushing to build more upgraders in Alberta?

Mr. Hughes: That's actually a very good question. Again, I was kind of alluding to this in my earlier answer. Different companies make different decisions on their own investment and the risk profile that they're prepared to take on. It was quite clear that Suncor made a decision in their own corporate interest that they weren't prepared to take on that big a risk together with their partner and that big of an undertaking. They felt, in their own view, that they could market their bitumen in other ways without capturing the potential upside or taking on some of the potential risk of turning that into a product that is an upgraded product.

Each company has to make its own decision. They make that decision facing the risk that their whole operation has, and they take that, taking into account the cost of capital that they can source in the marketplace. All of those are challenging factors today for investors in Alberta as they are globally. Those are the kinds of factors that the individual investors take into account.

Mr. Sandhu: My last one. We're trying to send our oil to Asia. Do we have enough?

Mr. Hughes: Do we have enough to actually ship?

Mr. Sandhu: Uh-huh.

Mr. Hughes: Yeah. I think that objectively looking at all of the projects that are already committed or in the ground or are about to start producing or that will be producing over the next two or three or four years, we have enough to actually do all the upgrading that we can do in this province. Plus, we need all the pipelines. We need east, south, west. We need them all.

Actually, as you would know, if TransCanada is able to get to Saint John, New Brunswick, that's actually closer to the west coast of India for the upgrading facilities there than it would be leaving from the west coast of Canada. So that's a potential market if we have enough. The refineries in Montreal; Quebec City; Saint John, New Brunswick; Nova Scotia; and maybe Come by Chance: if they don't take up all of that bitumen and there's excess bitumen available, we could ship it to India.

Mr. Sandhu: That's good news. Thank you very much.

The Chair: Thank you, Mr. Sandhu.

I'm just going to make a note about an amendment here, an amendment to the amendment. Now it's not an economist talking; it's lawyers talking. The amendment that was read into the record by Mr. Anglin actually noted Mr. Hale's name. We've just corrected that to say that it's Mr. Anglin who moved the notice of amendment, and he has signed it. So thank you for that correction.

Mr. Anglin, you were going to speak next?

Mr. Anglin: Yes.

The Chair: Do you want to do five and five?

Mr. Anglin: Minister, I'll go five and five and reel off a whole bunch of questions for you. The legislation has certain mandates for the regulators and for – well, my first question is about duty of care. Normally the duty of care of the regulator is to the legislation and to the industry that the legislation is applicable to. Does that duty of care apply to the directly and adversely affected indi-

viduals and the directly and adversely affected public when they are adjudicating any hearing process?

The Chair: Can you get that back to the budget?

Mr. Anglin: Yes. Right back. It's all part of your efficiency and your business plan, page 22, if you want to look it up.

The single regulator, that has been spoken at great length about, is the combining of jurisdictions to streamline a process, but you have on the other side of your portfolio the AUC, which has a two-stage process. You have a needs hearing and then a location hearing. The legislation allows for a combination, to combine the hearing process, but it's rarely done. Does that make sense to be consistent with your single regulator if the Alberta Utilities Commission streamlined and only had one hearing that combined both the needs and the location? How much money would that save in your process if you were to undertake that?

The single regulator is combining the environmental aspects along with the jurisdiction of the old ERCB, but under the AUC the environmental impact assessments are not applicable to the major transmission lines but are applicable to the smaller transmission lines. Is there a proposed change in dealing with environmental impacts to be consistent with your single regulator?

Dealing with the cost of transmission in your business plan, looking at 2011, '13-14, '14-15, and '15-16 – this is on page 23 – you have 3.4, 3.1, 3.0, and 3.0 per cent as expectations for what the transmission losses should be. The Transmission Cost Recovery Subcommittee has reported that the bundle of cable that is going to be used on these HVDC lines will have a 6 per cent loss. My question is: how does that affect these projections you've made, or will it affect these projections? Have they been included in that?

Second, all companies have to pay a fee to transmit over a transmission line, and in between Edmonton and Calgary, as you know, there's a transfer. Right now we transfer around 750 megawatts on a daily basis. Once Shepard goes online, of course, that's an 800-megawatt plant. Enmax is expecting to transmit electricity north. My question to you is: will generators have the option of which path they will take? In other words, there will be fees over these paths. Is there a different cost to the generators over which path is chosen? Who chooses the path? Is that directly up to the AESO, or do our generators have an option?

Going to the cost of the transmission. The Transmission Cost Recovery Subcommittee in its report on mitigating the transmission costs has recommended to the minister that the minister actually guarantee the debt. Is that something that the ministry will undertake, or is the ministry going to reject that recommendation?

The forecast transmission cost is expected to increase – this is on page 3 of that same cost committee report that you received – from \$14 a megawatt to \$32 a megawatt. What I'm going to ask you is: is this correct? Have there been any changes to this? What is the expectation? What will be the impact on our industries?

6:15

Going to the Brattle Group study that was just recently submitted to the AESO, there was a significant amount of findings that the Brattle Group gave to the AESO. One is the increased risk of hydroelectric exposure to our market. In other words, what they said is that the hydroelectricity exposure, which is, I assume, from B.C. since we don't have a direct connection to Manitoba, drives down our prices. They look at that as unfavourable. Does the government look at that as unfavourable? I know that Enmax has been fined twice in previous years for importing hydroelectricity

when there was more expensive coal available. [Mr. Anglin's speaking time expired] Rats. I'll go faster next time.

Mr. Hughes: Perhaps I'll try to address those in reverse order, Madam Chair, starting with the Brattle Group report and: is hydro unfavourable? Well, clearly, they were looking at the impact of hydro as being perhaps unfavourable to other producers. Actually, it's quite favourable to consumers, and that's a good thing for it because consumers actually pay for the services. That would be the response on that one.

The question with respect to levelling costs of the transmission build: there's been no definitive decision made at this point with respect to how we either amortize or spread out the cost of the new transmission build. The Alberta Utilities Commission is looking at that, and they will be responsible for identifying an effective way to allocate costs over the lifetime of these long-term assets.

With respect to the question of north-south transmission cost allocation, that is something that is overseen by the AESO. They're responsible for that.

With respect to transmission losses and whether or not that's built into this business plan here, the major transmission projects are completed. The heartland is going to be completed when?

Ms Locke: Next year.

Mr. Hughes: Next year, right? The other ones are even farther out in the future. These projections, actually, are not directly affected in most cases by the major transmission projects that you were asking about.

Are there any proposed changes to the EIA, the environmental impact assessment? The answer is no.

Then the question about a duty of care of the regulator. It's a bit of slightly unusual language in terms of how I would describe it. The Alberta energy regulator board would have a fiduciary duty to the organization and to meet the mission of the organization.

The regulator actually has an obligation in legislation to notify people who are directly or adversely affected by any particular application that's coming before them. We put that into the legislation, as you'll recall, last fall specifically to strengthen the obligation upon the regulator to ensure that all landowners are properly notified. Should somebody not actually be notified by the regulator, they can still self-identify. You'll recall that we added that into the legislation specifically last fall as well so that if people feel they are directly or adversely affected, they can self-identify and say, "Hey, Alberta energy regulator, I think I'm affected here, and here's why," and their view will be taken into account right at the front end of the regulatory process in order to ensure that their interest, their concern, is addressed appropriately.

Those are your questions in a reverse order.

Mr. Anglin: Duty of care you missed. You might try that again.

Mr. Hughes: Duty of care is what I was talking about with respect to the obligation of the . . .

The Chair: Gentlemen, it was five and five.

Mr. Anglin: I snuck that one in on you. I can't get by her.

Mr. Hughes: Nice try.

The Chair: Thank goodness.

Ms Fenske, do you want to go five and five, or do you want to go back and forth?

Ms Fenske: Back and forth, please. Thank you very much.

Thank you, Mr. Minister. It's either you or I, but I'm thinking it's the chair that's going to get the last word anyway, so we'll just go for it. We'll try. We'll try very hard.

I want to talk a little bit more about natural gas and by-product royalties. That would be page 22 of the fiscal plan, and I guess it's page 70 in the estimates. In the fiscal plan you're noting that, of course, it's 81 cents higher. I think MLA Sandhu started along this line. For every 10-cent increase – is it still true? – in the price of natural gas what are we making as far as additional income? Do you happen to have that figure handy?

Mr. Hughes: Yes. Actually, it's a very good question. The sensitivity of a change of natural gas price of 10 cents – so, for example, if natural gas comes off 10 cents relative to the projected numbers that we built the budget on – the net impact would be \$23 million to the revenues for the province of Alberta. So every 10-cent adjustment is worth \$23 million.

Ms Fenske: Okay. Now, many years ago, I guess, in the Klein era, certainly, natural gas was the large driver of the economy. Would you still say that, or has production declined so much that we can't go there?

Mr. Hughes: Well, two things have happened. First is that the price has changed so dramatically. You'll recall there were prices of natural gas over \$6, \$7, right up to \$8 or better at one point. In 2005 that yielded \$8 billion in royalty revenues to the province of Alberta. Today the yield is, you know, in the order of magnitude of \$1 billion. So the price of natural gas, obviously, is one thing.

But when that collapsed – and that came about because of immense innovation in the natural gas extraction business, where people started to learn how to do directional drilling much more effectively, to use fracking much more effectively, multistage fracking, which allowed for the exploitation of much more complex fields – that has had the effect of basically gutting an industry in North America and dropping the price because of an immense oversupply of natural gas. When that price dropped, that then sent a signal to people to stop drilling and stop producing as much as well, so it's been a combination of lower price and lower production.

You know, we're losing some of the markets we used to feed our natural gas to as well. You'll see that one of the factors driving the decision by TransCanada PipeLines is that they had a 42-inch pipe that was no longer full when it used to be full because the end-user is now being supplied from elsewhere in North America. That's cannibalized our market. It's cannibalized our revenues. It's cannibalized industry's revenues. We have these immense resources. The way to get out of this is, obviously, to find other markets and to diversify our markets. The way we get there is through LNG exports off the west coast, which we're all optimistic we'll see success at over time.

6:25

Ms Fenske: Yet we look at Williams, of course – that's the by-products that Williams Energy is looking at, the propane and such – and Dow, of course, using ethane. I know that in my community the incremental ethane extraction program was well received, and I've been asked time and time again by industry in the area if something like that is coming back. It certainly doesn't appear to be that way in this budget. I think it came out in '06 and was again extended in 2011. Do we have enough ethane? Is there an opportunity to get more ethane? Did you want to kind of comment on that? Some of those by-products are just as good as the natural gas as far as royalties, would they not be?

Mr. Hughes: Oh, yeah. The natural gas liquids market is pretty robust. I mean, off and on, right? Sometimes there's a regional oversupply of some of the liquids, and sometimes there's an undersupply, but it is an important value chain that we can expand, actually. The ethane extraction program that we provided that you referred to really accomplished the goal of priming the pump, getting people into the business, making sure that they were adding the most value that we could in this province.

But even downstream of what we do today in the ethylene extraction business and the value-added that we do there, there are actually immense opportunities to add even more value before we ship a product overseas, you know, in the plastic sector or other sectors. We don't expect, certainly not in this budget – there's nothing there for this kind of pump-priming technique for added value, but, you know, markets change, times change. We'll keep an eye on this, and if industry has suggestions about things that we could do that would augment value-added in this province, we'll certainly look at it.

I reflect upon the early days of the Lougheed government and the work that they did to create Joffre and that kind of value-added industry in this province. It was tremendous foresight that they demonstrated and a willingness to take on and look at the regulatory and perhaps other underbrush that needed to be cleared away in order to enable the creation of a whole new industry that has become one of the pillars of employment in this province for hundreds of Albertans, good, paying jobs that serve Albertans for the long haul.

Williams has chosen to do that in Alberta, to spend a billion dollars on a whole new pillar in the value-added business in this province, natural gas liquids. There are companies like Sasol that are looking at what they might do here as well. We'll continue to be open to any of these kinds of proposals because this adds huge value to Alberta. It uses these tremendous resources that we have. It creates jobs. It creates tremendous opportunities. You know, if I look at the Williams proposal, they didn't need one cent from government to do what they did. They made a decision based upon the economics that they saw in the world. You know what? Hair on 'em.

That's what entrepreneurs and businesspeople are going to do in this province regularly, day in and day out. They're going to build opportunities. They're going to look at the market. They're going to figure out where they can play in it and how they can make the most of it, and that is what makes this a great place to live.

Ms Fenske: Well, thank you so much, Mr. Minister.

Mr. Hughes: Thank you.

The Chair: Thank you, Ms Fenske.

We have one minute left, and I know, Mr. Hale, that you have a few questions you want to put on the record. There won't be time to answer them, but if you wish to put them on the record, you've got a minute.

Mr. Hale: Sure. And if the Energy minister would like to get back to me, this one's a pretty simple question. With the government transfers ERCB has operated at a loss. When will we see the ERCB back in the black, or is it the plan to operate at a loss or try to break even?

In the estimates the operational cost for the ERCB is \$3.4 million less than the 2013 budget. Are these estimates a reflection of the operations of the ERCB in its old capacity or the new capacity as a single regulator?

Also, Bill 2 adds new responsibilities with the environmental regulation parts. How specifically . . .

The Chair: That's it, folks. Thank you, everyone.

I'd like to remind all the committee members that our next meeting is Monday, April 15, 7 p.m., committee room B, to

consider estimates for the Ministry of Environment and Sustainable Resource Development. That's a six-hour series as well.

I would like to thank everyone for their civility. This was wonderful. Thank you.

[The committee adjourned at 6:30 p.m.]

