



Legislative Assembly of Alberta

The 29th Legislature
Fourth Session

Standing Committee
on
Resource Stewardship

Ministry of Energy
Consideration of Main Estimates

Monday, April 9, 2018
7 p.m.

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Fourth Session**

Standing Committee on Resource Stewardship

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Drysdale, Wayne, Grande Prairie-Wapiti (UCP), Deputy Chair

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Fraser, Rick, Calgary-South East (AP)
Hanson, David B., Lac La Biche-St. Paul-Two Hills (UCP)
Kazim, Anam, Calgary-Glenmore (NDP)
Kleinsteuber, Jamie, Calgary-Northern Hills (NDP)
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Vacant

* substitution for Wayne Drysdale

** substitution for Jamie Kleinsteuber

Also in Attendance

Clark, Greg, Calgary-Elbow (AP)
Starke, Dr. Richard, Vermilion-Lloydminster (PC)
Strankman, Rick, Drumheller-Stettler (UCP)
Swann, Dr. David, Calgary-Mountain View (AL)

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Standing Committee on Resource Stewardship

Participants

Ministry of Energy

Hon. Margaret McCuaig-Boyd, Minister

Douglas Borland, Assistant Deputy Minister, Ministry Services

David James, Assistant Deputy Minister, Electricity and Sustainable Energy

Doug Lammie, Assistant Deputy Minister, Strategic Policy

7 p.m.

Monday, April 9, 2018

[Loyola in the chair]

**Ministry of Energy
Consideration of Main Estimates**

The Chair: Welcome, everybody. I'd like to call the meeting to order. The committee has under consideration the estimates of the Ministry of Energy for the fiscal year ending March 31, 2019.

I'd ask that we go around the table and have all MLAs introduce themselves for the record. Minister, please introduce the officials that are joining you at the table when it comes your turn. I'm Rod Loyola, the MLA for Edmonton-Ellerslie and chair of this committee. We'll start here to my right.

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

Mr. Strankman: Rick Strankman, Drumheller-Stettler.

Mr. Loewen: Todd Loewen, MLA, Grande Prairie-Smoky.

Mr. Hanson: David Hanson, Lac La Biche-St. Paul-Two Hills.

Mr. Panda: Prasad Panda, Calgary-Foothills. With me is my legislative assistant, David Jackson.

Mr. Clark: Good evening. Greg Clark, MLA, Calgary-Elbow, and with me at the table is my very capable researcher, Barbara Currie.

Ms McCuaig-Boyd: Margaret McCuaig-Boyd, Minister of Energy.

The Chair: And the officials joining you, Minister.

Ms McCuaig-Boyd: Okay. I have Douglas Borland, Coleen Volk, David James, and Doug Lammie.

Mr. Dang: Good evening. I'm Thomas Dang, the MLA for Edmonton-South West.

Ms Babcock: Good evening. Erin Babcock, Stony Plain.

Mr. Malkinson: Brian Malkinson, MLA for Calgary-Currie.

Mr. Rosendahl: Eric Rosendahl, MLA, West Yellowhead.

Ms Woollard: Denise Woollard, Edmonton-Mill Creek.

Ms Kazim: Good evening. Anam Kazim, MLA for Calgary-Glenmore.

Dr. Turner: Bob Turner, Edmonton-Whitemud.

Mr. Nielsen: Good evening, everyone. Chris Nielsen, MLA for Edmonton-Decore.

The Chair: Good. I'd like to note that Dr. Turner is substituting for Mr. Kleinstaub.

Please note that the microphones are operated by *Hansard* and that the committee proceedings are being live streamed on the Internet and broadcast on Alberta Assembly TV. Please set your cellphones and other devices to silent for the duration of the meeting.

Hon. members, the standing orders set out the process for consideration of the main estimates, including the speaking rotation. As provided for in Standing Order 59.01(6), the rotation is as follows. The minister or the member of Executive Council acting on the minister's behalf may make opening comments not to exceed 10 minutes. For the hour that follows, members of the Official

Opposition and the minister may speak. For the next 20 minutes members of the third party, if any, and the minister may speak. For the next 20 minutes members of any other party represented in the Assembly or any independent members and the minister may speak. For the next 20 minutes private members of the government caucus and the minister may speak. For the time remaining, we will follow the same rotation just outlined to the extent possible; however, the speaking times are reduced to five minutes, as set out in Standing Order 59.02(1)(c).

Members wishing to participate must be present during the appropriate portion of the meeting. Members may speak more than once; however, speaking times for the first rotation are limited to 10 minutes at any one time. A minister and a member may combine their time for a total of 20 minutes. For the rotations that follow, with speaking times of up to five minutes, a minister and a member may combine their speaking time for a total of 10 minutes.

Discussion should flow through the chair at all times regardless of whether or not the speaking time is combined. Members are asked to advise the chair at the beginning of their rotation if they wish to combine their time with the minister's time. If members have any questions regarding speaking times or the rotation, please feel free to send a note or speak directly with either the chair or the committee clerk about the process.

A total of six hours has been scheduled to consider the estimates of the Ministry of Energy. With the concurrence of the committee I will call a five-minute break near the midpoint of the meeting; however, the three-hour clock will continue to run. Does anyone oppose having a break? Okay.

Committee members, ministers, and other members who are not committee members may participate; however, only a committee member or an official substitute may introduce an amendment during a committee's review of the estimates.

Ministry officials may be present and at the direction of the minister may address the committee. Ministry officials seated in the gallery, if called upon, have access to a microphone in the gallery area. Ministry officials are reminded to introduce themselves prior to responding to a question. Pages are available to deliver notes or other materials between the gallery and the table. Attendees in the gallery should not – I repeat: should not – approach the table. Members' staff may be present and seated along the committee room wall. Space permitting, opposition caucus staff may sit at the table to assist their members; however, members have priority to sit at the table at all times.

If debate is exhausted prior to the six hours, the ministry's estimates are deemed to have been considered for the time allotted in the schedule, and the committee will adjourn. The scheduled end time of today's meeting, for this evening at least, is 10 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 by the minister in the Assembly for the benefit of all members.

The vote on the estimates and any amendments is deferred until consideration of all ministry estimates has concluded and will occur in Committee of Supply on April 19, 2018.

Amendments must be in writing and approved by Parliamentary Counsel prior to the meeting at which they are to be moved. The original amendment is to be deposited with the committee clerk, and 20 copies of the amendment must be provided at the meeting for committee members and staff.

I now invite the Minister of Energy to begin her opening remarks. You have 10 minutes.

Ms McCuaig-Boyd: Thank you, Mr. Chair. Thank you and good evening, everyone. I'm here to present highlights from the Ministry of Energy's budget for the fiscal year 2018-19. Joining me at the table, as I mentioned, is my deputy minister, Coleen Volk; the assistant deputy minister, ministry services, Douglas Borland; the assistant deputy minister, electricity and sustainable energy, David James; and the assistant deputy minister, strategic policy, Doug Lammie.

My department continues its work ensuring the responsible development of our vast resources, both renewable and nonrenewable. Tonight I will talk about how in 2018-2019 we will continue to build on the hard work of the past three years while highlighting our strategic priorities of energy diversification, market access, electricity market transition, and better liability management.

As I've done in previous years, I'll begin with a review of the budget numbers, and I'll start by putting Energy's budget in context with the work of the department and the associated agencies. The first is the actual amount to run the department; that is, the funds the department will use to carry out its routine business and focus on strategic priorities. This fiscal year the voted amount for the department is 30 per cent of the overall ministry budget.

Next, a large portion, 38 per cent, is funding that is allocated to the Alberta Energy Regulator and the Alberta Utilities Commission. This ensures that staff in those agencies can continue to carry on their duties on behalf of Albertans. I remind the committee that these two agencies are funded by industry levies. In other words, the funds to support these two agencies do not come from government revenues.

Finally, 32 per cent of the ministry's budget relates to statutory expenses such as the carbon capture and storage initiative.

This evening I want to provide a quick overview of this year's budget numbers. The total budget for the ministry for this fiscal year is \$872 million. This includes \$262 million for the Department of Energy. This is to pay for the people who work there, and this does not include the previously mentioned regulatory agencies. The department continues to control its spending in a thoughtful and prudent manner while supporting the core goals of our government. I will talk more about our goals and priorities in a moment.

Also in the budget is \$67 million representing the second year of the principal portion of the coal phase-out agreements. There's also \$30 million set aside for the interest associated with the coal phase-out agreements. We've also allocated \$74 million for the regulated rate option price ceiling program and allotted \$2 million to continue with the administrative and policy development work of my department. Finally, we've reported \$272 million linked to payments for the carbon capture and storage initiative. The increase is the result of a carry-over payment from last year and represents a two-year roll-up.

Now, on to the priorities and goals of our upcoming year. We recognize there's a global shift in how energy is produced and consumed. Make no mistake; the transition to a low-emission future is happening. If we failed to prepare our province's energy sector and our economy for that reality, we would be taking an unacceptable risk with the future of Albertans. However, the transition to renewable energy won't happen overnight, and oil and gas will continue to play an essential part in our lives as building blocks for new products and for maintaining our high standard of living.

7:10

While we work to diversify our energy industry, promote our unconventional resources, and advocate for pipelines, we continue to be serious about protecting our environment and our most

important industries. We're making it clear to all Canadians and people around the world that combatting climate change and supporting energy development must go hand in hand. We know that in Alberta being an energy leader means that we're also a climate leader.

Our number one strategic priority for the upcoming year is to get the Trans Mountain pipeline built. The events in the last 24 hours have not lessened our determination to see this happen. Indeed, they have only deepened our resolve. As the Premier has said: if ever there was a project that was in the national interest, it is Trans Mountain. The approval of this project is an example of how we can balance economic growth and job creation while addressing climate change. This is a project that will create tens of thousands of jobs and generate billions of dollars in revenues that will benefit not just Alberta but will benefit the entire country. It will open up our energy products to new markets and enable producers to garner a competitive price for our oil, thereby limiting the impact of the price differential that costs government millions of dollars every year.

We know that Albertans are on our side, Canadians are on our side, and the law is definitely on our side. With the most recent decision by the Federal Court of Appeal, who wouldn't even hear the appeal from British Columbia, the courts have ruled in the pipeline's favour 14 out of 14 times. That's 14 times on 14 different tries.

We will soon be introducing legislation to give us the tools we need to control the supply of our resources. This week the Premier is lobbying for Trans Mountain with business and economic leaders in Toronto. As the leader of Canada's delegation she will also be standing up for Alberta at the North American governors' and premiers' summit in May. Whether it's Trans Mountain, Keystone XL, or Enbridge line 3, we will spare no effort in gaining the access Alberta producers need to get product to market and for Albertans to get the full value of their resources.

With respect to Keystone and line 3 we know that more work and approvals are needed. We continue to monitor developments with respect to both pipelines and are anticipating a decision from the state of Minnesota in the coming weeks on line 3. We will continue to take action and advocate for Alberta's energy products with respect to pipelines both nationally and internationally.

Switching gears a little, we are also taking action to diversify and grow our province's energy sector. This was former Premier Peter Lougheed's dream, and we are going to make it a reality. Based on the recommendations from the Energy Diversification Advisory Committee, we are creating three key programs that will lead to a dynamic and diversified energy sector in Alberta as outlined in the Energy Diversification Act.

The first initiative is a \$1 billion partial upgrading program, which will use a mix of loan guarantees and grants to leverage long-term private investment. Specifically, we expect this support to attract up to \$5 billion in private investment to build partial upgrading facilities. This process will take diluent out of some of the shipments of bitumen so that we could move up to 30 per cent more oil through existing pipelines. It will also give us access to refineries that right now cannot take our bitumen.

The second program is an expanded \$500 million petrochemical diversification program. This will build on the success of the initial petrochemicals diversification program and adds ethane to the list of supported feedstock. Like round 1, round 2 will offer \$500 million in royalty credits through a competitive process. It's important to note that a key benefit of using royalty credits is that these are not redeemed until the project is up and running and producing.

One of the two successful applicants in round 1, Inter Pipeline, will be proceeding with building two new petrochemical facilities

in the Industrial Heartland near Fort Saskatchewan. We hope to have a final investment decision on the Canada Kuwait Petrochemical Corporation, the other successful applicant under round 1, very soon. I'm pleased to note that front-end engineering design work is already under way for this project, indicating good progress towards a final investment decision. We anticipate generating more than \$6 billion in new private investment and up to 4,200 new jobs during construction of the petrochemical facilities under the first round of the program. We anticipate that the second round of the petrochemicals diversification program will also attract about \$6 billion in new investment and create around 4,000 jobs in construction.

Finally, the third program under the Energy Diversification Act is a \$500 million petrochemical feedstock infrastructure program. This investment will help industry build facilities to capture natural gas liquids required for petrochemical manufacturing such as ethane, methane, and butane. Increasing Alberta's supply of raw components reduces the need to import from the United States or elsewhere. It also meets a necessary condition for industry to construct and operate world-class petrochemical processing facilities in our province.

These three programs will create new jobs, attract billions in private investment dollars, and, most importantly, diversify our energy sector so Alberta's economy is stronger and more resilient for the long haul. The events of recent years have demonstrated yet again that Alberta can no longer afford to put all of its economic eggs into the upstream basket. This time Alberta must learn from its mistakes of the past and foster an economic recovery that is built to last. Without question, we will continue to act as stewards, ensuring that Albertans receive maximum benefits from oil and gas projects.

The Chair: Thank you, Minister.

For the hour that follows, we'll have the members of the Official Opposition. Would you like to go back and forth, Mr. Panda?

Mr. Panda: Yeah, I would like to go back and forth.

The Chair: Would you like me to set the clock at 20-minute intervals for you?

Mr. Panda: Sure.

The Chair: Okay.

Ms McCuaig-Boyd: Chair, if I may, I'm happy to go back and forth as long as I'm able to answer my questions this year. If not, I would like to revert to getting the questions, and I'll provide answers.

The Chair: Okay. Note made. Thank you, Minister.
Please go ahead, Mr. Panda.

Mr. Panda: Thank you, Mr. Chair, and thank you, Minister, for sitting with us for the next three hours and taking questions. I'd like to thank all your staff here to support you and us. I'll go back and forth, but if the answers are too long, then because of the number of questions I have, maybe I may have to interrupt.

Ms McCuaig-Boyd: Yeah. Understood.

Mr. Panda: Yeah. Thank you.

Minister, which line on page 116 is responsible for policy advice to you for pipelines? Is it line 2.2, resource development?

Ms McCuaig-Boyd: Yeah. That would be 2.2.

Mr. Panda: Okay. Thank you.

Minister, you're spending \$36,647,000 for resource development this year, on things like getting the pipelines not only approved but built, under this line item. Is that true?

Ms McCuaig-Boyd: Sorry. Could you repeat that question?

Mr. Panda: Under line 2.2 you're spending \$36.647 million this year on things like getting pipelines not only approved but built. Is that a fair statement?

Ms McCuaig-Boyd: Did you say \$37 million?

Mr. Panda: It's \$36,647,000.

Ms McCuaig-Boyd: We're not building pipelines but support the advocacy to get those pipelines built. The government doesn't build the pipelines; the company does.

Mr. Panda: So you're spending on advocacy about \$36 million?

Ms McCuaig-Boyd: Yeah. A portion of that is for the people who support resource development. The department participates in government integrated resource management initiatives which affect access to resources, you know, things like the ILM, the land-use framework, and all those kinds of things. It's all in that section.

Mr. Panda: Okay. Thank you.

The NDP government keeps declaring victory over B.C. on the Kinder Morgan Trans Mountain expansion project. Yesterday you heard that Kinder Morgan has halted all nonessential work on the project, with an eye on May 31 for future investments. This doesn't look like a victory to me. What has Kinder Morgan briefed you about the rationale for the slowdown and potential halt? Did you talk to them personally, or was it . . .

7:20

Ms McCuaig-Boyd: Could I ask you what line in this you're referring to?

Mr. Panda: Still 2.2 and resource development.

Ms McCuaig-Boyd: Yeah. None of that is part of this exercise tonight, from what I understand. This budget line is part of the work we do in market access. The other thing I would say is that if it were in here, a lot of those conversations are extremely private, and, you know, it's not something you bring out in the public. It's commercially sensitive. Honestly, I don't think that question is appropriate for this exercise tonight.

Mr. Panda: It is perfectly appropriate.

Ms McCuaig-Boyd: Okay. Can you refer to what budget line or how it fits into this?

Mr. Panda: Yeah. I'm still referring to 2.2, resource development. This Kinder Morgan pipeline is very much related to resource development.

Ms McCuaig-Boyd: The figure you're talking about also includes work undertaken to encourage, increase value-add – so that's part of it as well – public consultations, energy consultations, and the transition to the capacity market. All of that is in there.

Mr. Panda: I'll come to those questions later, but that was my question. If you don't want to answer, that's okay.

Ms McCuaig-Boyd: It's not that I don't want to. I just don't think it fits here.

Mr. Panda: So I'm still asking: when did Kinder Morgan brief you on this slowdown and potential halt?

Ms McCuaig-Boyd: Mr. Chair, I don't believe this is germane to this exercise this evening. It's not in our business plan.

Mr. Panda: Mr. Chair, I'm referring to the budget estimates. We are reviewing budget estimates, and the government said that balancing the budget is contingent on building pipelines like Keystone and Kinder Morgan. That's why this is very relevant.

The Chair: Mr. Panda, I can't force the minister to answer the question. You can carry on with your line of questioning and just continue.

Mr. Panda: Minister, when did Kinder Morgan brief you on this slowdown and potential halt?

Ms McCuaig-Boyd: You mean yesterday's announcement?

Mr. Panda: Yeah.

Ms McCuaig-Boyd: Yesterday.

Mr. Panda: They only informed you yesterday.

Ms McCuaig-Boyd: Well, I learned of it. They were in talks with the Premier ahead of that, but I was actually en route back from Fairview. Then I was in the hospital visiting my father, so I was not checking my phone appropriately.

Mr. Panda: Okay. Thank you.

Would you agree that halting and then resuming wine shipments may not be the best response to B.C. over the fight for this pipeline?

Ms McCuaig-Boyd: You know, we've said from the beginning that we're going to use different tools in our tool chest. That was one of them, and when they backed down on one of the agreements, our government agreed to back down on that. But we have a number of things that we are prepared to do. As I said today, we will be shortly tabling legislation that will allow us to limit resources going to B.C., and there are a number of different things. Again, I fail to understand how that has to do with the budget estimates tonight. That's my answer for that.

Mr. Panda: Yeah. It's very much related to the budget because this pipeline has to be built. On page 61 of the business plan, 2018-21, it reads:

The Alberta government is continuing to pursue and advocate for increased market access for Alberta's energy products. Getting a Canadian pipeline to Canadian tidewater is the best way for our world-class energy producers to sell our oil at world prices on the global market.

I mean, there's still more to that.

The federal approval of the Trans Mountain expansion project in the fall of 2016 was a significant step forward in gaining tidal access to new markets in Asia and Alberta's efforts to reduce emissions was a key factor in gaining this approval.

Ms McCuaig-Boyd: Are you asking me to comment further on . . .

Mr. Panda: No. I'm linking that to when you say that these questions are not relevant. They're very much relevant because

your colleague the Finance minister also mentioned that these pipelines have to be built to balance the budget.

Ms McCuaig-Boyd: Well, we've made it clear from the beginning that market access to Asia is absolutely critical, and it's something the previous government did not spend enough time and attention on. You know, the bulk of our resources go south, and we get what we get with them. As you're quite aware, there's a huge differential that we're losing a lot of money over.

Mr. Panda: Yeah. I get that.

Ms McCuaig-Boyd: We've worked very hard. I've made two trips to Asia to deal with those markets.

Mr. Panda: I appreciate that. I get that. I have follow-up questions. I mean, you can talk about those ones, but now we've established the relation and that my questions are relevant.

You talked about the tools that you can use – so you and I agree that blocking this pipeline is not a good idea for Canadians' prosperity – and you keep saying that you have tools. Have you launched a class-action lawsuit against organizations like @350 who are making mischief in opposing the pipelines?

Ms McCuaig-Boyd: You know, we're doing everything we need to do to stand up for the pipeline against the British Columbia government. As I mentioned earlier today and I'll mention again, in my notes 14 out of 14 cases have gone in favour of the pipeline.

Mr. Panda: Kinder Morgan won those lawsuits, but I'm saying: from your government, have you thought of launching any class-action lawsuit against some of those organizations deliberately creating mischief?

Ms McCuaig-Boyd: You know, Alberta has been playing by the rules from the start, and we've secured federal approval, as you mentioned, for the pipeline, which is, we all agree, in the national interest. This pipeline will open up export markets for energy produced under the most comprehensive climate leadership plan anywhere in North America. What we are doing is giving ourselves the greatest range of tools to use as we go forward so that we have maximum flexibility to apply leverage in the right place at the right time, depending on the circumstances. We aren't interested in creating any kind of crisis. Our actions will be measured, they will be careful, but – let me be clear – we won't stand for actions that are deliberate attempts to frustrate this nationally approved pipeline. We will take action, and we are . . .

Mr. Panda: Are you going to take them to court? We're already challenging this.

Ms McCuaig-Boyd: We are doing what we need to do to get this pipeline built.

Mr. Panda: Is that one of the options, then, taking them to . . .

Ms McCuaig-Boyd: We have many options before us. We have legal options. We have tools such as controlling the resources that go to B.C. We can pressure the federal government to do their part. There are a number of tools we can use.

Mr. Panda: Yeah. I mean, when you keep talking about a number of tools, we haven't seen those tools yet because you haven't opened up your tool box. Will you shut in B.C. natural gas crossing the Alberta border, costing B.C. millions in royalties, to protest the actions of B.C. and the protesters?

Ms McCuaig-Boyd: Sorry. Is that a question?

Mr. Panda: Will you shut in the B.C. natural gas crossing into Alberta?

Ms McCuaig-Boyd: As I mentioned, we will be tabling legislation soon, and there will be more to come on that. That's, again, not in here, and I would be, I think, in trouble if I gave too many details of the bill before it's introduced in the Legislature.

Mr. Panda: When is the bill going to be . . .

Ms McCuaig-Boyd: In the next few days.

Mr. Panda: Of this week?

Ms McCuaig-Boyd: Upcoming days.

Mr. Panda: Of this week?

Ms McCuaig-Boyd: Coming days.

Mr. Panda: Why haven't you imposed tolls on B.C. natural gas crossing into Alberta so far? Don't you have any ability to . . .

Ms McCuaig-Boyd: We require legislation.

Mr. Panda: Without that, you can't do it currently?

Ms McCuaig-Boyd: We require legislation. A bill will be coming in the next coming days. You will know more details then.

Mr. Panda: Do you also need the legislation to halt the purchase of electricity from B.C. Hydro?

Ms McCuaig-Boyd: We have halted talks. I know that earlier today it was mentioned in the House that we had agreements, which we do not, but we have halted any potential agreements at this time. We've halted any talks at all to do with electricity.

Mr. Panda: Yeah. But currently we have an intertie. Electricity is flowing both directions. I know that, you know, we also export to them. But, I mean, Alberta has a capacity to produce 16,000 megawatts, and our peak load is only 11,000 megawatts. Can they not shut the intertie? When I looked at AESO, they are actually shipping – today they are supplying 500 megawatts. We are not exporting anything to them.

7:30

Ms McCuaig-Boyd: Okay. As you stated, the Premier said earlier that we have suspended talks to further our electricity trade relationship with British Columbia. Right now existing power flows to and from British Columbia, and it remains in place as a requirement under the current emergency agreements and reliability standards. It just goes back and forth.

Mr. Panda: Yeah. My question is: can you shut that intertie?

Ms McCuaig-Boyd: May I explain the answer?

Mr. Panda: Yeah.

Ms McCuaig-Boyd: Okay. Thank you. B.C. Hydro sells into the electricity market, not under contracts. It is based on supply and demand by the market operator. The intertie supports Alberta's reliability, and we don't turn it off. So there's a difference between that and pipelines.

Mr. Panda: Thank you.

Can you explain to me how purchasing an ownership stake, an equity stake in the Kinder Morgan pipeline will get the pipeline built?

Ms McCuaig-Boyd: You know, that's just one of the tools. There's more to come on that. There's really very little I can say tonight on that. That's come in the last 24 hours and, again, is not part of this. It's part of, I guess, looking at how we're going to get it built, but there's really not much to say tonight on that matter.

Mr. Panda: Minister, without that legislation, there were no powers for you or the Premier to take any concrete actions pending that legislation? Time is of the essence. Every day we are losing millions of dollars by not having market access. We talked about that many times, and you felt that you were doing what you – but there were no concrete actions. Is the hesitancy to take concrete actions because of your Alberta NDP government's close relations with the B.C. NDP government, or is there any other reason?

The Chair: Mr. Panda, excuse the interjection here, but I don't believe that your question is really related to the estimates that we have before us and that we are considering at the moment. I am allowing you a certain level of flexibility so that you can make your point, but you keep asking questions that aren't directly related to the main estimates under our consideration at this time. I'd ask you to please refocus your questions on the main estimates particularly, please.

Mr. Panda: Okay. Thank you, Mr. Chair. Like you, I'm also so concerned about this pipeline. That's why we're asking those questions.

Okay. Turning to the fiscal plan 2018-21, page 104 notes that if the Trans Mountain expansion pipeline and the Enbridge line 3 expansion and the Keystone XL project go forward as planned, higher production and oil prices would boost royalties by up to 10 and a half billion dollars between 2018 and 2023. Would you commit to an undertaking to table the royalty revenue estimates for these pipelines on an individual basis for the fiscal years 2018-19, 2019-2020, 2020-2021, up until 2023-24?

Ms McCuaig-Boyd: You know, that would be difficult because royalties are collected at the wellhead, not at the pipeline.

Mr. Panda: We're asking for revenue estimates.

Ms McCuaig-Boyd: Really, this is about market access. We need two of the three, so any combination of line 3, Keystone XL, and TMX. Any two of those will get us that. But it's not about the individual pipelines; it's about the access.

Mr. Panda: Yeah, but in the estimates there should be some individual estimate. Can you break it up and table that?

Ms McCuaig-Boyd: I don't think we can, no, because the royalties are calculated at the wellhead. Once they're in the pipeline – there are no royalties at the pipeline end.

Mr. Panda: Okay. Thank you.

Page 86 of the fiscal plan 2018-21 shows the path to balance fiscal metrics. There is a line that shows nonrenewable resource revenue. Will you commit to an undertaking to table a chart showing the breakout of the nonrenewable resource revenue by type of resource to 2023-24?

Ms McCuaig-Boyd: What I can tell you is that nonrenewable resource revenue is only one component to the government's path

to balance. Treasury Board will be able to articulate the full details behind the path to balance. Gaining additional pipeline capacity will be one factor in the overall recovery. Line 3 is expected to come online in 2020. However, line 3 alone does not provide . . . [A timer sounded]

The Chair: You can carry on, Minister.

Ms McCuaig-Boyd: . . . sufficient pipeline capacity to change the marginal barrel economics from rail to pipeline economics for a full year. In the case of Trans Mountain the pipeline is not expected to come online until the second half of 2021. At this point it is expected that there is sufficient pipeline capacity to set the light-heavy differential based on pipeline economics from rail economics. So in the longer term capacity will be needed, especially with oil sands technology advances allowing more oil sands to be developed with a lower CO₂ footprint for additional production. Just when is uncertain, and there are a number of different forecasts.

Mr. Panda: Okay. Thank you.

Let's refer to page 116 of the estimates, line 1.1. That's related to your office, Minister. Can you tell me why you need \$70,000 more than last year's forecast to run your office?

Ms McCuaig-Boyd: Okay. There is an increase, and the majority of it is used to allow me to add staff to deal with the additional questions and co-ordination of files associated with off-coal agreements, coal-to-gas conversion, the methane reduction strategy, the new RRO price ceiling to protect electricity consumers, the move to 30 per cent renewable electricity generation by 2030, output-based allocation in the transition to the capacity market, and, of course, the one you've been asking lots of questions about today, the critical market access and the pipeline issues, that are important for all of us in the future. We have an additional staff for all of that.

Mr. Panda: In line 1.2, the deputy minister's office, how was your deputy able to save \$182,000 between the 2016-17 actual and today's estimate?

Ms McCuaig-Boyd: Sorry. What page are you on?

Mr. Panda: The same page, 116, line 1.2.

Ms McCuaig-Boyd: Okay. So you're looking at the \$485,000?

Mr. Panda: Yeah.

Ms McCuaig-Boyd: Okay. This is the direct cost incurred by the deputy minister's office to support the operations of the ministry. The budget supports two FTEs and the operating cost for the office. The difference is severance and vacation payout that was paid in 2016-17 as part of the government's transition and relocation expenses. That allows for the differences.

7:40

Mr. Panda: Okay. Thank you.

Page 116 of the estimates, line 3, cost of selling oil: who is the contractor that is selling Alberta's oil for us?

Ms McCuaig-Boyd: Okay. The cost of selling oil is through the Alberta Petroleum Marketing Commission, and it's made up of a variety of factors such as the cost of condensate and tolling fees based on the volume of oil . . .

Mr. Panda: Minister, does APMC have any other contractor working for them?

Ms McCuaig-Boyd: Yeah. Shell.

Mr. Panda: Shell? Thank you.

Are these the bitumen royalties in kind?

Ms McCuaig-Boyd: No.

Mr. Panda: No? Is your global travel to places like Houston charged to line item 3 on page 116?

Ms McCuaig-Boyd: There's a budget of \$30,000 set aside for travel. My travel expenses are publicly available, and every time I leave this province, it is done strategically to advance our energy sector, attract investment, and help explain the good work we are doing to become a sustainable energy producer. Some examples of the trips include my mission to Japan, China, and South Korea to engage in talks about new investment and energy diversification opportunities in Alberta. I also was in CERAWEEK with the Premier to share Alberta's leadership on energy, environment, and our energy sector and the deep trade ties that we have with the U.S. I was also at the future of energy summit in New York to showcase Alberta's electricity market reforms and to promote renewable energy investments into this province.

Mr. Panda: Now, I'm looking at performance measures on page 62 of the business plan. You have set the target of Alberta's oil sands supply share of global oil consumption as reaching 3 per cent by 2020. Can Alberta achieve this through the Trans Mountain pipeline expansion and Keystone XL alone?

Ms McCuaig-Boyd: Okay. The performance measure for the oil sands: this measure reflects the proportion of Alberta's oil sands production to global consumption on a calendar-year basis. The Alberta oil sands' share of world consumption is the best bottom-line measure of Alberta's vision to be a global energy leader and to be recognized as a responsible energy supplier. The target is to have year-over-year growth which reflects Alberta's oil sands' increasing importance in the global energy mix. Therefore, this measure can be interpreted as an indication of investment competitiveness. The share of the global oil consumption reflects a number of factors, both within and outside of government control.

Mr. Panda: So the target is 3 per cent by 2020? Can we achieve that just through these two pipelines, the Trans Mountain expansion and Keystone XL?

Ms McCuaig-Boyd: Yeah. As I mentioned, with any two of the three, a combo, we can do that.

Mr. Panda: Okay. How many other pipelines have filed for regulatory approval with the National Energy Board? Do you have any idea?

Ms McCuaig-Boyd: In Alberta?

Mr. Panda: Yeah.

Ms McCuaig-Boyd: None I know of. The ones I've been speaking about are the ones that are on the vote. There may be in other provinces, but I don't know. The National Energy Board is out of my jurisdiction.

Mr. Panda: On page 64 of the business plan you have performance measure 2(a).

Timeliness of the needs and facility applications (Alberta Utilities Commission)

- Percentage of needs and facility applications determined within 180 days of the application being deemed complete.

You have 100 per cent set as the target for 2018. Why don't you have the same performance measure for the Alberta Energy Regulator?

Ms McCuaig-Boyd: Okay. So you're looking at . . .

Mr. Panda: Measure 2(a).

Ms McCuaig-Boyd: Where it says "not applicable" and then "99" and "99"? Is that the line you're looking at?

Mr. Panda: No. The timeliness of the needs and facility applications, the percentage of needs and facility applications determined within 180 days of the application being deemed complete. You set a 100 per cent target for 2018. My question is: why don't you have the same performance measure for the Alberta Energy Regulator?

Ms McCuaig-Boyd: The AUC has an actual application process whereas with the AER it's a risk-based approach, so it's two different approaches on how they do it. In the case of the AER inspections they are selected based on an enterprise management approach to defining and applying risk as well as the predetermined level of risk that the activity may pose to health and safety, the environment, resource conservation, and stakeholder confidence in the regulatory process, including public and political influences. That kind of thing explains that 1 per cent difference. There are two different processes in how they do things.

Mr. Panda: Okay.

There may be questions which you may not be familiar with. If you like, if one of your colleagues wants to answer, I don't mind them answering.

Ms McCuaig-Boyd: For the same question, or just in the future?

Mr. Panda: No. I'm saying going forward.

CAPP, the Canadian Association of Petroleum Producers, indicated that it takes regulatory processing for oil and gas projects in Saskatchewan and British Columbia – they have a 148-day advantage over Alberta, and Texas has a 190-day advantage over Alberta. Does it really take more than half a year to go through an application for an oil and gas facility to determine whether or not the project can go ahead?

Ms McCuaig-Boyd: Again, I'm wondering what page you're looking at, where this would . . .

Mr. Panda: Under the performance measures, I'm talking about.

Ms McCuaig-Boyd: Okay. Well, I've explained – maybe I'll start at the top. The AER approach for this one performance indicator that you're talking about is to show that industry is compliant with regulatory requirements. By monitoring industry compliance with regulatory requirements, the AER ensures public safety, environmental protection, and resource conservation.

Mr. Panda: Yeah. I get that. But with respect to other jurisdictions like Saskatchewan and British Columbia, they have a faster approval process . . .

Ms McCuaig-Boyd: Well, one of the difficulties you're presenting is that I don't have the CAPP report here, and it's not part of this, so it's a little bit difficult for me to see what's in the CAPP report. I can tell you how the AER does things in Alberta. I'm not privy to British Columbia or Saskatchewan. The CAPP report is not part of this exercise tonight, so it's a bit of a disadvantage for me to speak to that question.

Mr. Panda: Minister, we're talking about performance measures here.

Ms McCuaig-Boyd: I understand that.

Mr. Panda: Actually, you would look at other jurisdictions, and you want to set the benchmark to be one of the best jurisdictions. Isn't it? We don't need the CAPP report for it.

Ms McCuaig-Boyd: We have one of the best jurisdictions, but, again, you're asking me to compare with a report I haven't seen, with two provinces that are not under my jurisdiction, and I'm begging to differ. I'm saying that I don't believe that's an appropriate question for this exercise tonight.

Mr. Panda: So you are not aware that other jurisdictions have a better approval process than us?

Ms McCuaig-Boyd: Again, I can talk about what Alberta does. You know, they actually are renowned in North America for the regulatory excellence that Alberta provides. In fact, we have agreements with Mexico right now to train their regulators because of the system we have here. So I can talk about that. They have their own strategic plan. They look for five outcomes. They look for: environment is protected, public is safe from harm . . .

7:50

Mr. Panda: No. But why is it not reducing the timelines to approve the projects? The longer it takes, it's discouraging investments. That's why I'm asking you those questions.

Ms McCuaig-Boyd: Okay. Again, that's a bit of a subjective comment, and again you don't want to listen to the answer I have. I don't have the other information, so can we maybe move on?

Mr. Panda: Okay. Thank you.

Page 65 of the business plan. I question your use of transmission losses as a performance measure. That number is going to remain a constant if the transmission network remains the same size and won't change unless the transmission companies change the material that the wires are made of. Why aren't reliability or price performance measures used?

Ms McCuaig-Boyd: Sorry. Can you just repeat the last part, please?

Mr. Panda: I'm referencing page 65. I'm asking: why aren't reliability or price performance measures used?

Ms McCuaig-Boyd: Okay. You're talking about transmission losses.

Mr. Panda: Correct.

Ms McCuaig-Boyd: Yeah.

Mr. Panda: Either reliability or price as the performance measures.

Ms McCuaig-Boyd: You said the reliability of price?

Mr. Panda: Reliability or price.

Ms McCuaig-Boyd: Or price. The AESO has a number of ways that they look at things. Some are the price and what the transmission can provide. I'm not sure if that's answering what you're asking.

Mr. Panda: No.

Okay. Let's talk about the security of Alberta's electrical grid. Over 50 per cent of the electricity on the grid is directed to industry. Rare events like intense aurora borealis or coronal mass ejection from the sun have the potential to knock the grid offline for weeks or months. In the case of the nuclear war, like, if it happens, the electromagnetic pulse generated by an atomic warhead detonated – it's too technical for her, right? I'll skip this. I'll give you the benefit of . . . [interjection] I know.

Ms McCuaig-Boyd: Yeah. Again you're asking questions that are under the purview of the AESO, you know, and there are international standards for security of electrical grids . . .

Mr. Panda: No. We're talking about performance measures here.

Ms McCuaig-Boyd: Okay. Could you tell me what page you're on because I . . .

Mr. Panda: Is the grid shielded? Do you know or any of your staff?

Ms McCuaig-Boyd: David, do you want to?

Mr. James: The Electric System Operator relies on security standards as well as critical infrastructure protection standards that are defined by the North American Electric Liability Corporation. Those standards adhere to all electric operators across North America. Our system operator makes sure, along with the transmission facility owners, that all of the facilities in Alberta are up to standard associated with anything like aurora borealis or electrical storms or any of those other electromagnetic pulse impacts. All of that is done as per the standards that are defined by the North American Electric Liability Corporation.

Mr. Panda: So we can assume the grid is shielded, then?

Mr. James: The grid is shielded and reliable. It's designed and built in a way to manage all of those impacts.

Mr. Panda: Thank you.

Now I'm referring to the Alberta Energy Regulator. On page 66 of the business plan it talks about the \$15 million in capital investment going to support the Alberta Energy Regulator. In December 2016 the Alberta Energy Regulator suffered a malware attack. Is any of this \$15 million towards cybersecurity of the regulator?

Ms McCuaig-Boyd: Sorry. You're on page 66? You're looking at the \$15,000?

Mr. Panda: Fifteen million dollars in capital investment.

Ms McCuaig-Boyd: Fifteen million dollars. Sorry. I'm trying to find the line you're referring to here. Okay. Yeah. They would consider cybersecurity as part of their business, but it's not broken out. You're asking about cybersecurity in the AER?

Mr. Panda: Yeah. If anything happens, does that \$15 million cover those cyberattacks?

Ms McCuaig-Boyd: Well, I think it's like your insurance. You pay so much all the time. You know, they allot a certain amount, and if . . .

Mr. Panda: Were you aware of any foreign espionage at the Alberta Energy Regulator?

Ms McCuaig-Boyd: No.

Mr. Panda: Okay. Thank you.

Switching channels here, I'm referring to page . . . [A timer sounded]

The Chair: Continue, Mr. Panda.

Mr. Panda: Yeah. Thank you.

Page 116, line 2.2, of the estimates. Minister, you made a submission to the federal parliamentary Standing Committee on Transport, Infrastructure and Communities that's related to Bill C-48, which is the tanker ban on the northwest coast of B.C. Minister, in the last paragraph of your submission on C-48 you called for the tanker ban to be executed accurately and based on fact. Why did you hang Alberta out to dry on the tanker ban and encourage this legislation?

Ms McCuaig-Boyd: Sorry. Can you just elaborate on what your question is?

Mr. Panda: Line 2.2 on page 116 of the estimates.

Ms McCuaig-Boyd: For resource development, yeah?

Mr. Panda: Right. I'm referring to that. You made a submission to the standing committee . . .

Ms McCuaig-Boyd: Yeah.

Mr. Panda: . . . on transport and infrastructure about Bill C-48.

Ms McCuaig-Boyd: Okay. Is there an amount that you're concerned with on that?

Mr. Panda: In the last paragraph of that submission you called for the tanker ban to be executed accurately and based on fact, so it amounts to encouraging that legislation. Why did you do it that way?

Ms McCuaig-Boyd: I think, you know, the paragraph stands for itself. I asked them to look at fact in that. I fail to see the connection of how that creates me hanging Alberta out to dry. I was standing up for Alberta's interests in proposed legislation.

Mr. Panda: By saying that it has to be executed accurately and based on fact?

Ms McCuaig-Boyd: Well, do you want them to make legislation made up on whatever? Like, what's the opposite of that? I would think that good legislation is made on a fact basis.

Mr. Panda: In my opinion, there shouldn't be any ban because on the east coast there is no ban.

Ms McCuaig-Boyd: Okay. But I don't get to decide what legislation they're going to do, so if they're going to propose legislation, I think it's pretty imperative that I as Energy minister stand up for this province and encourage them, if they're going to do that, to do it on fact. I reject what you're even insinuating there. I think it's insulting.

Mr. Panda: In contrast, as your shadow minister, I also wrote to them. I'll table it, and you can read it.

Ms McCuaig-Boyd: Yeah. Thank you for sharing it. I didn't see it.

Mr. Panda: Thank you.

I thought your staff might have seen that.

Ms McCuaig-Boyd: No.

8:00

Mr. Panda: Okay. Minister, I'm still referring to Bill C-69, which is the latest bill we talked about. Last week was the deadline to make submissions to the federal Standing Committee on Environment and Sustainable Development specific to Bill C-69. I know you wrote a letter about tanker bans, Bill C-48. Have you made any submission against Bill C-69?

Ms McCuaig-Boyd: Okay. The submissions are due this month, and we are preparing one at this point. The deadline has not passed yet.

Mr. Panda: Okay. When you send your submission, can you table it?

Ms McCuaig-Boyd: I would imagine. It's, again, nothing to do with this. But, yeah, you will know.

Mr. Panda: Yeah, because last week our Premier said that she would try and get certain exemptions to Bill C-69, but the columnists have come back saying that the Premier was dangling a red herring. I don't know how one province could get a crossborder exemption on pipelines with other provinces.

Ms McCuaig-Boyd: Well, I can tell you that in our discussions we've pointed out to the federal government that we have an emissions cap and things and that we have a climate leadership plan, so in their considerations that should be considered. We have not prepared our submission yet, but that's part of what she was talking about. I would again dispute that that's a red herring.

Again, Mr. Chairman, these questions are based on a news article. I would prefer to talk about the estimates here in the budget.

The Chair: Thank you, Minister. Yes.

Mr. Panda, I've given you a certain amount of leeway, but again what's under consideration right now are the main estimates, so please refer to line items from the estimates when asking your questions. Please focus on that.

Mr. Panda: Thank you, Mr. Chair. We're talking about the budget line items where we talked about resource development, which includes getting the pipelines built. So Bill C-69: you know, last week the pipeline association said that if that bill is passed, no one else is going to build any pipelines, which will impact our budget. That's why it is relevant.

The Chair: But you need to be asking about the estimates that the minister has provided, so please refer to line items from the estimates under consideration.

Mr. Panda: I did. Okay. Thank you.

On page 116 of the estimates, line 4, is the climate leadership plan, and it is funded at \$106,435,000 this year. Now, according to the business plan, page 66, the climate leadership plan is proposed to rise to \$160,073,000 by '20-21. Why are you planning to spend \$53,638,000 more, and what are you spending this money on?

Ms McCuaig-Boyd: Sorry. You started out on 100 and something, and then you went to 66, did you say?

Mr. Panda: No. Page 116, line 4, climate leadership plan. It is funded at \$106,435,000 this year, but in the business plan, page 66, the climate leadership plan is proposed to rise to \$160,073,000 by 2020-2021. My question is: why are you planning to spend \$53,638,000 more, and what are you spending this money on?

Ms McCuaig-Boyd: Okay. So it's a combination of several things. One is the regulated rate option program: was this being considered? The coal transition agreements: there's a portion of interest. That was in my opening comments. There's a reduction in the anticipated requirements for the climate leadership initiatives and the coal transition. There's micro- and small-scale generation. There's renewable electricity. There are nonmanpower costs. All of that is a combination to arrive at that figure.

Mr. Panda: Okay. Thank you.

Ms McCuaig-Boyd: Oh, sorry. There are also some anticipated payouts for renewable electricity programs in the fiscal year, a decrease to anticipated RRO options, coal transition agreements. There's an accretion portion of those costs, so that amount will be reduced every year until it's fully retired in 2030. That explains that part.

Mr. Panda: Okay. Thank you.

Line 4.2 of the estimates is the climate leadership initiatives, funded at \$2,218,000. What outcomes does the Energy department get for just over \$2 million in spending?

Ms McCuaig-Boyd: In that amount it's related to the following things. There's the regulatory work on the methane reduction program, there's policy work on the methane reduction program, there's coal generation transition, there's energy efficiency, there's micro- and small-scale generation, there's output-based allocation, there's the renewable electricity program, there's the regulated rate option, and there's climate leadership, strategic co-ordination of the plan. All of those encompass that.

Mr. Panda: Thank you.

How many metric tonnes of greenhouse gas emissions were reduced when the carbon tax was \$20 per tonne under the specified gas emitters regulation?

Ms McCuaig-Boyd: Yeah. That would be a question for Environment and Parks.

Mr. Panda: You're spending \$106 million in your budget for the climate leadership plan. Won't your department have answers on how that money is spent to reduce emissions?

Ms McCuaig-Boyd: It's spent on those initiatives, but the measurements would be part of the Environment and Parks portfolio. We're more on the regulatory side and the policy side.

Mr. Panda: Okay. Can you indicate to me what price per tonne is required to meet the targets set at the Paris convention?

Ms McCuaig-Boyd: Again, that's all under Environment and Parks. That's their business. Ours is, again, to support the climate leadership plan through regulation and policy. You'll have to save that for Environment and Parks.

Mr. Panda: Okay. Thank you.

Now I'm looking at methane regulations. Under which line item in your estimates on page 116 are the full-time equivalents who are responsible for the oversight of the proposed federal methane regulations?

Ms McCuaig-Boyd: That's, I think, what I just spoke to. The climate leadership initiatives that are led and supported by Energy include methane reduction, both the regulatory work and the policy work; coal generation transition; energy efficiency; micro- and small-scale generation; output-based allocation; the renewable electricity program; the regulated rate option; and the climate leadership plan strategic co-ordination.

Mr. Panda: How many full-time equivalents will oversee those regulations?

Ms McCuaig-Boyd: Oh. There are 15 full-time equivalents for everything to do with climate leadership.

Mr. Panda: How many? Sorry.

Ms McCuaig-Boyd: Fifteen FTEs for everything in climate leadership.

Mr. Panda: Thank you.

Will the proposed federal methane regulations necessitate the province bringing in legislation to implement that?

Ms McCuaig-Boyd: It'll be regulation, not legislation. Oh, hang on. Sorry. Can you say that again?

8:10

Mr. Panda: Will the proposed federal methane regulations require the province bringing in legislation to implement that?

Ms McCuaig-Boyd: No, just regulations.

Mr. Panda: Just regulations. Thank you.

How much will the regulations cost the industry?

Ms McCuaig-Boyd: We're still working with industry and groups on that. There'll be more to come, but that will be in next year's estimates, I would assume.

Mr. Panda: Do you have any rough estimate of the number of jobs that will be lost because of those?

Ms McCuaig-Boyd: Well, I can tell you a little bit about the process. We're working with industry and groups, and we're mindful of the costs industry will face with these changes. That's why, again, we're doing a made-in-Alberta approach to achieve our goal, which is the most economically efficient manner possible while maintaining industry competitiveness. Reducing methane emissions is part of a global movement, and we have taken action now to maintain our position as a global energy leader.

To help industry during this transition, the Alberta government granted a five-year carbon levy exemption. This exemption is expected to provide support to industry in the form of avoided costs of approximately \$2.8 billion between 2017 and 2023.

Our government also has worked constructively with the federal government to delay federal requirements' implementation, that would have added cost and created immediate risks for industry.

Mr. Panda: So why is Ottawa involved? Is it not Alberta jurisdiction, I mean, to look after methane emissions?

Ms McCuaig-Boyd: No. It'll be federal legislation, correct? Yeah, federal legislation. So we are acting early, and we've worked with industry on a flexible solution for them. A lot of the good ideas we have have been derived from industry.

Mr. Panda: Was there any push-back from your team that it should be our own jurisdiction, not federal?

Ms McCuaig-Boyd: I don't think that's something we get to decide. It's part of the federal legislation. But what we can decide are the regulations that we put under that, and what we can decide is working with industry to come up with a plan that's cost-effective for them rather than have Ottawa tell us and make a far more restrictive process.

Mr. Panda: In your regulations you will ensure that there won't be any additional cost or job losses to our industry here? Is that how I should interpret that?

Ms McCuaig-Boyd: Yeah. I can't comment because the regulations are under development right now, but again it's in development with industry at the table. So this is more to come.

Mr. Panda: Okay. Thank you.

How many orphan and abandoned wells will these methane regulations create?

Ms McCuaig-Boyd: None. That's not the plan, no. This is to deal with methane emissions on current working – it's a bit of a stretch, I think. Yeah, but the regulations are under development.

Mr. Panda: Why isn't industry being allowed to decide how best to reduce methane emissions to the target? Why do we need to be so prescriptive about it?

Ms McCuaig-Boyd: No. They have a target. There's an outcome over here, and industry is working with us to get to that outcome. There's a lot of flexibility built in, and industry is working with us. They're coming up with a lot of good ideas on how to do that in a cost-effective manner, and that's what we're doing because we want something that's going to work for our industry. As we've done with everything else, we are working with industry to come up with this flexibility. Otherwise, if we fail to do that, Ottawa will impose what they say that we need to do, and the outcome might be much more difficult for industry. Again, we have a panel. All the big players are on this panel working with us, and we are currently developing those methane regulations.

Mr. Panda: Minister, Ottawa is not providing compensation to industry to implement these methane regulations.

Let's compare the EDAC, Energy Diversification Advisory Committee, report. Why are you going ahead to compensate industry for building straddle plants to collect the ethane that is needed for the petrochemical industry? If Ottawa can will something and impose a cost on industry, why can't you?

Ms McCuaig-Boyd: They're two different things. In energy diversification we're encouraging investment in Alberta. It's apples and oranges. Those are programs to afford an opportunity to build a straddle plant in Alberta to extract ethane or whatever to feed, potentially, an ethane cracker in that. Again, these are programs that are about economic development. I fail to see the connection with what you're asking about. We have methane regulations of how . . .

Mr. Panda: Because Ottawa is not providing any compensation to the industry to implement their methane regulations, but you are for your ethane collection.

Ms McCuaig-Boyd: The methane reduction is part of the climate leadership plan, which is under the umbrella of the federal climate leadership plan to reduce methane. The Energy Diversification Advisory Committee is about investing and providing diversification in Alberta. So they're two completely different things. I can tell you that with EDAC, you know, we announced those programs in Bill 1. As I mentioned, there are loan guarantees. There's a billion, the \$500 million. There's all of that. When we talk about methane, we're developing our methane reduction efforts in parallel and in partnership with the federal government and our provincial counterparts to ensure that we have alignment.

The Chair: Thank you, Minister.

We will now move on to the member from the third party. Mr. Clark, would you like to go back and forth with the minister?

Mr. Clark: Very much, if that's all right with you, Madam Minister.

The Chair: Please go ahead, sir.

Mr. Clark: Thank you, Mr. Chair. Thank you, Madam Minister, for being here. Thanks to your officials as well. I'm looking forward to an evening of good discussion. I'm going to start on page 65 of the Energy business plan. You've talked about some risks to achieving the outcomes you've laid out in your business plan and indeed in the budget. I think we've seen one of those risks potentially coming home to roost here in the last 24 or 48 hours, that, of course, being the Kinder Morgan pipeline and whether or not that's going to in fact go ahead. What I'm curious about is: have you run any numbers in your department showing what the potential impact would be on energy prices realized in Alberta if, in fact, the Kinder Morgan pipeline is not completed on time or indeed at all?

Ms McCuaig-Boyd: We need, as I mentioned earlier, two out of the three pipelines. If Kinder doesn't go, we still have KXL and line 3. Like, we need two of the three.

Mr. Clark: So there's a potential here that there's still a positive scenario for Alberta if the Kinder Morgan pipeline does not go ahead?

Ms McCuaig-Boyd: Yeah. You know, certainly, we'd like it for going to Asia, but we need at least two of the three.

Mr. Clark: That doesn't seem to square very well with a lot of the other things that you've said in your business plan and publicly about the importance of opening up markets to Asia.

Ms McCuaig-Boyd: Well, it's not our ideal solution.

Mr. Clark: Right. Because, of course, unless my geography is not as good as I think it is, both KXL and line 3 go to the United States, and that continues to exacerbate our challenge of having, really, only one customer. Of course, the importance of Kinder Morgan is access to tidewater.

Ms McCuaig-Boyd: Absolutely. And we're not giving up on it.

Mr. Clark: It's interesting that it's a two-out-of-three scenario. That's certainly news to me. That's the first I've heard.

Ms McCuaig-Boyd: That's for the path to balance. I mean, it's not necessarily – we still need to develop our access to Asia, absolutely.

Mr. Clark: Okay. Let's talk about line 3. You'll have to excuse me if my knowledge of the nomenclature of these projects is not up to speed. Back on page 61 of the business plan, the second paragraph, about two-thirds of the way through you talk about permits issued for Keystone XL and Enbridge's line 67 expansion in the fall of 2017. Is that the same thing as line 3? Is that an internal Enbridge name? I just want to make sure we're all talking about the same projects.

Ms McCuaig-Boyd: Sorry. I was busy looking for pages. I missed the . . .

8:20

Mr. Clark: Yeah. The business plan, page 61, the second paragraph, about two-thirds of the way through, talks about Keystone XL pipeline in the spring of '17 and Enbridge's line 67 expansion in the fall of '17. Is that the same thing as line 3?

Ms McCuaig-Boyd: Oh. Okay. No. Line 67: that's different. I'm still looking for what you're referring to.

Mr. Clark: I guess I'm just curious as to why you haven't specifically mentioned – you've mentioned Trans Mountain in that paragraph, you've mentioned Keystone XL, and you've mentioned line 67. My apologies for not being fully up to speed on what that is. But I don't see line 3 here. What I'm curious about is whether you've done any risk assessment on whether that project goes ahead or not. That one, interestingly, in the news around Kinder Morgan seems to be assumed to be going ahead, but I have heard and understand that there's a fair bit of opposition to that in the United States and that there is, I guess, a nontrivial risk that, in fact, that project may not go ahead either.

Ms McCuaig-Boyd: There is a bit of a connection. Line 67 and line 3 do connect together to provide one access to the U.S. That's the pipeline that started in 2014. Enbridge constructed the short-distance interconnections between line 67 and line 3, which allowed the increased volume of 800,000 barrels per day on 67 and then transferred to line 3 immediately north of the Canada-U.S. border and then across the border itself before being transferred back onto line 67 for final delivery.

Mr. Clark: Apologies, Minister. I don't mean to interrupt, but what I'm really driving at here is: have you run any risk-analysis scenario planning around delays to what is commonly referred to as Enbridge line 3? Certainly, there's a non zero risk that that is either delayed or doesn't go ahead. What would the impact of that be on the energy prices realized by Alberta producers and, therefore, the tax take and royalty take to Albertans?

Ms McCuaig-Boyd: Currently the budget is based on two of three pipelines, any combo, and it's based on the best available information we have right now. Is that, again, what you're asking?

Mr. Clark: Yeah. Really, what I'm asking about are some what-ifs. I mean, I'm assuming – and I believe this very much to be true – that within your department you're not simply picking a number and that's the one number you run your scenario on. I'm sure you run different scenarios on if the price is low or if the price is higher and what the return to Albertans would be. I guess what I'm asking is: if Enbridge line 3 doesn't go ahead as hoped and Kinder Morgan doesn't go ahead as hoped, what is that impact, each one of those? So let's pick those two. Let's say that those two don't go ahead

either at all or in a timely manner. What is the impact between now and 2023-24, which is your path to balance date? How much of an impact is that going to have on the overall revenues to the province of Alberta?

Ms McCuaig-Boyd: What I can tell you is: again, we look at the pipelines, but it's approximately a \$7-per-barrel impact.

Mr. Clark: Okay. So that's significant.

Ms McCuaig-Boyd: That's why we need to get those pipelines built.

Mr. Clark: I absolutely agree. I'm just concerned that that may not happen.

Is that how you get your assumption that nonrenewable resource revenue will be roughly three times higher in five years than it is today? Is that where those numbers come from?

Ms McCuaig-Boyd: Sorry. Which numbers?

Mr. Clark: On page 86 of the fiscal plan, which is the path to balance section, you forecast \$10.4 billion in nonrenewable resource revenue. I recognize that it's the Minister of Finance who has come up with those numbers in the path to balance section, so I'm not asking you about the path to balance itself. What I am asking, though, is the forecast on nonrenewable resource revenue, which, I would assume, your department has had some significant input into. You've talked about the \$7-per-barrel differential between no pipelines and pipelines. Is that how we get to \$10.4 billion, which is roughly three times the current nonrenewable resource take?

Ms McCuaig-Boyd: That figure is due to a slight increase in the WTI prices and also an increase in production with some projects coming on stream.

Mr. Clark: Okay. It just seems like there are a lot of ifs in that assumption to get to \$10.4 billion, which is not historically the highest ever, but it's certainly an awful lot higher than we're at today.

With that, I think I'll shift now to a discussion about electricity. One of the things you said on page 61 of the business plan is that "the province is moving towards a capacity market," and one of the reasons for that is "a reliable supply of electricity at stable, affordable prices." I guess I'd just like to know, given the fact that we're touching the RRO cap now for the first time, if in fact, in the aggregate, Albertans are receiving affordable electricity prices. Ultimately, someone has got to pay. These are price spikes that have been caused by some of the changes that you've brought in. Does that qualify as providing affordable electricity?

Ms McCuaig-Boyd: We are seeing a return to more realistic prices, historic prices, but we're still well below others on the North American continent.

Mr. Clark: Yeah. You know, as we talk about the raft of changes that have happened – and there are many; it's an enormously complex area – I certainly don't have any concerns with the general principle of moving away from coal and towards renewables, but I would say that there is a cost to doing that. Is there not? I mean, there is no question that there is a cost that has to be paid.

I guess I'll just take this as my opportunity to pivot into a discussion about the RRO cap. What I'm really curious about is why you feel we need a cap when half of Albertans already have contracts that they have signed with retailers, and those retailers were already offering a fixed price. In fact, literally half an hour

before we came in here today, I went and looked online and was able to find a three-year fixed electricity price at 5.9 cents per kilowatt hour. That is something I can sign up for as an Albertan that costs the government of Alberta and taxpayers exactly zero dollars. So if consumers can lock in at that rate cap, what problem, exactly, does the RRO cap solve if we already have a solution that doesn't cost taxpayers anything?

Ms McCuaig-Boyd: Certainly, we would love it if every Albertan did as you are suggesting and went onto a contract of some sort. Not every Albertan has chosen to do that. I was going to say that up where I live, it's not even an option that's readily available to people. In the transition, you know, we promised that we would protect Alberta families, farms, and small businesses from the high electricity costs through a four-year price cap. So the default electricity contract available to most consumers: again, this is part of the whole transition, looking at keeping prices stable while we go from the old electricity only to 30 per cent renewables by 2030. This is something we don't plan to always kick in, but it's there to protect consumers as we do transition.

8:30

Mr. Clark: All right. What percentage of Albertans don't have access to those contracts?

Ms McCuaig-Boyd: I don't have the exact – it's a low per cent, but there are some regions where . . .

Mr. Clark: Yeah. So there are some?

Ms McCuaig-Boyd: Yeah. I would suggest that up where I live, it's . . .

Mr. Clark: Sure. That's fair.

I guess I'm just wondering: why have we got this sort of one-size-fits-all approach when, frankly, I can assure you, for less than the \$50 million it's going to cost taxpayers this month when we hit the RRO cap – that's an awful lot of Facebook advertising and traditional advertising to let Albertans know that they have the opportunity to sign a contract from a competitive retailer which would be at absolutely no cost to taxpayers.

Ms McCuaig-Boyd: Yeah. Certainly, I think that companies are doing that work to give the products that they want to promote.

Mr. Clark: Yeah. I guess my point is that it feels like there's not really a market failure here. That deregulated structure was working. Maybe it wasn't perfect, and I'll acknowledge it wasn't absolutely perfect, but it seems like we've gone through an awful lot of upheaval and cost to fix something that was not as badly broken as the solution seems to be.

Ms McCuaig-Boyd: Well, one thing I might add is that we're not forcing anyone to sign a contract. That's not in any legislation or anything. You know, certainly, we told people. When we first announced that, I had people who had a good deal like you're talking about: I've got my contract at four something, so why do I have to sign at 6.8? So we had some educating to do – and we've done that – to explain the difference. It's a cap to protect those who aren't on one.

Mr. Clark: That money, then, that is going to fund the regulated rate option price ceiling – I'm on page 116 of the big blue book, the government estimates, and that's line 4.3 – the estimate of \$74,310,000 this year: that whole category, that whole line item 4, adds up to \$106 million. That comes from the climate leadership

plan, ultimately, does it? I can find \$106 million on page 144 of the fiscal plan under Energy. Is that the same \$106 million? Do those two numbers connect? I'm seeing head nods there from your officials. That's great.

Then if I look forward in the fiscal plan to fiscal '19-20 and '20-21, the next two years, that number goes up quite substantially, from \$106 million this year to \$135 million next year to \$160 million.

Ms McCuaig-Boyd: Sorry. I've got page 116 for the first part, the \$74 million. Where did you jump to?

Mr. Clark: Sorry. Lots of numbers. Page 144 of the fiscal plan tables, which is the climate leadership plan section. What I'm trying to do is to follow the dollars between different giant books.

Ms McCuaig-Boyd: Follow the money, yeah.

Mr. Clark: We've taken \$106 million, which is on page 116 of the Energy big blue book, and we're at \$106 million on page 144 of the fiscal plan tables. I'm trying to give *Hansard* a challenge as well to keep up with my numbers. If we look ahead to fiscal '19-20 and fiscal '20-21, those numbers go from \$106 million this year to \$135 million next year to \$160 million the year after that. My question is: do those numbers reflect anticipated payouts under the regulated rate option cap that was brought in by Bill 16 last year?

Ms McCuaig-Boyd: Okay. Certainly, there's an increase in anticipated payouts for the RRO as a result of higher electricity prices. Included in some of the thinking are coal transition agreements. There are some amounts in there for retiring that would come back. There's a reduction in the anticipated requirements for climate leadership initiatives in the coal transition. Again, there's a little bit. Then there are the anticipated payouts for renewable electricity programs expected to begin in the fiscal year '20-21. When you add and subtract those different amounts, that allows for the difference there.

Mr. Clark: But a fair chunk of that would be the RRO? That includes, anyway, the RRO contract and the RRO cap?

Ms McCuaig-Boyd: About \$104 million.

Mr. Clark: Okay. That is \$74 million this year, \$104 million that year. The question, then, is: in the four years that we will have the RRO cap, what do you anticipate the total cost being?

Ms McCuaig-Boyd: I don't think we've made that amount public, but I think you could add up in the documents.

Mr. Clark: Maybe I'll just ask it differently. EDC Associates, you may or may not be aware, has done an estimate that suggests that \$700 million is the number. Do you agree that that's the number, or if you don't agree, can you offer a critique of where they're wrong?

Ms McCuaig-Boyd: Yeah. Our estimate is less than half of what they're suggesting. For this year the estimate is the \$74 million, and the total budgeted amount until March 31, 2021 – and there might be a few months beyond that – is \$279 million.

Mr. Clark: Okay. Thank you.

Did you give any other thoughts, if you were going to go ahead with a cap, to any other models? I mean, the way this works is that in a given month, if the price is greater than 6.8 cents a kilowatt hour, then there's a payout. But if we were to average it even over two months – let's say the next month – if the month of April is 9 cents and the month of May is 4 cents, on average between the two it's less than 6.8 cents. In that kind of blending model you'd find

that, actually, we don't pay out either at all or at least as much. Did you give any consideration to a different model aside from the one that you've adopted, which appears to be quite costly?

Ms McCuaig-Boyd: Currently the RRO is based on a monthly cost. It's reported that way, so it has to be. You can't kind of blend them at this point.

Mr. Clark: We're the government. We can change things, though, right? We could change the legislation to allow that.

Ms McCuaig-Boyd: I guess. Right now it's the system we've got.

The Chair: Thank you very much.

We'll now take a quick break and reconvene at 8:43.

[The committee adjourned from 8:37 p.m. to 8:42 p.m.]

The Chair: Welcome back, everybody.

We're now on to independent members. Dr. Swann, over to you. Would you like to go back and forth with the minister?

Dr. Swann: Yes. Thank you very much. Thank you, Chair, and thank you, Minister and staff. I don't have very complicated questions. I'm really seeking information about four areas. One of the keen issues, that I've been following for over a decade, is groundwater. I'm wondering what the budget is, what the role of AER is in establishing groundwater testing, especially in areas where there's oil and gas activity, and what you do to verify that the groundwater sampling program is . . .

Ms McCuaig-Boyd: Yeah. That one is under the Environment and Parks half of the AER. Like, we split the AER, but all of the groundwater, all of that stuff, goes under the Environment and Parks half.

Dr. Swann: Really? She referred me to you.

Ms McCuaig-Boyd: Really? Oh, no.

Dr. Swann: Why should I be surprised. She said that she's involved in the surface water.

Ms McCuaig-Boyd: Yeah. Like, they do groundwater testing and that, but . . .

Dr. Swann: You do the surface water, and I gathered that the AER did the groundwater testing.

Ms McCuaig-Boyd: Yeah. Can I maybe find out about that, and I'll let you know? I don't want to make something up.

Dr. Swann: AER is under your budget, right?

Ms McCuaig-Boyd: Yes.

Dr. Swann: Okay. Where is that in the budget?

Ms McCuaig-Boyd: While they're helping me find the amount, before you came in, I was reminding people that it's industry funded. So even though they're under us, it's not public money that . . .

Dr. Swann: You don't give any money to AER?

Ms McCuaig-Boyd: No, no. It's all industry levied. You can find it on page 120, just at the top there, six lines down. This year it's \$302,250,000.

Dr. Swann: So you include it in your revenue?

Ms McCuaig-Boyd: Yeah. We have to do the accounting, but it's all on an industry levy.

Dr. Swann: Thank you.

Royalties. It looks like our royalties are very modest. I guess I don't know what those royalty revenues include, whether they have included the proposition that Kinder Morgan would go ahead or not and whether you're including royalties under the BRIK program and the upgrading plan that we have for BRIK. Are both of those included or excluded? Kinder Morgan, I assume, is not included at this time?

Ms McCuaig-Boyd: Yeah. Again, a similar question was asked before you came. Royalties are calculated at the wellhead, not in the pipeline. When we're looking at revenues – like, when we're looking at pipelines, we're looking at a scenario of two of three pipelines being built, not necessarily the strategic ones but just two of the three for capacity's sake, to look at that.

Royalties aren't calculated in the pipeline. They're calculated ahead of that.

Dr. Swann: I'm just asking, I guess: what went into the calculation?

Ms McCuaig-Boyd: Yeah. I don't know.

Doug, do you want to expand on that?

Mr. Lammie: TMX isn't expected to come online until 2021, so in the near term those royalties are based on the current state of existing pipeline capacity. Post-2021 there are assumptions for having market access, which is two out of three pipelines. With two out of three pipelines you see the revenue projections in the path to balance section of the budget.

Dr. Swann: Okay. Where does BRIK, bitumen royalty in kind, fit into that?

Ms McCuaig-Boyd: It doesn't.

Dr. Swann: None of it adds value to your budget, then?

Ms McCuaig-Boyd: The bitumen royalty in kind was to do with the Sturgeon refinery. There are royalties in kind – it's conventional, correct? Yeah.

Dr. Swann: The current royalties reflect the bitumen royalty in kind, or they do not reflect it?

Ms McCuaig-Boyd: Maybe you can explain it better than I can.

Mr. Borland: BRIK, bitumen royalty in kind, is a program mainly for us to obtain a supply in order to upgrade at the Sturgeon refinery. It's not dependent on production.

Dr. Swann: But you include it in your budget. Is it included in these budget figures?

Mr. Borland: Royalties paid on BRIK that could be used in the refinery are included in the budget, yes.

Dr. Swann: Can you separate those out or not particularly?

Mr. Borland: No.

Dr. Swann: I see. Okay.

Carbon capture and storage. You've included \$273 million. Where is it, what is it doing, and how is it being evaluated?

Ms McCuaig-Boyd: You're looking at the \$273 million figure?

Dr. Swann: Yeah.

Ms McCuaig-Boyd: Okay. There are two projects, Shell's Quest and the Alberta carbon trunk line with Enhance, and part of the North West upgrader or refinery. The government remains committed to funding agreements to support industry-led development of this technology. As I mentioned, we have two commercial-scale projects that are receiving financial support in Alberta. A total of \$1.24 billion over 15 years is being invested in the Quest project and also the Alberta carbon trunk line. The funding agreements are structured so recipients receive funding when they achieve defined project milestones in commercial operations and through annual instalments for carbon dioxide sequestration up to the end of 2025. These projects will capture 2.7 million tonnes of carbon dioxide per year. While there are no plans to fund new carbon capture and storage projects, we are helping to advance this technology with knowledge sharing.

For example, I spoke to an MP from Scotland who was interested in this project because they're hoping to get one there. It's a unique component of CCS. As part of the agreements both projects provide annual research reports that are posted online to share with stakeholders, including academics and industry. That's what the cost entails.

8:50

Dr. Swann: Is that \$273 million total till 2025? Is that your anticipation, or is there an annual expectation here?

Ms McCuaig-Boyd: Yeah. There are annual payments.

Dr. Swann: So you're spending a quarter of a billion dollars every year till 2025 on carbon capture and storage? Is that fair to say?

Ms McCuaig-Boyd: Yeah. As I mentioned, there's the \$1.24 billion over 15 years. To date the government has paid out \$541 million. The carbon capture and storage funding agreements expire, as I mentioned, on December 31, 2025. At that point it's expected that an additional \$700 million will have been paid. The three numbers: this year it's \$273 million and change; next year it'll be \$72 million; and then \$59 and a half million or so. Again, this is something we inherited from the previous government, and we're honouring those contracts.

Dr. Swann: Oh, I see. So you don't have any ability to change those contracts till 2025?

Ms McCuaig-Boyd: No, not unless we pay out a lot more in legal fees and that. So, no. We're just honouring that.

Dr. Swann: How do you evaluate that investment as compared to other ways of reducing carbon? It seems like an extremely expensive way to reduce carbon.

Ms McCuaig-Boyd: That cost is about \$100 a tonne, whereas coal transition works out to about \$10 a tonne. Again, we didn't commit to that project. We inherited it, so we're honouring the commitments that were made.

Dr. Swann: Thank you.

To relate to more current activities, I assume that there's no budget anticipated for the Kinder Morgan pipeline. This is something that has come up since this budget was written. Is that a fair assumption, that you're now talking about a budget for Kinder

Morgan as an investment share? Or was there anticipation in this budget about investing?

Ms McCuaig-Boyd: No, that's not in this budget at all.

Dr. Swann: That's what I was wondering, if you were already anticipating it when you . . .

Ms McCuaig-Boyd: No, no, no. Not at all.

Dr. Swann: So this is a new idea that's come up in the last while?

Ms McCuaig-Boyd: Again, you know, as you saw things unfold in the last day or two, it's an option, but it's not anything that's been baked. We're in negotiations and talks.

Dr. Swann: Very good.

Just, then, to finalize, you're going to send me some material on groundwater testing and where the responsibility lies and what the requirements are for fracking operations in particular.

Ms McCuaig-Boyd: Yeah. We'll get that to you.

Dr. Swann: There seems to be some confusion between your two ministries around this.

Ms McCuaig-Boyd: Yeah, and I apologize. I don't have the numbers. I know that we do part and that they do part. We'll sort it out, and we'll make sure you get it.

Dr. Swann: But it's not in your budget.

Ms McCuaig-Boyd: No.

Dr. Swann: Groundwater monitoring, groundwater testing.

Ms McCuaig-Boyd: Well, if it is, it would be under the AER, I assume, but we'll get you some more detail on that, absolutely.

Dr. Swann: Thank you.
I'm finished. Thank you.

The Chair: Thank you, Dr. Swann.
There are nine minutes left for the independent members.

Dr. Swann: I'll pass them to one of my colleagues on the right or left if they wish to ask any more questions.

Mr. Clark: Which one am I?

Dr. Starke: I think we're both right, actually.

Ms McCuaig-Boyd: All right. To your right or your right.

Dr. Starke: Greg, go ahead.

Mr. Clark: It's you. I got my own.

Ms McCuaig-Boyd: He had a chance already.

Dr. Starke: Oh, okay. Great.

Well, thanks. I'd like to thank colleagues and apologize for arriving after the start of the meeting. We were just wrapping up next door with Culture and Tourism. Thanks, Minister.

I have roughly 10 minutes, Chair?

The Chair: You have now eight and a half, sir.

Dr. Starke: Eight and a half. Okay. We could go back and forth if that's okay with the minister.

Ms McCuaig-Boyd: Sure.

Dr. Starke: Minister, I have some questions that have to do with a topic we've discussed before – it's of great concern to my constituents – and that's with regard to the development of the methane regulations, part of the climate leadership plan, for the 45 per cent reduction in emissions, specifically methane emissions, by the year 2025. That's sort of the target date. We've talked before, and there's still a lot of anxiety in our area of the province. I mean, you know as well that there are other areas of the province where the production facilities are methane intensive. Peace River is another one, but certainly nothing beats Lloydminster.

Ms McCuaig-Boyd: Yeah. You win.

Dr. Starke: It's a dubious distinction.

Minister, I know that there's a committee that's been working on this. Initially the time when they were going to have these regulations out was July and then September and then November. We're now in April, and I think we're still waiting unless I've missed an announcement or a release of those regulations.

Ms McCuaig-Boyd: No. Absolutely, I've met with some of your constituents during AUMA I think it was, and we discussed that at length. Certainly, you know, reducing methane emissions is a key part of the climate leadership plan and a vital component to secure our energy future. This initiative is, as I said, part of the climate leadership plan to make us one of the most environmentally responsible energy producers in the world while strengthening our economy. Our commitment – you're correct – is 45 per cent from the 2014 levels by 2025. We have struck a committee, and we've been doing a lot of really good work in this to create a made-in-Alberta plan. We're looking for competitiveness, flexibility to industry, and all that.

One of the reasons we've missed some deadlines is because we want to get it right. You know, I have to say that industry has been critical in getting really good ideas on what would work for them, and I think we're getting very close to what can work for industry, what can work for environmental groups, what can work for the feds. So we're taking the time to do it right. Honestly, in the federal legislation we don't want them to be imposing what's going to work for Alberta because we are the major ones who need to deal with this. So we're getting it right. As I say, we're very close; more to come soon. I'm very happy with the way we've been going with this. You'll be one of the first ones I'll let know when we're announcing things.

Dr. Starke: Well, Minister, like I say, I understand the frustration of the people who are waiting, but I would rather have it late and right than early and not right.

Ms McCuaig-Boyd: That's what we're working for.

Dr. Starke: So I encourage you, you know, to take the time that's necessary to get it right.

One of the things I always find interesting in poring through budget documents is changes or things that sometimes disappear from one year to the next. Now, last year, in Budget 2017, under outcome 3, which was that "Albertans benefit from a stable, reliable electricity system," you had key strategy 3.4, which was to "collaborate with other governments to further explore electricity" initiatives.

Now, this is not in the business plan for 2018. I'm curious to know why this was eliminated in this budget. Were those explorations successful? If they were successful, what did they result in? If they were unsuccessful, what are the new

intergovernmental or interprovincial relations that have been in the energy sector under your current government?

Ms McCuaig-Boyd: Sorry. Can you direct me to what page you might be referring to?

Dr. Starke: Oh. Good heavens, yes. Sure. Why not? Of course, it's not in 2018, so don't go looking there. Budget 2017: it's in there somewhere.

Ms McCuaig-Boyd: Okay. I actually have a note on this.

Dr. Starke: Excellent.

Ms McCuaig-Boyd: Oh, of course, I can't find it. Yeah. You know, all this started out, this east-west grid, looking at it as part of the Canadian energy framework, that the Premiers all agreed to. We're creating an electricity capacity market, looking at a number of things, as was discussed before you came. The transition: I'm just looking for the key thing that might direct me rather than read everything to you. It's not there.

Dr. Starke: Okay. Minister, let's really quickly just move to one last thing. This is very topical, very current. In light of very recent events, you know, the government or at least the Premier mentioned that we may become part owners of a pipeline. Soon we're going to be part owners of a huge clinical pathology lab and part owners of a superlaundry. But let's talk about the pipeline. Now, we're also the regulator. How does it work if we're the regulator and also the owner of a piece of infrastructure? I think my colleague to the left would say: what do the taxpayers get out of the said ownership of part of a pipeline? Does the minister think that B.C.'s opposition to this project is going to fundamentally change just because Alberta now owns a part of it?

9:00

Ms McCuaig-Boyd: Okay. Well, first of all, we don't regulate pipelines. They're federally regulated with the NEB.

Dr. Starke: Yeah, the construction of them, but certainly the AER has a role in the regulation of pipeline operations.

Ms McCuaig-Boyd: Only within the province; not outside the province. Before you came, we talked a bit about this. This is just an option that's come of light in the last day, but it's just a what-if right now. You know, there are some options on the table, but there are also federal options to put money into this pipeline. It's not something that I can speak to really this evening.

I just want to go back to the interties question. That's just something we've dropped because, honestly, we don't have the time right now to do that work when we've got so much other work. That's one of the reasons it's dropped for the moment. It is part of the Canadian energy strategy, but it's not high on our list right now.

Dr. Starke: Okay. Finally, Minister, page 87 of the fiscal plan shows that the light/heavy differential will significantly decrease in general over the coming years. Now, this is based on the assumption – I'm guessing that it's based on the assumption, along with the rest of your budget – that Alberta will get the Kinder Morgan Trans Mountain expansion built. Now, among the risks in energy prices you also identify that without sufficient pipeline capacity, Alberta's growing bitumen production will see a growth in the light/heavy differential. So as a lot of projects move from pre- to postproduction and the inventory of oil in Alberta and on the prairies increases, how do you expect the light/heavy differential to go down if there is no pipeline already in place?

Ms McCuaig-Boyd: This differential going down is based on any two of the three pipelines being built. Again, we're not looking strategically so much as just at the capacity of those pipelines, and that's what it's based on at this point.

Dr. Starke: Okay. I guess my other question is: how are you working with your colleague the Minister of Transportation to address the need for increased rail capacity to move bitumen as oil production increases this year without a pipeline and if the existing Kinder Morgan is still restricted in terms of its flow because of the recent failure that they had? I get a lot of calls from agricultural producers, as I'm sure you do, too, who don't like to see tanker cars go by and would prefer to see grain cars go by their farms. I'm just wondering what work you've been doing with the Transportation minister or with the railway companies for that matter.

Ms McCuaig-Boyd: Well, I certainly can say that he and I have had some chats on this matter. Crude by rail is an option for producers.

The Chair: Thank you, Minister.

We are now going to turn it over to the private members of the government caucus. Mr. Nielsen, you'll be taking charge here?

Mr. Nielsen: I will, Mr. Chair. With the blessing of the minister I would love to be able to share my time with her.

Ms McCuaig-Boyd: Okay. Sure.

The Chair: Go ahead.

Mr. Nielsen: Thank you.

Well, thanks, Minister, for being here this evening and to your team as well. Of course, thank you for all the work that you've done around pipelines and the work that you'll continue, I'm sure, to be doing on those. I know I've certainly had my opportunities to speak with U.S. legislators through the Council of State Governments about various pipelines, including line 3, that you mentioned earlier. Hopefully, we'll get some good news on that in the very near future.

I'd like to talk a little bit about energy diversification. If I could, you know, direct my first question around the Energy Diversification Advisory Committee, which in your business plan you talk about a little bit on page 61. It has its own line item on page 66 under expense. I was just wondering if you might be able to explain a little bit some of the actions that government has taken around the recommendations that this committee has made.

Ms McCuaig-Boyd: Okay. I was very brief in my opening remarks. Certainly, we reviewed the EDAC's recommendations, and we see merits in all 36 of the recommendations and have accepted the committee's recommendations. We're starting to move forward in a number of fronts. We're exploring opportunities to implement the recommendations in an efficient way and are looking at how we can get the most value for our dollars and the greatest return possible for Albertans. That's the lens that we're looking at.

As I mentioned briefly in my opening remarks, we're looking at the full-scale commercialization of partial upgrading technology in Alberta. That was the billion dollars that I had alluded to. That's in funding over eight years to support partial upgrading beginning next fiscal budget, 2019-2020. We have approved two projects. Again, I mentioned \$7 billion in new investment in petrochemicals in round 1. We saw so much success that, actually, we've announced phase 2 of that program. It's going to follow the same

lines with some minor tweaks and a competitive process. We're looking at maybe getting another couple of projects. One of the differences this time is that there's also a feedstock infrastructure program aligned with it, so we'll have to look at projects, you know, kind of together. We've added ethane as one of the new feedstocks as well.

Again, there are some really great ideas, but honestly we're just not there right now fiscally. But everything we do will be the best way to implement this, as I say, with the most bang for the buck and the greatest return to Albertans. That's the lens that we're looking at.

Mr. Nielsen: Well, thank you, Minister.

You know, with some of these programs that you think will be created, have you been able to suss out a little bit how many jobs you think will come out of these and maybe how much private investment you think can be created out of these projects and these programs?

Ms McCuaig-Boyd: Sure. We know that for each of these projects, you know, there's sort of a ballpark figure. Looking at that, this program will help, as you mentioned, to attract investment, create jobs, and broaden our tax base while things are being built. Those are things that support social services, health care, and education.

We expect in total \$10 billion in private investment, over 8,000 direct and indirect jobs during construction, and 400 new full-time jobs in operation in Alberta. When we talk about partial upgrading, we estimate the program will attract \$5 billion in private investment, 4,000 jobs in construction, 200 full-time while in operation.

For PDP we expect similar results from the first round, as I alluded to. In the first round we received a number of applications. When we added them all up, it was over \$20 billion of potential investment. The projects we chose had \$6 billion in private and 4,200 new jobs during construction, more than 240 full-time jobs.

When we talk about the feedstock program, it really depends on what the applications look like because there are so many different ways to do it. Once we know the projects, we'll know the jobs. I have to say that recently I was in Grande Prairie visiting a modular factory, and they potentially will have the contract for half of the modulars and piping for Inter Pipeline's projects. That one is not calculated when we talk about jobs; those are in the mods and stuff. So it's really good news for Alberta that they are making a concerted effort to source everything in Alberta. There will be some things they can't, but they've made that commitment.

Mr. Nielsen: Fantastic. That sounds exciting. Thank you.

You actually made it easy for me to segue into my next question around the PDP. I'm just wondering what status the projects approved under the first round are at.

Ms McCuaig-Boyd: Yeah. Before I do that, I want to also mention that while these things are being built, there are local taxes being paid and that kind of thing. The beauty of the PDP program is that the money for the royalty credits isn't expended till it's up and running. So that's another thing that's very positive.

As I mentioned, in the first round we were overwhelmed by the number of projects who applied. Like I say, if we added it up, it would be \$20 billion in potential investment. For one, the \$3.6 billion heartland petrochemicals project by Inter Pipeline has begun its construction. I talked to them recently. I can't remember the number of piles that are out there, but as I mentioned, they're already procuring the processing units and all of that within the province. The other one, the Canada Kuwait Petrochemical Corporation, is a \$4 billion project. Although they are yet to make

their final investment decision, they're spending a fair amount of money in engineering right now, which is an extremely good sign. We hope to have that investment decision by the end of this year or the beginning of next year.

Mr. Nielsen: You had just mentioned a little bit about the petrochemical diversification program, which provides the incentives to those projects in the form of royalty credits. I was wondering, just for some of my constituents because they have asked about this question, if you could explain a little bit about how those royalty credits work.

9:10

Ms McCuaig-Boyd: Yeah. Well, in the first program we offered up the potential of \$500 million in royalty credits for two to three projects, and I think there's a ceiling of \$200 million for the projects. Again, they use those royalty credits to secure their feedstock, essentially, so there's no upfront cost at all to the taxpayers. No credits are awarded until they've built the thing and it's up and running. So they don't directly benefit from the credits, because they don't pay royalties, but what they do is benefit from reselling them for feedstock or that kind of thing. It's up to them. It helps offset their costs.

I can say that in the case of Inter Pipeline they've told me personally that that was the deciding factor for them to build, and they're building two projects here. That's two projects in one, and that was definitely a deciding factor.

You know, when I was in Houston, it was very clear that we need to up our game here in Alberta to attract those investments. The ones that I've talked about previously are going to be difference makers in our effort to diversify.

Mr. Nielsen: Fantastic.

Around PDP, how it's expanded to cover ethane in the second round, like you had mentioned a little bit, I was wondering if you could explain what feedstocks are now covered.

Ms McCuaig-Boyd: Well, in addition to what we had before, which was propane and natural gas, we have ethane that we've added to this one because we have a lot of ethane potentially here. In the first round, as I said, it was a logical step to – I'm sorry; we had methane in the first one as well, so to the methane and propane we've added ethane.

You can look at things like an ethane cracker, which then would produce ethylene, right? I wasn't good in chem. It's been a long time since I've done chemistry. Anyway, ethylene can create some of those products just like propylene and that in plastics. Everything from the clothes we wear to our phones, car parts, all kinds of things can be developed. Once we get that going, there's no reason why we can't look at manufacturing streams and build some of those parts here in Alberta. Again, that's part of the diversification we're doing in Alberta on our side in oil and gas.

Mr. Nielsen: It kind of sounds a little bit like how I've explained to my constituents that there's been a lot of money that's been on the table that Alberta could be grabbing. It's nice to see that we're finally taking what could be ours.

Ms McCuaig-Boyd: Yeah. Absolutely.

Mr. Nielsen: I was wondering if I could shift gears a little bit around the upgrading. I was wondering if you could explain the benefits of partial upgrading to our province's energy industry as well as its economy. Again, some people have asked: why do we want to do upgrading here in the province?

Ms McCuaig-Boyd: Well, it's got a few benefits. You know, partial upgrading is an innovative process that reduces the thickness of the oil sands because it's pretty thick. First of all, it allows it to flow more easily through pipelines without adding diluent, so that's a huge advantage. With large-scale partial upgrading we could move more oil with about 30 per cent of diluted bitumen capacity through existing pipelines, so it would give us 30 per cent more capacity. It also allows us to get to refineries that we can't get to right now. That's exciting because it would create more markets for us. That makes our oil sands way more competitive. So that's another advantage, a thinner diluent to go through. One thing I learned in this whole process is that it increases the quality of our bitumen and in turn increases its value, so we can get more for our bitumen and ship to more markets around the world. So there are a number of things. Also, it reduces the oil price differential, which currently, as you said, is leaving a lot of money on the table that we could be using.

Building more partial upgrading facilities in Alberta absolutely is going to mean more jobs, more taxes in communities, more opportunities, and it doesn't limit future opportunities of full refining in Alberta as we go forward.

Mr. Nielsen: Okay. Thank you, Minister.

With regard to other markets I've heard that some of the government's new diversification measures are a response to competition from other jurisdictions. I was wondering if you might be able to explain that a little bit.

Ms McCuaig-Boyd: Yeah. You know, as I mentioned, we are a little bit of a higher cost jurisdiction, but once we create something, build something, and are operational, we can compete with anybody in the world. We look at some of our comparators. We have maybe greater distances, and sometimes materials are a little bit more expensive and that. We also have winter, which sometimes is a problem with heating and focusing on insulation and material requirements. So when we look at a competitive environment, we do face that in some of those. But, like I say, when I was down in Houston, it was made very clear to us that we can go toe to toe with the Gulf coast if we look at the right incentives to go against Pennsylvania, Texas, and Louisiana, who are three of our biggest competitors for downstream energy investment.

That's why we struck the EDAC committee. That's why we are looking at the recommendations and choosing the ones that will give us multilevel fiscal tools in the programs that we're unfolding. At the end of the day, that'll help with the capital costs and accelerate the thinking to build here. We're quite excited about that. I have to say that when I talked about where we were going down in Houston, tons of interest, so I am very confident we're on the right track.

Mr. Nielsen: Excellent. I look forward to them moving here.

Minister, I was wondering if you might be able to touch a little bit on why the new Energy Diversification Act was necessary given the broad powers the minister will have available under the Government Organization Act?

Ms McCuaig-Boyd: Well, again, I've spent a lot of time in the last couple of years talking to investors, and one thing I've learned is that the more you can sort of put in the rules, you know, embed them in legislation and regulation, the more confidence investors have. I heard that loud and clear down there. As I said, we're not going to continue to let the Gulf coast eat our lunch if we can do something about it. We looked at other areas, what they do to help with tax incentives or things. Our programs, we think, are really good for made-in-Alberta solutions, and we want to seize the

investment potential. We learned a lot from the first PDP program, so that's part of our thinking to go next. But we really want to be very strategic and act in specifically targeted energy diversification programs. Again, it's all about sending a loud and clear signal that Alberta is open for investment, and why not invest in Alberta? We've learned a lot from investors and how they think and react, and we think we've got the right mix.

Mr. Nielsen: Excellent. I was wondering if I could shift gears a little bit around liability management. I just want to direct your attention to the line item on page 66 of the business plan. I'm just wondering what the government is doing to address the growing number of existing orphan wells in the province and how it will ensure that an accumulation of orphan wells does not continue to be a problem over the long run.

Ms McCuaig-Boyd: Yeah. Thank you. That's a very important question I hear a lot about all the time. Our government is undertaking several actions and initiatives to address the long-standing problem of oil and gas liabilities, and this includes leveraging \$30 million from the federal government into a \$235 million loan to the Orphan Well Association to accelerate the cleanup of orphan wells. This is nearly eight times what the federal government was willing to invest. It's estimated that this loan will lead to about 1,650 new jobs in reclamation work over the next three years and reduce the liability facing the Orphan Well Association by about a third. The loan is in addition to what the Orphan Well Association already puts in their annual budget, and again that's a levy that's charged to industry for this.

This year's budget is \$45 million, that they levy in addition to what we've done. The Orphan Well Association works to close and reclaim infrastructure from oil and gas companies that no longer exist or that can't be found. This involves removing equipment, sealing wells, ensuring the safety of the site for the public.

9:20

Our government also continues its review of how we can develop long-term, made-in-Alberta solutions to better manage historic, current, and future liabilities concerning gas infrastructure. We're also continuing to lobby the federal government for changes to bankruptcy laws that hold companies accountable for their environmental responsibilities, and we're supporting municipalities with a credit for uncollectable taxes on disowned oil and gas properties, something I've heard from many communities that they're very appreciative of.

Other improvements to the liability management system include recent changes with the AER, the Alberta Energy Regulator, directive 067, ensuring that Albertans are protected from financial and environmental liabilities incurred by oil and gas operators. That's something that we got a lot of positive feedback on from communities and as well from companies. They think that's going to be a very good move.

We continue that work all the time, but those are the major things we've been doing and will continue to do.

Mr. Nielsen: Okay. I don't know if I have enough time to get this last quick question in. The liability management review recently concluded. What has come out of the review that will inform Energy's activities in 2018-2019?

Ms McCuaig-Boyd: Yeah. Thank you. We have finished our group engagement sessions with expert and key stakeholders from diverse perspectives, including indigenous communities, industry, environmental nongovernmental organizations, finance companies, trustees. We've got a really good group of people that we talked to.

Right now we're taking what we learned in those engagement sessions and developing process and policy options, with the goal of improving our liability management system. Three key areas that we're looking at are legacy and postclosure sites, fiscal policies and programs, and inventory management. You know, we're aiming to complete our review and determine the next steps in the next few months, so there'll be more to come on that.

Mr. Nielsen: Great.

Chair, how much time do I have left?

The Chair: You have exactly one minute and seven seconds.

Mr. Nielsen: One minute and seven seconds. Well, I don't know if I can quite get in this question, so maybe at this time I'll just thank the minister for providing that information. Like I said, I know my constituents have been asking some of these, so hopefully I'll be able to take those answers back to them. You know, they'll be keeping an eye on how things are going.

Again, I hope to see some good news here, certainly, on line 3 and, more importantly, of course, on Trans Mountain.

Thanks again to you and your team for all the work that you've been doing.

Ms McCuaig-Boyd: Thank you.

The Chair: Just a friendly reminder, members, that we are now moving to the 10 minutes combined with the minister or five minutes if you want to ask straight questions.

We return to the members of the Official Opposition. Mr. Panda, you'll be asking questions?

Mr. Panda: Yeah. Thank you, Mr. Chair. Just picking up where the Member for Edmonton-Decore left off.

The Chair: Would you like to go back and forth with the minister?

Mr. Panda: Sure.

Still on orphan well abandonment, in the business plan, page 66, can you tell me how many decommissioned wells, how many abandoned wells, and how many orphan wells there are in Alberta? If you don't have the numbers, you can table them later.

Ms McCuaig-Boyd: Alberta has an estimated 180,000 active wells, 83,000 inactive wells, and 69,000 abandoned but not yet reclaimed wells. The OWA completed the abandonment of 232 wells last year.

Our government continues to review upstream oil and gas liabilities and develop long-term, made-in-Alberta solutions. We have finished our strong engagement sessions, as I just mentioned. They provided really valuable input and perspectives on liability management systems and have contributed to the policy review process. We're taking what we've learned and, as I mentioned, will determine next steps in the next few months. There'll be more to come.

Mr. Panda: Thank you, Minister.

You talked about active and inactive and abandoned wells. Are there any numbers for decommissioned and orphan wells?

Ms McCuaig-Boyd: I don't know if we have those with us. As I said, we expect to do about a third.

Mr. Panda: You can provide it later?

Ms McCuaig-Boyd: Yeah. We can follow up with the OWA on that.

Mr. Panda: Thank you.

What is the liability this represents to the Crown, all of them together: decommissioned, abandoned, and orphan wells?

Ms McCuaig-Boyd: There's none because it's administered by the Orphan Well Association, and they charge their members for it. There's \$45 million this year plus the loan that we had. Are you referring to a number somewhere?

Mr. Panda: Sorry?

Ms McCuaig-Boyd: Can you tell me where you're getting a number from?

Mr. Panda: I don't have the number. I'm asking you.

Ms McCuaig-Boyd: Orphan wells are administered through the Orphan Well Association, and it's levied to industry, so there is no cost.

Mr. Panda: Okay. Under your watch how many orphan wells have been reclaimed so far?

Ms McCuaig-Boyd: We had 232 last year. I don't have the figures beyond, but 232 last year were done. Again, I could ask the Orphan Well Association. It's not something we oversee. Actually, it's probably online on the Orphan Well Association thing, but again it's not something that's really related to this exercise tonight on budgets.

Mr. Panda: I'm just following the same line of questioning from Edmonton-Decore if you don't mind.

Ms McCuaig-Boyd: Yeah. That's overall what we're doing in our fiscal plan to help, but the numbers aren't here because there's no budget attached.

Mr. Panda: Coming back to your budget, in 2019-2020 there is supposed to be a rise to \$60,500,000 per year for orphan well abandonment. At this rate of funding how many orphan wells will be reclaimed?

Ms McCuaig-Boyd: Sorry. Can you tell me what page you're on?

Mr. Panda: Page 66 of the business plan.

Ms McCuaig-Boyd: Okay. So you're looking at the figure of \$60,500,000. In the \$235 million loan that I talked about, we estimate that the inventory will be down about a third. As I mentioned, the levy is paid by industry. The annual budget for the OWA is \$30 million and is scheduled to increase to \$45 million in 2018-19 and to \$60 million in 2019-20. Again, those are all dollars that are levied to industry. It shows up in our budget because we . . .

Mr. Panda: Have you loaned some money to them? That's what you said?

Ms McCuaig-Boyd: No. We got a \$30 million loan from the federal government towards infrastructure, so we leveraged that for the \$235 million loan to the Orphan Well Association. They are administering the whole program. What our request was: fix these wells in three years, but you've got 10 years to levy industry to pay for it.

Mr. Panda: Do you have any idea how many orphan wells can be reclaimed for \$60,500,000?

Ms McCuaig-Boyd: You know, each well is different, because it depends. You know, it can be really cheap, or it can be really expensive. We do know that last year it was 230-some wells for \$30 million. What we have asked them to do is look in areas so that they're not, like, fixing a well here, going over here, and then going over here but finding ones that are sort of close to save costs. Again, it's all under the purview of the Orphan Well Association.

Mr. Panda: Okay. Thank you.

How many department FTEs and how many Alberta Energy Regulator FTEs do you have assigned to the Redwater case at the Supreme Court? How many full-time equivalents?

Ms McCuaig-Boyd: We don't have a dedicated group. There are people that work on it from time to time as part of their regular work, and there would be sort of outside counsel in that, but we don't have it in this.

Mr. Panda: Is Alberta Justice assisting with this activity?

9:30

Ms McCuaig-Boyd: Yeah. It's a file we support, I believe, Alberta Justice.

Mr. Panda: When do you anticipate the decision on that?

Ms McCuaig-Boyd: The report?

Mr. Panda: No. The court decision.

Ms McCuaig-Boyd: The court decision: when they decide to write it. I don't think we have a date that we're aware of.

Mr. Panda: Okay. Now let's switch to the Alberta Petroleum Marketing Commission, page 126 of the estimates. Can you explain for me the \$41,400,000 in net interest income? Is this the interest on the subordinate debt that the APMC loaned to the North West Redwater Partnership to facilitate access to the lowest cost capital possible to build a refinery?

Ms McCuaig-Boyd: I'm sorry. I was busy flipping pages.

Mr. Panda: Page 126.

Ms McCuaig-Boyd: Yeah. Which figure are you talking about?

Mr. Panda: There is \$41,400,000 in net interest income.

Ms McCuaig-Boyd: Okay. That's interest coming back to APMC from a loan on the North West upgrader.

Mr. Panda: Okay. So every time the province or CNRL experiences a credit downgrade, the credit rating of the refinery declines, too. Does this mean that the net interest income of the APMC will rise as the provincial credit rating declines?

Ms McCuaig-Boyd: It's fixed interest rates on the debt.

Mr. Panda: Okay. Thank you, Minister.

Why did the North West refinery withdraw their application for phase 2?

The Chair: Thank you very much, Mr. Panda.

Over to you, Mr. Clark.

Mr. Clark: Thank you very much, Mr. Chair.

Minister, if you don't mind, I'd like to go back and forth for the next 10 minutes or so if we may.

Ms McCuaig-Boyd: Sure.

Mr. Clark: I'll just pick up right where I left off. We were talking about the RRO cap on electricity, and what I was asking was if you had given any thought to different models in terms of how we might calculate the cap. Now, you said that currently the regulated rate option is a monthly amount, but of course the Legislative Assembly could change that. Presumably, you could potentially change it through regulation, I assume. We make up those rules. Really, I'm just curious if you would give some consideration to some sort of rolling cap. Just a very simplistic way I would think about it is that if we have a month where we're hitting 10 cents a kilowatt hour, which is obviously over the 6.8 cents, and then the next 30-day period we're at 3 cents, the average of those is below the cap and I don't think would add any substantial hardship to Albertans. I guess my question is: have you given any consideration to any sort of blended model, something along those lines, that may have mitigated the risk to Alberta taxpayers from the RRO cap?

Ms McCuaig-Boyd: You know, the rate-setting plans are approved by the AUC, so it would require changes to the rate-setting plans which are in place and approved by the AUC. It would require some work.

Mr. Clark: We're all happy to do a bit of work if we need to.

I guess what I'm really saying is that if the objective is to protect Albertans – and I would argue that some of the changes that you've made have caused this perceived need to protect Albertans – there are other ways of doing that. Albertans signing on to contracts themselves would certainly be one. But if there is, at the end of the day, a desire to protect, there seem to be other models that would perhaps mitigate the downside, and it seems that you haven't considered those.

Ms McCuaig-Boyd: Well, one of the things with this is that it's a finite program as we transition. It was never meant to be a permanent program.

Mr. Clark: Sure.

Did you ask the MSA to do a report on this before you moved forward?

Ms McCuaig-Boyd: Yeah, we did, and the MSA did not address this particular issue.

Mr. Clark: They did not address the regulated – you did not ask the MSA to evaluate options for how to consider an RRO cap?

Ms McCuaig-Boyd: They looked at options, but they didn't present this one of averaging it over.

Mr. Clark: Has that report been released publicly?

Ms McCuaig-Boyd: I'll have to get back to you on that. I don't know if that's happened.

Mr. Clark: Can I just formally request, please, that it be released publicly?

Ms McCuaig-Boyd: Yes. We'll follow up.

Mr. Clark: That would be very helpful. Thank you very much.

Just one other point on that, then. One of the concerns I have on kind of a universal program like this is that if someone makes a million dollars a year and pays their electricity bill and somebody makes \$10,000 a year and pays their electricity bill, both benefit

equally from the RRO cap. That doesn't seem right. There's one group of people who need help and one who doesn't. Had you given any thought to some sort of means test or other mechanism to ensure that the people who actually need help in paying their electricity bills are the ones that we're helping and that it is not truly universal?

Ms McCuaig-Boyd: No. I think we focused on stability and a program to bridge while we go to a capacity market, you know, from the energy only. As you know, a feature of the current system we have is price spikes, so we just looked at how this could manage this transition.

Mr. Clark: With great respect, Minister, and please . . .

Ms McCuaig-Boyd: I could add, though, that we have programs in place, like, for vulnerable Albertans and seniors, you know, in the rebates, so that one was considered as part of this.

Mr. Clark: It just feels like this is very hasty and that there are a lot of things that have not been considered, this being one of them. It does concern me where taxpayer dollars are being used to offset the electricity bills of people who, frankly, can afford to pay them. It seems like there are better ways of considering this. Again, I would hope that we get a chance to see that MSA report because I'd very much like to see what was considered.

I'm just going to shift focus here back to Kinder Morgan, which you had talked about in the business plan on page 61. It sounds like we're heading down a path of potentially having Albertans invest in the Kinder Morgan pipeline in one means or another, just reading now the news today as the Premier has mused that the province of Alberta may buy the whole thing. I guess I'm curious. What advice either has your ministry given to the Premier, the Minister of Finance, or any other portfolio or what advice would you give in terms of those investment models? Have you considered an equity stake as an option and looked at what that might mean?

Ms McCuaig-Boyd: You know, this is really preliminary. This has just been in the last day and a bit. We're looking at a number of options. Again, I'm not sure it's germane to this budget at this point.

Mr. Clark: Well, I mean, with respect, I think that given that you've said that getting a Canadian pipeline to Canadian tidewater is the best way for world-class energy producers to sell our oil at world prices and you mentioned specifically the approval of the Trans Mountain expansion – that is in your business plan . . .

Ms McCuaig-Boyd: Yeah, but to be fair, when we did that, we didn't know about yesterday's events. So I think it's a little bit premature to speak . . .

Mr. Clark: Well, that's great. The timing is fabulous, so we get a chance to talk about these things.

Ms McCuaig-Boyd: You know, I can tell you that there will be more to come in the next few days about some of the options we're looking at.

Mr. Clark: Great. Well, I guess I'd be curious, then, about whether you've looked at using BRIK barrels in this model. Is that something you'd look at?

9:40

Ms McCuaig-Boyd: More to come in the next few days.

Mr. Clark: How about . . . [interjection] Yes, you've borrowed a term from your Minister of Advanced Education. In the fullness of time: that is his favourite.

Ms McCuaig-Boyd: No. It will be sooner than in the fullness of time.

Mr. Clark: Great.

I have to say, while I have a moment here on the record, that it does concern me when the Premier is musing about potentially buying the whole thing. That seems to be hasty. I would hope that this is something that has been given some very thorough consideration by the experts in your ministry, and I know there are many. I wonder: have you done any work evaluating the different options between taking an equity stake, using something like BRIK barrels, or, if we're going to go down this path, perhaps loan guarantees being a better model? Also, have you had any conversations with your federal colleagues about ensuring that Ottawa is part of this as well if, in fact, we're going down this path?

Ms McCuaig-Boyd: Well, considering that it was yesterday publicly revealed, I think we've done a fair amount of discussion today on things, and there will be more to come. I think that what you're asking is pretty difficult to do in an eight-hour business day, but there will be more to come.

Mr. Clark: That's curious, though. Is this just something that popped up? You know, I appreciate that it just became public yesterday, but you'd said earlier today that the Premier was briefed – that's a direct quote – and I would assume that that was a briefing that came either from yourself or your ministry and the experts in your ministry. I would hope that this isn't something that's just a knee-jerk, in-the-moment comment from the Premier, because the consequences, the implications of musing about investing \$7.4 billion in a private business by a government is an astoundingly complex undertaking. This isn't just something that's come up on the spur of the moment. This is surely something that's been given some thought before public announcements were made.

Ms McCuaig-Boyd: Well, what I can say is that there are a lot of commercial discussions, and when you're talking about commercial discussions, a lot of it can't be spoken. You know, again, these are early days, and we're talking about many things right now and many options that we have, and there will be more to come in the next few days. Certainly, when we talk about commercial arrangements, that's a little bit difficult in this setting to . . .

Mr. Clark: Fair. I certainly wouldn't expect you to . . .

Ms McCuaig-Boyd: Plus, I'm not privy to it all at this moment.

Mr. Clark: . . . reveal anything confidential. I guess what I would hope and seek some assurances on is that there has been some very deep analysis done and some real thought given to the implications, just from a market perspective, of musing about purchasing the entirety of the Kinder Morgan Canada pipeline project. I mean, it is astounding to me that that's something that would be given consideration without a huge amount of work behind the scenes before saying something like that.

Ms McCuaig-Boyd: Yeah. Well, I think, you know, the Premier has been pretty clear about the role of the federal government in all of this as well. So there are a number of factors. She's been pretty clear about that as well.

The Chair: Thank you, Minister.

Dr. Starke, over to you.

Dr. Starke: Thank you, Chair. If we could, I'd like to go back and forth with the minister.

Ms McCuaig-Boyd: Sure.

Dr. Starke: Thanks, Minister. I want to talk a little bit about the Alberta Energy Regulator. This, I think, deals primarily with outcome 2 in the business plan on pages 63 and 64. Now, the Alberta Energy Regulator is one of the policy decisions that I think was a very good policy decision, and the regulator has become a model for energy-producing jurisdictions around the world. It's interesting that it was actually one of the first topics that was discussed at one of the first caucus meetings I attended back in 2012, that there was this development of a single-window regulator and how that would be an improvement over the previous system and would streamline things. I think that, for the most part, with a lot of those objectives, if they haven't already been met, we're on our way to meeting them.

But I do just want to say that I have some concerns, specifically on page 64, under 2(b), pipeline safety and the Alberta Energy Regulator, when I see these numbers. These are all actuals in terms of the number of high-consequence pipeline incidents: 53, 51, 31, and 33. These are actuals, not targets, on page 64. I guess I'm particularly concerned when I read that because, of course, we're telling the world that pipelines are very safe, and we're telling the world that pipelines are the right way to go. I do believe that that's true, yet anyone who looks at the business plan of our Energy department and sees those numbers will say: well, wait a minute; you're averaging close to three incidents a month that are what you declare by your own definition as being high consequence. I guess my question is: how would you, Minister, respond to somebody who said, "Wait a minute; you've got a problem here"?

Ms McCuaig-Boyd: Well, first of all, I would assure them that the AER provides a lot of pipeline safety and that it works very hard at reducing the incidents. They take steps to prevent pipeline incidents by requiring companies to implement comprehensive integrity management programs to identify, manage – you know, they use the smart PIGs and all that kind of stuff. The program aims to ensure that the adequate systems have been implemented and that ultimately there will be fewer incidents. They're focusing incrementally on reducing high-consequence incidents as these types of incidents, as you mentioned, have impact on the public, wildlife, and the environment. The number of high-consequence pipeline incidents was 33, as you mentioned there, in 2016; 31 in '15-16; and 51 in '14-15. So over the past two fiscal years the number of high-consequence incidents has actually fallen 40 per cent from the previous fiscal year.

Dr. Starke: Yeah, and that's fantastic. I guess I wonder: is there a target to eventually reduce that number to as close to zero as possible?

Ms McCuaig-Boyd: In my world, yes.

Dr. Starke: Perfect. Okay.

Ms McCuaig-Boyd: You know, they're working very hard to do that.

Dr. Starke: Okay. Great.

I want to talk about another area that is brought to my attention from time to time with regard to the Alberta Energy Regulator, and that is the length of time for approvals. I've raised before during question period the comparison between Alberta and Saskatchewan.

I know some people weary of hearing me talk about that; living in Lloydminster, it's a residential hazard. In Saskatchewan some of these small SAGD plants that produce 10,000 barrels a day can get approved, from proposal to approval, in less than 18 months, and in Alberta for whatever reason the AER is taking four years and more to get these things turned around. I guess I'm wondering: why the difference, and what is being done to at least bring that time frame down?

Ms McCuaig-Boyd: Yeah. That was asked earlier. While I can't speak to other provinces and that, you know, most routine applications are turned around in 30 days or less, which is probably a high percentage. Some are turned over in even less. The target is 200 days for nonroutine wells, pipelines, and facilities. Honestly, it depends on the complexity of some of the projects, the time. But I can tell you that the AER is working on lowering some of those times and working very hard, with an eye to competitiveness.

Dr. Starke: I mean, I'm glad you mentioned that, Minister, because, you know, while I don't necessarily like to make the comparisons, the reality in how this plays out for a company that operates on both sides of the border like Husky Energy is that they've built seven plants, that are either built or under construction, on the Saskatchewan side, and they've got plans for a similar number on the Alberta side, and they just haven't been able to go ahead with them. Why it's important is because, of course, as you know, these thermal SAGD plants have a much lower methane release component than the standard CHOPS method, which is being used widely in our area.

A bit of a question that has to do with the electricity side of things – Minister, I'm sure you get asked this question on a frequent basis – and that is: is the Alberta government doing anything to develop what I would call the Holy Grail of electricity generation; that is, electricity storage? You know, I'm sure you hear it, Minister, when you go into the A&W in Fairview, that the fellows that have all the answers to all the questions in there will tell you: "What are going to do when the sun doesn't shine? What are you going to do when the wind doesn't blow?" You know who I'm talking about. I've been there. That's, of course, the criticism that you get on renewable sources. I mean, until we have a cost-effective means of storing electricity as it's generated, that is always going to be an issue. I know a lot of work is being done world-wide with batteries and a number of other things, but I'm just wondering: in the Energy department is any work being actively done, for example, to do compressed carbon dioxide storage in underground salt caverns or some of the other technologies that have been talked about?

9:50

Ms McCuaig-Boyd: Yeah. There are a couple of areas. The AESO is actually doing a study right now on dispatchable renewables. I hope to get that sooner than not.

Also, Alberta Innovates is looking to invest money in projects that might speed that up. That's one of the things that, at his end, they're looking at. I can say that when I was down in Houston the last couple of times, that's always the one I wanted to know the most about, where we're at, because I honestly think that technology is going to be sooner than not. We do have a couple of areas where we've got eyes on that, and it's going to be a game changer.

Dr. Starke: Well, absolutely. If Alberta could be the centre of excellence that sort of breaks through that barrier of converting both ways, into storage and then back out of storage, and do it without much power loss, if we could be the jurisdiction that develops that,

you know, when we talk about renewable energy technologies and moving into a postcarbon economy, that's the kind of thing that I think would be incredibly exciting. I don't see any reason why Alberta can't be at the forefront of that.

Ms McCuaig-Boyd: Well, we could be leaders in everything.

Dr. Starke: Well, sure. Why not?

Finally, on page 65 of the business plan, Minister, risks to achieving outcomes. I read this section with considerable interest. In your risks to achieving the outcomes in the 2018 business plan, you correctly point out in your strategic analysis that there are, you know, a number of risks: policy and political decisions made at the federal level. I think: "Oh, boy. Check. Have we seen that." Interprovincial relations: well, we've had our share of those in the past six months. NAFTA, of course, is an ongoing one. Market demand, especially in the U.S. for Alberta's products: well, as we know, with a captive market, U.S. demand is critically important. And collaboration with other governments, which at times becomes tenuous in our current political climate. Now, you acknowledge that these are risks to achieving outcomes, and I would say, just objectively, that all of those risks have been very much at play in the last six months to a year. I guess I'm curious. Is there a specific strategic plan for overcoming these risks, and how much of your department's energy is directed towards mitigating those risks such that the objectives of your business plan can be achieved?

Ms McCuaig-Boyd: That's kind of a broad question, certainly. Yeah. I guess I can just tell you some of the things that we are doing. You know, we look at the risk to capital investment. Again, I'm not sure if I'm referring to the right things that you're wondering. When I was at the college, before I came here, that was one of my least-favourite committees to be on, but we looked at the risk of capital technology, which was a big one in mind. We do consider all of those risks. Like I say, there's capital; there's market. Certainly, we are looking specifically at controlling . . .

The Chair: Thank you, Minister.

We're going to move on to the private members of the government caucus. Mr. Malkinson, please go ahead.

Mr. Malkinson: Thank you very much, Mr. Chair. You know, in looking at key strategy 3.1 on page 64, the goal to meet our 2030 target of phasing out coal, I'm wondering: what has been achieved to date on the coal phase-out agreements, and how does it impact the 2018-19 budget?

Ms McCuaig-Boyd: So that's with respect to the electricity system? Sorry. What number were you looking at?

Mr. Malkinson: Key strategy 3.1 on page 64.

Ms McCuaig-Boyd: Okay. Yeah. Going back to November 2016, the province, as you know, signed off coal agreements with Capital Power, TransAlta, and ATCO, who were to operate facilities beyond 2030. These agreements ensure that we achieve zero emissions from coal-fired power by 2030. The electricity companies will receive 14 annual payments of \$97 million – it started in the 2017-18 fiscal year – representing the approximate capital investment in the generation units that cannot be recovered. At the end of the fiscal year the net present value of the amount outstanding is just over \$1 billion. Total payments represent less than \$10 a tonne – I mentioned that, I think, earlier in a question – which is approximately a tenth of the

government's subsidy, that would be required to retrofit coal units with carbon capture and storage. So a pretty good return on investment.

Mr. Malkinson: Thank you, Minister.

Sometimes in my office I get questions saying that the government is buying coal power from Montana because we're phasing out our coal power. Is that true, Minister?

Ms McCuaig-Boyd: No. That's the famous Facebook false facts. Yeah, I've seen that on Facebook as well. It's talking about 196 megawatts of coal-fired electricity from Montana, and it's absolutely false. The Alberta government does not purchase coal-fired electricity from Montana under any arrangement.

There are interties, our electricity transmission lines connecting to neighbouring systems, as I mentioned before, to allow power to import and export. Alberta currently has three operating interties between Montana, Saskatchewan, and British Columbia, and these interconnections are vital to balance supply and demand and to avoid paying high peak prices, which ultimately enhances resiliency in our grid.

The one you're talking about, the MATL, is the Montana-Alberta tie-line. It began operating in 2013 and is a merchant project owned and operated by Enbridge as a private company. It's not a publicly owned asset, and Enbridge does not recover the cost of the project from ratepayers. Enbridge takes the risk of earning returns on the electricity traded across the border, and Enbridge has said that the project was for connecting wind energy in Montana to Alberta's demand for power. Any restrictions on imports from the line would have impacts on Enbridge's investment as a merchant owner and operator. Last year Alberta exported on average around seven megawatts over the MATL. In 2016 Alberta's grid was a net importer of only three megawatts.

Again, what you've seen is not necessarily very true.

Mr. Malkinson: All right. So the concise answer is: not true?

Ms McCuaig-Boyd: Not true.

Mr. Malkinson: Yeah. Thank you very much, Minister.

You know, since we are on the subject of coal, often we talk about performance measure 3(b) on page 65 of the business plan. You state that in 2016 10 per cent of our electricity came from renewable energy, I would assume from solar and wind. I'm looking, like, as we look to the future, at our goal of 30 per cent renewable energy. What would you imagine that looks like as far as the use of wind and solar or perhaps other renewable sources? What do we think that mix would look like?

Ms McCuaig-Boyd: In 2016 renewable generating capacity was 2,831 megawatts, and this represents roughly 10 per cent, as you said. Breaking down this 10 per cent, the three significant sources of renewable energy are wind, hydro, and biomass. A little over half of the 10 per cent renewable generation comes from wind, and the wind generation has added more capacity than any other renewable source in Alberta. We now have the third-highest wind generation in Canada. Most Alberta wind farms are located in the windy part of the province, which is the southern part. Following wind, the next two largest, biomass and hydro generation, have been steady in Alberta. The share of the 10 per cent renewable generation for these sources is approximately 32 per cent and 15 per cent respectively. And I can say that there's a lot of interest in the future, you know, in continuing with wind but a lot of biomass interest and hydro in other parts of the province.

Mr. Malkinson: Thank you very much, Minister.

As you know, I was a diesel generator salesman, so I know what happens when we have those industrial applications. You know, we talk about things like solar, that if you had a theoretical grid that was all solar, that would work well and good until somebody, some A-hole in a factory somewhere, turns on a 600-horsepower electrical motor. That wouldn't work too well.

In order to have a stable grid, you have to basically have something spinning so that when you have that short-circuit from a big industrial application, you know, that mix is there to have a stable grid. Since currently coal power is the bulk of our larger plants – and we want to make sure that we avoid brownouts – until storage technology advances, as my colleague Dr. Starke had

mentioned in his previous line of questioning, what mix of renewable sources are we expecting? And are we . . .

The Chair: I apologize for the interruption, but I must advise the committee that the time allotted for the item of business has concluded, at least for this evening.

I would like to remind committee members that we're scheduled to meet again tomorrow, Tuesday, April 10, 2018, at 9 a.m. to continue our consideration of the estimates of the Ministry of Energy.

Thank you, everyone. This meeting is adjourned. Good night.

[The committee adjourned at 10 p.m.]

