



Legislative Assembly of Alberta

The 29th Legislature
Fourth Session

Standing Committee
on
Public Accounts

Energy, Alberta Electric System Operator, Alberta Utilities Commission,
Balancing Pool, Market Surveillance Administrator

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The 29th Legislature
Fourth Session**

Standing Committee on Public Accounts

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Dach, Lorne, Edmonton-McClung (NDP), Deputy Chair

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Carson, Jonathon, Edmonton-Meadowlark (NDP)
Clark, Greg, Calgary-Elbow (AP)
Gotfried, Richard, Calgary-Fish Creek (UCP)
Hunter, Grant R., Cardston-Taber-Warner (UCP)
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* substitution for Brian Malkinson

Also in Attendance

Swann, Dr. David, Calgary-Mountain View (AL)

Office of the Auditor General Participants

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Standing Committee on Public Accounts

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Ministry of Energy

Mike Ekelund, Assistant Deputy Minister, Resource Revenue and Operations

David James, Assistant Deputy Minister, Electricity and Sustainable Energy

Coleen Volk, Deputy Minister

Alberta Electric System Operator

Michael Law, Senior Vice-president and Chief Operating Officer

Alberta Utilities Commission

Bob Heggie, Chief Executive

Balancing Pool

Ben Chappell, Acting President and Chief Executive Officer

Market Surveillance Administrator

Doug Doll, Director, Corporate Services and Compliance

8:30 a.m. Tuesday, November 6, 2018

[Mr. Cyr in the chair]

The Chair: Good morning, everyone. I'd like to call this meeting to order for the Public Accounts Committee and welcome everyone in attendance.

My name is Scott Cyr. I'm the MLA for Bonnyville-Cold Lake and chair of the meeting. I'd like to ask the members, staff, and guests at the table to introduce themselves for the record, starting on my right.

Mr. Dach: Morning, everyone. Lorne Dach, MLA for Edmonton-McClung, deputy chair.

Mr. Clark: Morning, everyone. Greg Clark, MLA, Calgary-Elbow.

Mr. Hunter: Grant Hunter, MLA, Cardston-Taber-Warner.

Mr. Panda: Good morning. Prasad Panda, Calgary-Foothills.

Mr. Gotfried: Good morning. Richard Gotfried, MLA, Calgary-Fish Creek.

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

Dr. Swann: Good morning and welcome. David Swann, Calgary-Mountain View.

Mr. Doll: Good morning. Doug Doll, Market Surveillance Administrator.

Mr. Heggie: Morning. Bob Heggie with the Alberta Utilities Commission.

Mr. Law: Good morning. Michael Law, chief operating officer for the Alberta Electric System Operator.

Ms Volk: Good morning. Coleen Volk, Deputy Minister of Energy.

Mr. James: Morning. David James, ADM for electricity and sustainable energy, with Energy.

Mr. Chappell: Ben Chappell, acting president and CEO of the Balancing Pool.

Mr. Wylie: Good morning. Doug Wylie, Auditor General.

Mr. Leonty: Eric Leonty, Assistant Auditor General.

Ms Renaud: Marie Renaud, St. Albert.

Ms Payne: Good morning. Brandy Payne, MLA for Calgary-Acadia.

Mr. Carson: Good morning. Jon Carson, MLA for Edmonton-Meadowlark.

Dr. Turner: Bob Turner, Edmonton-Whitemud.

Mrs. Littlewood: Good morning. Jessica Littlewood, MLA representing the beautiful rural constituency of Fort Saskatchewan-Vegreville.

Ms Miller: Good morning. Barb Miller, MLA, Red Deer-South.

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

Dr. Massolin: Good morning. Philip Massolin, manager of research and committee services.

Mrs. Sawchuk: Good morning. Karen Sawchuk, committee clerk.

The Chair: All right. We do have a substitution: Ms Payne for the hon. Mr. Malkinson.

I have some housekeeping items to address as well. Please note that the microphones are operated by *Hansard*. Please set your cellphones and other devices to silent for the duration of the meeting. Committee proceedings are streamed live on the Internet and broadcast via Alberta Assembly TV. The audio- and video stream, the transcripts of the meetings can be accessed via the Legislative Assembly website.

Let's move on to the approval of the agenda. Are there any changes or additions to the agenda? Seeing none, would a member like to move that the agenda for the November 6, 2018, meeting of the Standing Committee on Public Accounts be approved as distributed? Mr. Hunter. Any discussion on the motion? All in favour? Any opposed? Thank you. The motion is carried.

Let's move on to the approval of the minutes. Do members have any amendments to the October 30, 2018, minutes? If not, would a member like to move that the minutes for the October 30, 2018, meeting of the Standing Committee on Public Accounts be approved as distributed? Dr. Turner. Any discussion on the motion? All in favour? Any opposed? Thank you. That motion is carried.

I'd like to welcome our guests, who are here on behalf of the Ministry of Energy, the Alberta Electric System Operator, the Alberta Utilities Commission, the Market Surveillance Administrator, as well as the Alberta Balancing Pool. Members should have the research report prepared by research services, the Auditor General briefing document, as well as the status of the Auditor General recommendations document completed and submitted by the ministry.

The committee welcomes opening remarks not exceeding 10 minutes. Ms Volk, will you be taking the lead in this respect?

Ms Volk: I will.

The Chair: Please go ahead.

Ms Volk: Thank you, Mr. Chairman. Good morning, everyone. As I've done in the past, this morning I'll provide an update on the recommendations from the office of the Auditor General as well as present highlights from the ministry's annual report for 2017-18.

On my right, joining me from the Department of Energy, is David James, assistant deputy minister of electricity and sustainable energy, and on David's right is Ben Chappell, president and chief executive officer with the Alberta Balancing Pool. On my left is Mike Law, senior vice-president and chief operating officer with the Alberta Electric System Operator; Bob Heggie, chief executive of the Alberta Utilities Commission; and Doug Doll, director of corporate services and compliance with the Market Surveillance Administrator. Seated in the gallery are other members of the department's executive team, who can help us out if we need it.

Before I talk about the department's progress and accomplishments over the past year, I want to clarify the role of each electricity-related organization represented by these individuals for the committee's benefit. To start, the Alberta Utilities Commission is an independent, quasi-judicial agency that's responsible for ensuring that the delivery of Alberta's utilities service takes place in a manner that is fair, responsible, and in the public interest. The commission regulates the utilities sector, natural gas, and electricity markets to protect social, economic, and

environmental interests of Alberta where competitive market forces do not.

The Balancing Pool manages the financial accounts arising from the transition to a competitive generation market on behalf of electricity customers. This includes meeting any obligations and responsibilities associated with both sold and unsold power purchase agreements.

The Market Surveillance Administrator is an independent enforcement agency that monitors Alberta's competitive electricity and natural gas markets and ensures the markets operate in a fair, efficient, and openly competitive manner. They monitor market participants to ensure there are no anticompetitive activities taking place, and they investigate matters brought to their attention. They also report on the state of the market to foster transparency and provide advice to the Department of Energy, particularly in the process of transitioning to a capacity market.

Finally, the Alberta Electric System Operator. They provide access to Alberta's power grid to power generators and distribution companies as well as for large industrial consumers of electricity. They work with the transmission infrastructure owners to ensure fair and timely access to the system. They facilitate Alberta's wholesale electricity market and are currently developing rules for the transition to the capacity market. In addition, the operator sets and administers transmission tariffs, which are ultimately approved by the Alberta Utilities Commission. They also carry out key functions such as running the competitive process for renewable electricity projects under the Renewable Electricity Act, working to ensure system reliability and managing settlement of the hourly wholesale market and transmission systems services, and looking at the long-term growth of Alberta's electricity system. As we can all appreciate, Alberta's electricity system requires many agencies working to ensure the system is operating in a manner that Albertans expect.

Now on to the department's progress with respect to the Auditor General recommendations. My update this morning builds on the ministry's appearance in front of this committee in May 2018. Over the past few years the Auditor General has made several recommendations to the Department of Energy, the Alberta Energy Regulator, and the Alberta Petroleum Marketing Commission. Specifically, the Auditor General recommended that the department evaluate and report whether the department's royalty reduction programs achieve their objectives. Energy has appeared before this committee several times to discuss progress with respect to this recommendation. This recommendation has been fully implemented, and a follow-up audit began in September. As members will recall, in response to this recommendation the department took several actions such as providing descriptions of existing royalty programs, reporting on intended outcomes and performance metrics, and implementing an evaluation framework.

Energy has also established a new area within the ministry devoted to program standards development as well as program design, implementation, and monitoring for royalty, liability, and diversification programs. This was based on a recommendation by the Auditor General. The department continues to make progress to improve controls over access to key business systems. This includes documenting descriptions of all of the roles in each business system, which roles are in conflict, and mitigation strategies of conflicting roles.

In addition to completing the documentation of two of Energy's key systems, the oil sands administrative and strategic information system and the corporate accounting reporting system, this past year saw the department complete documentation on two other systems, the freehold mineral tax and the land automated mineral

agreement system for land sales. The department has committed to review and document two remaining systems over the coming year. These are the royalty and marketing system and the foundation database. The royalty and marketing system calculates oil royalty volumes owed to the Crown. The foundation database is a system that houses volumetric well infrastructure changes and business period cut-off information.

The Auditor General determined that this progress is satisfactory. As members will recall, this recommendation will be considered fully addressed when the department has adequate controls in place to ensure there is identification and documentation of what roles are in conflict in all key business systems and access is provided according to an employee's roles and responsibilities with regular monitoring of conflicting roles.

With my remaining time I'd like to talk about some of the activities undertaken by the department this past year. Efforts to secure Canadian tidewater access is, of course, a government-wide priority. I know you will all understand that increasing our pipeline capacity and market access in general is vital to Alberta's future. For the Department of Energy this means ensuring the construction of the Trans Mountain pipeline expansion project. The department has been extremely active on both the regulatory and legal aspects of Trans Mountain for several years. For example, in May of 2017 Alberta was granted intervenor status in the Federal Court of Appeal judicial review. At the subsequent court hearing in October 2017 Alberta's legal counsel argued the need for clear, consistent rules and processes for interprovincial projects like Trans Mountain. While construction-related work had only just begun when the court halted the project, the department was developing construction updates for the Alberta segment of the route and compiling updates on Alberta permitting.

8:40

At the same time Trans Mountain was going through the regulatory process, my department was engaging the federal government on Bill C-69. Specifically we are concerned that this legislation as currently proposed hurts Canada's and Alberta's competitive position. For more than a year the department provided numerous technical submissions and feedback to the federal government on our concerns with this legislation. The department also continues to provide supporting information for department and elected officials who are engaging with federal counterparts on Bill C-48. This bill proposes a moratorium on all large crude oil shipments by tanker from ports along the B.C. coast and inland areas north of Vancouver Island.

On the electricity front we continue to move forward with developing renewable sources of energy with the launch of the renewable electricity program. In 2017 round 1 of the program saw three companies selected to provide 600 megawatts of power, resulting in an investment of \$1 billion. Building on this success, rounds 2 and 3 were launched in March 2018. The department anticipates these two rounds will add 700 megawatts of renewable electricity while attracting about \$10 billion in new private investment by 2030. Of note, the second rounds include an indigenous equity component that will help create jobs and economic opportunities for indigenous communities. The department also passed An Act to Cap Regulated Electricity Rates last year. This legislation caps the regulated rate option at 6.8 cents per kilowatt hour over a four-year period while there is a transition to a capacity market electricity system.

Moving on to oil- and gas-related developments, the department continues its work on addressing historic upstream liabilities by lending funds to the Orphan Well Association. By leveraging \$30 million in federal dollars, the department was able to lend \$235

million to the Orphan Well Association to speed up the reclamation of abandoned and orphaned oil and gas well sites.

Finally, I want to take a moment to talk about petrochemical development. The successful proponents under the department's initial petrochemicals diversification program continue to move forward with their development plans in 2017. This includes Inter Pipeline's Industrial Heartland project, which is currently under construction, and a project with Canada Kuwait Petrochemical. Once complete, the two Inter Pipeline facilities will turn 22,000 barrels of propane per day into propylene while front-end engineering work has been under way for the Canada Kuwait Petrochemical project. The department expects the owners of this project will make a final investment decision in 2019.

Subsequent to this program and building on the advice of the energy diversification advisory committee, the department passed the Energy Diversification Act in 2018. This act aims to diversify Alberta's economy by incenting and supporting even more petrochemical development. At the core of this act are three programs that will encourage more interest and investment in Alberta's petrochemical sector. They are: a \$1 billion partial upgrading program to encourage companies to build two to five bitumen upgrading facilities . . .

The Chair: Thank you for that, Ms Volk.

We will move on to the Auditor General for his comments. Sir, you may begin.

Mr. Wylie: Thank you Chair, committee members. I'd like to first thank the deputy for her comments relating to our recommendations to the ministry. We are pleased that progress is being made and certainly will work with the ministry to get the recommendations implemented. That's very important to the work of our office.

I thought that for the benefit of the record, Chair, I would just indicate that the committee is aware that we make recommendations to those organizations that we audit. Today we have three organizations that we are not the auditor of, and I thought that for the record I would just make that clear. We are not the auditor of the Alberta Balancing Pool, the Alberta Electric System Operator, or the Alberta Market Surveillance Administrator. Before you today we are the auditor, however, of Alberta Energy and the Alberta Utilities Commission.

I'll leave it there, Chairman.

The Chair: Thank you for that, Mr. Auditor General.

The committee will now follow its current time allotment format for questions. The first and second rotations provide nine minutes each for the Official Opposition and for the government members, followed by four and a half minutes for the third-party member. The third rotation will provide five minutes each for the members of the Official Opposition and the government members. Time permitting, following these rotations we will hear from the independent, FCP, Liberal, and PC members in attendance wishing to participate. If none are in attendance, this time will equally be rotated between the opposition and the government members and the third-party member, with the final few minutes designated for any outstanding questions to be read into the record and to consider other business.

We ask that officials at the table as well as those seated in the gallery provide their names before responding to questions. This is for the benefit of members who may be participating via teleconference, for those listening in online, and for the *Hansard* recording.

I will now open the floor to questions from the members. Mr. Panda.

Mr. Panda: Thank you, Chair, and thank you, all, for coming out today to meet with the committee. The committee will take full benefit of having representatives from the other agencies along with the deputy minister and ADMs. My questions will be directed to you. Because of the short time, I will try to be brief, and I expect you to give me yes or no answers, please.

The first one. I'm referring to page 105 of the report. On April 13, 2017, the Balancing Pool received a notice of investigation and request for information from the MSA. When was the first complaint filed that triggered this investigation?

Ms Volk: Doug, could you answer that?

Mr. Doll: The first complaint was in early 2016. I can't give you the exact date off the top of my head, but if you like, I can provide that at a later time.

Mr. Panda: Thank you.

When was the investigation concluded?

Mr. Doll: The investigation concluded with a settlement agreement filed in mid-August of this year with the AUC for approval of the AUC.

Mr. Panda: Thank you.

What were your major findings?

Mr. Doll: The major findings were that the MSA was satisfied that there was a contravention of the Balancing Pool regulation and section 85 of the Electric Utilities Act.

Mr. Panda: Was this case filed with the Alberta Utilities Commission?

Mr. Doll: The MSA and the Balancing Pool entered into a settlement agreement, and the settlement agreement is before the Alberta Utilities Commission. There's currently a proceeding under way on that.

Mr. Panda: When will it be heard?

Mr. Doll: It is currently in progress.

Mr. Panda: So when can we expect the ruling from the AUC?

Ms Volk: Bob, could you answer that one?

Mr. Heggie: Good morning, Mr. Panda. The process is open ended in the sense that there are objections to the settlement. Those objections need to be dealt with, and there are procedural things that need to be addressed. So I can't tell you specifically, Mr. Panda, when the decision will be issued.

Mr. Panda: There should be a range. When you say open ended, it could take 10 years. So 10 months?

Mr. Heggie: It's an independent process, and I'm not a party to that process. There's a panel, an adjudicative panel, of the commission that's charged with dealing with it, and it will be what it is in terms of the process.

Mr. Panda: Okay. Thank you.

The MSA has reached a settlement agreement with the Balancing Pool and directed it to change its behaviour but didn't actually include any findings of wrongdoing. That's my preliminary information. Doesn't this send a signal to the rest of the market that agreeing to disagree with the MSA is now okay; in other words, you

know, that Albertans expect the MSA to become a lapdog instead of a watchdog? Do you have any comments on that?

8:50

Mr. James: I think the responsibility of the MSA to investigate that and then to provide that advice in terms of the settlement agreement and the settlement process that would go between the Balancing Pool and the MSA doesn't negate the requirement for anybody in the market itself to conduct themselves in a fair and competitive way. I think the process that's in front of the Utilities Commission will confirm the results of the settlement agreement, or not, as Mr. Heggie indicated, in terms of their process.

Mr. Panda: Thank you.

Still on page 105, my question is to the Balancing Pool. You stand accused by the MSA of manipulating electricity prices below the market rate. Did the minister or any of her officials interfere in your independence and order you to sell electricity below the cost of generating it?

Mr. Chappell: To clarify, there was no finding of the Balancing Pool engaging in any conduct that manipulated prices below competitive market outcomes.

Mr. Panda: Are you, then, denying that the MSA accused you of manipulating electricity prices?

Mr. Chappell: That was not a finding in the settlement agreement.

Mr. Panda: Thank you.

If these actions continue, it will result in bankrupting major generators under your PPA agreement control. I mean, bankrupting generators is not a good thing. Does the government have any plan, if they go bankrupt, to nationalize them? Is there any plan like that?

Ms Volk: I'm not aware of any plan like that.

I'm sorry, Mr. Panda. Could I just ask: when you say "these actions," which activities are you referring to that would bankrupt the companies?

Mr. Panda: There are definitely findings. That's why I asked. But it seems that the process is on. We'll wait for the final report.

Ms Volk: Okay.

Mr. Panda: Yeah. On page 203 the NDP government has turned the Balancing Pool into the borrowing pool by pro-rating loans to cover its losses. Does the Balancing Pool try to minimize its losses from the market, or has it decided to operate at a loss and rely upon loans instead?

Mr. Chappell: The Balancing Pool does have a loan from the government, and we take every step possible to minimize the lending that we receive from the government. That's through a combination of the consumer allocation and through our operations in the market. To the extent that market prices aren't sufficient to cover the costs associated with the PPAs, we will incur a loss. But we don't have any control over market prices. Those are determined through competitive forces in the market.

Mr. Panda: Thank you.

On page 225 it says, "The Balancing Pool immediately assumed responsibility for all financial obligations associated with the terminated PPAs." That's not true. The Balancing Pool received the PPA termination notice in the first quarter of 2016, but the government interfered in the third quarter and took itself to court, further holding up the cancellation of PPAs and costing taxpayers

and ratepayers much more money. If you acted immediately to cancel the PPAs, why weren't they cancelled in the first quarter, immediately upon receipt of the notice?

Mr. Chappell: The Balancing Pool did receive the PPAs, and shortly after there was an action in the courts challenging the premise on which the PPAs had been returned to the Balancing Pool. The Balancing Pool board determined that it would be prudent to wait for that action to be resolved in the courts prior to moving forward with any PPA terminations. The reason for that is that a PPA termination is permanent and irreversible, and it has significant financial consequences and significant market repercussions. If the Balancing Pool had terminated these PPAs and the premise on which they'd been returned to the Balancing Pool in the first place was found to be invalid, there would be no way to put the egg back into the eggshell, so to speak. As such, acting on legal counsel, the Balancing Pool board determined that waiting was the prudent course of action.

The Chair: Thank you, sir.

Thank you, Mr. Panda.

I will move on to Dr. Turner.

Dr. Turner: Thank you, Mr. Chair, and thank you to the folks that are here today. It's actually two days short of six months since we last met with Energy, and I'm actually really impressed with what's happened in the in-between time.

Just carrying on a little bit from the previous discussion, as an electricity consumer and Albertan I'm very pleased with the protection against the price volatility that your actions have undertaken. I do want to ask some questions about what the deputy minister was referring to right at the end of her presentation, and that's nonelectricity issues, the partial upgrading program. On page 30 of the annual report you say that the government is planning to spend a billion dollars over eight years for new partial upgrading. Can you give us an update on where we are with that?

Ms Volk: Certainly. The application season for the partial upgrading program began on June 11, 2018, and it closed on September 4, 2018. Right now we're in the process of evaluating those applications. The evaluation process is under way. We expect to have some approved projects maybe announced late this year or early next year.

Dr. Turner: Fantastic. Was there a good uptake of the program?

Ms Volk: Yes, very good. We were pleased with the response to the program.

Dr. Turner: On page 32 you continue to talk about the partial upgrading program and the benefits. I think one of the benefits that I'm aware of is that partial upgrading may allow us to get the Trans Mountain expansion going, and there's also the oil to rail that we discussed in the May meeting. Partial upgrading will actually enhance our ability to ship oil both by rail and by pipeline. Are there other benefits of the partial upgrading that you can refer to?

Ms Volk: Yeah. Certainly. Partial upgrading is an innovative process. It reduces the thickness of the oil sands bitumen, allowing it to flow more easily through pipelines without adding diluents. With large-scale partial upgrading, we could move more oil, actually about 30 per cent of the diluted bitumen capacity, through existing pipelines and have access to refineries that right now can't take our bitumen product. So there are a couple of benefits. One is that by not having diluent, you increase the capacities of the pipes,

essentially, and the other is that you can access refineries that you wouldn't otherwise be able to because you have a different product. It's not a full 30 per cent on all pipelines – some pipelines already carry some synthetic crude oil and other products – but to the extent they're carrying bitumen, then that's a 30 per cent lift on that.

It will make Alberta's oil sands industry more competitive because of the reduced costs on diluent. It also increases the quality of our bitumen and, in turn, its value. This means we can get more for our bitumen and can ship it to more markets around the world. It can reduce the oil price differential, which currently costs Albertans billions of dollars every year, and building more partial upgrading facilities in Alberta will also create more jobs for Albertans. It will not limit future opportunities for full refining within Alberta. It's not a competitor to that; it's a complementary product.

Dr. Turner: Thank you.

There's a lot of activity in the Industrial Heartland that's going on related to this. I actually was in Bruderheim a few months ago, and I think Cenovus is planning to do a big partial upgrading program. I also understand that there's a Red Deer company that's building components. Do you anticipate that there are going to be these wide-ranging provincial benefits for suppliers and contractors all over the province?

Ms Volk: Yes, we do. The partial upgrading program has the potential to have these wide-ranging benefits for the province if it results in construction of successful, commercial-scale partial upgrading facilities over the next decade. Construction workers and a wide variety of skilled tradespeople will be needed to build the facility, and once it's built, it will need to be staffed with permanent workers, administrative staff, cleaning crew, and so forth. These are just examples of the direct workforce needed to build and sustain a facility like this.

9:00

The contractors hired to build the facility will need, in turn, to contract with engineering firms, land management companies, law firms, metal fabrication companies, transportation firms, and other professionals. These companies will then purchase goods and services from other businesses. When the facility is up and running, the maintenance company hired by the company will need to purchase goods and services from other businesses such as cleaning and plumbing supplies. These are all examples of the indirect workforce that contributes to sustaining the facility.

A key difference between the direct and indirect workforce is that those in the direct workforce would essentially be working for the company full-time, and those in the indirect workforce such as the owners of hardware or plumbing supply stores would sell goods and services to those in the direct workforce. When the company hires people to work at its facility, those people earn wages that are then spent on other things like entertainment, hospitality, food, and so on. So to the extent that the dollars earned by facility workers are recirculated into the provincial economy, these dollars help to support yet other jobs. In some cases entirely new businesses can spring up to serve new workers, all examples of the induced workforce that might be associated with a new world-scale facility.

Dr. Turner: Thank you very much.

Chair, I'll pass to MLA Renaud.

The Chair: Absolutely.

Please, Ms Renaud.

Ms Renaud: Thank you, and thank you all for being here. I'm going to switch gears a little bit and talk about or ask some questions about the renewable electricity program. On page 56 of the annual report you identify the successful bidders and projects from the renewable electricity program, round 1. Can you tell us about the status of the three successful bids from round 1?

Ms Volk: Certainly. Construction of the REP 1 projects is expected to start in late 2018 or early 2019, just following the AUC, Alberta Utilities Commission, approval. The projects are required to be in service by the end of 2019 or the generators could be subject to financial repercussions through their agreements with the Alberta Electric System Operator. For the Capital Power wind project, the AUC approval was granted in August 2018; for EDP Renewables Canada Ltd., Sharp Hills wind farm, the AUC granted approval in September 2018; and for Enel Green Power, the AUC is currently considering applications for the Riverview and Castle Rock Ridge wind projects.

Ms Renaud: Thank you.

Also on page 56 of the annual report you talk about the indigenous equity ownership requirement in the renewable electricity program, round 2. How is the ministry ensuring that Alberta's indigenous communities are able to benefit from development projects in electricity, and was the indigenous leadership involved in the development of the program?

Ms Volk: Yes. Round 2 includes a minimum 25 per cent indigenous equity ownership requirement, ensuring that our indigenous communities can engage in Alberta's climate leadership activities and benefit from renewable electricity projects. This component underscores our commitment to work with indigenous communities to increase economic activity. This round is only a first step in a long-term relationship to develop renewable energy with indigenous communities. Yes, round 2 was informed by our ongoing engagement with indigenous communities, engagement that continues as we move toward future REP rounds. We've worked with indigenous leadership at the engagement sessions, and we'll continue to work closely with them as the program develops and as it's implemented.

Ms Renaud: Thank you.

I'm going to switch to page 55 of the annual report. You talk about the renewable electricity program again. We've all heard that the first round of the renewable electricity program was record breaking in terms of low-cost renewable energy procurement. What were the key factors that brought this success to our first renewable energy auction?

Ms Volk: Well, indeed, we thought it was a great success. REP was designed by learning from the experience of other jurisdictions. That was a primary contributor to its success. The main learning was that competitions drive the best cost outcomes, so . . .

The Chair: Thank you.

Ms Renaud, would you like that response submitted in writing?

Ms Renaud: Sure. Thank you.

The Chair: Thank you.

Mr. Clark.

Mr. Clark: Thank you very much, Mr. Chair. I'm going to dive into the settlement agreement between the Market Surveillance Administrator and the Balancing Pool, and I'd just like to establish exactly what it is that the Balancing Pool has agreed, the rules that

they contravened. I'm reading the settlement agreement here. Paragraph 42 says: the Balancing Pool should have acted to stem its losses by terminating the unprofitable PPAs as soon as possible. Paragraph 43 says, in part: the Balancing Pool did not manage the generation assets comprised of the terminated PPAs in a commercial manner. What is the implication of that, Mr. Chappell? What is the implication of not managing generation assets of the terminated PPAs in a commercial manner?

Mr. Chappell: Well, as I said earlier, the Balancing Pool did not want to move forward with the termination of the PPAs given that the matter was being contested in the courts. We felt that was prudent and reasonable given the circumstances and given the severity of the decision. That said, we recognize the concerns that were raised by the MSA in their investigation, and we've agreed to report on our commercial activities in managing those PPAs on a go-forward basis to add clarity and transparency to the matter.

Mr. Clark: Can you provide us with a calculation of what the differential and cost to Albertans in all forms is, whether that be through borrowed money or impact on electricity bills for consumers, had you in fact acted in a commercial manner as the MSA found you should have?

Mr. Chappell: That's actually a very difficult question. When we conducted our PPA termination consultations with consumer groups, there were varied opinions about the impact of terminating the PPAs in terms of the costs to consumers. We had consumer groups who were supportive of the PPA terminations, we had consumer groups who advocated that the PPA terminations should not proceed, and we had consumer groups who took a more neutral position. So the impact on consumers depends on your assumptions about market circumstances and it depends on the timing. Presumably, the consumer groups varied in their opinions about the PPA terminations due to their specific circumstances.

Mr. Clark: But the MSA found that you acted inappropriately; you should have terminated them earlier. So can you not calculate what would have happened, regardless of the opinion of consumer groups, had you terminated in 2016, when the PPAs were returned, versus when you did in fact terminate in 2017-18?

Mr. Chappell: Well, again, it would be a very difficult exercise to proceed with. Just by way of background here, when the Balancing Pool terminates a PPA, the control of the underlying assets, the generation assets, reverts to the PPA owner. The PPA owner is then faced with a few choices. The PPA owner may choose to shut down the facilities. That in itself would have an impact on the market and market prices.

If the PPA owner decided to continue to run the plants, how they operated the plants in the market would have implications for power prices. To the extent that the choices of the PPA owner affected power prices in a positive way, as in an upward way, that would benefit the Balancing Pool's remaining position that it had in the market, which creates a very difficult interplay to figure out between the Balancing Pool's actions, the owner's actions, and market circumstances at the time.

This is why we had consumer groups that were arguing for the PPA terminations and against. Many consumer groups actually felt that they would be benefited if the PPA terminations did not proceed.

Mr. Clark: What I want to dig into is: how is it that the board of the Balancing Pool ultimately decided to pursue legal action versus simply terminating the PPAs when, at the end of the day, the MSA has found that the right thing to do would have been to terminate

those PPAs? Is it fair to say that there was some disagreement there? Are the same board members today that were board members then, that made that decision?

Mr. Chappell: One is.

Mr. Clark: And how many total board members?

Mr. Chappell: We have five total right now.

Mr. Clark: So four of those board members are no longer board members?

Mr. Chappell: No. Sorry. To clarify, one board member was sitting throughout the entire period that the PPA termination issue went on.

The Chair: Okay. Thank you, Mr. Clark.
We'll move on to Mr. Barnes.

Mr. Barnes: Thank you, Mr. Chair, and thanks to everyone for being here today and for your work for Albertans. Mr. Chappell, I'd like to follow up on those questions as well from my colleague Mr. Clark. Clearly, it's been reported that the losses to Alberta ratepayers may have been over a billion dollars, not terminating the PPAs on a more timely basis. Do you agree with that number?

Mr. Chappell: It's important to differentiate between losses to the Balancing Pool and the impact on consumers. Like I said, there's a very complex market dynamic that's involved in this, and that market dynamic affects the Balancing Pool's financial results. It also affects consumers directly through the cost of energy or electricity that they're purchasing. In terms of the cost to consumers, that's in our 2017 annual report, that is the direct impact through the Balancing Pool. That's through our consumer allocation. In 2017 that was \$1.10 per megawatt hour, which, if you assume about a 500 kilowatt hour consumption rate per month for a consumer, is about 55 cents a month.

9:10

Mr. Barnes: That's good for that. Thank you.

The Balancing Pool now: I've seen some reports that it's gone from a very positive net asset position to a liability position. What does the Balancing Pool owe today?

Mr. Chappell: Pardon me; I missed the last part of your question. What does the Balancing Pool . . .

Mr. Barnes: . . . owe in liabilities today?

Mr. Chappell: Oh, that can be found in our financial statements. Actually, in the Energy report, page 103, there is a line item, loans and borrowing. That's \$803 million, and that's what the Balancing Pool owes on its loans.

Mr. Barnes: Okay. How do you foresee those loans being paid back?

Mr. Chappell: Those will get repaid through a combination of the Balancing Pool's commercial activities in the market, to the extent it has earnings. To the extent that those earnings are not sufficient to repay the loan, the remainder will be repaid through the consumer allocation.

Mr. Barnes: Okay. The question remains: was the Balancing Pool in any way directed or influenced by the minister or the government?

Mr. Chappell: In what regard?

Mr. Barnes: To not act on terminating the PPAs and to wait for the results of the lawsuit.

Mr. Chappell: Well, maybe I'll just take a step back here. The Balancing Pool is an independent agency, and that independence is vital. That said, there is a legislative and regulatory framework that defines certain times when the Balancing Pool and government are required to interact. One of those times is in the event of a PPA termination. Section 97 of the Electric Utilities Act requires the Balancing Pool to consult with the minister before proceeding with a PPA termination. Those legally required interactions certainly did occur, but to the extent that there were directions provided outside of the legislative and regulatory framework that I just described, there was none.

Mr. Barnes: Okay. Thank you. I'm wondering: what are the revenue-generating activities of the Balancing Pool, and what are your projected annual net revenues?

Mr. Chappell: The commercial activities that the Balancing Pool undertakes are through a combination of efforts that are available to all market participants. This involves how we offer our units into the market. It involves transacting in foreign markets. It involves selling services like ancillary services, which is the sale of capacity into the market. The Balancing Pool looks at or engages in all of these activities and decides, when there is a business case for it, we would proceed.

In terms of earnings there is still expected to be a loss associated with the PPAs. Actually, on page 103 again of the Energy report, the power purchase arrangement liabilities represents the future expected losses associated with the power purchase arrangements. The losses associated with those arrangements primarily stem from the depressed power regime that we are currently operating in. Power prices are at record lows. Historically power prices had been at around the \$65 mark or so, but you'll see in our annual report that we've seen prices that have been in the sub \$20 level. It's just impossible to recover the costs associated with the generation facilities at those price levels.

Mr. Barnes: Okay. Thank you.

Switching gears a bit, page 55 of the Energy annual report talks about the addition of 5,000 megawatts of renewable electricity by 2030. Page 59 of the annual report talks about the transition to a capacity market from our energy-only market. My questions are for the AESO, Mr. Law, please. If the 5,000 megawatt target of renewables is not met, do we still need to switch to a capacity market?

Mr. Law: Mike Law from the AESO.

As the Independent System Operator our first priority is always to assess the long-term reliability of our system. From a number of years back, from as early as 2013, the organization started to assess the long-term sustainability of our energy-only market that we had in place. At that time, for a number of reasons, we determined that the energy-only market was at risk of not delivering the level of generation that was needed by the province due to provincial growth together with the natural phase-out of coal that would occur due to the end of life for a majority of the coal facilities during the 2020s. During that analysis we came to the conclusion and later recommended strongly to government in 2016 that a capacity market was required to ensure the long-term reliability of our province.

Mr. Barnes: Okay. Even if we, say, only make it halfway, 2,500 megawatts of renewables, do we still need the capacity market? Is it a decision to go to the capacity market in spite of how many megawatts of renewables may be added?

Mr. Law: The decision to move to a capacity market is ultimately predicated on a number of activities occurring. However, the shift away from coal together with the natural development of renewables that we're seeing within electricity markets around the world places stress on an energy-only market. Our analysis and our interactions and discussions with investors, developers, and the capital markets ultimately provided us with sufficient clarity to indicate that the future investment required would not be provided by an energy-only market. As such, we recommended a capacity market, and we would continue to recommend a capacity market for Alberta to ensure its long-term reliability.

Mr. Barnes: Mr. Law, do we need to be concerned about the stress on the taxpayer? I'm noticing with the regulated rate option and the institution of our rate cap that in April, August, September, and October 2018 we've gone past the 6.8 cents cap, where the taxpayers had to step in and subsidize the ratepayer. I believe the number the government had in their budget was between \$70 million and \$80 million for this fiscal year, and of course commercial ratepayers aren't protected at all. It's impossible to get an accurate number on how much business is being driven out of Alberta. Are we at all concerned about the effect of the capacity market on what the taxpayer will have to subsidize the ratepayer and what it's doing to our commercial market?

Ms Volk: David, why don't you take that question.

Mr. James: The RRO rate cap is in effect until May 2021. The capacity market is not due to come into effect until after that date. The RRO rate cap is about transitioning between where we are today and managing the stability and the volatility of the electricity market and the prices that people have seen historically over this transition period. It shouldn't have any impact from the capacity market into the RRO itself.

Mr. Barnes: Okay. Do you have any estimations? Do you have any way of tracking what rates will be after the capacity market is fully implemented and whether these policies will meet your targets and your goals?

Mr. James: EDC Associates is one of the forecasting groups that is out in the marketplace, and they'd looked at what happens after the transition to the capacity market. They and others have also indicated, as was the plan . . .

The Chair: Okay. Mr. Barnes, would you like his response to be in writing? Okay. Thank you, sir.

We'll move on to Ms Payne.

Ms Payne: Thank you. On page 56 of the annual report it identifies successful bidders and projects from REP 1. I'm curious why only wind projects were chosen for the successful projects in round 1 and if REP can work for other technology types, and how will the government ensure that they're getting a fair shake?

Ms Volk: In the REP programs all eligible projects are allowed to build, so we're not restricting them only to wind or any particular technology. Any renewable project is allowed to bid. The four winning projects won purely on the basis of being the lowest cost. The current rounds, REP 2 and 3, are again open to all forms of renewable technologies. They'll win if they're the most competitive

option. It's really about market dynamics, and nothing in our program design would favour or preclude any particular technology.

Ms Payne: Thank you. Again on the same program, what were some of the lessons learned from REP round 1 that were used in the development of rounds 2 and 3?

Ms Volk: Round 1 affirmed the importance, from the perspective of potential investors, of having clear process for the competition. A high level of competition was realized in round 1 by minimizing the barriers to participate in the initial phase of the process and then allowing only those determined to be at a sufficient stage of development to proceed to the bid submission. Having the competition conducted by a third party with an independent fairness adviser resulted in a rigorous procurement process that will be able to withstand any scrutiny. The success of REP 1 demonstrated the merits of the overall approach, and rounds 2 and 3 will build on that approach.

9:20

Ms Payne: Continuing along that same line, could you comment a little bit about how far along rounds 2 and 3 are and when we can expect to hear more about those programs?

Ms Volk: Certainly. The response to the request for qualification stage of REP 2 and 3 competitions was sufficient for the AESO to continue the process on to the request for proposal stage, which opened on September 17, 2018, and closed in late October. All stages of REP 1, 2, and 3 competitions have been and will continue to be overseen by a fairness adviser. The fairness adviser is an objective third-party observer engaged by the AESO to monitor. They report on how the process has been conducted from a transparency and fairness perspective. Project awards and decisions and announcements are anticipated by the end of 2018.

Ms Payne: Thank you.

Mr. Chair, I will turn the floor over to MLA Littlewood.

The Chair: Proceed, Mrs. Littlewood.

Mrs. Littlewood: Thank you, Chair. Thank you very much for coming in today. On pages 30 and 31 of your annual report it's discussing the new diversification programs that have come in under the petrochemical diversification program, and I was wondering if you could give us some details on how many jobs have been created so far and what we hope to see also in terms of both direct and indirect employment.

Ms Volk: In total, from PDP 2, PUP, and PFIP, if you don't mind me using those acronyms – they're very long names of programs otherwise – we expect more than \$10 billion in private investment, over 8,000 direct and indirect jobs during construction, and 400 new full-time jobs in operation, all in Alberta. For PDP 2 we expect to see similar results as the first round of the program, depending on the applications from industry. Under PDP 1 the government announced approvals for two projects that, if they both proceed, will result in over \$6 billion in capital investment, over 4,000 construction jobs, and more than 200 full-time jobs when operating. For partial upgrading, we estimate the program will attract \$5 billion in private investment and 4,000 jobs during construction and 200 jobs during operation. For the feedstock program, it will really depend on the types of applications that are received because there are many different ways to extract natural gas liquids. Some are large scale, and some are small scale.

Both the PDP and the feedstock program will ultimately support more jobs and investment throughout the entire energy value chain while adding more value to our resources here in Alberta. There are also significant impacts to local taxes received through increased property taxes where these plants are located in addition to the payroll and corporate taxes received by all three levels of government.

Mrs. Littlewood: Thank you very much.

Of course, part of the very important work is the contracting and supplying of goods during the project. Would you be able to give us some details on what those benefits are to Alberta businesses and workers that are directly employed by the project?

Ms Volk: Investments in downstream petrochemical projects can have positive direct, indirect, and induced benefits to the workforce. Fabrication shops hundreds of kilometres away can be involved in building components used in a project. A plant can be built in Strathcona county but provide benefits to workers and business owners as far away as Red Deer or Grande Prairie or Balzac. Construction workers and a wide variety of skilled tradespeople will be needed to build the petrochemical facility, and once it's built, it will need to be staffed with permanent workers, administrative staff, a cleaning crew, and so forth, all examples of the direct workforce needed to build and sustain the facility.

Mrs. Littlewood: Okay. Thank you very much. Going forward, when these projects come up and running, what are you going to be doing to ensure that you're measuring the impact of these projects? How will you be measuring how this continues to diversify our energy and oil and gas industry and measure the benefits for Alberta?

Ms Volk: Diversification in our energy industry can be measured in a number of ways; first, by assessing diversity in industrial structure. PDP 1 is resulting in a new propane-based value chain, a first in Canada. New multibillion-dollar facilities are being built to convert propane to propylene and then polypropylene. It's hoped that PDP 2 will result in the expansion of our ethane-based petrochemicals and ethylene derivative sectors. We can also assess the diversity of markets that our products reach. Our polypropylene will be shipped globally. It's hoped that PDP 2 will result in new types of downstream derivative facilities that could reach new markets with new products.

Thirdly, we'll look at the range of commodities produced by existing industries, and lastly we can assess the degree of processing of raw materials in the region. Alberta has traditionally been an exporter of raw hydrocarbon resource to the United States and Canada. The new program should result in an increase in the amount of raw materials that are processed to high-value products in Alberta. These programs create value and jobs in Alberta, which will benefit all of the province.

Mrs. Littlewood: Thank you.

How much time do I have left, Chair?

The Chair: A minute and 30 seconds.

Mrs. Littlewood: Would you be able to give a bit more information on how these projects would be potentially affected by the trading price of oil?

Ms Volk: Sure. Like oil and gas wells or oil sands projects, the changes in markets have a substantial impact on the viability of these diversification projects, but the relationship between the oil

and gas price and projects for higher value products is more complex than just for straight extraction projects. Upgrading, refining, and petrochemical-producing projects depend primarily on the price difference between the end products and their feedstocks. In general both prices are set by global markets.

In some cases a low oil or gas price can be a substantial benefit to a diversification project if the market outlook for the final product is still relatively strong. In other cases such as upgrading the difference between light oil and heavy oil has not remained large enough for full upgraders to be competitive. This requires investing capital in operating costs to create a light oil product that will compete in U.S. markets against U.S. light oil from shale and other horizontal, multistage fracture wells. That's why we've seen Upgrader Alley go from a large number of projects to basically none.

Partial upgrading economics are less sensitive to the price of oil. The objective of partial upgrading is to reduce the amount of diluent used to ship our bitumen to the U.S., thus freeing up additional pipeline capacity while saving diluent handling costs. More effective transportation and handling will result in less GHG emissions on a well-to-wheel basis for Alberta crudes.

Mrs. Littlewood: Thank you.

The Chair: Thank you, Mrs. Littlewood.

Mr. Clark.

Mr. Clark: Thank you very much. I'm going to pick up where I left off with Mr. Chappell. I won't expect you to comment on what I'm going to say here, but I have to say that there's some pretty odd behaviour. I won't expect you to comment on why we've had multiple board resignations from the Balancing Pool, but it really is pretty remarkable behaviour for what is supposed to be an independent body of the government of Alberta.

If I can break this down in a way that – it's a very complex issue, and I've got to say that this complexity seems to be used to mask what sure appear to be some real problems. In a simple sense, PPAs were handed back to the Balancing Pool as a result of government policy choices which rendered them more unprofitable. The Balancing Pool accepted that first PPA back, which tells me that the Balancing Pool knew at the time that that was the right thing to do, but the government of Alberta sues, which causes a two-year delay, hundreds of millions of dollars in losses, taking what was a positive \$700 million in the bank for the Balancing Pool to a negative \$800 million and probably counting, based on my understanding of the financial statements going forward.

Then one government agency investigates another government agency and finds what we think we knew all along, that it was in fact behaving in a noncommercial manner to push back and sue instead of just accepting back the PPAs. All I can conclude is that there must have been a tremendous amount of pressure to do that. I mean, the people in the Balancing Pool are a rare breed of people who are experts in a very, very specialized field, so it seems to be very odd behaviour.

When I come back to the settlement agreement between the MSA and the Balancing Pool, I look at paragraph 67, and it says: the circumstances that arose here were unprecedented and unexpected. I just have to ask Mr. Chappell: was there political pressure from anyone anywhere in the government of Alberta for you to behave the way you did?

Mr. Chappell: That's a great question, actually. By way of background, again, it's important to differentiate where interaction with government is required and where it's not. There are a number of legislative and regulatory pieces that require the Balancing Pool to interact with government. For example, under the Alberta Public

Agencies Governance Act the Balancing Pool as a government agency is required to share information with government. Under section 97 of the Electric Utilities Act the Balancing Pool is required to consult with the minister before proceeding with a PPA termination. This framework exists, and the Balancing Pool did fulfill its legal obligations to have those interactions with government.

9:30

Outside of those interactions, though, there was no pressure from government or no direction from government to delay the process. The Balancing Pool took into account that there was an action in front of the courts that contested the very premise on which these PPAs had been returned to the Balancing Pool and, based on legal advice received, felt that it would be most prudent to not move forward with these permanent and irreversible PPA terminations until that matter had been settled.

Mr. Clark: But, with respect, that's been proven to be demonstrably incorrect to tremendous cost. The people of Alberta, ultimately, are now on the hook for the money that's been borrowed. Do you acknowledge that was a mistake, then, to go down this path?

Mr. Chappell: Well, like I said, that was a decision that was made at the time with the information that was available. I do believe it was a prudent and responsible decision. But that said, the Balancing Pool acknowledges the concerns that were raised by the MSA in its investigation, and we've agreed to the reporting requirements going forward to add more transparency and clarity to the matter.

Mr. Clark: Do you have the independence you need to do your job in the Balancing Pool?

Mr. Chappell: Yes, we do.

Mr. Clark: Is the system set up in an optimal way? I mean, we have these groups that are arm's length to some degree. It seems the MSA has total independence, but the Balancing Pool has this odd legislative touchpoint, I guess, with government, which seems to open a pretty big avenue for the risk of political interference. Is the system designed optimally?

The Chair: Thank you, sir.

Would you mind responding to that in writing?

Mr. Chappell: Certainly.

The Chair: Thank you, sir.

We'll move on to Mr. Panda.

Mr. Panda: Thank you. I'm also really concerned about that \$803 million that you borrowed. A Balancing Pool representative said that you're going to use all other funds, and you said that if there's nothing left, you will allocate. I don't know who you're going to allocate to if consumers are capped at 6.8 cents, as ratepayers are not going to pay anything more than that. So that means that taxpayers are going to pay. Anyway, you don't have to comment on that because I'm short of time.

My question to the system operator is: after the PPAs expire, do we still need the Balancing Pool?

Mr. Law: I think that the Balancing Pool still has lingering financial obligations that it will need to undertake going forward, but I would defer to the government and the Balancing Pool on that one.

Mr. Panda: Okay. Thank you.

Does the Balancing Pool intend to try to transfer control or sell the remaining power purchase agreements, or will you keep holding them and continue to dispatch all of the PPAs under control through to the end of the accounts?

Mr. Chappell: That's an excellent question. The Balancing Pool continuously monitors market conditions to see if it can fulfill its mandate to sell generation capacity when such a sale would result in a competitive process that has the Balancing Pool receiving fair market value for that capacity. Our most recent market soundings that we've conducted have indicated that there is little to no appetite for the coal capacity that we have. We do not believe that selling that capacity at this time, based on that information, would result in the Balancing Pool getting a fair price for that generation.

Mr. Panda: Chair, Mr. Hunter will ask the next question.

The Chair: Please proceed, Mr. Hunter.

Mr. Hunter: Page 4 talks about the electricity price cap under the regulated rate option. The government prides itself on the capping of the rate at 6.8 cents per kilowatt hour. The rural electrification associations are not happy that they do not get to enjoy the full cap and pass those prices on to consumers. To the deputy minister: does this create a fair and competitive marketplace?

Ms Volk: I'd like to refer that to David if you don't mind.

Mr. James: The REAs themselves do have access to the full and complete cap. Government's action in the regulation when they set it up was that there was a reference rate that was established. That reference rate that was established took the average rate from all of the RRO providers, and then they added 10 per cent to that, recognizing the conditions of the REAs as well as municipalities and various boards. That reference rate then established, frankly, a higher rate under which those particular REAs would have the opportunity to recover costs above that 6.8 cent cap. So they could go to a higher level above that threshold and recover those rates in that particular space.

Mr. Hunter: Okay. I'm just going to ask about page 55, coal transition. If a change in government is to occur in 2019, resulting in a change in policy to allow Keephills 3 and Genesee 3, Alberta's newest and most efficient coal-fired power plants, to keep burning coal past 2029, to the AESO: what would the government have to do to allow that to happen?

Mr. Law: I believe that that's a government policy question.

Mr. James: The contracts that are established at this point in time with those particular companies establish their obligation to cease coal-fired emissions by 2030. If the government of the day were to change that, that would be a decision by the ministers in the government, and I'm not sure I could speculate on how they would go about doing that.

Mr. Hunter: Okay. Page 61 of the annual report talks about the federal government initiative to study and maybe even build interties across the four western provinces and the Northwest Territories. Now, being responsible for the operation of the existing interties, could the AESO explain: when electricity flows from Montana to Alberta, how often is that electricity from coal?

Mr. Law: Electricity flows that occur on interties are managed by the Alberta Electric System Operator, but we do not have ownership

of or have any insight into the origin of those original flows. So we do not track the source of those power flows, whether they are from renewables or from coal.

The Chair: Thank you, Mr. Hunter.
Ms Miller.

Ms Miller: Thank you, Chair. On page 59 of the annual report you talk about transitioning to a capacity market system. Can you remind us what the original objectives were for this transition, and are we seeing those objectives achieved in implementation?

Ms Volk: Certainly. Alberta announced in November 2016 that it would transition to a capacity market, to be operational in 2021, for several reasons: to protect consumers from volatile price swings; to ensure Albertans continue to have a stable, reliable electricity supply; to provide the price stability and revenue certainty needed to attract private investment; and to support Alberta's transition from coal generation to renewable energy.

Government remains confident that the transition to a capacity market will achieve these objectives. An Act to Secure Alberta's Electricity Future established the capacity market; clarified the duties, expectations, and responsibilities of electricity agencies; and enhanced public interest oversight in a way that will ensure the new framework delivers desired outcomes.

Alberta Energy held robust consultations to ensure that capacity market regulatory changes also support the stated objectives and are monitoring as the AESO develops rules to implement the technical aspects of the market. Early indications are that the market will achieve its intended objectives once fully implemented.

Our department and the electricity agencies have worked with stakeholders in an open and transparent way throughout the policy and technical design process and have received a significant amount of direct feedback from the industry, consumer groups, and other organizations.

The AUC has also retained Dr. Peter Cramton, an independent markets expert, to review the capacity market technical design being led by the AESO. He has made two public reports on the market technical design and has validated the fundamental aspects of the AESO's comprehensive market design. In addition, Department of Energy staff are monitoring the implementation process to ensure the market is on track to meet its objectives.

Ms Miller: Thank you.

On the same topic, what has the department done to ensure a smooth transition to a capacity market, and what will the cost be to taxpayers? And did you consider the cost to consumers for this transition?

Ms Volk: The reason we're moving to a capacity market is to ensure Albertans continue to have safe, reliable, sustainable, and affordable electricity but without the price volatility of the energy-only market. Consumers have always paid for capacity, but previously that cost was included in their electricity charge. Now the charges for electricity and capacity are being separated.

Government carefully considered the different ways capacity costs could be allocated to consumers. We discussed this issue extensively with stakeholders so we could understand their views. We've chosen a capacity cost allocation approach that creates a clear price signal for consumers and provides an incentive to reduce consumption during high-demand periods. It also reflects the unique mix of Alberta's electricity users and when they use electricity. It will ensure that both small and large consumers pay a fair amount of capacity costs. This approach reduces the opportunity for some consumers to easily shift their share of

capacity costs to other consumers while providing no reduction in the need for capacity. So, all in, they shouldn't pay any more for the service, just pay it differently.

9:40

Ms Miller: Thank you.

I'm going to pass the remaining time on to MLA Nielsen.

The Chair: You have a minute and a half.

Mr. Nielsen: Well, thank you, Mr. Chair. I hope you guys don't mind if I just shift gears here a little bit and go down the topic of liability management and the Orphan Well Association. If I can maybe direct your attention towards page 44 of the annual report, you reported on a loan to the Orphan Well Association. I'm just wondering: how many sites have been cleaned up or reclaimed from this loan? I'm just wondering also how Albertans can track the funding issued at a number of sites undergoing cleanup right now, and maybe if you could allude to how you are making any decisions last fiscal period on setting up cleanup targets and timelines around those.

Ms Volk: Sure. As of August 15, 2018, 110 well abandonments and reclamation of 48 sites have been completed as a result of the orphan well loan program. Additional preparatory work, including 4,824 inspections, well access construction operations, and 35 phase 2 environmental site assessments, has also been completed and will set the groundwork for increasing numbers of abandonment, remediation, and reclamation projects in the future. The OWA estimates that the orphan well loan program will be used in the next three years to decommission 1,700 wells and 1,500 pipelines as well as reclaim 1,200 sites.

The Chair: Thank you.

Do you want the rest of her answer in writing?

Mr. Nielsen: Sure. That would be great, Mr. Chair.

The Chair: Okay. Thank you.

Dr. Swann. You have three minutes, sir.

Dr. Swann: Thanks very much. The Auditor reported in 2015 that they recommended that the Alberta Energy Regulator "develop and execute on a risk-based plan for its Mine Financial Security Program monitoring activities to ensure it is carrying out the appropriate amount of verification." Revelations this week from a courageous vice-president of Alberta Energy Regulator estimated the liability at over \$250 billion for cleanup costs for oil and gas activities, five times the amount that has previously been reported by your department. What are you doing to restore confidence in our failed risk assessment system?

Ms Volk: I think the answer to that question is – well, it's probably best directed to the AER, and we don't have anyone from the AER with us today. I apologize for that. The AER has come out publicly since the release of the statement, and they've been quite clear that that reference was to an absolute worst-case scenario where everything sort of dissolves today – companies, just everybody walks away en masse today – and that's what we would be left with. It's a highly unlikely scenario. You know, they were very quick to defend their original estimates and explain the difference between the somewhat different estimate that was provided in the speaking notes.

Dr. Swann: Well, that contradicts what the gentleman said about that being probably a low estimate, but we'll probably have to deal with that over the coming weeks.

The licensee liability rating system on abandoned oil wells is also clearly a failure and puts both investors and public at risk. What should replace the licensee liability rating system to protect both investors and the public going forward?

Ms Volk: We have some work going on under liability management review, so there are options under consideration, and there have been a series of consultations that have taken place. It's a difficult time for us to feed out from that process because it's still under consideration in the government, so it's not something I can speak publicly to today.

Dr. Swann: One consultant has indicated that roughly 85 per cent of all wells in Alberta are marginal producers. We're talking about tens of thousands of potential abandonments in the coming years. How are we going to deal with that with the Orphan Well Association, that is so strapped for cash?

Ms Volk: I'm wondering if one of my colleagues would be better placed to answer this. Where's Mike? Mike, would you mind?

While he's coming to the table, I'll introduce Mike Ekelund, my assistant deputy minister of resource revenue and operations and a lot of experience in the department.

Mr. Ekelund: Thank you very much. I think the key thing to understand is that there are the obligations on the producers to do the appropriate abandonment and reclamation. Not all of the wells that are currently suspended or operating or the ones that are producing . . .

The Chair: I apologize, sir. Can you follow up in writing, please? Thank you.

We will go to three minutes for questions read into the record. Mr. Barnes.

Mr. Barnes: Thank you, Mr. Chair. I've talked to many stakeholders, commercial users in particular, that are looking at the total cost of their full electricity bills and are looking at self-generating as an option. Has your department done any studies as to how many commercial users may be looking at going to self-generating and what this impact will be on other ratepayers?

The Chair: Thank you, Mr. Barnes.

Mr. Carson.

Mr. Carson: Thank you. On page 58 of the annual report you talk about your efforts to protect consumers from electricity price spikes. The regulated rate option cap has been in place for over a year now, and I'm hoping you can share if you found that the program has been valuable to Albertans.

The Chair: Thank you, Mr. Carson.

Mr. Clark.

Mr. Clark: Thank you, Mr. Chair. I'd like to ask Mr. Chappell or anyone at the table, please, to table any advice provided by the Balancing Pool to the government of Alberta regarding article 4.3(j) of the PPAs and/or the subject of PPA terminations as a whole in the period between the time the specified gas emitters regulation was increased in June 2015 and the commencement of legal action by the Attorney General of Alberta on July 25, 2016.

The Chair: Thank you, Mr. Clark.

Mr. Panda: Currently wind projects selected under the renewable electricity program will not be participating in the capacity market. Will the existing merchant wind be able to bid the capacity market?

The Chair: Thank you.
Dr. Turner, please.

Dr. Turner: Thank you. Do we have a sense of where orphan well reclamation has been taking place and which communities have seen activity over the years? These decisions were made by the Orphan Well Association and not by government. Do we have a sense of how many service companies have facilities in the province, and what's the status of their work?

The Chair: Thank you, sir.
Mr. Clark.

Mr. Clark: Thank you. I'd ask, please, to table any advice by the Balancing Pool to the government of Alberta between the date of the commencement of legal action on July 25, 2016, and the conclusion of legal action on or before December 31, 2017.

The Chair: Thank you, Mr. Clark.

Mr. Hunter: How much coal-fired electricity did Alberta import last year from Montana sources?

The Chair: Thank you, Mr. Hunter.
Is there anybody from the government?

Mr. Carson: On page 31 of the annual report you report on the government's petrochemical feedstock infrastructure program. I'm hoping that you could share with us the status of that program.

The Chair: Thank you, Mr. Carson.

Mr. Clark: What is the cost difference between what would have happened had PPAs been cancelled in 2016 versus the actual cancellation date in 2018?

The Chair: Thank you, Mr. Clark.
Mr. Gotfried, final question.

Mr. Gotfried: Has the Balancing Pool bid the provision of electricity below cost of recovery of the generating assets?

The Chair: Thank you, sir.

I would like to thank the department and the agencies who attended today for responding to the members' questions. I would ask that any responses to the outstanding questions from today's meeting be provided in writing and forwarded to the committee clerk within 30 days.

Let's move on to other business. Are there any items for discussion under other business?

Okay. Moving on, the committee meets next on Tuesday, November 20, with the Ministry of Health and Alberta Health Services. The committee meeting is scheduled from 8:30 a.m. to 10 a.m., and the committee's premeeting briefing will begin at 8 a.m.

Would a member like to move to adjourn this meeting?

Mr. Nielsen: So moved.

The Chair: Mr. Nielsen. All in favour? Any opposed? That is carried.

Thank you very much.

[The committee adjourned at 9:49 a.m.]

