

# STANDING COMMITTEE ON CROWN AND CENTRAL AGENCIES

Hansard Verbatim Report

No. 13 – December 13, 2016



**Twenty-Eighth Legislature** 

## STANDING COMMITTEE ON CROWN AND CENTRAL AGENCIES

Ms. Colleen Young, Chair Lloydminster

Ms. Carla Beck, Deputy Chair Regina Lakeview

> Mr. Fred Bradshaw Carrot River Valley

Mr. Terry Dennis Canora-Pelly

Mr. Warren Kaeding Melville-Saltcoats

Mr. Hugh Nerlien Kelvington-Wadena

Mr. Kevin Phillips Melfort

#### STANDING COMMITTEE ON CROWN AND CENTRAL AGENCIES December 13, 2016

[The committee met at 08:31.]

**The Chair**: — Good morning, and welcome everyone to our Crown and Central Agencies committee meeting. I'm Colleen Young. I will be acting as your Chair today. We have with us on the committee here as well, Carla Beck as Deputy Chair and committee members Fred Bradshaw, Warren Kaeding, Terry Dennis, Kevin Phillips, and Hugh Nerlien.

This morning we will be beginning by tabling the following document: CCA 35-28, Crown Investments Corporation of Saskatchewan: Composition of CIC subsidiary Crown Corporation boards. I would like to advise the committee that pursuant to rule 145(3), chapters 19 and 50 of the Provincial Auditor of Saskatchewan 2016 report volume 2 were committed to this committee.

And I welcome with us this morning our Provincial Auditor, Judy Ferguson. And I will begin by allowing her to introduce her staff that is with her here today and begin with her comments.

## SaskEnergy Inc.

**Ms. Ferguson**: — Thank you very much, Madam Chair, Deputy Chair, members, Minister, and officials. I've got with me, on my left-hand side is Ms. Tara Clemett. Tara is our deputy in our office whose responsibilities include SaskEnergy. Behind her is Ms. Kim Lowe. Kim is our committee liaison.

So this morning we're talking about the 2015 report volume 1, chapter 30. It's securing SCADA [supervisory control and data acquisition] system follow-up. Ms. Clemett's going to do the presentation. There is no new recommendations in that chapter.

Before we start our presentation I just want to pause and thank the government officials for their support during this, and in particular recognize the president in terms of his service and the co-operation with our office that we've received pre your retirement and wish you well in your retirement.

Without further ado, I'm going to turn it over to Ms. Clemett.

**Ms. Clemett:** — So chapter 30 of our 2015 report volume 1, starting on page 285, reports the results of our follow-up of seven recommendations we initially made in our 2013 audit on SaskEnergy's processes to secure its SCADA system.

We are pleased to report that by March 2015, SaskEnergy had implemented five of the seven recommendations. It completed a threat and risk assessment, created and updated its security policies based on its threat and risk assessment, improved restriction of physical access to its facilities and access controls to its SCADA system, developed and tested its business continuity plan annually. It tested and updated its plan in 2013 and 2014.

As of March 2015 SaskEnergy still needed to do more work to securely configure and monitor security of its SCADA system to cover off the remaining two recommendations. Effective security configuration and timely review of security logs can prevent and detect potential cyber attacks. We plan to follow up on the status of these two outstanding recommendations in 2017. That concludes my presentation.

**The Chair**: — Thank you. I'll now turn it over to Minister Duncan of Economy and Crowns and let him introduce his official and make any opening comments he wishes.

**Hon. Mr. Duncan**: — Thank you very much, Madam Chair. Good morning, committee members, and thank you for inviting us to appear before the committee. I also want to thank Ms. Judy Ferguson and her officials from the Office of the Provincial Auditor for joining us this morning to follow up on recommendations for the supervisory control and data acquisition, otherwise known as SCADA.

I'd first like to take a moment to introduce SaskEnergy officials here with me today. To my right is Mr. Doug Kelln, president and chief executive officer. On my left is Ms. Christine Short, vice president of finance and chief financial officer; and behind us is Ms. Jill Schmeltzer, manager of SCADA for SaskEnergy and TransGas.

In 2013 the Provincial Auditor made seven recommendations to improve security processes to protect SCADA against risks. SaskEnergy took these recommendations made by the auditor very seriously and worked towards implementing them as quickly as possible in a diligent and methodical way. By March 2015, as the Provincial Auditor's office has noted, SaskEnergy has implemented five of the seven recommendations with two continuing to be in progress or partially implemented.

I'm pleased to advise the Office of the Provincial Auditor and the committee that these two outstanding recommendations have now been fully implemented. With respect to the auditor's recommendation that SaskEnergy configure the SCADA system to protect it from security threats, SaskEnergy has completed the installation and configuration of the required servers and firewalls as of November 2016 to meet the specifics of the recommendation. Although these upgrades are now complete, SaskEnergy is moving forward on other enhancements to its SCADA system to protect against future threats.

The other outstanding recommendation, to monitor the SCADA security system, SaskEnergy has again implemented and met all specifics with the recommendation as of December 2015. TransGas's SCADA system was integrated with the corporate security information event management system, which is monitored 24 hours a day, seven days a week by a third party security service provider.

On behalf of SaskEnergy, I thank the Office of the Provincial Auditor for their careful consideration of our system and recommendations to improve security. Thank you.

**The Chair**: — Thank you, Minister. Are there any questions from committee members? Ms. Beck.

**Ms. Beck**: — Thank you, Madam Chair. Thank you to everyone here and officials, Minister. I guess the first question that I have — and thank you for the update, Minister Duncan — is around the recommendation that SaskEnergy incorporate or configure its supervisory control and data acquisition system

network to protect from security threats. And I just want to be sure that I heard you correctly. So that was completed in November of 2016? Is that correct?

## Hon. Mr. Duncan: — That's correct.

**Ms. Beck**: — Okay. So at the time that this chapter was published, it was expected that that work would be done in 2015. I guess my question is twofold. First of all, what accounted for the delay? And second question would be, what were the steps that were taken to fully implement that recommendation?

**Mr. Kelln**: — Well as the minister noted, it was a methodical process. It very much interacts with everything we do, so it was carefully doing it so we are building for the future. So it took a little longer, but we think it got us to a better place. That would be the first part of it.

You know, in terms of the specifics, we've layered on an additive effect of ensuring, for example, that we have the firewalls in place throughout the province, which was really critical. We've added a network access control, which provides some robustness to that, and then we've added an authentication, authorization, and accounting server, which really distinguishes between the different parties using it, and that's really enabled us to get to a very good place. And we appreciate the recommendations of the Provincial Auditor.

**Ms. Beck**: — So the authentication process is just so you have a better understanding who's accessing the system and better able to identify who is accessing the system?

**Mr. Kelln**: — Absolutely. You have a number of different users; you want to distinguish them so that you have a very good control relative to that system. And at the same time you want the ability for that system to be accessed because you have different people looking at it in different ways. So this morning we'll have someone operating the system, but out throughout the province in the 50 different locations they have specific tasks relative to compressors running, relative to valves that are turning so that the gas gets to Regina and Saskatoon and different places.

**Ms. Beck**: — Okay, thank you. And just so I'm clear, so the delay was ... more had to do with creating a more robust system? Is that correct, or were there some unexpected delays in that?

**Mr. Kelln**: — And ensuring that when we do it, we're not creating unintended consequences. We have to be very methodical about it because every change you make affects a number of different parties.

**Ms. Beck**: — Okay, thank you. And I guess my second question would be just in terms of allowing you to expand a little bit upon the second recommendation that SaskEnergy Incorporated monitor the security of its supervisory control and data acquisition system. You'd noted that that was completed in 2015, and I'm just wondering if you could expand on some of the steps that were taken subsequent to this audit report.

Mr. Kelln: — Okay. Well it's built off ... We actually went

through a SCADA system upgrade in 2015, which was very helpful because it provided some of the functionality related to it. So that's the first thing we did. And then we introduced and fully implemented ... At the time that the auditor was previously looking at it, we were just in the process of that, of introducing an application called Industrial Defender, which really is a security monitoring tool that provides inventory of all the software and configurations in the SCADA centre and looks at it on a continuous basis. So if somebody's changing something, we need to know about that. So simply put, that was taken care of.

And then the key was the element the minister talked about that we then integrated SCADA within the overall corporate security information environment system, or SIEM [security information and event management], and that then got us into a continuous monitoring 24 hours a day, 7 days a week, provided the training to our employees relative to that, and really put us in a good spot relative to the recommendation.

**Ms. Beck**: — So the follow-up to that would be, so subsequent to these changes there was a regime or a system of training and education of users of the system as well, employees and other users of the system.

**Mr. Kelln**: — Yes, certainly there was. And it's very dependent on if you're in the monitoring of the security side or if you're just trying to use it to operate. So we certainly provided that as well.

Ms. Beck: — Thank you.

**The Chair**: — Are there any further questions from committee members? None noted. The 2015 report volume 1, chapter 30 has no new recommendations for the committee to consider today, so I will ask a member to move that we conclude consideration of this chapter.

Mr. Phillips: — I will so move.

**The Chair**: — Mr. Phillips has moved that we conclude consideration of the 2015 report volume 1, chapter 30. Is that agreed?

Some Hon. Members: — Agreed.

**The Chair**: — Carried. That concludes our time with the Provincial Auditor this morning. I want to thank her and her officials for their time, and I guess we'll see you again later this afternoon, folks.

Ms. Beck: — Thank you.

**The Chair**: — We'll just take a few minutes to allow them to leave. All right, now we will begin by considering the annual reports and financial statements of SaskEnergy and its subsidiaries. This includes 2012, 2013, 2014, and 2015 SaskEnergy annual reports; the 2012, 2013, 2014, and 2015-16 SaskEnergy Inc. and subsidiaries financial statements. Minister Duncan, if you would like to begin with some comments.

Hon. Mr. Duncan: — Sure. Thank you very much, Madam Chair, and again to committee members. We're pleased to be

here to have the opportunity to discuss SaskEnergy's 2012, 2013, 2014, and 2015-16 annual reports. I do have some brief overview remarks, and then we'll be pleased to answer questions on these annual reports spanning four years of major progress across the corporation, record levels of growth, and strong operational and financial outcomes.

In 2012 SaskEnergy connected nearly 7,400 new customers, the highest annual number since the 1980s. This growing customer base contributed to a \$73 million net income from operations. The corporation delivered system integrity commitments with a \$79 million investment and completed thousands of service upgrades in Saskatchewan communities. This service upgrade program is still ongoing with very successful safety results. Integrity programs offered an expanded pipeline leak survey program as SaskEnergy focused efforts on alignment with industry best practice.

#### [08:45]

Significant investment was made by TransGas to connect commercial customers in key Saskatchewan industries, including potash mining, enhanced oil recovery, and power production.

Transmission volumes saw major growth with an increased demand of 10 petajoules in 2012 alone. With this high level of growth and productivity, SaskEnergy realized \$5.6 million in efficiencies through process changes and new technology.

2013 was a record year of growth with nearly 7,700 new distribution customers, and delivered high volumes of natural gas demand. SaskEnergy continues to spend in safety areas with an increase budget of 94 million. 2013 delivered a first step toward a five-year, \$1 billion investment by the corporation to upgrade its infrastructure system, which included projects related to customer growth and building on capacity to import additional natural gas supply from Alberta.

With Saskatchewan's customer base expanding in colder than average weather in 2013, SaskEnergy saw strong financial results with \$79 million in income before unrealized market value adjustments.

Major technology program improvements were rolled out with the customer information system and advanced metering infrastructure project. Another 5.5 million in efficiencies was realized in 2013 through third party transport reduction costs and other cost-saving measures.

In 2014 the corporation's customer base continued to grow at an unprecedented rate with over 7,300 new customers and a larger safety investment of \$101 million. Saskatchewan residents endured extreme weather with one of the coldest winters in over 30 years, resulting a high demand for natural gas that heating season. Further weather extremes led to flooding in summer of 2014, requiring emergency response by our local technicians within several overflowing communities and impacting thousands of residents.

The high rainfall levels accelerated ground shifting in certain communities, including the Last Mountain Lake region where immediate and significant effort was needed to respond to a serious Regina Beach incident in December of 2014. SaskEnergy and TransGas employees demonstrated their commitment to safe and reliable service delivery throughout these conditions.

SaskEnergy also launched a new safety patrol program in collaboration with other Crowns and the Saskatchewan Common Ground Alliance. Safety patrols continues to operate during the construction season with a proactive and grassroots approach.

TransGas completed a 132-kilometre Bayhurst to Rosetown pipeline project which expanded our capacity to deliver natural gas from Alberta. SaskEnergy effectively managed its costs, achieving \$4.6 million in efficiencies in 2014 through process improvements.

SaskEnergy again experienced excellent results in 2015-16, with strong customer growth and increased industrial demand, plus enhanced safety initiatives that align with industry best practices. Financial highlights include \$135 million in income before market value adjustments for a 15-month period that ended March 31st, 2016. A continued focus on efficiencies generated another 5.9 million in cost reduction savings, allowing SaskEnergy customers to benefit from competitive rates while maintaining a high level of service.

System integrity was again a key focus, with 107.5 million dedicated to programs and processes for increased safety. This involved system remediation work continuing in the Last Mountain Lake region, where geotechnical conditions have created challenges for buried infrastructure, including natural gas pipelines.

In 2015-16 SaskEnergy invested \$244 million in capital programming. SaskEnergy's debt-to-equity ratio at March 31st, 2016 was 61 per cent debt and 39 per cent equity, well within the target range. This strong capital structure allows SaskEnergy to maintain long-term financial flexibility.

These are just a few examples of SaskEnergy's many successes and challenges during this time of change and unprecedented growth. At this time we'd be pleased to answer members of the committee's questions. Thank you.

**The Chair**: — Thank you, Minister. Questions from committee members? Ms. Beck.

**Ms. Beck**: — Thank you. And again, thank you for your presence here today. And I just wanted to take a minute to thank you, Mr. President, Mr. Kelln, for your service and, as was noted by the auditor, I suspect the last time we'll see you around this table in this capacity. So I just wanted to thank you for your service and wish you well in retirement.

#### Mr. Kelln: — Thank you.

**Ms. Beck**: — And thank you, Minister Duncan, for that overview. And of course we are looking at reports going back to 2012, and some of my comments will be focused on that span, period, and I'll largely focus on the most recent reports and financial updates. But I think to start I'm just going to start to move systemically through the 2015-2016 annual report.

Thank you again for the opportunity to do this.

I'm going to start first with the message from the Chair, Ms. Sue Barber. And one of the things that she noted — and, Minister Duncan, you touched on it — was efficiencies. And in the preamble to her comments, she notes increased levels of financial restraint for all Saskatchewan Crown corporations. I believe, Minister Duncan, you noted a number, I believe it was \$5.9 million in efficiencies back in 2012, and the same number in 2015 and '16. I'm just wondering, the span of reports that we're looking at today, going back to 2012, what has been the sum of the efficiencies that have been realized within SaskEnergy over that time period?

**Hon. Mr. Duncan:** — Thank you, Ms. Beck, for the question. I'm going to . . . I'll begin by answering this question just to say that I appreciate the comments that you've made, particularly in light of the fact that this is Mr. Kelln's last appearance before the committee. I don't want Mr. Kelln, after he leaves SaskEnergy, to be, you know, sitting on a beach somewhere thinking of how much he misses appearing before committees, so I'm going to make sure he gets a lot of time in in answering questions today just so he doesn't forget how great of an experience this is. And I'll have some remarks about Mr. Kelln at the end of, the close of committee in my final comments.

But to your question, it's been about \$20 million in efficiencies since the time period that we're talking about, going back to 2012. And in fact it's about 38 million if you extend that a little bit farther; over the last seven years it's approximately \$38 million in efficiencies. But over the time period that we're discussing, it's about 20 million.

**Ms. Beck**: — I guess my question around that number arrived at, \$20 million and \$38 million going back a little bit further, were there targets that were mandated of SaskEnergy to find those efficiencies? How was that number arrived at?

**Mr. Kelln**: — Well certainly I can talk about the process. We reference seven years ago because it was a start of an elevated attention around efficiencies that we focused on that really was driven by our board of directors, working with management. What we've done is we established the targets, and it's really focusing on continuous process improvement, integrating technology and, frankly, changing how we do things at times to capture what industry is doing in terms of a best practice perspective.

So annually we go through and establish what we believe is a target that we think is aggressive but can be achieved, and then that becomes part of our business plan that we put forward through the normal governance process.

**Ms. Beck**: — And I guess adding to that ... So when those efficiencies are realized, was there a target area for reinvestment of those efficiencies within SaskEnergy?

**Mr. Kelln**: — In terms of the efficiencies, predominantly, if you think about it, the major undertakings of SaskEnergy are providing service to the residential commercial customers through SaskEnergy and then providing service to the industrial customers directly through TransGas. So if we can find efficiencies effectively, that allows us to deliver the services at

a lower cost into the future. So you know, it's really again about trying . . . It's very much rate management as much as anything. And you know, over recent time we've certainly seen that customers are more challenged. So you know, clearly they've been, certainly are very receptive to us continuing to find opportunities.

We have taken the liberty of providing detailed reports to the Saskatchewan rate review panel since 2010 related to those efficiency measures as well, because that's a pretty critical element when they review our application.

**Ms. Beck**: — So just so I'm clear on that, so those efficiencies largely have been directed towards keeping rates low for consumers?

**Mr. Kelln**: — Certainly they do that. And also our goal, which is comparative with what you see across the country, is an industry comparable return. So that aids us to get there without having undue rate pressure or cost. So it really becomes holistically looking at what can we do that changes our business, and can we do that so we have a more effective service delivery. And we're going to keep doing that. That's a critical part of a Crown corporation that's serving the province well.

**Ms. Beck**: — Okay. Thank you. This is a fairly broad question, but can you outline some of the challenges? Obviously there's a balance there to be found between efficiencies and providing service and investing in infrastructure, and of course with Crown corporations there's also the added element of dividends being paid back into government. Can you describe sort of some of the challenges that you may have encountered in looking and realizing these efficiencies over the last, oh say, going back to 2012?

**Mr. Kelln**: — Certainly. I think you start with the fundamental. For SaskEnergy, the fundamental is public safety. So in no way do we want to jeopardize public safety or employee safety. So you think, that starts out being the foundation of what we're talking about. Reliable, when you're talking about days that hit minus 40 — and I'm sure we'll get a few of those coming up, which makes it tough for the beaches of Wadena; Fishing Lake beaches get a little frozen — but you know, you need to have reliable service as well. So those become the building planks.

When you go and look at efficiencies, you're saying, well how can we still achieve those, but maybe in a slightly different way or in a different way that captures good ideas that have occurred in industry or that relate to technology or they relate to changing your processes? So it is very much an evolution of doing that, and one builds off the next and you move from year to year to try to continue to provide better service.

You know, a simple example of technology — we've moved away from field construction because in a good portion of the year, or at this time of year, it's very difficult to do that construction. So we tend to use more modular kind of construction, which we have a number of different manufacturing facilities in the province that put those together for us. So if you think of it, we virtually bring them out on skids or on wheels, and that eliminates the pouring of concrete, those kind of things that do it. That is an efficiency move because we've really been able to dramatically reduce the cost of our equipment and reduce the time it takes to install that equipment. So that's maybe a sign of technology.

Process wise, we've looked at how do we do a better job at connecting with our customers. And the one's been ... A big one of late has been remote meter reading. Because the meter reads are actual reads, we've seen customers actually call us less to the tune of about 25 to 30 per cent less phone calls because they actually have an actual read. So in the month it's cold they get a bigger bill, and that makes sense. The estimating is always a challenge, that there's times they don't get that bigger bill till it's warm out, and then they will give us a call. And that takes some challenges.

#### [09:00]

So there is a process change that was really changing how we were billing them that's been helpful. Industry practice, you know, I think it built around our integrity management of the tools now that we can leverage from industry, and how we can go through the inside of our pipelines and go to the doctor, check out how things are progressing with some of those pipelines that are 60 years old, and can do that while gas is still flowing. So it used to be you'd have to shut the pipeline down and fill it with water and pressure test it to see if the pipeline's good. Now we can have natural gas flowing from Meadow Lake to Prince Albert and have a tool inside of it doing a checkup on how that pipeline is doing.

So those are three examples of ... So they are about changing how we do business, but it doesn't take away from those fundamentals, and that's certainly the fundamentals our minister asked about to ensure that public safety is in place. It's certainly what our board asks about, but it doesn't stop you from finding better ways to do things.

**Ms. Beck**: — There are a few questions I want to ask you. I guess the first one is just out of interest. You described, how I heard it was a bit of a scoping system that you're able to check the integrity of the line while gas is still flowing. Can you just describe that technology a little?

**Mr. Kelln**: — Sure. Well it's a tool if you can, if you visualize, it's easier to do in bigger pipelines, but those are the ones that tend to move more gas, so that makes sense. But if you think of the . . . We have a mature pipeline from the Meadow Lake area to Prince Albert, so it's a 12-inch line. This tool would be about 8 feet long. It has a bunch of sensors that are part of it, and it'll keep track where it is. And every foot of pipe, it'll do a check from the inside out, on are there any imperfections in the pipe; are there maybe problems that will inevitably give them an idea that there's a coating issue. There's a bunch of things it checks and it provides that data.

We take a look at the data and then we'll go and verify. If thought there may be something here, we'll go and actually physically dig up that portion of the line to (1) verify that this thing's reading correctly; and (2) if there is an issue, we correct it before there's a problem. So we do that over and over. We establish a frequency, depending on, just like going to your doctor, depending on how you fare in the checkup will determine the frequency of whether we should come back next year, come back every three years, or come back every five years. And then we just continually do that as the pipelines become older because age is not the only determination, but it simply . . . It's just like all of us. Age is one of the things that we have to keep track of.

**Ms. Beck**: — Right. So based on that initial test, you would see the condition of the line and then implement a schedule for how frequently you would go back to that line?

**Mr. Kelln**: — That's correct. And you know, we'll also compare that with . . . Depending on the time it was built, there was different techniques that were done in the construction. So we tended to wrap that steel pipe with different kinds of coatings. Well history has shown us that some of the coatings fared better than others. So we will tend to sort of keep track of the ones that industry's telling us may be more of a challenge; we will pay more attention to it. So it's really trying to bring all of the pieces of the puzzle together.

We are fortunate that the forefathers of the building of the system did a very good job, so we're in pretty good shape. But we need to provide the dollars, as the minister indicated in his opening remarks, to continually check in on things because we're moving a lot of natural gas every day.

**Ms. Beck**: — Thank you for that answer. And certainly, Minister, in your opening comments and some of the comments subsequent to that, this planning and reinvestment over the course of the last four years, there have been some significant weather-related events that I'm sure would challenge further finding some of those efficiencies and challenge the safety aspect.

Of course we've, as is noted in this report and was noted in the preamble, we saw significant flooding in which we saw ground shifting. And that is something that we have heard several times over the last several years, wild fluctuations in weather, record low levels of temperatures, and then a couple of years of very high levels. So when you have this plan and you're looking for the efficiencies and then you're hit with something like an unexpected weather event, like the flooding or the situation at Regina Beach, how does that impact the plan? How do you face those challenges?

**Mr. Kelln**: — You know, over time we've really built a contingency into our capital investment plan that takes care of a particular system issue that would arise, and you've certainly given some examples of some of them. We saw the riverbank in Saskatoon in Nutana that ended up an issue over time. So when you look over the last, through '12 through the present period, there has been a different issue that we have to manage. And there's dollars; we really have a portion of our investment that really is set aside for those kind of issues that arise. And that's been very helpful to us because, you know, when we sense that there may be an issue, we want to have the ability to go and manage it.

Maybe an example of it was the spring of this year. Humboldt last fall had about eight inches of rain in a very short period of time, something like that. It was wet. I know I was driving through there and everybody had their sump pumps leading to the street. Well that came around to in the spring we started to see a pattern of several very small leaks that were close together. And we really drew out of that contingency fund to say, we're not waiting around here. We're going to go and really apply a bunch of elevated things to Humboldt to manage the situation prior to there being any major issue. And that's exactly what we did. We practically dealt with some of the core areas of Humboldt needing attention, and we did that. We then established where there were some perimeter areas we needed to pay attention to, and then this summer finished up by doing some additional upgrading.

Again that wasn't ... As a rule, Humboldt doesn't get eight inches of rain in 10 days. But they did, but we wanted to proactively deal with it prior to a bigger issue coming about. So you know, that's probably been our evolution, that we are very much trying to integrate that proactive approach into it.

For Last Mountain Lake communities, we are using satellite technology to effectively take pictures once a month of the ground. It turns out to be data. It's not a physical picture, and it can tell movement within a couple of millimetres of ... So depending on the movement of the ground, you then can go and translate that into, well where's your pipeline system, and you can specifically look at particular parts without trying to be dealt with the task of looking everywhere. This allows you to focus in on the areas that need attention. So you know, that contingency we have is very helpful. And you know, our view is using as many tools as we can to be proactive will be very much a key part of the future.

**Ms. Beck**: — Thank you. That contingency amount, is that a percentage amount or how do you arrive at the contingency?

**Mr. Kelln**: — You know, we look at it every year. It's generally in about the \$5 million range, you know, and that compares to, as the minister indicated, in our capital programs in this period have varied between 225 and \$260 million. So a relatively modest amount relative to our total capital, but a pretty critical component.

**Ms. Beck**: — Okay, thank you. One of the other comments that you made, Mr. Kelln, around the modular construction, just out of curiosity. So rather than pouring concrete on site, you've moved to more reliance on modular construction. What type of facilities would you be building out of that modular construction?

**Mr. Kelln**: — Sure. Well it starts . . . The one we've done the most work around is our compressors. So if you can think about today, and today's a fairly cold day, we'd have about 70,000 horsepower running, and it's pushing the gas across the province. And in that you're going to have about 80 different units — think of them as car engines or engines — that are running compressors that are pushing the gas. Those traditionally have been built on a concrete pad with a building. That means you can't move them, so you have to pick your spot.

Where we move to is, they're on wheels. They're actually on a semi-trailer. And the beauty of it is, depending on the time of year, we can use them in different locations. So we now have 17, so about 23,000 horsepower out of that 60 or 70 that are operating today are the ones on wheels. And we need them in a

different location at the beginning of the winter than at the end. So we'll have them in the location they're in, but as we move through winter we'll start moving them around. So the 17 units actually act like 26 units. So because you can use them in two places, you can get multiple use out of them.

So it's been a dramatic reduction in the cost of that compression because of the fact that they are on wheels. So a compressor station in the minister's riding of Weyburn, where you used to see a lot of concrete, now you just see what looks like a couple of compressors on wheels. The piping that's in front are also on skids, and those were manufactured in Saskatchewan. And so when we went to build that station, we built it in six weeks. The former traditional way of building would take 12 months because of the fact that concrete and that is just a much more extensive process. So using technology of today, engines don't need to be strapped to concrete to work. But using the ability that if you need to, one of those Weyburn units may be going over to Moosomin to help things out as we near the end of winter.

**Ms. Beck**: — I do remember you talking about those before. Out of curiosity, so what would be the factors? You noted that where the mobile units are needed at the beginning of the winter wouldn't necessarily be where they would be needed at the end of the winter. What would be those factors that would be involved in moving those units around?

**Mr. Kelln**: — Well at the beginning of winter we have everything, all of our storage facilities, full. So our storage fields have lots of pressure in them. So when we need to bring gas to get to the province today, it's really about opening valves, and there's enough pressure in the fields that they don't need any help. So we don't need compression where the fields are right now. We need to sort of have it over, as we get closer to Saskatoon and Regina, as we move to the spring, we need to help the gas, take the last part of the gas out of the fields. That's where we move the compression over to those locations. So it works out very well that, you know, we can get more utilization of the same equipment. And that means at the end of the day customers have a more cost-effective rate.

**Ms. Beck**: — That's very interesting. Thank you. The only other piece on that that I wanted to ask you about, and you had noted a couple of times, that you are able to source these units within Saskatchewan. There are some suppliers within Saskatchewan who provide these modular units and the skids.

**Mr. Kelln**: — In terms of the piping, the actual piping skids, there are. In terms of the actual engines, those tend to be built in the United States. There's not a lot of engine building in Canada basically. So where we can, the piping skids, you know, we look to the fact that there's some very good manufacturing facilities in the province, and we look to see them helping us with that.

**Ms. Beck**: — Okay, thank you. I'm just going to take a minute to look at my own notes here. That was very interesting. Thank you.

Mr. Kelln, I'm moving now on to the president's message at the beginning of the report here. And one of the things that you noted was the SaskEnergy and TransGas employees responded admirably in aligning with other government ministry and Crown corps on fiscal restraint measures designed to reduce the impact on the provincial budget, and noted some tough decisions throughout the year. I just wonder if you could expand upon, first of all, how those measures impact the provincial budget and what some of those tough decisions might have been that you were referring to in that message?

**Mr. Kelln**: — Sure. Well, you know, Crown corporations' financials end up within the financial summary reporting of the province, so clearly our ownership is the province of Saskatchewan. When you look at gas companies across the country, you have some privately held gas companies, but you also have Crown corporations. Manitoba would be an example of that. So, you know, we very much appreciate that ownership structure, and we know this is the time where we really need to manage our costs. And at the same time we clearly, as I indicated earlier, are receiving that message from our customers. Ultimately the customers are the ones that are having, you know, receiving the service but are also paying for it. So we did elevate our restraint efforts.

#### [09:15]

You know, I think as much as anything it builds off of what we've just talked about in terms of the process change, adapting to technology, and bringing different practices in. It's been about managing our positions or our resource levels inside the company, and I think certainly that's been, certainly that's always a challenge to do. But we think it's been positive that we are, in the period that we talk about, 2012 to '15-16, we're moving about 35 per cent more natural gas. And we're doing it with a flat resourcing level. And you know, that is a challenge, but I think when you think of the customers in this province, I think it's very positive as well for the owner when we're managing our costs. That's helpful to manage the costs of the province as we go forward.

So it's really been both when we think about it. So managing the number of FTEs [full-time equivalent] inside our company has been one element. We've actively managed travel and we do appreciate relationships within our industry. But we also know there's a number of ways you can do that. And you can do it through conference call; you can do it through different technologies.

Within the province we also do the same. We use a lot of video conferencing because we are spread out. The reality is we have employees in just over 50 locations in the province and we want to keep them connected together. So inexpensive video technology allows us to effectively connect.

So travel's been another side of things, you know, looking at what are the core expenses that we need to continue to expend. but if we think there's some additional expenses that we could curtail at a time where I think we are in this province, looking for everybody to chip in, we've certainly done that.

**Hon. Mr. Duncan**: — I'll maybe just add to that. I agree with everything that Mr. Kelln has said. I think that from my perspective, as the minister, certainly that's been the message that I've tried to deliver to both Mr. Kelln and to other areas that I have responsibilities, that especially in light of the

financial circumstances as a province that we are in, Mr. Kelln is right to note that as SaskEnergy or any Crown can become more efficient in terms of how they're operating as a company, obviously one that is going to help to keep rates as low as possible for our customers.

We also want to ensure that we are protecting the dividend for the province of Saskatchewan. Obviously that's something that is a part of our budgeting at the beginning of each fiscal year. You know, we take into account what the expected dividend level of any Crown is going to be, and so we want to make sure that at the end of the year that we can . . . that I can deliver to the Finance minister on that part.

As well, you know, we've delivered to all the Crown corporations as well as other third party organizations that summaries are a different world for government, that their budget is now our budget and our budget is their budget. And so in past when there used to be the summary accounting but there was also the General Revenue Fund accounting of the Government of Saskatchewan, that was a different way of reporting. And so there was the ability for government to express the finances of the province with not necessarily having the impact of a Crown corporation. That's changed now, and so we have very strongly delivered the message to the Crowns that what happens within the corporation does affect the bottom line of the province. And so you know, we want . . . and I think that that's a message that all the Crowns have received.

**Ms. Beck**: — Thank you both for that answer, and I certainly can appreciate the current fiscal climate and business climate that we're in in this province, and also some of the climate- and weather-related challenges that have impacted the business over the last several years.

In addition, as you both have sort of alluded to, there is a bit of a ... at least a dual mandate within all of our Crowns and that you have an obligation and desire to keep rates low for consumers and to return dividends to government, as well as delivering a service in a province that we know is ... can be cold and can be warm and has a fairly small population distributed over a large, large area of land. So I certainly do appreciate all that goes into meeting all of those challenges in the province.

One of the things that was noted was one of the difficult choices that was made to deliver that balance was a change in FTEs. And I'm just wondering if you could walk me through the FTEs going back to 2012, how those have been managed going back to 2012.

**Mr. Kelln**: — Well since 2012 we've been essentially flat, and when I say . . . at approximately that 1,090 to 1,100 employees level. In that though, what we've been doing is ensuring that the front-line service delivery is adequately resourced. So we really have seen the efficiencies of some reduced positions occurring within our corporate functions and we found efficiencies to do that, but ensure that we deliver in the field because again that's driven predominantly by public safety. So you know, at a high level that's where we've worked at.

You know, over recent we've been very focused on redeployment when there is an opportunity, that there are peak times where we need additional resources to get things done, but they aren't there for the entire year. So how can we use some of those corporate functions to give a hand to service delivery when it's needed and then get back to the other functions throughout the rest of the year? That's old-fashioned process improvement of doing things.

We think it's been productive, that, you know, we have employees that, when you effectively look at the gas we're moving today, we're at a more effective state than we used to be. But at the same time it's very focused on ensuring that we have trained people in the field to get the work done and have individuals that are answering customer inquiries.

**Ms. Beck**: — Thank you. Mr. Kelln, you noted that ... So overall FTEs are fairly, have been flat since 2012, and there has been a focus on maintaining service on the front lines. Have there been an increase in FTEs on the front lines during that period since 2012?

**Mr. Kelln**: — There has been a modest . . . and it's really been around some of the training that we've had to do related to our technician positions because we're having some retirements. We need to bring on some individuals who can go through the training prior to someone retiring and they're able to cover.

It doesn't stop us from continuing looking at, you know, if we can reconfigure our operations so we can still do the same job with a few less individuals doing it, well we'll look at that. And you know, we have some cases. But predominantly it's actually been a little bit higher because of the elevated retirements in the last five years. We've had to do a bit more training.

**Ms. Beck**: — Okay. And you noted redeployment, so that the need for service on the front lines is not static. It peaks at different times and there's a need for increased FTEs at certain points of the year. How does that redeployment process, what does that look like?

**Mr. Kelln**: — Well I'll give you a simple example, and it was around the fact that, as per the obligations with Measurement Canada, a meter can only be sitting or connected to a side of a house for so long before we have to do a check on that meter to make sure it's accurate. And it involves changing out or bringing in a new meter, taking back the old one. And that will, you know . . . To give you an idea, on a typical year it may be 20,000 times.

Formerly we had more of a reactive process that we were relying on our front-line employees to connect with the customer. We've moved it to a proactive appointment process. So we've used some of our customer solutions people within our corporate office to be part of active phone calls to customers saying, you know, we're going to need to get in your yard over the next while. What fits for you? And setting up an appointment structure versus the more traditional sort of moving through towns in a systematic way.

With enough organization, it's been a way that corporate office has been now able to help out and it's saved time on our front line. So that would be a good example of something that we've done from a redeployment point of view that's proven to be very effective and aligns with certainly the words that the minister indicated earlier.

**Ms. Beck:** — Thank you. I'm going to move on to the financial and operating highlights, so this is page 13 of the annual report. One of the first things that I wanted to ask you about .... Between 2014 and 2015 there was a fairly significant decline. It looks like 2014 was a bit of a high in terms of the ... I'm looking at operating and maintenance, 126 million in 2014, 118 in 2015 And I guess going back to 2012, the numbers were significantly lower. I'm just wondering what accounts for that fluctuation in the operating and maintenance.

**Ms. Short**: — So in 2014 that was ... I'm not sure if everybody recalls, that was probably one of our coldest winters, so that required us to transport additional gas to meet customer requirements. So the majority of that increase related to transportation costs of bringing that gas in from Alberta. The second component of that was just the stress on our system as well to keep the gas flowing through the province and making sure customers stayed warm during that very cold winter.

**Ms. Beck**: — We do unfortunately remember that winter. So largely 2014 was a bit of an outlier because it was such a cold winter. Those transportation, was that ... did gas have to be trucked in, or how was that gas moved?

**Ms. Short**: — Most of our gas now is coming from Alberta, so that would have been transported through a pipeline from Alberta.

**Ms. Beck**: — Okay, thank you. Looking at delivery, and I think that you've just answered that question, we saw in 2014 again which was a bit of an outlier in terms of the temperatures that year, we saw a fairly high number in delivery — 232 million. Is that largely driven . . . Those numbers under delivery, is that largely driven by temperature?

**Ms. Short**: — Yes it was. We would have delivered more gas to customers.

**Ms. Beck**: — Okay. Moving down to the next line under delivery, there's some sort of a slow climb going back to 2012 on transportation and storage, and then we see a fairly significant jump in 2015 in transportation and storage. Can you elaborate on that?

**Mr. Kelln**: — On the TransGas or transmission and storage side, we've seen a very significant growth in the industrial activity in the province, which has been very positive. That turns into moving additional natural gas volumes, which generates revenue.

#### [09:30]

So an example would be an enhanced oil recovery project that's occurring in the Northwest. Each one of those projects that come on equates to the city of Swift Current at 40 below every day, so fairly significant volumes, and of course lots of economic activity around it. But on the TransGas side, that's where that 35 per cent increase in volumes has come in, as the industrial activity, certainly on potash, on the enhanced oil, and certainly providing support to the power generation site of SaskPower as well, that we move the gas to their new facilities.

**Ms. Beck**: — So fairly significant increases in industrial use?

Mr. Kelln: — Yes.

**Ms. Beck**: — Largely around enhanced oil recovery, potash. Are there any other major . . .

**Mr. Kelln**: — Some of the fertilizer sides of things. Some of the processing, and then the power generation, meeting the needs of SaskPower's natural gas-fired, new-fired generation facilities.

**Ms. Beck**: — Okay. Were there any significant increase in terms of capital infrastructure spending to be able to deliver to those large operations?

**Mr. Kelln**: — It was noted, in 2014, the Bayhurst to Rosetown pipeline project was a significant \$70 million project for us. But otherwise we've been fortunate that our pipeline infrastructure has been in a fairly good location relative to the new potash developments and the enhanced oil, which is predominantly in the Northwest, and as well as meeting the needs of SaskPower.

**Ms. Beck**: — Okay. So there has been some coincidental alignment, luckily, with having gas lines in the areas that you largely would need in order to supply this industry.

**Mr. Kelln**: — Yes, and we have been using that modular compression that I've talked about. We're effectively making the gas move faster through our pipelines. If you can think of it, you know, 10 years ago, just to give you sort of a simple way to view it, the natural gas was maybe moving at sort of 30 to 40 kilometres an hour through our pipeline. It's now in the 40 to 50, probably this morning, it's 50 kilometres an hour. So that's really about the opportunity of using existing infrastructure and just making it work harder.

Now you have to make sure that that in no way jeopardizes public safety or anything of that nature. We stay within what those pipelines were built for, but we were fortunate, some of the infrastructure that was built right back to the '70s had been built with a future in mind, that there would capacity there. And that was a very astute decision by the individuals who made those moves because we've been able to utilize those pipelines ever since.

**Ms. Beck**: — So out of curiosity, how do you make, how do you increase the flow, the speed of flow, through the pipelines?

**Mr. Kelln**: — Well if you visualize it, we will push the gas along. And we'll tend to push it more frequently; so we'll have the compressor locations being closer together so that we can make it move faster. And that means that the pressure drops quicker to the next point, to give this sort of a water hose analogy, and then we put another compressor on to push it down the line.

So we've added locations where we can make that gas move quicker. And that then allows us to beat the timelines of this industrial activity because they are very much working hard to quickly move, once they decide on a project, get it into operation and, at the same time, very cost effectively because this modular equipment, the incremental cost to serve additional flows is very cost effective.

**Ms. Beck**: — Thank you. I'm going to just move along now to the corporate highlight section, which starts on page 17. Take a minute to look at my notes here. I think that you've already answered some of my questions, so I just don't want to ask you the same question again.

One of the things that you reported on, on page 17, was the corporate safety performance, and there's a measure there, the total recordable injury frequency rate. A rate of ... I think that rate was down during this reporting year. What goes into that measure? Is it simply the number of injuries, or is there any accounting for the severity or the days lost with that injury rate?

**Mr. Kelln**: — The total recordable injury rate is, using an industry calculation, is the lost-time injuries plus the medical aids, and it's divided by a number-of-hours metric to get to an industry standard. It doesn't take the severity into account, that particular metric. We also do track the severity of injuries, and as well we track preventable vehicle collisions because they have the potential of causing injury.

So we spend a lot of time around all of those metrics. We very much believe that the safety of employees produces a cascading to public safety; so making sure that our employees are safe really creates the practices that assist with public safety. And we're very proud that we've really seen a reduction to historical best performances over the last several years. And 2015 was the best ever total recordable injury rate, and also was our lowest preventable vehicle collision rate for the corporation. And at a time where we're doing many different things to serve the customers, we've done that with the best safety performance that we've every had corporately. So something we're very excited about.

**Ms. Beck**: — How is that measured? The preventable, recorded motor vehicle accident rate, what does that look like?

**Mr. Kelln**: — We very much keep track of . . . And let's say if you had a deer that ran into the side of your vehicle, which will happen at times on a grid road. That's a non-preventable. But we have a very detailed process within the company reporting any safety-related incidents, and certainly we do that on the vehicle side, as well as on the personal side. And the thinking around that is all about learning from the incidents that occur. That's only the second element.

The first is really focusing on hazard identification. And that's something that aligns with the provincial mission and zero initiative of, you know, you want to identify the hazards before they happen. If you do have an incident, you want to report it so that you can learn from it to prevent it happening in the future. And we think the two of those and the regimen around it have been very helpful for us.

The third is comparing yourself with industry. And we use an Enform mechanism which is a Western Canada . . . We write an exam every year, so to speak, that Enform comes in, and we work toward a certificate of recognition of our safety programming. They interview about a hundred of our employees, and then they go through all of our safety programming and give us a grade. And we're very happy that

again, that the grade to get your certificate is 80 per cent, and in 2015 we achieved 94 per cent. So we're very happy on that as well.

So it's really those three elements, and you know, it fits with the Mission: Zero. It is about, every minute of every day, employees thinking about the safety of themselves and their fellow employees, and when they got home at night, it's about thinking about the safety of themselves and their family. And if we can achieve that, I think we end up in a very good place. And you know, it's something that as a province I think we're working on and we're continuing to get better at. As a company, public safety, employee safety is a big, big part of how we do work every day, and we're just very excited where we're at, relative to safety. We need to keep it there.

**Ms. Beck**: — Thank you for that focus and those measures. I think that its important for sure. Were there any changes in training or measuring that went into realizing that decrease, or largely just the ... not just, but the measures that you noted previously?

**Mr. Kelln**: — From a training perspective, we've followed an industry-leading practice of a competency assessment. So what we do is, to give you an example, we'll have employees going through about 3,000 assessments as we get into 2016, that they go through training and they develop their skills relative to many, many different scenarios. Industry best practice is now that they've been through that training to do a refresher check. Do they still have the competency of dealing with something that they don't normally deal with? So we go through on a competency assessment program, and on a rotational basis that employee will then get checked in relative to those skills on a three-year or a five-year frequency. So you're always ensuring that it's fresh in mind.

And this is all about the safety of the employee. If you take a typical technician out in the field, they may not come upon a situation like that for 20 years. And what we hope for is they never do, but we need them prepared for it to happen this morning.

So the competency assessment has been a pretty critical element. So we've been an early adopter of that in terms of gas companies across the country, and it's been very helpful. I think it's been an important component in the overall focus on safety.

**Ms. Beck**: — When was that implemented, that type of training?

**Mr. Kelln**: — It really came on about three years ago in full. And now it's on a rolling basis, so employees are pretty well through the cycle once or are entering into the next cycle.

**Ms. Beck**: — Great. Thank you. Moving on, I'm going to move on to page no. 18, and particularly the flare gas capture in southeastern Saskatchewan.

So what's noted in part here is the fact that TransGas installed major transmission infrastructure in the Southeast in 2015 to receive vital associated flare gas volumes while facilitating gas processing initiatives in the area. Can you walk me through what that transmission infrastructure, what that looks like, what the goal is, and just sort of provide some details on that project?

**Mr. Kelln**: — What we are seeing with the oil production in the Southeast, when the oil is brought up there's bubbles of natural gas within the oil called associated gas or flare gas. And the great opportunity is, if you can capture it, it's really green natural gas. It's not being flared; it's being captured. So we were certainly seeing investment, private-sector investment by oil and gas producers to develop processing facilities because they have to take it from its raw form and eliminate some of the things out of the streams so it can be accepted into the pipeline.

So that's been happening, and our job was to keep up with the fact that we had more volumes. And so in it, the expansion you referred to is something I'd noted earlier, which is the Weyburn compressor station. So it's been adding modular compression so that we can move the gas out of the southeast area. So this morning a portion of the natural gas that was part of your water heater, giving you hot water for a shower, really came from southeast Saskatchewan, which five years ago that wouldn't have been the case. So the Weyburn compressor station was moving the gas up to Regina. It's ending up going through our town border station in Regina and ending up in people's homes. And that's great, because it's not being flared; it's being captured.

We are fortunate that we have pipeline infrastructure that really got put in place in 2010 or 2011 that sort of did most of the pipelines. We have a little bit of pipeline work that's being done between Weyburn and Estevan, but not too significantly. It's primarily that compression. And the beauty of that compression is we don't have to do it that far in advance, so we can manage it relative to the needs and you know, are very interested in capturing ... That's something the minister and I have had lots of conversations, of how we can potentially even capture more flare gas because, you know, that is really green natural gas, if you view it that way.

#### [09:45]

And it's something that we're working on to see if we can adopt a bit of a new technology, and that is not always having to have a pipeline extended to where this flare gas is. Can you use trailers of compressed natural gas to effectively create a virtual pipeline so that you can ensure more flares are being captured? So it's something we're working on.

I'm pretty excited about it because it's a resource in this province that, if we can put it in the pipeline and have it end up creating the hot water for a shower, it helps the province. So we're spending a lot of time in the Southeast, a lot of time in the Kindersley area, and a focus down by south of Maple Creek in the Shaunavon area as well.

**Ms. Beck**: — Thank you. So certainly some of that flare gas is being captured now and being put into the system after .... There is some processing that's required. So what is being removed from the flare gas in that processing?

**Mr. Kelln**: — When the natural gas comes up with the oil, there tends to be a little bit of water in it, and water needs to be removed. And it tends to have the propanes, butanes, and ethane in it as well. So you know, natural gas in its pure form is just

purely methane. So those others, ideally you need to have them removed so that the natural gas has about the right heat value and those kind of things. In other words, when it ends up in your furnace, it allows your furnace to operate appropriately. So there is processing that needs to occur, and we've seen an expansion of processing facilities by private sector oil and gas producers in the southeast area as well as Kindersley in the last while.

**Ms. Beck**: — So certainly I think that's positive that we're capturing. Do you have any estimations in terms of percentage of that flare gas that's being captured as opposed to that's being ... I think when you drive down in the Southeast at night you'll see a number of large candles out in the fields there. What's the potential there? How much are we capturing as opposed to what could be captured, were we able to do that?

**Mr. Kelln**: — You know, a good portion is being captured, and it tends to be at the larger locations where an oil battery has collected flare gas together. I think the opportunity, if I were to look at it, if you think of the natural gas that SaskEnergy purchases every day, there may be an opportunity for 10 per cent of that, an increase of 10 per cent of it being flare gas. And that's something talk to the minister about. I think we'd be leading in the country if we found a way to do that. That is a way of reducing emissions related to, you know, the oil and gas industry. So we're working at it.

We think the opportunity will be actually around not necessarily building pipelines to all those locations, which is very difficult, but using virtual pipelines. So if you can visualize, we would have a compressed natural gas trailer at each of those locations, and instead of it flaring you would fill the trailer. And you'd have one ... And there are a number of private sector companies that I think are interested, some from North Dakota and a few others, to come here. In the morning they would go and bring an empty trailer, pick up the full one, and put that gas into TransGas or SaskEnergy's system, and then once that trailer's empty, they'd go and pick up another full one. And they could probably do 20 a day. So when you add up all those trailers full of natural gas, it's a way of not having to build a pipeline but you're capturing incremental flare gas.

So we're pretty excited about it. It's new technology in terms of not the technology itself but applying it in this circumstance so, you know, it's something we're working on. We're keeping Minister informed and our board informed because we think that ultimately would be very important to be a part of SaskEnergy's gas supply purchases every year.

**Ms. Beck**: — And is that something that's viable at the current price point for natural gas, or does there need to be an increase in order to be able to invest more in that technology?

**Mr. Kelln**: — I think we're going to have to recognize that it's green; you know, it's an avoidance of emissions related to that. But I think it can . . . To me it'll be cost effective, that it's an appropriate recognition. So there's some added cost. But on the long term if that oil battery moves to a different site, you're not left with a pipeline that's going to somewhere that, you know, isn't needed anymore. So, you know, I think it can make a lot of sense and, you know, I think we can be leaders in Western Canada related to it.

**Ms. Beck**: — Okay, thank you. I think before I lose this thread and my thought, you noted something that pertains to page 31 of the report, and just looking at the . . . In its raw source, you know, traditionally, natural gas would contain mostly methane. But I believe it comes out . . . When you're looking at recovery from the shale projects, you tend to have this product that has, as you noted, some water, butane, propane, ethane in it. I believe that there was a note about, that in Alberta some of that processing wasn't being done, that it was being shipped in a raw form. Is that correct? Did I read that correctly?

**Mr. Kelln**: — Well we do note in the report that we've actually seen the energy content of the gas, of natural gas in the province, actually going up. So what has happened is because of the price of some of the propanes and butanes being so low, that within specification they're leaving more of that in the natural gas. So if you view it that natural gas has more energy in it, and simply put, your furnace won't need to operate as long because of the fact that there's more energy for every minute that your furnace runs, so you get more heat out of it.

So we've seen that happening and it's just a reality of ... With the decreased oil pricing, we've seen a correlating decrease in propane and butane pricing. So producers have left more of that in, but they only leave the amount in that they're allowed to within our specifications.

**Ms. Beck**: — So that would be in keeping with the appliances or the furnaces for example, that they would be able to process certain amounts of that, that there would be industry standards up to which you couldn't leave more of those gases within the natural gas?

Mr. Kelln: — That is correct, yes.

**Ms. Beck**: — And just while we're here and we're on the topic, going back to page 30, and certainly this is very interesting. And looking at this graph I think is particularly interesting, the graph that's noted on page 30, and just going back to 1996, some of the very significant shifts within the industry. I believe there's another graph, you know, looking at conventional natural gas and then sort of a major shift that took place when we started more shale drilling, and as you noted all of the ... natural gas being one of the by-products of that drilling.

So just in an effort to better understand the context and the business model of SaskEnergy, so looking back to between 2008 and 2010, at that point we had most of our natural gas supply coming from Saskatchewan production and then after that we saw a marked shift. And I think that that was in large part to the increased drilling activity in Alberta and, as we've noted, the increase in gas being realized from shale drilling. Is that correct?

**Mr. Kelln**: — We saw a shift. If you think back to 2008, 2010, natural gas pricing was considerably higher than it is today. So at that time we saw natural gas being developed in the province and in Western Canada for conventional reservoirs. So if you think, Saskatchewan has a lot of natural gas reserves that are really just pure natural gas. And they need a certain price for them to be drilled and developed, and that price was there in 2008, 2010. With the collapse of pricing after that, we really saw in Western Canada conventional natural gas stopped being

drilled. So it was not being developed. So that gas is still waiting for us in the future to be developed. It's sitting there and really had then . . .

Well what took its place? Well it was associated gas, and it was associated gas that we're seeing in our province. But you see associated gas production in BC [British Columbia] and Alberta very much growing, and you see a tremendous amount of it down in United States. We've seen United States go from being very dependent on the import of natural gas from Canada to meet their needs, to now they're being quite independent around it because they have so much that they've developed themselves primarily driven by looking for the oil and the oil bringing up the natural gas.

That doesn't mean that the natural gas that's just a pure reservoir, that . . . There are parts of the province where you can drill a well and what comes out of that well is really gas that you could put right into a furnace, that it's there. But there's a certain price that's needed for that, and the price that we've had in the last five years has been below that price. So you've not seen wells being drilled, but you haven't seen them being drilled across North America. But those, I guess, those we'll be saving for a future day when prices return.

So a bit of a different dynamic, you know, I think for us. We've had the opportunity of adjusting where supply comes to meet the province's needs. That's been something we've done since the 1960s. And we've used some of those different connections that we had to make that happen. So not problematic at all but, you know, it is a change.

So in the future is there additional natural gas below the ground in the Kindersley area, in the Shaunavon area that has yet to be developed? Absolutely. And it'll be developed when the price, you know, meets with what the costs are to develop it for conventional natural gas.

**Ms. Beck**: — Right. So what would be the factors that would be contributing to that decline in the conventional natural gas commodity price?

**Mr. Kelln**: — So if you don't drill wells in conventional natural gas production — and we have about 17,000 natural gas wells in the province — so the minute you stop drilling new wells, it's sort of like a balloon, that if you've undid the end and the air comes out, that it doesn't take long for the air to be coming out of the balloon a lot slower. Think of it, of these reservoirs, as balloons below the ground. So if you don't drill more wells, the existing wells produce less and less every day. And that's what we've seen happen since 2010 is the existing reservoirs have not had any new drilling, so effectively they're producing less. At the same time we've seen incremental oil production, so incremental flare gas, and you've seen that grow. And you've also seen in Western Canada associated gas growing as well. And that's how the two go together.

So the existing locations for traditional natural gas reservoirs certainly are producing a lot less today than they did five years ago. That's because the air is coming out of the balloon. As soon as they start drilling again, of course, they could return that production. But it's dependent on price. **Ms. Beck**: — Thank you. One of the . . . Now I'm back on page 19. The Crown collaboration initiatives notes that there has been some collaboration amongst the Crowns to find efficiencies, and one of the examples that's provided there is vegetation management control, some sharing of that service or that contract between SaskEnergy and SaskTel. Can you just walk through how those efficiencies were found and what that contract or that initiative looks like?

**Mr. Kelln**: — Well, you know, we are focused on Crown collaboration and I think it's turned out to be very positive. We've done it in a number of different initiatives. It can be all three Crowns but in this case it was ourselves and SaskTel, and we had fairly extensive vegetation management at all our stations. So we tend to have stations on the edge of each town. SaskTel was interested on, when they're going out that way anyways, can they also deal with SaskTel facilities. So it turned out to be very productive.

So if they're heading to the Wadena area, they're going to cover both the SaskEnergy requirements, but also meet the SaskTel. That reduces travel time, which ultimately has a cost associated with it. So it's been one we've been a lead on; we coordinate SaskTel's requirements with the provider. And I think it's worked very, very well.

[10:00]

**Ms. Beck**: — So just so I have that clear, is this someone who is . . . This is a contract for someone to do this work, or this is your employees that would go out, and if they're going out to do vegetation management at a site and there's a SaskTel site nearby, that they would coordinate that?

**Mr. Kelln**: — We've been using an external provider on this for a lot of years. We find it just very helpful. They're specialized. They really will only use what's needed, so to speak, and I think that's also environmentally responsible. So it's worked out well because, you know, maybe 30 or 40 years ago we would have that done by our own folks. But that's just one added thing that ended up, well do you they have the right supplies to do it and that kind of thing. So it's turned out to be very effective that we've had a long-standing, sort of external provider kind of focus on this, and been very effective for us. And we've now combined that with SaskTel's requirements.

**Ms. Beck**: — Okay. So is that regularly renewed, that contract, or how does that work?

Mr. Kelln: — It is a procurement process that we go through.

Ms. Beck: — Okay.

**Mr. Kelln**: — We usually try to make it more than an annual process because we want, you know, the most competitive price we can get for doing it.

**Ms. Beck**: — Okay. Thank you. Similarly it was noted that there was an award to OpenText Corporation for software and maintenance pricing for all Saskatchewan government entities. Can you elaborate a little bit on that process and that contract?

**Mr. Kelln**: — It related to our records inventory and management requirements, which is a legislative requirement that we move to a heightened level of managing our records. When proceeding to procurement of software related to that, our ask was that if it became a bigger ask by different participants of other Crowns or the Government of Saskatchewan, would they provide additional pricing attractiveness to it. And we got that response, so we felt we were heading down that road. We knew that that's the same road that other Crowns would be going down as well as government departments, so we put out the ask as saying that if others were to consider it, that what kind of pricing would you get. So I think it proved to be very positive.

**Ms. Beck**: — So by going together you were able to negotiate a better price.

**Mr. Kelln**: — It was a case of ourselves going alone, but asking the question that if others came along, would you give a better price.

**Ms. Beck**: — Okay. One of the things, and we've talked about it certainly today and previously in some detail, the expansion of the mobile compression system and the flexibility of that and the ability to meet increased demands.

Certainly the latest annual report brings us to March of this year. And I'm just wondering, you know, we started with comments about the downturn in the resource sector and some financial difficulty within the province. Did you see or did you anticipate any downturn in demand at the start of the year, or were you still considering seeing that demand growing in the last quarter of this report?

**Mr. Kelln**: — We have seen some moderation of residential, commercial activity. Now relative to 10 or 15 years ago, it's certainly still elevated. But it's certainly moderation compared to where we were in 2013, 2014, but still there.

Our job is to only be investing the capital that's needed to make growth. So it's been helpful that with the modular approach we're doing we've been able to defer some of those commitments and not get in a situation where we're spending dollars but we don't have the growth that produces a revenue to support it. So been very happy with that. That's something our board of directors spent a lot of time with management on, and Christine and myself, of saying, are we matching the investment in capital dependent . . . There's, you know, about a third of that capital is dependent on growth, and we need to adjust it a bit when growth changes. So in a bit of a moderation, but we've been able to adjust to it.

**Hon. Mr. Duncan**: — I can pick up a bit of ... put some numbers to that, just to give a bit more context. So in terms of new distribution customers in 2015, to the end of 2015, it'll be about 5,000. So that's December of 2015. Of course this was the change in the fiscal year. So if you extend that out to the, I guess, the first quarter of '16, it'd be about 6,000. So from January 2015 to March 2016, about 6,000.

So it is down from previous years. I think our high was about 7,700 new connects. So down from, you know, the historic highs that we've been seeing two, three years ago, but still 5 to

6,000 new connects in a ... either if you look at the calendar year or the new, the 15-month fiscal year, still pretty strong demand for the corporation.

**Ms. Beck**: — So those connects, are they primarily residential, or those would be a combination of residential and industrial?

**Mr. Kelln**: — They'd be a combination, predominately residential. But you know, you think of our 380,000 customers in total for SaskEnergy are residential and commercial customers, you know, you have about 300,000 of the residential and the remaining are various sizes of commercial.

**Ms. Beck**: — Thank you. I'm going to move on to again on page 19 under the heading of environmental efficiencies. We talked a little bit about the flare gas and the potential there both as a source of gas but also reducing those emissions. One of the statements here is that "... SaskEnergy achieved a number of environmental efficiencies during 2015." I just wanted to provide you the opportunity to expand upon that a little bit what those efficiencies were.

**Mr. Kelln**: — Well we did a number of things, and something we've been quite focused on and absolutely are planning to continue that focus. When you sort of break it down to a few categories, the one is the fact that those compressors when they're running, they create emissions. So how do we make them cleaner burning kind of applications? And that's where the modular compression we talked about are also state of the art units; they produce less overall emissions because they burn less. They're more fuel efficient, but they also have state of the art emissions management equipment on them. So you know, from that bigger one of managing, we're doing that.

Within our operations we also have the challenges that historically natural gas has been used to act as a pressurized gas to start units and that kind of thing. We're converting those to compressed air, not compressed natural gas. So that ended up in that process of some natural gas being vented, and we're eliminating that as we go.

And then the final category is fugitive emissions, the better job we can do around different practices we have of not having natural gas escape into the air. And even if it's flared, flaring has a significant benefit versus raw methane.

And you probably heard our public service announcements that if we're going to be running a flare, we do need to let the public know that this is something we've organized. And we do that around the province. So we have a fairly ... There are times when we have to work on a pipeline. We have to take the natural gas out of the pipeline. We do it now by the use of flaring, so we will flare the natural gas out of the pipeline rather than venting it. And that has some significant environmental benefits as well. So there's a number of different things we're looking at and, you know, I think with technology that's continuously evolving, we're going to keep working at.

**Ms. Beck**: — That's interesting, your note about the flaring of gases, as opposed to venting them without flaring. Do you want to just elaborate upon that? It might be interesting for people.

Mr. Kelln: — Actually if you view it into greenhouse gases,

methane just vented in a raw form to the environment will have a factor of 23 to 30 times more impact. So if you flare it, it becomes just combusted. And the next step we're looking at is actually incinerating. So if you think of it, view it as an on-site furnace sort of simplistically, a high efficiency furnace, it's something that ... Now it has to be able to take a lot of gas. These pipelines hold a lot of natural gas, and there's customers on the end of them, so we have do it quite quickly.

So that's the reason we focus on it. There's such a much bigger environmental impact with raw methane versus something that's been combusted. And we're looking at continuing to improve how we combust the gas as well. And you know, I think the incinerating versus the flaring is an industry best practice, and I think may turn out to be an attractive thing that we do over the next year or two, which is another step. But the first step is not, if we can at all possible, not have any methane escaping in raw form.

Ms. Beck: — So how do you mitigate that risk of the escape?

Mr. Kelln: — Well we do it on a planned basis.

Ms. Beck: — A planned flaring?

**Mr. Kelln**: — So you know, the plans for the different outages, and there will be several hundred different outages that we're going to have through the next calendar year, the next summer period, which tends to be the period. We need to plan that. We need to plan it so we have the flares set up so we can make sure ... We need to plan it so we maintain service to customers. Because if a customer is going through a maintenance cycle, we'll plan our work at the same time they're doing their maintenance work. So it's a fairly complicated world of trying to organize that. But I think the more you plan it, the better chance you have of not having an escaping of methane due to the fact of some of the maintenance work you're doing.

From a smaller point of view, it's procedural that there's some things that our technicians need to do that historically used to be a small amount of methane was vented. We're finding ways that they don't need to vent the gas, and that gets down to how we configure the piping on people's homes. So we can find a different way of, for example, taking the meter off without it causing issues, and so we're continuing to work on that as well.

**Ms. Beck**: — So the maintenance, so if you have a customer who is needing to do maintenance or shut a line down, you would coordinate your maintenance with that so you would only have to vent that once. Is that . . .

**Mr. Kelln**: — Exactly, or organize that the flare is there so it's flared, so we're not venting the gas.

**Ms. Beck**: — So you noted that incineration is potentially a next step and industry standard, I believe you said. What's involved in getting to that step, to getting that point where you would be incinerating those fugitive gases?

**Mr. Kelln**: — It's a new technology, so it's sort of an industry reach for best practice. It hasn't turned into a standard, how you can make it portable, how it can be moved to site. The part that would we think be very valuable, that when you incinerate, it'd

be much like your furnace: all you would see is just water vapour coming up. If you think of a high-efficiency furnace, it doesn't have a chimney anymore. It just has a polyethylene pipe leading out of it.

The challenge is it's got to be able to match how quickly we need the pipeline to be emptied, so we have to work through those logistics with that. But you know, I think it has promise of being that next level of environmental stewardship. And you know, for us we keep looking at are there additional things we can do? And they're not necessarily more costly. If you can arrange it in the right way, there are times that you can do it and you can have the benefits without, you know, a severe penalty in cost.

**Ms. Beck**: — I think you sort of just answered that. My question was, just is there an increased capital cost associated with that type of technology?

**Mr. Kelln**: — You know, it's in early days, but I don't believe there will be. I think there's some providers that again are interested in the option. They were looking for a demonstration site, and we put our hand up and said we'd be very interested in being a demonstration site because that's free. So we took them up... They took us up on the offer and we're doing it.

You know, and I think on the environmental file, you know, I think of LED [light-emitting diode] lighting in our station yards. That was one that, yes there's a bit of investment, but the payback was so quick that we're in a case now that we're using less energy. It's had its payback, and we're good for the next 15 years. So you know, it's continually looking at where there are places that you can improve, but at the same time you want to manage your dollars related to it.

**Ms. Beck**: — Thank you. So one of the notes at the end of the end of this small section here on environmental efficiencies notes:

While no emissions regulations were implemented, in March 2016 the Federal Government announced commitments toward reducing oil and gas industry methane emissions ... over the next decade, using 2012 levels as a benchmark.

## [10:15]

Were there any impacts during this reporting period or any anticipated impacts with regard to what you're expecting, given federal regulations around emissions — I guess in this case, particularly methane? Is that something that has impacted the business model here?

**Mr. Kelln**: — It hasn't but, you know, we're taking the view that it's very important to be staring down the road. The reality we have is we're, we noted in this period, we're moving 35 per cent more natural gas than we did at the start of it. That inevitably means you're running more compression and creating more emissions, so how does that work relative to the future? So we're keeping a close eye on it.

Now the simple things that I've noted, that purchasing units that effectively produce less emissions is helpful to it but, you know, it continues to be something that we keep an eye on and see how it aligns with what our plan is. But no, there was not a financial impact in this reporting period.

**Ms. Beck**: — Okay. Thank you. Just noting the time here. I just wanted to move on to page 25. And this is under the heading achieving growth. And there's a table provided underneath, talks about ... We were talking about projections and some of the projections here. One thing that I wanted to ask about was the total capital investment. So there are obviously some fluctuations in here for different reasons as noted but there's significant ... In 2015 there was a target of 45 million — I believe this is in millions, yes — and then the actual was quite a bit, was significantly below that at 15. And then projected for next year, a similar level and then a big spike again in 2018. I was just wondering if you could walk me through that.

**Mr. Kelln**: — Sure. That line is really focusing on leveraging private sector investment and some of the activities that they were working at. We did see with the reduction in commodity values, that some of those projects for the current year did not come about. And again we're looking at leveraging, our being more of a 10 per cent in a project and having projects move forward.

The one that's noted in the future is liquefied natural gas. We have an interest of potentially having liquefied natural gas being produced in the province, potentially having liquefied natural gas being produced from flare gas which would be very valuable. There is a demonstration project in North Dakota. We would like to see it come to Saskatchewan. And the opportunity with liquefied natural gas is then to create the ability to provide peaking supply on the load side of our province.

So two years ago we created a situation at Aberdeen. Aberdeen has a small lateral serving it that we built 40 or 50 years ago that's run ... It's reached its capacity, that there's more customers than the capacity of that line. That only occurs on a design day, which is a 40 below day for 24 hours, which is extremely cold. Instead of traditionally saying, well when a pipeline runs out of space, you put another pipeline beside it, but if you think of it, how many cold days do we have? Statistically Aberdeen would only have sort of maybe 10 or 12 of those really, really extremely cold days. Well do you want to build a pipeline for 10 or 12 days?

So we actually created a docking site at Aberdeen where a liquefied natural gas trailer comes in, and when it's below minus 30 the trailer of natural gas, of liquefied natural gas, helps the pipeline meet the needs of Aberdeen. And that's allowed us to save not having to build a pipeline — which would have been about \$5 million — and utilize the gas out of the trailer. It is an external provider for the trailer. We only use it for a four-month period. He then can use, that provider can then use the trailer for the other eight months elsewhere. So we end up with a very cost-effective solution in terms of meeting the customers of Aberdeen. If you're in Aberdeen, you don't know any difference. Your furnace comes on; the water heater goes on, but for us it's a difference.

So we are very interested on seeing if we can have a liquefied natural gas processing plant or a liquefaction plant occurring in Saskatchewan. We think we're going to have a number of applications. As the province continues to grow, we have some laterals that were built a long, long time ago that will be nearing their capacity limits, and this will be an alternative that we can do that fits in, into meeting those needs in a non-traditional way but in a very cost-effective way.

**Ms. Beck**: — So there's anticipated growth within the province for that product, that natural gas. Do you see that type of growth within liquid natural gas elsewhere, or are other jurisdictions looking at a similar model to what you described at Aberdeen?

**Mr. Kelln**: — Well, you know, if you head south through Montana, Wyoming, and Utah, you quickly see that liquefied natural gas gets used in a number of ways. And a lot of their heavy equipment, if you get down further south, your buses and all kinds of things for transportation are used. So you know, those trailers tend to get used a lot in Wyoming, Montana in the shoulder months, in the spring and the fall. So it's a very good match that when they're done that, they come up and help us through the extremely cold winters, so it's a very good fit.

The challenge is, the shorter the distance you haul the liquefied natural gas, the more attractive the pricing of that fuel. So if we can have a liquefaction facility in Saskatchewan, that really is helpful. And you know, we've always been open to, you know, is there a potential that it could assist in serving northern communities as well that are ... You know, to traverse a pipeline to those communities is cost prohibitive. But you could have a distribution system in that community, and on the edge of town you have an insulated tank.

So Vancouver for the last 30 years has not had the ability to store natural gas underground like we do. They don't have the geology to do that. They have a very, very big insulated tank of liquefied natural gas. And when they hit their design day of minus 12, they use liquefied natural gas to meet their needs. So it's something that's been around a long time.

Again we're trying to apply it in a different way which, you know, I think that's the responsibility we have, is to keep looking at different ways of doing things.

**Ms. Beck**: — So there's some potential for use in the North, I'm hearing you say as well. But you also noted that the longer the distance that you have to transport this product, that the viability is reduced.

**Mr. Kelln**: — It is dependent on the trucking costs. So, you know, we could say, why aren't you hauling it from Vancouver right now? Because if you went there, they would give you a load of liquefied natural gas. It looks like water actually. It looks like clear water, only it's cold. It's at minus 200 degrees Celsius. So if they pour a mug of it for you, you better be wearing an oven glove, so to speak. But it's the cost of hauling it that becomes part of the math. So, you know, ideally, if you had liquefaction capability at Meadow Lake or Prince Albert, that would allow you to reach to some of those northern communities. But, you know, we're not experts in that. We're just interested in seeing if we can get interest to come to Saskatchewan.

**Ms. Beck**: — Okay. So that's what's anticipated in that target for 2018. You noted that there was some projects that perhaps

were anticipated in 2015, but didn't, because of the commodity market, didn't go through. Could you expand upon those a little bit?

**Mr. Kelln**: — We had a number of different flare gas-related processing facilities that we were interested in. In essence we saw the private sector invest in those directly so we didn't need to, and there was some downturn in oil well drilling that affected those numbers as well. So it tended to be associated gas-focused but, you know, a bit of a combination on one hand. We just had one new processing plant just come on stream the last several months that didn't need our investment to be created, so that's great. We're just moving their gas. But we have seen a reduced activity in oil drilling which has affected investment in that sector.

**Ms. Beck**: — Thank you. Just noting the time. Some questions that I had around workplace diversity targets, specifically the targets for young workers which I believe are defined as those under 30, as well as were defined as First Nation and Métis representation. There was a note and I can't find it right now in the report, but that the restraint measures, looking now on page 27, have impacted the ability to meet some of those goals that were set out in those categories. Could you expand upon that a little bit?

**Mr. Kelln**: — Well we have very aggressive goals around that and very excited that SaskEnergy has become a much younger company. It's something we started in 2009. I don't reflect that, but it's very fortunate to be around new graduates. We focused on graduates from our universities in Saskatchewan as well as our technical institutes. And I can probably say that they've done very, very good things in SaskEnergy.

And they've done one unique thing. Some of the HR [human resources] sort of world experts would say that they will be much more transient than, say, my age group was. You know what? They've stayed with our company for the most part, which is helpful. But with the fact that we are managing our positions in a more tight fashion, we have less additional reasons to recruit and that has affected some of those aggressive targets. I think we're still in a very good place of youth in our company, and First Nation and Métis representation, but it is, you know, a bit dependent on the number of new individuals coming into your company.

**Ms. Beck**: — You had noted earlier some increased need to provide training to the front lines, given higher rates as we see that baby boom generation move through retirement. I just want to make sure that I heard you correctly that you are still having a significant number of younger workers, those under-30 workers who are joining and staying with SaskEnergy. Is that correct?

**Mr. Kelln**: — Yes that is correct. We create the opportunity and we're, just have a class right now of individuals in the company that are going through their training as technicians. And they have a lot of ... You know, it's a fairly extensive program because by the time they reach the point that they can deal with all the different scenarios, they need to have that training ... [inaudible] ... to do it.

Ms. Beck: — Will the suspension of the Gradworks program,

will that impact that ability to bring some of those young workers on?

**Mr. Kelln**: — The Gradworks was predominantly around the professional side of things. And, you know, we are in the case, as I indicated earlier, that really from a corporate function point of view we are not looking at expanding those. We're, if anything, looking at redeploying. So a pause in that right now certainly doesn't cause issue for us.

**Ms. Beck**: — Okay. I'm just recognizing the time and that we've had other people join us, so I think I will just say thank you, first of all, to the minister, and again best wishes to the officials here today. Christine, thank you. And with that I will move to conclude my remarks.

**The Chair**: — Thank you. Seeing there are no further questions, I will now ask a member to move that we conclude consideration of the following annual reports and financial statements: the 2012, 2013, 2014, and 2015-16 SaskEnergy annual reports; the 2012, 2013, 2014, 2015-16 SaskEnergy Incorporated and subsidiary financial statements.

Mr. Phillips: — I so move.

**The Chair**: — Mr. Phillips has moved that we conclude consideration. Is that agreed?

Some Hon. Members: — Agreed.

**The Chair**: — Carried. That concludes our business with SaskEnergy. Minister, if you or your officials either have any final comments to wrap up.

**Hon. Mr. Duncan**: — Yes. Thank you, Madam Chair. I do want to thank the committee for allowing us to appear, inviting us to appear this morning. Ms. Beck, to you for your very thoughtful questions. I just want to thank the officials that are here with me. Obviously there's three here today that represent SaskEnergy, but they're representing the over 1,100 people that work for SaskEnergy and that do a great job each and every day in providing services to the people of the province of Saskatchewan.

## [10:30]

And I do especially want to note one very special person that we do have at the table here that has been noted in the past. I've had the opportunity to work with Doug Kelln on two occasions now. This is my second go-round as Minister Responsible for SaskEnergy. And I will say it on the record — I've said it off the record, but I have no problem saying this on the record — it has been an absolute pleasure and an honour to work with Doug Kelln. To be associated with this man is truly an honour. He has managed SaskEnergy very well through a period of transition and a period of significant growth for this province and for this organization.

He has always kept a focus on safety of our customers and of our employees, and that is something that, especially when you're dealing with something like natural gas, that is something that is very important. He's been very vigilant on this. And finally, and I think for me as minister probably most important, he just provides good advice and good counsel. And I have always appreciated that about Doug Kelln.

And so, this being his last opportunity to appear before the committee, I just want to — on the record, as I've said to him I think privately on a number of occasions, and I've said publicly on a number of occasions, and this probably won't be the last — but I do want to, on behalf of the Government of Saskatchewan and the people of this province, thank Doug Kelln for his hard work and his tremendous service that he's provided to this organization and to this province for a number of decades.

And, Doug, you will be very sorely missed, but we want to wish you all the best, and good health and happiness in the next phase of your life.

**The Chair**: — Thank you, folks. We'll just take a brief recess just to change up officials, and if everybody wants to refresh their coffee or water.

[The committee recessed for a period of time.]

## Saskatchewan Telecommunications Holding Corporation

**The Chair**: — All right. Welcome back, everyone. For the remainder of this morning, we will be considering the annual reports and financial statements of SaskTel and its subsidiaries. I welcome Mr. McCall who will be subbing in for Ms. Beck, who will also be watching and participating in the proceedings today.

We will be dealing with the 2015-16 SaskTel annual report; the Sask Telecommunications financial statements dated March 31st, 2016; the Saskatchewan Telecommunications International Inc. financial statements dated March 31st, 2016; DirectWest Corporation financial statements of March 31st, 2016; SecurTec Monitoring Solutions Inc. financial statements dated March 31st, 2016; and the 2015 Saskatchewan Telecommunications pension plan annual report. Mr. Minister Duncan, if you would like to begin with your comments and to introduce your officials.

**Hon. Mr. Duncan**: — Absolutely. Thank you, Madam Chair, and to members of the committee, I'm honoured to be here to speak this morning about SaskTel. I'd like to thank members of the committee for the opportunity to share some brief opening remarks. Before I do, just to introduce the officials that are in attendance from SaskTel. To my left is Ron Styles, the president and CEO [chief executive officer]. Charlene Gavel is chief financial officer; she's to my right. And behind us is Darcee MacFarlane, vice-president, corporate and government relations; John Meldrum, the vice-president and corporate counsel and regulatory affairs and chief privacy officer; and Scott Smith, senior director of finance.

SaskTel was hard at work during the 2015-16 fiscal year. Much of the great work they did focused on building new infrastructure and expanding the reach of their services. Those efforts have positioned SaskTel to continue growing and supplying world-class telecommunication services to our province. In 2015-16, with revenues exceeding \$1.5 billion and a net income of \$126.7 million, SaskTel achieved another year of strong financial results. This is the eighth year in a row that revenues have exceeded \$1 billion. Although revenue only saw a modest increase over the year before, it's a great accomplishment for a corporation that has aggressively invested over \$300 million in northern, rural, and urban communities during the 2015-16 fiscal year.

A major highlight of their investments is completion of a new fibre backbone in northeastern Saskatchewan. SaskTel invested \$30 million and worked in partnership with SaskPower and Cameco to lay 574 kilometres of new fibre optic cable. Between the new fibre backbone and an additional partnership with the Canadian government's Connecting Canadians program, SaskTel is on track to upgrade the Internet speeds available in 23 northern communities from 1.5 megabits per second to 5 megabits per second download speeds and will introduce high-speed Internet to three more northern communities for the first time.

Throughout 2015-16 SaskTel has also continued to expand high-speed Internet services in rural Saskatchewan. SaskTel introduced digital subscriber line, DSL high-speed Internet in 17 rural communities, and the service is now available in 429 communities. During the same period, they've also increased the Internet speeds in 48 rural communities. Since 2013 SaskTel has now increased speeds in 295 communities.

SaskTel continues to grow its rural-focused Fusion high-speed Internet service. It launched in 2014 on 59 rural towers and has remained an area focus for SaskTel. In total Fusion is now available in over 700 rural communities.

Turning your attention to Saskatchewan's urban centres, SaskTel has pushed forward with its deployment of fibre to the premises, branded Infinet. As of September 30th over 68,000 homes and businesses are now connected to SaskTel's fibre network. Moose Jaw has been a particularly shining example of the work SaskTel is doing with fibre to the premises. That city is now the largest fibre-connected community in Western Canada.

The achievements of the past fiscal year demonstrate the hard work and dedication of SaskTel's employees, and their success is built around a culture of being SaskTel proud. Whether it's in the province's far North, its rural heartland, or its thriving urban centres, SaskTel is providing our province with the services it needs to keep Saskatchewan's economy moving forward.

Thank you. And with that we'd be pleased to take the committee members' questions.

**The Chair**: — Thank you, Minister. And now I will open the floor to questions from committee members. Mr. McCall.

**Mr. McCall**: — Thank you very much, Madam Chair. Mr. Minister, officials, welcome to the consideration of the 2015-16 annual report for SaskTel. I guess lots of questions and where to start. Always a lot of interesting things going on with SaskTel, but now certainly more than ever. And I guess there are certain activities, with the indulgence of Madam Chair, that arise from the year under question in terms of the future of SaskTel.

## [10:45]

And certainly yesterday we had the board response to the Goldberg risk assessment arising from the possible purchase of MTS [Manitoba Telephone System] by Bell Canada, and certainly that particular transaction arising against a backdrop of approaches that were made under the year in question from Bell Canada to SaskTel in terms of whether there was any interest in some kind of purchase or strategic alignment or, you know ... I guess I'll be looking to the minister or officials to clarify what that particular offer looked like. But certainly that took place within the year under question for the annual report. So if the minister or officials could off the top tell us what transpired at that time between MTS and SaskTel and tell us about the implications for that going forward as regards to the future of the company.

**The Chair**: — Mr. McCall, can you point to where this is tied into the information provided in the annual report?

**Mr. McCall**: — I believe we're here for consideration of the 2015-16 annual report. Is that not correct, Madam Chair?

**The Chair**: — Yes, but is there a specific area where you're asking this question is tied into whether . . .

**Mr. McCall**: — Certainly under, you know, the risks that stand in the future of SaskTel. This took place, if you'd allow the minister or the officials to respond, this took place clearly within the time period under question here today and certainly stands as a good point of departure for what is the future of SaskTel, risks and opportunities.

**The Chair**: — I guess what I'm asking, is it tied within to the revenues or, you know, the expenditures or anything that's in question in the annual report?

Mr. McCall: — Absolutely, Madam Chair.

The Chair: — Minister. Okay.

**Hon. Mr. Duncan**: — Okay. Thank you for the question. So I think what you're referring to is that, as a part of the MTS acquisition, MTS filed information that did speak to different options that they did consider as a corporation. One of those that was listed was the potential of some sort of deal, merger type of thing, acquisition of SaskTel. They did, I believe, approach the president in late '15, perhaps early '16, but the approach wasn't ... Basically there wasn't an interest in whatever MTS was putting forward.

**Mr. McCall:** — Mr. Minister, are you familiar with the response of the then minister? Again there's a bit of complexity, given that the minister is new to the position as of August, and certainly I'm going to be referring to statements made by the minister's predecessor, but certainly the minister's a highly intelligent person, and I'm sure he'll keep up just fine.

So from a June 18th, 2016 article that appeared in the *Leader-Post*, and again this refers to the period under examination here today, Madam Chair, in response to the approach made by MTS, the minister — this is again from the June 18th, 2016 *Leader-Post* — then minister Reiter said:

"The answer, very clearly, was that we're going to comply with the Crowns Protection Act and the answer was no."

This law says that government wanting to privatize a major Crown [Corporation] like SaskTel must signal its intention through legislation, then go through an election in which voters can pass judgment on it.

I guess, how has that position changed, or has that position changed on the part of the government?

**Hon. Mr. Duncan**: — Well I would just say that in terms of the year that's under consideration, the 2015-16 annual report of SaskTel, that was the response by the then minister. You know, I think in light of the MTS sale, the Premier has mused publicly about the risks that may be associated with any type of acquisition of MTS and what that would do to the, you know, what risks that may pose to the last regional carrier left in Canada, SaskTel.

And so we've embarked upon a process of looking at what those risks would look like. But I think that those questions are probably going to be better addressed when we consider the '16-17 annual report, because those are in which the year that those risks have been assessed.

**Mr. McCall**: — I guess in terms of the risk presenting itself for the corporation, certainly SaskTel is operating in a highly competitive environment, you know, something underlined no lesser a date than yesterday in the SaskTel response to the Goldberg risk assessment. And also in terms of the stewardship of the asset, there are always questions of valuation; there are always questions of anticipating risk and positioning the company as best possible for meeting those risks.

So again in terms of what those risks are and the different sort of turns in the road, there's been a major development in terms of what the position of the government is, as changed from the position where the Crown protection Act was to be respected and to be upheld. And certainly this is a government that's campaigned on that three times. So I guess it gives rise to a lot of question and a lot of uncertainty as to the future of the corporation.

And I guess I'm looking to the minister or officials today to provide assurance to the employees of SaskTel that do so much work that is valued by the people of this province — indeed, the people of the province. There's an opportunity here for the minister to put concerns to rest as regards the future of SaskTel.

So the position of the government has changed to, you know, being able to sell 49 per cent of the corporation. They've got legislation in front of the House to that effect. That poses, in and of itself, a number of risks and challenges for the future of SaskTel and all of the good things that the minister referred to off the top in terms of dividends, in terms of service levels, in terms of this corporation that's very much valued by the people of Saskatchewan.

So does the minister have anything that he'd like to say today in this ever-changing, highly competitive, risky environment for SaskTel? Does he have anything that he'd like to say today to put the minds at rest of SaskTel employees or citizens in the

#### 226

province of Saskatchewan as regards the future of SaskTel?

**Hon. Mr. Duncan**: — So again I would say, in terms of what has changed in the '16-17 year, which actually isn't under consideration, but the major change is that the second-to-last regional carrier in this country is in the process of being acquired by one of the major national firms. And so as a part of our due diligence, we've looked at what risks in . . . We did this in '16-17, which is not the year under consideration, but we looked at what are the risks. The board went out to a third party to ask what are the risks of being the last regional carrier left in Canada. The board has then asked management to look at what their assessment is based on the third party, and that work is now complete.

But that doesn't really change anything in terms of the operations of SaskTel because what the reports — again, this is part of the '16-17 consideration for next year, but what the reports do indicate is that SaskTel has known that there are risks of being a regional carrier, and no surprise that they've done their duty in terms of the board and the management to try to mitigate those risks as much as possible. The report does not say that there are no risks. It says that there are risks, and it does identify that SaskTel has done a very good job in managing those risks. Yet I think we'll probably get more into that in the '16-17 annual report consideration.

In terms of the '15-16 annual report that's under consideration, I'll say that SaskTel has had a very good year. They have, in a very competitive environment, done very well to extend the number of years that they've seen revenue over \$1 billion. This year was 1.5 - a little bit flat compared to last year — but still over \$1.5 billion in revenue, and have provided for a return to the shareholders, to the Government of Saskatchewan in this year. We can get into detail over the next hour and a half as to, you know, in '15-16 where those expenses and where those revenues, where they were coming from.

**The Chair**: — So based on those comments from the minister, Mr. McCall, do you have questions that relate to the '15-16 annual budget and annual revenue that's in front of us?

**Mr. McCall**: — I surely do, Madam Chair, and certainly I don't think it's too much to ask to get some assurance from the minister as regards to what happened in the year under question when an approach was made to SaskTel as to interest on selling off all or part of SaskTel. The answer at that time was that the government was respecting the Saskatchewan Crown corporation protection Act.

That situation has changed because, of course, we now have legislation in front of the House where the minister would be able to sell off 49 per cent, and not have to go to the people, either in a referendum or in an election. So what contribution . . .

**The Chair**: — Mr. McCall, I'm going to ask you to make your questions relevant to the annual report that's in front of us and defer the comments and the questions you have going forward at this point in time.

**Mr. McCall**: — Again, Madam Chair, I don't think it's too much to ask of the minister for some assurance . . .

**The Chair**: — It is, based on the fact that we have the '15-16 annual report review in front of us and that is what is to be considered here today.

**Mr. McCall**: — Can the minister or officials describe for the committee regulatory challenges that arose in 2015-16 and the status of those regulatory challenges on a go-forward basis?

**Mr. Styles:** — If I can I'll try to highlight the two or three key. Most of the regulatory issues usually run over several years. With the CRTC [Canadian Radio-television and Telecommunications Commission], they'll hold a set of consultations on a national basis, potentially some hearings, and then take those, that information into consideration before they make a decision. So often they're multi-year, but I'll highlight two or three of them for you.

First one is the CRTC and the federal government made a decision going back into 2014 that the major telecoms in Canada would have regulated roaming rates. They then embarked on a consultation set of hearings to pull information together, and they are presently considering what those roaming rates may look like. We are waiting for that decision as it has impact on our relationship with the big three. And so the uncertainty that that's generated with respect to the economics of different approaches from a technology perspective has been a bit of a concern or a bit of an issue for us over the past roughly year and a half.

**Mr. McCall**: — If I could, just on that, if Mr. Styles, if you could describe to the committee actions taken by the corporation and by the government to press the case for SaskTel on that matter.

**Mr. Styles:** — For that particular situation, we have provided a set of, a presentation, if you can — I guess that'd be the right phrase — a presentation to the CRTC around our costing around what we believe to be the appropriate roaming rates and our thoughts and ideas, I guess, on the calculation methodology, which really is what is most important. The methodologies that can be used by different companies, what they might include into a cost structure, for instance, are quite variable and so we have provided that sort of information to the CRTC.

#### [11:00]

We've also talked to the CRTC both in person, directly in meetings with them, as well as through phone calls and regular discussions to press home, I guess, our concerns or our points around roaming rates. In addition we've followed a lot of what other organizations that have a similar interest in roaming rates, the approved roaming rates. We've followed them to a certain extent as well to try to find out where we are positioned in respect to, I guess, the industry. As an example, Wind has been a big proponent of lower roaming rates to try to establish a much broader footprint across Canada.

So those would be the primary discussions that have gone on. We've also advised the federal government proper, okay, that oversees the CRTC, of what our views are on that particular topic or that particular issue. The government and SaskTel were very successful in the first round of discussions on this particular issue, when SaskTel was exempt from having regulated roaming rates, so our lobby efforts in this particular area have been quite successful. To date we're cautiously optimistic that the type of cost structure, cost formula that they put in place will also result in roaming rates that are more reasonable in Canada.

**Mr. McCall**: — In terms of the membership of the CRTC and the leadership structure of the CRTC, 2015-16 to now, have there been any significant changes undergone by the CRTC?

**Mr. Styles:** — They have not been in a position where they have been able to refill positions over the past roughly year. My understanding is the new government's rather slow in trying to fill positions in the federal system, and as such I believe that the CRTC is now down to, I believe, eight members and I think they can ... I think full membership is in excess of 12, if I remember correctly.

So they have had some challenges from that perspective. The Chair is also up for renewal or replacement in 2017, and so there is an issue there to be resolved. Saskatchewan and Manitoba traditionally have shared a member on the CRTC panel and that member is, their term is due sometime in early 2017 if I remember correctly as well.

So there is a little shortage, I think, on the CRTC right now. There is some question about the direction of the CRTC as well. I think the federal government is still sorting out where they may want the CRTC to be going in the future, so there's a certain degree of uncertainly.

**Mr. McCall:** — I appreciate the degree of uncertainty with the federal regulator. What sort of actions have been undertaken dealing with the policy-makers on the political side? And certainly, you know, we've got a new federal government that's a little over a year old. What actions have been undertaken on that side to engage with the policy-makers in the federal context?

**Mr. Styles:** — So there's really two aspects to it, and there's only one part that I really am in position to comment on, and that is our role. Now we're a commercial entity. We really don't represent policy in a sense for the Government of Saskatchewan. Policy, you know, in the sense of broadcast policy, those sorts of things are represented by another part of government, and so I believe Intergovernmental Affairs has that responsibility.

Now they do consult with us and ask for our views, but, you know, our role is more as a company that is being regulated. And so we do advance our views on the regulatory framework and its impact on us from a commercial perspective. And we do have certain views around policy, but again they're very tightly tied more to the commercial aspects of that policy.

As an example, fibre to the prem, we engaged for the last couple of years with the federal government or with the CRTC, pardon me, around the whole issue of common carrier status for companies that run fibre networks. Our position on this was that we don't believe that there is a necessity at the present time for the federal government to have a policy requiring common carrier status. We believe there is a need to allow companies to recoup the capital investments that they're making — which are very large — into fibre. And maybe at some point in the future, common carrier status would be discussed. But that is strictly from a commercial perspective and what the commercial interests of the corporation are.

So when it comes to our relationship with them, we meet with them on a very regular basis. Again we advance our positions in terms of their consultations or in terms of hearings. We have a couple hearings, I think, coming up in 2017 that we'll be appearing at as well. So we're quite active from again a purely commercial SaskTel perspective.

On the flip side, broadcast policy again, it's a purview of the Government of Saskatchewan, and we really don't get too involved in it.

**Mr. McCall**: — Okay. But again, as you rightly point out, there's certainly an involvement, or what is decided and what is advanced and succeeded or not on the policy-maker side of the equation certainly impacts SaskTel's ability to provide a great service for the people of Saskatchewan. So I guess, what is the end? You know, it's been pointed out the challenging regulatory atmosphere or environment that the corporation's working in, certainly in yesterday's response from the board. So what sort of work has been done to engage with the new federal government over the past year, and any changes that might be coming on a policy basis that in turn impacts the CRTC and other relevant regulations for the future good functioning of SaskTel?

**Mr. Styles:** — With a new government there's always a necessity, at least at the federal level, there's always a necessity to try to take some time to understand, you know, what their proposed policy framework might be, or whether or not they're going to embark on some type of consultation. The federal government to date has done neither of those. So it's relatively difficult to understand exactly what their policy is going to be, and nor have they embarked on a structured consultation of any sort that I'm aware of.

We have met several times now with the federal Department of Industry, and my apologies, I think they're called ISED [Innovation, Science and Economic Development Canada] now, I believe, so a slightly different name. But we have met with them and had discussions with them to try to identify where the federal government may be going or what they might change. As an example, the fourth carrier policy, we've enquired several times about their position around the fourth carrier policy. We've enquired several times around their position on spectrum auctions going forward, and made representation as to what we believe those kind of policies should look like in the long run. And again, they're very much from a commercial perspective.

You know, in addition, Minister Bains has contacted me at one point, and we had a short discussion about the existing policy framework that the federal government had in place prior to the new government coming in. And you know, he expressed his appreciation for my outlining where some of our concerns were from a commercial perspective.

I do believe there's been some engagement as well in other parts of government around broadcast policy, Canadian content, things like that, again that are part and parcel of the overall framework. But again, it's not a responsibility of SaskTel per se. While we do have a TV licence, and we do express our views on the financial aspects of some of the requirements that are out there, we've left that again with Intergovernmental Affairs over time.

Mr. McCall: — Thank you very much for that, Mr. Styles. And again, making sure that every possible opportunity is taken to make the case for SaskTel, and its manyfold value to the people of Saskatchewan is obviously in, particularly in ICT [information and communications technologies] and in telecom, where the role of the regulator plays such an important ... is critically important. And then in terms of the changes that have undergone on that landscape - I guess, in terms of the confidence that you have as the CEO of SaskTel working in partnership with people that are responsible for the intergovernmental affairs function of the Government of Saskatchewan, or with the new minister who again knows his way around that terrain very well - how is the case for SaskTel being pressed on that side of the equation? Can the minister or officials provide us with any updates as to how that's been undertaken?

**Mr. Styles:** — You know, so I'll speak more maybe in sort of a retrospective perspective. So at various times in the past, where we've had issues or concerns around the format of the spectrum option, for instance, which was a big issue for us in the past, we have advanced to the government those issues and those concerns. And you know, my ministers have always responded. I've done trips down east with one of my past ministers as well to meet with a lot of these people in person. It's also been advanced through intergovernmental affairs from time to time and, you know, I believe at higher levels in government as well from time to time it's been raised.

So the government has always been very supportive of SaskTel as we've put those kind of issues and questions forward. The government has taken action to try to assist us in getting a framework in a format that is, you know, that is as positive as possible for SaskTel and the province of Saskatchewan. Lots of times those two things are aligned.

We'd like to push deeper into rural Saskatchewan, as an example, and I think it's fair to say that that is a policy of the Government of Saskatchewan, and they've assisted us with that. We've been successful on four or five program calls from the federal government; First Nations, there have been a couple of very big pushes there. We recently received money as well to run new fibre line into northern Saskatchewan. I believe we received 7.5 million from the federal government on that and has allowed for almost all of the communities on the northeast side of the province to gain much faster speeds. You know, so the government has helped press our case in all of these kind of situations. So you know, it's been a very productive coordination of approach.

**Mr. McCall:** — Thanks for that. Again, and this might be too sort of particular, but I thought one of the things that the current provincial government did, you know, right after the federal election, which I thought was a well-placed effort, was to invite Minister Goodale to the legislature for a meeting. And certainly he's the Saskatchewan minister in the new federal government, and unless there's been some boundary change I'm not aware

of, 2121 Saskatchewan Drive is located in the riding of Regina-Wascana. So this is an individual that's got a very sort of from-the-ground-up appreciation of the value of SaskTel to the people of Saskatchewan. So have there been any particular undertakings made with the Saskatchewan minister and the federal government on the various issues of importance to SaskTel and its future?

**Hon. Mr. Duncan**: — So I would agree that in terms of the province's . . . the provincial government's tie or connection to the new federal government would be through Mr. Goodale. And I can tell you that on a number of fronts colleagues, including the Premier, have indicated that Mr. Goodale, Minister Goodale has been very receptive to having discussions on a number of different topics. I know Mr. Styles has indicated to me that he is, I believe, has a call in with Mr. Goodale's office to arrange to have some time with Mr. Goodale to discuss some of these very issues that you're talking about.

I've had a chance to speak to Minister Goodale since coming into my new roles. On the SaskTel file I would just say that the only thing that we discussed is I've never met Minister Bains, the new . . . or the minister that is responsible for the regulatory side that SaskTel feeds into. And so Mr. Goodale has offered to basically help to make an introductory connection between Minister Bains and myself. That hasn't happened yet. I don't have a planned trip to Ottawa at any point coming up, but certainly Mr. Goodale has offered to connect the two of us.

**Mr. McCall**: — Thanks, and it's not to harp too much on the federal connection, but certainly, as SaskTel rightly identifies, the regulatory environment is one of the more challenging aspects in trying to plot the course of SaskTel forward. And certainly we'll be looking to the leadership of SaskTel and the provincial government to continue to press that case as vigorously and as thoughtfully as is humanly possible and on as many fronts.

## [11:15]

So I guess for the year in question, 2015-16, was there a valuation of the corporation that was undertaken in that year? And is there a figure that the minister or officials could provide to the committee as to the worth of the corporation and, if there was a valuation, what the terms might have been if that was undertaken upon?

**The Chair**: — Mr. McCall, the question you're asking of a valuation is not part of the annual report. And so I would ask that you direct your questions to the annual report that's in front of you.

**Hon. Mr. Duncan:** — So I'll say a few ... to Mr. McCall's question. There is no valuation in terms of SaskTel. It's not a part of the '15-16 annual report because there wasn't an undertaking. There was not an undertaking to determine what the valuation of SaskTel is, then or now.

**Mr. McCall**: — Thanks for that. And certainly again we're here to discuss the balance sheet. And you know, as the minister can talk about the revenues and net profit and all of that, it would be, you know, sort of curious to not have a valuation as part of the vital information provided on the corporation. Is

there a plan for that kind of information to be provided on an ongoing basis?

**The Chair**: — Mr. McCall, could you ... Once again, I will have to either cut you off if you're not going to ask questions that are pertinent to the annual report that's in front of you.

**Hon. Mr. Duncan**: — So, Madam Chair, you know, I think if we turn our attention towards the report that is under consideration, including the financial statements, I think from that perspective it tells the ... It would show the value of SaskTel in terms of the amount of revenue it generates for the province.

Obviously with summary financials, the revenue, the top line for SaskTel or any Crown corporation does show up on the summary financials of the province. It certainly will show you the net income for the company, how much of the earnings was retained by the corporation, and then obviously what we paid out at the end of the year in terms of a dividend. That would be the extent in terms of the value of SaskTel that is a part of the annual report. Again there is ... Aside from that, there is no other valuation that has been done in terms of SaskTel.

I certainly hope, Mr. McCall, you're not suggesting that in past governments that you were involved in that there was, you know, an active file that would have had the valuation. I think from your question, you were kind of alluding to ... You maybe were questioning why we didn't have a valuation in terms of what the company is. I don't expect that that was a part of the past practice, and it certainly hasn't been under this government.

**Mr. McCall**: — Well certainly from time to time, there were valuation efforts made of the different assets for which the government was responsible for their stewardship. And no, it wasn't part of the annual ongoing basis, but certainly the governance landscape is seemingly changing by the month in terms of how these things are looked after by the government. So I'm just wondering if that's in the go-forward for the government in terms of including that kind of information, within the information provided in these very valuable annual reports.

**The Chair**: — Mr. McCall, do you have a question relevant to the annual report in front of you for the minister or his officials?

**Mr. McCall**: — I certainly do, Madam Chair, and I guess the ... Moving on in the report, in terms of the debt level and the return on equity, again drawing upon the annual report under question here today, does the minister or officials have any observations to make in terms of confidence or concern as regards the debt level of SaskTel and the challenges going forward from the numbers that we're considering here today?

**Hon. Mr. Duncan**: — I'd say the most up-to-date figure that I can provide to members of the committee, the debt ratio is approximately 50.6 per cent. In terms of industry standards, it's consistent with industry ratios. Certainly that would be, if you compare SaskTel to the major national firms, that would be among the lower of the range. I believe MTS is around 55 per cent. Telus is 60 per cent, and Rogers is 72 per cent. So we would be consistent with industry standards, but we would be at

the lower end if you compare us to the nationals.

**Mr. McCall**: — Well thanks for that, Mr. Minister. And certainly on the go-forward, what are the plans in terms of debt level going up, standing pat? Moving from this particular set of figures going forward, what are the plans of the corporation?

**The Chair**: — Is there a reference page that you are referring to, Mr. McCall, within your questioning?

**Mr. McCall**: — I think if you look at the management's discussion and analysis portion of the annual report, Madam Chair, say page 38, that should satisfy your concern about whether or not this is pertinent to the discussion here today.

**Hon. Mr. Duncan**: — So the projections that are being made by the corporation over the next number of years is that the debt ratio would be at a similar if not a little bit lower ... That's notwithstanding, you know, should we choose to make some sort of capital investment that would, you know, change our capital plan going forward. But what is being contemplated would keep the debt ratio at a pretty stable level.

**Mr. McCall**: — Thanks very much. What is the debt limit for the corporation at present, and all in when you consider the different subsidiaries?

**Hon. Mr. Duncan**: — So if you back out short-term investments, sinking funds that are already in place, roughly speaking the net debt of the company is about 950 million. And there is authorization to go up to 1.2 billion, so there is still plenty of room available should SaskTel ever need that.

**Mr. McCall**: — Okay. And so just to ask the question another way: there are no plans at present to go back to government asking for an increase on the borrowing limit of the corporation, as what's happening currently with the Saskatchewan power corporation Act?

**Hon. Mr. Duncan**: — Thank you. So in 2015-16 there wasn't a request to authorize increase in the debt level. Just conferring with officials, it's been a number of years since that's taken place, and we certainly, on a go-forward basis, don't expect it in the next year.

**Mr. McCall:** — Thanks very much, Mr. Minister. And again we're always looking to get things on the record so that, you know, it's not some *post facto* thing where it's like, wow, we obviously didn't understand what was being contemplated. So it's good to get that clarification, Mr. Minister.

In terms of the retained earnings policy of the corporation ... And again this is one of the admirable things about SaskTel, is that it's a highly capital-intensive atmosphere environment that the corporation does its great work in. So in terms of the wherewithal of the corporation to meet those intensive capital needs, based on the 2015-16 annual reports and then, of course, going forward, what's the confidence level like with the leadership at SaskTel in terms of being able to meet those always-demanding capital needs in the ICT sector?

**Hon. Mr. Duncan**: — I would say over the last couple of years we've certainly left more cash within the organization than in

previous years. You know, certainly there were years in the past where successive governments were, you know, in one case up to 93 per cent of the net income was taken out as a dividend. In this '15-16 year we're at about 30 per cent. So certainly the last two to three years there has been a reduction in the amount of dividend that's been declared based on the net income. So I think it's fair to say that we've been mindful to leave as much cash into the company as possible for them to continue on with their expansions and different service upgrades.

**Mr. McCall:** — Thank you very much for that. I guess this is as good a place as any to ask for the minister or officials' observations on the year-end. The annual report under question is a bit of an anomaly in terms of the 15 months under consideration, this being the change year when the government moved the end reporting date to reflect the broader fiscal update. And in terms of the projections and the graphs and all that that attends, the good forecasting work that SaskTel does, this will, I'm sure, cause some interesting moves on those representations. In terms of it being 15 months, does the minister or officials have any, do they have any observations on how that impacts the figures under consideration here today?

**Hon. Mr. Duncan:** — So in terms of the dividend versus the net income of the corporation, so I can indicate to the committee that if the fiscal year-end would have ended on the calendar year 2015, then the net income would have been 97.7 million and a declared dividend of 30 million, so about a 31 per cent dividend. When you add in the additional three months to bring it to the '15-16 year, the net income's 126.7 with a declared dividend of 37.5, so in fact the dividend level dropped to 30 per cent from 31 per cent.

**Mr. McCall**: — Thanks for that. In terms of, and again the spectrum sort of arises from the regulatory challenges that the corporation faces in terms of the always changing nature of ICT technology. That's another set of challenges as well, in terms of the dispersed population in the province, a whole other set of challenges therein. What's the confidence level going forward from these figures here today, the information in this annual report, in terms of the ability of the corporation to meet the capital needs going forward?

[11:30]

**Hon. Mr. Duncan:** — Thank you, Mr. McCall, for the question. So I'll just maybe start by saying that, you know, we've been very deliberate to try to cap the dividend over the last number of years so that SaskTel could reinvest into capital infrastructure. Obviously we know that SaskTel operates in a very competitive environment, and so when you're building and rebuilding the network, that's very capital intensive. And you know, we wanted to be mindful of not increasing those debt levels in SaskTel like we've talked about in the last, few questions ago. And so by, you know, very deliberately keeping the dividend at a fairly modest level compared to the income that has been . . . so that SaskTel had the resources to invest and reinvest into the network.

Now I'm very confident with the plans that have been set out by the board and by our senior management. I think we have a very good team both at the board level and at the senior management level and great employees that work for the company, so I'm confident in that. I think, you know, the challenge will be, are we investing, reinvesting enough fast enough?

Certainly I hear from colleagues, from constituents that would like to have increased services, improved services. You know, in a perfect world we'd like to do more of that, but obviously there's balances and trade-offs when you have to make some of those capital decisions. But I think in terms of building out the network, rebuilding some of the aging infrastructure, you know, I'm pretty confident that the company has the resources going forward.

**Mr. McCall**: — Thank you for that, Mr. Minister. In terms of the human resources piece of the puzzle for SaskTel, does the minister or officials have any sort of general observations to make on SaskTel meeting the always vigorous challenges out there in terms of ICT human resource requirements?

**Hon. Mr. Duncan**: — So I think, I would say that probably the biggest challenge for SaskTel on the HR side is just ensuring that employees have the training that they need. If you think about the technology and the systems and the software and the hardware that is being developed and being deployed, you know, very little of this you get training out of university because of how fast and how much these types of technologies change. And so there's constant upgrading that needs to take place in terms of the employees. If you think about, you know, somebody that joined the corporation 20 years ago, they're dealing with technology that obviously wasn't even in existence. Some of that legacy . . . Obviously legacy equipment and technology still may be in existence, but more and more SaskTel is adapting and adopting newest and the best technology.

So you know, I would say that the biggest HR issue is ensuring that employees are up to speed and up to date in the latest software, latest technology, latest hardware. You know, we try to do as much of that as possible within the province, but obviously some employees do have to leave the province to meet with vendors, to kind of have first-hand, hands-on experience in kind of what is not only being deployed today, but I think, more and more importantly, what SaskTel is looking to deploy into the future.

**Mr. McCall:** — In years previous, succession planning was an ongoing concern for the corporation and, you know, other parts of the Crown sector. And this is not into, get into the great impolitic place of asking people their age or anything like that or ... You know, I've for one got more grey in my beard this year than I certainly did last year. But in terms of those sort of benchmarks by which you can then draw confidence on making sure that you've got the right HR mix in terms of the senior leadership and also on the front lines in terms of service delivery, does the minister or officials have any observations to make in terms of the health of the corporation as regards meeting that HR challenge?

**Mr. Styles:** — So on a regular basis for the management group we carry a very formal succession strategy. Having a look at staff that are moving into management jobs and have the potential to move up and make sure that we're trying to align the necessary experiences and the necessary training to put them in a position where they can assume higher level jobs.

**December 13, 2016** 

In my time at SaskTel we've now changed over pretty close to half of our executive. And so individuals as they're reaching, you know, a certain age, obviously they do look to retire and so we try to stream individuals to be prepared when that does occur. And I just, my vice-president of operations has just retired. He actually ended the month, but we have a new VP [vice-president] that has moved in to that particular job. He used to be the director of operations in Regina, and he will now assume a more senior role.

So, you know, we look to do a lot of this internally within the corporation. On a pan-Canadian market basis we have trouble competing from a salary perspective, so we need to train and develop people. At lower levels in the organization, I think we're equally successful. We train a lot of the individuals that are our CSTs [customer service technician], our consumer service techs. They come in potentially with grade 12 education. We run them through electronics courses, technology courses, okay, and then they go out into the field for us.

A lot of those people are the people that move in to the managers positions or regular directors positions. We have a very, very active training program for our staff, so things like ICT, for instance. When we started to move down that path more aggressively, we put together a program that essentially allows everyone in the organization to get a basic level of understanding of what ICT is, what data centres are and how they tie in to the cloud offerings, how they tie in to the development of our fibre products, for instance.

We've put in some new fibre products that weren't heard of in our organization a number of years ago. DWDM [dense wavelength division multiplexing] is one of them, dense wave multiplexing. And so again you need to make sure your sales staff, your operating staff all understand these technologies. And it's the only way you get full alignment on your strategic plan as well.

But yes, succession planning very important to us. Now I haven't seen the average age of the corporation recently, but I think it's sort of mid-40s, which isn't bad. You know, for us we're quite happy with that. There's still a bit of a bulge, I think, at the top end in terms of a group of boomers, myself being one of them, okay, who are approaching that period of potential retirement in the near future. And, you know, we continue to examine this on a pretty regular basis.

My board is very involved as well. So just last year is a good example of that. We did a session with our board where a group of our sort of younger management staff were able to meet with my board members, introduce themselves. Our board was able to get some understanding — I think Mr. Dennis may have remembered that particular occasion — and get a good understanding of who is coming up and who might slide into positions.

You know, our last three vice-president appointments, just the last two are both internal appointments. Another one was an external individual, and a couple before that, for instance, our chief technology officer was an internal appointment as well. So you know, I think it's a very good process. It's worked well for us over time. We tend to end up with people that want to stay in Saskatchewan. Money isn't the only issue. They want to be here to serve the public and they like what we do as a company and how we treat our employees and the kind of culture, so it's ... but it's been very successful from my perspective.

**Mr. McCall**: — Thank you for that. In terms of questions around gender balance or representative workforce and better engagement, both within the human resource component and through supply chain and through work with vendors around better engaging First Nations and Métis people in the province, does the minister or officials have any comments to offer on successes or points of departure in the year under question on those particular scores?

**Mr. Styles:** — So maybe I'll highlight some successes. So a good example, I think, would maybe starting with our executive committee at the corporation, our vice-presidents, that level. When I got to the corporation, essentially it was all men. Right now we have five ladies, I think it is, five ladies that are on the executive committee. So we're pretty close to being completely balanced. You know, I would add they have all earned their positions, okay, through the quality of the work they do. And I've never found it to be an issue to find very, very capable women here in Saskatchewan.

In terms of the corporation and the gender balance in the corporation, you know, I wouldn't be surprised — I haven't seen the latest numbers — but I wouldn't be surprised to see that women, the number of women in our management group is, probably exceeds, you know, the targets that are set through the human rights commissions. In areas such as marketing as an example, okay, I would tell you most of the management are women. So you know, I think on that side of it, the gender balance side, I think we've done an excellent job over time.

First Nations, you know, we have programs that we operate on a regular basis. We have, I believe we're just slightly above the target that is set by human rights. I think their target is around 12 and I think we're just slightly above 12 right now, so we've had great success there.

An area that we've watched over time but haven't really found there to be a situation that worked well is trying to move some people of Aboriginal ancestry into higher level management positions. And so we're still sort of watching for that and looking to see if we can make that push. We found over time that a number of people that seemed to move up from First Nations into higher level positions seemed to move onto other jobs outside the corporation. Holding on to them seems to be an issue or a challenge.

On the side of disabled individuals, we have a number of active programs with people with ... Gee, I just can't think of the name of the affliction, yes. Anyways we have a number of different programs, okay, that are out there, individuals that work in our stores as an example. And you know, some are on half days, some are on full days. We have some I think that are in our ops, if I remember correctly, as well. And so we've worked hard to try to adjust to that.

We have an individual without sight that works in, I believe, my marketing group right now. And we've tried to find ways to assist him to overcome the disabilities. And in his particular case, it was a voice-activated computer system that has allowed him to participate in everything. And in point of fact he was featured, I think, in the *Leader-Post* just recently.

So we have a number of those kind of relationships that are there and they seem to work quite well. I don't think we've quite got to the target that's set out by the Human Rights Commission but we're not far off. And we take it as a point of pride to continue to try to offer opportunities to any and all individuals.

You know, non-visible minorities I believe is the other category, and I think we're quite a bit above actually the targets that the Human Rights Commission has set out for us. We find that with a lot of the refugees that have come to Canada over time, either directly through refugee programs or sometimes just through the university programs where they come in on a temporary visa, we find that after the fact they have excellent educational backgrounds and are great workers. We have a number of people — Panama is an example, okay — that have come to Canada and now work in the organization as well. So I think we have an enviable record, to be very blunt.

**Mr. McCall**: — Okay. Thank you for that. One of the documents we have for consideration here today is the Saskatchewan Telecommunications pension plan 2015 annual report.

## [11:45]

There's a concern that has been communicated to myself and I'm presuming to the minister and to the corporation, as regards individuals that were members of the telephone defined benefit members pension plan association. And if I could just read something into the record and would invite the minister or officials' comments on it. The letter concludes:

We strongly believe that the government should reconsider the order in council by not including SaskTel's old plan with the other public sector pension plans when solvency deficiency payments were eliminated.

Short of this resolve, we would also support the current government give plan members a written assurance that, should SaskTel be unable to fund this plan or should SaskTel be sold, that the provincial government would provide appropriate funding if needed to deliver the benefits to all members of the SaskTel defined benefit plan as determined in the negotiated plan text.

We look forward to some positive action regarding this issue.

And again this is in reference to I believe 2,000 members of that that are affected by that plan, and regards an outstanding matter of \$264 million. And then put another way, this is the pension of people that built the company, that built the corporation, and they're looking for some assurance from the government on their pensions, their livelihoods being made whole, which of course was part of the deal in terms of the good work that these people did over many years for the corporation.

So does the minister or officials have anything to say to the

folks that are concerned about the future of their pension?

**Hon. Mr. Duncan:** — Thank you for the question, Mr. McCall. The SaskTel pension plan is the responsibility of SaskTel, as you've pointed out, and it is being managed by SaskTel. The plan is fully funded on an ongoing concern basis. I don't want to get into too much speculation, but I would just say that in the event of a change in ownership or in the event of the solvency of the corporation, insolvency of the corporation, we would deal with this matter in accordance to all the applicable Acts and regulations.

**Mr. McCall**: — So drawing from that, the pensioners would be made whole? Is the government committing to that responsibility?

**Hon. Mr. Duncan**: — Again I would just say that the plan is fully funded on an ongoing concern basis. You know, I can't speak much more to that, and I can't speak to what interest rates may be in the future. I can't speak to ... I won't get into too much speculation other than to say the plan is fully funded.

**Mr. McCall**: — I would presume that the minister can expect further letters from the pensioners in this regard in looking for assurance that they will indeed be made whole as per the terms of their pension going forward. So the minister can certainly look forward to that.

**Hon. Mr. Duncan**: — Well I have received letters in the past. I suspect I will receive letters in the future. And I would say again, the way that I'm answering those letters, based on what I know today, is that the pension is fully funded on an ongoing concern basis, and that in the event of a change in ownership, in the event of the company being insolvent, in the event of, you know, what other eventual potential realities may exist with interest rates, with all sorts of different things that would go into a pension plan, we would treat the pension plan in accordance with all applicable laws and regulations. But as of today, the pension plan is fully funded on an ongoing concern basis.

**Mr. McCall**: — I will leave that where that stands for now, but again I'm sure that the minister can look forward to continued correspondence in this regard.

In terms of the work that is undergoing in the year under question or work undertaken in the year to question, be it fibre to home or . . . I guess one of the concerns I always have about . . . or one of the things that stands out is a real vivid example for me is the whole transfer between or the change for SaskTel in terms of the environment around moving from land lines to wireless and where the corporation provides its service and how it best anticipates again the changes in this highly competitive, ever-changing environment that it operates in, and to date has done so much better than say the Blockbuster Video that is . . . The remnants of it are on North Albert.

So my compliments to the leadership of the corporation and to the men and women that provide the service in terms of anticipating these challenges, these changes in the environment, and then still coming out on the other side of ... Again you know, we've got an annual report here where there's a considerable net profit and return to the people of Saskatchewan, not just in service, but in actual revenue.

So in terms of, you know, the year under question that we've got here, I'm obviously constrained by the agenda in terms of getting a better forecast from the minister or the officials, which is a shame given that we've got you here. It would be great to ask you what that anticipation is.

But in terms of the year under question, does the minister or the officials, any observations to be made about profit centres, service centres for the corporation that weren't anticipated say five years ago? And what are sectors in the corporation's activity that stand out as areas to watch for the years to come in terms of increased activity on the part of the corporation? Or in terms of disengaging, and obviously land lines would seem to ... What can we expect for the future of land lines and where that all might wind up? Any observations to be added?

**Mr. Styles:** — So I wouldn't say whether there was anything new. I would say it's the pace of change that is likely the big issue for us. As an example, when I joined the corporation back in 2010, the implementation of LTE, long-term evolution, as the next type of wireless network was being slated for around 2018. We started implementing it in 2014. And so a lot of things get sped up very, very quickly.

There are other things that we think sometimes are going to, you know, come to the fore very quickly and sometimes they don't. And a recent example of that is probably the Internet of things, machine-to-machine technologies. And while we seem to be on the cusp of something there, it hasn't produced the explosion of devices being connected to the Internet that probably were expected.

So for us the challenge is always about the introduction of these technologies and being able to accelerate or maybe decelerate certain approaches to those. You know, I'll maybe go with the land lines as a starting point. On the land line side, we continue to see a reduction in the number of land lines here in the province. A lot of it is cord cutting, plus we're faced with competitive pressures where the cable companies are still trying to pull some of our land line customers over onto their platforms.

You know, we seem to understand quite well how that's going to go. And every year we set our numbers, and we're usually pretty close, you know, either above or below, and we know that it's going to continue to drop off over time. Where we've now found a way to introduce new products that keep some people on a form of land line, if I can use that phrase, new products like integrated business communications that we brought to the market about 18 months ago, maybe a little longer. And that has exploded, and we're now finding our business customers are picking up that product. It's a hosted application, and so unlike the idea that you have a land line in your home, this is a hosted application and there's transport to whatever device or whatever location you wish to use IBC [integrated business communications] at. That has done much better than maybe we would have expected. We're always happy to see that and in a commensurate way has produced, you know, great revenues for us.

Another example probably is data centres. We were in data

centres for a long time before we brought them to the market in a sense for our customers. You know, we've built two in existing buildings over the past couple of years. We have a third one in Saskatoon that's being built right now and we're finding great success there. And what it's doing is it's causing us not only to bring all of the server environments, the applications from companies, into our buildings, but it's facilitating the use of our fibre optics lines, okay, to provide transport to whatever location they want to use those particular products in. You know, so we've seen that.

We're working right now as well at changing out our land line switches. And so for the first time in Moose Jaw — it's happened sort of very quietly — but the first time in Moose Jaw we've now moved off of, or are in the process of moving off of our old switches from the 1970s and 1980s called DMS [digital multiplex switches] switches to broadband line gateways. We're one of the first in Canada to do that. We wanted to test out the technologies and make sure that this works. It does. We're having great success with it. Over the next number of years, as our old technology in other centres throughout Saskatchewan gets to a point of no support from the vendors, we will start to convert them over as well onto broadband line gateways.

And this is our sort of overall move. We're going to end up being an IP [Internet protocol] company, you know, Internet protocol company and ICT products. And so you know, again we're seeing in all parts of the company these things happening.

Fibre is a very long-term play. You know, we've now finished, I think we're into the 80s if you count all the numbers this year in terms of the number of connections we have to our fibre network. We've passed over 150,000 customers. We're going to continue to do that in the coming year. We'll finish our first community, Moose Jaw, with the exception of just a couple of small places in it, but 99.9 per cent of Moose Jaw will be on fibre.

And while people don't really see the technology difference when it comes to their home phone, their home phones are really VOIP [voice over Internet protocol] phones now because it's all over IP. We just manage the network to make sure that there's a dedicated amount of space for those lines. Whereas if you use VOIP over an Internet connection, the network quality probably isn't there as well, so we're making a lot of progress there as well. We hope to continue to do that going forward.

We've introduced some new Internet products into rural Saskatchewan. Fusion, we now have it on over 59 towers around the province. And our challenge is trying to keep up with the amount of bandwidth that people would like to have off of those towers, you know, so I would just suggest it's a matter of each year adjusting our approach to things a little bit and speeding up in some areas.

The only real surprise I would suggest that we've come across in the past three years is how far we could push our network into rural areas. And so there was always a sense that the cost to do that would not be justified given the potential returns. And we have found that through the use of different technologies and different approaches, that we can push very, very deep into rural areas, into northern Saskatchewan. A good example of that is we did run a fibre line into the northeast part of Saskatchewan.

We have now put in a radio network as well that is roughly four times the capacity of the old radio networks. It's a brand new technology, first time introduced here in Saskatchewan. I think the first time in Canada actually. We worked with one of the vendors out of Europe, if I remember correctly, to bring it in. And we've now upgraded all the speeds in places such as Denare, Sandy Bay, Creighton, Jan Lake, all along the side there.

#### [12:00]

I just received some numbers this morning as an example that since we've upgraded them, which is only four or five months ago, the amount of bandwidth they're using right now has gone up 400 per cent. And so we're seeing that, you know, you can open the door ... And again the revenues are decent. They make the investment worthwhile. And so we continue to push our technologies out further and deeper into rural areas, which we're very happy to be able to do, and we're seeing the kind of returns that make it justified.

So you know, other than that, lots of other things going on. In 2016-17 we'll be introducing for the first time VoLTE in Saskatchewan, voice over LTE. By the end of March 2017, LTE will be on almost every tower in Saskatchewan and we'll have the first fully deployed provincial LTE network in Canada. Other jurisdictions have some LTE in certain major metropolitan locations, but we're taking it out to all towers throughout Saskatchewan with a couple of small exceptions. There's four in the very far North that'll probably be later before we get to them, but essentially again a nice achievement from our perspective. So yes, a number of things that are still coming down the pipe that we hope are staying a step ahead, if I can, of the demands that are out there.

**Mr. McCall**: — Okay. Well thank you very much for that. And I guess certainly, noting the time and where we're at, I'd just say thank you very much, Minister, officials. And please, through yourselves, extend our thanks on behalf of the official opposition to the good men and women of SaskTel for the critical work that they do all the year through. But with that I'd conclude my remarks, Madam Chair.

**The Chair**: — Thank you, Mr. McCall. I'll now ask a member to move that we conclude consideration of the following annual reports and financial statements: the 2015-16 SaskTel annual report; Saskatchewan Telecommunications financial statements dated March 31st, 2016; Saskatchewan Telecommunications International Inc. financial statements dated March 31st, 2016; DirectWest Corporation financial statements, March 31st, 2016; SecurTek Monitoring Solutions Inc. financial statements dated March 31st, 2016; and 2015 Saskatchewan Telecommunications pension plan annual report.

Mr. Nerlien: — Thank you, Madam Chair. I so move.

**The Chair**: — Mr. Nerlien has moved that we conclude consideration. Is that agreed?

**The Chair**: — Carried. And that concludes our business with SaskTel this morning. And, Mr. Minister, if you have any final comments to wrap up.

**Hon. Mr. Duncan**: — I do, very quickly. I just want to thank the committee for inviting us to appear, to discuss the annual reports. I want to thank Mr. McCall for his questions. And I do want to thank not only the officials that you see here but obviously the people that they represent, our board of directors, and all of our employees all across this province. And I do want to thank Mr. Styles for his assistance, not only today in answering the questions, but I appreciate working with him and I appreciate his patience. There's often times where he's briefing his tech-challenged minister — and as you can tell, there's a lot of technology that we talk about — and there's oftentimes a look where he can tell that I'm not getting it, and so he explains it in another way in which hopefully I get it. So I appreciate his patience.

And I want to thank the committee again. Thank you for your time.

**The Chair**: — Thank you. This committee will now recess until 1 p.m.

[The committee recessed from 12:03 until 13:03.]

#### Saskatchewan Water Corporation

**The Chair**: — So welcome, Minister Moe, and your officials from the Saskatchewan Water Corporation, and welcome back to our Provincial Auditor, Judy Ferguson, and her officials and committee members for this afternoon. And we have Ms. Sproule sitting in for Ms. Beck as well this afternoon.

So I'm going to turn it over to Ms. Ferguson to introduce her officials and make her presentation on the 2014 report volume 1, chapter 4 and 2015 report volume 1, chapter 3 and 2016 report volume 2, chapter 9.

**Ms. Ferguson**: — Thank you very much, Madam Chair, and deputy — well I guess we don't have a Deputy Chair — members and Minister and officials. With me this afternoon I've got Ms. Regan Sommerfeld. Regan's the deputy that's responsible, and included in her portfolio is actually Sask Water Corporation. Behind her is Ms. Kim Lowe, and Kim is our committee liaison.

Before I launch into sort of how this is structured, I just want to extend our thank you for the co-operation that has been extended to our office from Water Corporation. We appreciate that as we work our way through the various audits that we do.

As the Chair indicated, what we're going to do is she's grouped the three chapters that relate to our integrated audits. Regan will present those first. We'll pause after that presentation and then we'll present the follow-up chapter, which is the additional chapter. None of the chapters have new recommendations for the committee's consideration; you've looked at them all before. So just an update as to where things are at. So without further ado I'm going to change it over to Ms. Sommerfeld.

Some Hon. Members: — Agreed.

office works with Deloitte to carry out the annual integrated audits of SaskWater each year. Chapter 4 of our 2014 report volume 1, starting on page 21; chapter 3 of our 2015 report volume 1, page 19; and chapter 19 of our 2016 report volume 2, page 95 report the results of our 2013, 2014, and 2016 annual integrated audits of SaskWater. 2016 is reported because of the change to the March 31st year-end, so there was no 2015 report.

We found SaskWater's 2013, '14, and '16 financial statements were reliable, and for these years it complied with the authorities governing its activities related to financial reporting; safeguarding public resources; revenue raising; spending, borrowing, and investing; and had effective rules and procedures to safeguard public resources other than it had not completed and tested a business continuity plan.

Since 2012 we have reported the need for SaskWater to implement and test a business continuity plan. A complete business continuity plan includes disaster recovery plans for its business critical financial and water-metering systems. Without a complete and tested business continuity plan, SaskWater increases the risk of loss of these business critical systems.

As reported in each of these chapters, SaskWater has partially implemented our recommendation. In 2014 it continued to refine the business continuity plan for head office operations. Also in 2014 management noted that it intended to investigate alternative system supports as the next step in ensuring critical system functionality in the event of a disruption. In 2016 we found that SaskWater has made limited progress. That concludes my presentation.

**The Chair**: — Thank you. I will turn to the minister now for introduction of his officials and opening comments.

**Hon. Mr. Moe**: — Sure. Thank you very much, Ms. Chair. Pleased to be here today. I'd like to thank the committee for taking the time to consider these chapters as well as our annual report and a water quality report here today. I also want to welcome the Provincial Auditor and her officials to the committee here today, as well as Ms. Sproule. I welcome you, and it's good to see you again.

I have with me to my left Doug Matthies, the president of the Saskatchewan Water Corporation. I have behind me, somewhere over to my right behind me, Eric Light, the vice-president of operations and engineering. To my right is Jacquie Gibney, the vice-president of business development and corporate services, and I have behind me to my left, Mr. Danny Bollinger, director of financial services. And Tyler Lynch, from my office, my chief of staff is back behind me as well.

Would you like my comments now or later on the chapters?

The Chair: — You can begin with your comments.

**Hon. Mr. Moe**: — So my officials and I are here today and pleased to be here to speak to the recommendations in the Provincial Auditor's report and the 2015-16 SaskWater annual reports, as well as the water quality report which I mentioned. My comments here, I'll do the chapters that we just brought in and any other ones as they come.

**The Chair**: — Yes, that's correct. Thank you.

**Hon. Mr. Moe:** — So chapter 4 of the auditor's 2014 report; chapter 3 of the 2015 report; and, I understand, chapter 19 of the 2016 auditor's report all relate to the same issue, and that's the need for SaskWater to improve its business continuity plan in the event of a disaster.

Saskatchewan Water Corporation has a business continuity plan, and in the auditor's report it identifies that SaskWater has in the past used the plan to run a simulated disaster. SaskWater acknowledges, however, that the plan was not robust enough as it relates to disaster recovery of its information technology systems. And since the 2015 auditor's report, SaskWater determined that it needed to switch its IT [information technology] services provider before being able to implement an adequate disaster recovery plan to strengthen its business continuity plan.

So SaskWater went through a competitive process to select a new vendor. They've worked diligently in 2016 to transition service providers, and the actual changeover was just completed at the end of November this year. One of the steps that SaskWater completed as part of its service migration plan was to test its new vendor's ability to recover from a disaster situation within 24 hours. This test was successfully completed using only a portion of SaskWater's data and systems in August of 2016. SaskWater expects to operate for a few months with its new service provider to ensure that all systems are indeed operating as planned, and then during 2017, the year 2017, we will come back to addressing the outstanding recommendation on its business continuity plan.

So therefore we would deem that SaskWater is making progress on this recommendation, but it does remain partially completed at this point in time. But we look to achieving full completion in the future.

**The Chair**: — Thank you, Minister. Are there any questions from committee members at this point in time? Ms. Sproule.

**Ms. Sproule**: — Thank you very much, Madam Chair, and thank you, Mr. Minister and officials. We really touched on a very high level, this business continuity plan, and I'm just wondering if you could break it down a little bit for the layperson in terms of what IT work was required, what is the service migration plan. Maybe you could walk us through a scenario. What is the actual scenario that you tested just recently, I guess, and sort of how would one of these systems actually work in a real situation?

**Hon. Mr. Moe**: — I'll ask — as she's been the driving force on working on much of this — I will ask vice-president, business development and corporate services, Jacquie Gibney, to give a response.

**Ms. Gibney**: — I'll maybe start from when we looked at our business continuity plan and recognized it wasn't robust in terms of our ability to respond adequately if there was an impact on our IT systems. So really what that says is if something happened and we needed to recover data and get our financial systems and our water metering up and running, we weren't in a position to be able to do that very quickly.

And so what we did is we hired a consultant originally to say we actually need a broader, long-term IT strategy. And that's really because our existing service provider, when we first started to work with them, it made a lot of sense because we were two organizations with very similar approaches. SaskWater has matured significantly over that time period, and we were finding that our needs were significantly different than our service provider.

So we hired a consultant to say what should SaskWater's IT strategy be going forward. We did that in 2015. The consultant ... One of their recommendations was that we needed to change to a new provider in order to be able to have the adequate disaster recovery that we were seeking, as well as to be able to have the services, applications, and an ability to manage our business long term with the IT that would be available.

So once that was done, then we went and through the competitive process hired a new service provider. So we hired WBM in conjunction with SaskTel. So what SaskTel and WBM have put in place for us is our data is stored on the SaskTel data centre here in Regina, and if there is a problem with that centre, our data automatically migrates over to the data centre in Saskatoon. So what was tested in August is, in order for us to migrate from our current provider, our data was integrated in a very complex way. So we were really joined together, and so it took us a long time and a lot of discussion amongst the IT folks that we had hired to figure out how we could separate our data before migrating.

So once we did partially start to migrate, what we did is we migrated our data, bits at a time, so that when we did the full migration on November 30th all we were doing was about a month of information that needed to finalize the migration. So in August we had a portion of our data and a portion of our applications up and running on the new infrastructure. We tested that in accordance with our specifications which are, we need to be able to recover those financial applications and key systems within 24 hours. And we did that. We actually exceeded the standard at that point in time.

We were also able to limit the data that would be lost or things that would not be transferable. So in terms of the specs that were put in place by both WBM and the SaskTel data centre, we met those requirements. But we do want to test it now that we have everything migrated and so, as I said, that was done on November the 30th. We have a few very small items that we need to complete and then operate the system for a period of time.

## [13:15]

At that point we will do another test, so that's really just ... What happens is our service provider shuts the system down so it essentially doesn't work at the data centre in Regina to see if it actually flips over to Saskatoon. And then they provide us, based on the specs that we have in plan, a report that says, yes it succeeded, or here's an area that we need some additional information.

Once we've done that, then we were going to ... we will build all of those protocols into our business continuity plan. The plan itself is very good from a, you know, get people out of facilities, figure out how we're going to get back up and running, but it needed the IT support to be able to continue with the business.

Once that's up and running, what we will then do is get a third party to do a scenario with our business continuity team. So they essentially come up with some kind of disaster that we don't know about and they implement that, and then our business continuity team needs to respond in accordance with our plan. So we will be doing that in the next fiscal year.

**Ms. Sproule**: — Thank you. You've been busy. Sounds like it's rolling along. I'm just . . . A couple questions about your initial service provider, who was that?

Ms. Gibney: — It was the Water Security Agency.

**Ms. Sproule**: — You say you basically outgrew them in a way? Can you talk a little bit more about that?

**Ms. Gibney**: — So in 2002 when the Water Security Agency and SaskWater divided, essentially we have a very different mandate than they do: as a regulator body, we are the water utility. And so it worked really well for a period of time, but then what we're finding is our needs and requirements as two entities are entirely different. And so because they have the IT unit and the resources, it makes sense that their needs are met prior to ours, and so what we were finding is that we needed to go in one direction that was different than the direction that they were heading.

**Ms. Sproule**: — So when you had to do the separation of the data, as you said, it was very complex and integrated. How much would you say that cost the corporation to do that kind of work? Do you have an estimate?

**Ms. Gibney**: — It was all included with the WBM tender. And so that component . . . Actually what ended up happening is the time and resources necessary to do it was significantly more than what the company had bid, but they completed it as they had originally submitted with their tender.

**Ms. Sproule**: — So they incorporated the extra costs within their own. Do you know how much it was or . . .

**Ms. Gibney**: — I don't know that, that part, but I can get that for you.

Ms. Sproule: — Okay. Thank you.

Ms. Gibney: — That added cost for that.

**Ms. Sproule**: — Yes. Who was the consultant that you hired to review this business ... I made a note that you hired a consultant when you started all this. Who was that?

**Ms. Gibney**: — That was Otium Solutions, and they did our IT business strategy for us.

Ms. Sproule: — And where are they from?

Ms. Gibney: — Regina.

Ms. Sproule: — Regina. O-d?

Ms. Gibney: — O-t-i-u-m.

**Ms. Sproule**: — O-t-i-u-m. Okay. Otium, Regina. All right. So in terms of one of the scenarios that might happen, would it be like a tornado blows down the building in Regina and then you need to see if the data will migrate?

**Ms. Gibney**: — Right. It could be a tornado. Sometime it could be a flood that floods out your server room, a fire, those kind of things where we have to vacate the premises and re-establish the IT systems.

**Ms. Sproule**: — Okay, I think that's the extent of my questions on this, Madam Chair.

**The Chair**: — Thank you, Ms. Sproule. Any further comments on that chapter, Minister? Okay. The 2014 report volume 1, chapter 4 has no new recommendations for the committee to consider, so I'll ask a member to move that we conclude consideration of this chapter. Mr. Dennis has moved that we conclude consideration of the 2014 report volume 1, chapter 4. Is that agreed?

## Some Hon. Members: — Agreed.

**The Chair**: — Carried. We'll now move to the 2015 report volume 1, chapter 3 ... [inaudible interjection] ... Oh, okay. They're all together. Correct. Sorry. The 2015 report volume 1, chapter 3 also has no new recommendations for the committee to consider, so I'll ask a member to move that we conclude consideration of this chapter as well. Mr. Kaeding has moved that we conclude consideration of the 2015 report volume 1, chapter 3. Is that agreed?

#### Some Hon. Members: — Agreed.

**The Chair**: — Carried. The 2016 report volume 2, chapter 19 has no new recommendations for the committee to consider as well, and I'll ask a member to move that we conclude consideration of this chapter. Mr. Bradshaw has moved that we conclude consideration of the 2016 report volume 2, chapter 19. Is that agreed?

## Some Hon. Members: — Agreed.

**The Chair**: — Carried. So moving on to the 2015 report volume 1, chapter 27. I will now turn back to Ms. Ferguson to give her presentation on that chapter.

Ms. Ferguson: — And I'll turn it over to Ms. Sommerfeld.

**Ms. Sommerfeld:** — Chapter 27 of our 2014 report volume 1, starting on page 199, reports the results of our second follow-up of two recommendations we originally made in our 2006 report volume 1, regarding SaskWater's processes to maintain its water treatment and transmission infrastructure. As noted on page 200, by December 31st, 2013, SaskWater had partially implemented our recommendation that it compile reliable information detailing the water treatment and transmission infrastructure.

SaskWater had implemented an asset management system for the electronic recording and management of its capital assets as well as recorded details and compiled assessments of key pumps and motors in 23 of its 58 facilities. This accounts for the delivery of approximately 72 per cent of water provided to its customers. SaskWater expects to complete its assessment of the remaining infrastructure by December 31st, 2016.

Also on page 200, by December 31st, 2013, SaskWater had partially implemented our recommendation that it develop and use a maintenance plan for its water treatment and transmission infrastructure. SaskWater had prepared maintenance plans in a number of key areas, as well as standardized maintenance plans for electrical instrumentation equipment and water meter maintenance. However it had not yet completed maintenance plans for the remaining treatment and transmission infrastructure. It expected to complete these by December 31st, 2016. And that concludes my presentation.

The Chair: — Minister, I'll turn it over to you and your officials to comment.

**Hon. Mr. Moe**: — Thank you very much. And with respect to the 2014 auditor's report chapter 27, there's two recommendations and they're both related to the management and maintenance by SaskWater of its infrastructure assets. These recommendations originated out of an even earlier report from the auditor previously.

I'm very pleased to advise the committee that SaskWater believes that it has now completed the implementation of the auditor's recommendation. Saskatchewan Water has applied bar code labels to its major assets except buried pipelines and maintains an electronic record of the infrastructure with a condition assessment notation.

Further SaskWater is using the same system to log maintenance activities related to those assets and also to plan and schedule preventative maintenance activities. SaskWater expects to continue enhancing the system over time and updating it as new infrastructure is acquired. And I understand staff from the auditor's office will be examining the system SaskWater's implemented early in 2017, and we look forward to demonstrating it at that time.

The Chair: — Thank you, Minister. Are there any questions?

**Ms. Sproule**: — Not really, Madam Chair. Your anticipation is that both of these will be fully implemented by 2017. When in 2017?

**Hon. Mr. Moe**: — We feel they're implemented now. They'll be tested in 2017 by the auditor's office.

**Ms. Sproule**: — Okay. Then I think I have no further questions.

**The Chair**: — Thank you. Being there are no further questions, the 2014 report volume 1, chapter 27 has no new recommendations for the committee to consider, so I'll ask a member to move that we conclude consideration of this chapter.

Mr. Nerlien: — Thank you, Madam Chair. I so move.

**The Chair**: — Mr. Nerlien has moved that we conclude consideration of the 2014 report volume 1, chapter 27. Is that agreed?

Some Hon. Members: — Agreed.

**The Chair**: — Carried. This concludes our consideration of the Provincial Auditor's chapters related to SaskWater Corporation, so we'll just take a minute to allow the auditor and her officials to leave. Okay. We will now be considering the 2015-16 Saskatchewan Water Corporation annual report and the 2015 water quality report. Minister Moe, if you would begin with comments.

**Hon. Mr. Moe:** — Just very short comments. And again I thank the committee, all members for taking the time for consideration of these reports here today. And I would just make the comment that — and I heard it in one of the answers by Jacquie Gibney earlier — SaskWater is maturing as an organization in the services that they provide alongside or with, I would say, in conjunction with communities that they work with as well as certain industry partners that they work with as well. And I think the future is bright for Saskatchewan Water Corporation, and that shows, I think, as we go along with our budget projections and where SaskWater is, both from a service standpoint but also from a financial standpoint.

So with that I would not take up much of the committee's time and just open the floor to questions.

**The Chair**: — Thank you, Minister. Are there any questions with regards to the 2015 annual report? Ms. Sproule.

**Ms. Sproule**: — Thank you, Madam Chair. Thank you, Mr. Minister. I think for this afternoon my intention is just to take a bit of a meander through the annual report. A few things jump out of interest and maybe ask a few questions about that, and then we're going to look as well at some of the supplier payments that were made.

So we'll start with the annual report. My first question is in relation to page 3 where you have your operating highlights. And the first question that I just was wondering if you could share with us is the increase in the distribution of non-potable water, a fairly significant increase from 2014 to '15, and then another large increase to 2016. If you could just share with the committee why it's increasing so much, and do you see that trajectory continuing into the future? Or what is your anticipation, your plans in relation to that? Sorry, at the same time maybe you could comment on potable water as well.

**Hon. Mr. Moe:** — With respect to the increases in non-potable water, there's a couple of reasons for those increases. First was the ramp-up of a number of potash mines in the province of Saskatchewan and them increasing production due to economic circumstances of the day, as well as in April of 2015, K+S came on board as taking water, utilizing water. So that was . . . Those two reasons are the increase on the non-potable side.

On the potable side the first reason for any increase, of course, would be growth of communities that we service, and the second would be is we did have a drier summer and we do, as it turns out, sell more water during a drier summer to those communities. So those are the reasons for the increases on the non-potable side as well as the potable side.

**Ms. Sproule**: — So the growth in communities and the drier . . . In terms of the drier summer, is that non-potable or would it also increase the potable water use?

**Hon. Mr. Moe**: — That would primarily be potable water that's servicing communities.

**Ms. Sproule**: — And they're just using it to water their lawn basically, or it's being used for all purposes?

Hon. Mr. Moe: —Yes, all purposes.

**Ms. Sproule**: — In terms of projections for the future, with the declining potash prices, do you see the amount of non-potable water being distributed as going up or down in the future?

**Mr. Matthies**: — Madam Chair, Doug Matthies, president of SaskWater. We've seen over the years potash volumes do tend to fluctuate a little bit based on market circumstances. And so as we've learned in servicing the industry, it is not unusual for this industry to have periodic shutdowns as they adjust supply and demand, so we do tend to see some bounce in the volumes. And so what we had seen in the year under review was they were capitalizing on some opportunities, whereas when we moved into the current year that we're in now, you know, there were some delayed sales and so there were some slower pieces but then it seems to ... You know, you run with a few slower months and then you run with a few quicker months, and so we'll see at the end of the year where it balances out.

[13:30]

**Ms. Sproule**: — So in terms of your own risk management then, do you have contracts with the potash companies that require a minimum amount, or how are your contracts structured?

**Mr. Matthies:** — Yes, thank you. That's exactly what we do. From a risk mitigation purpose, we actually do have minimum payments like a take-or-pay provision in each of the contracts for the big water volume users. With the exception of one at least, there is these take-or-pay. And the other contract where we don't have that arrangement, we actually operate it on a cost-plus basis, so we insulate ourself in that way.

**Ms. Sproule**: — Could you identify for the committee which contract that is and what is a cost-plus arrangement? How do you mitigate risk with a cost-plus?

**Mr. Matthies:** — So the way the cost-plus arrangement works is we invested a certain capital in the provision of the water supply system and basically we are guaranteed each year to receive whatever our operating costs are. We also receive a portion of our capital investment through the depreciation charge, and then we also receive a return on our investment. And that's all guaranteed regardless of the amount of volume that that particular entity uses. And we went to that model of contract for that supplier because it was a solution mine whereas to that point our experience had been with the conventional mines, and so there was much less volatility. But there was more risk to us with the solution mines because of the volumes that were involved.

Ms. Sproule: — Is that K+S then?

Mr. Matthies: - No, that's actually Mosaic, Belle Plaine.

Ms. Sproule: — And what's the arrangement with K+S?

**Mr. Matthies**: — With K+S we have the minimum take-or-pay provisions.

Ms. Sproule: — Okay. It's a solution mine as well, is it?

**Mr. Matthies:** — It is. K+S was, or I would say . . . Sorry, the Mosaic Belle Plaine arrangement was our first venture with a solution mine and so we have that piece. We're comfortable with the take-or-pay provision that we have now with K+S because it's more standard to our other arrangements, and we're more confident in dealing with solution mines than on the first one.

**Ms. Sproule:** — All right. Okay, let's keep moving. On page 10 there's a discussion of your lines of business and I'm just... Maybe backing up a little bit. What is the goal of the company in terms of growing your clientele? Do you feel that you are more responsive to the needs of industry? Or do you have specific goals or targets that you've identified in terms of your clients and your lines of business?

**Hon. Mr. Moe:** — So with respect to the goal moving forward with SaskWater, the bulk of, by volume, the volume of water that we supply is to, ultimately, the potash industry. I think 68 per cent of the water that we supply is to the potash industry. So there, you know, we continue to obviously work with new partners — as K+S came on — to supply those partners, as they look to come on stream and we'll look to others as those conversations develop.

But we constantly are looking to ... We do have a significant municipal business as well where we work with municipalities across the province. And we feel we offer a good service for a number of municipalities, and I think they would indicate the same. So we're constantly looking and in discussions with municipalities as well where there's a good fit with, in particular the assets that SaskWater has, but also, you know, working with municipalities on challenges that they may face, and expertise and services that SaskWater may be able to offer.

And in addition to that, we look at other industry partners as well, aside from the potash industry, where there may be some opportunities for SaskWater to offer services. And I mean a synergistic opportunity as well, as SaskWater has a profit margin that they would shoot for, but they also, I think, offer a service that is, you know, provide a good service for the fees that they have.

The outlook that SaskWater has is that we went through a couple of the business models that they have in the industrial side and they have, I think, a lot to offer and a good service for the price that they work into their contracts.

Ms. Sproule: — In terms of your business plan, when you

mention the municipal business line and other industry partners, do you have targets that you identify in your business plan? I don't see them in the report, but they may be there. And how do you sort of measure success, or are you ... When you say you're constantly looking under the municipal business line, what exactly does that mean, and what are your goals?

**Hon. Mr. Moe:** — In the annual report, '15-16 annual report on page 20, if you go to the top of the graph, it lays out some of the targets by sector, if you will, as we move forward, including our percentage investment that we would expect in new growth opportunities. We have projected opportunities that may arise in our municipal revenue growth — now these aren't by volume; these are by revenue — and to increase that over time, and then also the percentage of industry served by SaskWater and then some other metrics as we go down. But the top three are involved ... the top three lines there would address your question.

**Ms. Sproule**: — They partially do, and thank you for pointing that out, and thank you for sharing a much larger version from our Clerk here. I guess we're saving printing or something, but we have two on a page here.

It's a very ambitious target too when I look at you're looking at increasing your municipal revenue growth by 71 per cent. Can you share with the committee how you are planning to achieve that and how you're going to ... Like you said, you're constantly looking, but do you have a marketing plan or are you meeting with municipals on a regular basis, municipalities?

**Hon. Mr. Moe**: — There's a number of factors that come into play, the first which is need. And on clean water and waste water across the province, in general in communities, the need is quite strong, in particular in light of water standards that we now hit in the province. Since a challenge, quite frankly, in North Battleford just over a decade ago, our water standards and where we're going with water standards have changed greatly as well as the management and servicing of that equipment.

So the need is in general across the province quite strong. That's been identified by investment, obviously, by different levels of government — municipal, provincial, and federal — in that infrastructure. With that, I will let Doug Matthies speak to a couple of recent, or at least one recent example, of where the discussions with a community have resulted in SaskWater actually offering a service in that community. I believe it was Melville with a wastewater plant — treated water, sorry — how those that came to be, and how other communities will approach SaskWater from time to time on this very issue.

**Mr. Matthies:** — Thanks, Minister. So as the minister indicted, we certainly are active when we're attending SUMA [Saskatchewan Urban Municipalities Association] conventions for example or other trade shows where we're trying to get our name out in front of the different players because we're trying to match up a service we provide with the need that's out there. We have some staff that work in our business development area that are also proactively ... We're looking at trying to understand whose infrastructure is at what point in the life cycle because as they approach the end-of-life cycle, that's when communities tend to be most interested in looking for

And so we will approach the communities or they will approach us and then we will try . . . It actually takes several years to sort of go through the process of understanding the need, coming up with a conceptual design, some financial numbers. And then there's a significant period of time where the players will try to figure out do they have the resources to come up with it. In our experience, a lot of the municipalities in particular, they tend to try to time those expansions around grant programs. And so you end up with a little bit of feast/famine at times.

And so the minister made reference to our work with the city of Melville, and that certainly was a great success story for us. We worked with Melville for a number of years going through different design pieces and costing options and how that might work out. And on the 27th of June this year, we actually were able to sign a water supply agreement with the city. So that now obligates us to build them a brand new water supply system including a new pipeline from new wells south of town and a new water treatment plant. And the objective is to have that up and running by the end of December 2019 or by the end of 2019.

And so when the minister was referring to the growth targets that are on page 20, these targets come out of a strategic planning process that we went through with our staff and our board. And basically what we were trying to look at is starting from sort of renewing the plan in 2015, where do we want to be five years out, for example, or whatever the ... So the 71 per cent increase that you, I think, made reference to, you know, that's the growth that we're hoping to achieve over the next five years.

And Melville will be a big part of it because that's a big, big issue for us. I think it's the first time we've been able to land a community that is a city, a city status. We serve five cities now, but the other ones started out smaller and then they grew. And so this was a very big one for us. But we do find that it takes several years of hard work to be able to pull the deals together by the time everything comes together with the engineering and the financing in particular.

**Ms. Sproule**: — Thank you very much. One of the things I was wondering is, who would be your competition in this kind of bidding process? Like did the city of Melville go through a bidding process, or is this ... It wouldn't be something you would put in an RFP [request for proposal] and SaskWater would bid on it, would you? Or is it more a relationship building?

**Mr. Matthies:** — Technically it does tend to be a lot of relationship building. The other thing that we certainly do run across is other municipalities can be competition, to describe it that way, and part of that is that the government itself has messaged to communities, find ways to work together. And so some communities will choose to work together amongst themselves.

SaskWater, we think, offers a great service because we can bring operators, engineers, all the pieces together. And sometimes it's just a little bit more difficult for some communities to get past, gee, you're my hockey enemy and now I've got to work with you. And so we bring in an independent party like SaskWater and it makes it a little better.

**Ms. Sproule**: — Very real. So who would be the other private competitors that you would be . . . I don't know if you want to call it competition, but who else is providing these services on a large scale in Saskatchewan?

**Mr. Matthies**: — So on a large scale in Saskatchewan, I think the only one that we're aware of right now is the Epcor wastewater deal for the city of Regina, and that was a huge-scale issue. SaskWater was actually involved. We talked with four of the different players who were putting consortiums together for that deal. But when the Regina project was going forward, we certainly had level 4 certified operators, but our experience had only been running lagoons at the time, not quite sophisticated mechanical systems. So we have staff with that experience, but our own pedigree was short in that area. So for that kind of a major project, Epcor was a successful bidder with their consortium, and they're the only one, I believe, in the province at this point.

**Ms. Sproule**: — Okay. Mr. Minister, you indicated that you are looking at other industry partners, and when I look at this chart on page 20, I see the investment in new growth is sort of a bit of a curve in the next five years, but there's still the substantial expectation of growth there and then the percentage of industry served by SaskWater. So I don't really understand where industry partners fit in there. Maybe both of those targets involve new industry partners, but could you share with the committee what sort of industry partners you have now, and which ones you're hoping to secure?

## [13:45]

**Hon. Mr. Moe**: — Obviously as I indicated, the potash sector is the largest, by volume, customer of Saskatchewan Water Corporation. There is other fertilizer industry partners that we work with as well as ethanol plants, for example, some other industries involved with agriculture. Some of the expansion opportunities, I guess as we move forward, would obviously be any other potash plants, any other fertilizer plants in the province, as well as additional ag opportunities. Canola crushers, for example, would be a potential opportunity as we move forward. As well as we've had significant discussions over the past while, and into the future I expect, with the oil and gas industry as well. But there is opportunities, I would say, in quite likely the ag sector, the ag processing sector, canola crushers, pea processors, things of that nature.

**Ms. Sproule**: — Thank you. In terms of the oil and gas industry, what sort of water needs would they have right now and into the future?

**Mr. Matthies:** — So, Madam Chair, I'll maybe respond to that. At this point, SaskWater does not serve the oil and gas sector. We have had some discussions with some of the players, particularly up around the Lloydminster area, so we're early stages, I would describe at that. So if we can find some way to provide a service to them, then we want to go down that path as a way of diversifying the portfolio as the minister was indicating. But we don't actually serve any at this point, so we're just in very preliminary discussions. **Ms. Sproule**: — Would that be like well injection for EOR [enhanced oil recovery]?

**Mr. Matthies**: — So SAGD [steam-assisted gravity drainage] for example.

**Ms. Sproule**: — That's steam-assisted gravity?

Mr. Matthies: — Yes.

**Ms. Sproule**: — So that would be . . . Okay. In sort of the more oil sand situation, there would be a possibility there.

Mr. Matthies: — Yes. Basically heavy oil recovery pieces down.

**Ms. Sproule**: — All right. In terms of ethanol and fertilizer, what would the water usage be for that kind of production?

**Hon. Mr. Moe:** — So with respect to not getting too detailed on individual user or their volumes, but for example an ethanol plant of some type would use in the range of about half a million cubic metres of water as would a canola crusher, would be roughly in that range. The potash mines would be far in excess of that with their usage.

**Ms. Sproule:** — Thank you. I was just chatting with my colleague and I know we talked about this I think last year. But in terms of the total usage by the potash industry, as you know, there's concerns from citizens about the Buffalo Pound aquifer and the effects of climate change on the glacial supply of water that we receive through our river system. Have you done any work in the last year regarding modelling for adequate supply for that industry, and obviously residential use as well?

**Hon. Mr. Moe:** — As you said, this is a . . . The concerns with respect to climate change and cumulative effect on our water supply into south and central Saskatchewan is something that SaskWater is taking seriously. I think this was brought up last year. I think I'll turn it over to Eric Light. He can probably answer it in quite a bit more detail than I think we were able to last year, as the results of the study that we were going through, we have more definitive at this point. So I'll turn it over to Eric and he can go into that question in quite a bit more detail.

Mr. Light: - Okay. Thank you, Mr. Minister, and Madam Chair. Eric Light, vice-president of operations and engineering, SaskWater. So one of the things that we've done related to the question is done or had a cumulative effect study done related to water demands from Buffalo Pound Lake. And this was related to the environmental impact assessment process on a water system that we were looking at for Vale potash mine. And the study considered all the existing municipal and industrial customers currently drawing from Buffalo Pound Lake as well as K+S potash mine and Mosaic Belle Plaine. And on top of that was imposed projected water demand for a regional water supply system that would supply the proposed Vale mine as well as other potential users in the Belle Plaine corridor. And so what this study determined was that there was adequate water supply from Buffalo Pound Lake to support the existing users plus this additional water demand as far as in a sustainable way, long term.

And then as you're aware, the Vale project was put on hold and then around the same time, the Yancoal potash mine project was starting. And this project has also planned to use Buffalo Pound Lake as a water source. And the amount of water is relatively similar between the Vale project and the Yancoal project.

And I guess those studies are part of a normal process that would take place in the environmental review of a project that's using water. So that's an example.

**Ms. Sproule**: — So for Yancoal, I think their environmental review was completed in this calendar year. Did you just use that cumulative effect study that you had done for Vale or was further work done on the Yancoal project, or is that ongoing?

**Mr. Light**: — There's actually two separate environmental studies. The one that I'm talking about is the one related to the water supply, but there's also a separate one for the mine. And I believe both of those have been completed today or they've been completed.

So in the one as far as for the water supply system, they utilized the work that had been previously done for Yancoal because the volumes were . . . Actually they used previously the study that had been done for Vale, for Yancoal because the volumes were very similar. Yancoal was actually slightly less than what Vale was proposing to use.

**Ms. Sproule**: — I guess the Vale one was done two or three years ago now. Do you know what year it was completed?

**Mr. Light**: — Yes. March of 2015 was when that study was done.

**Ms. Sproule**: — 2015. I'm just, you know, as we get better at predicting climate change ... And I know, Mr. Minister, you have a unit specifically dedicated to that in terms of the adaptation modelling that you're doing. Is there more information coming forward that would adjust some of your expectations of water supply or are those pretty static?

**Mr. Light**: — So in answer to the question, there is a limited time frame with respect to when the work is done on the study and when the project needs to go ahead. And if that kind of has lapsed, then there's potential for that to be relooked at. Yes.

**Ms. Sproule**: — So what is the best-before date for the project that was just done?

Mr. Light: — I think the time frame is around five years, yes.

**Ms. Sproule**: — But if I recall, the expectation is that there's adequate water supply coming from the Rocky Mountains basically for enough time for you to meet your commitments for these potash mines in perpetuity, or for how many years?

**Mr. Light**: — The way those studies work is essentially a sustainable supply, so in perpetuity.

**Ms. Sproule**: — And that's your commitment to the potash mines.
Mr. Light: — Yes.

**Ms. Sproule**: — All right. I was just informed that — and I would ask you to confirm this — that Water Security Agency also has a SAGD agreement with CNRL [Canadian Natural Resources Ltd.] at Paradise Hill. Is that correct or is that something you're aware of?

**Mr. Matthies:** — Madam Chair, that would not be something that we're involved in. The Water Security Agency is the regulator and they issue usage permits and things, but that can be to any player who's going to use large volumes of water. And so there'll be several players in the province where they would have a permit where it may not involve us.

**Ms. Sproule**: — Okay. I just wanted to make sure that they're not in competition with you providing those supplies. Okay, so they're just issuing permits, basically. Okay, good. Thank you.

Just moving on to page 14, there's some discussion on waste water treatment, certified operation and maintenance, project management. I'm just wondering if you could share with the committee what sort of issues you're dealing with in waste water management. Basically what are the current issues that are problems or cause you to not sleep at night with those?

Mr. Matthies: — I'll just make sure I heard the question clear.

**Ms. Sproule**: — The current issues that you're dealing with, the most current issues or problems that you have to deal with in waste water management.

**Mr. Matthies:** — Specific to waste water? So waste water currently only represents about 2 per cent of our business. So it's not the bread and butter for us, but it is an area that we are looking to do more with.

One of the pieces I guess that we look at as a potential opportunity in this area is the federal government did change their regulations for waste water a couple years back, and so that has created some need for facility upgrades. And what the federal government did, and I can't remember the specifics just off the top, but there's a transition period. So depending on where you're at, you have a number of years until you actually have to have your facility upgrades in place. And depending on the severity of where your situation is, you have more or less time. So we view that as a potential opportunity where if communities are looking for upgrades, maybe we can be a partner with them and we can provide a service.

We are very big from our side that we like regionalism, though. We find that working with individual small communities, it's hard for SaskWater to necessarily come in and provide a good business case that works for both sides, in part because if you're dealing with a lagoon, for example, they're relatively low maintenance. You don't need a lot of labour. And so if we don't have other service in the area, then it costs us a lot more money to drive somebody out a couple hours to do some particular piece of work, whereas small communities themselves will use the town foreman or whatever to get something done if they need to.

So we are optimistic that we can do some more in the waste

water side, partly driven by the demand pieces out of the regulatory changes. But we are being mindful that regional works better for us. And if it's not, communities aren't close to either existing infrastructure that we have or if there isn't a group of communities that are in need at the same time, then it's harder for us to make a case for it to work for both parties.

And one of the challenges, of course, is that every community in the province today has water and waste water facilities. And so if you're trying to put together a regional system, then you can certainly get the situation where one player needs something today but the other guys that are in the area, well they just did their upgrade five years or 10 years ago and they don't need anything for a while. So it's hard to, you know, you've got to find a timing where everyone's prepared to jump at the same time and make that work. So that timing challenge has been something that, whether it's on waste water or even on potable water, trying to get that to kind of line up at the same time because everybody's infrastructure has different useful life and trying to get that to line up.

[14:00]

And then when you do get that to line up, as I said earlier, the communities are being good stewards. Their councillors, they're looking to make sure that they can get the best price for their residents, and they're looking for senior levels of government to provide some grant funding to keep the capex [capital expense] down and the water rates down. And so they, you know, in my observation at least, as long as I've been in this chair, is when there's grants, you're busier. And when there's not grants, it's a little bit slower.

**Ms. Sproule**: — Thank you for that. I guess just maybe a couple of questions for the minister following up on that. Again we see the federal government imposing regulations on provincial operations and that has an impact, as you say, on communities and the provincial government. Is there a role here for the Water Security Agency to assist with the regionalization efforts? Because I think, as you know, it's practical in the long run, but you've pointed out some of the impracticalities and the difficulties in regionalizing services. But in the long run, do you meet with Water Security Agency officials and say, look guys, is there a regulatory world that we could move to here that would help facilitate that, with maybe some of these grants that would move it along?

**Hon. Mr. Moe**: — I have met with the Water Security Agency minister from time to time, and we even agreed once. But no, with respect to ... First of all there's a lot of spokes in the wheel, if you will. And you're exactly right with that regional perspective. You know, as things come together and those conversations happen, sometimes we find that SaskWater is a good fit. Sometimes we find that maybe SaskWater isn't a good fit. And there's some communities that (a) want to either go on it alone, or go on it on their own as a group, or whatever that might be.

But SaskWater does meet with Water Security Agency on a regular basis on topics just such as this as well as regulatory topics that are ever changing, whether it be on the clean water or the waste water side. As well SaskWater and Water Security Agency meet on a regular basis with Government Relations, which is another spoke in the wheel when it comes to, you know, first of all I guess communication. And one point of communication with municipalities, both rural and urban and resort communities if not . . . But also a communication point, as Mr. Matthies said, when grants are available, what those grants are particularly for, how they're leveraged with municipalities and the federal government, and how those grants are disbursed on whatever system that may be.

So there's a number of different spokes in this. And could there be a larger role for Water Security Agency in this? Possibly to some degree, as they are the regulator and they do know to some degree the age and relative, you know, where the systems are in each particular community. But so do the communities, and so they're one aspect that I think they can bring something to that conversation.

But I think there's a few other aspects that come to it as well, like for instance what grants are available and when and what for; the communities themselves, where they are in understanding where their infrastructure is. I see communities that I meet at the constituency level. Some have their asset management planning in great shape and some maybe not so much. And so there's some communities I think could bring a whole lot to that discussion at the table and then there's some that maybe SaskWater or even Water Security Agency may have an opportunity to enhance that discussion as well. So that's a point well taken, and I'll inform the Minister of WSA [Water Security Agency].

**Ms. Sproule**: — As long as you don't answer yourself, that's ... We know that your government has talked a lot about the need for transformational change, and I'm just wondering if the minister could share with the committee how that is being talked about in terms of I guess the Water Security Agency but SaskWater in particular; that's why we're here today. So what sort of ... Like this to me would suggest to be one way of looking at transformational change as more of a regionalization of water delivery services. Are you looking at transformational change in that aspect or in any other aspect?

**Hon. Mr. Moe**: — With respect to transformational change, again understanding this and the supplying of water is ... We've actually had a number of different discussions on what may constitute transformational change or what may be just, you know, solid round table discussions on where we go in the future. You know, things have come up like for example on the waste water side as we move forward with that. You know, where does that effluent go and what are you doing with that? Because there is obvious uses for that in the way of fertility and in close proximity. And a lot of our business is in rural Saskatchewan so there's, you know, rather than putting effluent into one of our river or creek systems, there might be an opportunity to utilize that in some other way that can utilize some of the fertility that may be associated with it as well. These are some of the discussions that we've just had.

Again you touched on it as well with the involvement of WSA, but some discussions around how we get to those expansion numbers that we had talked about, you know, with groupings of communities, understanding that SaskWater isn't the best fit for every situation but attempting to be part of that discussion in most of those situations. In particular, when you get ... Like I said, it works best with SaskWater when you can start to group communities or services together with, you know, across the province and how to better get to that discussion. And your point with Water Security Agency is well taken.

I think, you know, any time that we are able to sit down with neighbouring municipalities, whether it's through, you know, Water Security doing some assessment of the infrastructure, whether it's through MLAs [Member of the Legislative Assembly] that come forward with a certain grouping of ... You know, now we have significant resort properties around the province as well that maybe are much larger than they once were. And all of these present themselves with challenges from the community perspective on clean water and waste water, but possibly opportunities from a corporation's perspective such as Saskatchewan Water Corporation. So these are a number of the discussions that are going on.

I'd maybe share, you know, some other discussions and on somewhat relevant to climate change or more relevant to emissions and some of the intensity emissions. I'd maybe let Eric speak to a little bit on the greenhouse gas emissions piece and some of the interesting things that we see. And I'll just a share a quick story with respect to a phosphate mine that I visited in Morocco where they have done, undertaken quite a pipeline project. It's 186 kilometres. The first 20 kilometres is uphill and so that is pumped; they pump a phosphate slurry uphill. Then it's gravity fed to the port where they then dry it. They have another process that they go through there, they dry the phosphate, and it's ready for export. What it's done at the mine site is it's eliminated one drying process, which is a significant emissions incentive or savings, and it has saved quite a bit on because 186 kilometres ... 176, pardon me. I believe 167 kilometres. I think it's 187 total, first 20 being pumped, the last 167 being gravity fed. They saved a substantial amount on the power to move that product. I believe it was in the range of 8 or 900,000 or 1 million tonnes of CO<sub>2</sub> a year that they are saving with that project.

You know, we've bantered around ideas like that. Obviously with water, not quite as easy to do that in a pipeline. If you lose your pressure, then you lose your actual, the security of the safety of the water. But in saying that, we do have some of those gravity-fed systems in some of our canal systems and whatnot, where we pump up and then they flow from that point in time as well. And we have made great efforts I think on an intensity base, on a per-litre or per-cubic-metre volume of water that we do supply to communities as well. And I'll maybe have Doug Matthies just speak a little bit to our remote oversight and monitoring system, or the ROAM system, with respect to the changes that it is bringing to our corporation.

**Mr. Matthies:** — Okay. Thanks, Minister. So one of the pieces that we're engaging with customers around change I guess or service, for us it's making sure that the corporation is listening to customers. And one of the I'll say more of a nuanced change almost in our new strategic plan was we changed one of our goals from, it used to be growing the business, to customer focus. And it was all about making sure that we're listening to the customer and we're here for the customer and we have to sell a product that they need. We have to listen to them, figure out their demands, figure out what they need, so we can offer the right solution. And so that's why we changed the name of

that.

But in having some of those conversations, what we were hearing from small communities in particular is they're looking for greater assurance that the systems are working the way they're supposed to, that there isn't some unexpected surprise that all of a sudden results in water that's no longer potable or that has a problem. And so we've been developing a new product that we call ROAM, as the minister indicated. And so that's basically 24 hours a day, 365 days a year monitoring of key pieces within the facilities. And so we're having those conversations now with a number of communities.

I think as we've been talking with communities, one of the first things that we find is before we can actually install this kind of a service, communities themselves actually have to put some technical equipment into the ... They have to put analyzers, for example, into the facility. A number of the communities that we've talked to originally, they've relied strictly on Joe, for lack of a better word. Joe goes into the shop and he takes his readings, you know, once a day or once a week or whatever his routine might be. And for what we're offering or we think that they're looking for, you actually need an analyzer there that's basically taking readings maybe every five minutes or something like that. And so we've heard the need for greater assurance on the quality of the water, but now we're working with communities that it's not just about putting our monitoring system in because you have to have an analyzer in place to monitor.

But those are examples of where we're trying to listen for the change, and what is it that you need to be able to tell your residents that they should be confident in their water because good water is good for community growth. And where you have poor water, you tend not to see the same success on the growth side of things. So that's an area that we've tried to listen. And whether that's transformational change, as the minister indicated, it is a mindset change and it is listening. And so we're doing those sort of things.

And he also talked about on the waste water side. You know, one of the things that I guess that I would say that I've learned from some of our engineers is the first thing you need to understand when you're dealing with a waste water question is, what are you going to do or what do you want to do with the water, with the effluent? And until you know that, that drives sort of how you're going to design your solution. And so there are some areas of the province where there is much more environmentally sensitive lands or water beds around, and so the notion of having an irrigated woodlot, for example, where you're using the effluent to irrigate that as opposed to discharging into the environment or downstream, is something that we've been doing some work with.

## [14:15]

We are looking for a municipal partner to test it out on a more commercial scale. We think we actually may have a commercial customer, an industrial customer that's interested in trying it out as well. So we're looking at doing some new things in that regard and I think the minister mentioned that maybe ... I don't know if you want to get into a discussion on greenhouse gas innovation pieces or work that we've done there, but I think this is where we go over to you, Eric, if that's where the committee would like to go.

**Ms. Sproule**: — Definitely one of the questions that I had coming up, so if you want to address it now, that would be fine.

**Mr. Light**: — Okay. As far as greenhouse gas goes, as we've talked about previously, we do have a greenhouse gas committee dedicated to working on ways to reduce our greenhouse gases. One of the things that we talked about last time was one of our initiatives in that area as far as improving the efficiency of our pumping, and by putting our pumps on a curve so that they're operating, on average, on a lower pressure so that we save energy and hence save power and lower greenhouse gas.

One of the things that has happened since the last time we were in committee is we had put a remote sensor on one of our systems so that we can react more quickly to changes in water demand so that we would follow the curve more closely. And we also have added another system or targeted another system where we're going to try that remote sensing implementation because we found the one system that we have done that on already worked pretty good.

We do have still some other systems that we've identified that we're going to implement the curve solution as soon as we've finished our investigation on it.

Some of the other things that we have done with respect to greenhouse gas reduction is when some of our fleet vehicles need to be replaced, we've replaced them with smaller, more fuel-efficient vehicles. Another thing that we've looked at is converting some of our facilities to natural gas from electric as far as heat goes. We've also, when we've had a situation where we've had a boiler at one of our facilities that is old and needs to be replaced, we're replacing that with more efficient boilers.

Another thing that we have been doing is, when we have lighting that needs to be replaced, we're making sure that we're replacing that lighting with more efficient LED lighting, that sort of thing. And we also have been investigating solar, looking at solar power as a potential energy source for some of our facilities. So that's some of the things that we have been working on.

We also have, just have our 2015 greenhouse gas numbers. We had provided up to '14 the last time, and so our 2015 number, we're at a 16 per cent reduction from the 2006 greenhouse gas level which is, we're using that as the benchmark. We've got a 16 per cent reduction in our ratio, greenhouse gas ratio.

**Ms. Sproule**: — How many tonnes is that?

**Mr. Light**: — So the number of tonnes of greenhouse gas, 2015, was 24 294.

**Ms. Sproule**: — Thank you. I just want to talk a little bit about your customer-driven goal. And I guess we've seen the government introduce a bill that would enable sale of Crown corporations up to 49 per cent. Many of your customer-driven goals are ... I'm looking at page 25 where you have community consultations, community investment, and you talk

about social responsibility in that you embrace it to make a contribution to Saskatchewan communities. Obviously we know you have contributed financially to community organizations.

Has there been an analysis done of the impact of privatization on your ability to continue to be a customer-driven corporation, and in particular, your responsibilities to your shareholders may actually be in conflict with some of these social responsibility goals as a Crown corporation?

**Hon. Mr. Moe**: — No, there's been no interest in someone in purchasing this corporation. We've done no analysis or anything of that sort.

**Ms. Sproule**: — Do you anticipate doing that analysis in advance of an offer to purchase?

**Hon. Mr. Moe:** — There's not plans to do that analysis now. You see the customer base that we have: there's a certain number of communities, some municipal customers, and then a smaller number of heavy industrial customers. And despite, you know, efforts to grow all of that suite of business as we move into the out years, there's been, really, there's been no analysis as to, you know, what that impact would be with respect to SaskWater.

**Ms. Sproule**: — Thank you. On page 26 you identify some of the events that your staff gets involved with and I just have to ask. What is RuBarb Productions? Just curious.

Hon. Mr. Moe: — So that's a drama production.

**Ms. Sproule**: — Sounds interesting. All right, and that's in Moose Jaw? All right, thank you. Just going through here, I see time is zooming by as always. I'm going to skip . . . Oh, one of the things I noticed is that you talked about training as being one of your goals. And yet you talked — I have to find the right page here. Oh yes, on page 31 — about cost reductions under your efficiency reporting, and you've indicated that you have seen cost reductions in training. So how does that jive with sort of your corporate goal of ensuring that your employees are adequately trained?

**Mr. Matthies:** — Excellent question, Madam Chair. I think what I would do is I would say that we've separated our training into, I'm going to call it sort of at least two distinguishable pieces. We have core training which is absolutely critical for our people in terms of work safety and technical knowledge, and so we have not reduced any of that core training pieces.

If people require certain training activities to maintain their certification as a water or waste water operator at level 1 to 4, whatever it might be, or if there are certain trainings that we need, for example, for confined space entry to make sure that our people are safe and complying with OH & S [occupational health and safety] rules. We've had no reduction in those.

We have reduced what I would call some of our discretionary training pieces in response to some of the fiscal challenges. And so that might be something where if I'm looking at taking a course that's not ... I'll call it more of a soft skill. We have had

to belt-tighten a little bit in that area.

**Ms. Sproule:** — Thank you. On page 49 you talk about attracting staff to your corporation and there's, I guess, three bullets there on the page where you say how you're managing ... It's a risk assessment, I guess, of ensuring you attract the right people to your workforce. And of those six bullets that are there, three of them are relating to training. So you've identified on page 49, you managed the risk of attracting staff by promoting your commitment to training staff. The second bullet is: "recruiting youth through the co-op student and Gradworks programs." And the last bullet is: "implementing succession planning, including cross training opportunities for staff."

Given what you've just indicated, that you've had to trim some of this because of fiscal restraints and the disappearance of the Gradworks program, how are you going to continue to manage the risk?

**Hon. Mr. Moe:** — As Mr. Matthies indicated, we still do what I would say would be a significant amount of training, although we  $\ldots$  When there's training that may not be deemed as absolutely necessary to the, you know, the core business that we do in SaskWater, we have made decisions to trim that back where we are able to.

With respect to the Gradworks program, we have utilized up to four positions in that in years past. We do have one that will be finishing on April the 30th, and then that program will no longer be available.

But we do however still utilize two co-op students and have had ... view that as a successful program in years past and into the future as well, so we still do training within SaskWater, and we still do push that as a recruitment tool, and we still do utilize the co-op program that is available to us.

**Ms. Sproule:** — All right, thank you. On page 52 there's a piece on contamination of potable water supplies. As you know, in July we saw a significant contamination in the North Saskatchewan River with the spill of the oil from the Husky pipeline. That wouldn't, I think, have affected your operations. The city of North Battleford and city of Prince Albert I assume are not within your service area or your service contracts.

But what have you done as an organization in response to that particular spill and, you know, the potential ... I don't even know how many pipelines actually cross our rivers, and perhaps the minister has an answer to that. But in terms of your operations and your clients, what sort of risk analysis have you done in relation to the Husky spill in terms of being able to respond to clients who would be without a potable water supply in the event of an oil spill like that one?

**Hon. Mr. Moe:** — So with respect to the oil spill this past summer, SaskWater does service the community of Melfort which does pull water out of the Saskatchewan River. So we did have, from an operational standpoint, we did have some work that we did with respect to that community which is coming to conclusion here shortly. Fortunately in the case of the city of Melfort, we were able to shift our supply of water to the Star City reservoir on an interim basis and supply that community without, very minimal I would say, disruption and then to shift back to the Saskatchewan River, the North Saskatchewan River, or the Saskatchewan River, pardon me, when it was safe.

One of the last pieces operationally with that water supply is we are in the process of installing a hydrocarbon analyzer at the inlet, I guess, for the water, or at the supply point to the water to be able to monitor that as we go forward for that community.

With respect to contamination in water, for a company that their business is the supply of non-potable water of a certain standard but also potable water of a much higher standard, you know, contamination of that water supply is something that's forefront on SaskWater's mind, I think, each and every day. And when you say, what might keep you up at night, that might be it. So with respect to how we, you know, deal with that, the event of contamination of any circumstances, I'll turn it over to Eric to speak to SaskWater's position.

### [14:30]

**Mr. Light**: — Okay. One of the things that we have done with respect to that is completed vulnerability assessments on each of our facilities, and worked through a number of different scenarios which would include in contamination and kind of what our game plan would be to mitigate the risk of that occurring.

I think another thing that we typically do is try and protect the water that we have in storage so that we can maintain service. We also have had situations in the past where we haul water from nearby communities that aren't impacted on a temporary basis.

And the other thing that we do as well is we monitor our systems with our SCADA centre 24-7. And so we're trying to make sure that we're proactive and on top of any kind of upset conditions or things that happen. We do also significant water testing continually on our systems as well to try and pick up any kind of issues that we might have. And we also have on each one of our facilities a quality control, quality assurance emergency response plans that we have had developed for each of our facilities.

**Ms. Sproule**: — Have you compiled a list of pipelines that are near, or under or near waterways within Saskatchewan?

**Mr. Matthies**: — I think, Madam Chair, what I would say is SaskWater knows where our pipelines are, but you know we can only speak to our own lines.

**Ms. Sproule**: — Yes, I'm talking more about risk assessment in terms of pipelines that are near your sources of water.

**Mr. Matthies:** — I think what I would describe there is we are in the process of becoming a member of Sask 1st Call. Sask 1st Call basically is a phone number basically, or a system where anybody who's looking at doing construction or excavation or earth disruption of some sort can get an idea of what infrastructure is in that area.

And so basically it's a database. If I might describe it — or Eric might offer a further refinement — but it's a compilation of

where infrastructure is, whether it's telecom, whether it's power ... I'm quite sure that the oil and gas guys are in there as well because it's all about making sure that there's one place to go to find out where that stuff is. SaskWater hopes to be a full partner in that system over the next year or so, and that would give access to, I think, the type of information that you're asking about.

**Hon. Mr. Moe:** — With respect to, you know, where pipelines are throughout the province or throughout Western Canada, obviously water flows away from the Rocky Mountains. There's numerous pipelines under, you know, numerous tributaries all throughout Western Canada, and then the water will flow from them. There's also, you know, with respect to your question, there's numerous rail crossings and whatnot over much of those same water bodies as well that also transport all types of products on them.

And this is a conversation and a very public conversation I think that involves governments, involves industries, and involves individuals as well, as to trying to assess how we get our projects to market in a landlocked area like the prairie provinces of Western Canada in the safest and most efficient manner: efficient from an economic standpoint, but also efficient and safe from an environmental standpoint. And there's a number of different options in transporting, you know, whether it be oil or whether it be wheat or whether it be potash to markets. And it's a conversation that, in fairness, that we'll have from time to time, and it's also a conversation that is much broader than this room as well.

**Ms. Sproule**: — Yes of course, Mr. Minister. I just really am having trouble finding out where pipelines are that go underneath watercourses in Saskatchewan, and I just thought maybe you would have that information. I certainly will continue to search for that, but I know the Ministry of the Economy would have that information as well. But I just thought you would have identified those as a result of what happened in the North Saskatchewan River this summer. But I know the information's available; I just haven't pinned down where it is yet. And people are asking me that question as well, so I will continue to seek that answer elsewhere.

Moving on to the actual financial statements. I just have a couple questions. Obviously the debt/equity ratio is quite healthy and, I think, well managed. But I'm wondering, are there any onerous contracts? I see that in the notes on page 63 it identifies what they are, but I couldn't find out whether you have any in your financial statements. So I'm just wondering if you could share with the committee whether you do have onerous contracts at this point in time.

**Mr. Matthies**: — Madam Chair, yes SaskWater does have two onerous contracts. They are the same two that we've discussed in the past. The solution for the smaller of the two, they put in a grant application. We were hoping to build a pipeline from a different facility that we own and operate into that community, and then basically mothball the older facility that's in that small community and strike a new deal. The community is still waiting word on whether they'll get grant funding or not, so basically that work is on hold.

The other one is a little larger community, and we've done all

the engineering to address some of the refurbishment issues. We've had lots of discussions with the communities on rate structure. They too are very interested in the recent grant announcement last week where there's a new intake that's open. And so we hope, you know, that they're certainly interested in an application going forward to address that, and then that we might be able to strike a deal on addressing the infrastructure problem and the rates issue sometime next year. So that's our optimism at least at this point.

**Ms. Sproule**: — Thank you. Can you identify for the committee where that line item is on your statements?

**Mr. Matthies**: — So, Madam Chair, on page 72 of our financial statements, note 13, provisions. So on page 72 there's actually a note that identifies the total dollar value that's associated with these provisions. And the annual amount, if we're making an adjustment for any change in the provision itself, is I'll say it runs through the operations, maintenance, and administration expense.

**Ms. Sproule**: — So essentially that amount hasn't changed from the previous year then? It continues to be the same amount that you are negotiating or hopefully will be?

**Mr. Matthies:** — Yes. The amount may change if you are able to strike a rate deal different or, in some cases, you may see consumption changes. If the community's demand has gone up or down, that will impact things as well. So the number, you know, it's still a fairly large number, but there will be some smaller adjustment year to year depending on what happens, unless and until we get to a spot where we might have a brand new deal. Then we'll see something more substantive.

**Ms. Sproule:** — All right. On that same page, actually on the next page, we see three additional long-term debt entries. Is this new borrowing that you've entered into last year? We see one for December of 2035, January 2036, and March of 2041: fairly significant long-term debt amounts.

**Mr. Matthies:** — So what we do with our long-term debt is, as we complete a new infrastructure project, we'll actually secure long-term debt so that we've got some greater cost certainty for our pricing models going forward. Typically when we build new infrastructure, we'll finance that out of our notes payable or short-term credit, if you will. Then once we have the costs completed and the construction completed, then we basically lock it in so we know what the financing cost is going to be on a long-term basis.

So in some cases what we saw was we had seen some previous debt mature, and so we basically replaced that. In other cases, as we've completed new projects, then we're putting the financing in place. And the details of each issue are basically listed on page 73 in the note that I think you're looking at.

**Ms. Sproule**: — All right. I assume taking of advantage of fairly low interest rates as well.

**Mr. Matthies**: — Yes, we've seen certainly some fairly good financing rates right now. Yes.

Ms. Sproule: — Obviously. On page 76 there's a mention of

litigation. Is the corporation in any lawsuits at this point in time?

**Mr. Matthies:** — Madam Chair, litigation is a normal disclosure in our annual financial statements, as it is with everyone. There are, I'll say, no major litigation claims in process as we speak today. There are some claims that were filed several years ago that have not moved through the process and have been inactive but not discharged for several years. And I think that's probably about it.

**Ms. Sproule**: — I really appreciated seeing the corporate governance statement. Obviously a lot of work has gone into that on behalf of your board of directors and the work they're doing.

On page 84, there's a description of whether or not the board members are independent or not, and they're all identified as being independent. My question is around one of your board members, his name is Lionel Labelle. And when you look at his resume on page 102, he is currently senior vice-president of the treasury board Crown corporation, SaskBuilds. And I'm just wondering how that jibes with him being declared as independent, as an officer, or as a board member? Madam Chair, in his resumé he's also identified as being chief commercialization officer with the Government of Saskatchewan, and he's also a board member of the Global Transportation Hub Authority.

**Hon. Mr. Moe:** — With respect to his sitting on the board of Saskatchewan Water Corporation, Mr. LaBelle has been viewed as an independent member of . . . sitting on that board. I think it's fair to say, as with any board member, including Mr. LaBelle, if there's any conflict of interest that they may feel they have with any of the decisions that are being made or any of the discussions that are happening, Mr. LaBelle or any other board member would excuse themselves for that discussion. And with respect to Mr. LaBelle, he's no longer on the SaskWater board.

Ms. Sproule: — And when did he step down?

Hon. Mr. Moe: — November 24th.

Ms. Sproule: — Of this year?

Hon. Mr. Moe: — Yes.

**Ms. Sproule**: — I guess my question is, then what does independent mean? What are you independent of if you are sitting on the board of this Crown corporation and on the board of the Global Transportation Hub Authority, and also senior vice-president of a treasury board Crown corporation, SaskBuilds? How is that seen as being independent?

[14:45]

**Hon. Mr. Moe**: — So with respect to being classified as an independent board member, the sub-note at the bottom underneath the board members: "The determination of independence is made by the Governance and Corporate Social Responsibility Committee and is based on an assessment of the requirements in Multilateral Instrument 52-110, Audit

committees." And if you look up to the left, it further goes on to say, 1(d) would not apply to SaskWater as it does not have share capital, and is not an issuer. And 1(d) is not relevant to SaskWater, but the others are.

**Ms. Sproule:** — I noted that as well. And I'm just wondering what that determination was, based on the fact that he actually sat on the boards of two other Crown corporations and was also employed by the government. Would it be possible to get a copy of that determination and share it with the committee? And in addition to that, sorry, could we also get a copy of that multilateral instrument 52-110?

**Hon. Mr. Moe**: — We can get a copy of the multilateral instrument 52-110. We'll have to do some digging for the other.

**Ms. Sproule**: — Thank you. Just in the time that remains, I'd like to turn to the payee summaries in the — what's this called? — Crown disclosure reports that are filed. Yes, payee disclosure reports from Crown Investments Corporation and the subsidiaries.

Sask Water Corp's payments in year end 2014 and year end 2015, I have a couple questions for you on some of those payments. So on page 3 of your 2014 Crown payee disclosure, and this goes for 2015 as well, I note that you have the Marketing Den as a contractor and paid \$202,000 in '14. And I think ... Oh, I don't see them on the 2015 one. So can you share with the committee what that amount was for, that Marketing Den amount?

If I may, I did find the Marketing Den in last year was 193,000 in the year end, or March 31st, 2016. It just is alphabetized differently.

**Hon. Mr. Moe**: — You'll look for 193,000. I have the \$202,000 here. Advertising broken down into advertising, consulting, printing, and duplicating as well as some signs and banners. And what that relates to is a marketing campaign in the communities where SaskWater services with respect to conservation.

Some of the organization of that campaign, some of the conservation efforts and the awareness campaign that was going on was in conjunction with World Water Day in the 202,000. In the 198... So in the 193,000 in March 31st, 2016, is for much of the same reasons in respect to conservation of water in the communities where we're operating, as well as the annual report. They had a hand in putting together the annual report.

**Ms. Sproule**: — Thank you. I noticed there's a company named Watson Land Services. 2015, the total was 1.2 million and then another \$874,000 in 2016. What services do they provide?

**Hon. Mr. Moe:** — Watson Land Services would be a company that's been employed with respect to securing right-of-ways and ensuring that those right-of-ways are in good standing for major projects that SaskWater's involved with. And the bulk of the 874,000 would be for the BHP project at Jansen. And the other one, I think the bulk of that would be about BHP as well, the 1.2 in the other year. Yes.

**Ms. Sproule**: — In 2016 there was a company named J.R. Cousin Consultants Ltd. for 100,000. Could you share with the committee what work they did for SaskWater?

**Hon. Mr. Moe**: — They are an engineering consultant company, and we employed them for some work we are doing with a secondary cell expansion at the Echo waste water lagoon.

**Ms. Sproule**: — A couple more. Kawacatoose Business Development Corporation, \$143,000 — what work was provided there?

**Hon. Mr. Moe:** — So the Kawacatoose Business Development Corporation was employed alongside the installation of the pipeline of the BHP Jansen site to work with them on acquiring some indigenous and local knowledge, if you will, and to ensure that the pipeline route is not impacting on First Nations communities en route or in any other way, so they are . . . That was a consulting company that was employed for those reasons.

**Ms. Sproule**: — Thank you. Zacaruk Consulting Inc. in 2016, \$93,000.

**Hon. Mr. Moe:** — Under another . . . Zacaruk Consulting Inc. is another engineering firm that's been employed to do inspections along the SSEWS [Saskatoon south east water supply] canal with regards to the structure replacement of phase 3 in that canal.

**Ms. Sproule**: — And just one ... a couple more, I guess. Kowal Construction Alberta, \$4.5 million in 2016.

**Hon. Mr. Moe**: — They did some of the actual work on the SSEWS canal improvements to increase the flow for the expansion of BHP Jansen.

Ms. Sproule: — And just for *Hansard*, the which canal?

**Hon. Mr. Moe**: — Sorry, the SSEWS, the Saskatoon south east water supply.

Ms. Sproule: — Can you spell the acronym, please?

Hon. Mr. Moe: — S-S-E-W-S. Sorry.

**Ms. Sproule**: — It sounded like Suez, and I knew it wasn't the Suez Canal. Okay.

**Hon. Mr. Moe**: — I have marbles in my mouth.

**Ms. Sproule**: — No, that's fine. Thank you. Also the final question then is Otium Solutions, 141,000. Now you identified that as being the company you worked with to do your business continuity plan. That seems like a low amount. Is that the total work that they've done for you or will it be higher than that?

**Mr. Matthies:** — Maybe I'll just clarify. Otium was involved in helping us come up with our IT strategic plan, and then they provided assistance to us in the selection of the new IT provider. And then they've also provided some assistance during the transition. So they were critical in the development of the strategy, and then they've had a smaller role as we've moved into the transition of the new service provider. I'll maybe use this opportunity ... I believe one of the earlier questions, and I just wanted to make sure I captured the request correctly. I think you were ... Jacquie was describing how when we did the IT transition, the successful bidder was incurring more costs than what they had anticipated when they put their bid together but that they stuck to their bid. I'm not sure if I heard the question. Could we get some sense of how much additional effort they've put in? I actually, if that was the question, I'm not sure we can give you a quantification of that because it's sort of their cost. The piece of us was they bid the price. They honoured their bid. And we're happy.

**Ms. Sproule**: — That's sufficient, so thank you. Madam Chair, I think that's as many as I can squeeze in for now. So I see the other officials are assembling for the next report and I would conclude my questions at this point. I just want to say a big thanks to the minister and the officials from SaskWater for all the forthright replies and responses to the questions today.

**The Chair**: — Thank you. Seeing that there are no further questions, I will now ask a member to move that we conclude consideration of the 2015-16 Saskatchewan Water Corporation annual report and the 2015 water quality report.

Mr. Dennis: — I so move.

**The Chair**: — Mr. Dennis has moved that we conclude consideration of the 2015-16 Saskatchewan Water Corporation annual report and the 2015 water quality report. Is that agreed?

Some Hon. Members: — Agreed.

**The Chair**: — Carried. That concludes our business with Saskatchewan Water Corporation and, Mr. Minister, if you have any final comments.

**Hon. Mr. Moe**: — Yes, thank you, Madam Chair. I appreciate the committee taking the time to consider this work here today. I thank you very much for that time. I also want to thank Ms. Sproule for her questions and then representing the people of Saskatchewan with those questions. It's appreciated by all, including myself and officials here today.

And I lastly but not least want to thank the officials with SaskWater for the job that they have done, not just here today, but the job that they do day in and day out. It is a corporation, I think, that is very much maturing and coming to a very good place on behalf of the people they serve in the province but also on behalf of the shareholders of the province that have a stake in it. So thank you.

**The Chair**: — Thank you, Mr. Minister. And we'll just take a short break now to change officials and give everyone a chance to go to the washroom.

[The committee recessed for a period of time.]

[15:00]

## Saskatchewan Power Corporation

**The Chair**: — Okay. Welcome, everyone. We'll now be considering the Provincial Auditor chapters and annual reports

for SaskPower. And I'll turn to Ms. Ferguson to introduce her officials that are here with her and make her presentation on 2014 report volume 1, chapter 28.

**Ms. Ferguson:** — Thank you very much, Madam Chair, Deputy Chair, members, Minister, and officials. On my left-hand side this morning is Ms. Carolyn — or this afternoon, I guess — Ms. Carolyn O'Quinn. Carolyn's the deputy that included in her portfolio is SaskPower. Behind her is Ms. Melanie Heebner. Melanie works directly on the audit of SaskPower along with the appointed auditor, Deloitte Touche. And beside her is Ms. Kim Lowe, and Kim is our committee liaison.

So this afternoon there's actually four chapters related to SaskPower on the agenda. We're going to present each of those chapters individually, pausing after each one. So we'll present them in the order that's on the agenda. There is two chapters that have new recommendations for the committee's consideration, and we'll identify those as we work our way through. So before I ask Ms. O'Quinn to present the first chapter, I just want to pause and say thank you, extend thanks to the officials at SaskPower for their co-operation extended to our office in the course of our work. Ms. O'Quinn.

**Ms. O'Quinn**: — Thank you. I'll start with chapter 28 of our 2014 report volume 1, which starts on page 201. This chapter reports the results of our first follow-up of seven recommendations that we initially made in our 2011 report volume 2 regarding SaskPower's processes for inspecting gas and electrical installations. There are no new recommendations related to this work.

On March 31st, 2014, SaskPower had implemented five of the seven recommendations. It had established strategies and requirements for gas and electrical installation inspections and a process to clear its backlog of uninspected gas and electrical permits. Also SaskPower required inspectors to document the rationale for not inspecting permits for high-risk installations and required reporting to senior management on the results of installation inspection activities.

As noted on pages 203 and 204, while SaskPower did require management to review the inspectors' rationale for deciding which installations to inspect, it was unable to provide us with evidence that these reviews took place. In addition, in March 2014, SaskPower had not yet started providing its board with periodic reporting of trend information on its inspection activities and common or emerging trends or risks in gas and electrical installations. That concludes my overview of this chapter. Thank you.

**The Chair**: — Thank you. Minister Wyant, if you would like to introduce your officials and make any comments with regards to this chapter.

**Hon. Mr. Wyant**: — Thank you very much, Madam Chair, and thanks to Ms. Ferguson and her staff for the presentation.

I'm joined here today, to my right, Mike Marsh, president and chief executive officer of SaskPower; to my left, Sandeep Kalra, vice-president of finance and chief financial officer; and behind me, Rachelle Verret Morphy, vice-president of law, land and regulatory affairs; and Troy King, the director of corporate planning and controller. And I want to thank them for their tremendous leadership at SaskPower.

So we're pleased here today to discuss SaskPower's '15-16 annual reports and the past Provincial Auditor's recommendations for SaskPower. As always we welcome the Provincial Auditor's review of our business practices and are happy to share the progress that's been made around cybersecurity, procurement, gas and electrical inspections, and the independent power producers to date.

As for the annual report, you are all aware SaskPower is committed to providing reliable, sustainable, and cost-effective power to the people and businesses of this province. Due to the change in SaskPower's fiscal year, the SaskPower '15-16 annual report covers January 1st, '15 to March 31st of 2016.

SaskPower's operating income in 2015-16 was \$124 million with an operating return on equity of 5.7 per cent. SaskPower's net income was \$26 million in '15-16 with a return on equity of 1.2 per cent.

Last year SaskPower reduced its budgeted operating, maintenance, and administration spending by \$38 million. This was done through freezing management salaries, reducing spending on training, travel, and contract services, and not filling vacancies as people retire or leave the company. We expect to save another \$53 million from these areas in 2016-17 to 2018-19.

While demand for power grows, SaskPower also continues to make substantial capital investments to replace ongoing or replace aging infrastructure and meet the province's energy requirements in support of our province's growth. Much of the province's electrical system was built 30 to 50 years ago. Replacement and upgrade programs will take many years and indeed will be a regular part of SaskPower's capital investment for the long term. So going forward, Madam Chair, the company's forecasting the need to keep making capital investments of about \$1 billion a year. In '15 alone, SaskPower spent \$990 million on capital projects. We know those are challenges faced by many utilities across North America.

So, Madam Chair, with those opening comments, we're prepared to take any questions with respect to the matters before the committee.

**The Chair**: — Thank you, Minister, and I'll open it to questions from committee. Ms. Sproule.

**Ms. Sproule**: — Thank you very much, Madam Chair. Thank you, Auditor and staff, and of course, the minister and the staff or officials for SaskPower.

In terms of just the thing we're dealing with right now, which is chapter 28 of the 2014 report, where is SaskPower at when it comes to the summary trend information and providing it to the board of directors? We see it wasn't implemented in 2014. Has any progress been made on that?

**Mr. Marsh**: — If I may, all the recommendations that were in the 2011 report, we believe, have been addressed completely.

With respect to the question on the reporting to the board of directors, we began reporting in ... Its first annual report for 2013 was presented to our board of directors in the second quarter of 2014. Since that time we have continued to present to our board on June 4th, 2015, and the 2015 annual report was presented to the board on June 2nd, 2016. So we've made that reporting part of a regular annual event for gas inspections activity.

**Ms. Sproule**: — Can you share with the committee what sort of trends that you have identified as common or emerging with the board of directors?

**Mr. Marsh**: — Typically we talk about the amount of inspections that have been cleared, the amount of permits that have been issued each and every year. We look at the number of permits per inspector to make sure we have an equitable distribution or we're not running into a severe backlog situation. And we talk about generally, you know, how that compares to other inspections branches across the country to the extent we can get that information.

**Ms. Sproule**: — So you've provided that data. Are there any sort of trends or risks that come out of the data that you provide?

**Mr. Marsh**: — Just a moment please. When the audit was done in 2011, we found that the number of permits that were actually inspected were lower than what industry average was, and since that time we've added inspectors to bring that percentage quite a bit higher. So for both gas and electrical, we've moved that bar substantially. I believe gas inspections was 60 per cent; electrical was 40. And we've moved that up to 80 and 60 respectively.

**Ms. Sproule**: — Thank you. Obviously gas is ... one would expect that TransGas and SaskEnergy would be doing those inspections. Can you share the history behind that for the committee? Why SaskPower is doing the gas inspections?

**Mr. Marsh**: — Certainly. Back in the 1980s, SaskEnergy and SaskPower were split into two different Crown corporations. At the time, SaskEnergy was moving into a deregulated environment. There was going to be competitors in the marketplace. It was felt that having inspections still with SaskEnergy wouldn't be appropriate if they were in a deregulated market. They were kept in SaskPower partially because they were a joint inspections team, gas and electrical together, and for the reasons I've just explained. So they've been with SaskPower since power and energy split in 1988-89.

**Ms. Sproule**: — Is there any discussion of ever transitioning that over to SaskEnergy or is that just not discussed?

**Mr. Marsh**: — I don't think it would be something that would be appropriate to go to SaskEnergy. They still have ... A percentage of their business is in a nonregulated environment, and I just think it probably would not be an appropriate place.

**Ms. Sproule**: — Thank you. In terms of page 202 of the chapter under discussion, there was a recommendation that SaskPower review and update gas and electrical inspection strategies. That was implemented. And then further on, there's a

comment saying that SaskPower indicated that it plans to re-evaluate this methodology on a periodic basis. Have you done a re-evaluation of the methodology since this chapter was released?

[15:15]

**Mr. Marsh**: — Excuse me for . . . [inaudible] . . . make sure I had my facts correct. We're going to be reviewing that strategy actually in 2017.

**Ms. Sproule**: — And just for the layperson like me, what exactly would you be looking at in terms of this methodology? Like what changes could result in terms of your gas and electrical inspection strategies?

**Mr. Marsh:** — Well post the last audit, we developed a risk-based methodology. So we prioritize a lot of the work that's being done in the province by risk activity. So if it's in an area where there's been known to be a number of issues in the past and inspections have to make sure they keep an eye on certain aspects of the equipment, then they pay more attention to that. And that would be elevated to a higher priority risk. So we intend to continue with a risk-based methodology, but we're always looking at ways to improve the gap.

One of the things with that risk-based methodology is the inspectors have the option to not do an inspection if they have reason to believe they shouldn't do it or there's some concern. They have an obligation, however, to raise that to their supervisor and eventually to the chief inspector so that at some point that particular issue will be dealt with. It will not be lost.

But we're always looking at ways to try to improve the process, improve the number of inspections relative to the number of permits issued, and make sure we continue to keep that percentage high so that as a public safety issue, the public has confidence that we're inspecting a good number of our permits that are issued.

**Ms. Sproule**: — And could you share with the committee what are the high-risk installations or the high risks that you're asking inspectors to review right now? Like what are the latest, most high-risk inspections?

**Mr. Marsh**: — A good number of the inspections done by both gas and electrical are done in the oil field sector. So there's a number of installations in the oil field that are certainly in a much more of a hazardous location, and they require a degree of due diligence just to make sure that the equipment is properly certified, properly installed, and they get the proper clearance to operate that equipment.

**Ms. Sproule**: — And what are the training levels required for inspectors? Are they certified? How are they certified?

**Mr. Marsh**: — The inspectors typically come from the trades. So a gas inspector would come from a plumbing, heating, and gas fitting trades in the province. So we would hire from the street, if you will, into the company. The electrical inspectors typically have an electrical journeyperson's certificate, and both of them, we require a good number of years of experience before they can become an inspector. So they have to have years in the trade, experience in industrial facilities preferred — a good percentage of our work is around industrial — so those are the two main qualifications.

Then when they join SaskPower, we have training programs. We have industry conferences across Canada where they get their development programs for each of the classifications, gas or electrical.

**Ms. Sproule**: — Okay, and obviously what springs to mind on the residential level is the smart meters. What is . . . They've all been removed and now we're back to the other kind of meter, and I forget the name. So what sort of inspections are being done on the residential installations? I'm thinking of the electrical meters. Is that part of this?

**Mr. Marsh**: — Anything from the point of service from the utility to the customer service panel is the utility. So the meter is typically part of the utility. Electrical inspectors would normally inspect after the meter from that electrical service box to the inside of the house, so it's after the meter inspections. But we have taken it upon ourselves since 2014 to inspect meter installations and meter service boxes where we believe there may be a problem, and that's been identified by our utility personnel.

**Ms. Sproule**: — I have no further questions on this chapter, Madam Chair.

**The Chair**: — Thank you. The 2014 report volume 1, chapter 28 has no new recommendations for the committee to consider, so I'll ask a member to move that we conclude consideration of this chapter. Mr. Phillips has moved that we conclude consideration of the 2014 report volume 1, chapter 28. Is that agreed?

Some Hon. Members: — Agreed.

**The Chair**: — Carried. So we'll move on to 2014 report volume 1, chapter 29, and I'll turn it over to Ms. Ferguson once again.

Ms. Ferguson: — Ms. O'Quinn.

**Ms. O'Quinn:** — Chapter 29 in our 2014 report volume 1, which starts on page 207, contains the results of our third follow-up of two recommendations that we first made in our 2007 audit of SaskPower's processes to buy goods and services valued at under \$100,000. There are no new recommendations related to this work.

By February 28th of 2014, while SaskPower had made some progress in implementing the remaining two recommendations, it had more work to do. Even though SaskPower had purchasing policies and procedures for obtaining appropriate approval prior to finalizing purchasing decisions, we continued to find that staff did not always follow them. Our test of purchases identified instances where purchases were approved by staff without the authority to do so or purchases were made prior to approval. Obtaining the appropriate approval prior to finalizing any purchasing decision helps ensure the purchases are proper and available resources are used effectively and efficiently.

2017 volume 1.

**Ms. Sproule**: — Thank you. I have no further questions on this chapter, Madam Chair.

**The Chair**: — Thank you. The 2014 report volume 1, chapter 29 has no new recommendations for the committee to consider, so I will ask a member to move that we conclude consideration of this chapter.

Mr. Kaeding: — I so move.

**The Chair**: — Mr. Kaeding has moved that we conclude consideration of the 2014 report volume 1, chapter 29. Is that agreed?

Some Hon. Members: — Agreed.

**The Chair**: — Carried. Moving on to 2015 report volume 1, chapter 17. Ms. Ferguson.

Ms. Ferguson: — Ms. O'Quinn.

**Ms.** O'Quinn: — SaskPower purchases power from independent power producers as one way to fulfill customer power needs and to secure a mix of different power generation options. In the rest of my presentation I'll refer to the independent power producers as IPPs.

Chapter 17 in our 2015 report volume 1, which starts on page 205, reports the results of our audit of SaskPower's processes to procure power through IPPs. Our audit examined power purchased from IPPs through SaskPower's competitive procurement process and through unsolicited proposals. We found that SaskPower's processes were effective except for the areas reflected in our four new recommendations. I'll now highlight each recommendation and explain why we made it.

On page 215, we recommend that SaskPower update its procurement policies to specifically require that when buying power from IPPs, the use of fairness monitors, written evaluations of IPPs' abilities such as experience and financial resources, written evaluations of the technical merit of IPPs' proposals.

Although SaskPower's competitive IPP procurement process did include these requirements, it had not incorporated these requirements into its procurement policies. Having policies that include all key expectations helps ensure staff consistently use fair and equitable procurement processes when entering into IPP arrangements.

Similar to PricewaterhouseCoopers 2014 recommendation that was included in the CIC SaskPower smart meter procurement and contract management review, we noted that SaskPower's procurement policies did not specifically require it to assess and document risks associated with procuring power from IPPs. A risk assessment would outline key financial, operating, and technical risks that SaskPower faces and how it plans to mitigate those risks or transfer those risks to the IPPs. Such an assessment would help SaskPower identify the minimum financial, technical, and operational requirements for IPPs to meet. Without explicitly assessing risks, SaskPower may retain

Also while SaskPower had begun working on a centralized process to evaluate and monitor supplier performance, it had not yet made supplier performance information readily available to the employees that make the purchasing decisions. Tracking the performance of key suppliers helps reduce the risk of reusing suppliers that have performance issues. That concludes my overview of this chapter.

**The Chair**: — Thank you. Minister Wyant.

**Hon. Mr. Wyant**: — We have no further comments to make, but we're happy to answer any questions that you have, Madam Chair.

The Chair: — I'll open the floor to questions. Ms. Sproule.

**Ms. Sproule**: — Thank you, Madam Chair. Perhaps the officials could share with the committee what progress has been made in terms of the two partially implemented recommendations that came out of this report.

**Mr. Kalra**: — I'll address that. We believe that both these recommendations have been addressed. In 2014 and '15, the procurement policies procedures were changed to enable SaskPower to consistently follow its established processes. The changes included: aligning the procedures to New West Partnership Trade Agreement, publishing the process for procurement below the New West limits — that is below 25,000 for goods and below 100,000 for services — and also increasing the PO [purchase order] limit to 25,000. These changes will ensure that appropriate approval of the purchase would be obtained prior to finalizing the purchase decision, and will streamline low-value procurement. In the event that the procedures are not followed, the process for policy and procedure violations have been reaffirmed with the procurement staff to report on non-compliance.

On the vendor performance issue, we implemented a corporate-wide vendor performance process in March 2015. The vendor performance process tracks performance data on suppliers for use in future supply decisions. Performance data is currently being collected, and once an update is available, it will be used in future supply decisions.

**Ms. Sproule**: — Can you share with the committee how many key suppliers are on that list and how many you would . . . like how many are in the doghouse? How many are in the bad books of SaskPower?

**Mr. Marsh**: — The information I have right now is we're currently grading 147 suppliers as of October 31st on a four-point scale. We're using zero being unacceptable and three being exceptional. Currently, according to this rating scale, we have 34 suppliers which are below satisfactory, so a score of two or less.

**Ms. Sproule**: — Okay, thank you. And, Madam Auditor, will you be reviewing what they've said now and then reporting on that eventually?

**Ms. Ferguson**: — Yes we will. We actually have ... We do that normal follow-up process, and we're planning to do the follow-up in early next year and hopefully have a report in our

an inappropriate amount of risk in its arrangements with IPPs which may expose it to increased costs or litigation.

Note that we did not make a separate recommendation for SaskPower to change its procurement policies given PricewaterhouseCoopers's recommendation and SaskPower's public commitment to implement that recommendation.

On page 217 we recommend that SaskPower use consistent processes to evaluate unsolicited proposals provided to SaskPower from potential IPPs interested in selling it power. At February 2015, SaskPower had a draft, but not finalized or formalized, three-stage process to guide procurement decisions when considering unsolicited proposals. We also found this draft process did not fully align with SaskPower's procurement policies.

We noted the draft terms of reference for the steering committee who evaluate the proposals did not require committee members to make conflict-of-interest disclosures or set out the minimum number of individuals to be involved at each evaluation stage. The draft process did not include criteria guidelines for any particular technology, for example minimum technology standards and financial viability, to help the steering committee assess the proposals fairly and equitably. The draft process did not include similar requirements to those for single-source purchases, even though purchasing through the use of unsolicited proposals presents similar risks such as not paying the best price or giving preferential treatment to certain suppliers.

Not having an approved process for unsolicited proposals that aligns with SaskPower's procurement policies and outlines all key expectations increases the risk of SaskPower being viewed as not treating potential IPPs equitably and fairly. It also increases the risk of SaskPower accepting proposals from unsuitable IPPs who may not be able to deliver the required power or paying too much for power.

# [15:30]

On page 219 we recommend that SaskPower document its rationale for key requirements set in request for proposals and related due diligence requirements as part of the competitive IPP procurement process.

As previously noted, SaskPower's policies did not specifically require it to assess and document risks associated with procuring power from IPPs. Consistent with the lack of policy, for the proposal that we examined, we found SaskPower did not document its risk assessment of risks identified. As a result, SaskPower could not show us its rationale for selecting the requirements that were set out in its requests for qualifications and requests for proposals.

Also we found SaskPower did not require bidders to submit evidence for some key requirements. For example, IPPs were not required to submit information demonstrating their plan to obtain the required environmental permits within a specified period of time. The successful bidder in the project we examined failed to obtain those required permits in a timely manner, which resulted in delays. Without documented rationale for key requirements in requests for proposals, it is unclear whether SaskPower sufficiently identified and mitigated its key risks.

On page 220 we recommend that SaskPower communicate to IPPs who submit unsolicited proposals to supply power the evaluation process and criteria against which unsolicited power proposals are considered. To help ensure a fair and equitable procurement process, SaskPower's procurement policies require it to communicate its evaluation process to all bidders, including any changes to that process. We found that SaskPower did not share with interested potential IPPs the process that it used to evaluate unsolicited proposals. By not communicating the process and the criteria that it uses to consider unsolicited power proposals, SaskPower risks appearing biased, which could hurt its reputation. That concludes my overview of this chapter.

The Chair: — Thank you. Minister Wyant.

**Hon. Mr. Wyant**: — We have no further comments to make, but we'll answer any questions that you have, Madam Chair.

**The Chair**: — I open the floor to committee members. Ms. Sproule.

**Ms. Sproule**: — Thank you, Madam Chair. I would like to go through each recommendation in this chapter and obtain an update from SaskPower as to progress being made on the recommendations. I think there are, is it four or five recommendations? Starting with the first one is the updating of the procurement policies to specifically require the use of fairness monitors, written evaluations of independent power producers' abilities, and evaluations of the technical merit of their proposals. Could you provide the committee with an update on the progress on that particular recommendation?

**Mr. Kalra**: — Sure. We believe we have addressed this recommendation. The procurement procedures were updated in June 2015 and again in January 2016, which include updates for the complex procurement, evaluation criteria, and evaluation committee sections. We are currently in the process of developing RFQ [request for quotation]/RFP procedures for the upcoming IPP competitive procurements.

As these initiatives develop, the IPP and development group and the procurement group will work through the RFP processes and revised procurement procedures to further validate if they align well with these initiatives. The procurement procedures updated included complex procurements which references the use of fairness monitors or fairness advisers. IPP and development intends to use fairness advisers or fairness monitors depending upon the complexity of the procurement as indicated in the procurement procedures.

When upcoming competitive processes are undertaken for buying power from an IPP, written evaluations on the IPP abilities, for example experience and financial strength, will be documented as suggested in the recommendation.

**Ms. Sproule**: — I'm wondering if you could share with the committee how many — I'm going to move into unsolicited — how many unsolicited proposals you would have received in the last three years for example, '14, '15, and '16.

**Mr. Marsh**: — We'll have to get that information from the records so . . . I don't have that with me.

**Ms. Sproule**: — Just to get a sense of what sort of proposals are coming across your desk, it would be interesting to know how many. Do you have any idea how much power that would represent? Or perhaps you could research that and provide that to the committee as well for sort of the size.

We know there was a fairly public dissatisfaction recently with Saskatchewan Community Wind and their inability to secure a contract with SaskPower, so that was fairly public. And I think it would be helpful for the committee to understand. I don't think we would ask you to commit specifically on that one, but what sorts of criteria do you find that the unsolicited proposals are strong in? And what kind of criteria are they weak in?

**The Chair**: — Ms. Sproule, just for your information, on page 208 there is a note that SaskPower received 22 unsolicited proposals in 2014.

**Ms. Sproule**: — Thank you, Madam Chair. Very good. So that's part of the question. Thank you very much.

**Mr. Marsh**: — To answer the question about what kind of proposals are typically received through this process, it varies. We have groups or individuals that may have a technology solution that they feel will allow them to generate electricity and want to bring that forward. In some cases it's for generation that we're already familiar with like wind and more recently with solar. We undertake to look at unsolicited proposals when we don't have a current or a pending program in place. So in the last year, since we made our announcement in the fall of 2015 that we'll be proceeding with wind and solar RFPs, RFQs and RFPs, that we have directed anybody who wanted to submit a proposal to wait until those became public and to submit through that process.

In many of the cases that we look at, the economics of some of these projects are just simply very, very expensive and would not proceed in any event. You know, the proponents may have certainly a desire to see the project get off the ground but at the end of the day, if the project doesn't, you know, meet certain threshold criteria — and the baseline is really the cost of electricity at the end of the day because we have to keep that cost low for our customers — that we would reject that particular proposal.

**Ms. Sproule**: — So for example the Saskatchewan Community Wind proposal in Swift Current, was it just that it would have been too expensive for your customers?

**Mr. Marsh**: — We had no idea what the cost for that proposal was. That particular proposal was for wind. I think there was also a more recent one for a community solar project, and we simply asked that that proponent direct their submission through the channel as we went out for a competitive process.

**Ms. Sproule**: — On page 206 there's a list of I believe all the independent power producers generating in 2014. Of those — it looks like there's 10 or so, or maybe 9, 10, 11, 12 — I think only one was unsolicited and that was the Prince Albert Pulp one. Is that correct? You've only actually had one unsolicited

project come forward? Or are there others?

**Mr. Marsh**: — That is correct. Since operating IPPs in 2014, this is correct. There's no other operating facility that came through an unsolicited proposal process.

**Ms. Sproule**: — What is your policy in terms of unsolicited . . . I think you indicated that you look at it when there's no pending program in place, for one. I know that I'm trying to think of the First Nations Power Authority. That's a program. Would that be considered a program? So it wouldn't fit into unsolicited or the competitive process?

**Mr. Marsh**: — Yes, the First Nations Power Authority was an entity that we entered into with an MOU [memorandum of understanding] through 2011, 2012. In that MOU we agreed to look at small-scale renewable development that would be allocated to the FNPA [First Nations Power Authority] should there be an opportunity for them to bring forward a project. We would have looked at, you know, that project through the FNPA.

To date there hasn't been a project that we've been able to approve because again the economics simply haven't been there. With the more recent announcement on the solar projects, we've agreed to a 10-megawatt set-aside for the FNPA as part of that 60-megawatt first block of solar that we've announced. So that's 60 megawatts; 10 megawatts is set aside for the FNPA. They can also bid into the competitive process, so they have the potential to earn up to 20 megawatts if they're successful through the competitive process.

**Ms. Sproule**: — Thank you. In terms of small-scale renewables, do you foresee in the future an ability for unsolicited proposals on the small scale that would maybe go above and beyond the programs that you have in place just to facilitate, you know, the community engagement? I think that's the goal of Community Wind and community solar, is allowing ... You know, maybe they can't come up with 150-megawatt project, but there could be a 5-megawatt project. And I know that's a frustration people seem to have with SaskPower's current processes. There isn't an ability for those smaller, maybe more nimble or community-based projects to be part of the power picture. Is that something the company is considering at any point or pretty much you're going to go forward with ... stay the course?

Mr. Marsh: — At the present time we have indicated that we want to build out our renewable portfolio by taking advantage of market pricing that's available. There's relatively mature industries in the wind market, certainly a developing solar market, and recent declines in pricing for solar is going to make this attractive, we believe. But having not built a utility-scale solar facility before, we need to get a market signal. We need to understand what the marketplace is truly capable of. Entering into an agreement with any proponent ahead of that I believe would, you know, prevent us from seeing what the market could bring and would probably subject us to more scrutiny and questions about why would we do that. So we're opting to go with a competitive process to begin with. We will take that market signal and use that price as the basis for negotiation with FNPA. We are going to look at community solar options as part of that first 60 megawatt, and we're developing what that might

December 13, 2016

look like right now. But as the market changes, as the price for solar continues to come down, not only utility grade solar but residential solar and solar on businesses, on rooftops, is only going to increase.

And our projections, I believe I might have spoken to this last time I was here, that by the year 2021 we believe we'll have over 3,000 installations in the province on residential and small businesses. And that's a significant shift. Today we have about 450 residential-size solar installations in the province. So the market is certainly increasing and we are going to understand what the pricing and the degree to which we can integrate solar, maybe solar with some battery storage, look at how we can integrate that into the grid and then go to the next phase. But we are going to build that as we go, and over the next two to three years we'll have probably a pretty good blueprint on how we're going to go forward with any community solar projects.

**Ms. Sproule**: — Thank you. When you talk about market signal, maybe you could . . . I'm not sure I understand what you mean by that. And would other provinces have already established that market signal?

**Mr. Marsh**: — Other provinces are doing exactly what we're doing. For example, Alberta has just recently announced the 400-megawatt renewable portfolio option, and so they're going out for market pricing in a three-stage process. Now they have indicated that they expect most of that will be taken up by wind. Wind has recently I think achieved a drop in price as well. And for the amount of megawatts that they're talking about, solar is probably not going to be competitive, but they do expect some solar companies to be submitting into that RFP. So they're going out for competitive pricing.

We are going to do the same thing, except we're doing it, a separate wind RFP and a separate solar RFP, where the Alberta AESO [Alberta electric system operator] was going out for 400 megawatts of renewable energy.

**Ms. Sproule**: — Back to the recommendations. The second recommendation was that SaskPower use consistent processes to evaluate unsolicited proposals from potential IPPs interested in selling power. Can you give the committee an update on that recommendation?

[15:45]

**Mr. Kalra**: — We believe we have addressed this recommendation as well. An internal UPP [unsolicited power proposal] process document was created to outline the activities that occur in each stage of the process. In addition, a UPP technology messaging chart was also drafted. These processes will be evaluated yearly or as needed in order to align with good utility practices.

We have implemented a terms of reference document for the UPP executive steering committee and a subcommittee of the executives called strategic investment and risk executive committee.

We also have a requirement for declaration of conflict of interest for this committee members. So the documentation is there now and it's coming through a rigorous process now and it's being addressed. So this recommendation has been addressed, we believe.

**Ms. Sproule**: — Third recommendation is to document your rationale for key requirements set in the RFPs and related due diligence requirements. Can you give us an update on that recommendation.

**Mr. Kalra**: — We have addressed this recommendation as well. IPP development is currently in the process of developing new renewable energy IPP competitive procurements, for example, solar. The process for setting key requirements will be documented as recommended. SaskPower's enterprise risk management department has developed a corporate-wide risk register which will be used for large projects as well. For example, a risk matrix is being developed for the upcoming wind and solar IPP procurements.

When SaskPower chooses to buy power from an IPP through a power purchase agreement, SaskPower's normal governance practices, for example a decision item, are followed. A decision item is created where the recommendation is presented to the appropriate committee for approval. The decision item also includes a template on the risk profile to assess and potentially mitigate any risks in entering into the project or PPA [power purchase agreement].

Depending upon the complexity of the project or PPA, a full risk register may be required to be maintained, reviewed, and updated from time to time.

**Ms. Sproule**: — All right. The next recommendation is the communications to IPPs who submit unsolicited proposals, that you would communicate the evaluation process and the criteria against which they're reviewed.

**Mr. Kalra**: — We believe this recommendation has been addressed as well. The IPP development group has drafted an external UPP process document which outlines the criteria and steps involved in this process. The external process document is shared with developers that are interested in submitting unsolicited power proposals to SaskPower for consideration.

An internal UPP process document was also created to outline activities that occur in each stage of the process. In addition, a messaging chart was also developed to outline SaskPower's understanding of the latest technologies. These processes would be evaluated yearly or as needed in order to align with good utility practices.

**Ms. Sproule**: — Thank you. Madam Chair, I have no further questions on this chapter.

**The Chair**: — Thank you. The 2015 report volume 1, chapter 17 has four recommendations for the committee to consider. What is the wish of the committee? Mr. Phillips.

**Mr. Phillips**: — I would move that the committee concurs with the recommendations and note compliance.

**The Chair**: — Thank you. Mr. Phillips has moved that the committee concur with the recommendations and note compliance. Is that agreed?

Some Hon. Members: — Agreed.

**The Chair**: — Carried. Thank you. Moving on to the 2015 report volume 1, chapter 17, I'll turn it over to Ms. Ferguson again.

**Ms. O'Quinn:** — Thank you. SaskPower makes significant use of information technology to deliver power and manage its business. Cyber incidents, including cyber attacks, may disrupt the provision of power. Those disruptions could potentially damage power generating plants and transmission equipment, adversely impact businesses relying on power to operate, and put public safety at risk.

Chapter 18 in our 2015 report volume 1, which starts on page 227, reports the results of our audit of SaskPower's processes to manage the risk of cyber incidents for the protection of the provision of power. We concluded that SaskPower's processes were effective except for three areas where we made recommendations. I'll now highlight each recommendation and explain why we made it.

On page 231, we made two recommendations. We recommend that SaskPower document the most likely types of information technology threats that could lead to cyber incidents that would adversely impact its ability to provide power.

We also recommended that SaskPower confirm that its cyber risk mitigation strategy addresses the significant threats of cyber incidents that would adversely impact its ability to provide power.

We found that the high-level summary of potential threats to assets that provide power and the impact of those threats that senior management had received may not be complete. SaskPower did not specifically identify potential weaknesses in and threats to its operational technology systems that may allow an attacker to get into the critical cyber assets.

Also SaskPower did not assess the likelihood of these types of cyber attacks that could potentially lead to a cyber incident. Without fully documenting these threats, it's difficult for SaskPower to ensure it has the appropriate strategy in place to mitigate the risks.

On page 232 we recommend that SaskPower provide its staff with guidance to assist in assessing when an information technology security-related event is considered to be a cyber incident and requires the use of its incident command system response plan.

SaskPower used processes to detect and track various IT security-related events. However, it did not have documented criteria that set out what IT security-related events that it considered to be cyber incidents. Without a consistent understanding as to when staff should classify an IT security-related event as a cyber incident, staff may not appropriately assess those events in a consistent and timely manner, including invoking SaskPower's incident command system response plan when needed.

That concludes my overview of this chapter.

**The Chair**: — Thank you, and I'll just correct that it was chapter 18 that we are referring to, not 17. Minister.

**Hon. Mr. Wyant**: — I'm just happy to answer any questions that you have, Madam Chair.

**The Chair**: — Okay. I'll open the floor to questions from committee members. Ms. Sproule.

**Ms. Sproule**: — Thank you, Madam Chair. I just would like an update from the corporation as to the recommendations that have been made by the auditor. So the first recommendation is documenting the types of IT threats that could lead to cyber incidents. Could you give us an update on that?

**Mr. Kalra**: — This recommendation has been addressed. The enterprise security now has an inventory of assets and has developed standards for facility classification that apply consistent risk profile ratings across all NERC [North American Electric Reliability Corporation] and non-NERC assets, North American reliability corporation, the NERC.

Enterprise security has developed a guide containing an approach, common practices, and understanding for conducting evaluations of potential threats and vulnerabilities of a physical security attack against transmission stations, transmission substations, and/or primary control centres. Enterprise security awareness training and NERC CIP training — once again, North American reliability corporation critical infrastructure protection training — has been delivered to designated employees and contractors across SaskPower's corporate and operational technology environments. And it has achieved and maintained a 95 per cent or better completion rate since April 2016.

A comprehensive data loss prevention program has been defined to address end-to-end protection from threat vectors such as emails, USB [universal serial bus] devices and network services. A vulnerability threat management project is forecast to begin in 2016 to address the need for ongoing threat management services at SaskPower.

Ms. Sproule: — I think you used an acronym there . . .

Mr. Kalra: — Quite a few. NERC, it's n-e-r-c, NERC.

Ms. Sproule: — N-e-r-c.

**Mr. Kalra**: — Yes, it's North American reliability corporation, so this is the organization which is made up of utility members all over North America, and we are part of that. And this corporation defines the standards, operating standards and information technology standards and operational technology standards for all the utilities.

**Ms. Sproule**: — All right. And the first recommendation asked for you to document the most likely type of threats. Can you identify for the committee what a likely threat would be?

**Mr. Kalra**: — It could be physical. So someone gaining an unauthorized access to, you know, let's say a substation or control stations. On the cyber side it's, you know, unauthorized access to our systems and the ability to gain an attack and

maybe even paralyze the grid would be on the cyber side.

**Ms. Sproule**: — Certainly been the subject of movies and of late in the news with the American election. So basically hacking, would that be the colloquial term for that unauthorized access?

**Mr. Kalra**: — Exactly, with the objective of maybe even breaking down the grid in the most severe cases.

**Ms. Sproule**: — Are you aware of any of those types of threats that have ever taken place on Canadian soil?

**Mr. Marsh**: — No, I can't recall one specifically but I know every utility across the country has this as top of mind in terms of dealing with cyber security risk, the threat to the interconnected grid across Canada. This is a very high-priority item for all utilities. I mean we have threat detection devices on our firewall systems. We get many, many attempts every day by individuals or whomever trying to access our infrastructure. That happens across the country, so we have special committees set up through the Canadian Electricity Association to deal with cyber security and indeed it's been the subject of many conference calls and development programs for technical people in the utility industry.

**Ms. Sproule**: — Thank you very much. The second recommendation was that SaskPower would confirm that a cyber risk mitigation strategy addresses the significant threats. Now did you address that in your initial comments? Or is there a further comment that you can share?

**Mr. Kalra**: — The second one, we have not fully implemented the second recommendation yet. It's in progress. Enterprise security applies SaskPower NERC CIP cyber security policy — So NERC I explained; CIP is critical infrastructure protection — cyber security policy to holistically address the risks to critical infrastructure by facilitating compliance with NERC CIP set standards which places a strong emphasis on incident investigation and security risk management. Participation in November 2015 GridEx III exercises demonstrated SaskPower's prompt cyber risk mitigation strategies were effective and will continue to be defined with other NERC-regulated utilities. Enterprise security's cyber risk mitigation strategies enhancing incident management's capability with power production transmission services and distribution services.

So I think what we are saying is we are making progress, but we're not kind of fully there yet and we keep working on it.

**Ms. Sproule**: — Do you know when you might be able to say it's fully implemented? What's your goal?

**Mr. Marsh**: — Well the issue with NERC standards is that they continue to be updated each and every year. So we are currently working towards compliance with what's called NERC standard or version 5/6. And in that there's 11 major standards and hundreds of technical issues that have to be addressed under those standards. So we're currently working to identify what that means for SaskPower and work to close those gaps over a period of time. Every two years we are subject to an audit by NERC. They come in and review our performance against meeting those standards, and in the case where we don't have the standards, what's our plan to meet them and at what point in time.

**Ms. Sproule**: — Well my question is when do you anticipate you'll meet them, so maybe I could say, when do you think you will meet the 5/6 version of their standards?

**Mr. Marsh**: — I would suggest it's going to be a year to two years down the road before we are compliant with those standards. By that time there'll be a new set of standards coming out and we'll be working on those as well.

**Ms. Sproule**: — Madam Auditor, when SaskPower indicates that they're also being audited by this North American Electric Reliability Corporation — is it a corporation? — do you take those audits into account when you're doing your work?

**Ms. Ferguson**: — Yes we do. Actually you'll see that the report actually references those particular standards, so it's actually referenced on page 233, and so yes we do. And what we'll do is we realize in this case it is a moving target, so what we're looking for is in essence that SaskPower has a process to make sure that they're staying on top of the game, that they don't lag behind. And so that's what we'll be looking for in this one. So we don't anticipate that it'll be hanging around for every change of NERC standards because we realize it is, as with IT, it is a moving target all the time.

**Ms. Sproule**: — Thank you. The third recommendation then is providing staff with guidance to assist in assessing when an event is considered a cyber incident. Can you update the committee on your progress on that recommendation?

### [16:00]

**Mr. Kalra**: — It is not fully implemented yet. The answer is the same as recommendation no. 2. We're in progress of implementing compliance with NERC standards, and, you know, this would be one of those things which gets implemented with it.

**Ms. Sproule**: — All right. Thank you, Madam Chair. I have no further questions on this chapter.

**The Chair**: — Right. The 2015 report volume 1, chapter 18 has three recommendations for the committee to consider. I would note that there was compliance with no. 1. So what is the wish of the committee? Mr. Phillips.

**Mr. Phillips**: — I would move that the committee concurs with recommendation and note compliance of recommendation no. 1, and note progress towards compliance of recommendation no. 2 and recommendation no. 3.

**The Chair**: — Mr. Phillips has moved that the committee concur with the recommendation no. 1 and note compliance, and concur with recommendation 2 and 3 and note progress towards the compliance. Is that agreed?

### Some Hon. Members: — Agreed.

The Chair: - Carried. That concludes our consideration of the

Provincial Auditor's chapters for SaskPower. And I want to thank the auditor for her time here today as well as her officials. And we will take a brief recess before continuing on.

[The committee recessed for a period of time.]

**The Chair**: — All right. So for the remainder of the afternoon, folks, we will be considering the annual reports and financial statements of SaskPower and its subsidiaries, and this includes the 2015-16 SaskPower annual report, the 2015-16 NorthPoint Energy Solutions Inc. financial statements, and the 2015 Power Corporation Superannuation Plan annual report.

Minister Wyant, if you want to introduce any new officials you may have, or just begin with some comments.

**Hon. Mr. Wyant**: — We have our same officials here, Madam Chair, and we're just happy to answer any questions that the committee members have. No additional comments.

**The Chair**: — Thank you. I'll open the floor to committee member questions. Ms. Sproule.

**Ms. Sproule**: — Thank you, Madam Chair. I'm going to just start off with a very general question on NorthPoint Energy because we never seem to get to NorthPoint Energy. So just maybe if you could comment on sort of the general state of affairs for that corporation, how it's doing, and sort of any issues or concerns or things to celebrate that you want to share with the committee.

**Mr. Kalra**: — So NorthPoint has basically two or three essential functions. It manages the load for us, manages imports and exports, manages the overall system, and also does some trading activity when we have surplus power. It would export power to neighbouring jurisdictions — mostly it is Alberta.

So in the past the . . . when the industrial activity in Alberta was stronger, the price of power in Alberta was quite strong and NorthPoint made lots of money through this trading activity. Over the last couple of years the prices in Alberta have come down, power prices in Alberta have come down.

So if you look at the financial it just presents one picture. It's on the trading side, not on the other support functions that NorthPoint provides to SaskPower. But on the trading side you would see over the last couple of years we lost money, and that loss is not on trading transactions. It's on a fixed-cost component. We have transmission rights which take power from northwest US [United States] to Alberta through BC, and those rights have been bought till 2020, I believe. And that fixed cost we haven't been able to recover through profits, through trading, so as a result you see some losses from net cost from electricity trading.

We have rationalized the size of NorthPoint over the last few years. They used to have two desks. Now they have one desk, so the costs have come down. So NorthPoint continues to do, provide very valuable service to SaskPower. The slice of life that you're seeing in the financial reports just shows the losses because of our fixed position, of transmission position.

We made lots of money in the past. We expect if the prices

revert back to normal levels in Alberta, we would still be making some money on, you know, on exports when we have surplus power.

**Ms. Sproule**: — When you say one desk, is that just one employee that manages the . . .

**Mr. Kalra**: — That means ... No, it's more than one employee. It's a number of employees which we used to have east trading desks, so eastern US and western US and Alberta. And now we only have one. We have combined those operations. So we've kind of rationalized the cost structure of the operations a bit.

**Ms. Sproule**: — In terms of the price in Alberta dropping, what has caused that to happen?

**Mr. Kalra**: — It's mainly the bank has fallen off because of, you know, what's happening with the commodity cycle and the industrial activity over there. It's got an open market structure for power and, you know, as the demand falls, the price at the margin starts falling quite rapidly. And the prices right now have been averaging around \$20 and they used to be around \$80 just a couple of years ago.

**Ms. Sproule:** — So in terms of the net loss, and this year it's a net loss ending in March 31st, 2016, this figure is basically on the books, or do they have to borrow money to cover or is there debt that is associated with this?

**Mr. Kalra**: — Not all of this. For example, if you see 6.5 million at the bottom, not all of this is cash loss. Unrealized market value is a non-cash component of that. So 4.1 is non-cash loss. And also net cash, net cost from electricity trading, also includes non-cash items. So I think if you looked at the cash flow which is on page 7, that would provide, you know, the cash picture. So the cash reduction, if you look at the bottom, through operations is \$2.7 million during the year.

**Ms. Sproule**: — Is there any debt associated with the corporation right now then?

**Mr. Kalra**: — There is no debt at NorthPoint level. It's been funded by contribution from SaskPower.

[16:15]

**Ms. Sproule**: — Okay. On page 8 in the notes to the financial statements, and under note 1, the bottom statement is as a subsidiary of a provincial Crown corporation, NorthPoint is not subject to federal or provincial income taxes in terms of the introduction of the bill to change the definition of privatization to allow for sale up to 49 per cent of SaskPower. If that happened, would NorthPoint then be subject to federal or provincial income taxes?

Mr. Kalra: — I haven't looked into it, and I could not comment.

**Ms. Sproule**: — Perhaps is that something you could provide a comment on if you could look into it?

Hon. Mr. Wyant: - It really depends, I think, on the nature of

the transaction in terms of the sale of any equity in SaskPower. So it's a very difficult question to answer given that we don't have a scenario in front of us in terms of divestiture of equity.

**Ms. Sproule**: — Would it be possible for NorthPoint to become a separate stand-alone corporation if in the event SaskPower was privatized to 49 per cent?

**Hon. Mr. Wyant**: — Well certainly that's a possibility, but again there's been no consideration with respect to the divestiture of any equity in SaskPower. But certainly any corporate structure is possible.

**Ms. Sproule**: — I guess my question is, as a subsidiary, is it reliant on the head company or is this something that could be a stand-alone company?

**Mr. Kalra**: — As I mentioned earlier on, a lot of what NorthPoint does is to further SaskPower's objectives, you know, to manage the system. So it's very well integrated with SaskPower. Just for trading activities, it's a small, little component which is stand alone. But if it were, in a hypothetical situation, if it were a stand-alone company, the scale is not there for it to be very successful. This is kind of my opinion.

**Ms. Sproule**: — Right. Thank you very much. I better move on so we get to the main show here, the annual report for SaskPower. As you know, we met just last month. Mr. Marsh, you weren't here, but I had an opportunity to talk to Mr. Kalra and Ms. Verret Morphy and the minister about quite a bit of the information that's in the annual report.

Now I just wanted a quick follow-up on that because you had made a number of undertakings to provide us with information. I'm just wondering if you could update the committee on the status of that or ... I know it was, I believe November 23rd, so I don't know if you've had an opportunity to go through those yet. But could you give us a little update on where those are at?

**Mr. Kalra:** — We are collecting some of that information. Not all of that is available with me right now, but there are two pieces of information which are available. One is, you had asked a question on previous borrowing authority limits, when they were raised. So I can, you know, answer that question. The borrowing authority was \$3.5 billion in 1986. It was raised to \$5 billion in 1987, and it stayed \$5 billion till 2012, so from 1987 to 2012. In 2013, it was raised to \$8 billion. Okay, so that was, I think, one question that you had asked.

**Ms. Sproule:** — Okay well maybe I will just start. We had talked about the equivalency agreement with the federal government on coal-fired regulations, and I think just after we met, there was an announcement that came out that the government and the federal government had finalized at least an agreement in principle. I guess maybe if you could provide us with the impact of that agreement on SaskPower's operations.

**Mr. Marsh**: — Certainly. What the equivalency agreement allows SaskPower to do is to operate our conventional coal-fired facilities beyond their retirement date. Currently under federal regulations, any conventional coal-fired station had to be retired prior to 2030 or cleaned up so that it was as

good as the emissions that would've occurred from a natural gas generating station. So the only way to do that is using carbon capture technology that we've employed on BD3 [Boundary dam 3] today.

What the equivalency agreement now allows is that you can run the unit beyond its retirement life as long as you meet the same emissions profile as if you had cleaned it up, so it was as good as gas. So we could run a conventional coal unit differently than it is today. We would not be able to run it on a 24-7 basis. We would have to look at altering our portfolio of generation. We may have to look at other greener energy options — hydro, perhaps additional wind — but it still gives the optionality to extend the life of that coal fleet by a certain amount, allow us to operate that unit perhaps during peak times because we have a very large baseload generation requirement. As I've talked about in previous conversations, two-thirds of our energy supply goes to supply baseload generation at transmission voltage, so at our high-voltage side.

So this allows some flexibility which allows us to spread the costs out over a period of time, will reduce the requirement to accelerate depreciation on these facilities, and certainly give us the flexibility that we need as we move in to a lower carbon future and have to transition off of coal.

**Ms. Sproule**: — In terms of the retirement date being extended, is there another final date that's being proposed?

**Mr. Marsh**: — No, not now. The details are not yet known. Those are the things that have to be worked out. As you've said, this is an agreement in principle and the details between the provincial ministry, the federal government, and ourselves have yet to be understood. So those will be worked on and I think become clear over the next few weeks.

**Ms. Sproule**: — Is it possible to get a copy of the agreement in principle? Is that public document?

Mr. Marsh: — I don't believe it is, no.

**Ms. Sproule**: — Okay. So we'll have to wait for the final details.

**Mr. Marsh**: — Yes, all I have is the announcement that was in the press as well. That's just the agreement in principle between the federal government and the provincial government.

**Ms. Sproule:** — All right. One of the factoids that is in the press release was that Saskatchewan will establish regulations under *The Management and Reduction of Greenhouse Gases Act*. Do you know what sort of changes . . . Like will that mean that the Act will be implemented and these regulations will be established as part of this? Or what is the plan in terms of your obligations under *The Management and Reduction of Greenhouse Gases Act*?

**Mr. Marsh**: — Currently because this is just breaking news, we have to look at that together with our provincial Ministry of Environment and figure out the path forward. So we don't have a concrete plan. The equivalency agreement was expected to allow us some flexibility, and now that we know that we can begin to develop a plan to work around that, that's what we're

going to be doing over the next few months.

**Ms. Sproule**: — But your understanding is that that Act will have to be proclaimed, enforced, and regulations will be established.

Mr. Marsh: — That is correct, yes.

**Ms. Sproule**: — But no idea when it will actually be proclaimed then?

Mr. Marsh: - No.

**Ms. Sproule**: — Okay. Just moving on to BD3 now for a few questions. Last January you highlighted that \$17 million was being spent in 2015 on cleanup of the amine solution. Can you give an update on that number, and we'll start with that. Is there an update on the cost of amine?

**Mr. Marsh**: — To the end of the calendar year, March 31st? Is that the number you're looking for?

Ms. Sproule: — To start with, yes.

**Mr. Marsh**: — Okay. To the year ending March 31st, 2016, approximately 18.5 was spent on amine costs at Boundary dam 3.

**Ms. Sproule**: — Was that a cost that was anticipated when you first started operating the plant, or is that because of the degradation of the amine, unexpected?

**Mr. Marsh**: — Yes. Amine degradation is a normal part of the process and the rate of degradation has been higher than what was originally designed. So I believe we had budgeted approximately 5 to \$6 million in amine cleanup and replacement costs as part of our operating costs. So the numbers came in higher than that for that operating year. And we continue to experience additional amine charges as we have moved into 2016-2017 calendar year as well.

**Ms. Sproule**: — Do you think it'll be higher than 18 million in the 2016-2017 calendar year?

**Mr. Marsh**: — Currently, yes we do. They will probably be in excess of 20.

**Ms. Sproule:** — Okay. Now I need to understand this. When you first created the CCS [carbon capture and storage] plant, was the thought that the amine could be completely reused and that this degradation was not anticipated at the time, like it wasn't built into the business plan?

**Mr. Marsh**: — As I said, some degradation was built into the operating costs, the parameters, if you will. We expected there to be because that's a normal part of that process. What has transpired since then is additional technical difficulties which has resulted in a higher amine degradation than planned for. So we continue to work on finding the engineering solution. In the meantime we are spending additional money to clean up and to replace amine at a higher rate than we expected.

Ms. Sproule: — If my math is correct, you said 5 to 6 million

was the expected cost of degradation.

Mr. Marsh: — On an annual basis, yes.

**Ms. Sproule**: — On an annual basis. And now we're looking at 18 to 20 million, so up to four times more than was expected. Is that about right?

Mr. Marsh: — Yes.

Ms. Sproule: — Okay.

**Mr. Marsh**: — Yes. This is not uncommon on start-up facilities. And certainly as we get more experience with this chemical plant, you know, additional costs in the first few years is something that we've talked about in the past as well. But over time the operating performance is getting better and our costs will come down.

**Ms. Sproule**: — I guess a few questions about the degradation of the amine. Are there concerns when the chemical composition of the coal is different from the last batch? Is that part of the problem is the coal composition?

**Mr. Marsh**: — Yes, that is certainly part of it. The coal chemistry plays a big part of it. Even when you're drawing coal out of the same seam in the Estevan area, the coal quality can change. When the coal quality changes and you pass it through a furnace and you combust it, then the products of combustion change. So you have a different chemical trace, if you will, and that chemical trace affects the amine and the way the amine binds with the molecules coming out of that exhaust. So every time there's a change, it affects that operating performance. It's a very sensitive area because it's where the bonding takes place between the amine at the front end of the process and the exhaust gas coming through.

This is a problem that I think is documented on the Internet. You can pull up other articles on it, and it's a common problem. And we continue to work through the issues as we continue to extract  $CO_2$  out of that exhaust gas. And as you know, we've reached 800 000 tonnes in under a year post-overhaul. We're very proud of that, but there continues to be some technical issues, and there may always be some technical issues, as there are in all our facilities. You just don't hear about them like you do with this one.

**Ms. Sproule**: — It is a very popular topic, as you know. In terms of coal quality, would it be different if you were importing coal from other, say cleaner coal? Because we know that the lignite is fairly ... what they call dirty coal. I don't know, what ...

**Mr. Marsh**: — It's called brown coal. Sometimes it's jokingly referred to as burning dirt. It's a very low heating value. It has lots of impurities. You can have silica. You can have sodium. You can have other compounds in there as well that affect the chemistry. We're not sure . . . This unit was designed to burn lignite. I am certain that if there was a way to clean up any of the dirty components, which they're are trying to understand which ones those are that truly affect it, but that takes time. And I can assure you, we've got our best chemists and chemical engineers working on this problem.

**Ms. Sproule**: — Yes, I'm sure you do. Just moving on to the OM & A [operating, maintenance, and administration] cost for the capture plant. In January when we spoke last about it, you indicated it was around \$13 million. Do you feel that that figure is going to be consistent for this year?

**Mr. Marsh**: — The 13 million was for chemical clean-up costs. That was for . . .

Ms. Sproule: — OM & A.

[16:30]

**Mr. Marsh**: — OM & A. The current forecast for OM & A cost is about 11.2 million for this year, so it's come down from last year.

**Ms. Sproule**: — That's good news. Thank you. Can you highlight at a very high level the maintenance that has been done at BD3 in the past year? And what were the costs associated with the CCS plant in particular?

**Mr. Marsh**: — I will give you two or three things off the top of my head; I do not have an extensive list. I can tell you that during the overhaul in 2015, in the fall of 2015, we replaced a number of components. We added what was called a water washing station to help wash particles out of the exhaust stream before it actually hit the first stage of amine capture. We replaced a number of control systems that were in the plant. We replaced a couple of heat exchangers that were causing issues. And all of those combined resulted in a much improved performance post-overhaul.

We've had a couple of overhauls since then. A couple of those were to go in and clean up the facility. There's scaling that occurs at the front end of that capture process, and that has to be cleaned out from time to time. That's a normal part of maintenance. And I believe when there was some of the overhauls, when they tried to bring the unit back up, we had a couple of failures of gaskets and devices that sometimes fail when you're bringing a plant up online, and then we had to replace those. So generally the same components you would replace in any plant, but the major overhaul last year is where you plan for major components once you've identified the engineering solution, and you work with the manufacturers to get the proper equipment specified and manufactured.

**Ms. Sproule**: — Thank you. Is there any way you could provide the actual costs for each one of those components that you've identified? So the water washing station, the heat exchangers?

**Mr. Marsh**: — We could provide some costs for some of the major components, yes.

**Ms. Sproule**: — The major ones, perfect. Thank you. In November, your status update, you indicated that the power unit had a compressor electrical failure. Is that something that happens on a regular basis with your power units, or was it unexpected and unusual?

Mr. Marsh: — No, the compressor unit in the carbon capture facility had a failure that month. That was not normal. It has

never happened since we started up that plant, so we had two years of operation. There ended up being a relay component in the control system that needed to be replaced, and that resulted in a multiple-day outage before we found that problem and corrected it.

Ms. Sproule: — Do you know the cost of that?

Mr. Marsh: - No, I do not.

Ms. Sproule: — Could you provide it to the committee?

Mr. Marsh: — I could, yes.

**Ms. Sproule**: — Okay, thank you. And then there was the maintenance for six days as well at the CCS process. Was that ordinary maintenance in November, the six days?

**Mr. Marsh**: — Yes, it's all planned maintenance. So these are scheduled maintenance periods, and we conduct, as I said, cleaning, the replacement of components that fail over the course of the year, everything that we would normally do in one of our generation plants anywhere in the province.

**Ms. Sproule**: — Yes, this isn't the generation plant though, right? This was the CCS unit.

**Mr. Marsh**: — You're talking the power unit or the carbon capture unit?

**Ms. Sproule**: — The carbon capture unit. Is that where you did the maintenance?

Mr. Marsh: — Yes.

**Ms. Sproule**: — Okay, so that wouldn't be done anywhere else because it's the only one, right?

**Mr. Marsh**: — But I'm saying we're doing maintenance the same way we do maintenance in all our other facilities. So there's nothing special about the maintenance we're doing at our carbon capture facility.

**Ms. Sproule**: — No, only that it's the only carbon capture facility that exists.

Mr. Marsh: — Correct.

Ms. Sproule: — Okay.

Mr. Marsh: — Yes.

**Ms. Sproule**: — Thank you. Were there any penalties paid to Cenovus in '15-16, or are you anticipating any this year?

**Mr. Kalra**: — For seven months in 2016-17 the penalty accrual to Cenovus is for \$1.2 million.  $CO_2$  revenues for the same period is 10.9 million, so there's a net revenue of 9.7 million.

**Ms. Sproule**: — And could you share with the committee why there was a penalty for 1.2 million?

**Mr. Kalra**: — We have a contracted minimum amount of  $CO_2$ 

that we are expected to produce on an ongoing basis. And there is in the contract, the mechanism is not there to go back and make for that shortfall. So if you fall short in a given period, you can only make it up during that period so it doesn't carry over to the next one. So as a result, in some months when the plant is down due to maintenance, planned or otherwise, we won't be able to meet our contracted volumes. And as a result, there could be a penalty every once in a while, even though on an overall basis we are producing close to the target amount of  $CO_2$ .

**Ms. Sproule**: — So even though you are able to produce 800 000 tonnes or reduce ... capture 800 000 tonnes a year, you could still end up paying penalties to Cenovus because you aren't able to deliver within a particular period.

Mr. Kalra: — That's correct.

**Ms. Sproule**: — So what period in your operations was that penalty assessed for, or what month?

**Mr. Kalra**: — I don't have the exact month here, but what I have is the cumulative amount of 1.2 till seven months ended October 31st, 2016.

**Ms. Sproule**: — All right. How much did you sell to Cenovus? So that \$10.9 million in sales, how many tonnes is that equivalent to?

**Mr. Kalra**: — I'm not sure if we have given the price away already on this one or not, but this was supposed to be one thing, you know, which we were supposed to keep confidential, okay?

**Ms. Sproule**: — Of the 800 000 tonnes that you did capture this year, how much went to Aquistore?

**Mr. Kalra**: — We don't have exact numbers with us right now. We can provide that information to the committee. But on an ongoing basis, on a daily basis, the amounts are 200, 300 tonnes go to Aquistore.

**Ms. Sproule**: — And if Cenovus decides on a particular day that they don't want to offtake any carbon, can you increase the amount that you send to Aquistore, or is that limited?

**Mr. Kalra**: — We can. The Aquistore has its own capacity, and I think we are able to sequester up to 2000 tonnes. But that hasn't been the case. Cenovus has taken, you know, what's expected of them in the contract, and as a result we haven't kind of faced that situation.

**Ms. Sproule**: — I'm just wondering if Cenovus decides to not uptake in a particular day and Aquistore cannot store whatever is being sequestered, would you just stop the plant and let it be released, then? Is that how that would work?

**Mr. Marsh**: — That's exactly how it works. If Aquistore cannot take it and Cenovus doesn't want it, and we need to run that generation plant, we would run it without carbon capture and storage so the  $CO_2$  would be vented. Or we would shut unit 3 off and we wouldn't run it at all. It just, it depends on whether we need the load at that point in time and whether we can

operate with or without it.

**Ms. Sproule**: — And then going forward into the future when the coal-fired regulations are in place, the new management and reduction of greenhouse gases actually in place, and the regulations, would that impact . . . Would you still be able to do that or do you know yet?

**Mr. Marsh**: — You know, that's going to be something that our operating people are going to have to figure out. We're going to have to meet that emissions profile on those emissions reductions targets. So we're going to have to look at various scenarios of operating our plant in different configurations. So we may be shutting that plant off much more often in the future for sure.

**Ms. Sproule**: — Yes, thank you. Just want to move on a little bit to the CCS Knowledge Centre that's been established. Is SaskPower involved financially in that knowledge centre at all?

**Mr. Marsh**: — Okay, I'll answer this one. No, at the present time we are not. We have covered some small expenses during the transition as it moved from . . . Some of our people moved over to their new facilities over at the University of Regina, but the expenses and the salaries of all the employees who have been seconded to the knowledge centre are being paid by BHP. They provide the funding through a five-year agreement, and we're providing the people and the expertise to staff up that knowledge centre.

Ms. Sproule: — So they're located at the University of Regina?

Mr. Marsh: — Yes.

**Ms. Sproule**: — We note that Mike Monea used to be the vice-president for SaskPower for carbon capture. He's no longer listed in your executive. So was he seconded to the knowledge centre?

**Mr. Marsh**: — Yes, Mr. Monea was seconded to the knowledge centre, and two other engineers and, I believe, one lawyer and two administrative people have been seconded to date.

**Ms. Sproule**: — So BHP is entirely responsible for all their salaries then?

Mr. Marsh: — All their salaries, expenses, travel expenses.

**Ms. Sproule**: — And will you be filling Mr. Monea's position at SaskPower?

Mr. Marsh: — No, we will not.

Ms. Sproule: — So you will have no more VP?

**Mr. Marsh**: — No, we have a liaison vice-president with the knowledge centre. That's Mr. Guy Bruce who was our VP of planning, environment and sustainable development. His team is responsible for long-term planning for SaskPower and, as a result, he's the logical place to have that liaison with any work the knowledge centre might be doing around the world to advance carbon capture and storage.

**Ms. Sproule**: — Okay. Your plan for 50 per cent renewables, is there any detail that you could share with the committee in terms of timelines, like how much do you hope to achieve by 2019, 2020? Do you have percentages and years available?

**Mr. Marsh**: — Currently we are in the process of issuing the first RFQ/RFP for wind. That will be up to 200 megawatts. We estimate that that wind facility will be on in 2020.

There will also be ... The current Chaplin project is currently in the process of locating to a different area in that southwest part of the province. That will be, as you recall, about 177 megawatts. That will be coming on in about that same period.

We look at about 200 megawatts of wind every other year going out to 2030 so that we can hit our about 1600 megawatts of additional wind by 2030. So every two years you should see a block of wind going to the marketplace.

**Ms. Sproule**: — So that's 1600 megawatts. What about the other renewables?

**Mr. Marsh**: — On the solar side, currently we've spoken about 60 megawatts in the first five years out to 2021. We're going to take a very good look at how the pricing comes in on that solar, but there's every opportunity to put in additional solar out to 2030 as well. It will certainly depend on the price of solar and how best we can integrate that solar into our grid in the province. And we're going to do this carefully and mindfully so that we keep the cost to an absolute minimum.

**Ms. Sproule**: — And hydro? I know you've got 100 megawatts coming in this year or next year.

**Mr. Marsh**: — That's a 100-megawatt transaction with Manitoba Hydro. Starts in 2020, and it's a 20-year power purchase agreement with Manitoba Hydro, so that goes to 2040.

Ms. Sproule: — Part of your 50 per cent renewables target.

Mr. Marsh: — Yes it is. Yes.

Ms. Sproule: — Okay.

**Mr. Marsh**: — Anything that we can either build or we can purchase is considered part of our portfolio.

**Ms. Sproule**: — And biofuels, other forms? Is there any?

**Mr. Marsh**: — Well currently we are working on another 50-megawatt hydro facility in the far north called Tazi Twé. That is what's called a river diversion project, so it's a tunnel through ... [inaudible interjection] ... Pardon me?

Ms. Sproule: — Elizabeth Falls?

**Mr. Marsh**: — Elizabeth Falls, yes. So it's a very environmentally sound project. Part of the river flow is diverted through this facility, so there's no hydro dam as we would normally see it. So it's very environmentally responsible.

The process for that project is currently working through the system. We have not received final approval from our board of directors yet, and beyond that it would then go to cabinet for approval, so we look at some point later in 2017 for that approval.

We're currently in discussions with proponents on a biomass facility in northern Saskatchewan. There's every potential that something may develop there over the next two to three years as well.

**Ms. Sproule**: — Okay, I have 1600 wind additional. I have 150 hydro and 60 in solar. How many additional megawatts do you anticipate in the biomass if it goes forward?

**Mr. Marsh**: — It's relatively small, you know. The maximum potential for biomass in this province would probably be anywhere from 50 to 100 megawatts max, yes.

**Ms. Sproule**: — Okay, so if we say 100, that's around 1900 additional megawatts. Does that bring you to 50 per cent?

**Mr. Marsh**: — I'm not sure if those numbers exactly add up. You know, we can certainly give you the breakdown that we currently see, but those numbers will change each and every year as we look at our plan and look at how these projects are progressing and what's coming on, what's the most competitive price for SaskPower and the province.

**Ms. Sproule:** — If *The Management and Reduction of Greenhouse Gases Act* comes into effect, I know there are a number of provisions in terms of a technology fund for high emitters, and SaskPower would be one of those high emitters. Would your equivalency agreements replace the definition of high emitter for SaskPower so that you wouldn't be part of the technology fund?

**Mr. Marsh**: — No, I don't believe so. I would like to believe we'd still have access to any funds for technology and innovation, and certainly carbon capture, the next generation, is something we'd be interested in pursuing on that side. So no, I don't believe it affects it at all.

**Ms. Sproule**: — And when you say next generation carbon capture, what are you referring to there?

**Mr. Marsh**: — Well it's research and development that's occurring in different parts of the world today on that next stage of amine technology. There's different amines being tested all the time. There's different chemical processes that are being improved upon. That improves the efficiency and the overall power demand on the carbon capture facility, so if you can reduce that and improve the quality of the process, reduce the cost for amine replacement, for example, it makes the whole project much more economic and more likely to be adopted around the world. So that's where that research activity is focusing on.

**Ms. Sproule**: — Of course when it comes to SaskPower, its emissions here in Saskatchewan, so that would be, that would still be one of your considerations then, is using that for other power units, coal-fired?

**Mr. Marsh**: — Yes. We continue to look at how the technology is progressing. And as I've indicated on a number of occasions, we continue to develop options for Boundary dam 4 and 5, where we have to make a decision by the end of 2019. We've already signalled that we want to be in a position later in 2017 or beginning of 2018 with a decision on that unit so we know clearly where we're heading.

**Ms. Sproule**: — So when you say a decision has to be made by 2019, I thought that's when it had to be implemented.

**Mr. Marsh**: — No. Under the current regulations the decision has to be made. If you commit to a carbon capture facility, then you have a period of time where you're allowed to build that facility and, you know, replace the turbine generator and build the carbon capture facility. And I believe we'd have out to the end of 2024 in order to get that facility up and running.

Ms. Sproule: — For 4 and 5.

Mr. Marsh: - Yes.

**Ms. Sproule**: — And what is happening with Boundary ... there is a sixth unit, right? BD6 [Boundary dam 6]?

**Mr. Marsh**: — Yes. There's a sixth unit, well, BD6, no. 6. Of the six original units that were there, two have been retired, so Boundary dam 1 and 2 are retired. So we only have four operating units there today.

Ms. Sproule: — And 6 is not on the same timeline as 4 and 5?

**Mr. Marsh**: — No, 6 was built in the late '70s. It's not scheduled to retire until . . I believe it's 2028.

**Ms. Sproule**: — Right. I know this, but I forget the numbers, so thank you. Smart meters, a couple of more topics. Our time is quickly running out. In the last committee you provided an update on industrial and commercial smart meters. Can you tell us where that's at currently?

Mr. Marsh: — The last meeting, or was it the previous?

**Ms. Sproule**: — I can't remember.

**Mr. Marsh**: — Yes, so currently we are looking at a replacement program for our smart meters, but the first stage is to start introducing commercial and industrial meters into the system. So those would be meters that would be on an oil field location out in the countryside, for example. We'd be looking at those facilities. Most of those companies want to have the smart meter put on because it allows them access, remote access to their consumption and other characteristics out at that oil field site.

So many of them have been asking for this device for some time. So we're going to look at staging in commercial and industrial meters. We've had a number of them on test beds in the province over the past year and we're going to continue to test through this winter and into 2017. Currently we do not have a smart meter on the residential side. We have worked through a specification with the meter manufacturing rating agencies and we are currently looking at possibly a ... We thought it

was going to be 2017, but it looks more like a 2018 start date for residential smart meter development and deployment in the province.

**Ms. Sproule**: — So development and deployment. Do you expect installations in 2018?

**Mr. Marsh**: — In 2018. If the current schedule holds, that's the most likely time, yes, 2018.

Ms. Sproule: — And Sensus is still the provider, correct?

**Mr. Marsh**: — Sensus is still the provider. They've been, just for the record, they've been bought by another company. The Sensus product name and the Sensus technology is still . . . It's being adopted by this new company. We continue to employ the Sensus communications system. Almost all the natural gas meters installed by SaskEnergy have been deployed now, and the system is working very well backhauling that data through the system. So we're looking forward to getting good data back from our customer sites using that technology when we can get that program back up and running.

**Ms. Sproule**: — And can you tell us the name of the new company?

Mr. Marsh: — Xylum, x-y-l-u-m.

**Ms. Sproule**: — All right. Just further discussion around the property that was purchased at the GTH [Global Transportation Hub] site. I know in your annual report you indicated that it was being put on hold in early 2015 in terms of planning activities. We also talked a little bit about options that you had explored previously, and I believe you said there were three other sites that were looked at. And there's a Q & A [question and answer] that I have here, and I'm sorry it's not dated, but it's a SaskPower document which indicated that there were 13 options explored and reviewed. So in addition to the three that you referred to, do you know what the other 10 options were?

**Mr. Kalra**: — I don't have that information right now. I think over time we may have looked at a number of sites and narrowed them down to those three, and some kind of business case was developed on those three, and you know, pluses and minuses were looked at all those sites. So I don't have the information on the other 10 sites, sort of all 13 sites at this point in time.

**Ms. Sproule**: — Oh yes, this is . . . It said 13 options so there may not have been other physical locations.

Mr. Kalra: — So that might be a little bit different.

Ms. Sproule: — Yes.

**Mr. Kalra**: — I think the options were not just site specific. But they were in terms of, you know, whether we would build it, whether we would have someone else build, whether we would lease it back. So all that kind of analysis was done. I don't think it was done on 13 sites but on different ways of building that campus.

Ms. Sproule: — Just a few questions then around the actual

December 13, 2016

location that was chosen. Are you still planning on developing that? And perhaps you could share with us when and what sort of costs you're anticipating with the development of that logistics centre.

**Mr. Marsh**: — Yes, certainly. We are still considering going ahead with development on that site. We pressed pause on our planning activities last year and certainly this year just due to the whole issue of financial constraint. We're trying to contain our capital costs; we're trying to contain our rate increases for our customers. So anywhere we could defer capital spending and, you know, push that out into a future year when it was more manageable, we opted to do that. So in addition to many of the transmission projects that were deferred into future years, we opted to do that with GTH.

I've also asked my vice-president of procurement and properties to go back and revisit the project plan, look at how we can scale it back, look at how we can rightsize this project, and look at different options for bringing that forward so that we can have a project that we can get approved in an appropriate way. Costs, as you know, in the construction industry had been increasing, and we just were not comfortable going ahead with the project until we looked at all the different options.

**Ms. Sproule**: — Can you share with the committee why it was important to actually purchase the land even though that would have been a cost, that 25 million, that you could have saved. 23.

**Mr. Marsh**: — Yes. We still hold the land and we still are looking at building a warehouse complex on that facility. At the time the purchase was made, I believe certainly there was a growing appetite for land in that particular area. We were able to look at that land compared to other parcels of land, and it was in a fully developed state with sewer and water and all the facilities that we needed, good access with the highway system. And with the city of Regina expanding on the west side, it seemed like absolutely the right place so we opted to make that purchase.

Since then the economy has shifted and we've had to make different decisions, but we still intend to move forward at the appropriate time. If the final footprint ends up being a little bit smaller, then we'll divest ourselves and sell that land and that money will go back into SaskPower.

**Ms. Sproule**: — So when you say scale it back or rightsize, that may mean a reduction in the actual footprint in that . . .

**Mr. Marsh**: — The number of acres that we currently have I believe is 140 acres. At the end if we decide that we want to go with a smaller footprint . . . The original plan was to take all the facilities we have in Regina, which is 26 different facilities, and combine most of them into one much bigger facility.

Well you can appreciate the cost for that is quite high. So we're revisiting whether we really need to do that and whether it's more appropriate to keep three or four or five facilities in other parts of the city in addition to a much smaller logistics warehouse complex out at the GTH. So that's what we're working through and we'll bring it back through our executive team and through our board at the appropriate time. **Ms. Sproule**: — So can you share with the committee why that analysis wasn't done before you purchased the 140 acres?

**Mr. Marsh**: — Well we were just in the preliminary planning stage, and we were moving forward with the project at the time. And we decided that it was a good time to procure the land to make sure we had that site available.

**Ms. Sproule:** — Given the time, Madam Chair, I believe that ... Oh I do have one additional question just on demand-side management. In terms of the renewables mix of 50 per cent, what is your projection for demand-side management? I know there was 100, I believe, 100 megawatts that were identified in your — I'm just going to look it up and make sure I got it right — annual report. One hundred megawatts of capacity for a 10-year target. What's the next target?

**Mr. Marsh**: — Just to let everyone know, we achieved that 100 megawatts in two years less than what we had originally anticipated. So our energy efficiency teams are looking at a revised target for the next period of time. We do expect that it will be in the similar range, maybe a shorter time period.

A lot of effort going on in industry and business today on energy efficiency programs. And we'll continue with our residential and commercial and industrial lighting programs to help reduce load in the province and with energy efficiency consulting work to help businesses reduce their consumption in the province.

**Ms. Sproule**: — And when do you expect your team to announce that next project?

**Mr. Marsh**: — As we are completing a longer term integrated resource plan for SaskPower, we'll have that through our board of directors by June. I would say at that time we would have a number that we could provide to you.

**Ms. Sproule**: — Thank you very much. As always, I have lots of questions, so thank you very much for the answers provided today, and for your patience in me trying to get up to speed on all this. So thanks to the committee. Thanks to Madam Chair and the minister and the officials for a fruitful afternoon.

**The Chair**: — Thank you. I will now ask a member to move that we conclude consideration of the following annual reports and financial statements: 2015-16 SaskPower annual report, 2015-16 NorthPoint Energy Solutions Inc. financial statement, and the 2015 Power Corporation superannuation plan annual report.

Mr. Bradshaw: — I'll so move.

**The Chair**: — Mr. Bradshaw has moved that we conclude consideration of the 2015-16 SaskPower annual report, the 2015-16 NorthPoint Energy Solutions Inc. financial statements, and the 2015 Power Corporation superannuation plan annual report. Is that agreed?

Some Hon. Members: — Agreed.

The Chair: — Carried. That concludes our business with SaskPower this afternoon. Mr. Minister, if you would like to

add some final comments.

**Hon. Mr. Wyant**: — Well thanks very much, Madam Chair. Thank you very much to the committee, the committee for their patience, and Ms. Sproule for your questions and to Mr. Marsh and Mr. Kalra for answering most of them. So thanks very much for that and for the support from the other officials. And I do also want to thank Hansard for being here today. Thanks very much for your attendance and for your attention.

**Mr. Marsh**: — If I may, I'd like to make one comment. I would just like everybody to know that the SaskPower annual report was recently awarded the award for the best annual report for a provincial Crown corporation for the third year in a row by the certified professional accounting association of Canada. So credit to Sandeep Kalra and Troy King and his team for the great work they do. We should all be proud for what they've accomplished there.

**The Chair**: — Awesome. Thank you. Seeing that we have no further business today, I will ask a member to move a motion for adjournment.

Mr. Bradshaw: — Oh, I could do that.

The Chair: — Mr. Bradshaw so moved. Is that agreed?

Some Hon. Members: — Agreed.

**The Chair**: — This committee stands adjourned to the call of the Chair. Thank you, everyone, and Merry Christmas.

[The committee adjourned at 17:02.]