STANDING COMMITTEE ON THE ECONOMY

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STANDING COMMITTEE ON THE ECONOMY

Ms. Colleen Young, Chair
Lloydminster

Ms. Jennifer Bowes, Deputy Chair
Saskatoon University

Mr. Ryan Domotor
Cut Knife-Turtleford

Mr. Ken Francis
Kindersley

Mr. Delbert Kirsch
Batoche

Ms. Alana Ross
Prince Albert Northcote

Mr. Doug Steele
Cypress Hills

[The committee met at 15:36.]

The Chair: — Good afternoon, everyone, and welcome to the Standing Committee on the Economy. I'm Colleen Young and I'll be chairing the meetings this afternoon. In committee we have this afternoon Mr. Ryan Domotor, Mr. Ken Francis, Mr. Delbert Kirsch, Mr. Doug Steele, and sitting in right now for Alana Ross is Marv Friesen, and in for Jennifer Bowes is Ms. Betty Nippi-Albright.

General Revenue Fund
Saskatchewan Research Council
Vote 35

Subvote (SR01)

The Chair: — Today the committee will be considering the estimates for Saskatchewan Research Council. We'll begin with vote 35, Saskatchewan Research Council, central management services, subvote (SR01).

Minister Harrison is here, and unfortunately his officials could not make it down from Saskatoon due to the inclement weather we have outside. So, Minister, you can begin with any opening remarks you have before we ask for questions.

Hon. Mr. J. Harrison: — Great. Well thank you very much, Madam Chair, and thank you to the committee as well. And just by way of explanation prior to beginning, of course, SRC, Saskatchewan Research Council, is based in Saskatoon. Officials were planning on making the trip to Regina this morning. Of course with the blizzard they are not able to do so, so there were discussions between the parties.

We are going to move forward with the estimates. Officials will be obviously monitoring online the committee meeting. On occasion I may leave the chair that I'm in here now to consult with the officials and then return.

We may also . . . And I may ask the committee for their indulgence if we are to have the officials on the phone and they could actually speak through the microphone, through the phone. And this is something we don't normally do, of course, but we have done before, including with SRC estimates during COVID. So I would ask the committee's indulgence in that regard because we do want to make sure that we get quality answers for members asking questions.

But I do just want to say it's a pleasure to be here to represent the Saskatchewan Research Council. Monitoring online we have Ryan Hill, who is SRC's chief financial officer and senior VP [vice-president] of mining and minerals. And I think the committee is aware that SRC is the second-largest research and technology organization in Canada, located right here in our province and more specifically in Saskatoon.

Last year SRC celebrated a major milestone with its 75th anniversary of providing valuable research, development, and demonstration to Saskatchewan industry and beyond. Over the last 75 years, SRC has been part of many important firsts for the province, and I'd like to begin by sharing a few key examples of how SRC has established strategic initiatives that benefit our province.

In the 1970s, SRC was a leader in energy-efficient housing research, and it worked to form the basis for the development of the R-2000 standard for energy-efficient homes. In the 1980s, SRC played a large role assisting the Saskatchewan oil and gas industry by enabling the implementation of horizontal wells and the use of carbon dioxide for enhanced oil recovery.

SRC geoanalytical laboratory's secure diamond facility was established in the early 2000s and is now the largest such facility in the entire world. The secure diamond facility is just one portion of the geoanalytical lab, however, as it also offers geochemical and mineralogical analysis with expertise in base metals, gold, lithium, uranium, potash, and rare earth elements.

In fact SRC geoanalytical laboratory celebrated its 50th anniversary last year after starting in 1973 as an internal service for the geologists working at SRC. Over the years, it evolved into a world-class laboratory, providing high-quality analysis to the exploration and mining industry locally and around the globe. These examples give just a small taste of the important work SRC has done over its 75-year history and the positive impacts that have followed.

Speaking of impacts, for over two decades now, SRC has been measuring its economic impact within the province. SRC's 2021-22 economic impact assessment showed impacts of more than $1.2 billion in direct economic benefits to the province, plus at least 10,700 jobs created or maintained in Saskatchewan that are valued at an additional $627 million. This means for every dollar invested in SRC by the provincial government, a 59-times return was achieved in 2021-22.

These numbers, which also included a record-breaking year in terms of revenue generated, demonstrated SRC's incredible strength and reliance through the COVID-19 pandemic and the years that followed. More importantly, these numbers reflect how SRC supported the ongoing growth of Saskatchewan industry at a most crucial time. This year SRC is receiving $40.4 million in provincial investment. This includes a status quo portion of SRC's provincial investment plus an additional $20 million of previously approved funding for SRC's rare earth processing facility, which I will speak more about later.

In 2019, as part of SRC's strategic planning process, its leadership team considered what Saskatchewan's biggest challenges would be for the next decade or so and how SRC could help support those challenges. Through this process, SRC identified a number of large-scale, industrial- and resource-based projects that look to the future but are grounded in what is relevant to Saskatchewan. These projects, many of which are now incorporated into the 2030 Saskatchewan growth plan, are complex ones but address significant technology challenges and industrial needs and are now a key focus for SRC.

Since then, SRC has focused on key areas including strategic metals, carbon capture utilization and storage, micro-small modular reactors, and advanced mining. Each project requires substantial involvement in terms of capital and engagement from multiple stakeholders such as governments, academia, industry, and regulators.

SRC has large networks, technical and scientific expertise, and

hands-on involvement with the technologies needed to bring these complex ideas to life. Not only will these projects provide ongoing support to industry, but also catalyze new opportunities for in Saskatchewan. This is all done with environmental sustainability top of mind. These large-scale projects will take years to fully develop and mature, but we are already seeing evidence of success in many of the areas, more of which I'm excited to share today.

The strategic metals project focuses on rare earth elements, or REEs. These are naturally occurring minerals that are essential to the modern economies. They are found in items such as electric vehicles, electronics such as phones and tablets, and wind turbines. REEs also hold a significant strategic defence function for Western nations as they're used in fighter jet engines among many other applications. For the past 15 years, SRC has been investigating REE technologies as the industry has developed.

SRC's minerals group is now internationally recognized as a centre of expertise in REE extraction and processing technology. It should be noted that SRC is not actually a mining company removing ore from the ground, but provides a technology support and development to industry as we develop the midstream supply chain.

As part of the Saskatchewan growth plan, our government identified the importance of strategic metals and the opportunities they provide for the provincial mining sector. This was strengthened just last month by our newly revealed critical minerals strategy. A significant part of that strategy relies on the expertise and experience of SRC in this area to grow a rare earth elements hub right here in Saskatchewan through our government's $71 million investment into a first-of-its-kind rare earth processing facility.

[15:45]

As mentioned earlier within estimates, the final installation of $20 million is reflected within this year's budget document. It will be North America's first fully integrated, commercial demonstration rare earth processing facility with hydrometallurgy separation and metal-smelting units. The facility is positioned as a catalyst to stimulate the resource sector in Saskatchewan and across Canada, providing the early-stage supply chain needed to generate industry investment and growth.

2022-23 saw significant progress on the construction of the facility with several construction procurement and innovation milestones for the project. Phase 1 of the project, a monazite processing unit, is well under way with excavation work and the installation of major equipment happening in parallel as we speak. Nine hundred tonnes of feedstock for this unit procured from Brazil arrived last spring and will be sufficient to feed the facility through the first year of operation. Phase 2 of the project, which includes both the separation unit and metal-processing unit, has begun, including engineering designs and major equipment procurement. These additional processes will complete the midstream supply chain in Saskatchewan.

In August 2022, SRC achieved a significant milestone for this phase of the project during a test run of its metal-smelting unit by processing the first large-scale production of magnet metals in Canadian history. Metal ingots, a rare earth metal, are the key ingredient used to manufacture permanent magnets which are used in electric vehicles, wind turbines, and electronics.

Another major milestone from phase 2 of the project saw SRC design and now manufacture 140 solvent extraction cells in-house for use in the separation unit. The solvent extraction cells will separate the rare earths into three mixtures: medium-heavy REEs, lanthanum and cerium carbonate, and a neodymium-praseodymium — hard to say; NdPr is how they kind of refer to it — mixture which will then undergo further processing in the metal-smelting unit.

This innovation and the ability to design and fabricate these cells in-house at SRC means that Saskatchewan is now only one of a handful of jurisdictions in the world with this capability. But of course SRC didn't just do what other companies or countries have done. SRC's patent-pending solvent extraction cells have been designed with automation algorithms that improve their efficiency and recovery capabilities.

All of this means that the rare earth processing facility is on track to be completed on time and on budget and will be fully operational by the end of 2024, only a year and a half away.

Our government has also identified the use of enhanced oil recovery to assist with carbon capture, utilization, and storage, or CCUS. SRC has considerable expertise and experience in each of the three components of CCUS: capture, transport, and carbon dioxide enhanced oil recovery. This knowledge and technical capabilities will help us work towards the targets we have set out in the Prairie Resilience climate change strategy.

Through its Centre for the Demonstration of Emissions Reductions, SRC helps the oil and gas sector to identify, test, verify, and quickly deploy methane-reduction technologies that are best suited for their unique needs. The centre is playing a leading role, creating environmental benefits and helping sustain primary natural resource industries in Saskatchewan by encouraging and enabling the adoption of greenhouse gas emission-reduction technologies.

Last year, with the Ministry of Energy and Resources to aid in the development of the Government of Saskatchewan's emissions inventory, SRC's process development team compiled information for the emissions inventory, which the Ministry of Energy and Resources will use internally to help confirm and inform current and future emissions reductions from the upstream oil and gas sector. The Saskatchewan emissions inventory is one of two initiatives created by the province to support responsible energy production that enhances Saskatchewan-specific data and ensures the province remains one of the most sustainable energy producers in the world.

Given its 38 years of hands-on experience with the Slowpoke II nuclear reactor and their connections with key stakeholders across the nuclear industry, SRC is uniquely positioned to play a role in supporting the development of micro-small modular reactors, or SMRs [small modular reactor], in Saskatchewan going forward.

In May of 2022, SRC signed a memorandum of understanding with Westinghouse Electric Canada to advance micro-reactors in Saskatchewan. SRC and Westinghouse are taking a stage-gated

approach on the development and implementation of a strategy to introduce a first-of-a-kind eVinci SMR and the development of its key commercial and industrial applications to Saskatchewan. SRC is in the early stages of this project which will and is expected to support future sustainable heat and power opportunities.

Advanced mining technologies have the potential to unlock billions of dollars in Saskatchewan commodities such as potash, uranium, diamonds, and other mineral reserves such as REEs. SRC's experience in the research, design, and development of advanced mining technologies will help us access these valuable commodities.

Sensor-based sorting is one example of an advanced mining technology that SRC has experience with and has now become a leader in with its sensor-based sorting service offerings for new uses and to new industries. Sensor-based sorting allows waste rock to be rejected early in the crushing and grinding process by using high-tech sensors combined with the latest in AI [artificial intelligence]. Using sensor-based sorting can help mining operations reduce energy, capital, and operating costs along with greenhouse gas emissions.

These key projects show that SRC has an ambitious strategic plan which will help ensure ongoing future economic, environmental, and social impacts in Saskatchewan. With a focus on projects that expand Saskatchewan's industrial and resource base, SRC is also supporting the development of new resources, value-added manufacturing, and the application of emerging technologies.

I would like to note some additional examples that help provide an understanding of the breadth of work SRC currently does to assist industry. Last year SRC worked with the Ministry of Energy and Resources to complete a helium liquefaction hub study that furthered the development of helium processing and liquefaction hubs in the province. The study incorporated technical and economic components and provided the critical information needed to look at the development of a commercial-scale, value-added, export-oriented helium sector in Saskatchewan. The helium study will help provide companies with the information they need to make major investment decisions around establishing Saskatchewan as a regional helium liquefaction hub in Western Canada and the surrounding US [United States] states.

Since May 2020, SRC has been helping the Ministry of Energy and Resources expedite the accelerated site-closure program, or ASCP, which accessed up to $400 million over two years to see up to 8,000 inactive wells and facilities that were abandoned and make them reclaimed. The final phase of the accelerated site-closure program recently wrapped, but over its three years the program was very successful as it prioritized Saskatchewan-based service companies and created full-time jobs.

Funding went to more than 900 unique Saskatchewan-based oil and gas service companies, supporting an estimated 2,500 jobs over the life of this program. That includes about 1,790 jobs directly in the oil and gas service sector. Over $90 million of program funds were spent in support of Indigenous participation. Over 32 million was used for projects on reserve lands, and eligible Indigenous service companies completed over $59 million in site-closure work under the program.

SRC is leading another major remediation project that's been ongoing for well over 10 years now and will also soon be wrapping up. In 2022 work continued at project CLEANS [cleanup of abandoned northern sites], the remediation being done at 37 abandoned uranium mine and mill sites in northern Saskatchewan. The Lorado mill site has now been completely remediated. The Gunnar mine and mill site is currently undergoing major remediation with completion scheduled in the next two to three years. And 20 smaller satellite sites have also been fully remediated.

This project will ultimately remediate the sites with positive economic, environmental, and social impacts, ensuring a safe environment for those that live and work in the area. The project has been successful in integrating a variety of stakeholders and local knowledge into the work and creating various training opportunities for local people and in building substantial, quantifiable capacity for the North going forward.

SRC works directly with the communities of the Athabasca region, and project CLEANS currently employs over 60 self-identifying Indigenous workers and has ongoing contracts with three Indigenous contractors. In closing, it's clear that SRC continues to add value to the Saskatchewan economy through its many services and projects.

And I do look forward to taking questions. And as I kind of said at the beginning, we'll likely have to do a bit of consultation with officials but I will try, as imperfectly as I can, to provide those responses as well. So thank you very much.

The Chair: — Thank you, Minister. I'll now open the floor to questions from members, and I'll recognize Ms. Betty Albright.

Ms. Nippi-Albright: — I thank you so much for your presentation, and it was actually quite interesting what's all happening here in our province when it comes to SRC. Like I got in the beginning of your presentation, you were talking about what you were going to do with the 20 million transfer from the General Revenue Fund. Can you remind me what that 20 million transfer from the GRF [General Revenue Fund] fund was for?

Hon. Mr. J. Harrison: — Sure, I absolutely will. So the $20 million, which was a companion to the $20 million that was advanced last year as well, is for the completion of the next phase of the rare earth element production facility. So that will take us to the completion of the metals manufacturing phase of the REE project.

So the original announcement that had been made a number of years ago now, that was for the original phase of taking the ore and moving that into kind of the refined ore that could then be used for manufacturing of metals. And the metals manufacturing and the actual metals that come out of the process really are the raw materials for what is used in electric vehicles' batteries primarily, but they're really used — because there are 17 different elements that go along as a part of the rare earth family — are used in a tremendous number of other applications.

So that could be, you know, wind turbines . . . I mean phones. I mean anything with a screen basically utilizes a number of different components. A number of different rare earth elements are involved in that. I mean phones probably have seven or eight

different REEs, depending on a couple of factors. But they're also really very, very significant for application in a broader strategic context.

So members may even remember last summer there was an announcement that basically the F-35 production line in Texas was shut down. And the reason it was shut down was because it was impossible to source one particular rare earth, scandium, from any source outside of China. This is a problem in the production . . . in the defence industry. So it literally led to . . . Because of kind of how it was sourced for one of the contractors, Honeywell and Lockheed Martin had to shut the production line down.

We are going to be, in Saskatchewan, producing literally 40 tonnes of that particular rare earth starting in about a year and a half from now. And we will be the only producer of these metals in all of North America, which really is a deeply strategic capacity that we will have that's not just important for Canada; it's really very, very important for the United States as well. And we've had some very, very significant, interesting, in-depth discussions, and beyond discussions some very good, what are going to lead to significant partnerships with a number of different entities in the United States.

I met with, as an example, Senator Manchin, Joe Manchin from West Virginia about this a number of months ago. Premier was in Washington just a short while ago and obviously had to return to Saskatchewan when the member for Walsh Acres passed away. But really the focus of that trip in Washington was very high-level discussions about the contribution and relationships on rare earth production. I think you're going to see more of those discussions in the next couple of weeks as well.

So I mean there is a deeply significant element to this that goes beyond just the production in Saskatchewan of rare earths that has taken on an interest that goes far beyond just Canada or even the United States. You know, Prime Minister Trudeau was out a couple of months ago, and the purpose of that was to highlight rare earth production. Basically in all of our international engagements, one of the most significant areas of interest from partners around the world is around rare earths.

[16:00]

And you know, we were on a mission in Japan about a month ago or so. The Japanese are extraordinarily excited about having a potential supply source on the metals front from outside of China. And the Chinese have used their control in the rare earths industry as really a strategic tool, a geopolitical strategic tool that goes beyond commercial arrangements. And that's why, you know, we talk about what we're doing here as being significant, and not just kind of what we're doing and for the product that's going to be coming out at the end of the day and SRC really being the leading expert in this in North America, but really what it's going to mean for the West, both in a commercial security interest but actually in a defence security interest as well. So we have a great team working on this.

And you know, one of the questions I get sometimes is, well why is nobody else doing this? I mean why is SRC doing this? And the answer to that is that this is really hard to do. And SRC have been working on this for over a decade. Fifteen years we've had a rare earth team working at SRC on this, seeing the long-term potential, understanding the challenge, and working through really some very difficult engineering challenges that only really the Chinese have been able to master at a large scale up until this point.

So you know, I really want to acknowledge the work that our team over at SRC has done on this. There's still more hurdles to climb and, you know, there are going to continue to be some challenges. But that being said, SRC are the acknowledged leaders in this area, which is something I think everybody in the province really can take a lot of pride in.

Ms. Nippi-Albright: — Thank you, Minister, for that. Can you tell me what the priorities are for SRC?

Hon. Mr. J. Harrison: — Yeah. I really appreciate the question and it's a good one. It's really a fundamental one to where the corporation is going to go. And I would say, kind of before getting into the individual priorities, you know, kind of positioning the work that the company does and how the company works, SRC is a treasury board Crown corporation set up and governed by statute that was passed by this legislature many decades ago. But SRC really does operate in the commercial environment and really does operate in competition with companies that, you know, are working in this space and really are subject to all of the market discipline that comes along with working as a company in the private sphere.

So I would say that, you know, really it is a treasury board Crown corporation but our transfers, our contributions, are a very small part of the actual revenue. SRC makes money as a normal corporation would, through contracts and relationships in the private sector. So you know, De Beers is one of our biggest clients, and it's because we do all of the diamond analysis and more than just that at our geoanalytical laboratory. That's one example of a company. There are many more.

I mean the biggest companies in the world that work in the mining and mineral space, we work with almost all of them and have really carved out some really market-leading niche areas that we work in. So that's kind of the position, you know, which I think is quite different that SRC has than maybe some other Crown corporations that are owned by the people of the province do. But you know, what are the priorities? Rare earths continues to be a priority which, you know, I gave a relatively in-depth answer on on the last question. That's going to continue to be a significant focus of what we're working on.

One of the other areas where we have done just some very, very exciting work — and I give just a ton of credit to Mike Crabtree and our team at SRC — is around the micro-reactor field. I think I said in my opening remarks that we had entered into an MOU [memorandum of understanding], and we did with Westinghouse Electric Company, probably the most, you know, the leading nuclear reactor producer in the world. You know, these are the folks that build nuclear reactors for the US navy and beyond and commercial and, you know, a lot of clients around the world including Ukraine, as an example.

This was a company that was just largely acquired and that still . . . The deal wasn't closed until late October probably, but Cameco literally bought Westinghouse Electric, which speaks to

the market position Cameco has really worked to to achieve to be able to acquire a company of the significance of Westinghouse.

But we entered into and had been in negotiation and discussion with Westinghouse — far in advance of Cameco actually taking, you know, a 49-plus per cent position in Westinghouse — to work on jointly the micro-reactor and the eVinci project specifically, which is a very different project than . . . You know, we talk about small modular reactors. This is a different concept. This is a much smaller reactor. We're talking 5 megawatts power production, about 10 of heat production.

And really what the idea is with micro-reactors is that you would be able to deploy these. They basically fit in a sea can. I mean clearly there's more security considerations that go into it than that, but they are really nuclear batteries more than they're reactors. And I might actually ask one of our officials, if the member so desires, to maybe talk about some of the technical elements of that.

Where these units would really be deployed to would be remote mine sites, for example, would be to communities that were, you know, at the end of an existing grid, isolated geographically, really to provide stable baseload power generation, because we know that's a very legitimate concern that a lot of communities have.

So we would, you know, see there being a very, very significant market for that. Not obviously in Saskatchewan but, you know, around Canada, around the world. There is a huge, huge economic opportunity which Westinghouse see, and the reason that they have partnered with SRC on this is because we have genuine expertise in the nuclear field. We've operated a reactor for over 30 years. We have a unit that has been working on this, you know, from the reactor operational perspective but into more than that.

We're the only licensed nuclear operator in Saskatchewan, one of the handful that exist in the entire country. So SRC really has a unique expertise when it comes to developing and working through, again, some of the engineering challenges in what would be a first-of-its-kind micro-reactor project. So that is going to continue to be a priority.

Our core business is always a priority, making sure that we are providing good customer service on existing contracts. All of those will continue to be very important. I kind of touched on the geoanalytical work that we do, which goes beyond just kind of the single company that I referenced, but it is significant.

The other kind of element or one of the other priorities is going to be completing the mine cleanup up at U City. I mean that is something that we have spent a lot of effort, time, resources, and money on over the course of the last about 12, 14 years. And you know, I've had the honour really of being the minister responsible for the corporation for a long time, and you know, I know the amount of effort that has gone into making sure we get the mine cleanup right. These were deeply contaminated sites that required a tremendous effort to remediate.

And the other direction that, you know, I'd given early on in this process was we need to make sure that we are creating the conditions and every opportunity for northerners to take part as contractors in those efforts that we're putting forward. And I think that, you know, that has been . . . And I think leaders in the North would say as well that we've, you know, maybe been imperfect in all of it, but you know, we really have made very good-faith efforts to make sure that we're working in partnership with northerners and northern companies and northern leaders on that front.

So you know, we've got . . . Gunnar has been completely remediated. Or I forget, I think . . . Sorry. Gunnar, Lorado. The one, second is we're probably a couple years out from having that work done. There are a few factors in play that will mean whether it's two years or three years before we have that completely remediated, and there are probably about 10 or so satellite locations that have yet to be fully remediated. We've done most of the remediation on the satellite locations which vary in size and complexity, but yeah, there's probably about 10 or 12 left that we have to complete.

But that's continuing to be a major undertaking. You know, that was a 265 . . . I don't have it right in front of me. It was over $250 million investment that we've put into that cleanup. And it's been a deep source of frustration that the Government of Canada have refused to be a partner in funding that, considering the fact that it was a federal government Crown corporation that was responsible for really making the mess and leaving it behind. And I think there's ongoing litigation in that front.

But I can say that it has been deeply frustrating, going back to . . . You know, you can look back — I don't have it in front of me — but I've asked questions about this in the House of Commons during my time as an MP [Member of Parliament] nearly 20 years ago, demanding at that point that the federal government be a participant and co-operate with the Government of Saskatchewan in funding the remediation of these sites, which they have steadfastly refused to do, which is, you know, quite remarkable for a federal government that claims to be as concerned about the environment as they are, that here's an actual environmental issue that has substantial implications in the real world, which is leaching uranium into Lake Athabasca, and they refused to put a dollar for it — literally refused to put a dollar into remediating.

It's a scandal, and why more attention hasn't been paid to this by, you know, our national media, I have no idea. But this is a genuine scandal that the federal government wouldn't participate in this. So anyway that's a bit of an aside.

You know, continued project on our CeDER [Centre for the Demonstration of Emissions Reductions] program. But I think that probably touches on some of the big priorities anyway.

Ms. Nippi-Albright: — Thank you. So just kind of getting back to the SRC, so tell me what is the governance structure of the Research Council?

Hon. Mr. J. Harrison: — Yeah, so I mean the government of course is, you know, the shareholder in the company in that it is a, you know, creation of a statute of the province of Saskatchewan and as a treasury board Crown. So through the government, it's owned by the people of Saskatchewan. You know, we have our management team headed up by Mike Crabtree, who's our CEO [chief executive officer] and then, you

know, a number of senior leaders that report to him.

There is a board as well that is appointed through order in council. Board is chaired by a gentleman named George Prudat who had been a senior officer in the Royal Canadian Navy with a high degree of leadership and engineering experience, having commanded ships, warships in the Royal Canadian Navy, a Saskatchewan gentleman. So that would be kind of the overall governance structure.

You know, clearly the day-to-day management decisions, business decisions, really are made at the level of management. Like I said, it's kind of . . . tried to position it earlier. This is a company that really does operate in a very highly commercial environment. So you know, I'm very deferential, I can say. And I think that both the board and the management would concur as far as business decisions that are being contemplated and made. Those are made by the professionals that are leading the company on a day-to-day basis.

Ms. Nippi-Albright: — Thank you. Just in respect to the policy for the SRC board, tell me about the length of terms or how many terms a person can serve.

Hon. Mr. J. Harrison: — Oh, that's a good question. I'm going to have to kind of go and get an answer. I'm not very involved in kind of the board stuff. I've never been to a board meeting. But we'll come and I'll get an answer for you on that.

[16:15]

All right, so I've got Ryan Hill on the phone. And I understand that there's a bit of a challenge as far as Hansard picking up the voices off of the phone. I'm hoping that it'll come through. Members will be able to hear Ryan speaking, but it's a bit of a challenge too because there's like a minute time delay on what's going on TV. So that also kind of throws another wrench in there. He said this was going to be not the most smooth process but again, thanks to members for kind of indulging on this so we could do it.

I'm going to take Ryan off mute here right now, and then he can speak to the question. So, Ryan, you're off mute.

Mr. Hill: — Hello, committee.

Hon. Mr. J. Harrison: — I think we can hear you, so it's good.

Mr. Hill: — Okay, I apologize for not being down there in person, of course, with the weather that's happening right now. Just in answer to the question that was asked, the current term and all terms are three years. It's based upon the order in councils. There is no maximum, as it's based upon the renewals of the order in council. We currently have nine board members, and under our Act there is a maximum of 18 board members allowed.

Ms. Nippi-Albright: — Okay, maybe he could stay on the line.

Hon. Mr. J. Harrison: — Yeah, he is.

Ms. Nippi-Albright: — He's on the line, okay. So just a follow-up to that. There have been some wholesale changes to the board and executive team at SRC since 2019. Can you explain the reason behind this?

Hon. Mr. J. Harrison: — Ryan, did you hear the question?

Mr. Hill: — No, sorry . . . [inaudible] . . . second delay.

Hon. Mr. J. Harrison: — Okay, well I'll try and relay it then. Basically the member asked just with regard to changes both at the management level and at the board since 2019 whether basically we would offer any kind of thoughts or rationale to that.

I would just say before I turn it over to Ryan, Ryan's been there for a long time. So no change there. And Mike's been CEO for quite a while as well, a number of years, and before that Mike had been vice-president at SRC as well.

Laurier Schramm had been the CEO for a very, very long time prior to Mike taking over. And Laurier was the CEO when I first became minister and had been. So we've only had two CEOs in probably the last 25 years, 20 years probably at least. So there hasn't been, at kind of the management level, a whole lot of change. And you know, I think even at the board level we've had a pretty high degree of stability there too. But Ryan, over to you then. Hopefully that wasn't too convoluted.

Mr. Hill: — No, not at all. With regards to change at both management level and the board level, as far as management level goes the only change is it's just been through standard business practices. We've had new VPs come on, we've had some VPs leave — all standard business.

As far as the board changes go, we've had a number of board members that ended their three-year terms within the order in council, and new board members were approved through the order in council and brought on.

Hon. Mr. J. Harrison: — And I would maybe just add to that as well. I mean I can't kind of be super specific about it, but there is probably going to be another board member added as well. And that was done on the recommendation of our board Chair just because of some workload issues that they had asked if we could add an additional board member as well.

So we have a bit of flexibility as far as the numbers, but that's a decision that's going to be made in the next week or thereabouts. So I don't want to pre-announce anything, but there is consideration for one more board member as well.

Ms. Nippi-Albright: — So in total, there'll be how many? You're increasing another board member in total from . . .

Hon. Mr. J. Harrison: — That's something we're contemplating right now, is adding one more. And really it is because they're folks who are . . . My understanding anyway is that, I mean there is a significant workload and the organization has been expanding as well.

We've added, probably — Ryan, you can speak to this — but I think we've added about 30 or 40 employees over the course of the last year. A bit of that was because we had, during COVID, some employees who were no longer working for the company, and there were a bunch of reasons for that. But I think we've

added, you know, we've added significant numbers. I'm trying to see if I have it right in front of me.

Mr. Hill: — We've added 50 employees in the last year.

Hon. Mr. J. Harrison: — Fifty employees in the last year, yeah. So you know, it's a growing company and a growing corporation.

Ms. Nippi-Albright: — Thank you for that. Just to kind of ask a little bit more here, you have one person that . . . You have no maximum terms that a person can serve on the board, and then you have somebody that just left after one three-year term. So because you have no maximum, they're just serving the one term? Is that correct?

Hon. Mr. J. Harrison: — Yeah, this is actually what I had asked them to kind of get into. Like I said, I'm not an expert on board governance. So, Ryan, do you maybe want to speak to that? I thought the statute had prescribed a minimum and maximum number of board members. Is that right?

Mr. Hill: — The Act states a minimum number and a maximum number of board members, the maximum number being 18 and the minimum number being four. We've never actually been at the minimum number, at least not in recent history.

Hon. Mr. J. Harrison: — Right.

Ms. Nippi-Albright: — So of the 18, or potentially 19 now, board members, how representative is it of the community of Saskatchewan?

Hon. Mr. J. Harrison: — So the question, I'll ask you, Ryan, maybe to address it. But the question from the member was how representative the board is of the public. So I don't know all of the board members, so I'll maybe ask you to speak to this.

And just so the committee knows as well, Mike's not actually available right now because he's sick. So Wanda's on the call, who's our CFO [chief financial officer], and Ryan as well. So, Ryan, just to you on the board composition.

Mr. Hill: — Sorry, I believe I heard that the board number was 18, up to 19. The board number's currently nine. The board is currently made up of seven males, including Mike Crabtree, who is our president and CEO, and then two female representatives.

Ms. Nippi-Albright: — So just on that piece, like I've asked about representation, so you've given me seven males, two female. How many of those are Indigenous or minority?

Hon. Mr. J. Harrison: — So the question was with regard to the composition of the board, Indigenous and minority. You know, as I kind of said, was I mean I don't know all the board members, but Leanne Bellegarde is the Vice-Chair of the SRC board, and I've had a couple of discussions with Leanne about different elements of kind of direction at SRC. But I'm not sure kind of on the other board members just because I'm not entirely sure, yeah. So Ryan, I'll put this up to the microphone and you can have the floor here.

Mr. Hill: — Yeah, Leanne Bellegarde is the only individual within the board that's a minority. She is not only the Vice-Chair of the board; she's also the Chair of the governance committee.

Hon. Mr. J. Harrison: — Yeah, and Leanne's background, Leanne's a lawyer, well-known lawyer in Saskatchewan. I believe Leanne lives in Prince Albert. Is that correct, Ryan?

Mr. Hill: — She spends her time, Prince Albert, Saskatoon.

Hon. Mr. J. Harrison: — Okay, yeah.

Ms. Nippi-Albright: — Yeah, I know Leanne. She's a good friend of mine. Oh, so that's interesting. I'll have to chat with her further on that.

Just the next question I have is, SRC functions in support of industry. You kind of talked about this a little bit earlier. So historically it has managed its business lines to avoid competition with industry. Recent announcements regarding rare earth elements suggest SRC will drive commercialization. Has there been a change in mandate?

[16:30]

Hon. Mr. J. Harrison: — Yeah, and I'll probably ask Ryan to weigh in on that question as well. And the question, just for officials, was whether SRC's mandate has changed, and the assertion being that we had not been in a space of competing with private industry. So I would just kind of preface my reply maybe referring to a bit of an earlier one with regard to the commercial environment that SRC operates in.

So I would not characterize the mandate as not competing with private industry, because we do. I mean we're working and earning business from companies that could take that business to anybody that they so desire to take that business to. So we do operate in the commercial sphere. We do operate in a market sense and we always have. I mean there are elements of what SRC does that are more focused on primary research, and those would be areas where, you know, where I would say government provides and why government provides resources for operations at SRC. But the vast majority of what SRC does is done in a commercial context. So well over 70 per cent of the revenues of the company come from private sector contracts, and we do operate in a commercial context in that regard.

With regard to where we are at on rare earths, one of the things . . . and I've talked about this at length. And you know, I think kind of a 20-year history and public life would show that, you know, I'd be probably the last one to have government enterprise in direct competition with private sector and enterprise where there was any alternative but to do that. This is really a case on the rare earths side of the equation that if we were not doing it as government, it would not happen. And that is why it has not happened elsewhere.

And the reason it has not happened in a commercial context — even though the economics have made very, very good sense on rare earths for a long time — the reason there has been private sector investment is because the dominance of Chinese state-owned enterprises in this space makes the risk quotient so high that private capital won't move into the space.

And what I mean by that, and this was really, really exemplified

in 2011 when there were a number of companies — around the world, not just kind of in North America — but there were a number of companies making investments into doing literally what we are doing right now, and that is into ore and into metals manufacturing.

What the Chinese government directed through its SOEs [state-owned enterprise] was basically to flood the market with rare earths, such that the price collapsed and it wrecked the economics of all of the projects that would have otherwise been very, very sustainable in a market context.

The reason they did that had nothing to do with market fundamentals or what commercially made sense for the SOEs, and everything to do with the strategic self-interest of the Chinese Communist Party, which was to maintain its dominant position in the rare earth space because they could leverage that dominant position through advancing the national interest of the Chinese Communist government.

So what that has meant is that there was . . . Especially after 2011, private sector investment looked at these projects and said, well you know, we could deploy capital into rare earths. It, you know, makes sense at kind of the current fundamentals. We could deploy that capital into copper or other critical minerals where there was much less risk, because there was not a controlling interest held by the Chinese government. So what they did — I mean, this is how the market works — is they deployed capital into lower-risk investments in that critical mineral space. But nobody, no private sector company, would make the . . . really gamble to deploy capital into rare earths with the fear that the Chinese would sink the market again, wreck the economics of the project, and they would lose their investment over it all.

So really the only solution to this — and it's the conclusion that the US government has come to as well, and the Canadian government has come to as well, being a part of the project that we're undertaking — is that unless government are prepared to move forward with the initial investments into that rare earth space, there is going to be no ability for the private sector to deploy capital.

What we have, and really the overall approach on this . . . And I would say that the US government kind of have shared this, and the Canadian government as well. We make the initial investment into creating the industry, and that will mean that we will create conditions for the private sector to follow-on invest. I don't want the Government of Saskatchewan to own the entire rare earth industry, and we're not going to. I mean what we are doing is creating the conditions for the private sector really to take over and develop on this.

And I would say, you know, in this province we actually have a history of doing this where . . . And in Alberta too, frankly. It's not just this province. In high risk initial industry development work, the oil sands would be an example where the Government of Alberta had deployed, you know, a lot of resources into proving technologies, working with the private sector, and scaling up technologies to the point where the overall very large investments were de-risked for the private sector to make. And it worked.

In the potash industry here in this province as well, I mean, the initial investments, a lot of them were made by the provincial government to de-risk the development of large-scale potash production. This has happened, you know, in other areas.

So I would really kind of liken what we are doing in that rare earth space to a historic tradition that has existed in Western Canada of us actually being the catalyst for the private sector to take industries that we have created the conditions to exist, to take them to the next level. And actually I would point to uranium here in Saskatchewan as well. That'd be another area where provincial Crown corporations were . . . a provincial Crown corporation that has become Cameco was really the catalyst for the development of the industry. But it's about de-risking and it's about creating conditions so that the market can then follow on.

So that's kind of a very long answer to it, but I would say kind of to the specific question about mandate change, there hasn't been a mandate change. SRC operates in the private market-based economy already, and this would be part of a tradition of how we have developed industry here as well.

Ms. Nippi-Albright: — Thank you. I'm just going to switch it over a little now. I'm just going to go and get into asking different sets of questions here.

So can you advise on how many of the wells that were remediated were actually wells that the province assumed the responsibility and liability for as a result of the companies going out of business, and that government is left with that liability, but for which no funds were held in trust by the province?

Hon. Mr. J. Harrison: — Very, very good question. And I'm going to go and get kind of the specific answers on it. So I appreciate the question. We'll be back shortly.

All right, thank you to the committee for your indulgence. So I think we've got a pretty comprehensive answer for the question, and it's a good question.

With regard to the program itself, so kind of by way of background and context, the program was a federal government initiative that was really advocated for, I would say, by provincial governments in Western Canada. But you know, I would actually say the kind of overall program design was the result really of grassroots suggestions from those who were in the energy sector. And it had been talked about for some period of time and, you know, to their credit, the federal government came forward with a program that really has worked very well in Saskatchewan.

I think that there would be those who would say it worked less well in Alberta, and who would point to Saskatchewan as the model that should have been used by other governments to make the program most effective. But all that to say that the overall program was a federal government-funded initiative that we were given significant leeway as a provincial government to administer and deliver.

Specific question with regard to the number of abandoned or orphaned wells that were cleaned up and the liability assumed. There were no orphaned and abandoned wells that accessed the program. Those are really all dealt with through Energy and Resources in their orphan well fund.

So what happens is companies pay into this and . . . You know, Minister Reiter can speak about this in more detail in his estimates. But companies pay into the orphan well fund as a part of, kind of their general operations. And the overall policy rationale being that, if there were to be companies that fail for whatever reason, there would be a fund that would be utilized and available to clean up and remediate abandoned wells.

So this program didn't apply to those. So there were no orphaned or abandoned wells that were remediated under this program. And another part of the program is the government assumed no liability for any of them, so there was no additional Government of Saskatchewan liability. So what the program was focused on was wells that were no longer in use or production, but that companies would make application to the government to have basically either a cleanup or remediation or closed in. And government would partner with them to do that.

So it wasn't that they were abandoned. This had to be an application-based process by companies that were in the space. And we would then contract with service providers and oil field service companies to actually do the work on them.

And again, kind of the overall idea behind this . . . And important to remember the time that this program was implemented in the spring/summer of 2020 which was right after COVID hit. And you know, we had days where, you know, WTI [West Texas Intermediate] was trading at one point for, you know, negative valuation. So I think it was down to like nearly negative $20 at one point, which meant people were trying to give oil away for free.

So I mean the future of the industry was very much, very much in question at that point, and the economics were catastrophic for companies in . . . I mean ultimately what that means is individuals and workers, tens of thousands of whom are employed here in Saskatchewan in the energy sector, because there was no economic case, basically, for a while to keep wells operating.

So the federal government's policy rationale as a part of their emergency programming under COVID, partnering with the provincial government was, hey, let's keep these energy workers employed, and let's keep these companies solvent by having them do work that, you know, likely is going to have to be done anyway, but let's have them do this work right now and that we would contract with the companies in order to do it.

So this was really something we tried to turn around really quickly. SRC was chosen fairly early on, well very early on as the administrator of the program, and there were a variety of reasons for it, but we have some real expertise in this space. And you know, working with Energy and Resources, of course, but really SRC was best positioned to deliver the program, you know, having a high degree of expertise in the industry.

So you know, the one piece of direction that I had given — I mean this was all very, very quickly put together and it's, you know, worked remarkably well, considering — was that we make sure that we maximize the Indigenous component in delivering the program.

So we had a conversation really early on with the First Nations Centre of Excellence about how we could partner — which is a, you know, FSIN [Federation of Sovereign Indigenous Nations] organization run by Sheldon Wuttunee, who's done a great job over there — how we could work together to make sure that we were, you know, moving as much of the resources as we could and maximizing Indigenous participation in this space. And you know, we did. Over $90 million of the funds were spent in that regard.

As far as the number of wells that were . . . inactive wells that applied to the program, it was about 8,000, so a very substantial number of wells that were applicable under the program. And you know, we ended up contracting with over 900 companies that were participants in the program as well. We probably kept over 2,000 people working over the course of the program that would otherwise have been unemployed, laid off, companies that would have went insolvent.

And I think you would find in the energy sector a lot of companies, especially the oil field service companies would say, this is what got us through. I mean it wasn't, you know, that they were getting super wealthy or anything doing it, but this was enough to keep people employed and enough to keep work moving forward.

So I hope that kind of addresses the overall approach. But there really were no orphaned or abandoned wells that were applicable, simply because those are managed under E & R's [Energy and Resources] program on orphaned wells.

Ms. Nippi-Albright: — Thank you for that. So I just want to unpack that a little bit. So of these dollars that were put in the trust and held in trust by the province and then the federal dollars that came in to do this, how much of that was . . . Were the federal dollars used up? And the dollars that were held in trust by the province, was that used up? Tell me about it.

Hon. Mr. J. Harrison: — Yeah. Without kind of having officials here, this is a little bit me taking a swing at it. But I mean, there was $400 million that was allocated by the federal government. We didn't have dollars kind of that were matching or equivalent. I mean it was a federal transfer to the Government of Saskatchewan that was administered through SRC.

We used all of that $400 million — all of it. And this is kind of what I alluded to a bit earlier where, you know, the comparative deployment of the federal resources was one of the questions that, you know, some were asking with regard to other governments and whether they were able to deploy their federal resources or not.

And they would all compare it to Saskatchewan, saying well Saskatchewan was able to, you know, get all that money out the door and get the work done. Why weren't we? And that was the case with a couple of other Western provinces where those questions were being asked of those governments.

So you know, I think it reflected well on the fact that we, you know, were able to deploy those federal resources. And you know, I would say that we did it in as efficient a way as it could be done in that it resulted in some very real work being done as well that served the public interest.

So you know, it's not often where I'm going to be giving the Government of Canada a whole lot of kudos, but I would say that this was a program that was well designed and that worked well, and we appreciated that partnership with them on it.

Ms. Nippi-Albright: — Thank you. Just another question. This is very interesting. How many of the wells that were remediated were wells that existing companies had the responsibility and the liability for? So how many of those were with existing companies that had that responsibility as well as that liability?

Hon. Mr. J. Harrison: — Yeah, I may have to just duck out to try and get a specific on that. But I mean, these were wells that were already owned and the liability ran with the companies that were in that ownership position. The government has no liability for any of them.

But again kind of going back to the policy rationale in which this all unfolded, the idea was that we were going — and again, this was a federal government policy; we worked with them on it — but the idea was that this would be a deployment of federal resources that would keep people employed as a part of emergency COVID programming.

So I really do understand the point that's being made. And it's not an invalid point. It's really not. But you know, and I get what you're saying, but the liability would have ran with companies, and they should have been the ones to do it.

But you know, these circumstances being what they were at the time that we were dealing with, I do think it was a valid policy response by the Government of Canada in allocating resources that would have otherwise been probably even . . . The work would have still been done, but you would have ended up with companies that would have gone completely insolvent. And then you would have had the wells fall back into the genuine orphan well scenario where they then would have been the responsibility of the respective provincial governments. And that would have been in the thousands of wells, given the economic circumstances that the energy sector was facing in that, you know, negative oil scenario where the economics for any of these companies operating and existing had really evaporated. Not for, you know, not for really market-based reasons in the long term, but because of the fact that airline travel was shut down, you know, interprovincial, interstate travel was prohibited.

All of these things meant that there was no use or there was virtually no market for refined gasoline products or jet fuel or, you know, all of the kind of end products that come from the energy production. There was no market. But it was to do with factors that had no kind of long-term permanence, so kind of that short-term response to keep the existing industry solvent — employees employed as opposed to unemployed and then, you know, being in a position needing direct government assistance as well.

All of that led to policy decisions — taken in very short order, by the way, by all levels of government at this time — to deploy that capital to keep the people working, with the understanding that in the long term the energy sector would recover, the economics would recover, and companies being solvent would be more of a value to the overall economy and public then having been insolvent and all the wells then falling onto the provincial government's responsibility as orphans.

So you know, these were kind of challenging decisions that were having to be made on very short notice during that period of time which . . . You know, there's going to be a lot of books written about kind of those sort of decisions. But this was one where it was the right call. And I think it's been borne out by the fact that, you know, we've seen energy prices recover significantly.

You know, I haven't looked at WTI today, but we've seen pretty healthy energy prices that have resulted in companies that it . . . the kind of period that was six months would have made them insolvent. I'm glad that they're working and got through it.

[17:00]

Ms. Nippi-Albright: — Thank you. I'm just going to get into . . . I guess one of the things that I think about, and I know others have asked about, is the existing companies. We all know that they pay into a fund. And again, how many of those existing companies that are supposedly paying into this fund have also accessed that transfer from the federal government to remediate those wells that . . . They're an existing company. Like are we like . . . Tell me about that. Is that, like . . .

Hon. Mr. J. Harrison: — Yeah . . .

Ms. Nippi-Albright: — Or are they paying and they're remediating that and taking care of that? Or are they coming back to say, we need your help in this?

Hon. Mr. J. Harrison: — Yeah. No, it's a good question, and I'm going to go back and kind of try and get the specific number on all of it. And officials are watching this right now, so I'm sure they're going to be working on it, given the one-minute delay. But I'll get the, kind of specific as best we can on that.

I would venture to speculate though, which is always a dangerous thing to do in public life, but the number of companies that are paying into the orphan well fund — which is basically, I mean, it's all of them that are operating in that sector — any of which then access the ASCP program, all of whom would have been paying into the orphan well fund as well, right? So you know, I think that would be the answer, although we'll kind of get the specific on that.

But that then kind of leads to the discussion that we just had though about the basis and the policy basis on which that made sense at that time given those circumstances. Because had the companies gone insolvent, which they likely would have . . . And again, can't speak for all of them but I think if we had service companies who were in the room with us right now, I think a number would say, if not the vast majority, that but for the work that they were able to do through ASCP they likely would not have survived as a going concern. And a number of the energy companies as well would not have been able to continue along as going concerns for a variety of reasons but for the kind of overall support that they had, in which case then all of the wells would've fallen onto the orphan well program.

So we wouldn't have had the resources in that program — again not to speak for E & R — but I don't think the resources would have existed to clean up that volume if all of these had reverted

into that program during those handful of months because of reasons that were not permanent and were not, you know, really kind of market based in a broader sense.

So I think that would be the kind of short answer, although I'm going to go and ask our officials because I think they'll have heard the first part now.

Ms. Nippi-Albright: — They could also table it.

Hon. Mr. J. Harrison: — Well sure. We can commit, undertake to kind of table that part of it then because it's a pretty technical answer.

Ms. Nippi-Albright: — Again, I'm just cognizant of the time. So if their answers could be tabled that'd be wonderful.

Hon. Mr. J. Harrison: — Yeah, sure.

Ms. Nippi-Albright: — So I'll just keep moving on. I have a lot of questions here, but I'm thinking about the time. So I'm just going to move into the micro nuclear reactor. So has the SRC produced a business case for the Westinghouse micro-reactor? And if so, do you have a copy of the business plan to share?

Hon. Mr. J. Harrison: — I appreciate the question. So with regard to the business case, I think one of the things to kind of keep in mind as a part of the basis of the discussion is our MOU with Westinghouse is about the research component.

So you know, as far as commercial — you know, we're going to be churning these things out and selling them and all that — that is kind of not the idea. I mean, we want to be a technology partner in this. We think that there are applications that make a lot of sense for Saskatchewan. We think that the fact that Cameco is, you know, a very, very large owner in Westinghouse creates this as even a more obvious, almost, relationship for the province. So you know, there's kind of . . .

And the other part to remember is that it's, you know, a preliminary discussion that we're having right now. We're not at the point where we have any formal contract. We have a memorandum of understanding, but you know, we'll be keeping both the legislature and the public apprised of kind of further milestones. And you know, ultimately for everybody, this has to make sense. And we're going to do all of our due diligence to make sure that it makes sense for everybody. And you know, it may or may not. Well we'll kind of see because we don't know yet.

And what I would say though — as a kind of overall direction of policy, not being involved in day-to-day management decisions — is that we are very open to having the discussion. The fact that we have a long history at SRC of being a nuclear operator — you know, a small reactor — we have a lot of experience in this space. It had been located at the University of Saskatchewan for the better part of 30 years. And we just decommissioned that reactor, you know, a handful of years ago. Maybe three or four years ago we decommissioned the reactor; the core basically transported back to Oak Ridge in the United States in Tennessee. But we've, you know, had this very long history of being a nuclear operator and a high degree of expertise in that space.

So you know, we're going to continue to have discussions about what may make sense, what might not make sense, but how, you know, we could be a part of furthering the technology. And you know, I think there's a number of different options for what that might look like, but kind of the degree of detail, we're not there yet. We're working towards that, but the House will be kept fully apprised of developments in that regard.

Ms. Nippi-Albright: — Thank you. Yeah, I was just reading, looking at some of the Westinghouse website and just reading, going through some of their information here. And I just was reading here that there are at present no SMR reactor designs approved by the Canadian Nuclear Safety Commission.

And I'm wondering — and you said, been doing this for over 30 years — I'm just wondering what plan do you have, or is there a process that you will be following in terms of engagement to stakeholders at various levels? And how will that look going forward?

Hon. Mr. J. Harrison: — Yeah. A good question. So I'll kind of start with the first part around the licensing issue. CNSC, the Canadian Nuclear Safety Commission, are the federal regulator for the nuclear industry in Canada. And SRC has a long, long history working with CNSC, as does Westinghouse, of course, being a long-standing, almost the original producer of nuclear reactors and a leader in nuclear technology around the world.

So you know, we've been working with CNSC, from SRC's perspective, for a long time. Westinghouse have been working, I think they would characterize it as working concurrently on their design with CNSC and going through the different stages of approval. So it's not like, you know, a company does all the work, comes up with the final design and then says, here it is; you guys make a decision whether it's regulated or not. They really work hand in hand through the entire process.

So CNSC is deeply aware of the design parameters and technical specifications all the way through the process of design for reactors. And the reason that it is done that way in the nuclear industry is because, even with that process, it takes a very, very long time to do these things. It takes a long time on the design front. It takes time on licensing, siting. All of these things are time intensive so they work to do those concurrently, as opposed to sequentially. So I mean, that process with CNSC continues to be an ongoing one. SRC are involved, you know, through different windows in that process, obviously carried though by proponent companies in this and also partnerships on these fronts.

The Government of Canada have put in significant resources into the development of the micro-reactor technology as well, very significant resources. I think it's well over $20 million; it might be even higher than that over the last year or so. And that's generally done through what they call SIIF, their strategic infrastructure innovation fund. So I've spoken with Minister Champagne about this a number of times. You know, I think that it would be fair to say that both the Government of Canada and the Government of Saskatchewan are by and large on the same page about the importance and significance of what this technology could mean for the country.

And that is, you know, what I touched on earlier about where

these units could be deployed to, that being remote mine sites, remote communities, where there is, you know, uncertain baseload or where you have challenges of transmission. I mean there are a lot of regions and areas where it would make sense to have a mobile, highly reliable source of energy, you know, in smaller quantities, where you're not talking 300- or 500- or 1000-megawatt sort of units; you're talking 5 or 10, which is what you would be looking at. And you can stack these things too, but it would be what you would be looking at in a remote location or a mine site.

So I think, you know, there is a confluence of interest there. You know, I think that we are jointly committed to exploring this. Governments obviously aren't designing nuclear reactors, which is why we have Westinghouse as our partner in this space. So you know, I think it would be fair to say that we're continuing to work through the licensing process and working with our partners, stakeholders, and regulators in doing it.

Ms. Nippi-Albright: — Thank you. Thank you so much for that. So I'm just going to move on, and I should have actually asked these questions ahead before. But I'm asking them now around the rare earth mineral plant and also just the rare earth minerals. So my question is, was there consultation in Indigenous communities, given where the minerals are?

Hon. Mr. J. Harrison: — Yeah, I mean, we're not actually mining them. That's the thing or a part of the thing to keep in mind. You know, I said kind of in our opening remarks, I think sometimes there's a bit of a misconception about what SRC does — that it's kind of front end to back end, and really we're not. I mean we do kind of the midstream stuff. So we're not the miner.

Saskatchewan really does have significant rare earth potential. There continues to be exploration work done on what areas would be more potential for rare earth commercial-scale extraction than others. There are different elements as well to this. Again kind of not . . . Mike or Muhammad, our kind of rare earth expert, could kind of speak to this much more eloquently than I. But there are different sources for rare earths.

They're not especially rare. I mean it's kind of a misnomer to say rare earth elements. They're actually quite common. The challenge is that you have to find them in a particular volume and that generally happens within certain geological formations and within the geological formation, certain kinds of rock. So we're setting our operation up to use monazite which, you know, contains all of the different rare earths in differing quantities. That's not the only rock, though, that you could use for rare earth extraction. Bastnaesite is another example of it, which is one of the rocks that you actually have in large volumes in Saskatchewan because it's a by-product of uranium mining.

[17:15]

So there are a lot of kind of options, and it is more complicated than just kind of saying here's the rare earths, we'll take them and whatever. So you know, the original monazite that we have right now in Saskatoon was actually from Brazil and it's because they have existing mine sites that are producing monazite. I mean it's not particularly rare to have this particular rock mined. And it's mined in Vietnam as well. I mean there's a lot of locations. The Chinese mine a lot of this which is part of the reason why they are the centre for the actual value-add part of it.

But you know, when it gets to the point where companies or groups, or whoever it is, are looking at the commercial sourcing of ore, I mean that's going to be, you know, obviously incumbent on them to have those discussions. You know, I would think it would be a wonderful thing, I mean, if there were First Nation companies that wanted to move into the space and do that sort of work at the very front end. That would be something we would be deeply encouraging of, and you know, would be fully prepared to work with companies in making that happen.

But I think that'll be a bit down the road before we get to that part of the rare earth value chain. Really we are focused on the development of the midstream facility, and that really is just kind of Saskatoon, at our location within the city. So you know, other parts of that value stream though, I suspect you're going to see significant development there, but it's not right now and it won't be SRC doing it.

Ms. Nippi-Albright: — So with Saskatchewan, they haven't joined the regional energy and resource tables that have been set up with the provinces, the federal government, and municipalities in nine other provinces and Saskatchewan. So if there's no such table in Saskatchewan, how does Saskatchewan propose to access federal funding of the development of rare earth minerals and their processing?

Hon. Mr. J. Harrison: — Very, very good question, and I'm actually glad you asked that. The federal government have, as you well point out, set up regional tables. Not all provinces have committed to be a part of them. In fact some have been very explicit that they will not be a part of them.

I've had a number of discussions with federal ministers about what partnership would look like in this rare earth space beyond that which already exists. And I would just say kind of as a general observation, there is a very, very high degree of interest that the federal government have in being a bigger part of what might come next. You know, this is frankly something we've heard from the Prime Minister on down — the government has, you know, spoken a great deal about — which is interesting given that the only project in this space is in Saskatchewan and it's undertaken by SRC.

So you know, just as an example, a couple of weeks ago, Minister Wilkinson, Jonathan Wilkinson and I had a sit-down at SRC actually. Mike and I toured him through the facility. He was able to have a first-hand look. And you know, he's very knowledgeable about what we're doing and where we're going on this, so we had a very good discussion, pretty granular discussion about what federal involvement work . . . And I can tell you very explicitly, there is no connection the federal government are making between regional tables and being a part of a rare earth contribution. There is no connection that the federal government is making between those two things.

So you know, on the regional table discussion, that's not my lead and it's not, kind of, an SRC-related item. But Energy and Resources and Minister Reiter would be, I'm sure, happy to address that when the appropriate time comes.

Ms. Nippi-Albright: — Thank you. Thank you. So I just have

two more questions. I'll try to squeeze them in here. I have lots of questions, but I had to pare it down.

So does SRC have any contract or MOU signed with other companies, other provinces, the federal government, or any other stakeholders in regards to the plant's construction or operation?

Hon. Mr. J. Harrison: — That's kind of an operational question, which I can probably give you an undertaking to table, unless there's a commercial sensitivity that I'm not aware of. You know, I would say just prior to giving, kind of, a more detailed answer in the tabling of the document though, that the federal government have provided some resources for elements of what we are doing at the rare earth plant. They've been quite limited in the overall scheme. I think a couple of million dollars, and they've been project based not based on "we are supporting your overall project." That's what kind of discussions have been around some of the other ones.

As far as, you know, contracts with providers, I mean I'd presume — and again, not privy, it being an operational decision, a management decision — you know, obviously we have contracts with suppliers that are providing equipment and that sort of thing for the construction. And I'm sure there would be a significant number of commercial relationships that go along with that.

But as far as, kind of, formal agreements with other provinces, I'm not aware of any, but you know, we'll provide an undertaking to answer that part of it.

Ms. Nippi-Albright: — Actually the one question I almost forgot to ask is, did SRC conduct a business case analysis for the development of this rare earth mineral plant? And also if they did, would you be able to provide that for us?

Hon. Mr. J. Harrison: — Again I'll probably have to give an undertaking on tabling what we can on that. I mean yeah, there's been a lot of work that has gone into . . . though I would just say overall, the overall fundamentals around a project like this. What I would say as well though is kind of reiterate some of the earlier comments around the reasons why we moved into this space as government, which have to do with more than just kind of the day-to-day dollars and cents sort of elements. The overall importance of the projects, and I mean the commercial challenges that have existed at other points in the past.

So you know, it's a relatively complicated question. It goes beyond just kind of your standard business case you would find in most sort of commodities simply because rare earths are not a standardly traded commodity. I mean you can't kind of go onto the exchange and say, I want to buy a certain amount. It doesn't work that way in that industry.

So that being said though we feel very, very comfortable and confident about where the market is going because there is going to be an ever increasing need for rare earths. And not just, you know, we're not talking just a little bit more every year. I mean we're talking exponential growth in the demand for rare earths simply because of their central role in the production of a whole number of products that are essential to modern life, whether it be phones, whether it be computer screens, iPads, you know, EVs [electric vehicle], battery production for all host of different things. I mean rare earths are absolutely essential to that.

So in the direction that a lot of manufacturing, and you know, commercial products are going in, there's going to be an increased need for this. There's a finite amount of production that's in this space right now. And you know, we are the leaders and have genuine expertise in this space that others do not.

Ms. Nippi-Albright: — Thank you for sharing that. It's very interesting, which kind of leads into my next question. Was there an assessment done of the supply sources and a list of known deposits of these rare earth minerals in Saskatchewan? And if there is, would you be able to share that? And we can table that.

Hon. Mr. J. Harrison: — Yeah, I mean I think geological survey, you know, have kind of the overall, the work the government has done at different points over the years. Important to remember, like I said earlier, rare earths aren't especially rare. I mean they're found, you know, really quite broadly. The challenge is finding them in concentration and beyond that challenge is actually being able to process them beyond the rock in which they exist in a natural form. And that's really, you know, where we have the expertise.

There is, and I know the member is aware of this, but there is a mine just kind of north of the border, Nechalacho, which is, you know, really going to be, I think, a significant source of rare earths going into the future along with, you know, some other products as well. But that's an operational commercial mine that's open. There is work being done on a site in Quebec as well.

And you know, I think that the market will dictate to a degree about what other deposits and what constitutes a commercial deposit going forward based on global demand and based on global growth and use of a particular rare earth, which will actually inform, too, what the raw materials and formations that will be economic for different reasons.

So now there's a lot of moving parts in this space, but I think the overall answer is that this is an area where there's going to be tremendous growth. There is tremendous potential and where we as a government have really decided to work to make Saskatchewan the midstream hub in Canada, if not North America, for rare earth processing and value-added. You know, we're going to work hard at that. That's the objective.

Ms. Nippi-Albright: — So I don't know if I can squeeze in two questions here. I know I told you earlier I only had two, but this is very interesting. So one question is, so what will the processing plant be equipped to refine? And my last question is, in terms of economic reconciliation and Indigenous communities, how will they participate in that besides employment? Is there impact benefit agreements going to be signed? Because it's going to be within the treaty territory.

Hon. Mr. J. Harrison: — Yeah, so a good question, and I really do appreciate it. So what our facility is going to be equipped to add value to in the immediate term right now is monazite ore. And you know, really we have a high degree of experience in using monazite to then refine down into the constituent rare earth parts and the different rare earths that come out of that. We have a very high degree of understanding as to what comes from . . . You know, you have a ton of monazite. We know what we're

going to get per unit of the 17 rare earths that make that product up. And we know what their values are and we know . . . So you know, we have a very, very good sense on the monazite front of it. You know, is there going to be opportunity for using other feedstock? I think there will be. There will be both in the medium and longer term. But those will be decisions that companies are going to be making based on a whole host of factors that are likely going to evolve over time.

As far as the Indigenous participation element of this, where I really view there being a tremendous opportunity for Indigenous-led development is around the mining part of this when we get there. And you know, I spoke to it a bit earlier is, you know, I would love to see Indigenous companies that are leaders and, you know, significant equity partners, if not owners, of projects on the extraction, whether it be monazite, bastnaesite, you know, whatever rare material, or whatever raw material makes sense.

Because I think that there is going be very real value there, and given the expertise that Saskatchewan has in sustainable mining practices — and really we are the best in the world at this; we really are — I think that will make a very, very big difference and how we are able to do that in a way that's economic, because that has an impact on the economics of the broader project, both midstream, upstream, all the way through the entire process.

So I think that that will be the point where, you know, we will want to be, you know, really working with partners in how we can make that happen. And I think I've said before, you know, both in this committee and elsewhere, I mean we always are very, very much . . . Encouraging isn't the right word, but we really ask that those who are looking to make investments are making investments, even those who have, you know, histories here already. It goes beyond just impact benefit. It goes into equity ownership.

[17:30]

That's where we need to be with Indigenous economic engagement. It's not about just kind of the jobs or the impact benefits. It has to be, it has to be equity ownership in the longer term. And that's why we set up the Indigenous investment fund. You know, that's why literally every meeting I have with proponent companies I say, you need to find an Indigenous partner in this, and it has to be substantive and real. And that's something we really are deeply committed to.

Sorry, I went past the two and a half hours, I think. Or two hours.

Ms. Nippi-Albright: — Well we technically started late.

Hon. Mr. J. Harrison: — Yeah, okay.

Ms. Nippi-Albright: — Yeah. Just one question, follow-up.

Hon. Mr. J. Harrison: — Yeah. Sure.

Ms. Nippi-Albright: — Can I do just a follow-up? And you talked about the Indigenous investment fund. So is there an opportunity in that fund to be increased to allow for meaningful Indigenous participation in being an equity partner?

Hon. Mr. J. Harrison: — Yeah, I mean the short answer is, absolutely. I said that at the SARM [Saskatchewan Association of Rural Municipalities] convention a couple of weeks ago as well. I mean the $75 million that we have allocated initially, you know, where I would see this going — I mean subject to the treasury board and cabinet approval of course, and all of those things — but this is going to be a fund like the municipal finance corporation as well where you have a long-term revolving element to all of this. So you know, I think that it would be fair to say we absolutely are going to be looking at, when the appropriate time comes, whether we need to put more resources here.

The other thing I would say on this as well, and I really, firmly believe the Government of Canada — I don't care which party it is — but the Government of Canada really needs to have something that is equivalent to what we're doing here. They really do. If you are going to have Indigenous equity participation in large-scale economic projects, you need to have government support in order to do that. And the reason for that really is a classic case of market failure in the textbook definition of the term, in that Indigenous governments and Indigenous corporations cannot borrow money in the same market-based way that other corporations would.

And the reason for that has to do with, kind of, the constitutional setup and how, you know, chattels can be realized on and how assets are accounted for by the bank in how they calculate the ability to borrow money, or their thresholds for borrowing money. There actually is market failure in this space.

So the federal government are in a position to really put a lot more resources into this than provincial governments are, and I'm talking billions. I mean the federal government should have a fund like we have for a financing corporation for Indigenous businesses and governments in the billions of dollars. And I think they will get there. I actually believe that. I think, be it Tory or Liberal government, I think they will get there, but they need to get there quicker because this is going to be vitally important to how we develop economies, you know, not just in Western Canada, but I think probably more, you know, substantively in Western Canada.

Ms. Nippi-Albright: — Thank you so much. I think I used up our two hours. Thank you so much for your presentation and answering the questions and not taking too much time out in the hallway. Thank you.

Hon. Mr. J. Harrison: — Well I tried to answer them my best, so we'll see how many corrections I'm making afterwards without officials. That being said, thank you very much for the questions as well and thanks to the committee for being here.

The Chair: — All right. Thank you, Minister, and thank you, Ms. Betty Nippi-Albright for the questions. That concludes our business for today. I would ask a member to move a motion of adjournment. Mr. Francis so moved. All agreed?

Some Hon. Members: — Agreed.

The Chair: — Carried. This committee stands adjourned to the call of the Chair.

[The committee adjourned at 17:34.]