The Uranium Institute 25th Annual Symposium
30 August-1 September 2000: London

Saskatchewan: New Mines for the New Millennium

Hon. Eldon Lautermilch

This paper presents an update on the Saskatchewan uranium mining industry and the environment in which it operates.

The Government of Saskatchewan strongly supports the uranium mining industry and mining in general. In today's world of high-tech, e-commerce business, mining is often viewed as a low technology, sunset industry. Nothing could be further from the truth. A famous line states that everything we have is ultimately either grown or mined — taking a broad definition of mining as non-renewable resource extraction. The mining industry in Saskatchewan is a flourishing, high technology industry. Saskatchewan is the fourth largest mineral producer in Canada in terms of value of mineral sales and the mineral sector in Saskatchewan contributes nearly as much as agriculture to the provincial GDP. Saskatchewan is the world's largest producer of potash and uranium, with approximately one-third of annual world production of potash and 26% of uranium production in 1999.

The uranium mining industry makes an important contribution to Saskatchewan's economy and the Government of Saskatchewan is committed to working closely with the industry to ensure its competitiveness now and into the future. This paper covers several topics to demonstrate the vitality and strength of the uranium mining industry in Saskatchewan. By linking them, a picture emerges of why Saskatchewan stands alone in the world as the dominant uranium producer and will maintain that position into the foreseeable future.

Saskatchewan is an exciting place to do business, particularly for the uranium mining industry. While most other jurisdictions in the world are faced with ongoing concerns and protests associated with the nuclear industry, uranium mining in Saskatchewan continues to enjoy a high level of public support. In fact, in Saskatchewan, some of the highest levels of support for mining come from communities in the region of the mines. This subject will be revisited later in the paper.

Uranium Exploration in Saskatchewan

Geologists and uranium mining companies throughout the world recognise that the Athabasca Basin has tremendous potential for the discovery of more large high-grade uranium deposits. Given the long-term nature of the uranium mining industry, companies that wish to continue in the business must replenish resources depleted through the mining process. Therefore, exploration reflects the state of the market on a broad scale and for individual companies, their view of the urgency with which they must replenish their uranium resources. Exploration for new uranium deposits in Saskatchewan continues, but at reduced levels when compared to previous years.

With total uranium reserves and resources of more than 950 million lbs U_3O_8 (365 000 tU) (as of 31 December 1999) and prices for uranium near historic lows, uranium exploration has become focused on the long-term future rather than an aggressive pursuit of new mines in the shorter term. Under such a strategy, companies continue to explore, primarily to retain their talented geoscientists, land holdings and reserve base in the Athabasca Basin of northern Saskatchewan. Saskatchewan Energy and Mines requires that exploration work be undertaken to retain mineral rights.

Despite the modest levels of exploration activity, positive exploration results continue to be obtained in a number of regions of the Basin. Recent drilling in the vicinity of La Rocque Lake, part of the Dawn Lake joint venture involving Cameco Corporation, Cogema Resources Inc and PNC Exploration (Canada) Ltd, has found intersections with grades up to 30% U_3O_8 at depths of approximately 280 metres, shallower than McArthur River and Cigar Lake. However, based on only three drill intersections, it is not yet possible to fully evaluate the extent of the target.

Cameco continues to carry out the majority of its uranium exploration in the eastern Athabasca Basin. Its Saskatchewan exploration expenditures for 2000 will be C$6 million (US$4 million). In the early part of 2000, Cameco was active at several projects including seven with diamond drilling programmes. Cameco drilled approximately 17 500 metres in 56 holes. Additional drilling of the La Rocque Lake area re-commenced in June.

Cogema Resources Inc also operates a substantial exploration programme in the Athabasca Basin. The company has varying levels of participation in nearly all of the promising exploration programmes in the Basin and its Canadian uranium exploration budget is in the range of C$7 million (US$4.7 million) in 2000. One of the company's more promising developments is at Shea Creek, 15 km south of its Cluff Lake operation. Results from drilling at Shea Creek continue to be positive, as they have been for several years. Massive pitchblende has been found, up to 6 metres in thickness, at the unconformity between the sandstone of the basin and the basement rock in addition to perched mineralisations 30 to 40 metres above the unconformity and high-grade veins within the basement rock. However, the target is very deep, occurring at approximately 700 metres. Continued exploration success and improved economic conditions are two of the necessary requirements for development to proceed.

Cogema Resources' drilling technology used in this exploration programme is an example of high technology applied to mineral exploration. This innovative approach, called navigational drilling (or navi-drilling), holds great promise for reducing deep exploration costs. Navi-drilling allows operators to begin drilling a new hole 500 to 600 metres below the surface by using a pre-existing "pilot hole". This technique significantly reduces costs and environmental impact as the same pilot hole is used for up to six navi-drilling holes.

In addition to the major, uranium-producing companies, junior companies have been quite active in uranium exploration in the Athabasca Basin in recent years. In particular, JNR Resources has been exploring a large aero-magnetic anomaly in the vicinity of Moore Lake, together with Kennecott Exploration Canada Ltd, a subsidiary of Rio Tinto.

Promising exploration results point to the enormous potential of the Athabasca Basin for further uranium developments. However, given the long lead times between first discovery of a deposit and development of the mine, that can range to 20 years, we need to begin the hunt for the deposits that will replace the mines now under development in Saskatchewan. It is easy to forget that the uranium deposits now coming into production were discovered in the 1970s and 1980s. Deposits such as McArthur River, McClean Lake, Cigar Lake and Midwest, that are high grade and relatively compact in area, really are the proverbial "needle in the haystack". The diligence and perseverance of the uranium mining industry in finding them is commendable.

Status of Operating Mines and New Developments

Saskatchewan is, and will continue to be, home to the most impressive uranium mines in the world.

Key Lake has been the largest uranium mining and milling operation in the world producing 14 million lbs U_3O_8 (5400 tU) per year and more than 190 million lbs U_3O_8 (73 000 tU) over its 15 year life. However, as happens with all deposits, its reserves have been exhausted. Processing of ore stockpiled from the Deilmann pit is virtually complete. At Rabbit Lake, which has operated for 25 years, mining of Eagle Point was suspended, but the mill continues to process stockpiled ore on a half-time basis.

Operations at Cluff Lake will be suspended later in 2000 or early in 2001. After producing more than 50 million lbs U_3O_8 (19 000 tU) during 20 years of operation, the suspension was triggered by economic conditions and the lack of tailings capacity at the mine. Based on present knowledge of reserves available to the mine and current uranium prices, it is not economic to develop a new tailings management facility. Regrettably, Cluff Lake will leave approximately 9 million lbs U_3O_8 (3500 tU) in the ground. Following suspension of operations, Cogema Resources will begin to undertake decommissioning and reclamation of parts of the operation. The company has indicated that it will keep open the option to restart milling operations for a number of years following the suspension.

Two new mines also saw the start of operations in 1999. Both McClean Lake and McArthur River commenced production — McClean Lake in June and McArthur River in December. While these operations have encountered some unanticipated challenges during construction and initial operations, this is fairly normal for any new mine operation. Challenges at McClean centred on the construction of the tailings disposal facility. At McArthur River the challenges involved addressing high groundwater pressures and the interaction of the freeze process with clays associated with the ore in obtaining the proper size ore fragments for the underground crushing and grinding process. A further challenge at McArthur River related to the shipping of ore in slurry form to Key Lake and settling problems in the slurry container. All of these challenges have been resolved.

Uranium production in Saskatchewan is forecast to increase to a maximum of 42 million lbs U_3O_8 (16 000 tU) annually, more than a 30% increase over the historic capacity of Saskatchewan mines when the new operations reach capacity production. It is anticipated that this level will be reached in 2005.

These new mines employ leading-edge technologies in their operation. At McClean Lake, the new mill represents the state of the art in processing uranium ore. Special features that the mill incorporates in its design include concrete shielding of tanks to limit radiation exposures from processing solutions, highly computerised control of mill processes, and an impressive air circulation system that is designed to limit exposures to radon. At the McArthur River mine, the focus is on remote operation of virtually every component of the mining process. Not only is the ore mined remotely, but the mine also incorporates an underground grinding circuit that allows the ore to be pumped to surface in a slurry form. The freezing plant at McArthur River that is used to freeze the ore body before it is mined has the capacity to provide ice for 16 skating rinks. In addition, every aspect of the McArthur River and McClean Lake mines is designed to contain and treat all water flows, from groundwater to rain. Cogema Resources, operator of the McClean Lake mine, and Cameco, operator of the McArthur River mine, have taken environmental protection and worker health and safety to new levels.

Cigar Lake has undergone a change in operational plans. Based on the current uranium market conditions the joint venture participants do not see a need to rush into development of the mine. Cigar Lake is now forecast to commence commercial production in 2003 subject to market conditions. Initially, plans called for the expansion of milling capacity at McClean Lake to 24 million lbs U_3O_8 (9200 tU) annually to handle the ore feeds from McClean Lake, Cigar Lake and Midwest. However, this has now changed to a proposal for processing 57% of the ore at the Rabbit Lake mill and the balance at the McClean Lake mill, which will have a capacity expansion of 6 million lbs U_3O_8 (2300 tU) annually.

In addition, the original plans were adjusted to allow for disposal of the waste rock from Cigar Lake in the mined-out Sue C pit at the McClean Lake mine, 75 km from the Cigar Lake site. This change alone is forecast to add C$28 million (US$19 million) in costs to Cigar Lake operations, but will reduce environmental impacts considerably. Because both these proposals represent significant changes to the operating plans for the Cigar Lake mine, environmental legislation of the province and the federal government requires that the company prepare an environmental impact statement of the proposed changes. Once the document has been submitted, it will be reviewed publicly and decisions made as to the acceptability of the proposal by the appropriate federal and provincial ministers.

To provide an indication of the magnitude of the new deposits, McArthur River and Cigar Lake will only need to mine and process 100 to 150 tonnes of ore per day to produce 18 million lbs U_3O_8 (6900 tU) per year. This is less than the amount that can be produced in one shift at the mine. In terms of the in-ground value of the ore, McArthur River resources of 483 million lbs U_3O_8 (185 000 tU) (as of 31 December 1999) at current, low spot market prices are worth about C$6 billion (US$4 billion).

It should also be noted that before the ore from McArthur River and Cigar Lake is processed, it will be blended down in grade using low-grade waste rock or lower grade ore. This is probably a first in the world, diluting ore for processing operations.

Examining the contained mineral value per tonne of ore is another interesting comparison. Using this evaluation, it is possible to compare between different mineral commodities. The contained value per tonne of ore for the Ekati Diamond mine that recently opened in northern Canada is approximately C$149/tonne, for the Voisey's Bay nickel deposit in Labrador it is in the range of C$334/tonne, for the McArthur River uranium mine it is more than C$4700/tonne and for the Cigar Lake deposit it is more than C$4400/tonne. At this level of contained value, it appears that few mineral deposits in the world, including other uranium deposits, will be able to compete with Saskatchewan's uranium deposits.

As a result of the high ore grades and extensive uranium resources, the Saskatchewan uranium mining industry is known to have among the lowest production costs in the world. However, if recent market prices are sustained for a long period, they will be a challenge even for low-cost producers. The current low prices appear to be a result of perceptions of an abundant supply of secondary sources of uranium in the world and widespread reliance on those sources. Euratom has also recognised this problem and the organisation recently warned its members against excessive reliance on secondary uranium supplies.[1]

Apart from ongoing capital and operating costs, the uranium industry in Saskatchewan has invested about C$1 billion (US$670 million) to bring the McClean Lake and McArthur River deposits into production. The Cigar Lake and Midwest deposits represent more than C$500 million (US$330 million) in further investment. For mining to be sustainable, companies must be able to provide a return to their investors that is substantially higher than current interest rates. Such a return is necessary to compensate the investor for the risk that is associated with the mining industry.

Regulatory Environment for Uranium Mining

The Saskatchewan uranium mining industry has been very successful in meeting the stringent environmental and worker health and safety standards. The provincial government actively encourages and supports uranium mining on the basis of a proven track record. This means that uranium mining companies must:

- protect the environment;
- protect the health and safety of workers;
- provide an appropriate distribution of socio-economic benefits.

As these objectives indicate, socio-economic factors are considered together with worker health and safety and environmental protection very early in the evaluation of new mine developments. Through a rigorous and public review process, the uranium mining industry demonstrated that the impacts of the new mines would be minimal and short-term, while the socio-economic impacts would be significant for the economy of northern Saskatchewan and the province as a whole.

The uranium mining industry has a good working relationship with provincial regulators. This relationship is based on communication and co-operation. Rather than taking an adversarial or prescriptive approach to regulatory activities, provincial regulators allow industry to develop the most successful solutions. Key to this approach is the ALARA concept: "as low as reasonably

achievable, social and economic factors considered". This is applied not only to radiation standards, but also to all releases of contaminants.
Working together with provincial regulators, the uranium mining industry has achieved notable levels of performance. The industry in Saskatchewan has a long history of safe operations at its mines. Mine accidents are well below national averages and the exposure of workers to radiation is tightly controlled. An example of this commitment to worker health and safety is reflected in Cameco's recent receipt of the John T Ryan award for the best safety record at a Canadian metal mine, presented to the McArthur River mine and the Key Lake mill. Cogema Resources won this same award for its safety record at the Cluff Lake operations in 1998. The companies are to be congratulated on these achievements.

With respect to exposure to radiation, the average exposures and maximum exposure of workers to radiation are only a fraction of the allowable limits that are based on the ICRP 60 and 65 recommendations. All other emissions from the mine sites are well within allowable limits as a result of the companies' stringent environmental protection measures.

Provincial Government Initiatives

The Government of Saskatchewan supports its uranium mining industry and is actively working to ensure its long-term viability. For the uranium mining industry in Saskatchewan to flourish, it is crucial for the provincial government to ensure that the regulatory and investment environment in which it operates is efficient and positive. The government has a number of initiatives in place that are designed to maintain strong public support for the industry and to ensure an optimal operating environment.

Providing Geoscience Information
The Government of Saskatchewan recognises its role in providing geoscience information that is valuable to the mining industry, and it works closely with the industry in establishing exploration programmes. To investigate the potential of the Athabasca Basin for new uranium deposits further, a new funding programme for geoscience investigations into the nature of Saskatchewan uranium deposits was recently announced. The purpose of this research initiative is to improve our understanding of the nature and formation of Saskatchewan uranium deposits and, at the same time, address industry's need for new exploration technology to aid in the transition from shallow to deeper basin exploration.

The multidisciplinary study involves funding from the Geological Survey of Canada, Saskatchewan Energy and Mines, Cameco Corporation and Cogema Resources, together with other federal grants that match industry contributions. The majority of the funding will be spent in Saskatchewan, which will receive a C$3.4 million (US$2.3 million) investment in geoscience over three years. A key outcome of this initiative will be to assist in the discovery and safe sustainable development of Saskatchewan uranium resources, and maintain the province's role as a reliable, long-term supplier of uranium to the world.

Promoting Communications and Public Input
As noted earlier, the uranium mining industry has an impressive track record in environmental protection and worker health and safety. It is vital that this

information be communicated. The flow of information to and from communities in the vicinity of the uranium mines is recognised as a critical factor in the future of uranium mining in Saskatchewan. Communities must be assured that the mines are being operated in a safe manner that ensures environmental and worker health and safety.

It is not sufficient for the community to receive scientific reports on monitoring programmes or a presentation by a regulator or scientist. Northern communities, similar to many southern counterparts, often distrust information that is communicated in a way that is unfamiliar or that they may not understand. Therefore, in 1995 the Province of Saskatchewan established Environmental Quality Committees (EQCs) made up of local residents appointed by their home community. The purpose of the committees is to review and provide input to regulators on mine operations, environmental monitoring programmes and socio-economic issues associated with the mine operations. There is a clear delineation in the role of the committees. Their function is to provide input into regulatory decisions as opposed to regulating the industry directly.

In 1998, Cogema Resources faced a renewal process before the Atomic Energy Control Board (AECB), the federal regulator, for its operating licence at the Cluff Lake mine. Prior to the hearing, the AECB had identified a number of operational issues to be addressed. The EQC for that region sent representatives to the hearing who went on record supporting continued operations of the mine and the measures proposed by Cogema Resources. This type of support is invaluable for companies undergoing licensing processes.

The Province of Saskatchewan has received a number of requests from other jurisdictions in Canada and beyond for information on the structure and functions of the EQCs as a best practice for a successful community participation initiative.

Streamlining the Regulatory Environment

The provincial government is very concerned with the financial burden placed on the uranium mining industry as a result of regulatory overlap and duplication unique to this industry. Both the federal government and the provincial government have regulatory responsibility for the operation of uranium mining and milling facilities. As a consequence, a situation exists in which each order of government conducts similar regulatory activities for similar, but not identical, standards. This results in considerable confusion for industry and places undue costs on uranium operations.

The problem has existed in Saskatchewan for many years, but recently a number of events have occurred that have spurred activities to resolve the issue. These include:

- The profile given to this issue by the public review process.
- The development of the Nuclear Safety and Control Act that replaced the Atomic Energy Control Act and which contains specific provisions that allow for incorporation of provincial legislation in federal regulations for administration by the responsible provincial agency.
- Ongoing efforts by provincial officials to ensure that the issue is addressed.
- A government-wide initiative to address regulatory issues that place an undue burden on industry.

Following discussions and negotiations between senior levels of the federal and provincial governments and the Canadian Nuclear Safety Commission, a Memorandum of Agreement was developed. Under the agreement, the parties commit to the incorporation of provincial legislation in the federal regulations under the Act. Responsibility for administering those instruments will be retained by the provinces. Under such a regulatory structure, the industry will work with provincial regulators for on-site activities and only address one set of standards for the mines. The process will considerably streamline the regulatory environment and should result in cost-savings to the industry.

Another regulatory issue crucial to the mining industry involves certainty of access to land for exploration and development of new mines. In some jurisdictions, uncertainty associated with Aboriginal land rights are a cause of concern. However, in Saskatchewan, Treaty land entitlement issues have been resolved, providing a high degree of certainty to mining companies that they will be able to develop the deposits which they find.

Decommissioning and Reclamation of Mines

Current uranium mines are required to provide financial assurances in the form of funds, bonds, insurance, or other fiscal options which ensure that, following operations, the site is returned as closely as possible to the natural conditions that existed before mining commenced.

This was not always the case. Early mining activities in the province occurred with little or no environmental controls and no planning for the eventual decommissioning or reclamation of the mine sites. Often, the end of a mining operation was signalled by the bankruptcy of the mine operator and the abandonment of facilities.

This was the case with two small, low-grade uranium mines in the 1950s and early 1960s in northern Saskatchewan. These abandoned mines need to be decommissioned and reclaimed to properly dispose of mine buildings and the tailings from mine/mill operations. While the mines are having only a limited impact on the environment, the buildings are also deteriorating and represent a hazard to curious visitors. Undertaking the clean-up of these operations is a priority with residents of northern Saskatchewan and the provincial government.

Neither of the two abandoned mines was owned or operated by a surviving company. For a currently operating company to be liable for decommissioning and reclamation of a mine, the provincial government believes that this linkage must exist. Furthermore, as the industry of the day acted in good faith and operated to the standards of the day, as established by the federal and provincial governments, governments also bear some of the responsibility for subsequent changes to our level of understanding of the environment and the adoption of new standards.

The Government of Saskatchewan undertook an evaluation of the sites. The province then developed a proposal to cost-share the estimated clean-up cost of C$25 million (US$17 million) over five years on an equal basis with the federal government. The two orders of government are now close to finalising an agreement. An important feature of the clean-up activities will be to provide training opportunities to northerners in decommissioning and

reclamation of mines. This will allow northerners to gain important skills in this area and to seek other opportunities providing contract services to the mining industry.

Creating a Competitive Investment Environment
Although it is saddled with a large debt and is under pressure for spending in a number of programme areas, the Government of Saskatchewan recognises that the provincial tax regime must address the changing realities in today's business world. The world is indeed becoming a global village in which industries can often choose between a number of jurisdictions for operations and are much more prone to seek the best possible tax regime in which to operate.

Saskatchewan recognises that an attractive investment climate is a necessary supplement to its outstanding geological potential and the well-developed mining infrastructure if it is to compete with other jurisdictions in attracting new investment. Saskatchewan is currently pursuing this objective on two fronts. Firstly, officials in the Department of Energy and Mines and the Department of Finance are working with representatives of the mining industry. They are reviewing the full range of taxes that apply to the mining industry and examining opportunities to improve the competitiveness of the investment environment in the province.

Secondly, the Department of Energy and Mines has initiated an in-depth review of the uranium royalty regime in conjunction with the start of commercial production from the new generation of mines. It is important that the royalty system appropriately recognises the new operating arrangements of industry and the new market realities in which they operate. This complete review of the royalty structure could result in fundamental changes to how royalties are determined and the rates at which they are assessed. Maintaining industry competitiveness is a key motivating factor in the review process.

Industry and Government Promoting Northern Development in Saskatchewan

The uranium mining industry is a leader in Canada in developing innovative ways to attract and retain Aboriginal employees in its operations and in directing economic opportunities to businesses and communities in the north.

The uranium mining industry and the Government of Saskatchewan continue to work together to provide opportunities for northern Saskatchewan residents and businesses to benefit from the economic opportunities provided by the industry. Northern Saskatchewan offers few economic opportunities for residents beyond limited traditional occupations of trapping and fishing. The uranium mining industry represents a major component of the northern economy. Unemployment rates in many communities are extremely high. In addition, education levels in the north generally lag those achieved in the south. In a world of constantly advancing technology, the education levels in the north are additional barriers to northern hiring programmes. Despite this, the uranium mining industry has achieved remarkable results in hiring and retaining northern residents in its operations.

In particular, the Multi-Party Training Plan (MPTP), an education and training initiative that involves northern communities, the uranium mining industry

and the provincial and federal governments working together is very successful. Training programmes are developed for identified opportunities and timed to a detailed forecast need for those occupations in the industry. Training not only involves theoretical instruction, but also involves counselling and significant practical experience at one of the operating mines. The MPTP was initially established for a fixed, five-year term. It was recently renewed for a second term following the initial term in which all the targets of the plan were not only met, but exceeded. This training model is now being applied to other sectors of the economy, such as forestry, in attempts to duplicate its successes.

As a result of these efforts, employment of northerners and, in particular northerners of Aboriginal descent, has increased significantly at the mines. Northerners now make up approximately 50% of the uranium mine site workforce. In addition, through other initiatives, the value of contracts to supply goods and services to the mines has also increased.

Saskatchewan Energy and Mines is represented on a Canada-wide committee examining Aboriginal participation in mining over the course of the last 11 years. During this time, the committee has published nine reports documenting best practices in the mining industry with respect to promoting participation by Aboriginal people in mine operations. Saskatchewan practices have figured prominently in the reports of the committee. The levels of participation achieved in Saskatchewan in the uranium mining industry have been unmatched in the rest of Canada.

Public Support for the Uranium Mining Industry

The strong commitment to consultation, the long history of safe operations, initiatives to improve social and economic conditions in northern Saskatchewan, and a pragmatic and co-operative approach to addressing issues have all been outlined earlier. The result is that the uranium mining industry in Saskatchewan enjoys a high level of trust and support by the people of the province.

Cameco Corporation and Cogema Resources conduct an annual poll of Saskatchewan people on their perceptions of the uranium mining industry and a few of the results from the companies' latest poll, conducted in late 1999, are worth highlighting. In terms of the level of support for the uranium mining industry, 70% of the people polled were either very supportive or somewhat supportive. However, it is interesting to note that this support increased to 80% when people learned that nuclear power plants do not emit greenhouse gasses that contribute to global warming. While 62% of the people were concerned about the environmental impact of the uranium mining industry in Saskatchewan, this was considerably lower than the level of concern with the forest industry (74%), the oil and gas industry (74%), and the agriculture industry (72%).

These are very impressive levels of support for any industry. They also demonstrate that over time it is possible to build and maintain a strong base of support for this component of the nuclear fuel cycle. The lessons learned from the uranium mining industry in Saskatchewan may be transferable to other components of the nuclear fuel industry. The future of the nuclear industry ultimately depends on the support of the public and Saskatchewan's uranium

mining industry is an example of one component of the industry that has got things right.

Conclusions

The Saskatchewan uranium mining industry has a number of strengths that contribute to its prominence in the uranium production industry. These strengths include:

- large, high-grade resources;
- significant geological potential;
- production costs among the lowest in the world;
- good working relationships with regulators;
- a regulatory environment undergoing streamlining;
- a strong commitment to communication and consultations;
- a long history of safe operations;
- strong public support;
- support by the provincial government.

All of these strengths suggest a reliable, healthy and competitive long-term future for the uranium mining industry in Saskatchewan. Based on current information, it is difficult to envisage a future competitor for Saskatchewan as the largest supplier of uranium to the world. The Saskatchewan uranium mining industry has invested more than C$1 billion (US$670 million) to bring a new generation of large, high-grade uranium mines into production — maintaining and strengthening Saskatchewan's long-term position in the uranium market.

Co-operation and communication are the common themes that are present throughout all aspects of uranium mining in Saskatchewan. The strong public support that exists for Saskatchewan's uranium mining industry suggests that this is a component of the nuclear industry that has "got things right" and may be able to serve as a model for other components. If one message can be taken away from this review of the uranium mining industry in Saskatchewan, it is that Saskatchewan will continue to be the premier source of new uranium production for the world. Our geology, the people of the province, the mining industry and government all support this goal.

Acknowledgement

The author would like to thank Cameco Corporation and Cogema Resources Inc for providing technical information and assistance with this presentation.

REFERENCE

1. *Euratom: Utilities De-stocking*. The Ux Weekly, vol 14, no 19, 8 May 2000.