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Important information about this document

This annual information form (AIF) provides important information about Cameco Corporation. It describes our history, our markets, our operations and development projects, our mineral reserves and resources, sustainability, the regulatory environment, the risks we face in our business and the market for our shares, among other things.

It also incorporates by reference:
• our management’s discussion and analysis (MD&A) for the year ended December 31, 2010 (2010 MD&A), which is available on SEDAR (sedar.com) and on EDGAR (sec.gov) as an exhibit to our Form 40-F
• our audited consolidated financial statements for the year ended December 31, 2010 (2010 financial statements) which is also available on SEDAR and on EDGAR as an exhibit to our Form 40-F.

We have prepared this document to meet the requirements of Canadian securities laws, which are different from what US securities laws require.

Reporting currency and financial information

Unless we have specified otherwise, all dollar amounts are in Canadian dollars. Any references to $(US) mean United States (US) dollars.

We have presented financial information in this AIF according to Canadian generally accepted accounting principles (Canadian GAAP). We explain any differences between Canadian GAAP and US generally accepted accounting principles (US GAAP) that apply to us in our Form 40-F, which we file with the US Securities and Exchange Commission (SEC). We also prepare a reconciliation of our annual financial statements to US GAAP, which is filed with securities regulatory authorities in Canada on SEDAR and in the US on EDGAR.

Caution about forward-looking information

Our AIF and the documents incorporated by reference include statements and information about our expectations for the future. When we discuss our strategy, plans and future financial and operating performance, or other things that have not yet taken place, we are making statements considered to be forward-looking information or forward-looking statements under Canadian and US securities laws. We refer to them in this AIF as forward-looking information.

Key things to understand about the forward-looking information in this AIF:
• It typically includes words and phrases about the future, such as believe, estimate, anticipate, expect, plan, intend, predict, goal, target, project, potential and strategy (see examples on page 2).
• It is based on a number of material assumptions, including those we have listed below, which may prove to be incorrect.
• Actual results and events may be significantly different from what we currently expect, because of the risks associated with our business. We list a number of these material risks below. We recommend you also review other parts of this document, including Risks that can affect our business starting on page 92, and our 2010 MD&A, which include a discussion of other material risks that could cause actual results to differ from current expectations.

Forward-looking information is designed to help you understand management’s current views of our near and longer term prospects. It may not be appropriate for other purposes. We will not necessarily update this forward-looking information unless we are required to by securities laws.
Examples of forward-looking information in this AIF

- our expectations about future worldwide uranium supply and demand
- production at our uranium operations in 2011 and our target for doubling annual uranium production to 40 million pounds by 2018
- our ability to maintain expected annual production at McArthur River and Key Lake
- our mid-2013 target for initial production from Cigar Lake, the expected benefits from our surface freeze strategy and our 2011 Cigar Lake plans
- our expectation that Inkai will receive all the necessary approvals and permits to meet its 2011 and future annual production targets
- forecasts relating to mining, development and other activities at our uranium operations
- future production at our fuel services operations
- the likely terms and volumes to be covered by long-term delivery contracts that we enter into in 2011 and future years
- future royalty and tax payments and rates
- our mineral reserve and resource estimates

Material risks

- actual sales volumes or realized prices for any of our products or services are lower than we expect for any reason, including changes in market prices or loss of market share to a competitor
- we are adversely affected by changes in foreign currency exchange rates, interest rates or tax rates
- production costs are higher than planned, or necessary supplies are not available, or not available on commercially reasonable terms
- our estimates of production, purchases, costs, decommissioning or reclamation expenses, or our tax expense estimates, prove to be inaccurate
- we are unable to enforce our legal rights under our existing agreements, permits or licences, or are subject to litigation or arbitration that has an adverse outcome
- there are defects in, or challenges to, title to our properties
- our mineral reserve and resource estimates are inaccurate, or we face unexpected or challenging geological, hydrological or mining conditions
- we are affected by environmental, safety and regulatory risks, including increased regulatory burdens or delays
- we cannot obtain or maintain necessary permits or approvals from government authorities
- we are affected by political risks in a developing country where we operate
- we are affected by terrorism, sabotage, blockades, accident or a deterioration in political support for, or demand for, nuclear energy
- there are changes to government regulations or policies, including tax and trade laws and policies
- our uranium and conversion suppliers fail to fulfill delivery commitments
- delay or lack of success in remediating and developing Cigar Lake
- we are affected by natural phenomena, including inclement weather, fire, flood and earthquakes
- our operations are disrupted due to problems with our own or our customers’ facilities, the unavailability of reagents, equipment, operating parts and supplies critical to production, lack of tailings capacity, labour shortages, labour relations issues, strikes or lockouts, underground floods, cave-ins, tailings dam failures, or other development and operating risks
- our ability to comply with current and future environmental, safety and other regulatory requirements, and to obtain and maintain required regulatory approvals
- our operations are not significantly disrupted as a result of political instability, nationalization, terrorism, sabotage, blockades, natural disasters, governmental or political actions, litigation or arbitration proceedings, the unavailability of reagents, equipment, operating parts and supplies critical to production, labour shortages, labour relations issues, strikes or lockouts, underground floods, cave-ins, tailings dam failures, lack of tailings capacity, or other development or operating risks

Material assumptions

- sales and purchase volumes and prices for uranium, fuel services and electricity
- expected production costs
- expected spot prices and realized prices for uranium
- tax rates, foreign currency exchange rates and interest rates
- decommissioning and reclamation expenses
- our mineral reserve and resource estimates
- geological, hydrological and other conditions at our mines
- our Cigar Lake remediation and development plans succeed
- our ability to continue to supply our products and services in the expected quantities and at the expected times
About Cameco

Our head office is in Saskatoon, Saskatchewan. We are one of the world’s largest uranium producers, with uranium assets on three continents. Nuclear energy plants around the world use our uranium products to generate one of the cleanest sources of electricity available today.

Vision and strategy

Our vision is to be a dominant nuclear energy company producing uranium fuel and generating clean electricity. Our goal is to be the supplier, partner, investment and employer of choice in the nuclear industry.

We are focusing our growth strategy on our uranium segment, and plan to double our annual uranium production to 40 million pounds by 2018 to meet the world’s rising demand for uranium. You can find more information about our growth strategy in our 2010 MD&A.
### Uranium

We are one of the world’s largest uranium producers, and in 2010 accounted for about 16% of the world’s production. We have controlling ownership of the world’s largest high-grade reserves, with ore grades up to 100 times the world average, and low-cost operations.

**Product**
- uranium concentrates ($U_3O_8$)

**Mineral reserves and resources**

- **Mineral reserves**
  - approximately 475 million pounds proven and probable

- **Mineral resources**
  - approximately 140 million pounds measured and indicated
  - approximately 355 million pounds inferred

**Global exploration**
- focused on four continents

**Operating properties**
- McArthur River and Key Lake, Saskatchewan
- Rabbit Lake, Saskatchewan
- Smith Ranch-Highland, Wyoming
- Crow Butte, Nebraska
- Inkai, Kazakhstan

**Development project**
- Cigar Lake, Saskatchewan

**Projects under evaluation**
- Inkai blocks 1 and 2 production increase, Kazakhstan
- Inkai block 3, Kazakhstan
- McArthur River extension, Saskatchewan
- Kintyre, Australia
- Millennium, Saskatchewan

### Fuel services

We are an integrated uranium fuel supplier, offering refining, conversion and fuel manufacturing services.

**Products**
- uranium trioxide ($UO_3$)
- uranium hexafluoride ($UF_6$) (control about 35% of western world capacity)
- uranium dioxide ($UO_2$) (the world’s only commercial producer of natural $UO_2$)
- fuel bundles, reactor components and monitoring equipment used by Candu reactors

**Operations**
- Blind River refinery, Ontario (refines $U_3O_8$ to $UO_3$)
- Port Hope conversion facility, Ontario (converts $UO_3$ to $UF_6$ or $UO_2$)
- Cameco Fuel Manufacturing Inc. (CFM), Ontario (manufactures fuel bundles and reactor components)
- a toll conversion agreement with Springfields Fuels Ltd. (SFL), Lancashire, United Kingdom (UK) (to convert $UO_3$ to $UF_6$) - expires in 2016

We also have a 24% interest in GE-Hitachi Global Laser Enrichment LLC (GLE) in North Carolina, with General Electric (51%) and Hitachi Ltd. (25%). GLE is testing a third-generation technology that, if successful, will use lasers to commercially enrich uranium.

### Electricity

We generate clean electricity through our 31.6% interest in the Bruce Power Limited Partnership (BPLP), which operates four nuclear reactors at the Bruce B generating station in southern Ontario.

**Capacity**
- 3,260 megawatts (MW) (100% basis)
  (about 15% of Ontario’s electricity)

We also have agreements to manage the procurement of fuel and fuel services for BPLP, including:
- uranium concentrates
- conversion services
- fuel fabrication services
Our operations and investments span the nuclear fuel cycle, from exploration to electricity generation.

1 Mining
There are three ways to mine uranium, depending on the depth of the orebody and the deposit’s geological characteristics:
- **Open pit mining** is used if the ore is near the surface. The ore is usually mined using drilling and blasting.
- **Underground mining** is used if the ore is too deep to make open pit mining economical. Tunnels and shafts provide access to the ore.
- **In situ recovery (ISR)** does not require large scale excavation. Instead, holes are drilled into the ore and a solution is used to dissolve the uranium. The solution is pumped to the surface where the uranium is recovered.

2 Milling
Ore from open pit and underground mines is processed to extract the uranium and package it as a powder typically referred to as **uranium concentrate** (U₃O₈) or **yellowcake**. The leftover processed rock and other solid waste (**tailings**) is placed in an engineered tailings facility.

3 Refining
Refining removes the impurities from the uranium concentrate and changes its chemical form to **uranium trioxide** (UO₃).

4 Conversion
For light water reactors, the UO₃ is converted to **uranium hexafluoride** (UF₆) gas to prepare it for the next stage of processing. For heavy water reactors like the Candu reactor, the UO₃ is converted into powdered **uranium dioxide** (UO₂).

5 Enrichment
Uranium is made up of two main isotopes: U-238 and U-235. Only U-235 atoms, which make up 0.7% of natural uranium, are involved in the nuclear reaction (fission).

The enrichment process increases the concentration of U-235 to between 3% and 5% by separating U-235 atoms from the U-238. Enriched UF₆ gas is then converted to powdered UO₂.

6 Fuel manufacturing
Natural or enriched UO₂ is pressed into pellets, which are baked at a high temperature. These are packed into zircaloy or stainless steel tubes, sealed and then assembled into fuel bundles.

7 Generation
Nuclear reactors are used to generate electricity. U-235 atoms in the reactor fuel fission, creating heat that generates steam to drive turbines. The fuel bundles in the reactor need to be replaced as the U-235 atoms are depleted, typically after one or two years depending upon the reactor type. The used – or **spent** – fuel is stored or reprocessed.

Spent fuel management
The majority of spent fuel is safely stored at the reactor site. A small amount of spent fuel is reprocessed. The reprocessed fuel is used in some European and Japanese reactors.
## Major developments

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<th>2009</th>
<th>2010</th>
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<tr>
<td><strong>June</strong></td>
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<td>• We acquire a 24% interest in GLE, a uranium enrichment development company, by providing $124 million (US) in cash and issuing a $73 million (US) promissory note. General Electric owns 51% and Hitachi Ltd owns the remaining 25% of GLE.</td>
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<td>• We and our partners agree to a new pricing structure with Tenex under the Russian HEU commercial agreement from 2011 to 2013. The Russian and US governments subsequently approve the new pricing structure. Our share of the material affected is seven million pounds.</td>
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<td><strong>August</strong></td>
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<td>• There is a new water inflow on the 420 metre level of the Cigar Lake development project, and we suspend dewatering. Earlier in the year, the area of the October 2006 water inflow is sealed.</td>
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<td>• We (70%) and Mitsubishi Development Pty Ltd (30%) acquire the Kintyre uranium exploration project in Western Australia, from Rio Tinto, for $495.0 million (US) (our share is $346.5 million (US)).</td>
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<td><strong>September</strong></td>
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<td>• We restart the Port Hope UF₆ plant after a year-long rehabilitation program.</td>
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<td><strong>October</strong></td>
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<td>• We issue 21,205,585 common shares in connection with the redemption of our 5% $230 million unsecured convertible debentures.</td>
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<td><strong>November</strong></td>
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<td>• We suspend operation of the Port Hope UF₆ plant because of a contract dispute with our only supplier of hydrofluoric acid.</td>
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<td><strong>February</strong></td>
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<td>• Our $470 million bank credit facility is increased to $500 million. We cancel the facility in the third quarter.</td>
<td>• We add a $100 million bank credit facility. It expires in February 2012.</td>
<td>• Inkai files a notice of potential commercial discovery at block 3. It has approval in principle to assess commercial viability until July 2015.</td>
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<td>• We enter into an Agreement on New Terms with Kyrgyzztalyn JSC (Kyrgyzztalyn) and the Government of the Kyrgyz Republic that resolves all outstanding issues regarding the Kumtor Gold mine.</td>
<td>• We finished dewatering the Cigar Lake mine. By year end, we had resumed underground development in the south end of the mine.</td>
<td>• We receive approval in principle to increase annual production from blocks 1 and 2 to 3.9 million pounds (100% basis).</td>
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<td>• We issue $500 million of 5.67% unsecured debentures due in 2019.</td>
<td>• We agree to supply 23 million pounds of uranium concentrate to a Chinese utility under a long-term agreement to 2020.</td>
<td>• We agree to supply 29 million pounds of uranium concentrate to another Chinese utility under a long-term agreement to 2025.</td>
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<td>• We dispose of our entire interest in Centerra Gold Inc. (Centerra) in two steps: • sell 88,618,472 common shares of Centerra through a public offering for net proceeds of $871 million • transfer another 25,300,000 common shares of Centerra to Kyrgyzztalyn, under the April 2009 Agreement on New Terms • Inkai commissions its main processing plant and starts commissioning its first satellite plant.</td>
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How Cameco was formed

Cameco Corporation was incorporated under the Canada Business Corporations Act on June 19, 1987.

We were formed when two crown corporations were privatized and their assets merged:
- Saskatchewan Mining Development Corporation (uranium mining and milling operations)
- Eldorado Nuclear Limited (uranium mining, refining and conversion operations) (now Canada Eldor Inc.)

There are constraints and restrictions on ownership of Cameco shares set out in our company articles, and a related requirement to maintain offices in Saskatchewan. These are requirements of the Eldorado Nuclear Limited Reorganization and Divestiture Act (Canada), as amended, and The Saskatchewan Mining Development Corporation Reorganization Act, and are described on pages 113 and 114.

We have made the following amendments to our articles:

<table>
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<th>Year</th>
<th>Amendments</th>
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<td>2002</td>
<td>increased the maximum share ownership for individual non-residents to 15% from 5%</td>
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<td>increased the limit on voting rights of non-residents to 25% from 20%</td>
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<td>2003</td>
<td>allowed the board to appoint new directors between shareholder meetings as permitted by the Canada Business Corporations Act, subject to certain limitations</td>
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<td>eliminated the requirement for the chairman of the board to be ordinarily resident in the province of Saskatchewan</td>
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We have four main subsidiaries:
- Cameco Europe Ltd. (Cameco Europe), a Swiss company we have 100% ownership of through subsidiaries
- Our wholly owned subsidiaries Cameco Bruce Holdings Inc., a Canadian company, and Cameco Bruce Holdings II Inc., an Ontario company, which collectively own a 31.6% limited partnership interest in BPLP, an Ontario limited partnership
- Joint Venture Inkai Limited Liability Partnership (Inkai), a limited liability partnership in Kazakhstan, which we own a 60% interest in.

We do not have any other subsidiaries that are material, either individually or collectively.

For more information

You can find more information about Cameco on SEDAR (sedar.com), EDGAR (sec.gov) and on our website (cameco.com/investors).

See our most recent management proxy circular for additional information, including how our directors and officers are compensated and any loans to them, principal holders of our securities, and securities authorized for issue under our equity compensation plans. We expect the circular for our May 2011 annual meeting of shareholders to be available in April 2011.
Our markets

Demand
The demand for $U_3O_8$ is directly linked to the level of electricity generated by nuclear power plants.

We forecast that world demand will be almost 2.3 billion pounds of $U_3O_8$ over the next 10 years. This estimate assumes utilities will build strategic inventories of about 160 million pounds of $U_3O_8$ to support their reactor programs.

World annual uranium fuel consumption has increased from 75 million pounds $U_3O_8$ in 1980 to an estimated 180 million pounds in 2010. We expect global uranium consumption to increase to about 195 million pounds in 2011. By 2020, we expect world uranium consumption to be about 230 million pounds per year, reflecting an average annual growth rate of about 2%.

The demand for UF$_6$ conversion services is directly linked to the level of electricity generated by light water moderated nuclear power plants.

The demand for UO$_2$ conversion services is linked to the level of electricity generated by heavy water moderated nuclear power plants such as Candu reactors.

We estimate world consumption of UF$_6$ and natural UO$_2$ conversion services was about 69 million kgU in 2010. Consumption in the western world accounted for 60 million kgU, and the remaining 9 million kgU was from Russia, China and Eastern Europe. We expect world consumption of UF$_6$ and natural UO$_2$ conversion services to increase by about 7% in 2011.

Supply
Uranium supply sources include primary production sources (production from mines that are currently in commercial operation) and secondary supply sources (excess inventories, uranium made available from defence stockpiles and the decommissioning of nuclear weapons, re-enriched depleted uranium tails, and used reactor fuel that has been reprocessed).

To meet global demand over the next 10 years, we expect:
- 66% of global uranium supply to come from existing primary production sources
- 16% will come from existing secondary supply sources
the remaining 18% will come from new sources of supply.

Primary production
While the uranium production industry is international in scope, there are only a small number of companies operating in relatively few countries. Barriers to entry for new competitors are high, and the lead time for new uranium production can be as long as 10 years or more, depending on the deposit type and location.

We estimate world mine production in 2010 was about 140 million pounds U₃O₈, up 6% from 132 million pounds in 2009:
- 92% of the estimated world production came from eight countries: Kazakhstan (33%), Canada (18%), Australia (11%), Namibia (8%), Niger (8%), Russia (7%), Uzbekistan (4%) and the US (3%)
- 70% of the estimated world production was marketed by five producers. We accounted for about 16% of that production (22.8 million pounds).

Secondary sources
Uranium consumption has outstripped uranium production every year since 1985.

A number of secondary sources have covered the shortfall, but most of these sources are finite and will not meet long-term needs:
- Uranium from dismantled Russian nuclear weapons is the largest current source of secondary supply. Deliveries from this source should end in 2013, when the Russian HEU commercial agreement expires.
- The US government makes some of its inventories available to the market, although in much smaller quantities.
- Utilities, mostly in Europe and some in Japan and Russia, use reprocessed uranium and plutonium from used reactor fuel.
- Re-enriched depleted uranium tails are also generated using excess enrichment capacity.

Uranium from nuclear disarmament
In February 1993, the United States and Russia signed an agreement to manage the sale of highly enriched uranium (HEU) derived from dismantling Russian nuclear weapons (Russian HEU agreement). The agreement allows Russia to dilute 500 tonnes of HEU derived from dismantled weapons, and deliver it to the US as low enriched uranium suitable for use in nuclear power plants (disarmament LEU). Russia plans to dilute about 30 tonnes of HEU per year (equivalent to about 24 million pounds U₃O₈ per year) over 20 years, until the entire 500 tonnes has been delivered.

This is equivalent to a total of about 400 million pounds of natural uranium as U₃O₈ (disarmament uranium). About 323 million pounds of disarmament uranium had been delivered as of the end of 2010.

Russian HEU commercial agreement
In March 1999, we and other members of a consortium of western companies signed the Russian HEU commercial agreement with Tenex, the commercial arm of the Russian Ministry for Atomic Energy. Under the agreement, the western companies were granted options to purchase a majority of the disarmament uranium. We exercised our options and have been receiving deliveries of disarmament uranium. We will receive the remaining 23 million pounds of disarmament uranium to be delivered to us under the agreement from 2011 to 2013.

Trade restraints and policies
The sale of disarmament uranium into the US market is regulated by the USEC Privatization Act, which imposes an annual quota on the sale of disarmament uranium. The 2011 quota is 20 million pounds, which is the maximum level and the same level as last year.

The US had suspension agreements with some countries that limited access to the US market, as part of uranium anti-dumping proceedings in the early 1990s. Only the suspension agreement with Russia is still in effect.

In February 2008, the US and Russia amended the agreement, allowing Russia to directly supply additional uranium to US utilities in very low annual amounts from 2011 to 2013. Russia can also supply uranium for initial cores in new US reactors. Once the Russian HEU commercial agreement ends, the annual amount increases to 13 million pounds U₃O₈ equivalent from 2014 to 2020.
The US restrictions do not affect the sale of Russian uranium to other countries. About 75% of world uranium demand is from utilities in countries that are not affected by the US restrictions. Utilities in some countries, however, adopt policies that limit the amount of Russian uranium they will buy. The Euratom Supply Agency in Europe must approve all uranium related contracts for members of the EU, and limits the use of nuclear fuel supplies from any one source to maintain security of supply (historically this was an informal level of about 20%).

_Uranium from US inventories_
We estimate that the US has an inventory of approximately 150 million pounds U₃O₈ equivalent of surplus uranium. We expect this uranium will be available to the market over the next 25 years.

In March 2008, the US Department of Energy issued a policy statement and a general framework for managing this inventory, including the need to dispose of it without disrupting the commercial markets. In December of that year, it released the _Excess Uranium Inventory Management Plan_, which stated that it will dispose of the surplus annually, in amounts of 10% or less of annual US nuclear fuel requirements. It can exceed this limit in certain situations, however (during initial core loads for new reactors, for example). It indicated less than 3 million pounds U₃O₈ would enter the market in 2009, and that there would be a gradual ramp up to 5 million pounds U₃O₈ by 2013. It also planned to make another 20 million pounds available for initial cores for new US reactors beginning in 2010.

In 2010, the US Department of Energy made a total of 2.4 million pounds U₃O₈ equivalent available to USEC, which was sold in the spot market, in return for accelerated cleanup work at USEC’s gaseous diffusion plant in Kentucky. USEC, an American company, supplies services to enrich uranium at this plant.

_Conversion services_
We are one of three commercial suppliers of UF₆ conversion in the western world and control about 35% of western capacity. We are the only commercial supplier of conversion for natural UO₂ customers in the western world.

_Marketing_
We sell uranium and fuel services (as uranium concentrates, UO₂, UF₆, conversion services or fuel fabrication) to nuclear utilities in Belgium, Canada, China, Finland, France, Germany, Japan, South Korea, Spain, Sweden, Taiwan and the US. We are the only commercial supplier of UO₂ to Candu reactors operated in Canada.

In June 2010, the government of Canada signed a civil nuclear co-operation agreement with India to export nuclear technology, equipment and uranium to support India’s growing nuclear energy industry. Canada is the eighth nation to sign such an agreement with India since the Nuclear Suppliers Group lifted a 34-year ban on nuclear co-operation with India in 2008. Licensing arrangements for these exports still have to be negotiated by these two governments and discussions are ongoing.

We are in discussions with India to provide uranium for their growing reactor program.

In 2010, we signed two long-term agreements with Chinese utilities to supply more than 50 million pounds of uranium. While China and Canada have a bilateral agreement in place, the governments continue to negotiate the administrative arrangements required for delivery of Canadian U₃O₈.

Uranium is not traded in meaningful quantities on a commodity exchange. Utilities buy the majority of their uranium and fuel services products under long-term contracts with suppliers, and meet the rest of their needs on the spot market.

_Our sales commitments_
In 2010, 44% of our U₃O₈ sales were to five customers.

We currently have commitments to supply more than 300 million pounds of U₃O₈ under long-term contracts with 53 customers worldwide. Our five largest customers account for 45% of these commitments, and 39% of our committed sales volume is attributed to purchasers in the Americas (US, Canada and Latin America), 35% in Asia and 26% in Europe. We are heavily committed under long-term uranium contracts until 2016, so we are becoming increasingly selective when considering new commitments.
Our purchase commitments
We participate in the uranium spot market from time to time, including making spot purchases to take advantage of
opportunities to place the material into higher priced contracts. We determine the appropriate extent of our spot
market activity based on the current spot price and various factors relating to our business. In addition to being a
source of profit, this activity provides insight into the underlying market fundamentals and supports our sales
activities. We have also bought uranium under long-term contracts, and may do so again in the future. At December
31, 2010, we had firm commitments to buy 27 million pounds of uranium equivalent from 2011 to 2014. 23 of the 27
million pounds will come from deliveries under the Russian HEU commercial agreement, which runs through 2013.

Our contracting strategy
Our extensive portfolio of long-term sales contracts – and the long-term, trusting relationships we have with our
customers – are core strengths for us.

Because we sell large volumes of uranium every year, our net earnings and operating cash flows are affected by
changes in the uranium price. Our contracting strategy is to secure a solid base of earnings and cash flow by
maintaining a balanced contract portfolio that maximizes our realized price. Market prices are influenced by the
fundamentals of supply and demand, geopolitical events, disruptions in planned supply and other market factors.
Contract terms usually reflect market conditions at the time the contract is accepted, with deliveries beginning several
years in the future.

Our current uranium contracting strategy is to sign contracts with terms of 10 years or more that include mechanisms
to protect us when market prices decline, and allow us to benefit when market prices go up. Our portfolio includes a
mix of fixed-price and market-related contracts, which we target at a 40:60 ratio. Fixed-price contracts are typically
based on the industry long-term price indicator at the time the contract is accepted, adjusted for inflation to the time of
delivery. Market-related contracts may be based on either the spot price or the long-term price as quoted at the time
of delivery, and often include floor prices adjusted for inflation and some include ceiling prices also adjusted for
inflation.

This is a balanced approach that reduces the volatility of our future earnings and cash flow, and that we believe
delivers the best value to shareholders over the long term. It is also consistent with the contracting strategy of our
customers. This strategy has allowed us to add increasingly favourable contracts to our portfolio that will enable us to
benefit from any increases in market prices in the future.

The majority of our contracts include a supply interruption clause that gives us the right to reduce, on a pro rata basis,
defer or cancel deliveries if there is a shortfall in planned production or in deliveries under the Russian HEU
commercial agreement. We have deferred a portion of the 2011 deliveries for five to seven years.

Our older sales contracts allow the purchaser to adjust the amount of uranium to be delivered from year to year within
a specified range. Our newer contracts generally do not offer this.

Volumes and pricing
Spot market volume in 2010 was slightly below the record set in 2009, decreasing to an estimated 50 million pounds
of U3O8 and accounting for 28% of annual consumption (versus about 54 million pounds of U3O8 in 2009). Long-term
contracting in 2010 was about 250 million pounds of U3O8, or 67% higher than 2009.

The industry average spot price (TradeTech and Ux Consulting (UxC)) on December 31, 2010 was $62.25 (US) per
pound U3O8, or 40% higher than the December 31, 2009 average of $44.50 (US).

The industry average long-term price (TradeTech and UxC) was $66.00 (US) per pound U3O8 on December 31, 2010,
or 8% higher than the December 31, 2009 average of $61.00 (US).

Fuel services
The majority of our fuel services contracts are at a fixed price per kgU, adjusted for inflation, and reflect the market at
the time the contract is accepted.

For conversion services, we compete with two other commercial suppliers of conversion services in the western
world, and with the secondary supplies described above.
We have a similar marketing strategy for UF$_6$ conversion services. We sell our conversion services to utilities in the Americas, Europe and Asia and primarily through long-term contracts. We currently have UF$_6$ conversion services commitments of more than 85 million kilograms of uranium under long-term contracts with 46 customers worldwide. Our five largest customers account for 37% of these commitments, and of our committed UF$_6$ conversion services volume, 54% is attributed to purchasers in the Americas, 24% in Asia and 22% in Europe.

**Electricity business**

BPLP leases and operates four Candu nuclear reactors that have the capacity to provide about 15% of Ontario’s electricity.

It receives a reliable stream of revenue from financial contracts and sells electricity on the open spot market. Spot market prices are determined by bids from suppliers and buyers that reflect changes in supply and demand by the hour. In 2010, 42% of its output was sold under financial contracts.

BPLP also trades electricity and related contracts as part of its risk management activities to hedge output against exposure to low spot prices.

Demand for electricity in Ontario has been eroding. Wholesale demand has declined significantly since 2004, however, Ontario demand in 2010 was up by 2% or 3 TWh compared to 2009. While this increase signals a positive change in the economy, we believe it will take some time for demand to return to prior levels.

BPLP has an agreement with the Ontario Power Authority (OPA) that supports output from the B reactors with a floor price (currently $48.96/MWh) adjusted annually for inflation. The floor price mechanism and any related payments to BPLP for the output from each B reactor will expire on a date specified in the agreement. The expiry dates are December 31, 2015 for unit B6, December 31, 2016 for unit B5, December 31, 2017 for unit B7 and December 31, 2019 for unit B8. Revenue is recognized monthly, based on the positive difference between the floor price and the spot price. BPLP does not have to repay the revenue from the agreement with the OPA, if the floor price for the particular year exceeds the average spot price for that year. The agreement also provides for payment if the Independent Electricity System Operator reduces BPLP’s generation because Ontario baseload generation is higher than required. The amount of the reduction is considered “deemed generation”, and BPLP is paid either the spot price or the floor price, whichever is higher.

Sales to BPLP and Bruce Power A Limited Partnership (BALP) are a substantial portion of our fuel manufacturing business and an important part of our UO$_2$ business.

Nuclear power stations have higher operational, maintenance, waste and decommissioning costs than other methods of generating electricity. They also require more initial capital for development because of the complexity of the technical processes that underlie nuclear power generation, and the additional design, security and safety precautions to protect the public from potential risks associated with nuclear operations.

The relatively low cost of nuclear fuel compared to fossil fuel offsets these costs. In general, BPLP’s nuclear stations have a lower overall operating cost per megawatt-hour of electricity produced than facilities that use fossil fuels.
Operations and development projects

Uranium

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Uranium production
See page 56 of our 2010 MD&A for our forecast uranium production from 2011 to 2015.

<table>
<thead>
<tr>
<th>Cameco’s share (million lbs U₃O₈)</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>McArthur River/Key Lake</td>
<td>11.6</td>
<td>13.3</td>
<td>13.9</td>
</tr>
<tr>
<td>Rabbit Lake</td>
<td>3.8</td>
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<td>3.8</td>
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<tr>
<td>Smith Ranch-Highland</td>
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<td>1.8</td>
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<tr>
<td>Crow Butte</td>
<td>0.6</td>
<td>0.8</td>
<td>0.7</td>
</tr>
<tr>
<td>Inkai</td>
<td>0.3</td>
<td>1.1</td>
<td>2.6</td>
</tr>
<tr>
<td>Total</td>
<td>17.3</td>
<td>20.8</td>
<td>22.8</td>
</tr>
</tbody>
</table>
Uranium – operating properties

**McArthur River/Key Lake**

McArthur River is the world’s largest high-grade uranium mine, and Key Lake is the largest uranium mill in the world.

Ore grades at the McArthur River mine are 100 times the world average, which means it can produce more than 18 million pounds per year by mining only 150 to 200 tonnes of ore per day. We are the operator.

McArthur River is one of our three material uranium properties.

<table>
<thead>
<tr>
<th>Location</th>
<th>Saskatchewan, Canada</th>
</tr>
</thead>
</table>
| Ownership         | 69.805% - McArthur River  
                    83.33% - Key Lake |
| End product       | U₃O₈ |
| ISO certification | ISO 14001 certified |
| Deposit type      | underground |
| Estimated mineral reserves (our share) | 234.2 million pounds (proven and probable) average grade U₃O₈ – 15.24%¹ |
| Estimated mineral resources (our share) | 1.8 million pounds (measured and indicated) average grade U₃O₈ – 7.09%  
  104.8 million pounds (inferred) average grade U₃O₈ – 13.46% |
| Mining methods    | currently: raiseboring  
                    under development: boxhole boring |
| Licensed capacity | mine and mill: 18.7 million pounds per year (can be exceeded – see Production below) |
| Total production  | 2000 to 2010  
                    193 to 2002  
                    191.1 million pounds (McArthur River/Key Lake) (100% basis)  
                    209.8 million pounds (Key Lake) (100% basis) |
| 2010 production   | 13.9 million pounds (our share) |
| 2011 forecast production | 13.1 million pounds (our share) |
| Estimated mine life | 24 years (based on current reserves) |
| Estimated decommissioning cost | $36.1 million - McArthur River  
                                  $120.7 million - Key Lake |

¹ For more information on the average grade, please see Recent activity, below.

**Business structure**

McArthur River is owned by a joint venture between two companies:  
- Cameco – 69.805%  
- Areva – 30.195%

Key Lake is owned by a joint venture between the same two companies:  
- Cameco – 83½%  
- Areva – 16½%
History

1976  • Canadian Kelvin Resources Ltd. and Asamera Oil Corporation Ltd. form an exploration joint venture, which includes the lands that the McArthur River mine is situated on

1977  • Saskatchewan Mining Development Corporation (SMDC), one of our predecessor companies, acquires a 50% interest

1980  • McArthur River joint venture is formed  
• SMDC becomes the operator  
• Active surface exploration begins  
• Between 1980 and 1988 SMDC reduces its interest to 43.991%

1988  • Eldorado Resources Limited merges with SMDC to form Cameco  
• We become operator  
• Deposit discovered by surface drilling

1988 – 1992  • Surface drilling reveals significant mineralization of potentially economic uranium grades, in a 1,700 metre zone at between 530 to 640 metres

1992  • We increase our interest to 53.991%

1993  • Underground exploration program receives government approval – program consists of shaft sinking (completed in 1994) and underground development and drilling

1995  • We increase our interest to 55.844%

1997-1998  • Federal authorities issue construction licences for McArthur River after reviewing the environmental impact statement, holding public hearings, and receiving approvals from the governments of Canada and Saskatchewan

1998  • We acquire all of the shares of Uranerz Exploration and Mining Ltd. (UEM), increasing our interest to 83.766%  
• We sell half of the shares of UEM to Areva, reducing our interest to 69.805%, and increasing Areva’s to 30.195%

1999  • Federal authorities issue the operating licence and provincial authorities give operating approval, and mining begins in December

2003  • Production is temporarily suspended in April because of a water inflow  
• Mining resumes in July

2009  • UEM distributes equally to its shareholders:  
  • its 27.922% interest in the McArthur River joint venture, giving us a 69.805% direct interest, and Areva a 30.195% direct interest  
  • its 33⅓% interest in the Key Lake joint venture, giving us an 83⅓% direct interest, and Areva a 16⅔% direct interest.

Technical report

This project description is based on the project’s technical report: McArthur River Operation, Northern Saskatchewan, Canada, dated February 16, 2009 (effective December 31, 2008) except for some updates that reflect developments since the technical report was published. The report was prepared for us in compliance with NI 43-101, by or under the supervision of four Cameco qualified persons and one non-Cameco qualified person, within the meaning of NI 43-101. The following description has been prepared under the supervision of David Bronkhorst, P. Eng., Alain G. Mainville, P. Geo., Gregory M. Murdock, P. Eng., Lorne D. Schwartz, P. Eng., and Leslie D. Yesnik, P. Eng.  
These people are all qualified persons within the meaning of NI 43-101, but are not independent of us.

All conclusions, projections and estimates in this description are based on the qualifications, assumptions and exclusions in the technical report. We recommend you read it in its entirety to fully understand the project. You can download a copy from SEDAR (sedar.com) or from EDGAR (sec.gov).

For information about uranium sales see pages 10 and 11, environmental matters see Sustainable development starting on page 76, and taxes see page 90.  
For a description of royalties payable to the province of Saskatchewan on the sale of uranium extracted from orebodies within the province, see page 89.
About the McArthur River property

Location
Near Toby Lake in northern Saskatchewan, 620 kilometres north of Saskatoon. The mine site is one kilometre long, running north and south, and half a kilometre wide, running east and west.

Accessibility
Access to the property is by an all-weather gravel road and by air. Supplies are transported by truck from Saskatoon and elsewhere. There is a 1.6 kilometre unpaved air strip and an air terminal one kilometre east of the mine site, on the surface lease.

Saskatoon, a major population centre south of the McArthur River property, has highway and air links to the rest of North America.

Leases
Surface lease
We acquired the right to use and occupy the lands necessary to mine the deposit under a surface lease agreement with the province of Saskatchewan. The most recent agreement was signed in November 2010. It covers 1,425 hectares and has a term of 33 years.

We are required to report annually on the status of the environment, land development and progress on northern employment and business development.

Mineral lease
We have the right to mine the deposit under ML-5516, granted to us by the province of Saskatchewan. The lease covers 1,380 hectares and expires in March 2014. We have the right to renew the lease for further 10-year terms.

Mineral claims
A mineral claim gives us the right to explore for minerals and to apply for a mineral lease. There are 21 mineral claims, totalling 83,438 hectares, surrounding the deposit. We have title to all of these claims until 2017.

Climate
The climate is typical of the continental sub-arctic region of northern Saskatchewan. Summers are short and cool even though daily temperatures can sometimes reach above 30°C. The mean daily temperature for the coldest month is below -20°C, and winter daily temperatures can reach below -40°C.

Setting
The deposit is in the southeastern portion of the Athabasca basin in northern Saskatchewan, within the southwest part of the Churchill structural province of the Canadian Shield. The topography and environment are typical of the taiga forested lands in the Athabasca basin.

Geology
The crystalline basement rocks underlying the deposit are members of the Aphebian-age Wollaston Domain, metasedimentary sequence, and consist of two distinct parts:

- a hanging wall pelitic sequence of cordierite and graphite bearing pelitic and psammopelitic gneiss with minor meta-arkose and calc-silicate gneisses
- a sequence consisting of quartzite and silicified meta-arkose and rare pelitic gneisses.

These are unconformably overlain by flat lying, unmetamorphosed sandstones and conglomerates of the Helikian Athabasca Group. These sediments consist of the A, B, C and D units of the Manitou Falls Formation, and a basal conglomerate containing pebbles and cobbles of quartzite. The sandstone is over 500 metres thick in the deposit area.

Mineralization
McArthur River’s mineralization is structurally controlled by a northeast-southwest trending reverse fault (the P2 fault), which dips 40-65 degrees to the southeast. The fault has thrust a wedge of basement rock into the overlying
sandstone. There is a vertical displacement of more than 80 metres at the northeast end of the fault, which decreases to 60 metres at the southwest end.

There are four zones of delineated mineral reserves (zones 1 to 4). Zones A and B have been categorized as inferred mineral resources through surface drillholes. Parts of zones 1, 2, 3, and 4 also have mineral resources. The width of the ore varies.

Zone 2 is divided into four panels (panels 1, 2, 3 and 5). Panel 5 represents the upper portion of zone 2, overlying part of the other panels.

Five of the six mineralized zones are in sandstone and basement rock along the faulted edge of the basement wedge. Zone 2 sits in structurally disrupted basement rock in a unique area of the deposit, where a massive footwall quartzite unit lies close to the main fault zone.

Although all of the rocks at McArthur River are altered to some degree, the alteration is greatest in or near faults that are often associated with mineralization. Chloritization is common and most intense within a metre of mineralization in the pelitic hanging wall basement rocks above the P2 fault. The predominant alteration characteristic of the sandstone is pervasive silicification, which increases in intensity 375 metres below the surface, and continues to the unconformity. This brittle sandstone is strongly fractured along the path of the main fault zone, resulting in poor ground conditions and high permeability to water.

In general, the high-grade mineralization, characterized by botryoidal uraninite masses and subhedral uraninite aggregates, constitutes the earliest phase of mineralization in the deposit. Pyrite, chalcopyrite, and galena were also deposited during the initial mineralizing event. Later stage, remobilized uraninite occurs as disseminations, veinlets, and fracture coatings within chlorite breccia zones, and along the margins of silt beds in the Athabasca sandstone.

About the McArthur River mine

McArthur River is a developed mineral property with sufficient surface rights to meet future mining operation needs for the current mineral reserves.

We began construction and development of the McArthur River mine in 1997 and completed it on schedule. Mining began in December 1999 and commercial production on November 1, 2000.
Our mine production comes from zone 2 panels 1, 2, 3 and 5 and the lower area of zone 4. We started mining the lower area of zone 4 at the end of 2010.

Permits
We need three permits to operate the McArthur River mine:
- *Approval to Operate Pollutant Control Facilities* – renewed in 2009 and expires on October 31, 2014 (from the Saskatchewan Ministry of Environment)
- *Permit to Operate Waterworks* – renewed in 2009 and expires on October 31, 2011 (from the Saskatchewan Ministry of Environment)

Infrastructure
Surface facilities are 550 metres above sea level. The site includes:
- an underground mine with three shafts: one to move workers, material and waste rock and for fresh air ventilation, one for mine exhaust air ventilation, and one for fresh air ventilation and an emergency exit
- waste rock stockpiles
- a minewater treatment plant and ponds
- a freshwater pump house
- a powerhouse
- electrical substations
- standby electrical generators
- maintenance and warehousing facilities
- freeze plant
- a concrete batch plant
- an administration building
- an employee residence
- an ore loadout building.

Water, power and heat
Toby Lake, which is nearby and easy to access, has enough water to satisfy all industrial and residential water requirements. The site is connected to the provincial power grid and it has standby generators in case there is an interruption in grid power.

McArthur River operates throughout the year despite cold winter conditions. During the winter, we heat the fresh air necessary to ventilate the underground workings using propane-fired burners.

Employees
Employees are recruited first from communities in the area and then from major Saskatchewan population centres, like Saskatoon.

Mining method
We use a number of innovative methods and techniques to mine the McArthur River deposit.

*Ground freezing*
The sandstone that overlays the deposit and basement rocks is water-bearing, with large volumes of water under significant pressure. We use ground freezing to form an impermeable wall around the area being mined. This prevents the water in the sandstone from entering the mine, and helps stabilize weak rock formations.

In 2009, we developed an innovative, cathedral-shaped freezewall around zone 2, panel 5, allowing us to develop tunnels above and below the orebody. We expect this innovation will allow us to continue using raisebore mining as the main mining method at McArthur River and improve production efficiencies as we transition to other areas of the mine.

*Raisebore mining*
Raisebore mining is an innovative non-entry approach that we adapted to meet the unique challenges at McArthur River. It involves:
- drilling a series of overlapping holes through the ore zone from a raisebore chamber in waste rock above the ore
- collecting the broken ore at the bottom of the raises using line-of-sight remote-controlled scoop trams, and transporting it to a grinding circuit
• filling each raisebore hole with concrete once it is complete
• removing the equipment and filling the entire chamber with concrete when all the rows of raises in a chamber are complete
• starting the process again with the next raisebore chamber.

We have successfully used the raisbore mining method to extract about 190 million pounds (100% basis) since we began mining in 1999.

We may also use boxhole boring and blast-hole stoping in other areas of the mine.

Boxhole boring
Given our success with the cathedral-shaped freezewall around zone 2, panel 5, the use of boxhole boring in our mine plan has been significantly narrowed in scope. We expect to be able to continue using raisebore mining as our main mining method for McArthur River.

Boxhole boring is similar to the raisebore method, but the drilling machine is located below the orebody, so development is not required above the orebody. This method is currently being used at only a few mines around the world, but has not been used for uranium mining.

Boxhole boring poses some technical challenges. We have completed four test raises in waste, and intend to complete four test raises in ore in 2011, however, we expect it will only be used as a secondary method in areas where we determine raiseboring is not feasible. This method may not be as productive as the raisebore method, however, we will have a better understanding once we have fully developed and tested it at McArthur River. We may use it on a limited basis in 2013 to meet our production target.

Initial processing
We carry out initial processing of the extracted ore at McArthur River:
• the underground circuit grinds the ore and mixes it with water to form a slurry
• the slurry is pumped 680 metres to the surface and stored in one of four ore slurry holding tanks
• it is blended and thickened, removing excess water
• the final slurry, which ranges in grade from 15 to 30% uranium, is pumped into transport truck containers and shipped to Key Lake mill on an 80 kilometre all-weather road.

Contaminated water from this process, including water from underground operations, is treated on surface. The extra water we do not need is released into the environment.

Tailings
McArthur River does not have a tailings management facility because it ships the ore slurry to Key Lake for milling.

Waste
The waste rock piles are confined to a small footprint on the surface lease. These are separated into three categories:
• clean rock (includes mine development waste, crushed waste, and various piles for concrete aggregate and backfill)
• mineralized waste (>0.03% \( \text{U}_3\text{O}_8 \)) – stored on engineered lined pads
• waste with acid-generating potential – stored on engineered lined pads.

Water inflows
Production was temporarily suspended on April 6, 2003, as increased water inflow due to a rock fall in a new development area (located just above the 530-metre level) began to flood portions of the mine. We resumed mining in July 2003 and sealed off the excess water inflow in July 2004.

In November 2008, there was a small water inflow in the lower zone 4 development area on the 590 metre level. We captured and controlled the inflow, and did not have to alter our mining plan. We completed a freezewall in this area in 2010, and are now mining in the area.
Pumping capacity and treatment limits
Our standard for this project is to secure pumping capacity of at least one and a half times the estimated maximum sustained inflow. We review our dewatering system and requirements at least once a year and before we begin work on any new zone. We believe we have sufficient pumping, water treatment and surface storage capacity to handle the estimated maximum sustained inflow.

Production
- **Forecast**: 18.7 million pounds of U_3_0_8 per year until 2018 (our share will be 13.1 million pounds).
  
  After that, it declines until 2034.
- **2010**: 19.9 million pounds of U_3_0_8 was produced by milling McArthur River ore at Key Lake (our share was 13.9 million pounds). Average mill metallurgical recovery was 98.5%.

In 2010, the CNSC approved an amendment to our operating licence for McArthur River, giving us flexibility in the annual licensed production limit, similar to that received at Key Lake last year. The McArthur River mine can produce up to 20.7 million pounds U_3_0_8 (100% basis) per year as long as average annual production does not exceed 18.7 million pounds. If production is lower than 18.7 million pounds in any year, we can produce more in future years until we recover the shortfall. We still have the opportunity to recover about 4 million pounds (100% basis) in past production shortfalls.

Recent activity
In 2010, we completed the new freezewall and brought the lower mining area of zone 4 into production.

At McArthur River, average grade for our mineral reserves changed as follows:
- for our proven reserves: in 2010 the average grade is 17.29%, up from 15.72% in 2009
- for our probable reserves: in 2010 the average grade is 13.49%, down from 26.33% in 2009.

As a consequence, the average grade for our proven and probable reserves in 2010 is 15.24%, down from 19.53% in 2009.

The addition of 260 thousand tonnes of ore to probable reserves resulted in the average grade decreasing in 2010. This increase of tonnes is due mostly to successful underground drilling and conversion of lower grade inferred resources to probable reserves. Our plan to use conventional blast-hole stoping in some areas also enabled us to convert lower grade resources to reserves. We do not expect this reduction in grade to have a material effect on operating costs. Please see *Mineral reserves and resources* starting on page 67 for more information.

In 2011:
- Zone 2, panel 5 – We expect to develop a third raisebore chamber.
- Zone 4 – We will begin work to install the freezewall required to bring the upper mining area of zone 4 into production.

Our initial plan was to mine upper zone 4 using boxhole boring. We now expect, however, to use raisebore mining in this area by applying the ground freezing experience we gained in zone 2, panel 5. By using raisebore mining, we expect to significantly improve production efficiencies compared to boxhole boring.

Key Lake mill

Location
In northern Saskatchewan, 570 kilometres north of Saskatoon. The site is 9 kilometres long, running north and south, and 5 kilometres wide, running east and west. It is connected to McArthur River by an 80 kilometre all-weather road. There is a 1.6 kilometre unpaved air strip and an air terminal on the east edge of the site, on the surface lease.

Permits
We need three permits to operate the Key Lake mill:
- **Uranium Mine Facility Operating Licence** – renewed in 2008 and expires on October 31, 2013 (from the CNSC)
- **Approval to Operate Pollutant Control Facilities** – renewed in 2009 and expires on November 30, 2014 (from the Saskatchewan Ministry of Environment)
• Permit to Operate Waterworks – renewed in 2009 and expires on November 30, 2014
  (from the Saskatchewan Ministry of Environment)

In June 2009, the CNSC amended our operating licence for Key Lake, giving us flexibility in annual licensed production. The Key Lake mill can produce up to 20.4 million pounds U₃O₈ per year as long as average annual production does not exceed 18.7 million pounds. If production is lower than 18.7 million pounds in any year, we can produce more in future years until we recover the shortfall. We still have the opportunity to recover about 4 million pounds (100% basis) in past production shortfalls. This also gives us the flexibility to avoid having to restart the mill in cold winter temperatures.

After the mill is revitalized, annual production will depend mainly on mine production. We are continuing to plan for annual production of 18.7 million pounds (100% basis) for the next few years.

Supply
Our share of McArthur River ore is milled at Key Lake. We do not have a formal toll milling agreement with the Key Lake joint venture.

In June 1999, the Key Lake joint venture (us and UEM) entered into a toll milling agreement with Areva to process all of their share of McArthur River ore. The terms of the agreement (as amended in January 2001) include the following:

- processing is at cost, plus a toll milling fee
- the Key Lake joint venture owners are responsible for decommissioning the Key Lake mill and for certain capital costs, including the costs of any tailings management associated with milling Areva’s share of McArthur River ore.

With the UEM distribution in 2009 (see History on page 15 for more information), we made the following changes to the agreement:

- the fees and expenses related to Areva’s pro-rata share of ore produced just before the UEM distribution (16.234% – the first ore stream) have not changed. Areva is not responsible for any capital or decommissioning costs related to the first ore stream.
- the fees and expenses related to Areva’s pro-rata share of ore produced as a result of the UEM distribution (an additional 13.961% – the second ore stream) have not changed. Areva’s responsibility for capital and decommissioning costs related to the second ore stream are, however, as a Key Lake joint venture owner under the original agreement.
- Areva’s termination rights are the same except for one condition: the second ore stream must be milled at the Key Lake mill for the entire life of the McArthur River project, regardless of Areva’s termination rights.

The agreement is automatically extended for one-year periods (as of June 1, 2009) unless Areva terminates the agreement. It can do this as of the end of any operating year as long as it provides six months notice.

Process
The Key Lake mill uses a seven-step process:

- blend McArthur River ore with low grade mineralized material to lower the grade
- dissolve the uranium using a leaching circuit
- clarify the uranium in solution using a counter current decantation circuit
- concentrate it using a solvent extraction circuit
- precipitate it with ammonia
- thicken, dewater and dry it
- package it as 98% U₃O₈ (yellowcake).

Waste rock
There are five large rock stockpiles at the Key Lake site:

- three contain non-mineralized waste rock. These will be decommissioned when the site is closed.
- two contain low-grade mineralized material. These are used to lower the grade of the McArthur River ore before it enters the milling circuit.
Treatment of effluent
We modified Key Lake’s effluent treatment process to reduce concentrations of molybdenum and selenium discharged into the environment, as required by our operating licence. Release of both metals to the environment is now controlled at reduced concentrations.

Tailings capacity
There are two tailings management facilities at the Key Lake site:
• an above-ground impoundment facility, where tailings are stored within compacted till embankments. We have not deposited tailings here since 1996, and are looking at several options for decommissioning this facility.
• the Deilmann pit, which was mined out in the 1990s. Tailings from processing McArthur River ore are deposited in the Deilmann tailings management facility (TMF).

At current production rates, the capacity of the Deilmann TMF is five to six years, assuming only minor losses in storage capacity because of sloughing from the pitwalls. Significant sloughing may constrain McArthur River production.

In the past, sloughing of material from the pitwalls has reduced tailings capacity. Studies show that stabilizing and reducing water levels in the pit enhances the stability of the pitwalls, which reduces the risk of pitwall sloughing. We have doubled our dewatering treatment capacity, allowing us to stabilize the water level in the pit. This water level has been reduced gradually over the past two years.

In 2009, regulators approved our plan for the long-term stabilization of the Deilmann TMF pitwalls. We are implementing the plan, and expect it will take approximately four years to complete the work. During 2011, we expect to:
• complete the detailed design for the stabilization of the Deilmann TMF pitwalls
• start to relocate the infrastructure necessary to allow us to flatten the slope of the pitwalls
• advance work on the environmental assessment for the Key Lake extension project.

We have also assessed options for long-term storage of tailings at Key Lake. We are proceeding with the environmental assessment to support an application for regulatory approval to deposit tailings in the Deilmann TMF to a much higher level. Once we receive approval, we expect this would provide enough tailings capacity for many years of mill production at Key Lake.

Mill revitalization
The Key Lake mill began operating in 1983. We have a revitalization plan to maintain and increase its annual uranium production capability to up to 25 million pounds. Our initial work is in three areas:
• operational upgrades – upgrading circuits with new technology to simplify operations, increasing annual production capacity and improving environmental performance. As part of this plan, we are replacing the acid, steam and oxygen plants. We received regulatory approval to proceed with these projects and work is well underway. We plan to have the replacement plants commissioned by the end of 2011.
• treatment of effluent – completed
• increase in tailings capacity – see Tailings capacity, above.

We may make other changes to the mill, including demolishing facilities we no longer need, depending on the results of studies.

Decommissioning and financial assurances
In 2003, we prepared a preliminary decommissioning plan for both McArthur River and Key Lake, which were approved by the CNSC and the Saskatchewan Ministry of the Environment. In 2008, when we renewed our CNSC licence, we revised the accompanying preliminary decommissioning cost estimates. These documents include our estimated cost for implementing the decommissioning plan and addressing known environmental liabilities.

We, along with our joint venture partner, posted letters of credit as financial assurances with the Saskatchewan Ministry of the Environment to cover the amounts in the 2008 preliminary decommissioning cost estimates ($36.1 million for McArthur River and $120.7 million for Key Lake).
Exploration, drilling and estimates

The original McArthur River resource estimates were derived from surface diamond drilling from 1980 to 1992. In 1988 and 1989, this drilling first revealed significant uranium mineralization. By 1992, we had delineated the mineralization over 1,700 metres at between 530 to 640 metres. Data included assay results from 42 drillholes. The very high grade found in the drillholes justified the development of an underground exploration project in 1993.

Surface drilling

We have carried out surface drilling since 2004, to test the extension of mineralization identified from the historical surface drillholes, to new targets along the strike, and to evaluate the P2 trend north and south of the mine. Surface drilling has been over a strike length of two kilometres, generally at between 500 metres to 640 metres below the surface.

As of December 31, 2010, we had drilled 123 surface drillholes (both conventional and directional drilling) for a total of over 70,000 metres along the P2 trend.

We have completed preliminary drill tests of the P2 trend at 200 metre intervals over 10.7 kilometres (4.3 kilometres north and 6.4 kilometres south of the McArthur River mine site) of the total 14.8 kilometres strike length of the P2 trend. A total of $3.5 million (our share $2.44 million) has been budgeted in 2011 for diamond drilling to follow up on any 2010 anomalies and continue systematic testing of the P2 trend south of the mine.

Underground drilling

In 1993, regulators approved an underground exploration program, consisting of shaft sinking, lateral development and drilling. We completed the shaft in 1994.

We have drilled more than 750 underground drillholes since 1993, over 70,000 metres, to get detailed information along 750 metres of the surface delineation, and used this data to estimate the mineral reserves and resources in four mineralized zones (zones 1 to 4). The drilling was from the 530 and 640 metre levels. Data from hundreds of freezeholes and raisebore pilot holes support the estimate. Where there were no underground drillholes (the southern part of the deposit, and in zones A and B in the northern part of the deposit), we used surface exploration drillholes to estimate mineral resource.

We have also drilled 1,500 underground holes along more than 105,000 metres for geotechnical information and as probe and grout covers, as well as for service, drain holes and freezeholes.

Recent activity

We initiated a multi-year project, the McArthur River extension, in 2010, to advance the underground exploration drifts on the 530 metre level to the north and to the south of the current mining operations. We expect this work to further delineate zones A and B inferred mineral resources to the north and mineral resources to the south. We began tunneling the north exploration drift in 2007, and the south exploration drift in 2010.

We received regulatory approval to continue developing the north exploration drift towards zone A and zone B. Over the next two years, we will carry out underground exploration from this drift to expand our knowledge of the size and grade of the ore in this area.

The surface lease agreement reinstates the surface lease to its original size, which will allow us to optimize the location for future mine workings for ongoing approved activities. We expect a fourth shaft will be necessary for ventilation of ongoing operations and for the eventual development of zones to the north of the current mining areas.

In 2011, we will continue work on the McArthur River extension project, advancing the underground exploration drift to the north of the current mining areas. We will carry out further exploration drilling of zone B. We will begin work on a feasibility study for the zones north of our current mining areas.

Sampling and analysis

Surface samples

- GPS or mine site surveying instruments are used in the field to verify the location of surface drillholes.
- Holes are generally drilled every 12 to 25 metres, on sections that are 50 to 200 metres apart. Drilled depths average 670 metres.
• Vertical holes generally intersect mineralization at angles of 25 to 45 degrees, resulting in true widths being 40 to 70% of the drilled width. Angled holes usually intercept it perpendicularly, giving true width.
• All holes are radiometrically probed.
• A geologist examines the surface drillhole core in the field, determines its overall characteristics, including mineralization, logs the information, and takes samples that have noteworthy alteration, structures and radiometric anomalies.
• Basement sampling procedures depend on the length of the interval sampled, and attempts are made to avoid having samples cross lithological boundaries.
• All core with radioactivity greater than a set threshold is split and sampled for assay.
• We measure the uranium grade by assaying core. Core recovery is generally considered excellent with some local exceptions. The quality and representativeness of the surface drillhole samples is adequate for estimating mineral resources and mine planning, but we often validate surface drillhole results against underground drilling results in the same vicinity.

**Underground samples**
• Holes are drilled in stations 30 metres apart. Each station is drilled with three fans of holes, covering 10 metres across the deposit.
• Uranium grade is calculated from the adjusted radiometric probe readings. Radiometric probing is at 0.1 metre spacing in radioactive zones and 0.5 metre spacing in unmineralized zones. The drillhole fans give the gamma probes representative access across the entire deposit.
• For a small portion of the assay data we obtain, which we use to estimate mineral resources, we assay core to determine the U₃O₈ content past the probe limit of a hole, or to provide correlation samples to compare against a probed interval. In these cases, we log the core, photograph it, and then sample it for uranium analysis. We sample the entire interval instead of splitting the core. This provides very high-quality samples in these areas.
• Core recovery in these areas can be excellent to poor.
• The quality and representativeness of the underground drillhole samples is adequate for estimating mineral resources and mine planning.

**Analysis**
We record the following for each sample:
• hole number, date and name
• sample number
• from and to intervals and length
• recovered length
• range of radioactivity
• weight
• core diameter
• rock type, alteration, and mineralization.

We place each sample in a plastic bag and write its number on the bag. We place the bags in a metal or plastic shipping drum, which is scanned by the radiation department and shipped to the Saskatchewan Research Council (SRC) in Saskatoon for analysis.

SRC personnel:
• verify the sample information
• sort the samples by radioactivity
• dry, crush and grind them in secure facilities or in the main laboratory, if they have minimal radioactivity
• dilute the samples and carry out a chemical analysis
• prepare and analyse a quality control sample with each batch
• analyse one of every 40 samples in duplicate.

**Quality control**
A data and quality assurance coordinator on staff is responsible for reviewing the quality of geochemical data received from laboratory contractors. The coordinator reviews the analyses provided by the lab using the results of standard reference materials as a benchmark, and, together with project geologists, determines whether it is necessary to reassay.
We use several quality control measures and data verification procedures:

• enter surveyed drillhole collar coordinates and hole deviations in the database, display them in plan views and sections and visually compare them to their planned location

• visually validate core logging information on plan views and sections, and verify it against photographs of the core or the core itself

• compare downhole radiometric probing results with core radioactivity and drilling depth measurements

• validate uranium grade based on radiometric probing with sample assay results, when available

• compare the information in the database against the original data, including paper logs, deviation survey films, assay certificates and original probing data files.

Since 2000, we have regularly compared information collected from production activities, such as freezeholes, raisebore pilot holes, radiometric scanning of scoop tram buckets and mill feed sampling, to the drillhole data.

Quality assurance and quality control for underground drillhole information focuses on ensuring quality probing results. We do this by:

• checking the calibration of probes before using them

• visually monitoring the radiometric measurements

• periodically duplicating probe runs.

We also compare the probing results with the core measurements, and have an experienced geologist at the mine site or in Saskatoon visually inspect the radiometric profile of each hole. Reconciling the model with mine production is a very good indicator that estimated grades in the block model accurately reflect the mined grades.

**Sample security**

All samples collected from McArthur River are prepared and analysed under the close supervision of a qualified geoscientist at the SRC, which is a restricted access laboratory licensed by the CNSC.

We store and ship all samples in compliance with regulations. We consider it unlikely that samples are tampered with because of the high grade of the ore and the process used: the core is scanned immediately after it is received at a sample preparation laboratory and grade is estimated at that point.

**Accuracy**

We are satisfied with the quality of data obtained from surface exploration and underground drilling at McArthur River and consider it valid for estimating mineral resources and mineral reserves. This is supported by the fact that, for the last five years, actual annual production has been within 5% of our estimates.

**Mineral reserve and resource estimates**

Please see page 67 for our mineral reserve and resource estimates for McArthur River.
Uranium – operating properties

Rabbit Lake
The Rabbit Lake operation, which opened in 1975, is the longest operating uranium production facility in North America, and the second largest uranium mill in the world.

Location  Saskatchewan, Canada
Ownership  100%
End product  U₃O₈
ISO certification  ISO 14001 certified
Deposit type  underground
Estimated mineral reserves  25.5 million pounds (proven and probable) average grade U₃O₈ – 0.76%
Estimated mineral resources  4.0 million pounds (indicated) average grade U₃O₈ – 0.52%
10.2 million pounds (inferred) average grade U₃O₈ – 1.26%
Mining method  vertical blast-hole stoping
Licensed capacity  mill: maximum 16.9 million pounds per year; currently 11 million
Total production 1975 to 2010  182.5 million pounds
2010 production  3.8 million pounds
2011 forecast production  3.6 million pounds
Estimated mine life  2017 (based on current reserves)
Estimated decommissioning cost  $105.2 million

Business structure
We own 100% of Rabbit Lake.

Permits
We need three permits to operate the Rabbit Lake mining and milling complex:
• Uranium Mine Operating Licence from the CNSC
• Approval to Operate Pollutant Control Facilities from the Saskatchewan Ministry of the Environment
• Permit to Operate Waterworks from the Saskatchewan Ministry of the Environment.

These permits expire on October 31, 2013.

Production
2010 production was 3.8 million pounds U₃O₈, the same as in 2009. We completed a new exhaust air raise to support future activities in the northern part of the mine.

Exploration
In 2010, we added mineral reserves, extending the estimated mine life by two years to 2017. We completed surface exploration drilling near the mine and found new mineralization referred to as the Powell zone. We will continue to evaluate this through an underground drilling program planned for 2012.
We have extended our underground drilling reserve replacement program into 2011. We plan to test and evaluate areas east and northeast of the mine where we have had good results. Drilling will continue on other parts of the property.

**Tailings**

We expect the mill to have the capacity to handle tailings from milling ore from Rabbit Lake and a portion of Cigar Lake solution until mid-2016 (based on expected ore grades and milling rates). We are planning to expand the existing tailings management facility to increase the tailings capacity by mid-2016 to support the extension of Rabbit Lake’s mine life, accommodate tailings from processing Cigar Lake uranium solution, and provide a modest amount of additional tailings capacity. We need regulatory approval to proceed with any increase in capacity and will pay the capital costs. The increase in tailings capacity will require an environmental assessment.

**Site reclamation**

We are proceeding with our multi-year, site wide reclamation plan. We spent $5 million in 2010 to reclaim facilities that are no longer in use, and plan to spend another $5.7 million in 2011.

**Mill renewal**

We have been working on upgrades to the Rabbit Lake mill and associated facilities since 2006:

- 2006 – reduced mill effluent concentrations of uranium
- 2008 – replaced the mill-distributed control system and improved the mill’s secondary containment
- 2009 – reduced mill effluent concentrations of molybdenum and selenium
- 2010 – replaced the converter and heat recovery equipment in the acid plant
- 2011 – replacing the three acid plant towers in the acid plant, and ongoing upgrades to mill processing equipment and tanks
- mid-2015 – target for completing mill modifications to process Cigar Lake solution

**Toll milling of Cigar Lake solution**

Under the *Rabbit Lake toll milling agreement* (effective January 1, 2002), we will process a portion of uranium solution from Cigar Lake ore at the Rabbit Lake mill. This requires us to make additional modifications to the mill. Please see page 51 for more information.
### Uranium – operating properties

**Smith Ranch-Highland**

We operate Smith Ranch and Highland as a combined operation. Each has its own processing facility, but the Smith Ranch mill processes all the uranium. The Highland mill is currently idle.

Together, they form the largest uranium production facility in the United States.

<table>
<thead>
<tr>
<th>Location</th>
<th>Wyoming, US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>100%</td>
</tr>
<tr>
<td>End product</td>
<td>U₃O₈</td>
</tr>
<tr>
<td>ISO certification</td>
<td>ISO 14001 certified</td>
</tr>
<tr>
<td>Estimated mineral reserves</td>
<td>8.0 million pounds (proven and probable) average grade U₃O₈ – 0.09%</td>
</tr>
<tr>
<td>Estimated mineral resources</td>
<td>22.5 million pounds (measured and indicated) average grade U₃O₈ – 0.06% 6.6 million pounds (inferred) average grade U₃O₈ – 0.05%</td>
</tr>
<tr>
<td>Mining method</td>
<td>in situ recovery (ISR)</td>
</tr>
<tr>
<td>Licensed capacity</td>
<td>mine: 2 million pounds per year mill: 4 million pounds per year including Highland mill</td>
</tr>
<tr>
<td>Total production 2002 to 2010</td>
<td>13.6 million pounds</td>
</tr>
<tr>
<td>2010 production</td>
<td>1.8 million pounds</td>
</tr>
<tr>
<td>2011 forecast production</td>
<td>1.8 million pounds</td>
</tr>
<tr>
<td>Estimated decommissioning cost</td>
<td>$111.5 million (US)</td>
</tr>
</tbody>
</table>

### Business structure

We own 100% of Smith-Ranch Highland through a wholly owned subsidiary.

See our 2010 MD&A for more information.
Uranium – operating properties

Crow Butte
Crow Butte was discovered in 1980 and began production in 1991. It is the first uranium mine in Nebraska, and is a significant contributor to the economy of northwest Nebraska.

<table>
<thead>
<tr>
<th>Location</th>
<th>Nebraska, US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>100%</td>
</tr>
<tr>
<td>End product</td>
<td>U₃O₈</td>
</tr>
<tr>
<td>ISO certification</td>
<td>ISO 14001 certified</td>
</tr>
<tr>
<td>Estimated mineral reserves</td>
<td>3.1 million pounds (proven and probable) Average grade U₃O₈ – 0.12%</td>
</tr>
<tr>
<td>Estimated mineral resources</td>
<td>11.2 million pounds (measured and indicated) average grade U₃O₈ – 0.21% 5.6 million pounds (inferred) average grade U₃O₈ – 0.11%</td>
</tr>
<tr>
<td>Mining method</td>
<td>in situ recovery (ISR)</td>
</tr>
<tr>
<td>Licensed capacity</td>
<td>1 million pounds per year</td>
</tr>
<tr>
<td>(mine and mill)</td>
<td></td>
</tr>
<tr>
<td>Total production 2002 to 2010</td>
<td>6.8 million pounds</td>
</tr>
<tr>
<td>2010 production</td>
<td>0.7 million pounds</td>
</tr>
<tr>
<td>2011 forecast production</td>
<td>0.7 million pounds</td>
</tr>
<tr>
<td>Estimated decommissioning cost</td>
<td>$35.2 million (US)</td>
</tr>
</tbody>
</table>

Business structure
We own 100% of Crow Butte through a wholly-owned subsidiary.

See our 2010 MD&A for more information.
Uranium – operating properties

**Inkai**

Inkai is a very significant uranium deposit, located in Kazakhstan. There are two production areas (blocks 1 and 2) and an exploration area (block 3). The operator is Joint Venture Inkai Limited Liability Partnership, which we jointly own (60%) with Kazatomprom (40%).

Inkai is one of our three material uranium properties.

<table>
<thead>
<tr>
<th>Location</th>
<th>central Kazakhstan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>60%</td>
</tr>
<tr>
<td>End product</td>
<td>U₃O₈</td>
</tr>
<tr>
<td>ISO certification</td>
<td>BSI OHSAS 18001 ISO 14001 certified</td>
</tr>
<tr>
<td>Estimated mineral reserves (our share)</td>
<td>72.9 million pounds (proven and probable) average grade U₃O₈ – 0.07%</td>
</tr>
<tr>
<td>Estimated mineral resources (our share)</td>
<td>18.3 million pounds (measured and indicated) average grade U₃O₈ – 0.08% 153.0 million pounds (inferred) average grade U₃O₈ – 0.05%</td>
</tr>
<tr>
<td>Mining method</td>
<td>in situ recovery (ISR)</td>
</tr>
<tr>
<td>Licensed capacity (mine and mill)</td>
<td>approved in principle: 3.9 million pounds per year (our share 2.3 million pounds per year) application: expect to submit for 5.2 million pounds per year (our share 3.1 million pounds per year)</td>
</tr>
<tr>
<td>2010 production</td>
<td>2.6 million pounds (our share)</td>
</tr>
<tr>
<td>2011 forecast production</td>
<td>2.7 million pounds (our share)</td>
</tr>
<tr>
<td>Estimated mine life</td>
<td>20 years (based on current reserves)</td>
</tr>
<tr>
<td>Estimated decommissioning cost</td>
<td>$7 million (US)</td>
</tr>
</tbody>
</table>

**Business structure**

Inkai is a Kazakhstan limited liability partnership between two companies:
- Cameco – 60%
- JSC NAC KazAtomProm (Kazatomprom) – 40%
  (a Kazakhstan Joint Stock Company owned by the Republic of Kazakhstan)
History

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1976-78</td>
<td>• Deposit is discovered</td>
</tr>
<tr>
<td></td>
<td>• Exploration drilling continues until 1996</td>
</tr>
<tr>
<td>1979</td>
<td>• Regional and local hydrogeology studies begin</td>
</tr>
<tr>
<td></td>
<td>• Borehole tests characterize the four aquifers within the Inkai deposit (Uvanas, Zhalpak, Inkuduk and Mynkuduk)</td>
</tr>
<tr>
<td>1988</td>
<td>• Pilot test in the northeast area of block 1 begins, lasts 495 days and recovers 92,900 pounds of uranium</td>
</tr>
<tr>
<td>1993</td>
<td>• First Kazakhstan estimates of uranium reserves for block 1</td>
</tr>
<tr>
<td>1996</td>
<td>• First Kazakhstan estimates of uranium reserves for block 2</td>
</tr>
<tr>
<td></td>
<td>• Kazakhstan regulators registers Inkai, a joint venture among us, Uranerzbergbau-GmbH and KATEP</td>
</tr>
<tr>
<td>1997 - 1998</td>
<td>• Kazatomprom is established</td>
</tr>
<tr>
<td></td>
<td>• KATEP transfers all of its interest in the Inkai joint venture to Kazatomprom</td>
</tr>
<tr>
<td>1998</td>
<td>• We acquire all of Uranerzbergbau-GmbH’s interest in the Inkai joint venture, increasing our interest to 66 2/3%</td>
</tr>
<tr>
<td></td>
<td>• We agree to transfer a 6 2/3% interest to Kazatomprom, reducing our holdings to a 60% interest</td>
</tr>
<tr>
<td>1999</td>
<td>• Inkai receives a mining licence for block 1 and an exploration licence for blocks 2 and 3 from the government of Kazakhstan</td>
</tr>
<tr>
<td>2000</td>
<td>• Inkai and the government of Kazakhstan sign a subsoil use contract (called the resource use contract), which covers the licences issued in 1999 (see above)</td>
</tr>
<tr>
<td>2002</td>
<td>• Test mining operations at block 2 begins</td>
</tr>
<tr>
<td>2005</td>
<td>• Construction of ISR commercial processing facility at block 1 begins</td>
</tr>
<tr>
<td>2006</td>
<td>• Complete test mine expansion at block 2</td>
</tr>
<tr>
<td>2007</td>
<td>• Sign Amendment No.1 to the resource use contract, extending the exploration period at blocks 2 and 3</td>
</tr>
<tr>
<td>2008</td>
<td>• Commission front half of the main processing plant in the fourth quarter, and begin processing solution from block 1</td>
</tr>
<tr>
<td>2009</td>
<td>• Sign Amendment No.2 to the resource use contract, which approves the mining licence at block 2, extends the exploration licence for block 3 to July 13, 2010, and requires Inkai to adopt the new tax code and meet the Kazakhstan content thresholds for human resources, goods, works and services</td>
</tr>
<tr>
<td></td>
<td>• Commission the main processing plant, and started commissioning the first satellite plant</td>
</tr>
<tr>
<td>2010</td>
<td>• Receive regulatory approval for commissioning of the main processing plant</td>
</tr>
<tr>
<td></td>
<td>• File a notice of potential commercial discovery at block 3</td>
</tr>
<tr>
<td></td>
<td>• Receive approval in principle for the extension of the block 3 exploration licence for a five-year appraisal period that expires July 2015, and an increase in annual production from blocks 1 and 2 to 3.9 million pounds (100% basis)</td>
</tr>
</tbody>
</table>

Technical report

This project description is based on the project’s technical report: *Inkai Operation, South Kazakhstan Oblast, Republic of Kazakhstan*, dated March 31, 2010 (effective December 31, 2009) except for some updates that reflect developments since the technical report was published.

All conclusions, projections and estimates in this description are based on the qualifications, assumptions and exclusions in the technical report. We recommend you read it in its entirety to fully understand the project. You For information about environmental matters, see Sustainable development starting on page 76

For a description of royalties payable to the government of Kazakhstan on the sale of uranium extracted from orebodies within the country and taxes, see page 90.
can download a copy from SEDAR (sedar.com) or from EDGAR (sec.gov).

The report was prepared for us in compliance with NI 43-101, under the supervision of Alain G. Mainville, P. Geo., and Charles J. Foldenauer, P. Eng. These people are qualified persons within the meaning of NI 43-101, but are not independent of us.

About the Inkai property

Location
The Inkai mine is located in the Suzak District of South Kazakhstan Oblast, Kazakhstan near the town of Taikonur, 370 kilometres north of the city of Shymkent and 125 kilometres east of the city of Kyzl-Orda.

Accessibility
The road to Taikonur is the primary road for transporting people, supplies and uranium product to and from the mine. It is a gravel road and crosses the Karatau Mountains. Railroad transportation is available from Almaty to Shymkent, then northwest to Shieli, Kyzl-Orda and beyond. A rail line also runs from the town of Dzhambul to a Kazatomprom facility to the south of Taikonur.

Licences
Inkai holds the rights to three contiguous licence blocks, blocks 1, 2 and 3, based on the licences it has received and its resource use contract with the Kazakhstan government. Inkai has to meet certain obligations to maintain these rights. See page 36 for more information.

Setting
Inkai lies in the Betpak Dala Desert, which has an arid climate, minimal precipitation and relatively high evaporation. The surface elevation ranges from 140 to 300 metres above mean sea level. The average precipitation varies from 130 to 140 millimetres per year, and 22 to 40% of this is snow.

The area also has strong and almost uninterrupted winds that travel from 3.8 to 4.6 metres per second. The prevailing winds are northeast. Dust storms are common. The major water systems in the area include the Shu, Sarysu and Boktykaryn rivers.

Geology
The deposit is sub-divided into two regions: the Sandy-brackish intercontinental deltas of the Shu and Sarysu rivers, and the Betpak Dala plateau.

The geology of south-central Kazakhstan is comprised of a large relatively flat basin of Cretaceous to Neogene age continental clastic sedimentary rocks. The Cretaceous-Cainozoic Chu-Sarysu basin extends for more than 1,000 kilometres from the foothills of the Tien Shan Mountains on the south and southeast sides, and merges into the flats of the Aral Sea depression to the northwest. The basin is up to 250 kilometres wide, bordered by the Greater Karatau Mountains on the southwest and the Chu-ili uplift and Central Kazakhstan uplands on the northeast. It is composed of gently dipping to nearly flat lying fluvial-derived unconsolidated sediments composed of inter-bedded sand, silt, and local clay horizons.

The Cretaceous-Cenozoic sediments host several stacked and relatively continuous, sinuous “roll-fronts”, or oxidation-reduction (redox) fronts hosted in the more porous and permeable sand and silt units. There are several uranium deposits and active ISR uranium mines at these regional oxidation roll-fronts, developed along a regional system of superimposed mineralization fronts.

The Inkai deposit is hosted within the Inkuduk and Mynkuduk formations, which are made up of feldspathic sandstones or sub-arkoses, typically containing 50 to 60% quartz, 10 to 15% feldspar, and 5 to 10% clay. The redox boundary can be readily recognised in core by a distinct colour change from gray on the reduced side to yellowish stains on the oxidized side, stemming from the oxidation of pyrite to limonite. In cross-section, the redox boundary is often “C” shaped forming the classic “roll-front”. The sands have a high horizontal permeability.
Mineralization

Seven mineralized zones have been identified on blocks 1 and 2, including three zones in the Mynkuduk horizon and four zones in the Inkuduk horizon.

Mineralization includes sooty pitchblende (85%) and coffinite (15%). The pitchblende occurs as micron-sized globules and spherical aggregates. The coffinite occurs as small crystals. Both uranium minerals are commonly associated with pyrite, and occur in pores on interstitial materials like clay minerals, as films around and in cracks within sand grains, and as pseudomorphic replacements of rare organic matter.

Most of the mineralization in block 1 is in the Mynkuduk horizon, of Turonian age, which unconformably overlays Permian argillites. Made up of fine to medium sands with occasional layers of clay or silt, this horizon is at a depth of 500 metres. The lower part of the Inkuduk horizon, which sits above the Mynkuduk horizon, is also locally mineralized.

In block 2, mineralization is mainly in the Middle and Lower Inkuduk horizons, between 350 and 420 metres below the surface.

Block 3 potential commercial discovery

Exploration work on the northern flank (block 3) of the Inkai deposit has identified extensive mineralization hosted by several horizons in the lower and middle parts of the Upper Cretaceous stratigraphic level and traced along 25 kilometres from block 2 of the Inkai deposit in the southwest through to the Mynkuduk deposit in the northeast. This discovery requires further assessment of its commercial viability. In February 2010, Inkai filed a notice of the discovery with regulators.

In June 2010, Inkai received approval in principle from the relevant government authority to amend the block 3 licence to provide for a five-year appraisal period to carry out delineation drilling, uranium resource estimation, construction and operation of a test leach facility and to complete a feasibility study. Inkai carried out delineation drilling through 2010 and began planning for a new test leach facility.

In 2011, we expect block 3 work to include continued delineation drilling, infrastructure development, and engineering of the test leach facility.

Profits from block 3 production are to be shared on a 50:50 basis with our partner, instead of based on our ownership interests.

About the Inkai operation

Inkai is a developed mineral property with sufficient surface rights to meet future mining operation needs for the current mineral reserves.

Licences

We need a number of licences to operate the Inkai mine:

- **Licence Series AY 1370D**, April 20, 1999, expires in 2024
  For uranium extraction in block 1 (16.6 square kilometres)

- **Licence Series AY 1371D**, April 20, 1999
  For exploration and uranium extraction in block 2 (230 square kilometres) (expires in 2030) and for exploration in block 3 (240 square kilometres) (expires in 2015 (based upon June 2010 Kazakh regulatory approval in principle))

Other material licences

- **Licence for performance of works connected with stages of life cycle of objects of use of atomic energy**
  (issued January 18, 2010 by the Kazakhstan Ministry of Energy and Mineral Resources (MEMR))

- **Licence for operation of mining production and mineral raw material processing**
  (issued December 23, 2009 by the MEMR)

- **Licence for transportation of radioactive substances within the territory of the Republic of Kazakhstan**
  (issued November 18, 2008 by the MEMR)

- **Licence for dealing with radioactive substances**
  (issued August 29, 2008 by the MEMR)
These licences are all currently in force and have an indefinite term. Inkai’s material environmental permits are described on page 36.

Infrastructure

**Block 1**
- main processing plant, which includes a product recovery drying and packaging facility
- administrative office, shops, garage, laboratory, emergency response building, low-level radioactive waste and domestic landfills, engineering and construction offices
- a camp for 400 employees
- catering and leisure facilities

**Block 2**
- satellite processing plant that produces uranium loaded ion exchange resin
- office, small shops, and a food services facility

We are planning an additional satellite processing plant.

**Block 3**
- We are planning a test leach facility.

**Water, power and heat**

Groundwater wells provide sufficient water for all planned industrial activities. Shallow wells on site have potable water for use at the camp. The site is connected to the Kazakh power grid. Operations continue throughout the year despite cold winters (lows of -35°C) and hot summers (highs of +40°C).

**Employees**

Taikonur has a population of about 450 people who are mainly employed in uranium development and exploration. Whenever possible, Inkai hires personnel from Taikonur and surrounding villages.

**Mining method**

Inkai uses conventional and well-established ISR technology. It has a very efficient process for uranium recovery, developed after extensive test work and operational experience. The process involves five major steps:
- leach the uranium in-situ with sulphuric acid-based lixiviate solution
- recover it from solution with ion exchange resin (takes place at both main and satellite processing plants)
- precipitate it with hydrogen peroxide
- thicken, dewater, and dry it
- package it as U₃O₈ (yellowcake) in drums.

The process requires large quantities of sulphuric acid because there are relatively high levels of carbonate in the ore. In 2007, a fire at a sulphuric acid plant in Kazakhstan, and delays in the start-up of a new plant, restricted the availability of sulphuric acid. Allotments of sulphuric acid to Inkai and other ISR operations in Kazakhstan were reduced. The shortage continued throughout 2008, though it was resolved by the end of that year. Inkai received enough sulfuric acid in 2009 and 2010 to acidify the wellfields as planned.

The supply of sulphuric acid was not an issue for Inkai in 2010. However, given the importance of sulphuric acid to Inkai’s mining operations, we continue to closely monitor its availability. Our production may be less than forecast if there is a shortage.

**Production**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total mill production</td>
<td>Based on current mineral reserves, we expect the mine to produce a total of 103.3 million pounds U₃O₈ (recovered by the mill).</td>
</tr>
<tr>
<td>Average annual mill production</td>
<td>The mill has the capacity to produce 5.2 million pounds U₃O₈ per year (100% basis). Regulatory approval is required to carry out production at this annual rate. See <em>Production increases for 2010, 2011 and 2012</em>. There are enough mineral reserves to carry out production at this rate through the current term of each of Inkai’s mineral licences.</td>
</tr>
</tbody>
</table>
Production increases for 2010, 2011 and 2012
In 2010, Inkai received approval in principle to produce 3.9 million pounds per year (100% basis), and is seeking final approval with an amendment to the resource use contract.

Our 2011 and future annual production targets and mineral reserve estimates assume Inkai receives the necessary government approvals and the support of our partner, Kazatomprom. More specifically, Inkai must:
• obtain final approval to produce at an annual rate of 3.9 million pounds (our share 2.3 million pounds)
• obtain the necessary permits and approvals to produce at an annual rate of 5.2 million pounds (our share 3.1 million pounds)
• ramp up production to an annual rate of 5.2 million pounds this year.

We expect Inkai to receive all of the necessary permits and approvals to meet its 2011 and future annual production targets, and we anticipate it will be able to ramp up production as noted above.

There is no certainty, however, Inkai will receive these permits or approvals or that it will be able to ramp up production this year. If Inkai does not, or if the permits and approvals are delayed, Inkai may be unable to achieve its 2011 and future annual production targets and we may have to recategorize some of Inkai’s mineral reserves as resources.

Memorandum of understanding
As part of our strategy to double annual production by 2018 to 40 million pounds, we are working with our partner, Kazatomprom, to implement our 2007 non-binding memorandum of understanding.

The memorandum:
• targets future annual capacity of 10.4 million pounds (our share is 5.7 million pounds). While the existing project ownership would not change, our share of the additional capacity above 5.2 million pounds would be 50%.
• contemplates studying the feasibility of building a uranium conversion facility, as well as other potential collaborations in uranium conversion.

To implement this increase, we need a binding agreement to finalize the terms of the memorandum and various approvals from our partner and the government. We are currently in discussions with Kazatomprom about these initiatives. We expect our ability to double annual uranium production at Inkai will be closely tied to the success of the uranium conversion project.

Sales
Under Kazakhstan’s transfer pricing law (effective January 1, 2009), sales are based on the current uranium spot price. Inkai has one forward uranium sales contract for a portion of its 2011 production, and it is with us.

Funding
We have a loan agreement with Inkai. As of December 31, 2010, there was:
• $314 million (US) of principal outstanding on the loan
• a nominal amount of accrued interest and financing fees on the loan. In 2010, Inkai paid $49 million (US) in accrued interest and financing fees.

Inkai uses 100% of the cash available for distribution each year to pay accrued interest and financing fees. After those amounts are paid, Inkai uses 80% of cash available for distribution each year to repay principal outstanding on the loan until it is repaid in full. The remaining 20% of cash available for distribution is paid to the owners.

We have also agreed to advance funds for Inkai’s work on block 3 until the feasibility study is complete.

Costs and payback
In the March 2010 technical report:
• capital costs remaining were estimated to be $359.2 million (US). This includes $208.6 million (US) for wellfield development. We expect wellfield development costs to decline gradually over the last five years of production.
• payback was forecast in 2012, on an undiscounted, after-tax basis, including all 2009 and prior costs.
**Resource use contract**

In 2000, Inkai and the government of Kazakhstan signed the resource use contract, which covers the licences issued in 1999. Inkai has to meet the obligations under these licences and the resource use contract to maintain its rights to blocks 1, 2 and 3.

In 2007, Inkai and the relevant government authority signed Amendment No.1 to the resource use contract to extend the exploration period at blocks 2 and 3.

In 2009, Inkai and the relevant government authority signed Amendment No.2 to the resource use contract, which:
- extends the exploration period for block 3 to July 13, 2010
- approves mining at block 2
- combines blocks 1 and 2 for mining and reporting purposes
- requires Inkai to adopt the new tax code that took effect January 1, 2009
- requires Inkai to adopt current Kazakh legal and policy requirements for subsoil users to procure goods, works and services under certain prescribed procedures and foster greater local content
- prescribes Kazakh employment: over the life of the resource use contract, 100% of the workers, at least 70% of engineering and construction staff and at least 60% of the management staff must be Kazakh.

In June 2010, Inkai received approval in principle from the relevant government authority to:
- increase annual production from blocks 1 and 2 to 3.9 million pounds
- amend the block 3 licence for a five-year appraisal period to carry out delineation drilling, mineral resource estimation, construction and operation of a test leach facility, and to complete a feasibility study.

To complete the final stage of the approval process, Inkai subsequently submitted in draft form Amendment No.3 to the resource use contract to the relevant government authority for approval.

**Work programs**

Inkai is required to follow the work program appended to the resource use contract, which applies to mining operations over the life of the mine. To comply with the new subsoil law, Inkai is developing a life of mine work plan to submit to the relevant government authority for approval (see Project documentation on page 38). This work plan will need to be updated and submitted to the relevant government authority for every change.

Prior to the new subsoil law, Inkai had to submit an annual work plan to the government authority every year for approval.

**Environment**

Inkai has to comply with environmental requirements during all stages of the project, and develop an environmental impact assessment for examination by a state environmental expert before making any legal, organizational or economic decisions that could have an effect on the environment and public health.

Under Kazakhstan law, Inkai needs an environmental permit to operate. Inkai has a permit for environmental emissions and discharges, valid until December 2013, and an emissions permit for drilling activities, valid until December 2012. It also holds water permits.

**Insurance**

Inkai carries environmental insurance, as required by the resource use contract.

**Decommissioning**

Inkai’s decommissioning obligations are largely defined by the resource use contract. It has deposited the required contributions into a separate bank account as security to ensure it will meet its obligations. Contributions are capped at $500,000 (US). Inkai has funded the full amount.

Under the resource use contract, Inkai must submit a plan for decommissioning the mine to the government six months before mining activities are complete. It developed a preliminary decommissioning plan to estimate total decommissioning costs, and updates the plan every five years, or when there is a significant change at the operation that could affect decommissioning estimates. The preliminary decommissioning estimate is $7 million (US).
Groundwater is not actively restored post-mining in Kazakhstan. See page 79 for additional details.

Kazakhstan government and legislation

Subsoil law
The principal legislation governing subsoil exploration and mining activity in Kazakhstan is the Subsoil Use Law dated June 24, 2010, which took effect July 7, 2010 (the subsoil law). It replaces the Law on the Subsoil and Subsoil Use, dated January 27, 1996, as amended (the old law).

In general, Inkai’s licences are governed by the version of the subsoil law that was in effect when the licences were issued in April 1999, and new legislation applies to Inkai only if it does not worsen Inkai’s position. Changes to legislation related to national security, among other criteria, however, are exempt from the stabilization clause in the resource use contract. The Kazakhstan government interprets the national security exemption broadly.

The subsoil law defines the framework and procedures connected with the granting of subsoil rights, and the regulation of the activities of subsoil users. The subsoil, including the mineral resources it contains, belongs to the state. Resources brought to the surface belong to the subsoil user, unless otherwise provided by contract. The state has pre-emptive and approval rights with some exceptions (for example, for inter-group transfers), if a subsoil user transfers its subsoil rights or if there is a transfer (direct or indirect) of an ownership interest in a subsoil user.

Subsoil rights go into effect when a contract with the relevant government authority is finalized. The subsoil user is given, among other things, the exclusive right to conduct mining operations, to build production and social facilities, to freely dispose of its share of production and to negotiate extensions of the contract.

Until March 12, 2010, the Kazakhstan Ministry of Energy and Mineral Resources (MEMR) was designated as the “competent authority” under the old law. The Kazakhstan Ministry of Industry and New Technologies replaced it, and is the current competent authority under the subsoil law. We refer to the competent authority as the relevant government authority.

To date, the new subsoil law has not had a significant impact on Inkai. We continue to assess the impact. Some of the general impact is described below:

Stabilization clause
The general stability provision has been changed in the subsoil law. Under the old law, changes in legislation that worsened the position of the subsoil user did not apply to resource use contracts signed before the changes were adopted.

Under the new subsoil law, contracts are only protected from changes in legislation if the changes worsen the commercial position of the subsoil user. The subsoil law expands the list of exceptions from stabilization to include taxation and customs regulation. These are in addition to exceptions in the old law for defence, national security, environmental protection and health.

With the new subsoil law, the government continues to weaken its stabilization guarantee. The government is broadly applying the national security exception to encompass security over strategic national resources.

Amendment No. 2 to the resource use contract eliminated the tax stabilization provision that applied to Inkai.

The resource use contract contains significantly broader stabilization provisions than the new subsoil law, and these contract provisions currently apply to us.

Transfer of subsoil rights and pre-emptive rights
The subsoil law strengthens the state’s control over transactions involving subsoil rights and the direct and indirect ownership interests in a subsoil user.

Like the old law, transfers of subsurface rights, transfers of shares (interests) in subsoil users and the grant of security over subsurface rights require consent of the relevant government authority. The new subsoil law expands the list of transactions that require consent and also spells out in more detail the circumstances, documentation and information that must accompany the request for consent. It also contains a new provision requiring notification to the relevant government authority within five business days of completion of the transaction.
Similar to the old law, the state has a priority right on terms not worse than those offered by other buyers. Failing to obtain the state’s waiver of its pre-emptive right or the consent of the relevant government authority or to provide the completion notification, are grounds for the state to invalidate a transfer.

Dispute resolution
The dispute resolution procedure in the subsoil law does not specifically disallow international arbitration. Instead it says that if a dispute related to a resource use contract cannot be resolved by negotiation, the parties can resolve the dispute according to the laws of Kazakhstan and international treaties ratified by the Republic of Kazakhstan.

The resource use contract allows for international arbitration. We believe the subsoil law does not affect this right.

Contract termination
Under the subsoil law the relevant government authority can terminate a contract before it expires, if a subsoil user does not fix more than two breaches of its obligations under the contract or the project documents within a specific period.

Under the old law, the relevant government authority could terminate a contract if the subsoil user materially breached its obligations established by the contract or work program.

Under the resource use contract, if Inkai materially breaches its obligations, the relevant government authority has to notify Inkai of the breach and provide a reasonable period to fix it before it can terminate the contract.

We believe that the terms of the resource use contract should continue to apply unless the state seeks to apply the national security exception to stabilization.

Local content
Subsoil users must procure goods, works and services in compliance with the subsoil law. Procurement is carried out through a specially created register of the goods, works and services and of the entities (producers) providing them. Subsoil users must give preference to local producers, as long as the goods, works and services comply with applicable standards. The subsoil law also allows a statutory tender commission, which oversees tender procedures, to conditionally discount local producers’ bids by 20% relative to foreign bidders. This new local content provision applies to Inkai.

Project documentation
Subsoil users who received subsoil rights before the subsoil law was introduced are required to:

• develop new project documentation to be approved by July 7, 2011
• develop a new work program in accordance with the project documentation to be approved by January 7, 2012.

The subsoil law repealed the previous requirement for annual work plans. Instead, expected exploration and/or production volumes for each year will now be set out in the new work program. This new project documentation provision applies to Inkai.

Strategic deposits
On August 19, 2009, 231 blocks, including all three of Inkai’s blocks, were prescribed as strategic deposits under the Governmental Resolution On Determination of the List of Subsoil (Deposit) Areas having Strategic Importance.

Under the subsoil law, if any actions by a subsoil user relating to a strategic deposit leads to a change in the economic interests of the state that creates a threat to national security, the relevant government authority has the right to demand a change to a contract that will restore the economic interests of the state. The parties have to agree on and make the change within a specific time period, or the relevant government authority can unilaterally terminate the contract.

Currency control regulations
In 2009 specific amendments to existing currency regulations were adopted. These amendments are aimed at preventing possible threats to the economic security and stability of the Kazakh financial system. The President of Kazakhstan was granted the power to establish a special currency regime that can:
• require foreign currency holders to deposit a certain portion of their foreign currency interest free with a resident Kazakhstan bank or the National Bank of Kazakhstan
• require the permission of the National Bank of Kazakhstan for currency transactions, and
• restrict overseas transfers of foreign currency.

While the special currency regime has not been imposed, it has the potential to prevent Kazakh companies, like Inkai, from being able to pay dividends to their shareholders abroad or repatriating any or all of its profits in foreign currency. It can also impose additional administrative procedures, and Kazakh companies could be required to hold a portion of their foreign currency in local banks.

Explanation, drilling and estimates

We did not do any exploration drilling in blocks 1 and 2, and relied instead on historic data to estimate mineral reserves and resources.

Exploration

Historical drilling

• Historical drilling at Inkai included 4,898 holes in blocks 1 and 2, and 510 in block 3.
• Drilling was vertical, on a grid at prescribed density of 3.2 to 1.6 kilometre line spacing and 200 to 50 metre (3.2-1.6 kilometres x 200-50 metres) hole spacing. Additional drilling at grids of 800-400 x 200-50 metres and 200-100 x 50-25 metre grid increased the level of geological knowledge and confidence.
• Vertical holes were drilled with a triangular drill bit for use in unconsolidated formations down to a certain depth and the rest of the holes were cored.
• Volkovgeology, a subsidiary of Kazatomprom, compiled the data for block 1 of the Inkai deposit as well as some of the data for block 2 to produce a report in 1991.

Exploration drilling

• Inkai's geological department oversees exploration, including the strategic direction of the drilling program and management of contractors. Inkai has retained a contractor to direct and coordinate day-to-day drilling activities, and to ensure drilling quality, core recovery, surveying, and geological logging, sampling and daily data processing.
• There have been from three to over 20 rigs actively drilling on block 3, and anywhere from one to four drilling contractors in the last 24 months. This year, four contractors drilled in January and February (15 drilling rigs), and two from March to December (10 drilling rigs).
• Inkai had drilled a total of 2,159 exploration holes in block 3 as of the end of December 2010 (510 before 2006, 45 in 2006, 90 in 2008, 456 in 2009, and 1,058 in 2010). Approximately 70% of all exploration holes are cored through the entire mineralized interval, and have better than 70% core recovery.

Recent activity

• Invested $133.7 million (US) in exploring and developing the mineral processing infrastructure in blocks 2 and 3 during the pilot test mining period.
• Estimated block 2 mineral reserves and put them on the Kazakh state balance sheet of mineral resources.
• Drilled 1,649 exploration drillholes in block 3 between 1999 and December 31, 2010, and analysed more than 12,000 samples.
• Focused the first phase of the drilling program on following the trends and delineated mineralization in the Inkiduk horizons along the northwestern border, and mineralization in the Mynkuduk along the southern border. Used a drilling grid of 800 metres x 50 to 100 metres to form resource estimation blocks suitable for C2 Kazakhstan resources (equivalent to inferred resources). At the same time, conducted exploration drilling in the central part of the block 3 area and found mineralization traces. This area requires further delineation drilling.
• Submitted a preliminary resource estimate for the southwestern corner of the block 3 area to government authorities on July 10, 2010. The report was prepared for Inkai by Volkovgeology. Under Kazakhstan regulations, if a potential commercial discovery is declared, a preliminary resource estimate must be prepared for at least a portion of the related area to support the claim. Kazakhstan government authorities such as the State Reserve Committee are still reviewing the report.
Drilled the southwestern part of block 3 from October to December 2010, using progressively tightening drilling grids (from 800 x 50 metres to 200 x 50 metres) to delineate mineralization for the Kazakhstan C1 resource category (equivalent to indicated resources).

Conducted hydrogeological testing work, including aquifer pumping tests (two wall and multiwall) at two separate sites, to establish the hydrogeological characteristics of the aquifers hosting mineralization, and their relationship to the surrounding aquitards and other aquifers. These characteristics are important for the ISR mining.

Results of exploration and delineation:
- Traced the presence of mineralization throughout block 3 with greater certainty. There was a significant increase in the extent of mineralization in many places, especially in the Inkuduk horizon compared to results of predecessors, which were based on sparser historical drilling grids.
- Encountered more complex morphology of the mineralized zones, particularly in the Mynkuduk horizon and along the southern border of block 3.
- Used the mineralization delineation from 800 x 50 metre drilling grids in block 3 to form resource estimate blocks for the Kazakhstan C2 resource category for most of the area covered. Additional drilling is needed to close off mineralization zones and better define their morphology and continuity.

Sampling and analysis

Sampling
- Detailed sampling procedures guide the sampling interval within the mineralization. Holes are drilled on progressively tightening grids: 3.2 to 1.6 kilometres x 200-50 metres, 800-400 metres x 200-50 metres and 200-100 metres x 50-25 metres. When core recoveries are higher than 70% and radioactivity greater than 40 micro-rem per hour, core samples are taken at irregular intervals of 0.2 to 1.2 metres. Sample intervals are also differentiated by barren or low permeability material.
- The drillholes are nearly vertical and the mineralized horizons are almost horizontal, so the mineralized intercepts represent the true thickness of the mineralization.
- Inkai’s geophysical crews survey the drillholes, logging radiometric, electrical (spontaneous potential and resistivity), caliper and deviation data. For greater accuracy, they collect downhole data only from open or uncased holes.
- Sampling is done sectionally from half of the core, which is divided along its axis and cleared from the clay envelope. The average core sample length is 0.4 metres.
- The split core is tested for grainsize and carbonate content.
- Since gamma probing of the drillholes is used to estimate mineral resources, assays from core sampling are used only when core recovery is at least 70%, for correlation.
- Core recovery is generally considered to be acceptable given the unconsolidated state of the mineralized material.

Analysis
- We carried out a data verification process to validate the historic Kazakh mineral resource and reserve estimate. This included:
  - Studying and coding all 1,294 drillholes on the Volkovgeology cross sections
  - Sampling and assaying all drillhole core that could be recovered for uranium and radium content (and according to the drill logs, this recovery was very good)
  - Recording the location of each sample and its assay results on the drillhole log (referred to as a passport).

Quality control
- One of our geoscientists has witnessed core handling, logging and sampling used at the Inkai mine and considers the methodologies to be very satisfactory and the results representative and reliable.
- Geologists with Inkai, Volkovgeology, the State Reserves Commission and Cameco, have validated the current database a number of times. Our geologists consider it relevant and reliable.
- The findings are supported by results of the leach tests on block 2, and recent production, drilling results and exploration drilling in block 3.
- The exchange of digital drillhole information between Inkai and us is very good. All information is available for our review.
Sample security
Inkai’s current sampling process follows the strict regulations imposed by the Kazakhstan government, and include the highest level of security measures, quality assurance and quality control. We have not been able to locate the documents describing sample security for historic Kazakhstan exploration on blocks 1, 2 and 3, but we believe the security measures taken to store and ship samples were of the same high quality.

Accuracy
We consider the historic Kazakhstan exploration data adequate for estimating mineral reserves and resources, based on the 2003 and 2007 validation of Kazakhstan estimated uranium reserves for blocks 1 and 2 (see sampling and analysis). We consider the exploration data from Inkai’s exploration program at block 3 reliable for estimating mineral reserves and resources.

Mineral reserve and resource estimates
Please see page 67 for our mineral reserve and resource estimates for Inkai.
Cigar Lake
Cigar Lake is the world’s second largest high-grade uranium deposit, with grades that are 100 times the world average. We are a 50% owner and the mine operator, and expect the operation to use available capacity at our Rabbit Lake mill.

Cigar Lake, which is being developed, is one of our three material uranium properties.

<table>
<thead>
<tr>
<th>Location</th>
<th>Saskatchewan, Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>50.025%</td>
</tr>
<tr>
<td>End product</td>
<td>U₃O₈</td>
</tr>
<tr>
<td>Deposit type</td>
<td>underground</td>
</tr>
<tr>
<td>Estimated mineral reserves (our share)</td>
<td>104.7 million pounds (proven and probable) average grade U₃O₈ – 17.04%</td>
</tr>
<tr>
<td>Estimated mineral resources (our share)</td>
<td>0.6 million pounds (measured and indicated) average grade U₃O₈ – 2.27%</td>
</tr>
<tr>
<td></td>
<td>66.8 million pounds (inferred) average grade U₃O₈ – 12.61%</td>
</tr>
<tr>
<td>Mining method</td>
<td>jet boring</td>
</tr>
<tr>
<td>Target production date</td>
<td>mid-2013</td>
</tr>
<tr>
<td>Target annual production (our share)</td>
<td>9 million pounds after rampup</td>
</tr>
<tr>
<td>Estimated mine life</td>
<td>15 years (based on current reserves)</td>
</tr>
<tr>
<td>Estimated decommissioning cost</td>
<td>$27.7 million (to the end of construction)</td>
</tr>
</tbody>
</table>

Business structure
Cigar Lake is owned by a joint venture of four companies:
- Cameco – 50.025% (operator)
- AREVA Resources Canada Inc. (Areva) – 37.1%
- Idemitsu Canada Resources Ltd. (Idemitsu) – 7.875%
- TEPCO Resources Inc. (TEPCO) – 5.0%
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1976</td>
<td>Canadian Kelvin Resources and Asamera Oil Corporation form an exploration joint venture, which includes the lands that the Cigar Lake mine is being built on</td>
</tr>
<tr>
<td>1977</td>
<td>Saskatchewan Mining Development Corporation (SMDC), one of our predecessor companies, acquires a 50% interest</td>
</tr>
<tr>
<td>1980</td>
<td>Waterbury Lake joint venture formed, includes lands now called Cigar Lake</td>
</tr>
<tr>
<td>1981</td>
<td>Deposit discovered by surface drilling – it was delineated by a surface drilling program between 1982 and 1986</td>
</tr>
<tr>
<td>1985</td>
<td>Reorganization of the Waterbury Lake joint venture - Cigar Lake Mining Corporation becomes the operator of the Cigar Lake lands and a predecessor to Areva becomes the operator of the remaining Waterbury Lands</td>
</tr>
<tr>
<td></td>
<td>SMDC has a 50.75% interest</td>
</tr>
<tr>
<td>1987-1992</td>
<td>Test mining, including sinking shaft 1 to 500 metres and lateral development on 420 metre, 465 metre and 480 metre levels</td>
</tr>
<tr>
<td>1988</td>
<td>Eldorado Resources Limited merges with SMDC to form Cameco</td>
</tr>
<tr>
<td>1993-1997</td>
<td>Canadian and Saskatchewan governments authorize the project to proceed to regulatory licensing stage, based on recommendation of the joint federal-provincial panel after public hearings on the project’s environmental impact</td>
</tr>
<tr>
<td>2000</td>
<td>Jet boring mining system tested in waste and frozen ore</td>
</tr>
<tr>
<td>2001</td>
<td>Joint venture approves a feasibility study and detailed engineering begins in June</td>
</tr>
<tr>
<td>2002</td>
<td>Joint venture is reorganized, new joint venture agreement is signed, Rabbit Lake and JEB toll milling agreements are signed, and we replace Cigar Lake Mining Corporation as Cigar Lake operator</td>
</tr>
<tr>
<td>2004</td>
<td>Environmental assessment process is complete</td>
</tr>
<tr>
<td></td>
<td>CNSC issues a construction licence</td>
</tr>
<tr>
<td>2005</td>
<td>Development begins in January</td>
</tr>
<tr>
<td>2006</td>
<td>Two water inflow incidents delay development:</td>
</tr>
<tr>
<td></td>
<td>in April, shaft 2 (which is under construction) floods</td>
</tr>
<tr>
<td></td>
<td>in October, underground development areas flood</td>
</tr>
<tr>
<td></td>
<td>In November, we begin work to remediate the underground development areas</td>
</tr>
<tr>
<td>2008</td>
<td>Remediation interrupted by another inflow in August, preventing the mine from being dewatered</td>
</tr>
<tr>
<td>2009</td>
<td>Remediation of shaft 2 completed in May</td>
</tr>
<tr>
<td></td>
<td>We seal the 2008 inflow in October</td>
</tr>
<tr>
<td>2010</td>
<td>We finish dewatering the underground development areas in February, and establish safe access to the 480 metre level, the main working level of the mine</td>
</tr>
<tr>
<td></td>
<td>We substantially complete cleanup, inspection, assessment and securing of underground development and resume underground development in the south end of the mine</td>
</tr>
</tbody>
</table>
Technical report
This project description is based on the project’s technical report: *Cigar Lake Project, Northern Saskatchewan, Canada*, dated March 31, 2010 (effective December 31, 2009) except for some updates that reflect developments since the technical report was published.

All conclusions, projections and estimates in this description are based on the qualifications, assumptions and exclusions in the technical report. We recommend you read it in its entirety to fully understand the project. You can download a copy from SEDAR (sedar.com) or from EDGAR (sec.gov).

The report was prepared for us in compliance with NI 43-101, by or under the supervision of C. Scott Bishop, P. Eng, Grant J.H. Goddard, P. Eng., Alain G. Mainville, P. Geo, and Lorne D. Schwartz, P. Eng. They are all qualified persons within the meaning of NI 43-101, but are not independent of us.

Later this year, we plan to issue a new technical report for Cigar Lake. In the report, we will update the Cigar Lake capital cost estimate and certain other estimates, such as our production forecast, to reflect developments since the issuance of the March 2010 technical report, including our decision to proceed with the surface freeze strategy.

About the property

**Location**
Near Waterbury Lake, 660 kilometres north of Saskatoon. The mine site is four kilometres long, running north to south and six kilometres wide, running east and west.

**Accessibility**
Access to the property is by an all-weather road and by air. Supplies are transported by truck from Saskatoon and elsewhere. There is an unpaved airstrip and air terminal east of the mine site.

Saskatoon, a major population centre south of the Cigar Lake deposit, has highway and air links to the rest of North America.

**Leases**

*Surface lease*
We acquired the right to use and occupy the lands necessary to mine the deposit under a surface lease agreement with the province of Saskatchewan. The lease covers 984 hectares and expires in May 2037.

We are required to report annually on the status of the environment, land development and progress on northern employment and business development.

We are in discussions with the province to increase the number of hectares the lease covers. The increase is necessary to implement the proposed discharge of treated effluent to Seru Bay at nearby Waterbury Lake (see page 53).

The Cigar Lake airstrip is under a separate surface lease with the province. The lease covers a total of 17.2 hectares. It expires in May 2028.

*Mineral lease*
We have the right to mine the deposit under ML-5521, granted to us by the province of Saskatchewan. The lease covers 308 hectares and expires December 1, 2011. We have the right to renew the lease for further 10-year terms.

*Mineral claims*
A mineral claim gives us the right to explore for minerals and to apply for a mineral lease. There are 25 mineral claims (Nos. S-106540 to 106564), totalling 92,740 hectares, adjoining the mineral lease and surrounding the site. We have title to all of these claims until 2022.
Climate
The climate is typical of the continental sub-arctic region of northern Saskatchewan. Summers are short and cool even though daily temperatures can sometimes reach above 30°C. The mean daily temperature for the coldest month is below -20°C, and winter daily temperatures can reach below -40°C.

Setting
The deposit is 40 kilometres inside the eastern edge of the Athabasca basin in northern Saskatchewan. The topography and environment are typical of the taiga forested lands in the Athabasca basin. This area is covered with 30 to 50 metres of overburden. Vegetation is dominated by black spruce and jack pine. There is a lake above the portion of the deposit that has inferred resources.

Geology
The deposit is at the unconformity contact between rock of the Athabasca Group and underlying lower Proterozoic Wollaston Group metasedimentary rocks. The Key Lake, McLean Lake and Collins Bay deposits all have a similar structural setting. While Cigar Lake shares many similarities with these deposits (general structural setting, mineralogy, geochemistry, host rock association and the age of the mineralization), it is distinguished from other similar deposits by its size, very high grade, and the high degree of clay alteration.

Cigar Lake’s geological setting is similar to McArthur River’s: the sandstone that overlays the deposit and basement rocks is water-bearing, with large volumes of water at significant pressure. Unlike McArthur River, however, the deposit lays flat.

Mineralization
The Cigar Lake deposit is 1,950 metres long, 20 to 100 metres wide, and ranges up to 12 metres thick, with an average thickness of 4.9 metres. It occurs at depths ranging between 410 to 450 metres below the surface.

The deposit has three distinct styles of mineralization:
- high-grade mineralization at the unconformity
- fracture controlled, vein-like mineralization higher up in the sandstone
- fracture controlled, vein-like mineralization in the basement rock.

Most of the uranium metal is in the high-grade mineralization, which has massive clays and high-grade uranium concentrations. It is economically viable, considering the available mining methods and ground conditions.

The deposit consists mainly of three dominant rock and mineral facies in varying proportions: quartz, clay (primarily chlorite with lesser illite) and metallic minerals (oxides, arsenides, sulphides). In the eastern part of the deposit, the ore is 50% clay matrix, 20% quartz and 30% metallic minerals, visually estimated by volume, overlain by a very weak mineralized clay cap one to five metres thick. In the lower-grade western part of the deposit, the proportion changes to 20% clay, 60% quartz and 20% metallic minerals.

About the operation
Cigar Lake is a development project with sufficient surface rights (subject to a requested increase receiving regulatory approvals) to meet future mining operation needs for the current mineral reserves.

Permits
Please see page 52 for more information about regulatory approvals for Cigar Lake.

Infrastructure
The surface facilities are 490 metres above sea level. The site includes:
- an underground mine with one shaft constructed and one shaft under construction
- waste rock stockpile
- ore slurry load out building
- contingency ponds
- water treatment ponds
- water treatment plant
- construction camp
- freeze plant
- sewage lagoon
- an employee residence.
Except for the increase described on page 44, the current surface lease is sufficient to accommodate personnel, access to water, airport, site roads and other necessary buildings and infrastructure.

The underground workings are confined to a small portion of the area of the mineral lease, where initial test mining was concentrated.

**Water, power and heat**

Waterbury Lake, which is nearby, provides water for the industrial activities and the camp. The site is connected to the provincial electricity grid, and it has standby generators in case there is an interruption in grid power.

Cigar Lake operates throughout the year despite cold winter conditions. During the winter, we use propane-fired burners to heat the fresh air necessary to ventilate the underground workings.

**Employees**

Employees are recruited first from communities in the area and then from major Saskatchewan population centres, like Saskatoon.

**Mining method**

We will use a number of innovative methods and techniques to mine the Cigar Lake deposit.

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**Bulk freezing**

The sandstone that overlays the deposit and basement rocks is water-bearing, with large volumes of water under significant pressure. We will freeze the ore zone and surrounding rock in the area to be mined, to prevent water from entering the mine and to help stabilize weak rock formations.

In the past, bulk freezing has been done from underground. In 2010, however, we tested and began to implement an innovative surface freeze strategy, which we expect will provide the following benefits:

- reduce risk to the production schedule by advancing the availability of frozen ground and simplifying construction activities underground by moving some of the related freezing infrastructure to surface
- move up to 10 million pounds forward in the production schedule

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"Bulk freezing"
improve mining costs and economics of the project. We expect the capital cost for surface freezing will be $80 to $85 million (100% basis). Our plan is to use a hybrid freezing approach. We will use surface freezing to shorten the rampup period and underground freezing for the longer term development of the mine.

**Jet boring**

After many years of test mining, we selected jet boring, a non-entry mining method, which we have developed and adapted specifically for this deposit. This method is new to the uranium mining industry. Overall, our initial test program was a success and met all initial objectives. This method, however, has not been proven at full production. As we ramp up production, there may be some technical challenges, which could affect our production plans.

Jet boring involves cutting cavities with a diameter of 4.5 metres out of the frozen ore using a high pressure water jet. This is a non-entry method, which means mining is carried out from headings in the basement rock below, so employees are not exposed to the orebody.

This mining approach is highly effective at managing the radiation levels workers are exposed to. Combined with ground freezing and cutting collection systems, jet boring reduces radiation exposure to acceptable levels that are below regulatory limits.

We plan to procure additional equipment for the jet boring system in 2011.

**Processing**

Cigar Lake ore slurry will be processed in two steps:

*High density ore slurry* – The ore slurry produced by the jet boring mining system will be pumped to Cigar Lake’s underground crushing and grinding facility. The resulting finely ground, high density ore slurry will be pumped to surface storage tanks, thickened and loaded into truck mounted containers like the ones we use at McArthur River.

*Processing* – The containers of ore slurry will be trucked initially to Areva’s McClean Lake JEB mill, 70 kilometres to the northeast. After production ramps up to planned full capacity, the JEB mill will ship a portion of the uranium solution to the Rabbit Lake mill for processing. These arrangements are described in two tolling mill agreements (see page 51).

**Tailings**

Cigar Lake site will not have a tailings management facility. The ore will be processed at the McClean Lake JEB and Rabbit Lake mills.

**Waste**

The waste rock piles are separated into three categories:

- **clean rock** (two piles) – will remain on the minesite
- **mineralized waste** (>0.03% U3O8) – will be disposed of underground at the Cigar Lake mine. We have not identified any mineralized waste in development to date.
- **waste with acid-generating potential** – temporarily stored on engineered lined pads. It will be transported to the McClean Lake facility for permanent disposal.

Water discharged from the mine is currently treated and released to Aline Creek. We have applied for approval to change the discharge location to Seru Bay (see page 53).

**Production**

We updated the mining plan after the two mine in-flows, and expect production to start in mid-2013. The plan is designed to extract all of the current mineral reserves. The following is a general summary of the production schedule guideline and parameters:
Total mill production
- 206.1 million pounds of U₃O₈, based on an overall milling recovery of 98.5%
- 18 million pounds per year after a three-year ramp-up (less than this in the early and late years of the current mineral reserve life)

Total mine production
- 557,000 thousand tonnes of ore

Average annual mine production
- 100 to 140 tonnes per day during peak production, depending on ore grade

Average mill feed grade
- 17% U₃O₈

To meet our production schedule, the ground has to be fully frozen in the area being mined before we start jet boring mining.

We have divided the orebody into production panels, and will have one jet boring mining unit operating in a panel. At least four production panels need to be frozen at one time to achieve the full production rate of 18 million pounds U₃O₈ per year.

Our base case production schedule assumed all ground freezing was done from underground. We are, however, implementing a surface freeze strategy, which is described on page 46.

Payback
In the March 2010 technical report, we estimated payback, on an undiscounted pre-tax basis, in 2017. This did not include all 2009 and prior costs.

Costs
In the March 2010 technical report, we estimated our share of costs as follows:

<table>
<thead>
<tr>
<th>Capital</th>
<th>$912 million in capital for Cigar Lake</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$405 million already spent on construction and mill modification, <em>plus</em></td>
</tr>
<tr>
<td></td>
<td>$507 million still to come</td>
</tr>
<tr>
<td>Sustaining capital</td>
<td>$226 million</td>
</tr>
<tr>
<td></td>
<td>for Cigar Lake and Rabbit Lake (not including the cost to increase the tailings capacity at Rabbit Lake. Please see page 27 for details.)</td>
</tr>
<tr>
<td>Remediation</td>
<td>$93 million</td>
</tr>
<tr>
<td></td>
<td>$64 million already spent and expensed (2006 to 2009), <em>plus</em></td>
</tr>
<tr>
<td></td>
<td>$29 million still to come</td>
</tr>
</tbody>
</table>

The above capital cost estimate does not include our share of the estimated cost of $80 to $85 million to proceed with our surface freeze strategy.

As of December 31, 2010, we had:
- invested $492 million for our share of the construction costs to develop Cigar Lake
- invested $262 million related to test mining and infrastructure development (prior to our 2005 development decision)
- expensed $81 million in remediation expenses, including $17 million in 2010.

We will update our estimated share of the Cigar Lake costs and other estimates, such as payback and our production schedule, when we issue a new technical report for Cigar Lake, which is planned for later in the year.

Forecasts of costs, production, mine life and payback are forward-looking information, and are based specifically on the assumptions and risks listed below, and the assumptions and the material risks discussed on page 2.
Assumptions
- natural phenomena, an equipment failure or other causes do not result in a material delay or disruption of our plans
- there are no additional water inflows
- the seals or plugs used for previous water inflows do not fail
- there are no labour disputes or shortages
- we obtain contractors, equipment, operating parts, supplies, regulatory permits and approvals when we need them
- our mine plans are achieved, our processing plants are available and function as designed, sufficient tailings capacity is available and our mineral reserve estimates are accurate

Material risks
- an unexpected geological, hydrological or underground condition, such as an additional water inflow, further delays our progress
- we cannot obtain or maintain the necessary regulatory permits or approvals
- natural phenomena, labour disputes, equipment failure, delay in obtaining the required contractors, equipment, operating parts or supplies, or other reasons cause a material delay or disruption in our plans
- our mining plans change or do not succeed, our processing plants are not available or do not function as designed, sufficient tailings capacity is not available and our mineral reserve estimates are not accurate

Assurance of success program
We adopted an assurance of success program for Cigar Lake that uses risk-based quality assurance planning. This involves carrying out a thorough assessment of the risks of all principal processes before implementation, with a goal of making sure we understand all risks, have measures in place to mitigate them, and alternatives to address all risks that cannot be fully mitigated. As the project is developed, we systematically monitor and evaluate any changes or conditions that we did not anticipate in our original plan, assess the new risks, and then update the plan.

Reclamation and financial assurances
In 2002, our preliminary decommissioning plan for Cigar Lake was approved by the CNSC and the Saskatchewan Ministry of Environment. We revised this plan and the accompanying preliminary decommissioning cost estimate when we renewed our federal licence in 2008. These documents include our estimated decommissioning costs up to the end of the construction of the mining facility.

We, along with our joint venture partners, posted letters of credit as financial assurances with the Saskatchewan Ministry of Environment in the amount of $27.7 million, to cover these costs.

Once mining begins, we will review the plan and cost estimate and update them to account for changes in our decommissioning liabilities.

The reclamation and remediation activities associated with waste rock and tailings at the McClean Lake and Rabbit Lake facilities are covered by the plans and cost estimates for each of those facilities.

Water inflow and mine rehabilitation

April 5, 2006 inflow
- A faulty valve assembly on a grouting standpipe at the base of shaft 2 caused a water inflow. The shaft flooded and we stopped all activities.
- Flooding did not go beyond the shaft because it was under construction and not connected to the mine.
- We finished dewatering and completed remediating the shaft in the first half of 2009.
- We prepared the ground around the shaft in 2010 for freezing in preparation to resume shaft sinking.

October 23, 2006 inflow
- A rock fall caused a significant water inflow that flooded the mine. We stopped all underground activities.
- We developed, and began to carry out, a multi-phase remediation plan to restore the underground workings. As we carried out the plan, it was refined.
• We drilled holes from the surface to the source of the inflow, and to a nearby tunnel that had to be reinforced. We pumped concrete and grout through the drillholes to seal off the inflow, and then drilled dewatering holes and began dewatering the mine in July 2008.

**August 12, 2008 inflow**

• We dewatered shaft 1, which was connected to the flooded mine, down to 430 metres below the surface.
• We observed an increase in the rate of water inflow and temporarily suspended remediation.
• We later identified the source of the increase to be a fissure in a tunnel on the 420 metre level.
• We sealed the inflow in October 2009 by placing an inflatable seal between the shaft and the source of the inflow and filling the area behind the seal with concrete and grout.
• Crews entered shaft 1 in November 2009 and began refurbishing the shaft, installing the ladderway, replacing mechanical and electrical components and extending the in-shaft pumping system.
• We finished dewatering in February 2010 and established safe access to the 480 metre level, the main working level of the mine.
• By the end of the 2010, we had:
  • substantially completed our cleanup, inspection and assessment, and secured the underground development areas
  • begun to restore the underground mine systems and infrastructure to prepare them for construction
  • made progress on remediating the underground brine handling system to support freezing the orebody and shaft 2
  • increased the installed pumping capacity
  • re-established the permanent refuge stations and communications
  • resumed underground development in the south end of the mine
  • backfilled the 465 metre level, which has been abandoned because it is no longer part of our mine plan
  • installed a permanent bulkhead and filled the entire 420 metre level with concrete backfill. This level was abandoned because it is no longer part of our mine plan.

**Rehabilitating the mine**

Remaining underground work includes completing specific areas of mine remediation, sinking shaft 2, completing the brine system freezing infrastructure, an ore freezing program, an underground ore extraction system and an ore processing circuit, and mine development.

**Securing the mine**

This work is substantially complete. It involves inspecting the mine and completing any additional remedial work to protect it from an inflow or significant ground failure (for example, determining if additional reinforcement is required in higher risk areas). The objective is to complete the work to secure the mine in 2011.

**Rehabilitating the underground**

We will rehabilitate the remaining lower priority areas of the mine (including 480 and 500 metre levels) and re-establish the full mine ventilation circuits. This will include:
• re-establishing the underground orebody freezing program. We also are implementing our surface freeze strategy to accelerate our plans to mine the orebody.
• completing the shaft 2 freezing program
• preparing areas for construction and development.

**Construction**

Once the mine is secured, the underground rehabilitation program has progressed significantly and regulatory requirements are met, we will resume underground construction.

**Completing shaft 2**

We plan to complete shaft 2 by 2012, taking the following steps:
• refurbishing the main areas of the underground mine
• sinking the shaft from the current shaft bottom (392 metres) to its final depth of 500 metres – to be completed in 2011
• installing a hydrostatic liner from the 392 metre to the 480 metre level
• establishing a shaft station at the 480 metre level
• installing shaft furnishings in the fresh air compartment.

Increase pumping capacity
In 2010, we increased our pumping capacity to meet our standard for this project, which is to secure pumping capacity of at least one and a half times the estimated maximum inflow.

We believe we have sufficient pumping, water treatment and surface storage capacity to handle the estimated maximum inflow.

In 2009, we received interim approval to release up to 1,100 m³/hr of treated water in non-routine circumstances, to accommodate remediation activities in the mine while the Cigar Lake water management project environmental assessment process is advancing. We will be working to obtain approval of this environmental assessment in 2011.

Surface construction
We completed several surface facilities by the end of 2010. Surface construction at Cigar Lake is 50% complete. Important surface construction still remaining includes the Waterbury Centre (new administration/services building), the Seru Bay pipeline, surface ore process facilities, completing the new propane tank farm, 138 kilovolt electrical substation expansion and a permanent camp expansion.

Capital construction
The capital construction project was 60% complete just before the inflow on October 23, 2006, based on the previous mine design. We now estimate that the underground development necessary to start production is 50% complete, based on the revised mine plan.

Toll milling agreements
Milling the slurry from the Cigar Lake mine is a two-step process:
• processing the ore slurry into JEB uranium solution
• processing the JEB uranium solution into uranium concentrates.

McClean Lake and Rabbit Lake mills will carry out this work according to the terms of two toll milling agreements.

McClean Lake JEB toll milling agreement
The McClean Lake joint venture has agreed to process Cigar Lake’s ore slurry at its McClean Lake JEB mill, according to the terms in its agreement with the Cigar Lake joint venture: JEB toll milling agreement (effective January 1, 2002).

The Cigar Lake joint venture will pay toll milling charges as follows:
• its share of milling expenses
• a toll milling fee based on the type of ore being processed (phase 1(a), phase 1(b) or phase 2).

In certain circumstances, the Cigar Lake joint venture may also be required to pay standby costs. Standby costs of $12 million were paid in 2010 with the JEB mill placed in a care and maintenance mode in July 2010. We estimate further standby costs to be $35 million. These costs will be expensed as incurred, and are not included in the project’s capital cost.

Under this agreement, the McClean Lake joint venture is required to modify the JEB mill. It has almost completed the modifications necessary for processing the slurry. We expect it will complete the rest of the modifications in 2013, except for the construction of the uranium solution loading facility, which we expect it will complete in 2015.

The McClean Lake joint venture is responsible for all costs of decommissioning the JEB mill. As well, the joint venture is responsible for the liabilities associated with tailings produced from processing Cigar Lake ore at the JEB mill.

Rabbit Lake toll milling agreement
We have agreed to process a portion of the JEB uranium solution at our Rabbit Lake mill, according to the terms in our Rabbit Lake toll milling agreement with Cigar Lake joint venture (effective January 1, 2002).
The Cigar Lake joint venture will pay toll milling charges as follows:

- its share of milling expenses
- a toll milling fee based on the type of ore being processed (phase 1(a), phase 1(b)).

In certain circumstances, the Cigar Lake joint venture may also be required to pay us standby costs. At the moment, we do not expect any to be payable.

Under this agreement, we are required to modify the Rabbit Lake mill, and have set the following target dates:

- 2011 – begin detailed study of Rabbit Lake mill modifications
- 2012 – begin detailed design of mill modifications
- 2014 – complete required transportation infrastructure
- 2015 – complete a uranium solution receiving station and associated handling equipment.

We expect to pay the majority of the modification costs, either in our capacity as mill owner or as 50.025% Cigar Lake joint venture participant.

We are responsible for all costs of decommissioning the Rabbit Lake mill, and for the liabilities associated with tailings produced from processing JEB uranium solution at the Rabbit Lake mill.

**Division of work**

The work will be divided between the two mills based on phases.

**Phase 1 ore – Cigar Lake’s current mineral reserves**

*Processing the ore slurry from Cigar Lake into JEB uranium solution*

The McClean Lake mill will process 100%.

*Processing the JEB uranium solution into uranium concentrates*

The McClean Lake mill will process 100% of the JEB uranium solution until the later of:
- the end of the initial rampup period of 730 days (the period starts after the testing and commissioning)
- the day it finishes processing over 2.5 million pounds of uranium concentrates over a period of three consecutive months.

After that, Cigar Lake processing of JEB uranium solution into uranium concentrates will be allocated between the McClean Lake and Rabbit Lake mills based on the following categories:

<table>
<thead>
<tr>
<th>Category</th>
<th>Percent of JEB uranium solution processed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1(a) ore</td>
<td></td>
</tr>
</tbody>
</table>
| the first 160 million pounds of uranium concentrates produced by McClean Lake and Rabbit Lake (in total) | McClean Lake – at least 42.7%  
Rabbit Lake – up to 57.3% |
| Phase 1(b) ore            |                                           |
| the rest of the phase 1 ore (47 million pounds) | McClean Lake – 50%  
Rabbit Lake – 50% |

**Phase 2 ore – Cigar Lake’s current inferred mineral resources**

McClean Lake will process 100%.

The inferred mineral resources have been evaluated from a preliminary perspective only. Further drilling and mining studies are needed before these resources can be fully evaluated and a decision made whether to proceed to mine them.

**Regulatory approvals**

*Environmental assessment*

- In 1995, the *Cigar Lake Project, Environmental Impact Statement* was submitted to the Joint Federal-Provincial review panel on Uranium Mining Developments in Northern Saskatchewan.
• In 1997, the panel recommended that the project should proceed, pending identification of a suitable waste rock disposal location.
• The Canadian and Saskatchewan governments both accepted the panel’s recommendation and in 1998 both government bodies approved the project in principle.
• In February 2004, we submitted an environmental assessment study report for the Cigar Lake mine plan. The CNSC agreed that this report met the requirements of the Canadian Environment Assessment Act and approved proceeding with the licensing and permitting process.

Construction licence
• The CNSC issued a construction licence in December 2004.
• With water inflows in 2006 and 2008, the CNSC has twice extended the licence term. It now expires on December 31, 2013. The second extension was provided to give us time to complete mine construction, including remediation, sinking shaft 2 and surface construction.
• As part of our construction licence, we need additional regulatory approvals to complete remediation and resume pre-flood underground construction and development activities.
• The licence also contains a condition that the revised mine plan requires regulatory approval. We are working to obtain this approval in 2011.

Operating licence
While we are completing mine construction, we will be preparing an operating licence application for submission to the CNSC. This licencing process can proceed while construction is being completed.

Processing licences
• An amendment is required to the McClean Lake JEB mill licence to process Cigar Lake ore at the McClean Lake JEB mill. We do not anticipate any issues with the licence amendment. In 1997, the environmental impact statement for this processing was approved.
• In August 2008, we completed the environmental assessment process for processing the Cigar Lake solution at the Rabbit Lake mill. See page 27 for more information.
• With extensions to the Rabbit Lake mine life, we are planning to expand Rabbit Lake tailings capacity. Regulatory approval is required.
• An amendment is required to the Rabbit Lake mill licence to process Cigar Lake uranium solution at the Rabbit Lake mill. We do not anticipate any issues with the licence amendment.

Water treatment/effluent discharge system
• We designed the Cigar Lake system for both routine and non-routine water treatment and effluent discharge, and it has been approved and licensed by the CNSC and the Saskatchewan Ministry of Environment.
• We want to manage the potentially higher water inflow we may see during construction and operations by building infrastructure that will allow us to discharge treated water directly to Seru Bay of Waterbury Lake. Our application in 2008 to the CNSC in respect of this infrastructure has triggered a joint federal and provincial environmental assessment screening under the Canadian Environment Assessment Act, which is underway. We anticipate an assessment decision in 2011, and have interim approvals and measures in place to increase discharge to the Aline Creek system if we need to.

Exploration, drilling and estimates
The Cigar Lake uranium deposit was discovered in 1981 by surface exploration drilling.

We focus most of our exploration activities on mineral lease ML-5521. Areva is responsible for exploration activity on the 25 surrounding claims, which is minimal.

The data from the exploration program on the 25 mineral claims is not part of the database used for the estimate of the mineral resources and mineral reserves at Cigar Lake.

Surface drilling – mineral lease
A total of 319 surface holes have been drilled over 132,084 metres. 141 of these were drilled within the known
deposit limits and intersected minimum composite intervals with grade times thickness (GT) value greater than 3.0 metre % U₃O₈, equivalent to 2.5 metres at 1.2% U₃O₈.

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982 – 1986</td>
<td>A major surface drilling program delineated the deposit</td>
</tr>
<tr>
<td>1987 – 2002</td>
<td>Drilling for geotechnical and infill holes</td>
</tr>
<tr>
<td>2007 – 2009</td>
<td>51 holes drilled for various geotechnical and geophysical programs</td>
</tr>
<tr>
<td>2010</td>
<td>35 holes drilled over Phase 1 of the deposit and 6 holes drilled over Phase 2 of the deposit</td>
</tr>
</tbody>
</table>

Surface drilling – mineral claims
In 2006, exploration drilling confirmed the existence of unconformity style mineralization outside the mineral lease, 650 metres east of Phase 1 mineralization.

Since then, additional exploration in the area delineated a mineralized zone 210 metres in strike length and 30 metres in across-strike length.

Underground drilling
Diamond drilling from underground was mainly to determine the rock mass characteristics of both ore and waste rock before development and mining.

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989 – 2006</td>
<td>132 underground diamond drillholes were drilled, over 11,108 metres. Only 10 of these intersected the orebody.</td>
</tr>
<tr>
<td></td>
<td>A total of 347 freeze and temperature monitoring holes were drilled from the underground workings during the construction phase. 150 of these were gamma surveyed by radiometric probing.</td>
</tr>
<tr>
<td></td>
<td>Due to the drilling method for freeze holes, no core is available for assays. Uranium content is estimated by radiometric probing of the holes.</td>
</tr>
<tr>
<td></td>
<td>We plan to drill several core holes and use them for calibration, to reconfirm the current conversion factors for estimating uranium grade from the freezehole radiometrics.</td>
</tr>
<tr>
<td>2007 – 2009</td>
<td>There was no underground drilling because of flooding.</td>
</tr>
<tr>
<td>2010</td>
<td>34 holes were drilled underground totalling 2,833 metres. None intersected the orebody.</td>
</tr>
<tr>
<td></td>
<td>6 of the 34 holes were drilled from inside Shaft 2, in advance of the top seal grout cover.</td>
</tr>
<tr>
<td></td>
<td>22 holes were drilled from the 480 metre level and the remaining 6 holes were drilled from the 500 metre level.</td>
</tr>
</tbody>
</table>

Sampling and analysis

Sampling
In the early stages of exploration drilling, sampling intervals were of various lengths, up to 50 centimetres, based on geological differences in the character of the mineralization.

Starting in 1983, sampling intervals were fixed at a standard interval of 50 centimetres. All sample results have since been normalized at 50 centimetres for estimating mineral resources.

Vertical surface drillholes generally represented the true thickness of the zone since the mineralization is flat.

Samples were drawn from two phases of the deposit:

Phase 1 – the eastern part (700 metres long by 150 metres wide)
- nominal drillhole fence spacing was 50 metres east-west by 20 metres north-south
- wedge drilling from primary holes generated intersections at 10 metres along three of the fences
- two infill fences were drilled at 25 metres apart, with holes at nominally 20 metres along the fences
- five holes were drilled at 25 metres apart, along the central east-west axis of the eastern zone
Phase 2 – the western part (1,200 metres long by 100 metres wide)

- nominal drillhole fence spacing was 200 metres east-west by 20 metres north-south

Two additional 50 centimetre samples were taken from the upper and lower contacts of the mineralized zone, to ensure that the zone was fully sampled at the 1,000 parts per million (0.1%) U₃O₈ cut-off.

All holes were core drilled and gamma probed. In-hole gamma surveys and hand held scintillator surveys guided sampling of core for assay purposes.

**Analysis**

- More than 4,400 samples were assayed from surface and underground drilling.
- Starting in 1983, all drilling and sample procedures were standardized and documented. This gives us a high degree of confidence in the accuracy and reliability of results of all phases of the work.
- The entire core from each sample interval was taken for assay, except for some of the earliest sampling in 1981 and 1982. This reduced the sample bias inherent when splitting core.
- Underground drillholes were sampled and gamma probed to the same standards as the surface drillholes.
- Most of the underground drillholes were rotary holes for ground freezing, however, so no core was recovered. For these holes, we will rely on radiometric assays to determine grade to be used in future mineral resource and mineral reserve estimations.
- Chemical assays were used to determine grade in mineralized rock.
- Core recovery through the ore zone has generally been very good. Where necessary, uranium grade determination is supplemented by radiometric probing results.
- To estimate mineral resources and reserves when core recovery was less than 100%, the assayed value was assumed to be representative of the whole interval. Of the 2,612 assayed samples for Phase 1 mineralization, only 48 samples had recoveries of less than 75%.
- Sample composites were calculated by taking the weighted average for the mineralized intercept in each drillhole using a 1.0 % U₃O₈ cut-off grade.

**Width**
- largest 11.5 metres
- smallest 0.5 metres
- average 5 metres

**Assay**
- highest 82.9% U₃O₈
- lowest 0.0% U₃O₈

**Density**
- highest 8.44 g/cm³
- lowest 1.27 g/cm³

**Quality control**

The quality assurance and quality control procedures were typical for the time. The original database was compiled by previous operators, and used to estimate the mineral resources and reserves. The majority of uranium assays in the database were obtained from Loring Laboratories Ltd. We have reviewed the original signed assay certificates.

More recent assaying at the Saskatchewan Research Council includes preparing and analysing standards, duplicates and blanks.

**Sample security**

We do not know what security measures were in place when the deposit was delineated, but we have no reason to doubt that sample security was maintained. Current core logging is carried out in the same facility used during the delineation drilling. It is well removed from the mine site and behind a locked entry gate, which prevents unauthorized access by road.

**Accuracy**

We are satisfied with the quality of data obtained from the exploration drilling program and consider it valid for estimating mineral resources and mineral reserves. Radiometrics of closely spaced underground freezehole drilling have also confirmed the continuity and high grades of the ore zone.

**Mineral reserve and resource estimates**

Please see page 67 for our mineral reserve and resource estimates for Cigar Lake.
Uranium – projects under evaluation

**Kintyre**
Kintyre, which we acquired with a partner in 2008, adds potential for low-cost production and diversifies our geographic reach and deposit types. We are the operator.

<table>
<thead>
<tr>
<th>Location</th>
<th>Western Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>70%</td>
</tr>
<tr>
<td>End product</td>
<td>( \text{U}_3\text{O}_8 )</td>
</tr>
<tr>
<td>Deposit type</td>
<td>open pit</td>
</tr>
</tbody>
</table>

**Business structure**
Kintyre is owned by two companies:

- Cameco – 70%
- Mitsubishi Development Pty Ltd. – 30%

**History**
In August 2008, we paid $346 million (US) to acquire a 70% interest in Kintyre.

See our 2010 MD&A for more information.
Uranium – projects under evaluation

**Millennium**

Millennium is a uranium deposit in northern Saskatchewan that we expect will use the mill at Key Lake. We are the operator.

<table>
<thead>
<tr>
<th>Location</th>
<th>Saskatchewan, Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>42%</td>
</tr>
<tr>
<td>End product</td>
<td>U₃O₈</td>
</tr>
<tr>
<td>Deposit type</td>
<td>underground</td>
</tr>
<tr>
<td>Estimated mineral resources (our share)</td>
<td>21.4 million pounds (indicated) average grade U₃O₈ – 4.55% 4.3 million pounds (inferred) average grade U₃O₈ – 2.12%</td>
</tr>
</tbody>
</table>

**Business structure**

Millennium is owned by a joint venture of three companies:

- Cameco – 42% (operator)
- Areva – 38%
- JCU Exploration (Canada) Co. Ltd. – 30%

**History**

The Millennium deposit was discovered in 2000. The deposit was delineated through geophysical survey and drilling work between 2000 and 2007.

See our 2010 MD&A for more information.
**Exploration**

Exploration is key to ensuring our long-term growth. Since 2002 we have more than tripled our annual investment. We carry out exploration mainly in Canada, the US, Australia, Mongolia, Kazakhstan and South America, on a total of 4.3 million hectares (10.6 million acres) at December 31, 2010.

Our exploration activities include brownfield exploration near our existing operations, on our projects under evaluation, on advanced exploration projects where uranium mineralization is being defined, regional exploration in new target areas, and alliances or other agreements with junior exploration companies that own potential uranium targets.

**Brownfield exploration**

In 2010, we spent $11 million in five brownfield exploration projects, and $48 million for resource delineation at Kintyre and Inkai block 3.

**Regional exploration**

In 2010, we spent about $37 million in regional exploration programs (including support costs). Saskatchewan was the largest region, followed by Australia, northern Canada, Asia, and South America.

We own a 30% interest in the Phoenix deposit, part of the Wheeler River joint venture in Saskatchewan, operated by 60% owner Denison Mines. In 2010, an initial estimate of 36 million pounds indicated mineral resources (100%) for zone A, the largest of four known mineralized zones of the deposit, was announced.

**Plans for 2011**

We plan to spend approximately $90 million on uranium exploration in 2011 as part of our long-term strategy. This includes activities at our projects under evaluation.

**Brownfield exploration**

About $9 million will be spent on five brownfield exploration projects in the Athabasca Basin and Australia. Our expenditures on projects under evaluation are expected to total $22 million, with the largest amounts spent on Kintyre and on further delineation of the Inkai block 3 resource.

**Regional exploration**

We expect to spend about $60 million on 54 projects worldwide, the majority of which are at drill target stage. Among the larger expenditures planned are $8 million on two adjacent projects in Nunavut, $5 million directed towards new targets in South Australia and Argentina, and a $4 million expenditure on the Wellington Range project in Northern Territory, Australia.
Fuel services – refining

**Blind River refinery**
Blind River is the world’s largest commercial uranium refinery, refining U$_3$O$_8$ from mines around the world into UO$_3$.

<table>
<thead>
<tr>
<th>Location</th>
<th>Ontario, Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>100%</td>
</tr>
<tr>
<td>End product</td>
<td>UO$_3$</td>
</tr>
<tr>
<td>ISO certification</td>
<td>ISO 14001 certified</td>
</tr>
<tr>
<td>Licensed capacity</td>
<td>approved: 18 million kgU as UO$_3$ per year application: 24 million kgU as UO$_3$ per year</td>
</tr>
<tr>
<td>2010 production</td>
<td>12.4 million kgU</td>
</tr>
<tr>
<td>Estimated decommissioning cost</td>
<td>$36 million</td>
</tr>
</tbody>
</table>

**Markets**
UO$_3$ is shipped to Port Hope for conversion into either UF$_6$ or UO$_2$, or to Springfields, UK for conversion into UF$_6$.

**Production**
Production of UO$_3$ in the first half of 2010 was negatively affected by a lack of uranium feed and impurity issues from the solvent extraction process which have since been resolved.

**Inventory**
Inventory of uranium concentrates has been declining compared to historic levels and continues to affect the facility’s operating schedule. In the past, there was plenty of feedstock because customers stored large inventories at the facility. Customers now hold almost no inventory as concentrates, and provide the feedstock on a just-in-time basis. We manage production to match the delivery of uranium feed which could affect the supply of UO$_3$ feed to Port Hope.

**Capacity**
In the fall of 2008, the CNSC approved the environmental assessment required to increase production to 24 million kgU per year. In December 2008, we submitted a written request to the regulator for an amendment to the licence.

In 2011, we are starting the process to extend Blind River’s five-year licence, and expect the process to be completed in 2012. As part of this process, we anticipate that the regulator will consider a licence amendment to increase production. Once approved, we plan to start construction to increase annual capacity to 24 million kgU per year.
Fuel services – conversion and fuel manufacturing
We control about 35% of western world UF₆ capacity.

Port Hope conversion services
Port Hope is the only uranium conversion facility in Canada, and one of only four in the western world. It is the only commercial supplier of UO₂ for Canadian-made Candu reactors.

<table>
<thead>
<tr>
<th>Location</th>
<th>Ontario, Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>100%</td>
</tr>
<tr>
<td>End product</td>
<td>UF₆, UO₂</td>
</tr>
<tr>
<td>ISO certification</td>
<td>ISO 14001 certified</td>
</tr>
<tr>
<td>Licensed capacity</td>
<td>12.5 million kgU as UF₆ per year</td>
</tr>
<tr>
<td></td>
<td>2.8 million kgU as UO₂ per year</td>
</tr>
<tr>
<td>Estimated decommissioning cost</td>
<td>$96 million</td>
</tr>
</tbody>
</table>

Cameco Fuel Manufacturing Inc. (CFM)
CFM produces fuel bundles and reactor components for Candu reactors.

<table>
<thead>
<tr>
<th>Location</th>
<th>Ontario, Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>100%</td>
</tr>
<tr>
<td>End product</td>
<td>Candu fuel bundles and components</td>
</tr>
<tr>
<td>ISO certification</td>
<td>ISO 9001 certified</td>
</tr>
<tr>
<td>Licensed capacity</td>
<td>1.2 million kgU as UO₂ as finished bundles</td>
</tr>
<tr>
<td>Estimated decommissioning cost</td>
<td>$18 million</td>
</tr>
</tbody>
</table>

Springfields Fuels Ltd. (SFL)
SFL is the world’s newest conversion facility. We contract almost all of its capacity through a toll-processing agreement to 2016.

<table>
<thead>
<tr>
<th>Location</th>
<th>Lancashire, UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toll-processing agreement</td>
<td>annual conversion of 5 million kgU as UO₃ to UF₆</td>
</tr>
<tr>
<td>Licensed capacity</td>
<td>6.0 million kgU as UF₆ per year</td>
</tr>
</tbody>
</table>

Port Hope, CFM and SFL produced a total of 15.4 million kilograms of uranium in 2010.
Conversion services
At its UO₂ plant, Port Hope produces UO₂ powder, which CFM uses to make fuel bundles that Canadian and other Candu reactors use for fuel, and blanket fuel for light water nuclear reactors.

At its UF₆ plant, Port Hope converts UO₃ to UF₆, and then ships it to enrichment plants in the United States, Europe and Japan. There, it is processed to become low enriched UF₆, converted to enriched UO₂, and then used as reactor fuel for light water nuclear reactors.

Shutdowns
In July 2007, we discovered soil and groundwater contamination under the Port Hope UF₆ plant. We suspended production of UF₆ and conducted an investigation. We restarted the UF₆ plant in late September 2008, after significantly upgrading the liquid management structures and equipment.

In November 2008, we suspended UF₆ production a second time because we weren’t able to resolve a contract dispute and obtain hydrofluoric acid (HF) from our sole supplier on acceptable terms, and could not quickly source alternative supplies. HF is a primary feed material for the production of UF₆. We signed an agreement with our original HF supplier, and with two additional suppliers, and restarted production of UF₆ in June 2009.

Production at the UO₂ plant began in mid-January 2009, after it had been shut down for an extended planned maintenance period. We upgraded the floors and in-floor structures, and they now meet the standards of the UF₆ plant.

The UF₆ plant was shut down in the summer of 2010 for a maintenance period of three months.

Environment
In 2009, we completed a site-wide environmental investigation of subsurface contamination and a site-wide risk assessment to identify contaminants that could pose a potential risk to the environment. We used the results to develop an environmental management plan to mitigate potential risks. In 2010, we enhanced the plan by adding a number of groundwater retrieval wells.

Port Hope conversion facility cleanup and modernization (Vision 2010)
The federal Minister of Environment approved the environmental assessment guidelines in 2009 for Vision 2010, our project designed to clean up to appropriate levels and modernize the Port Hope facility. Work on the environmental assessment continues, with the draft environmental impact statement submitted to the regulator in December 2010. Once the assessment has been approved, we will apply for an amendment to Port Hope’s licence. We have completed preliminary engineering and project design and now are working on basic engineering.

We have agreed to buy two parcels of land for a better site layout after Vision 2010 is complete.

10-year toll conversion agreement
In March 2005, we entered into a 10-year toll-conversion agreement with British Nuclear Fuels plc (BNFL), now Springfields Fuels Ltd. (SFL). Under the agreement, SFL has agreed to convert 5 million kilograms of UO₃ per year to UF₆. Our Blind River facility provides the UO₃, and we entered into several long-term contracts for significant volumes of conversion services provided under this agreement. We expect SFL’s plant to remain in operation through 2016.

Fuel manufacturing
CFM’s main business is making fuel bundles for Candu reactors. CFM presses UO₂ powder into pellets that are loaded into tubes, manufactured by CFM, and then assembled into fuel bundles. These bundles are ready to insert into a Candu reactor core.

Manufacturing services agreements
A substantial portion of CFM’s business is the supply of fuel bundles to BPLP and BALP. We supply the UO₂ for these fuel bundles.
Electricity

Bruce Power Limited Partnership (BPLP)
BPLP leases and operates four Candu nuclear reactors that generate and sell electricity into the Ontario wholesale market. It has the capacity to provide about 15% of Ontario’s electricity.

<table>
<thead>
<tr>
<th>Location</th>
<th>Ontario, Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>31.6%</td>
</tr>
<tr>
<td>ISO certification</td>
<td>ISO 14001 certified</td>
</tr>
<tr>
<td>Expected reactor life</td>
<td>2018 to 2021</td>
</tr>
<tr>
<td>Term of lease</td>
<td>2018 – right to extend for up to 25 years</td>
</tr>
<tr>
<td>Generation capacity</td>
<td>3,260 MW</td>
</tr>
</tbody>
</table>

Business structure
BPLP, an Ontario limited partnership, is owned by:
- Cameco – 31.6%
  (through our wholly owned Canadian subsidiaries, Cameco Bruce Holdings Inc. and Cameco Bruce Holdings II Inc.)
- TransCanada PipeLines Limited – 31.6%
- Ontario Municipal Employees Retirement System Trust – 31.6%
- The Power Workers’ Union and The Society of Energy Professionals – 5.2%

History

2001
- We acquire a 15% limited partnership interest in BPLP and become BPLP’s fuel manager.
- BPLP enters into agreements with Ontario Power Generation Inc. (OPG) to lease and operate the Bruce A and B nuclear-powered units in southwestern Ontario. The initial lease period expires in 2018. BPLP can extend the lease for up to another 25 years.
- OPG retains ownership of the units, and responsibility for decommissioning and waste management.

2003
- British Energy plc sells its 79.8% limited partnership interest in BPLP to a consortium of companies, including us.
- After the transaction is completed, BPLP is owned: Cameco (31.6%), TransCanada PipeLines Limited (31.6%), an Ontario Municipal Employees Retirement System trust (31.6%), and The Power Workers’ Union and The Society of Energy Professionals (5.2%).
- We continue as BPLP’s fuel manager.

2005
- BPLP is restructured and announces a new arrangement with the Ontario government to increase output of the four Bruce A reactors, including by refurbishing and restarting two Bruce A reactors that had been removed from service. BALP is formed and subleases the four Bruce A reactors from BPLP.
- BPLP receives payment for the sublease, the assets it transfers to BALP under the sublease, and for Bruce A refurbishment costs already incurred.
- BPLP is responsible for the overall management of the Bruce site and continues to lease and operate the four Bruce B reactors.
- We maintain our 31.6% interest in BPLP and do not participate in BALP.
- BPLP pays a special distribution to its limited partners. We receive $200 million.
About the generating facilities

Location
250 kilometres northwest of Toronto on Lake Huron.

Infrastructure
- four Bruce B Candu reactors: commissioned between 1984 and 1987 and have a combined net generating capacity of 3,260 megawatts
- four Bruce A Candu reactors: commissioned between 1977 and 1979 and have a combined generating capacity of 3,000 megawatts. These were removed from service from 1995 and 1998. In 2003 and 2004, two of them were returned to service, and these have a combined net generating capacity of 1,500 megawatts. The Bruce A1 and A2 units are scheduled to start again in 2012.

Average capacity factor
91% in 2010, and 87% in 2009. We expect it to be 89% in 2011.

Average capacity factor is the amount of electricity the four Bruce B reactors actually produced for sale as a percentage of the amount they were capable of producing.

Capital expenditures
$111 million in 2010, and expected to be $80 million in 2011.

Employees
3,700 BPLP employees, mostly unionized. Employee costs are apportioned between BPLP and BALP.

About Candu technology
Candu is a pressurized-heavy-water natural-uranium power reactor designed in the 1960s by a consortium of Canadian government agencies and private industry. All commercial nuclear reactors in Canada use Candu technology.

Candu reactors are different from light water reactors in several ways:
- they are fuelled by natural uranium (UO$_2$)
- they use deuterium oxide, or heavy water, both to slow down the fission process and to transfer heat within the reactor
- they can be refuelled without being taken offline.

Despite their ability to be refueled at full power, the Bruce Candu reactors have a higher number of outage days per year than the average for light water reactors, mainly because of the time required for maintenance and repair of pressure tubes and feeders, which light water reactors do not use.

Shutdown systems
Every Bruce reactor has two physically separate and independent systems designed to shut down the reactor within two seconds from when the system is activated. The Bruce reactors also have an emergency core coolant injection system, which activates if a pipe breaks in the reactor coolant system, and a negative pressure containment system designed to safely contain radioactive material.

Unit power ratings
Before BPLP leased the Bruce reactors, studies revealed that emergency shutdown systems might not have sufficient safety margins for certain low probability events. As a result, the CNSC began limiting the four Bruce B units to operating at 90% of maximum power.

BPLP has had some success in addressing this issue, by reordering the fuel core for example, which has improved safety margins. In 2004, the CNSC approved the uprating of the Bruce B5, 6 and 7 units to up to 93% of maximum power. The Bruce B8 unit received this rating in March 2010.

BPLP is looking at other ways to address this issue, including modifying the reactor shutdown systems and making minor modifications to the existing fuel design.
BPLP believes the technical steps it is taking are sufficient to address the issue, but future derating is possible, including small deratings to maintain operating safety margins as the units age.

**Operating life**
The Bruce B nuclear units were initially expected to operate for 30 years.

Based on a testing program and the actual operating history of the units to date, BPLP estimates the units will operate until:

- 2021 for the Bruce B8 unit
- 2018 to 2019 for the other three B units.

BPLP is looking at whether it can demonstrate that longer operating life is possible for the units. It has also been assessing the condition and life expectancy of several of their key components, including steam generators, fuel channels and feeder pipes.

**Steam generators**
As of December 31, 2010, BPLP had inspected all of the Bruce B steam generators and determined their present condition with a reasonable degree of certainty. BPLP believes that all of the inner tubes in the steam generators are likely to degrade, and that periodic cleaning, repairs and internal modifications are necessary to slow down the rates of degradation and restore unit reliability. It is implementing a maintenance plan with the goal of keeping the steam generators operating for the expected life of the units. Current estimates of steam generator life are within the estimated operating lives of the units.

In 2003, inspections of the Bruce B8 unit identified some erosion on the support plates in three of the eight steam generators. BPLP repaired the damage and did not find any issues with the boiler tubes. It inspected the other units and did not find any similar issues, and follow-up inspections of the B8 unit did not show any further significant degradation. An inspection in 2009 confirmed that the mitigating actions appear to have been effective at stopping the erosion on these support plates.

**Fuel channels**
Past engineering assessments have indicated that the fuel channels will last until the end of the estimated operating lives for the Bruce B units, and current inspections support this. In 2001, BPLP began a maintenance program to reposition the support springs in the fuel channels to ensure life expectancy. The support springs in the Bruce B8 unit also need to be repositioned, but this unit has tight fitting garter springs. BPLP is developing new tooling to locate and move the springs, and is targeting implementation in 2012.

**Feeder pipes**
BPLP has carried out inspections to determine the condition of the feeder pipes in the Bruce B units. Feeder pipes are part of the system that transports the heat generated by the nuclear reactor to the steam generators, using the heavy water coolant. The feeder pipes in all Candu reactors thin and degrade to varying degrees, and this is the subject of industry studies and monitoring. The Bruce B units have degraded to a lesser extent than other Candu units. This difference is due to a combination of lower operating stresses and, to a limited extent, their output rating.

BPLP inspects for pipe cracking during planned outages, but has not found any cracking to date. It increased the scale of these inspections, however, in response to the cracking of feeder pipes at two Candu plants outside Ontario, where the cracked sections were replaced and the units returned to service.

BPLP does not expect the feeder pipes to limit the life of the Bruce B units, although they do expect to have to replace some feeder pipes, and to replace and upgrade pipes for safe operation during the operating lives of the units.

**Relationship with our fuel manufacturing and UO₂ businesses**
Sales to BPLP and BALP are a substantial portion of our fuel manufacturing business and an important part of our UO₂ business.
Financial commitments
Our total commitment for financial assurances given on behalf of BPLP was an estimated $94 million at December 31, 2010.

These include guarantees in favour of OPG under the lease (as discussed below) and guarantees to support BPLP’s power purchase agreements with customers. This last commitment is adjusted as wholesale electricity market prices change. As at December 31, 2010, our actual exposure was $24 million. See note 25 to the 2010 financial statements.

The BPLP partners have agreed that all future excess cash will be distributed on a monthly basis and that separate cash calls will be made for major capital projects.

Reliance on OPG
OPG provides services to BPLP, including some that are necessary for BPLP to comply with its CNSC operating licences.

The material short-term OPG services include fuel channel inspection and maintenance services.

The material long-term OPG services include:
- services related to the supply, delivery and processing of heavy water
- low level and intermediate waste storage and disposal services
- collection and storage of used fuel bundles (see page 83 for more information about nuclear waste management and decommissioning).

Lease payments to OPG
Under the lease, OPG is responsible for decommissioning liabilities. These are covered by BPLP’s payments under the lease. OPG can ask for limited adjustments to the base rent every five years during the initial lease period to reflect increases in the anticipated cost of decommissioning.

In 2006, OPG completed its first five-year review and proposed an increase of $14.8 million to the annual base rate over the remaining initial term of the lease. BPLP disagreed with the proposal.

In October 2008 the matter was resolved by agreement between OPG and BPLP and the base rent was not increased. BPLP is, however, required to pay the higher base rent retroactively to when it was proposed, in any one of the following situations:
- if BPLP fails to renew the lease past 2027
- if a BPLP material event of default occurs under the lease prior to June 30, 2027
- if BPLP terminates the lease prematurely because it is no longer economically viable to operate the facility.

The second five-year review is scheduled for 2011.

In addition to base rent, BPLP pays an annual supplemental rent ($26 million) for each Bruce B operating reactor that increases with inflation. If the annual average price of electricity falls below $30 per megawatt hour, the supplemental rent decreases to $12 million per operating reactor.

In 2010, the total lease payments were $129 million.

BPLP can also terminate the lease if it is no longer economically viable to operate the facility, as long as it:
- pays a lease termination fee of $175 million
- pays the increase in base rent specified in the 2008 settlement with OPG
- meets specified ongoing operational requirements during handover
- meets specified shut-down conditions before handover.

We have guaranteed BPLP’s performance of these obligations to a maximum amount of $58.3 million.
Reinforcing the system

The transmission system from the Bruce Power site will need to be reinforced once all eight units are back in service and the expected wind powered facilities in the Bruce area are operational. This involves adding a new 500 kilovolt line between Bruce Power and Milton, essentially doubling the current transmission capacity. Hydro One is planning for the transmission reinforcement to be in service by 2012.
Mineral reserves and resources

Our mineral reserves and resources are the foundation of our company and fundamental to our success.

We have interests in a number of uranium properties. The tables in this section show our estimates of the reserves, measured and indicated resources and inferred resources at those properties. However, only three of the uranium properties listed in those tables are material uranium properties for us: McArthur River and Inkai, which are being mined, and Cigar Lake, which is being developed.

We estimate and disclose mineral reserves and resources in five categories, using the definitions adopted by the Canadian Institute of Mining, Metallurgy and Petroleum, and in compliance with Canadian National Instrument 43-101 – Standards of Disclosure for Mineral Projects (NI 43-101), developed by the Canadian Securities Administrators. You can find out more about these categories at cim.org.

About mineral resources

Mineral resources do not have demonstrated economic viability but do have reasonable prospects for economic extraction. They fall into three categories: measured, indicated and inferred. Our reported mineral resources do not include mineral reserves.

- Measured and indicated mineral resources can be estimated with a level of confidence sufficient to apply technical and economic parameters to support evaluation of the economic viability of the deposit.
  - measured resources: we can confirm both geological and grade continuity to support production planning.
  - indicated resources: we can reasonably assume geological and grade continuity to support mine planning.

- Inferred mineral resources are estimated using limited information. We do not have enough confidence to evaluate their economic viability in a meaningful way. You should not assume that all or any part of an inferred mineral resource will be upgraded to an indicated or measured mineral resource as a result of continued exploration.

About mineral reserves

Mineral reserves are the economically mineable part of measured or indicated mineral resources demonstrated by at least a preliminary feasibility study. They fall into two categories:

- proven reserves: the economically mineable part of a measured resource for which a preliminary feasibility study demonstrates that economic extraction is justified
- probable reserves: the economically mineable part of a measured and/or indicated resource for which a preliminary feasibility study demonstrates that economic extraction can be justified.

We use current geological models, an average uranium price of $56.50 (US) per pound U₃O₈, and current or projected operating costs and mine plans to estimate our mineral reserves, allowing for dilution and mining losses. We apply our standard data verification process for every estimate.

We report mineral reserves as the quantity of contained ore supporting our mining plans, and include an estimate of the metallurgical recovery for each uranium property. Metallurgical recovery is an estimate of the amount of valuable product that can be physically recovered by the metallurgical extraction process, and is calculated by multiplying content of contained metal by the estimated metallurgical recovery percentage.

Qualified persons

The technical and scientific information discussed in this AIF, including mineral reserve and resource estimates, for our material properties (McArthur River/Key Lake, Inkai and Cigar Lake) were prepared by, or under the supervision of, individuals who are qualified persons for the purposes of NI 43-101:

McArthur River/Key Lake
- Alain G. Mainville, director, mineral resources management, Cameco
- David Bronkhorst, vice-president, Saskatchewan mining south, Cameco
- Greg Murdock, technical superintendent, McArthur River, Cameco

Cigar Lake
- Alain G. Mainville, director, mineral resources management, Cameco
- C. Scott Bishop, principal mine engineer, major projects – technical services, Cameco
- Grant J.H. Goddard, vice-president, Saskatchewan mining north, Cameco
• Les Yesnik, general manager, Key Lake, Cameco
• Lorne D. Schwartz, chief metallurgist, major projects-technical services, Cameco

Inkai
• Alain G. Mainville, director, mineral resources management, Cameco
• Charles J. Foldenauer, operations director, JV Inkai

Important information about mineral reserve and resource estimates
Although we have carefully prepared and verified the mineral reserve and resource figures in this document, the figures are estimates, based in part on forward-looking information.

Estimates are based on our knowledge, mining experience, analysis of drilling results, the quality of available data and management’s best judgment. They are, however, imprecise by nature, may change over time, and include many variables and assumptions including:
• geological interpretation
• extraction plans
• commodity prices
• recovery rates
• operating and capital costs.

There is no assurance that the indicated levels of uranium will be produced, and we may have to re-estimate our mineral reserves based on actual production experience. Change in the price of uranium, production costs or recovery rates could make it unprofitable for us to operate or develop a particular site or sites for a period of time.
See page 1 for information about forward-looking information, and page 92 for a discussion of the risks that can affect our business.

Please see page 73 for the specific assumptions, parameters and methods used for the McArthur River, Cigar Lake and Inkai mineral reserve and resource estimates.

Important information for US investors
While the terms measured, indicated and inferred mineral resources are recognized and required by Canadian securities regulatory authorities, the US Securities and Exchange Commission (SEC) does not recognize them.

Under US standards, mineralization may not be classified as a ‘reserve’ unless it has been determined at the time of reporting that the mineralization could be economically and legally produced or extracted. US investors should not assume that:
• any or all of a measured or indicated mineral resource will ever be converted into proven or probable mineral reserves
• any or all of an inferred mineral resource exists or is economically or legally mineable, or will ever be upgraded to a higher category. Under Canadian securities regulations, estimates of inferred resources may not form the basis of feasibility or prefeasibility studies. Inferred resources have a great amount of uncertainty as to their existence and economic and legal feasibility.

The requirements of Canadian securities regulators for identification of “reserves” are also not the same as those of the SEC, and mineral reserves reported by us in accordance with Canadian requirements may not qualify as reserves under SEC standards.

Other information concerning descriptions of mineralization, mineral reserves and resources may not be comparable to information made public by companies that comply with the SEC’s reporting and disclosure requirements for US domestic mining companies, including Industry Guide 7.
### Mineral reserves
As at December 31, 2010 (100% basis – only the second last column shows Cameco’s share)

<table>
<thead>
<tr>
<th>Property</th>
<th>Mining method</th>
<th>Proven</th>
<th>Probable</th>
<th>Total mineral reserves</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Tonnes</td>
<td>Grade %U₃O₈</td>
<td>Content (lbs U₃O₈)</td>
</tr>
<tr>
<td>McArthur River</td>
<td>underground</td>
<td>458.5</td>
<td>17.29</td>
<td>174.8</td>
</tr>
<tr>
<td>Cigar Lake</td>
<td>underground</td>
<td>130.5</td>
<td>25.62</td>
<td>73.7</td>
</tr>
<tr>
<td>Rabbit Lake</td>
<td>underground</td>
<td>39.6</td>
<td>0.62</td>
<td>0.5</td>
</tr>
<tr>
<td>Key Lake</td>
<td>open pit</td>
<td>61.9</td>
<td>0.52</td>
<td>0.7</td>
</tr>
<tr>
<td>Inkai</td>
<td>ISR</td>
<td>4,817.2</td>
<td>0.08</td>
<td>8.9</td>
</tr>
<tr>
<td>Gas Hills-Peach</td>
<td>ISR</td>
<td>6,403.8</td>
<td>0.13</td>
<td>19.9</td>
</tr>
<tr>
<td>North Butte-Brown Ranch</td>
<td>ISR</td>
<td>3,803.2</td>
<td>0.10</td>
<td>8.2</td>
</tr>
<tr>
<td>Smith Ranch-Highland</td>
<td>ISR</td>
<td>1,243.4</td>
<td>0.11</td>
<td>3.1</td>
</tr>
<tr>
<td>Crow Butte</td>
<td>ISR</td>
<td>922.2</td>
<td>0.11</td>
<td>2.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>7,673.3</td>
<td>-</td>
<td>264.0</td>
</tr>
</tbody>
</table>

**Notes**

See Recent activity on page 20 for a discussion of the change in the average ore grade for McArthur River mineral reserves.

**ISR - in situ recovery**

Estimates in the above table:
- are based on the average exchange rate at December 31, 2010 ($1.00 US = $0.99 Cdn)
- use an average uranium price of $56.50 (US)/lb U₃O₈.

Totals may not add up due to rounding.

Except for the possible Inkai permitting issue referred to below, we do not expect these reserve estimates to be materially affected by environmental, permitting, legal, taxation, socio-economic, political or marketing issues.

**Metallurgical recovery**

We report mineral reserves as the quantity of contained ore supporting our mining plans, and include an estimate of the metallurgical recovery for each uranium property. Metallurgical recovery is an estimate of the amount of valuable product that can be physically recovered by the metallurgical extraction process, and is calculated by multiplying quantity of contained metal (content) by the estimated metallurgical recovery percentage. Our share of uranium in the table above is before accounting for estimated metallurgical recovery.

**Estimates for Inkai**

In 2010, Inkai received approval in principle to produce 3.9 million pounds per year (100% basis), and is seeking final approval with an amendment to the resource use contract.

Our 2011 and future annual production targets and mineral reserve estimate assume Inkai receives the government approvals and support of our partner, Kazatomprom. More specifically, it must:
- obtain final approval to produce at an annual rate of 3.9 million pounds (our share 2.3 million pounds)
- obtain the necessary permits and approvals to produce at an annual rate of 5.2 million pounds (our share 3.1 million pounds)
- ramp up production to an annual rate of 5.2 million pounds this year.
We expect Inkai to receive all of the necessary permits and approvals to meet its 2011 and future annual production targets and we anticipate it will be able to ramp up production as noted above.

There is no certainty, however, that Inkai will receive these permits or approvals or that it will be able to ramp up production this year. If Inkai does not, or if the permits and approvals are delayed, Inkai may be unable to achieve its 2011 and future annual production targets, and we may have to recategorize some of Inkai’s mineral reserves as mineral resources.

Changes this year

The table below shows the change in our share of mineral reserves for each property in 2010. The change was mostly the result of:

- mining and milling activities which consumed 24 million pounds
- conversion of mineral resources to mineral reserves from drilling and mine design updates at McArthur River, Rabbit Lake and Smith Ranch-Highland
- conversion of mineral reserves to mineral resources at Inkai due to the production ramp up schedule and increased leaching recovery applied to a limited annual production rate.

<table>
<thead>
<tr>
<th>(thousands of pounds U₃O₈)</th>
<th>December 31, 2009 Throughput</th>
<th>Additions (deletions)</th>
<th>December 31, 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proven mineral reserves</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cigar Lake</td>
<td>36,861</td>
<td>36,861</td>
<td></td>
</tr>
<tr>
<td>Crow Butte</td>
<td>2,316 (864)</td>
<td>845</td>
<td>2,297</td>
</tr>
<tr>
<td>Inkai</td>
<td>6,674 (1,352)</td>
<td>5,322</td>
<td></td>
</tr>
<tr>
<td>Key Lake</td>
<td>590</td>
<td>590</td>
<td></td>
</tr>
<tr>
<td>McArthur River</td>
<td>120,578 (14,091)</td>
<td>15,516</td>
<td>122,003</td>
</tr>
<tr>
<td>Rabbit Lake</td>
<td>617 (72)</td>
<td>545</td>
<td></td>
</tr>
<tr>
<td>Smith Ranch-Highland</td>
<td>1,979 (2,129)</td>
<td>3,272</td>
<td>3,122</td>
</tr>
<tr>
<td><strong>Total proven reserves</strong></td>
<td>169,615 (18,508)</td>
<td>19,633</td>
<td>170,740</td>
</tr>
</tbody>
</table>

| **Probable mineral reserves** |                             |                      |                  |
| Cigar Lake                | 67,819                      | 67,819               |
| Crow Butte                | 1,840 (1,056)               | 784                  |
| Gas Hills - Peach         | 18,984                      | 18,984               |
| Inkai                     | 74,167 (1,662)              | 4,880                | 67,625 |
| McArthur River            | 113,442 (1,265)             | 112,177              |
| North Butte – Brown Ranch | 8,208                       | 8,208                |
| Rabbit Lake               | 20,706 (3,969)              | 8,271                | 25,008 |
| Smith Ranch-Highland      | 3,932                       | 972                  | 4,904 |
| **Total probable reserves** | 309,098 (5,631)             | 2,042                | 305,509 |
| **Total mineral reserves** | 478,713 (24,139)            | 21,675               | 476,249 |

Notes

Throughput corresponds to millfeed. The difference between 2010 millfeed and Cameco’s share of 2010 pounds U₃O₈ produced is from mill recovery, mill inventory and processing low-grade material.

Additions (deletions) come from reassessing geological data, gathering data from mining and milling, and reclassifying material as either a mineral reserve or a mineral resource.
Mineral resources
As at December 31, 2010 (100% basis – only the last column shows Cameco’s share)

**Measured and indicated** (tonnes in thousands; pounds in millions)

<table>
<thead>
<tr>
<th>Property</th>
<th>Mining method</th>
<th>Tonnes</th>
<th>Grade % U₃O₈</th>
<th>Content (lbs U₃O₈)</th>
<th>Tonnes</th>
<th>Grade % U₃O₈</th>
<th>Content (lbs U₃O₈)</th>
<th>Cameco’s share (lbs U₃O₈)</th>
</tr>
</thead>
<tbody>
<tr>
<td>McArthur River underground</td>
<td>open pit, underground</td>
<td>347.0</td>
<td>1.69</td>
<td>12.9</td>
<td>347.0</td>
<td>1.69</td>
<td>12.9</td>
<td>4.0</td>
</tr>
<tr>
<td>Cigar Lake underground</td>
<td></td>
<td>222.2</td>
<td>10.23</td>
<td>5.0</td>
<td>222.2</td>
<td>10.23</td>
<td>5.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Rabbit Lake underground</td>
<td></td>
<td>15.6</td>
<td>2.35</td>
<td>0.8</td>
<td>15.6</td>
<td>2.35</td>
<td>0.8</td>
<td>0.6</td>
</tr>
<tr>
<td>Dawn Lake</td>
<td></td>
<td>394.0</td>
<td>5.00</td>
<td>16.9</td>
<td>394.0</td>
<td>5.00</td>
<td>16.9</td>
<td>4.0</td>
</tr>
<tr>
<td>Millennium underground</td>
<td></td>
<td>108.1</td>
<td>7.09</td>
<td>16.9</td>
<td>108.1</td>
<td>7.09</td>
<td>16.9</td>
<td>11.8</td>
</tr>
<tr>
<td>Phoenix underground</td>
<td></td>
<td>24.0</td>
<td>2.27</td>
<td>1.2</td>
<td>24.0</td>
<td>2.27</td>
<td>1.2</td>
<td>0.6</td>
</tr>
<tr>
<td>Tamarack underground</td>
<td></td>
<td>7.4</td>
<td>0.6</td>
<td>0.4</td>
<td>7.4</td>
<td>0.6</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Inka ISR</td>
<td></td>
<td>46,637.5</td>
<td>227.3</td>
<td>141.9</td>
<td>51,626.4</td>
<td>227.3</td>
<td>141.9</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>222.2</td>
<td>4.55</td>
<td>50.9</td>
<td>507.8</td>
<td>4.55</td>
<td>50.9</td>
<td>21.4</td>
</tr>
</tbody>
</table>

**Inferred** (tonnes in thousands; pounds in millions)

<table>
<thead>
<tr>
<th>Property</th>
<th>Mining method</th>
<th>Tonnes</th>
<th>Grade % U₃O₈</th>
<th>Content (lbs U₃O₈)</th>
<th>Cameco’s share (lbs U₃O₈)</th>
</tr>
</thead>
<tbody>
<tr>
<td>McArthur River underground</td>
<td>open pit, underground</td>
<td>506.1</td>
<td>13.46</td>
<td>150.2</td>
<td>104.8</td>
</tr>
<tr>
<td>Cigar Lake underground</td>
<td></td>
<td>480.4</td>
<td>12.61</td>
<td>133.5</td>
<td>66.8</td>
</tr>
<tr>
<td>Rabbit Lake underground</td>
<td></td>
<td>369.4</td>
<td>1.26</td>
<td>10.2</td>
<td>10.2</td>
</tr>
<tr>
<td>Millennium underground</td>
<td></td>
<td>217.8</td>
<td>2.12</td>
<td>10.2</td>
<td>4.3</td>
</tr>
<tr>
<td>Phoenix underground</td>
<td></td>
<td>2,466.2</td>
<td>0.21</td>
<td>11.2</td>
<td>22.5</td>
</tr>
<tr>
<td>Tamarack underground</td>
<td></td>
<td>2,215.3</td>
<td>0.08</td>
<td>4.1</td>
<td>4.1</td>
</tr>
<tr>
<td>Inka ISR</td>
<td></td>
<td>1,080.5</td>
<td>0.09</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Gas Hills-Peach ISR</td>
<td></td>
<td>1,638.2</td>
<td>0.11</td>
<td>4.1</td>
<td>4.1</td>
</tr>
<tr>
<td>North Butte-Brown Ranch ISR</td>
<td></td>
<td>1,080.5</td>
<td>0.09</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Smith Ranch-Highland ISR</td>
<td></td>
<td>6,370.1</td>
<td>0.05</td>
<td>6.6</td>
<td>6.6</td>
</tr>
<tr>
<td>Ruby Ranch ISR</td>
<td></td>
<td>2,349.4</td>
<td>0.11</td>
<td>5.6</td>
<td>5.6</td>
</tr>
<tr>
<td>Ruth ISR</td>
<td></td>
<td>210.9</td>
<td>0.08</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Shirley Basin ISR</td>
<td></td>
<td>1,727.4</td>
<td>0.12</td>
<td>4.4</td>
<td>4.4</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>580.1</td>
<td>356.9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

ISR - *in situ recovery*
Mineral resources do not have demonstrated economic viability. Totals may not add up due to rounding.
Changes this year
The table below shows the change in our share of mineral resources for each property in 2010. The change was mostly the result of:

- addition of mineral resources at the new Phoenix deposit
- conversion of mineral resources to mineral reserves at McArthur River and Rabbit Lake
- conversion of mineral reserves to mineral resources at Inkai
- additional inferred resources came from the new Powell zone at Rabbit Lake and drilling and new mining plans at McArthur River zone 4 south.

<table>
<thead>
<tr>
<th>Measured mineral resources</th>
<th>December 31, 2009</th>
<th>Additions (deletions)</th>
<th>December 31, 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cigar Lake</td>
<td>193</td>
<td></td>
<td>193</td>
</tr>
<tr>
<td>Crow Butte</td>
<td>322</td>
<td>(322)</td>
<td>0</td>
</tr>
<tr>
<td>Gas Hills – Peach</td>
<td>3,372</td>
<td></td>
<td>3,372</td>
</tr>
<tr>
<td>McArthur River</td>
<td>16,005</td>
<td>(7,697)</td>
<td>8,308</td>
</tr>
<tr>
<td>North Butte – Brown Ranch</td>
<td>1,366</td>
<td></td>
<td>1,366</td>
</tr>
<tr>
<td>Shirley Basin</td>
<td>304</td>
<td></td>
<td>304</td>
</tr>
<tr>
<td>Smith Ranch-Highland</td>
<td>5,952</td>
<td>(1,024)</td>
<td>4,928</td>
</tr>
<tr>
<td><strong>Total measured and indicated mineral resources</strong></td>
<td><strong>27,514</strong></td>
<td><strong>(9,043)</strong></td>
<td><strong>18,471</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicated mineral resources</th>
<th>December 31, 2009</th>
<th>Additions (deletions)</th>
<th>December 31, 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cigar Lake</td>
<td>405</td>
<td></td>
<td>405</td>
</tr>
<tr>
<td>Crow Butte</td>
<td>10,149</td>
<td>1,026</td>
<td>11,175</td>
</tr>
<tr>
<td>Dawn Lake</td>
<td>7,436</td>
<td></td>
<td>7,436</td>
</tr>
<tr>
<td>Gas Hills – Peach</td>
<td>2,268</td>
<td></td>
<td>2,268</td>
</tr>
<tr>
<td>Inkai</td>
<td>13,118</td>
<td>5,153</td>
<td>18,271</td>
</tr>
<tr>
<td>McArthur River</td>
<td>5,136</td>
<td>(1,648)</td>
<td>3,488</td>
</tr>
<tr>
<td>Millennium</td>
<td>19,643</td>
<td>1,726</td>
<td>21,369</td>
</tr>
<tr>
<td>North Butte – Brown Ranch</td>
<td>5,984</td>
<td></td>
<td>5,984</td>
</tr>
<tr>
<td>Phoenix</td>
<td>-</td>
<td>10,691</td>
<td>10,691</td>
</tr>
<tr>
<td>Rabbit Lake</td>
<td>10,372</td>
<td>(6,370)</td>
<td>4,002</td>
</tr>
<tr>
<td>Ruby Ranch</td>
<td>4,078</td>
<td></td>
<td>4,078</td>
</tr>
<tr>
<td>Ruth</td>
<td>2,097</td>
<td></td>
<td>2,097</td>
</tr>
<tr>
<td>Shirley Basin</td>
<td>4,085</td>
<td></td>
<td>4,085</td>
</tr>
<tr>
<td>Smith Ranch-Highland</td>
<td>16,962</td>
<td>685</td>
<td>17,647</td>
</tr>
<tr>
<td>Tamarack</td>
<td>10,288</td>
<td></td>
<td>10,288</td>
</tr>
<tr>
<td><strong>Total measured and indicated mineral resources</strong></td>
<td><strong>139,535</strong></td>
<td><strong>2,200</strong></td>
<td><strong>141,755</strong></td>
</tr>
<tr>
<td>Inferred mineral resources</td>
<td>December 31, 2009</td>
<td>Additions (deletions)</td>
<td>December 31, 2010</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>------------------</td>
<td>-----------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Cigar Lake</td>
<td>66,792</td>
<td></td>
<td>66,792</td>
</tr>
<tr>
<td>Crow Butte</td>
<td>6,694</td>
<td>(1,101)</td>
<td>5,593</td>
</tr>
<tr>
<td>Gas Hills – Peach</td>
<td>1,289</td>
<td></td>
<td>1,289</td>
</tr>
<tr>
<td>Inkai</td>
<td>153,049</td>
<td></td>
<td>153,049</td>
</tr>
<tr>
<td>McArthur River</td>
<td>111,278</td>
<td>(6,443)</td>
<td>104,835</td>
</tr>
<tr>
<td>Millennium</td>
<td>4,089</td>
<td>182</td>
<td>4,271</td>
</tr>
<tr>
<td>North Butte – Brown Ranch</td>
<td>900</td>
<td></td>
<td>900</td>
</tr>
<tr>
<td>Phoenix</td>
<td>-</td>
<td>1,143</td>
<td>1,143</td>
</tr>
<tr>
<td>Rabbit Lake</td>
<td>942</td>
<td>9,302</td>
<td>10,244</td>
</tr>
<tr>
<td>Ruby Ranch</td>
<td>167</td>
<td></td>
<td>167</td>
</tr>
<tr>
<td>Ruth</td>
<td>365</td>
<td></td>
<td>365</td>
</tr>
<tr>
<td>Shirley Basin</td>
<td>1,132</td>
<td></td>
<td>1,132</td>
</tr>
<tr>
<td>Smith Ranch-Highland</td>
<td>6,560</td>
<td></td>
<td>6,560</td>
</tr>
<tr>
<td>Tamarack</td>
<td>591</td>
<td></td>
<td>591</td>
</tr>
<tr>
<td><strong>Total inferred mineral resources</strong></td>
<td><strong>353,848</strong></td>
<td><strong>3,083</strong></td>
<td><strong>356,931</strong></td>
</tr>
</tbody>
</table>

**Note**
Additions (deletions) come from reassessing geological data, gathering data from mining and milling, and reclassifying material as either a mineral reserve or a mineral resource.

**Key assumptions, parameters and methods**

**McArthur River**

**Key assumptions**
- Mineral reserves include allowances for dilution (20%) and mining recovery (95%). Mineral resources do not include allowances for either.
- Mineral resources are estimated at a minimum mineralized thickness of 1.0 metre and at a cutoff grade of 0.1% to 0.5% U₃O₈. Mineral reserves are estimated at a cut-off grade of 0.8% U₃O₈.

**Key parameters**
- For mineral resources estimated from surface drillholes, the uranium grade is determined from assay sample.
- For mineral resources and mineral reserves estimated from underground drillholes, grades are determined by converting radiometric probing to percentage U₃O₈ based on a correlation between radiometric counts and assay values.
- Densities are determined using formulas based on density measurements of drill core and chemical assay grades.
- Mineral reserves at McArthur River are estimated using the raisebore, boxhole and blast-hole stoping methods combined with freeze curtains. The planned mining rate is to vary between 150 and 200 tonnes per day at a full mill production rate of 18.7 million pounds U₃O₈ per year based on 98.7% mill recovery.

**Key methods**
- Mineral resources were estimated using 3-dimensional block models. The models were created from the geological interpretation of mineralization outlines using lithology, structure and uranium grade information interpreted on vertical cross-sections and plan views. Estimates of block grade and density were obtained with ordinary kriging or inverse squared distance methods.
Cigar Lake

Key assumptions

- Phase 1 mineral resources (the eastern part of the deposit, 700 metres long by 150 metres wide) have been estimated within minimum mineralization thickness of 1.0 metres and a cut-off grade of 1% U₃O₈. The Phase 2 mineral resources (the western part of the deposit, 1,200 metres long by 100 metres wide) have been estimated with a minimum mineralization thickness of 2.5 metres and a cut-off grade of 5.9% U₃O₈.

- Phase 1 mineral resources have been estimated with no allowance for mining dilution or mining recovery. Phase 2 mineral resources incorporate an allowance of 0.5 metre of dilution material.

- Phase 1 mineral reserves have been estimated at a cut-off grade of 2.0% U₃O₈ and a minimum mineral thickness of 1.5 metres.

- Mineral reserves have been estimated with an allowance of 0.5 metres of dilution material above and below the ore zone, plus 20% external dilution at 0% U₃O₈. Dilution from sump slimes and drilling cuttings is also included as part of the 20% external dilution. Mineral reserves have been estimated based on 90% mining recovery.

Key parameters

- Grades of U₃O₈ were obtained from chemical assaying of drill core and checked against radiometric probing results. In areas of lost core or missing samples, the grade was determined from probing.

- A correlation between uranium grade and density was applied where the density was not directly measured for each sample.

- Mining rates are planned to vary between 100 and 140 tonnes per day during peak production at a full mill production rate of 18 million pounds of U₃O₈ per year based on 98.5% mill recovery.

Key methods

- The geological interpretation of the orebody outline was done on section and plan views derived from drillhole information. Phase 1 mineral resources and mineral reserves were estimated using a 3-dimensional block model. Phase 2 mineral resources were estimated using a 2-dimensional block model. Ordinary kriging was used to estimate the grade and density of the blocks.

Inkai

- The estimated mineral resources and reserves at Inkai are located in blocks 1 and 2. No mineral resources or reserves have been estimated for block 3.

- The resource models follow the Kazakhstan State Committee of Mineral Reserves (GKZ) guide and use the Grade-Thickness (GT) estimation method on 2-dimensional blocks in plan. They were created by Volkovgeology, a subsidiary of Kazatomprom which is responsible for prospecting, exploration and development of uranium deposits in Kazakhstan. We performed a validation of the Kazakh reserves estimate for block 1 in 2003, and confirmed the estimated pounds of uranium to within 2.5% of the Kazakh estimate. The Kazakh estimate was also validated by an independent consulting firm in 2005. In 2007, we and an independent consulting firm verified the block 2 Kazakh mineral reserves estimate and obtained results that were consistent with the Kazakh estimate.

- Historic drilling pattern densities over blocks 1 and 2 were sufficient to satisfy the Kazakhstan State Reserve Commission requirements in defining reserves in the C2, C1 and B categories within block 1 and C2 and C1 categories within block 2.

- Our reconciliation of the Kazakh classification system to the CIM standard definitions are set out in Section 6.3 (Table 6-4) of the Inkai technical report. We believe that Kazakhstan's reserves categories B, C1 and C2 correspond respectively to NI 43-101 mineral resource categories of measured, indicated and inferred.

Key assumptions

- Dilution and mining loss are not relevant factors because Inkai uses in situ recovery as the uranium extraction method. The recovery obtained from the in situ leaching process is included in the metallurgical recovery.

- Mineral reserves have been estimated at a minimum grade-thickness of 0.130 m% U₃O₈.
**Key parameters**
- Grades (%U₃O₈) were obtained from downhole gamma radiometric probing of drillholes, checked against assay results and prompt-fission neutron probing results in order to account for disequilibrium.
- An average density of 1.70 t/m³ was used, based on historical and current sample measurements.
- In situ recovery production rates are planned to vary between 13,000 and 16,000 lbs U₃O₈ per day at a full mill production rate of 5.2 million lbs of U₃O₈ per year based on 85% recovery.

**Key methods**
- The geological interpretation of the orebody outline was done on section and plan views derived from core drillhole information.
- Mineral resources and mineral reserves were estimated with the grade-thickness method using 2-dimensional block models.
Sustainable development

Companies are under growing scrutiny for the way they conduct their businesses. There has been a significant increase in stakeholder expectations for environmentally and socially responsible business practices. We work under strict government regulation at every stage – from exploration and development, to decommissioning and reclamation.

Rather than viewing sustainable development as an "add-on" to traditional business activity, however, we see it as an integral component to the way we do business. Our aim is to fully integrate sustainable development principles and practices at each level of our operations, following the ALARA principle: protecting the environment by limiting emissions and managing waste so levels are as low as reasonably achievable, accounting for social and economic factors.

We measure our progress using 23 key performance indicators that reinforce our corporate strategy and align with our four measures of success:

**Safe and rewarding workplace**

As we strive to foster a safe, healthy and rewarding workplace at all of our facilities, we measure key indicators such as conventional and radiation safety statistics, employee sentiment toward the company and employment creation.

**Clean environment**

We are committed to operating our business with respect and care for the local and global environment. We strive to be a leader in environmental practices and performance by complying with and moving beyond legal and other requirements.

We are committed to integrating environmental leadership into everything we do. Part of the way we determine our progress is by measuring our impact on air, water and land near our operations as well as generation of waste and emissions.

**Supportive communities**

We work to build and sustain the trust of local communities by acting as a good corporate citizen. We measure the amount invested in communities through sponsorships and donations, community support through annual polling and regional employment figures.

**Outstanding financial performance**

To fulfill our vision, we must be competitive and secure the support of our stakeholders. We measure our financial performance based on our ability to achieve a number of strategic objectives, which are set and reviewed annually.

Our 2010 and 2011 objectives are based upon, and our performance is measured against, our four measures of success. See our 2010 MD&A for our 2010 objectives, our performance against those objectives and our 2011 objectives.

**Focus on environmental leadership**

Our business by its nature affects the environment, so environmental leadership is a key area of focus for us and a strategic priority for our operations.

Environmental leadership is reinforced by our systematic approach to safety, health, environment and quality (SHEQ) issues. We have integrated this approach into our planning process for major projects. We also have conceptual decommissioning plans in place for all of our operating sites.

We report our performance over a three-year period. You can find this information on our website (cameco.com) and in our sustainable development report, which is also available on our website.

**SHEQ management system**

We introduced our environmental, safety and health policies in 1991, and have refined our approach over the years to form our overall integrated management system: the SHEQ management system.
The system includes our statement of environmental principles, and seven programs for implementing the policies and fulfilling our commitments in these areas.

Our environmental principles
- keep risks at levels as low as reasonably achievable, accounting for social and economic factors
- prevent pollution
- comply with and move beyond legal compliance requirements
- ensure quality of processes, products and services
- continually improve our overall performance.

Seven SHEQ programs
- Quality management program
- Safety and health management program
- Radiation protection program
- Environment management program
- Management system audit program
- Emergency preparedness and response program
- Contractor management program

We benchmark our system against those used by other companies in the mining and nuclear power generation sectors. The board’s safety, health and environment committee oversees our environmental policies and programs and our environmental performance on behalf of the board. Our chief executive officer is responsible for ensuring the system is implemented across the company.

Our SHEQ management system is centralized and managed at the corporate level, and we implement it corporately and at our operations.

The corporate audit program assesses our compliance with laws, regulations, permit requirements, our SHEQ related policies and programs, and how well the sites are managing requirements and reducing risk.

The SHEQ audit function is integrated with our other internal audit functions. We generally conduct a SHEQ audit every 18 to 24 months at each operating site, and every 12 months at every construction or development site.

SHEQ activity at the operations focuses on consistently applying policies and procedures, and providing help with technical issues. The sites carry out internal audits to make sure their programs meet our standards and comply with regulatory requirements. The SHEQ management system is also part of our program to manage environmental risks at the operations and meet the requirements of ISO 14001. All of our operating sites are ISO 14001 certified except for CFM.

In 2010, we invested:
- $76 million in environmental protection, monitoring and assessment programs, a decrease of 17% compared to 2009
- $34 million in health and safety programs, unchanged compared to 2009.

In 2011, spending for these programs is expected to be similar to 2010.

We had 22 reportable environmental events in 2010, compared to 28 in 2009, however, both rates are below our long-term annual average of 30. There were no significant environmental incidents in 2009 and 2010.

In 2010, we achieved the best safety performance in our history, exceeding our award-winning performance in 2009.

You can find more information about our SHEQ management system on our website.

Reducing our impact

Our internal team of specialists has been carrying out our long-term plan to reduce the impact we have on the environment. This includes monitoring and reducing our effect on air, water and land, reducing the greenhouse gases we produce and the amount of energy we consume, and managing the effects of waste.
We are investing in management systems and safety initiatives to achieve operational excellence, and this is improving our safety and environmental performance and operating efficiency.

We are maximizing the lifespan of our operating sites to limit the environmental impact of our operations, and will be revitalizing the Key Lake mill (in operation for 28 years) and Rabbit Lake mill (in operation for 36 years).

Like other large industrial organizations, we use chemicals in our operations that could be hazardous to our health and the environment if they are not handled correctly. We train our employees in the proper use of hazardous substances and in emergency response techniques.

We meet with communities who are affected by our activities to tell them what we are doing and to receive feedback and further input, to build and sustain their trust. In Saskatchewan, we participate in the Athabasca Working Group and Northern Saskatchewan Environmental Quality Committee. In Ontario, we liaise with the community by regularly holding educational and environment-focused activities.

**Land**

Our 10 operating sites affect 30 square kilometres of land – a relatively small area compared to what would be required to generate the same amount of energy using other technologies.

Our current mines in northern Saskatchewan are underground mines so the impact on the surface land is minimized. We use ISR mining in the US and Kazakhstan to extract uranium from underground non-potable, brackish aquifers, so the impact on the surface there is also minimal.

**Water**

We are continually upgrading processes and adopting new technologies to improve how we manage process water, and the effect it has on receiving water bodies.

We are reducing the concentrations of molybdenum and selenium in the effluent released from our northern Saskatchewan mines and mills because the continued release of these substances at higher levels may affect the environment.

**Key Lake**

The CNSC accepted our action plan in 2007 to reduce molybdenum and selenium discharges in Key Lake mill effluent, and made it a condition of the facility’s operating licence. We have since reduced the concentrations of both substances in the effluent.

**McArthur River**

We are reducing the amount of molybdenum McArthur River discharges into the environment:

- The three shafts at the site seep good quality water. We are capturing it and using it for underground mining, rather than piping more water down from the surface.

- The water quality from shaft 3 has been assessed and approved for discharge to the environment without treatment, so we discharge all excess water picked up in shaft 3 directly to the environment. This keeps the water away from underground processes, reducing the concentration of molybdenum.

- We are studying how to send excess water from the other shafts directly to the surface water treatment plant.

We expect these activities to reduce both the volume of effluent treated and the concentration of molybdenum in the effluent.

**Rabbit Lake**

We modified the Rabbit Lake mill in 2009 and reduced discharges of molybdenum and selenium. We installed a water treatment circuit in 2006 to reduce uranium in the discharge and, as of 2007, there is an average of 10 times less uranium being discharged than there was before 2004 calculated on an annual basis. Early in 2008, while excavating for a new effluent treatment circuit next to the mill, we detected uranium in groundwater seepage. The uranium was present only in the immediate vicinity of the mill. We made the necessary repairs, identified and made improvements, and restored the contaminated areas.
We continually monitor the environment to verify that the improvements we made in the mill effluent treatment process are having the planned effect of reducing the impact on the receiving environment.

**Port Hope**

We discovered soil and groundwater contamination under the Port Hope UF₆ conversion plant in July 2007, and suspended operation to investigate. See **Shutdowns** on page 61 for information about the environmental effect of the incident, how we responded and the steps we took to resume operation of the plant.

We also shut down the UO₂ plant for an extended planned maintenance period in 2008, and brought floors and in-floor structures up to the new standards of the UF₆ plant. We discovered a leaking sump, which appeared to be the source of some localized contaminated ground water we found in an earlier assessment. We installed a new groundwater collection well next to the UO₂ plant to control contaminated groundwater, and reopened the plant in mid-January 2009.

Improvements to the UF₆ and UO₂ plants cost $50 million. We also spent $14 million to remediate the contaminated soil and groundwater from the Port Hope UF₆ plant.

**United States**

The ISR method we use in the US involves extracting uranium from underground non-potable aquifers by dissolving the uranium with a carbonate-based water solution and pumping it to a processing facility on the surface. After mining has been completed, an ISR wellfield must be restored according to regulatory requirements. This generally involves restoring the groundwater to its pre-mining use or equivalent class of use water standard.

We have 10 wellfields under restoration. See page 85 for more information.

**Kazakhstan**

The ISR mining method we use at Inkai uses an acid in the mining solution to extract uranium from underground non-potable aquifers. The injection and recovery system is engineered to prevent the mining solution from migrating to the aquifer above the orebody, which has water with higher purity.

Kazakhstan does not require active restoration of post-mining groundwater. After a number of decommissioning steps are taken, natural attenuation of the residual acid in the mined out horizon, as a passive form of groundwater restoration, has been accepted. Attenuation is a combination of neutralization of the groundwater residual acid content by interaction with the host rock minerals and other chemical reactions which immobilize residual groundwater contaminants in the mined-out subsoil horizon. This approach is considered acceptable as it results in water quality similar to the pre-mining baseline status.

**Air**

The table below shows our most recent data on our greenhouse gas emissions. We follow the general guidelines outlined by the *Intergovernmental Panel on Climate Change* to qualify greenhouse gas emissions.

<table>
<thead>
<tr>
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<th>2009</th>
<th>2008</th>
</tr>
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<tbody>
<tr>
<td>Greenhouse gas emissions of tonnes of CO₂ equivalent (CO₂e)</td>
<td>460,000</td>
<td>421,000</td>
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</table>

Greenhouse gas emissions include carbon dioxide, methane, nitrous oxide, sulphur hexafluoride, hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs) expressed as a carbon equivalent (CO₂e).

The greenhouse gas emissions have been slowly increasing since 2005. Expansion of mining operations has caused increases in fuel consumption, and therefore emissions, as expected.

**Port Hope**

We have lowered emissions of uranium and hydrofluoric acid to the air by installing new equipment and changing the operating procedures.

**McArthur River**

McArthur River has a large refrigeration plant that produces brine used for freezing the area of the deposit being mined. The plant uses refrigerants, but they are not ozone-depleting chemicals that harm the earth’s atmosphere.
Cigar Lake
Cigar Lake has a large refrigeration plant that produces brine used for freezing certain areas of the deposit as we prepare it for mining. The plant uses refrigerants, but they are not ozone-depleting chemicals that harm the earth's atmosphere.

Waste
Our mines and mills in northern Saskatchewan account for most of the tailings and waste rock our operations generate.

We treat the mill tailings at Rabbit Lake and Key Lake to stabilize contaminants before depositing them in tailings management facilities (in mined-out open pits near the mills).

We divert groundwater and surface water around the tailings management facilities, monitor the water to make sure it is not affected by the tailings, and treat it if necessary. We monitor all runoff and treat any seepage water from waste rock piles as needed. We stockpile some waste rock to blend with higher grade ores. We contour other waste rock piles and re-vegetate them before decommissioning the site. We continue to monitor groundwater after the facility has been decommissioned.

Complying with environmental regulations
Our business is required to comply with laws and regulations that are designed to protect the environment and control the management of hazardous wastes and materials. Some laws and regulations focus on environmental issues in general, and others are specifically related to mining and the nuclear sector. They change often, with requirements increasing, and existing standards are being applied more stringently. While this promotes continuous improvement, it can increase expenses and capital expenditures, or limit or delay our activities.

Government legislation and regulation in various jurisdictions establish standards for system performance, standards and guidelines for air and water quality emissions, and other design or operational requirements for the various SHEQ components of our operations and the mines we plan to develop. We must complete a comprehensive environmental assessment before we begin developing a new mine or start processing activities, or make any significant change to a plan that has already been approved. Once we have permanently stopped mining and processing activities, we are required to decommission and reclaim the operating site to the satisfaction of the regulator, and we may be required to actively manage former mining properties for many years.

Canada
There is ongoing public scrutiny of the impact our operations have on the environment, and ongoing regulatory oversight by the Canadian Nuclear Safety Commission (CNSC), the Saskatchewan Ministry of the Environment, the Ontario Ministry of the Environment, and Environment Canada.

The CNSC, an independent regulatory authority established by the federal government under the Canadian Nuclear Safety and Control Act (NSCA), is our main regulator in Canada. It regulates our compliance with the NSCA and is the federal lead for environmental assessments required to be carried out under the Canadian Environmental Assessment Act.

The primary objectives of an environmental assessment are to ensure that:
- potential adverse environmental effects are considered before proceeding with a project
- projects that cause unjustifiable, significant adverse environmental effects are not permitted to proceed
- appropriate measures are implemented, where necessary, to mitigate risk.

Generally, the environmental assessment process takes more than two years to complete. Our plans to expand production or build new mines in Saskatchewan are subject to this process, and we currently have a range of environmental assessments underway, from comprehensive study level to less detailed screening level. In certain cases, a review panel may be appointed and public hearings held.
Over the past few years, CNSC audits of our operations have focused on the following SHEQ programs:

- radiation protection
- environmental monitoring
- fire protection
- operational quality assurance
- organization and management systems effectiveness
- transportation systems
- geotechnical monitoring
- training
- ventilation systems

Improving our environmental performance is challenging, and we have several initiatives underway:

- dealing with more stringent controls on fugitive uranium emissions from ventilation systems at fuel services facilities
- optimizing performance of our facilities to reduce molybdenum and selenium loadings
- lessening the impacts our facilities have on groundwater.

Many of these initiatives have required additional environmental studies near the operations, and we expect that we will have to do more, especially environmental assessments, which generally establish expectations for operations in the future.

It can take a significant amount of time for regulators to make requested changes to a licence or grant requested approval because the proposal may require an environmental assessment or an extensive review of supporting technical data, management programs and procedures. We are improving the quality of our proposals and submissions and have introduced a number of programs to ensure we continue to comply with regulatory requirements, but this has also increased our capital expenditures and our operating costs.

As our SHEQ management system matures, regulators review our programs more often and recommend ways to improve our SHEQ performance. These recommendations are generally procedural and do not involve large capital costs, although systems applications can be significant and result in higher operating costs.

We believe that regulatory expectations of the CNSC and other federal and provincial regulators will continue to evolve, and lead to changes to both requirements and the regulatory framework. This will likely increase our expenses.

United States

Our US ISR operations have to meet federal, state and local regulations governing air emissions, water discharges, handling and disposal of hazardous materials and site reclamation, among other things.

Mining activities have to meet comprehensive environmental regulations from the US Nuclear Regulatory Commission (NRC), Bureau of Land Management, Environmental Protection Agency and state environmental agencies. The process of obtaining mine permits and licences generally takes several years, and involves environmental assessment reports, public hearings and comments. We have the permits and approvals for the US operations that we need to meet our 2011 production plans.

Our plans to expand our US ISR production, which includes adding satellite facilities to our operating mines in Wyoming and Nebraska, are subject to an environmental assessment process that can take several years.

After mining is complete, ISR wellfields have to be restored according to regulatory requirements. This generally involves restoring the groundwater to its pre-mining use or equivalent class of use water standard. Restoration of Crow Butte wellfields is regulated by the Nebraska Department of Environmental Quality and the NRC. Restoration of Smith Ranch-Highland wellfields is regulated by the Wyoming Department of Environmental Quality and the NRC. See page 85 for the status of wellfield restoration and regulatory approvals.

Kazakhstan

In its resource use contract with the Kazakhstan government, Inkai committed to conducting its operations according to good international mining practices. It complies with the environmental requirements of Kazakhstan legislation and regulations, and, as an industrial company, it must also reduce, control or eliminate various kinds of pollution and protect natural resources. Inkai is required to submit annual reports on pollution levels to the Kazakhstan environmental, tax and statistics authorities. The authorities conduct tests to validate Inkai's results.
Environmental protection legislation in Kazakhstan has evolved rapidly, especially in recent years. As the subsoil use sector has evolved, there has been a trend towards greater regulation, heightened enforcement and greater liability for non-compliance. The most significant development was the adoption of the *Ecological Code*, dated January 9, 2007 and effective as of February 3, 2007. This code replaced the three main laws that had related to environmental protection.

Inkai is required to comply with environmental requirements during all stages of the project, and must develop an environmental impact assessment for examination by a state environmental expert before making any legal, organisational or economic decisions that could have an effect on the environment and public health. Plans to double production at blocks 1 and 2 and to develop block 3 are subject to this environmental impact assessment process.

Under the *Ecological Code*, Inkai needs an environmental permit to operate. The permit certifies the holder's right to discharge emissions into the environment, provided that it introduces the "best available technologies" and complies with the technical guidelines in the code. Inkai has a permit for environmental emissions and discharges, valid until December 2013, and an emissions permit for drilling activities, valid until December 2012. It also holds the required permits under the *Water Code*.

Government authorities and the courts enforce compliance with these permits, and violations can result in the imposition of administrative, civil or criminal penalties, the suspension or stopping of operations, orders to pay compensation, orders to remedy the effects of violations and orders to take preventive steps against possible future violations. In certain situations, the issuing authority may modify or revoke the permits.

Inkai has environmental insurance, as required by the *Ecological Code* and the resource use contract.

**Nuclear waste management and decommissioning**

Once we have permanently stopped mining and processing activities, we are required to decommission the operating sites. This includes reclaiming all waste rock and tailings management facilities and the other areas of the site affected by our activities to the satisfaction of regulatory authorities.

**Estimating decommissioning and reclamation costs**

We develop conceptual decommissioning plans for our operating sites and use them to estimate our decommissioning costs. We also submit them to the regulator to determine the amount of financial assurance we must provide to secure our decommissioning obligations. Our plans include reclamation techniques that we believe generate reasonable environmental and radiological performance. Regulators give "conceptual approval" to a decommissioning plan if they believe the concept is reasonable.

We started conducting reviews of our conceptual decommissioning plans for all Canadian sites in 1996. We typically review them every five years, or when we amend or renew an operating licence. We review our cost estimates for both accounting purposes and licence applications. For our US sites, they are reviewed annually. A preliminary decommissioning plan has been established for Inkai. The plan is updated every five years or as significant changes take place, which would affect the decommissioning estimate.

As properties approach or go into decommissioning, regulators review the detailed decommissioning plans. This can result in additional regulatory process, requirements, costs and financial assurances.

At the end of 2010, our estimate of total decommissioning and reclamation costs was $465 million. This is the undiscounted value of the obligation and is based on our current operations. We had accounting provisions of $280 million at the end of 2010 (the present value of the $465 million). Since we expect to incur most of these expenditures at the end of the useful lives of the operations they relate to, our expected costs for decommissioning and reclamation for the next five years are not material.

We provide financial assurances for decommissioning and reclamation as letters of credit to regulatory authorities, as required. We had a total of $549 million in letters of credit supporting our reclamation liabilities at the end of 2010. Since 2001, all of our North American operations have had letters of credit in place that provide financial assurance in line with our preliminary plans for decommissioning for the sites.
Please also see note 12 to the 2010 financial statements for our estimate of decommissioning and reclamation costs and related letters of credit.

Canada

Decommissioning estimates
(100% basis)

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<tbody>
<tr>
<td>McArthur River</td>
<td>$36.1 million</td>
</tr>
<tr>
<td>Rabbit Lake</td>
<td>$105.2 million</td>
</tr>
<tr>
<td>Key Lake</td>
<td>$120.7 million</td>
</tr>
<tr>
<td>Cigar Lake</td>
<td>$27.7 million</td>
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</table>

These estimates have been reviewed and accepted by the CNSC. We, along with our joint venture partners, have filed with the Saskatchewan government letters of credit as financial assurance for all four operations to match these estimates.

The reclamation and remediation activities associated with waste rock and tailings from processing Cigar Lake ore and uranium solution are covered in the plans and cost estimates for the facilities that will be processing it.

Decommissioning estimates
(100% basis)

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<tbody>
<tr>
<td>Port Hope</td>
<td>$96 million</td>
</tr>
<tr>
<td>Blind River</td>
<td>$36 million</td>
</tr>
<tr>
<td>CFM</td>
<td>$18 million</td>
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The CNSC reviewed the decommissioning estimates for these facilities as part of the renewal of their licences in 2007. We have filed letters of credit with the regulator as financial assurance for them.

Bruce Power

Operating the Bruce Power nuclear units generates three kinds of radioactive waste:

- used nuclear fuel bundles (*high-level radioactive waste*)
- other material that has come in close contact with the reactors or is reactor equipment such as pressure tubes. This material is less radioactive than used nuclear fuel bundles (*intermediate-level radioactive waste*)
- material used in operating the station (*low-level radioactive waste*).

High-level radioactive waste

Used nuclear fuel bundles from the Bruce reactors are temporarily stored in water-filled pools (called *wet bays*) at the Bruce Power nuclear stations for a cooling-off period of at least 10 years so their radioactivity substantially decreases. The bundles are then transferred to above-ground concrete canisters at a dry storage facility constructed by OPG. The facility is located on the part of the site not leased to BPLP. OPG started transferring the used nuclear bundles to its facility in 2003.

BPLP is responsible for managing any used nuclear fuel bundles stored in the Bruce B wet bays although OPG retains title to all used nuclear fuel bundles stored in the wet bays before May 11, 2001. OPG also assumes:

- title to any used nuclear fuel bundles that are discharged from the Bruce reactors during the term of the lease
- the cost of, and responsibility for, disposing of these nuclear fuel bundles. It also receives a fee, paid as supplemental rent under the lease, for this disposal.

Intermediate and low-level radioactive waste

OPG has also agreed to take title to, store and dispose of all of BPLP’s low and intermediate-level radioactive waste at OPG’s radioactive waste management facility at the Bruce site during the term of the lease. OPG retains title to all low and intermediate-level radioactive waste generated before May 11, 2001.

Decommissioning

Under the lease and as owner of the Bruce nuclear plants, OPG is responsible for:

- decommissioning the eight units
- funding the decommissioning and meeting any other related requirements imposed by the CNSC.
• managing the radioactive waste associated with decommissioning the Bruce nuclear plants.

Historical waste
When Cameco was formed, we assumed ownership and primary responsibility for managing the waste already existing at the time of the reorganization. This historical waste was all in Ontario, at the historical facilities, which include the Port Hope Conversion Facility, Blind River Refinery, Port Granby Waste Management Facility and the Welcome Waste Management Facility in Port Hope.

Our liability includes:
• the first $2 million of all costs and expenses related to historical waste and the historical facilities, including costs and expenses relating to any claim arising out of or related to historical waste and decommissioning or reclamation costs and expenses related to historical waste and the historical facilities
• 23/98ths of the next $98 million of these costs.

Canada Eldor Inc., the entity established by the federal government to assume the historical liabilities and obligations of Eldorado Nuclear Limited, retained liability for the balance of these costs up to $100 million, and for all of these costs above $100 million, effectively capping our liability with respect to these costs at $25 million.

Principles of understanding
In October 2000, the government of Canada and certain communities near and including Port Hope announced they had signed a framework for the development of an agreement for the clean-up, storage and long-term management of certain historical waste (the principles of understanding).

In June 2001, the federal government announced that it had signed an agreement to invest approximately $260 million over 10 years to carry out the work.

In March 2004, we reached an agreement to transfer two facilities to the government of Canada: the Port Granby Waste Management Facility and Welcome Waste Management Facility. Atomic Energy Canada Limited (AECL), which indirectly owned these waste sites before 1988 through its ownership of Eldorado Nuclear Limited, is the licensee.

As part of this transaction, the federal government agreed to accept approximately 150,000 cubic metres of low-level radioactive waste from us at no charge. It also agreed to assume all liability for the waste at the two sites, as long as we met our obligation to contribute the balance of the $25 million cap respecting costs and expenses related to historical waste and the historical facilities remaining upon the transfer of the final waste facility. We have already recognized this $25 million liability, but at the end of 2010, only $7 million of it had been spent.

Port Hope Area Initiative
In July 2002, the federal government released the scoping document for the environmental assessment of the Port Hope Area Initiative, which described two projects to manage low-level radioactive waste in the Port Hope area for the long term: the Port Granby project and Port Hope project, which includes historical waste at the Welcome Waste Management Facility. Both projects have completed the environmental assessment process.

In September 2009, after a one-day public hearing, the CNSC announced a decision to issue a Waste Nuclear Substance Licence to AECL for the Welcome Waste Management Facility, valid as of the date of land transfer. Transfer of this facility to the federal government was completed on March 31, 2010.

Recycling uranium byproducts
We have an agreement with Denison Mines Corporation to process certain uranium-bearing byproducts from Blind River and Port Hope at the White Mesa mill in Blanding, Utah. While this arrangement addresses existing inventory and current recycling requirements, we are considering other outlets.

For example, in 2001, we tested recycling the byproducts at our Key Lake mill, and in 2002 submitted a proposal to federal and provincial regulatory authorities for approval to proceed. We received regulatory approval from the Saskatchewan government in 2003, but we have been pursuing lower concentrations of molybdenum and selenium in the effluent released at the Key Lake mill in order to receive federal regulatory approval. With our success in lowering these concentrations, we have made a submission to the CNSC to move this matter forward.
United States
After mining has been completed, an ISR wellfield has to be restored according to regulatory requirements. This generally involves restoring the groundwater to its pre-mining use or equivalent class of water standard.

It is difficult for us to estimate final timing and costs for restoring wellfields due to the uncertainty in timing for receiving regulatory approval.

Crow Butte
Restoration of Crow Butte wellfields is regulated by the Nebraska Department of Environmental Quality and the NRC. There are five wellfields being restored at Crow Butte. The groundwater at mine unit #1 has been restored to pre-mining quality standards, all wells are plugged and the piping removed.

Our estimated cost of decommissioning the property is $35.2 million (US). We have provided the State of Nebraska with a $35.2 million (US) letter of credit as security for decommissioning the property.

Smith Ranch-Highland
Restoration of Smith Ranch-Highland wellfields is regulated by the Wyoming Department of Environmental Quality and NRC. There are five wellfields being restored at Smith Ranch-Highland, and two wellfields (mine units A and B) that have been fully restored.

The restoration of mine unit B has been approved by the Wyoming Department of Environmental Quality, and is waiting for approval from the NRC. We have restored the groundwater at mine unit A to pre-mining quality standards, and continue to monitor the area’s environmental performance. We have received regulatory approval for the restoration at mine unit A.

Our estimated cost of decommissioning the property is $111.5 million (US). We have provided the State of Wyoming with a $111.5 million (US) letter of credit as security for decommissioning the property.

Kazakhstan
Inkai is subject to decommissioning liabilities, largely defined by the terms of the resource use contract. Inkai has established a separate bank account and made the required contributions to the account as security for decommissioning. Contributions are set as a percentage of gross revenue and are capped at $500,000 (US). Inkai has funded the full amount.

Under the resource use contract, Inkai must submit a plan for decommissioning the mining facility to the government six months before mining activities are complete. Inkai has established a preliminary plan and an estimate of total decommissioning costs of $7 million (US). It updates the plan every five years, or when there is a significant change at the operation that could affect decommissioning estimates.

Groundwater is not actively restored post-mining in Kazakhstan. See page 79 for additional details.
The regulatory environment

This section, and the section *Complying with environmental regulations* starting on page 80, discuss some of the more significant government controls and regulations that have a material effect on our business. We are not aware of any proposed legislation or changes to existing legislation that could have a material effect on our business.

International treaty on the non-proliferation of nuclear weapons

The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) is an international treaty that was established in 1970. It has three objectives:

- to prevent the spread of nuclear weapons and weapons technology
- to foster the peaceful uses of nuclear energy
- to further the goal of achieving general and complete disarmament.

The NPT establishes a safeguards system under the responsibility of the International Atomic Energy Agency. Almost all countries are signatories to the NPT, including Canada, the US, the United Kingdom and France. We are therefore subject to the NPT and comply with the International Atomic Energy Agency's requirements.

Industry regulation and permits

Canada

Our Canadian operations have regulatory obligations to both the federal and provincial governments. There are five main regulatory agencies that issue licences and approvals:

- CNSC (federal)
- Fisheries and Oceans Canada (federal)
- Transport Canada (federal)
- Saskatchewan Ministry of Environment
- Ontario Ministry of Environment.

Environment Canada (federal) is also a main regulatory agency, but does not issue licences and approvals.

Uranium industry regulation

The government of Canada recognizes the special importance of the uranium industry to Canada’s national interest, and regulates the industry through legislation and regulations, and exerts additional control through government policy.

Federal legislation applies to any uranium property or plant in Canada that the CNSC determines is producing or processing uranium for use in nuclear fuel, or has the capability to do so. Federal policy requires that any property or plant used for this purpose must be legally and beneficially owned by a company incorporated in Canada.

Mine ownership restrictions

The federal government has instituted a policy that restricts ownership of Canadian uranium mining properties to:

- a minimum of 51% ownership by residents
- a basic maximum limit of 49% ownership by non-residents of uranium properties at the first stage of production.

The government may grant exceptions. For example, resident ownership may be less than 51% if the property is Canadian-controlled. Exceptions will only be granted in cases where it is demonstrated that Canadian partners cannot be found, and it must receive Cabinet approval.

The government issued a letter to the Canadian uranium industry on December 23, 1987, outlining the details of this ownership policy. On March 3, 2010, the government announced its intention to liberalize the foreign investment restrictions on Canada’s uranium mining sector to “ensure that unnecessary regulation does not inhibit the growth of Canada’s uranium mining industry by unduly restricting foreign investment.”
Cameco ownership restriction
We are subject to ownership restrictions pursuant to the Eldorado Nuclear Limited Reorganization and Divestiture Act, which restricts the issue, transfer and ownership, including joint ownership, of Cameco shares to prevent both residents and non-residents of Canada from owning or controlling more than a certain percentage of shares. See pages 113 and 114 for more information.

Industry governance
The Canadian Nuclear Safety and Control Act (NSCA) governs the control of the mining, extraction, use and export of uranium in Canada. It is a federal statute, authorizing the CNSC to make regulations governing all aspects of the development and application of nuclear energy, including uranium mining, milling, conversion, fabrication and transportation. It grants the CNSC licensing authority for all nuclear activities in Canada. A person may only possess or dispose of nuclear substances and build, operate and decommission its nuclear facilities according to the terms and conditions of a CNSC licence. Licensees must satisfy specific conditions of the licence in order to maintain the right to operate their nuclear facilities.

The NSCA emphasizes the importance of environmental as well as health and safety matters, and requires licence applicants and licensees to have adequate provisions for protection.

Regulations made under the NSCA include provisions for dealing with the licence requirements of facilities, radiation protection, physical security for all nuclear facilities and the transport of radioactive materials. The CNSC has also issued regulatory guidance documents to assist licensees in complying with regulatory requirements such as decommissioning, emergency planning, and optimizing radiation protection measures.

All of our Canadian operations are governed primarily by licences granted by the CNSC and are subject to all federal statutes and regulations that apply to us, and all the laws that generally apply in the province where the operation is located, unless there is a conflict with the terms and conditions of the licence or the federal laws that apply to us.

Uranium export
We must secure export licences and export permits from the CNSC and the Department of Foreign Affairs and International Trade in order to export our uranium.

Land tenure
Most of our uranium reserves and resources are located in the province of Saskatchewan:

• a mineral claim from the province gives us the right explore for minerals (other government approvals are required to carry out surface exploration)
• a crown lease with the province gives us the right to mine the minerals on the property
• a surface lease with the province gives us the right to use the land for surface facilities and mine shafts while mining and reclaiming the land.

A mineral claim has a term of two years, with the right to renew for successive one-year periods. Generally, the holder has to spend a certain amount on exploration to keep the mineral claim in good standing. If we spend more than the amount required, the extra amount can be applied to future years.

A holder of a mineral claim in good standing has the right to convert it into a crown lease. A crown lease is for 10 years, with a right to renew for additional 10-year terms. The lessee must spend a certain amount on work during each year of the crown lease. The lease cannot be terminated unless the lessee defaults on any terms of the lease, or under any provisions of The Crown Minerals Act (Saskatchewan) or regulations under it, including any prescribed environmental concerns. Crown leases can be amended unilaterally by the lessor by an amendment to The Crown Minerals Act (Saskatchewan) or The Mineral Disposition Regulations, 1986 (Saskatchewan).

A surface lease can be for up to 33 years, as necessary for operating the mine and reclaiming the land. The province also uses surface leases to specify other requirements relating to environmental and radiation protection as well as socioeconomic objectives.
Electricity regulation

BPLP’s operations are heavily regulated. The CNSC regulates the Bruce nuclear generation stations through its powers under the NSCA (see Uranium industry regulation above). It also monitors the safety performance of the Bruce nuclear generating stations.

Licences issued by the CNSC stipulate that BPLP must report regularly on its operations. BPLP is also regulated by the Nuclear Liability Act (as discussed below), as well as other general legislation.

Licence renewals

BPLP operates the Bruce B nuclear reactors under a CNSC licence issued to BPLP’s general partner, Bruce Power Inc. In 2009, CNSC renewed the Bruce B operating licence for a term through October 31, 2014. BPLP was not required to provide financial assurances under the Bruce B operating licence because the CNSC determined that the preliminary decommissioning plan and the financial assurances which BPLP provides to OPG under its lease with OPG are adequate.

We are indemnified by BALP for any calls on the assurances resulting from operation of the Bruce A units.

Liability insurance

The Nuclear Liability Act requires operators of nuclear generating facilities to purchase specific amounts of nuclear liability insurance from the Nuclear Liability Association of Canada. The Nuclear Liability Act imposes liability and currently requires the operator of nuclear stations to maintain $75 million of liability insurance for each of its nuclear stations.

The Nuclear Liability Act has two parts:

- Under Part I, an operator is strictly liable for any damage to public property or personal injury arising from a nuclear incident (as it defines), other than damage resulting from sabotage or acts of war. If the Governor in Council is of the opinion that an operator’s liability for a nuclear incident could be higher than $75 million, or it would be in the public interest to provide special measures for compensation, the Governor in Council may proclaim Part II in effect.
- Under Part II, an operator is liable for the amount of insurance. The Governor in Council may authorize the federal government to pay funds for claims exceeding that amount.

The federal government has introduced legislation in the House of Commons that would significantly change the Nuclear Liability Act. It includes, among other things, requirements for the operator to maintain $650 million of insurance for each of its nuclear stations for liability it imposed. If this legislation becomes law, it will result in a significant increase in the cost and amount of insurance coverage BPLP must obtain.

Ontario

BPLP sells electricity into the wholesale spot market and contract market.

The Ontario regulatory framework has an impact on BPLP’s marketing of electricity, particularly the wholesale market where BPLP sells most of its production. The Ontario government took steps in 2005 and February 2006 to mitigate the impact of higher electricity prices on the province’s large industrial and commercial customers by regulating the price of electricity produced by OPG’s base load nuclear and hydro assets, and establishing revenue limits on the output of some of OPG’s other assets. This affected approximately 55,000 large industrial and commercial customers who consume more than 250,000 kilowatt hours per year.

BPLP expects these actions to depress the wholesale contract market, which is unregulated.

United States

Uranium industry regulation

In the US, uranium recovery is regulated primarily by the NRC according to the Atomic Energy Act of 1954, as amended. Its primary function is to:

- ensure employees, the public and the environment are protected from radioactive materials
- regulate most aspects of the uranium recovery process.
The NRC’s regulations for uranium recovery facilities are codified in Title 10 of the Code of Federal Regulations (10 CFR). It issues Domestic Source Material Licences under 10 CFR, Part 40. The National Environmental Policy Act (NEPA) governs the review of licence applications, which is implemented through 10 CFR, Part 51.

**Wyoming**

The uranium recovery industry is also regulated by the Wyoming Department of Environmental Quality, the Land Quality Division according to the Wyoming Environmental Quality Act (WEQA) and the Land Quality Division Non-Coal Rules and Regulations under the WEQA. According to the state act, the Wyoming Department of Environmental Quality issues a permit to mine. The Land Quality Division administers the permit.

The state also administers a number of Environmental Protection Agency (EPA) programs under the Clean Air Act and the Clean Water Act. Some of the programs, like the Underground Injection Control Regulations, are incorporated in the Land Quality Division Non-Coal Rules and Regulations. Wyoming currently requires wellfield decommissioning to the standard of pre-mining use.

**Nebraska**

The uranium recovery industry is regulated by the Nuclear Regulatory Commission, and the Nebraska Department of Environmental Quality according to the Nebraska Environmental Protection Act. The Nebraska Department of Environmental Quality issues a permit to mine. The state requires wellfield groundwater be restored to the class of use water standard.

At Smith Ranch-Highland and Crow Butte, safety is regulated by the federal Occupational Safety and Health Administration.

Other governmental agencies are also involved in the regulation of the uranium recovery industry.

The NRC also regulates the export of uranium from the US and the transport of nuclear materials within the US. It does not review or approve specific sales contracts. It also grants export licences to ship uranium outside the US.

**Land tenure**

Our uranium reserves and resources in the US are held by subsidiaries that are located in Wyoming and Nebraska. The right to mine or develop minerals is acquired either by leases from the owners (private parties or the state) or mining claims located on property owned by the US federal government. Our subsidiaries acquire surface leases that allow them to install wellfields and conduct ISR mining.

**Kazakhstan**

See Kazakhstan government and legislation on page 37.

**Royalties and taxes**

**Canadian royalties**

We pay royalties to the province of Saskatchewan under the terms of Part III of the Crown Mineral Royalty Schedule, 1986 (Saskatchewan), as amended. The royalty applies to the sale of all uranium extracted from orebodies in the province.

The schedule includes two kinds of royalties:

- **basic royalty**: 5% of gross sales of uranium, less the Saskatchewan resource credit (1% of the gross sales of uranium)
- **tiered royalty**: an additional percentage of gross sales of uranium, when the realized sales price of uranium (after deducting capital allowances) is higher than the sales prices listed in the schedule.

We claimed all of our capital allowances in 2007 and started to pay tiered royalties that year. We will be eligible for additional capital allowances once Cigar Lake begins production. We expect not to have to pay tiered royalties until these additional allowances have been used.

As a resource corporation in Saskatchewan, we pay a corporate resource surcharge of 3.0% of the value of resource sales.
Canadian income taxes
We are subject to federal income tax and provincial taxes in Saskatchewan and Ontario. Current income tax recovery for 2010 was $12.3 million.

Royalties are fully deductible for income tax purposes. For Ontario tax purposes, we are charged an additional tax (at normal Ontario corporate tax rates) if the royalty deduction exceeds a notional Ontario resource allowance. Our Ontario fuel services operations and BPLP are eligible for a manufacturing and processing tax credit.

Since 2008, Canada Revenue Agency (CRA) has disputed the transfer pricing methodology we used for certain uranium sale and purchase agreements and issued notices of reassessment for our 2003, 2004 and 2005 tax returns. We believe it is likely that CRA will reassess our tax returns for 2006 through 2010 on a similar basis. Our view is that CRA is incorrect, and we are contesting its position.

In July 2009, we filed a Notice of Appeal relating to the 2003 reassessment with the Tax Court of Canada. In November 2010, we filed a Notice of Appeal relating to the 2004 reassessment with the Tax Court of Canada. We intend to object to the 2005 reassessment and pursue our appeal rights under the Income Tax Act. However, to reflect the uncertainties of CRA’s appeals process and litigation, we have provided $27 million for uncertain tax positions for the years 2003 through 2010. We believe that the ultimate resolution of this matter will not be material to our financial position, results of operations or liquidity over the period. However, an unfavourable outcome for the years 2003 to 2010 could be material to our financial position, results of operations or cash flows in the year(s) of resolution. See note 18 to the financial statements.

US taxes
Our subsidiaries in Wyoming and Nebraska pay severance taxes and property taxes in those states. They paid $4.3 million (US) in taxes in 2010.

Our US subsidiaries are subject to US federal and state income tax. They may also be subject to the Alternative Minimum Tax (AMT) at a rate of 20%. We can carry forward AMT paid in prior years indefinitely, and apply it as credit against future regular income taxes. Current income tax recovery for 2010 was $1.3 million (US).

Kazakhstan taxes
The resource use contract lists the taxes, duties, fees, royalties and other governmental charges Inkai has to pay.

On January 1, 2009, a new tax code of the Republic of Kazakhstan went into effect that includes a number of changes to the taxation regime of subsoil users. The most significant changes involve eliminating the stable tax regime, imposing a mineral extraction tax and changing the payment rate for commercial discovery.

Tax stabilization eliminated
In October 2009, at the request of the Kazakhstan Ministry of Energy and Mineral Resources, Inkai signed an amendment to the resource use contract to adopt the new tax code, eliminating the tax stabilization provision. We do not expect the new tax code to have a material impact on Inkai at this time, but eliminating the tax stabilization provision could be material in the future. Please see page 36 for more information about the resource use contract.

Corporate income tax rate
Under the new tax code, Inkai is subject to corporate income tax at a rate of 20%.

Mineral extraction tax
The tax code includes a Tax on Production of Useful Minerals, a new mineral extraction tax replacing the previous royalty. The mineral extraction tax must be paid on each type of mineral and certain other substances that are extracted. Starting from January 1, 2011 the rate used to calculate the mineral extraction tax on uranium is 22%. Previously, Inkai would pay royalties that were calculated on a graduated scale, based on the sales price of production each year.
Payment for commercial discovery
Under the resource use contract, a one-time commercial discovery bonus of 0.05% of the value of Kazakh-defined recoverable reserves is paid when there is confirmation that Kazakh-defined recoverable reserves are located in a particular licence area. Under the tax code, that rate increases to 0.1%.

Excess profits tax
The tax code calculates the excess profits tax differently. Inkai believes it will not have to pay this tax for the foreseeable future.
Risks that can affect our business

There are risks in every business.

The nature of our business means we face many kinds of risks and hazards – some that relate to the nuclear energy industry in general, and others that apply to specific properties, operations or planned operations. These risks could have a significant impact on our business, earnings, cash flows, financial condition, results of operations or prospects.

The following section describes the risks that are most material to our business. This is not, however, a complete list of the potential risks we face – there may be others we are not aware of, or risks we feel are not material today that could become material in the future. We have comprehensive systems and procedures in place to manage these risks, but there is no assurance that we will be successful in preventing the harm that any of these risks could cause.

Please also see the risk discussion in our 2010 MD&A.

Types of risk
Operational .......................................................... 92
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1 – Operational risks
General operating risks and hazards
We are subject to a number of operational risks and hazards, many of which are beyond our control.

These risks and hazards include:

- environmental damage (including hazardous emissions from our refinery and conversion facilities, like a release of UF₆ or a leak of anhydrous hydrogen fluoride used in the UF₆ conversion process)
- industrial and transportation accidents, which may involve radioactive or other hazardous materials
- labour shortages, disputes or strikes
- cost increases for contracted or purchased materials, supplies and services
- shortages of required materials and supplies (including the availability of acid for Inkai’s operations in Kazakhstan and hydrofluoric acid at our conversion facilities)
- transportation disruptions
- electrical power interruptions
- equipment failures
- catastrophic accident
- fires
- blockades or other acts of social or political activism
- regulatory constraints
- natural phenomena, such as inclement weather conditions, floods and earthquakes
- unusual or unexpected geological or hydrological conditions
- underground floods
- ground movement or cave-ins
- tailings pipeline or dam failures
- adverse mining conditions
- technological failure of mining methods.
There is no assurance that any of the above risks will not result in:

- damage to or destruction of our properties and facilities located on these properties
- personal injury or death
- environmental damage
- delays, interruptions of, or decrease in production at our mines, our mills, our refining, conversion or fuel manufacturing facilities, our exploration or development activities or transportation of our products
- interruptions or decreases in electricity generation from BPLP
- costs, expenses or monetary losses
- legal liability
- adverse government action.

Any of these events could result in one or more of our operations becoming unprofitable, cause us not to receive an adequate return on invested capital, or have a material and adverse effect on our earnings, cash flows, financial condition, results of operations or prospects.

Insurance coverage

We buy insurance to cover losses or liabilities arising from some of the operating risks and hazards listed above. We believe we have a reasonable amount of coverage for the risks we choose to insure against. There is no assurance, however, that this coverage will be adequate in all circumstances, that it will continue to be available, that premiums will be economically feasible, or that we will maintain this coverage. Like other nuclear energy and mining companies, we do not have insurance coverage for certain environmental losses or liabilities and other risks, either because it is not available, or because it cannot be purchased at a reasonable cost.

Not having the right insurance coverage or the right amount of coverage, or choosing not to insure against certain risks, could have a material and adverse effect on our earnings, cash flows, financial condition or results of operations.

Flooding at our Saskatchewan mines

All of our operating mines in Saskatchewan have had water inflows, and our Cigar Lake development project in Saskatchewan has flooded in the past.

**McArthur River**

The sandstone that overlays the basement rocks of the McArthur River deposit contains large volumes of water at significant pressure. Ground freezing at McArthur River generally prevents water from flowing into the area being mined, but there are technical challenges with the groundwater and rock properties.

We temporarily suspended production at our McArthur River mine in April 2003 because increased water inflow from an area of collapsed rock in a new development area began to flood portions of the mine. This caused a major setback in the development of new mining zones.

**Cigar Lake**

The Cigar Lake deposit has hydro-geological characteristics and technical challenges that are similar to those at McArthur River. We have had three water inflows at Cigar Lake since 2006 (please see pages 49 and 50 for details).

These water inflows have caused:

- a significant delay in development and production at the property
- a significant increase in capital costs
- the need to notify many of our customers of the interruption in planned uranium supply.

**Rabbit Lake**

We temporarily reduced our underground activities at Rabbit Lake in November 2007, because there was an increase in water flow from a mining area while an equipment upgrade was limiting surface water-handling system capacity. Rabbit Lake resumed normal mining operations in late December 2007, after the source of the water inflow was plugged.
There is no guarantee that there will not be water inflows at McArthur River, Cigar Lake or Rabbit Lake in the future. A water inflow could have a material and adverse effect on us, including:

- significant delays or interruptions in production or lower production
- significant delays or interruptions in mine development or remediation activities
- loss of mineral reserves
- a material increase in capital or operating costs.

It could also have a material and adverse effect on our earnings, cash flows, financial condition, results of operations or prospects. The degree of impact depends on the magnitude, location and timing of the flood or water inflow. Floods and water inflows are generally not insurable.

**Technical challenges at Cigar Lake and McArthur River**

The unique nature of the deposits at McArthur River and Cigar Lake pose many technical challenges, including groundwater management, unstable rock properties, radiation protection, mining methods, ore-handling and transport. If we are unable to resolve any of these technical challenges, it could have a material and adverse effect on our earnings, cash flows, financial condition or results of operations.

**Tailings management**

Our Key Lake and Rabbit Lake mills produce tailings. Managing these tailings is integral to uranium production.

**Key Lake**

The Key Lake mill deposits tailings from processing McArthur River ore into the Deilmann TMF. In February 2009, we received regulatory approval to deposit the tailings at a higher elevation at that facility. This gives us five to six years of capacity at current production rates, assuming we experience only minor losses in storage capacity because of sloughing from the pit walls. We also completed prefeasibility work in 2009, to assess our options for additional long-term tailings storage. Technical studies and environmental assessment work are underway to support our application for regulatory approval to deposit tailings at a significantly higher elevation in the Deilmann TMF. This would provide us with enough tailings capacity to support many more years of mill production.

**Rabbit Lake**

The Rabbit Lake in-pit tailings management facility has the capacity to store tailings from milling ore from Rabbit Lake and a portion of Cigar Lake uranium solution until mid-2016. We are planning for an expansion of the tailings management facility to be ready by mid-2016. This will support the extension of Rabbit Lake’s mine life, accommodate tailings from processing Cigar Lake solution, and provide a modest increase in tailings capacity. We need to complete an environmental assessment to receive regulatory approval for the expansion in tailings capacity.

If sloughing or other issues prevent us from maintaining the existing tailings management capacity at the Deilmann TMF and Rabbit Lake pit, or if we are delayed or do not receive regulatory approval for new or expanded tailings facilities, uranium production could be constrained and this could have a material and adverse effect on our earnings, cash flows, financial condition or results of operations.

**Aging facilities**

Our Key Lake and Rabbit Lake mills are old and being refurbished. Our Port Hope fuel services facilities are also aging. This exposes us to a number of risks, including the potential for higher maintenance and operating costs, the need for significant capital expenditures to upgrade and refurbish these facilities, the potential for decreases or delays in, or interruption of, uranium and fuel services production, and the potential for environmental damage.

BPLP’s nuclear generating stations are also aging. Testing and inspection programs have identified issues relating to the equipment life cycle, including corrosion of the steam generator tube, thinning of the feeder pipe wall and contact between the pressure tube and calandria tube. While we understand these conditions are a function of design, the equipment has degraded more quickly than anticipated.

No nuclear generating station using Candu technology has completed a full life cycle yet, so it is possible that BPLP may have to invest a significant amount of capital in repairing or replacing this and other equipment. BPLP may need
to increase its preventive maintenance programs and allow more outage time (a period when a nuclear reactor is not operating) than currently planned.

These risks could have a material and adverse effect on our earnings, cash flows, financial condition or results of operations or on BPLP’s contribution to our earnings, cash flows, financial condition or results of operations.

**Reliance on development and expansion projects to fuel growth**

Our ability to increase our uranium production depends in part on successfully developing new mines and/or expanding existing operations. Cigar Lake is our major development project and we have several other projects under evaluation: expansion of production from Inkai blocks 1 and 2 and development of Inkai block 3 in Kazakhstan, McArthur River extension, expansion of production from our US ISR operations, development of Millennium in Saskatchewan, and development of Kintyre in Australia.

Several factors affect the economics and success of development projects:

- capital and operating costs
- metallurgical recoveries
- the accuracy of reserve estimates
- government regulations
- availability of appropriate infrastructure, particularly power and water
- future uranium prices
- the accuracy of feasibility studies
- acquiring surface or other land rights
- receiving necessary government permits.

Development projects have no operating history that can be used to estimate future cash flows. We have to invest a substantial amount of capital and time to develop a project and achieve commercial production. A change in costs or construction schedule can affect the economics of a project. Actual costs could increase significantly and economic returns could be materially different from our estimates. We could fail to obtain the necessary governmental approvals for construction or operation. In any of these situations, a development project might not proceed according to its original timing, or at all.

It is not unusual in the nuclear energy or mining industries for new operations to experience unexpected problems during start-up, resulting in delays, higher capital expenditures than anticipated and reductions in planned production. Delays, additional costs or reduced production could have a material and adverse effect on our earnings, cash flows, financial condition, results of operations or prospects.

There is no assurance we will be able to complete the development of new mines, or expand existing operations, economically or on a timely basis.

**Developing additional reserves to sustain operations**

The McArthur River, Rabbit Lake and Inkai mines are currently our main sources of mined uranium concentrates. We expect the reserves at our Rabbit Lake mine to be depleted in 2017.

As the reserves at these mines are depleted, our mineral reserves will decrease. We may not be able to sustain production if:

- the Cigar Lake deposit is not successfully developed and does not achieve its planned level of production
- the Inkai block 3, Millennium and Kintyre deposits are not successfully developed
- production from our US ISR sites is not increased
- we do not identify, discover or acquire other deposits
- we do not find extensions to existing orebodies, or
- we do not convert resources to reserves at our mines and development projects.

This could have a material and adverse effect on our earnings, cash flows, financial condition, results of operations or prospects.

Although we have successfully replenished reserves in the past through ongoing exploration, development and acquisition programs, there is no assurance that we will be successful in our current or future exploration, development or acquisition efforts. We believe that Cigar Lake will achieve its planned levels of production, but there is no assurance it will.
Nuclear operations risks

Risks, hazards and potential legal liability with nuclear power

Operating nuclear generating stations has inherent risks, including a substantial risk of liability and the potential for operating costs to rise significantly.

Risks and hazards can result from structural problems, technological problems, nuclear fuel supply, equipment failures, maintenance requirements, regulatory and environmental constraints, security requirements and the storage, handling and disposal of radioactive materials, among other things.

BPLP’s risk management strategies include the safety systems that are a part of Candu technology, but there is no assurance that risk can be minimized or eliminated. An accident at a nuclear installation anywhere in the world, or other issues, could prompt the CNSC to limit the electrical output or the operation of the Bruce nuclear generation stations, or impose significant conditions on its licence. Any type of accident could also have an impact on the future prospects for nuclear generation.

There is no assurance that these risks and hazards will not result in:

• damage to or destruction of BPLP’s nuclear facilities
• personal injury or death
• environmental damage
• delays in, interruption or decrease of electrical generation or halting of electrical generation from BPLP’s facilities
• costs, expenses or monetary losses
• legal liability
• adverse government action.

Any of these things could have a material and adverse effect on our earnings, cash flows, financial condition or results of operations.

Impact of unplanned or extended outages on electrical production

We can be affected by planned outages that are significantly longer than scheduled, and unplanned outages that extend over a period of time. Either of these situations could result in less electricity generated than expected, which could significantly affect BPLP’s contribution to our earnings, cash flows, financial condition or results of operations.

Dependence on reliable transmission systems

BPLP’s ability to sell electricity depends on the capacity, reliability and regulation of the Ontario electricity transmission system and other North American electricity transmission systems that are connected to the Ontario grid. Inadequate or unreliable electricity transmission capacity or disruptions in electricity transmission systems could have a material and adverse effect on BPLP’s contribution to our earnings, cash flows, financial condition or results of operations.

Impact of weather and economic conditions on electrical production

BPLP’s earnings are sensitive to variations in the weather. Variations in winter weather affect the demand for electrical heating, while variations in summer weather affect the demand for electrical cooling.

Industrial and wholesale demand for electricity in Ontario has decreased because of weak economic conditions in the province and some parts of North America. Wholesale demand has declined significantly since 2004, however, Ontario demand in 2010 was up by 2% or 3 TWh compared to 2009. While this increase signals a positive change in the economy, we believe it will take some time for demand to return to prior levels.

Dependence on a single contractor

BPLP depends on OPG and AECL as single source contractors for certain nuclear support services.

Relying on a single contractor creates a security supply risk for BPLP. If either of these suppliers does not provide quality service, timely service, or in the case of OPG, agree to extend the term of short-term material service agreements, it could have a material and adverse effect on BPLP’s contribution to our earnings, cash flows, financial condition or results of operations.
Major nuclear incident risk

Although the safety record of nuclear reactors has generally been very good, there have been accidents and other unforeseen problems in the former USSR, the United States and in other countries. The consequences of a major incident can be severe and include loss of life, property damage and environmental damage. Any resulting liability from a major nuclear incident could exceed BPLP’s resources, and its insurance coverage. In addition, an accident or other significant event at a nuclear plant – owned by others or by BPLP – could result in increased regulation, less public support for nuclear fueled energy, lower demand for uranium and lower uranium prices. This could significantly affect BPLP’s contribution to our earnings, cash flows, financial condition or results of operations and have a material and adverse effect on our own earnings, cash flows, financial condition, results of operations or prospects.

Labour and employment

People are core to our business. We compete with other nuclear energy and mining companies for talented, quality people, and we may not always be able to fill positions on a timely basis. There is a limited pool of skilled people and competition is intense. We will need additional financial, administrative, technical and operations staff to fill key positions as our business activity grows and we experience employee turnover because of an aging workforce.

If we cannot attract and train qualified successors for our senior and operating positions, it could reduce the efficiency of our operations and have an adverse effect on our earnings, cash flows, financial condition or results of operations.

We have unionized employees and face the risk of strikes. At December 31, 2010, we had 3,300 employees (including employees of our subsidiaries, but not including Inkai or BPLP). This includes 890 unionized employees at McArthur River, Key Lake, Port Hope and at CFM’s facilities, who are members of four different locals of the United Steelworkers trade union. BPLP has 3,700 employees, and most of them are unionized.

- The collective agreement with the bargaining unit employees at CFM expires on June 1, 2012. This agreement was signed following a three-month strike in 2009.
- The collective agreement with the bargaining unit employees at the McArthur River and Key Lake operations expires on December 31, 2013.
- The collective agreement with the bargaining unit employees at the Port Hope conversion facility expires on June 30, 2013.
- BPLP’s collective agreements with both the Power Workers’ Union and The Society of Energy Professionals expired in December 2010. BPLP has reached a tentative agreement with the Power Workers’ Union and discussions with the Society are underway.

We cannot predict whether we or BPLP will reach new collective agreements with these and other employees without a work stoppage or work interruptions while negotiations are underway.

From time to time, the mining or nuclear energy industry experiences a shortage of tradespeople and other skilled or experienced personnel globally, regionally or locally. We have a comprehensive strategy to attract and retain high calibre people, but there is no assurance this strategy will protect us from the effects of a labour shortage.

A lengthy work interruption or labour shortage could have an adverse effect on our earnings, cash flows, financial condition or results of operations.

Joint ventures

We participate in McArthur River, Key Lake, Cigar Lake, Inkai, Millennium, Kintyre, BPLP and GLE through joint ventures with third parties. Some of these joint ventures are unincorporated, some are incorporated (like Inkai and GLE) and some are partnerships or limited partnerships (like BPLP). We have other joint ventures and may enter into more in the future.

There are risks associated with joint ventures, including:
- disagreement with a joint venture partner about how to develop, operate or finance a project
- a joint venture partner not complying with a joint venture agreement
- possible litigation between joint venture partners about joint venture matters
- the inability to exert control over decisions related to a joint venture we do not have a controlling interest in.
Our joint venture partner in Kazakhstan is a state entity, so its actions and priorities could be dictated by government policies instead of commercial considerations.

These risks could result in legal liability, affect our ability to develop or operate a project under a joint venture, or have a material and adverse effect on our earnings, cash flows, financial condition or results of operations.

**Uranium exploration is highly speculative**

Uranium exploration is highly speculative and involves many risks, and few properties that are explored are ultimately developed into producing mines.

Even if mineralization is discovered, it can take several years in the initial phases of drilling until a production decision is possible, and the economic feasibility of developing an exploration property may change over time. We are required to make a substantial investment to establish proven and probable mineral reserves, to determine the optimal metallurgical process to extract minerals from the ore, to construct mining and processing facilities (in the case of new properties) and to extract and process the ore. We might abandon an exploration project because of poor results or because we feel that we cannot economically mine the mineralization.

Given these uncertainties, there is no assurance that our exploration activities will be successful and result in new reserves to expand or replace our current mineral reserves.

**Infrastructure**

Mining, processing, development and exploration can only be successful with adequate infrastructure. Reliable roads, bridges, power sources and water supply are important factors that affect capital and operating costs and the ability to deliver products on a timely basis.

Our activities could be negatively affected if unusual weather, interference from communities, government or others, aging, sabotage or other causes affect the quality or reliability of the infrastructure.

A lack of adequate infrastructure could have a material and adverse effect on our earnings, cash flows, financial condition or results of operations.

**Supplies and contractors**

**Supplies**

We buy reagents and other production inputs and supplies from suppliers around the world. If there is a shortage of any of these supplies, including parts and equipment, or their costs rise significantly, it could limit or interrupt production or increase production costs. It could also have an adverse effect on our ability to carry out operations or have a material and adverse effect on our earnings, cash flows, financial condition or results of operations. We are examining our entire supply chain to identify areas to diversify or add inventory where we may be vulnerable, but there is no assurance that we will be able to mitigate the risk.

**Contractors**

In some cases we rely on a single contractor to provide us with reagents or other production inputs and supplies. Relying on a single contractor is a security supply risk because we may not receive quality service, timely service, or service that otherwise meets our needs. These risks could have a material and adverse effect on our earnings, cash flows, financial condition or results of operations.

**2 – Political risks**

**Foreign investments and operations**

We do business in countries and jurisdictions outside of Canada and the United States, including the developing world, and invest in companies that also carry out these activities in these countries. Doing business in these countries poses risks because they have different economic, cultural, regulatory and political environments. Future economic and political conditions could also cause the governments of these countries to change their policies on foreign investments, development and ownership of mineral resources, or impose other restrictions, limitations or requirements that we may not foresee today.
Risks related to doing business in a foreign country can include:

- uncertain political and economic environments
- strong governmental control and regulation
- lack of an independent judiciary
- war, terrorism and civil disturbances
- crime, corruption, making improper payments or providing benefits that may violate Canadian or United States law or laws relating to foreign corrupt practices
- unexpected changes in governments and regulatory officials
- uncertainty or disputes as to the authority of regulatory officials
- changes in a country’s laws or policies, including those related to mineral tenure, mining, imports, exports, tax, duties and currency
- cancellation or renegotiation of permits or contracts
- royalty and tax increases or other claims by government entities, including retroactive claims
- expropriation and nationalization
- delays in obtaining the necessary permits or the inability to obtain or maintain them
- currency fluctuations
- high inflation
- joint venture partners falling out of political favour
- restrictions on local operating companies selling their production offshore, and holding US dollars or other foreign currencies in offshore bank accounts
- import and export regulations, including restrictions on the export of uranium
- limitations on the repatriation of earnings
- increased financing costs.

If one or more of these risks occur, it could have a material and adverse effect on our earnings, cash flows, financial condition, results of operations or prospects.

We also risk being at a competitive disadvantage to companies from countries that are not subject to Canadian or United States law or laws relating to foreign corrupt practices.

We enter into joint venture arrangements with local partners from time to time to mitigate political risk. There is no assurance that these joint ventures will mitigate our political risk in a foreign jurisdiction.

We assess the political risk associated with each of our foreign investments and have political risk insurance to mitigate part of the losses that can arise from some of these risks. From time to time, we assess the costs and benefits of maintaining this insurance and may decide not to buy this coverage in the future. There is no assurance that the insurance will be adequate to cover every loss related to our foreign investments, that coverage will continue to be available or that premiums will be economically feasible. These losses could have a material and adverse effect on our earnings, cash flows, financial condition or results of operations if they are not adequately covered by insurance.

Kazakhstan

Inkai has a contract with the Kazakhstan government and was granted licences to conduct mining and exploration activities there. Its ability to conduct these activities, however, depends on licences being renewed and other government approvals being granted.

To maintain and increase production at Inkai, we need ongoing support, agreement and co-operation from our partner, Kazatomprom, and from the government. Kazakh foreign investment, environmental and mining laws and regulations are still developing, so it can be difficult to predict how they will be applied. Inkai’s best efforts may therefore not always reflect full compliance with the law, and non-compliance can lead to an outcome that is disproportionate to the nature of the breach.

Subsoil law

Amendments to the subsoil law in 2007 allow the government to reopen resource use contracts in certain circumstances, and in 2009, the Kazakhstan government passed a resolution that classified 231 blocks, including all three Inkai blocks, as strategic deposits. These actions may increase the government’s ability to expropriate Inkai’s properties in certain situations. In 2009, at the request of the Kazakhstan government, Inkai amended the resource use contract to adopt a new tax code, even though the government had agreed to tax stabilization provisions in the original contract.
A new subsoil use law went into effect in 2010 that weakens the stabilization guarantee of the prior law. This development reflects increased political risk in Kazakhstan.

**Nationalization**
Industries like mineral production are regarded as nationally or strategically important, but there is no assurance they will not be expropriated or nationalized. Government policy can change to discourage foreign investment and renationalize mineral production, or the government can implement new limitations, restrictions or requirements.

There is no assurance that our assets in Kazakhstan and other countries will not be nationalized, taken over or confiscated by any authority or body, whether the action is legitimate or not. While there are provisions for compensation and reimbursement of losses to investors under these circumstances, there is no assurance that these provisions would restore the value of our original investment or fully compensate us for the investment loss. This could have a material and adverse effect on our earnings, cash flows, financial condition, results of operations or prospects.

**Government regulations**
Our operations in Kazakhstan may be affected in varying degrees by government regulations restricting production, price controls, export controls, currency controls, taxes and royalties, expropriation of property, environmental, mining and safety legislation, and annual fees to maintain mineral properties in good standing. There is no assurance that the laws in Kazakhstan protecting foreign investments will not be amended or abolished, or that these existing laws will be enforced or interpreted to provide adequate protection against any or all of the risks described above. There is also no assurance that the resource use contract can be enforced or will provide adequate protection against any or all of the risks described above.

See page 37 for a more detailed discussion of the regulatory and political environment in Kazakhstan.

**Australia**
State governments in Australia have prohibited uranium mining or uranium exploration from time to time, and from 2002 to 2008, uranium mining was banned in Western Australia, where our Kintyre development project is located. A prohibition or restriction on uranium exploration or mining in the future that interferes with the development of Kintyre could have a material and adverse effect on our earnings, cash flows, financial condition, results of operations or prospects.

### 3 – Regulatory risks

**Government laws and regulation**
Our operations and exploration activities are subject to extensive laws and regulations.

There are laws and regulations for uranium exploration, development, mining, milling, refining, conversion, fuel manufacturing, transport, exports, imports, taxes and royalties, labour standards, occupational health, waste disposal, protection and remediation of the environment, decommissioning and reclamation, safety, hazardous substances, emergency response, land use, water use and other matters.

Significant financial and management resources are required to comply with these laws and regulations, and this will likely continue as laws and government regulations become more and more strict. We are unable to predict the ultimate cost of compliance or its effect on our operations because legal requirements change frequently, are subject to interpretation and may be enforced to varying degrees.

Some of our operations are regulated by government agencies that exercise discretionary powers conferred by statute. If these agencies do not apply their discretionary authority consistently, we may not be able to predict the ultimate cost of complying with these requirements or their effect on operations.

Existing, new or changing laws, regulations and standards of regulatory enforcement could increase costs, lower, delay or interrupt production or affect decisions about whether to continue with existing operations or development projects. This could have a material and adverse effect on our earnings, cash flows, financial condition, results of operations or prospects.
If we do not comply with the laws and regulations that apply to our business, regulatory or judicial authorities could take any number of enforcement actions, including:

- corrective measures that require us to increase capital or operating expenditures or install additional equipment
- remedial actions that result in temporary or permanent shut-down or reduction of our operations
- requirements that we compensate communities that suffer loss or damage because of our activities
- civil or criminal fines or penalties.

Legal and political circumstances are different outside North America, which can change the nature of regulatory risks in foreign jurisdictions when compared with regulatory risks associated with operations in North America.

**Permitting and licensing**

All uranium mining projects and conversion facilities around the world require government approvals, licences or permits, and our operations and development projects in Canada, the US, Kazakhstan and Australia are no exception.

The development and operation of uranium mines and conversion facilities can only be carried out by entities that have received the appropriate approvals, permits and licences according to applicable laws and regulations. Depending on the location of the project, this can be a complex and time consuming process involving multiple government agencies.

We have to obtain and maintain many approvals, licences and permits from the appropriate regulatory authorities, but there is no assurance that they will grant or renew them, approve any additional licences or permits for potential changes to our operations in the future or in response to new legislation, or that they will process any of the applications on a timely basis. Stakeholders, like environmental groups, non-government organizations (NGOs) and aboriginal groups claiming rights to traditional lands, can raise legal challenges. A significant delay in obtaining or renewing the necessary approvals, licences or permits, or failure to receive the necessary approvals, licences or permits, could interrupt or prevent the development or operation of our mines and conversion facilities, which could have a material and adverse effect on our earnings, cash flows, financial condition, results of operations or prospects.

**Nuclear plant regulation**

BPLP’s nuclear electricity business is subject to extensive government regulations covering nuclear operations, nuclear waste management and decommissioning and environmental matters, and the Bruce B operating licence for its nuclear generation facilities can be revoked if BPLP does not comply. The government also can impose additional conditions on the licences, or impose fines or other penalties. Regulations are promulgated under federal and provincial law.

Because studies revealed that emergency shutdown systems might not have sufficient safety margins for low probability events, the CSNC limited the four Bruce B units to 90% of operating power. The CNSC later approved the uprating of the units to 93% of operating power, but there is no assurance that the CNSC will not significantly derate them in the future.

Compliance with these regulations, the imposition of additional conditions, fines or penalties or a derating of the Bruce B units could have a material adverse effect on BPLP’s contribution to our earnings, cash flows, financial condition or results of operations.

**Regulation of the Ontario electricity market**

The government of Ontario regulates Ontario’s electricity industry, which opened to competition on May 1, 2002 in both the wholesale and retail markets. The government has since announced regulatory changes, and could make additional or fundamental changes to the structure of the electricity market or new market rules based on the experience of the regulatory authorities and market participants.

Any of these factors could have a material and adverse effect on BPLP’s contribution to our earnings, cash flows, financial conditions or results of operations.
4 – Financial risks
Volatility and sensitivity to prices

Since a significant portion of our revenues come from the sale of uranium and conversion services, our earnings and cash flow are closely related to, and sensitive to, fluctuations in the long and short-term market prices of U₃O₈ and uranium conversion services.

Many factors beyond our control affect these prices, including the following, among others:

- demand for nuclear power
- forward contracts of U₃O₈ supplies by nuclear power plants
- political and economic conditions in countries producing and buying uranium
- reprocessing of used reactor fuel and the re-enrichment of depleted uranium tails
- sales of excess civilian and military inventories of uranium by governments and industry participants (including uranium from dismantling nuclear weapons)
- levels of uranium production and production costs
- significant interruptions in production or delays in expansion plans or new mines going into production
- investment and hedge fund activity in the uranium market.

We cannot predict the effect that any one or all of these factors will have on the price of U₃O₈ and uranium conversion services. Prices have fluctuated widely in the last several years, and there have been significant declines since 2007.

The table below shows the range in spot prices over the last five years.

<table>
<thead>
<tr>
<th>Range of spot uranium prices</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>US$/lb of U₃O₈</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>72.00</td>
<td>135.50</td>
<td>76.50</td>
<td>51.50</td>
<td>62.25</td>
</tr>
<tr>
<td>Low</td>
<td>37.50</td>
<td>75.00</td>
<td>45.50</td>
<td>42.00</td>
<td>40.75</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spot UF₆ conversion values</th>
<th>US$/kg U</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>11.75</td>
</tr>
<tr>
<td>Low</td>
<td>11.25</td>
</tr>
</tbody>
</table>

The next table shows the range in term prices over the last five years.

<table>
<thead>
<tr>
<th>Range of term uranium prices</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>US$/lb of U₃O₈</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>72.00</td>
<td>95.00</td>
<td>95.00</td>
<td>69.50</td>
<td>66.00</td>
</tr>
<tr>
<td>Low</td>
<td>37.00</td>
<td>75.00</td>
<td>70.00</td>
<td>61.00</td>
<td>59.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term UF₆ conversion values</th>
<th>US$/kg U</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>12.25</td>
</tr>
<tr>
<td>Low</td>
<td>11.75</td>
</tr>
</tbody>
</table>

Notes

Spot and term uranium prices are the average of prices published monthly by Ux Consulting and from The Nuexco Exchange Value, published by TradeTech.

Spot and term UF₆ conversion values are the average of prices published monthly by Ux Consulting and from The Nuexco Conversion Value, published by TradeTech.

If prices for U₃O₈ or uranium conversion services fall below our own production costs for a sustained period, continued production or conversion at our sites may cease to be profitable. This would have a material and adverse effect on our earnings, cash flows, financial condition, results of operations or prospects.
Declines in U₃O₈ prices could also delay or deter a decision to build or begin commercial production at one or more of our development projects, or adversely affect our ability to finance these development projects. Either of these could have an adverse effect on our future earnings, cash flows, financial condition, results of operations or prospects.

A sustained decline in U₃O₈ prices may require us to write down our mineral reserves and mineral resources, and any significant write downs may lead to material write downs of our investment in the mining properties affected, and an increase in charges for amortization, reclamation and closures.

We use a uranium contracting strategy as a way to reduce volatility in our future earnings and cash flow from exposure to fluctuations in uranium prices. It involves building a portfolio that consists of fixed-price contracts and market-related contracts with terms of 10 years or more. This strategy can create opportunity losses because we may not benefit fully if there is a significant increase in U₃O₈ prices. This strategy also creates currency risk since we receive payment under the majority of our sales contracts in US$. There is no assurance that our contracting strategy will be successful.

We participate in the uranium spot market from time to time, making purchases so we can put material into higher priced contracts. There are, however, risks associated with spot market purchases, including the risk of losses, which could have an adverse effect on our earnings, cash flows, financial condition or results of operations.

**Spot market electricity prices**
Electricity prices can be volatile. BPLP’s risk management activities include trading electricity and related contracts to mitigate these risks. There is no assurance, however, that the activities will be successful.

**Reserve, resource, production and capital cost estimates**

**Reserve and resource estimates are not precise**

Our mineral reserves and resources are the foundation of our uranium mining operations. They dictate how much uranium concentrate we can produce, and for how many years.

The uranium mineral reserves and resources reported in this AIF are estimates, and are therefore subjective. There is no assurance that the indicated tonnages or grades of uranium will be mined or milled or that we will receive the uranium price we used in estimating these reserves.

While we believe that the mineral reserve and resource estimates included in this AIF are well established and reflect management’s best estimates, reserve and resource estimates, by their nature, are imprecise, do not reflect exact quantities and depend to a certain extent on statistical inferences that may ultimately prove unreliable. The volume and grade of reserves we actually recover, and rates of production from our current mineral reserves, may be less than the estimate of the reserves. Fluctuations in the market price of uranium, changing exchange rates and operating and capital costs can make reserves uneconomic to mine in the future and ultimately cause us to reduce our reserves.

Short-term operating factors relating to mineral reserves, like the need for orderly development of orebodies or the processing of different ore grades, can also prompt us to modify reserve estimates or make reserves uneconomic to mine in the future, and can ultimately cause us to reduce our reserves. Reserves also may have to be re-estimated based on actual production experience.

Mineral resources may ultimately be reclassified as proven or probable mineral reserves if they demonstrate profitable recovery. Estimating reserves or resources is always affected by economic and technological factors, which can change over time, and experience in using a particular mining method. There is no assurance that any resource estimate will ultimately be reclassified as proven or probable reserves. If we do not obtain or maintain the necessary permits or government approvals, or there are changes to applicable legislation, it could cause us to reduce our reserves.

Mineral resource and reserve estimates can be uncertain because they are based on data from limited sampling and drilling and not from the entire orebody. As we gain more knowledge and understanding of an orebody, the resource and reserve estimate may change significantly, either positively or negatively.
If our mineral reserve or resource estimates for our uranium properties are inaccurate or are reduced in the future, it could:

- require us to write down the value of an operating property or development project
- result in lower uranium concentrate production than previously estimated
- require us to incur increased capital or operating costs, or
- require us to operate mines or facilities unprofitably.

This could have a material and adverse effect on our earnings, cash flows, financial condition or results of operations or prospects.

**Production and capital cost estimates may be inaccurate**

We prepare estimates of future production and capital costs for particular operations, but there is no assurance we will achieve these estimates. Estimates of expected future production and capital costs are inherently uncertain, particularly beyond one year, and could change materially over time.

Production and capital cost estimates for McArthur River also assume the successful transition to new mining areas. Production and capital cost estimates for Cigar Lake assume that remediation and development activities are completed successfully. Production and capital cost estimates for Inkai assume it receives regulatory and partner approvals to increase production to planned levels, including in 2011 and 2012.

Production estimates for uranium refining, conversion and fuel manufacturing assume there is no disruption or reduction in supply from us or third party sources, and that estimated rates and costs of processing are accurate, among other things.

Our actual production and capital costs may vary from estimates for a variety of reasons, including, among others:

- actual ore mined varying from estimated grade, tonnage, dilution, metallurgical and other characteristics
- mining and milling losses greater than planned
- short-term operating factors relating to the ore, such as the need for sequential development of orebodies and the processing of new or different ore grades
- risk and hazards associated with mining, milling, uranium refining, conversion and fuel manufacturing
- failure of mining methods and plans
- failure to obtain and maintain the necessary regulatory and partner approvals
- lack of tailings capacity
- natural phenomena, such as inclement weather conditions or floods
- labour shortages or strikes
- delay or lack of success in mining new areas at McArthur River, completing remediation and development activities at Cigar Lake or completing construction activities
- delays, interruption or reduction in production or construction activities due to fires, failure of critical equipment, shortage of supplies, underground floods, earthquakes, tailings dam failures, lack of tailings capacity, ground movements and cave-ins, or other difficulties.

Failure to achieve production or capital cost estimates could have a material and adverse effect on our earnings, cash flows, financial condition or results of operations.

**Currency fluctuations**

Our earnings and cash flow may also be affected by fluctuations in the exchange rate between the Canadian and US dollar. Our sales of uranium and conversion services are mostly denominated in US dollars, while the production costs of both are denominated primarily in Canadian dollars. Our consolidated financial statements are expressed in Canadian dollars.

Any fluctuations in the exchange rate between the US dollar and Canadian dollar can result in favourable and unfavourable foreign currency exposure, which can have a material effect on our future earnings, cash flows, financial condition or results of operations, as has been the case in the past. While we use a hedging program to limit any adverse effects of fluctuations in foreign exchange rates, there is no assurance that these hedges will eliminate the potential material negative impact of fluctuating rates.
Customers
Our main business relates to the production and sale of uranium concentrates and providing uranium conversion services. We rely heavily on a small number of customers to purchase a significant portion of our uranium concentrates and conversion services.

From 2011 through 2013, we expect:
• our five largest customers to account for 36% of our contracted supply of U₃O₈
• our five largest UF₆ conversion customers to account for 43% of our contracted supply of UF₆ conversion services.

We are currently the only commercial supplier of UO₂ used by Canadian Candu heavy water reactors. Our sales to our largest customer accounted for 38% of our UO₂ sales in 2010.

In addition, revenues in 2010 from one customer of our uranium and conversion segments represented $126 million (8%) of our total revenues from those businesses. Sales for the Bruce A and B reactors represent a substantial portion of our fuel manufacturing business.

If we lose any of our largest customers or if any of them curtails their purchases, it could have a material and adverse effect on our earnings, cash flows, financial condition or results of operations.

Counterparty and credit risk
Our business operations expose us to the risk of counterparties not meeting their contractual obligations, including:
• customers
• suppliers
• financial institutions and other counterparties to our derivative financial instruments and hedging arrangements relating to foreign currency exchange rates and interest rates
• financial institutions which hold our cash on deposit
• insurance providers.

Credit risk is the risk that counterparties will not be able to pay for services provided under the terms of the contract. If a counterparty to any of our significant contracts defaults on a payment or other obligation or becomes insolvent, it could have a material and adverse effect on our cash flows, earnings, financial condition or results of operations.

Uranium products, conversion and fuel services
We manage the credit risk of our customers for uranium products, conversion and fuel services by:
• monitoring their creditworthiness
• asking for pre-payment or another form of security if they pose an unacceptable level of credit risk.

As of December 31, 2010, 97% of our forecast revenue under contract for the period 2011 to 2013 is with customers whose creditworthiness meets our standards for unsecured payment terms.

Electricity
Excluding revenue support payments from the Ontario government, BPLP’s revenues come from two main sources:
• electricity sales through the spot market administered by government regulators
• electricity sales under medium-term and long-term power purchase and electricity price hedging agreements.

Spot market participants must meet standards for creditworthiness that are mandated by regulators, so we believe BPLP’s credit risk for sales to these customers is effectively managed. If these purchasers do not provide adequate credit support to the regulators, all market participants, including BPLP, could be responsible for any shortfall, in proportion to their market activity.

BPLP requires purchasers under these agreements to meet certain standards for creditworthiness to manage credit risk. In some cases, they must provide financial assurances as security for non-performance.

Other
We manage the credit risk on our derivative and hedging arrangements, cash deposits and insurance policies by dealing with financial institutions and insurers that meet our credit rating standards and by limiting our exposure to individual counterparties.
We diversify or increase inventory in our supply chain to limit our reliance on a single contractor, or limited number of contractors. We also monitor the creditworthiness of our suppliers to manage the risk of suppliers defaulting on delivery commitments.

There is no assurance, however, that we will be successful in our efforts to manage the risk of default or credit risk.

**Liquidity and financing**

Nuclear energy and mining are extremely capital intensive businesses, and companies need significant ongoing capital to maintain and improve existing operations, invest in large scale capital projects with long lead times, and manage uncertain development and permitting timelines and the volatility associated with fluctuating uranium and input prices.

We believe our current financial resources are sufficient to support the exploration and development projects we have planned. If we expand these projects or our programs overall, we may need to raise additional financing through joint ventures, debt financing, equity financing or other means.

There is no assurance that we will obtain the financing we need, when we need it. Volatile uranium markets, a claim against us, a significant event disrupting our business or operations, or other factors may make it difficult or impossible for us to obtain debt or equity financing on favourable terms, or at all.

**Operating and capital plans**

We establish our operating and capital plans based on the information we have at the time, including expert opinions. There is no assurance, however, that these plans will not change as new information becomes available or there is a change in expert opinion.

Pre-feasibility and feasibility studies contain capital and operating costs, estimated production and economic returns and other estimates that may be significantly different than actual costs, and there is no assurance that they will not be higher than anticipated or than what was disclosed in the studies. Our estimates may also be different from those of other companies, so they should not be used to project operating profit.

**Internal controls**

We use internal controls over financial reporting to provide reasonable assurance that we authorize transactions, safeguard assets against improper or unauthorized use, and record and report transactions properly. This gives us reasonable assurance that our financial reporting is reliable, and prepared in accordance with generally accepted accounting principles.

It is impossible for any system to provide absolute assurance or guarantee reliability, regardless of how well it is designed or operated. We continue to evaluate our internal controls to identify areas for improvement and provide as much assurance as reasonably possible. We conduct an annual assessment of our internal controls over financial reporting and produce an attestation report of their effectiveness by our independent auditors to meet the requirement of Section 404 of the Sarbanes-Oxley Act of 2002.

If we do not satisfy the requirements for internal controls on an ongoing, timely basis, it could negatively affect investor confidence in our financial reporting, which could have an impact on our business and the trading price of our common shares. If a deficiency is identified and we do not introduce new or better controls, or have difficulty implementing them, it could harm our financial results or our ability to meet reporting obligations.

**Carrying values of assets**

We evaluate the carrying value of our assets to decide whether current events and circumstances indicate whether or not we can recover the carrying amount. This involves comparing the estimated fair value of our reporting units to their carrying values.

We base our fair value estimates on various assumptions, however, the actual fair values can be significantly different than the estimates. If we do not have any mitigating valuation factors or experience a decline in the fair value of our reporting units, it could ultimately result in an impairment charge.
5 – Environmental risks

Complex legislation and environmental, health and safety risk

Our activities have an impact on the environment, so our operations are subject to extensive laws and regulations relating to the protection of the environment, employee health and safety and waste disposal. We also face risks that are unique to uranium mining, processing and fuel manufacturing. Laws to protect the environment as well as employee health and safety are becoming more stringent for members of the nuclear energy industry.

Our facilities operate under various operating and environmental approvals, licences and permits that have conditions that we must meet as part of our regular business activities. In a number of instances, our right to continue operating these facilities depends on our compliance with these conditions.

Our ability to obtain approvals, licences and permits, maintain them, and successfully develop and operate our facilities may be adversely affected by the real or perceived impact of our activities on the environment and human health and safety at our development projects and operations and in the surrounding communities. The real or perceived impact of activities of other nuclear energy or mining companies can also have an adverse effect on our ability to secure and maintain approvals, licences and permits.

Our compliance with laws and regulations relating to the protection of the environment, employee health and safety, and waste disposal requires significant expenditures and can cause delays in production or project development. This has been the case in the past and may be so in future. Failing to comply can lead to fines and penalties, temporary or permanent suspension of development and operational activities, clean-up costs, damages and the loss of key approvals, permits and licences. We are exposed to these potential liabilities for our current development projects and operations as well as operations that have been closed. There is no assurance that we have been or will be in full compliance with all of these laws and regulations, or with all the necessary approvals, permits and licences.

Laws and regulations on the environment, employee health and safety, and waste disposal continue to evolve and this can create significant uncertainty around the environmental, employee health and safety, and waste disposal costs we incur. If new legislation and regulations are introduced in the future, they could lead to additional capital and operating costs, restrictions and delays at existing operations or development projects, and the extent of any of these possible changes cannot be predicted in a meaningful way.

Environmental and regulatory review is a long and complex process that can delay the opening, modification or expansion of a mine, conversion facility or refining facility, or extend decommissioning activities at a closed mine or other facility.

Our ability to foster and maintain the support of local communities and governments for our development projects and operations is critical to the conduct and growth of our business, and we do this by engaging in dialogue and consulting with them about our activities and the social and economic benefits they will generate. There is no assurance, however, that this support can be fostered or maintained. There is an increasing level of public concern relating to the perceived effect that nuclear energy and mining activities have on the environment and communities affected by the activities. Some NGOs are vocal critics of the nuclear energy and mining industries, and oppose globalization, nuclear energy and resource development. Adverse publicity generated by these NGOs or others, related to the nuclear energy industry or the extractive industry in general, or our operations in particular, could have an adverse effect on our reputation or financial condition and may affect our relationship with the communities we operate in. While we are committed to operating in a socially responsible way, there is no guarantee that our efforts will mitigate this potential risk.

These risks could delay or interrupt our operations or project development activities, delay, interrupt or lower our production and have a material and adverse effect on our earnings, cash flows, financial condition, results of operations or prospects.

Decommissioning and reclamation obligations

Environmental regulators are demanding more and more financial assurances so that the parties involved, and not the government, bear the cost of decommissioning and reclaiming sites.
We have filed decommissioning plans for some of our properties with the regulators. We review these plans every five years, or at the time of an amendment or renewal of an operating licence. Plans for our US sites are reviewed annually. Regulators may conduct a further review of the detailed decommissioning plans, and this can lead to additional requirements, costs and financial assurances. It is not possible to predict what level of decommissioning and reclamation and financial assurances regulators may require in the future.

If we must comply with additional regulations, or the actual cost of decommissioning and reclamation in the future is significantly higher than our current estimates, this could have a material and adverse effect on our future earnings, cash flows, financial condition or results of operations.

In addition, if a previously unrecognized reclamation liability becomes known or a previously estimated decommissioning or reclamation cost is increased, the amount of that liability or additional cost is expensed, and this can have a material negative effect on our net income for the period.

Nuclear waste management and decommissioning (Bruce Power)
BPLP is subject to extensive federal regulation related to nuclear waste management. Not complying with the regulations could lead to:
• prosecution, and possibly cause the operating licences for its nuclear generation facilities to be revoked
• additional conditions imposed under the licences
• fines and other penalties.

If BPLP releases radioactive material at higher than the prescribed limits, it could lead to a government ordered investigation, control and/or remediation of the release and claims from third parties for harm caused by the release. BPLP already incurs substantial costs for nuclear waste management and changes in federal regulation could result in additional costs that could have a material and adverse effect on BPLP’s contribution to our earnings, cash flows, financial condition or results of operations.

The wet bays at Bruce B have limited capacity to store used nuclear fuel. Under its contract with BPLP, OPG has started collecting used nuclear fuel bundles, stored in the wet bays, for transport and storage at the OPG dry storage facility at the Bruce site. OPG has title to all used nuclear fuel bundles in the wet bays. If OPG fails to continue providing adequate service to collect the used fuel bundles, does not do it on a timely basis, or experiences problems associated with the station modifications in the wet bays to support the loading of bundles into dry storage containers, this could have a material and adverse effect on BPLP’s contribution to our earnings, cash flows, financial condition or results of operations.

6 – Legal and other risks

Litigation
We and BPLP are currently subject to litigation or threats of litigation, and may be involved in disputes with other parties in the future that result in litigation.

We cannot accurately predict the outcome of any litigation. If a dispute cannot be resolved favourably, it may delay or interrupt our operations or project development activities and have a material and adverse effect on our earnings, cash flows, financial condition or results of operations. See Legal proceedings on page 111 for more information.

Legal rights
If a dispute arises at our foreign operations, it may be under the exclusive jurisdiction of foreign courts, or we may not be successful in subjecting foreign persons to the jurisdiction of courts in Canada. We could also be hindered or prevented from enforcing our rights relating to a government entity or instrumentality because of the doctrine of sovereign immunity.

The dispute resolution provision of the resource use contract for Inkai and Russian HEU commercial agreement stipulate that any dispute between the parties is to be submitted to international arbitration. There is no assurance, however, that a particular government entity or instrumentality will either comply with the provisions of these or any other agreements, or voluntarily submit a dispute to arbitration. If we are unable to enforce our rights under these
agreements, this could have a material and adverse effect on our earnings, cash flows, financial condition or results of operations.

Defects in title
We have investigated our rights to explore and exploit all of our material properties, and those rights are in good standing to the best of our knowledge. There is no assurance, however, that these rights will not be revoked or significantly altered to our detriment, or that our rights will not be challenged by third parties, including local governments and by indigenous groups, such as First Nations and Métis in Canada.

Indigenous rights, title claims and consultation
Managing indigenous rights, title claims and consultation is an integral part of our exploration, development and mining activities, and we are committed to managing them effectively. There is no assurance, however, that we will not face material adverse consequences because of the legal and factual uncertainties with these issues.

Saskatchewan
Activities at our various properties in Saskatchewan may be affected by title claims by the First Nations and Métis, and related consultation issues. These activities include:
• exploration, development and mining at McArthur River and Rabbit Lake, our uranium producing properties
• milling at Key Lake
• Cigar Lake, our development property
• Millennium, an exploration property.

We also face similar issues with our exploration activities in other provinces and countries. We have received formal demands from the English First River Nation and the Métis Nation of Saskatchewan to consult with and accommodate them when we operate or develop on traditional lands. All aboriginal groups in northern Saskatchewan expect this of us.

It is generally acknowledged that under historical treaties, First Nation bands in northern Saskatchewan ceded title to most traditional lands in the region in exchange for treaty benefits and reserve lands. First Nations in Saskatchewan, however, generally continue to assert that their treaties are not an accurate record of their agreement with the Canadian government and that they did not cede title to the minerals when they ceded title to their traditional lands. First Nations have launched a lawsuit in Alberta making a similar claim that they did not cede title to the oil and natural gas rights when they ceded title to their traditional lands. There is a risk that the First Nations in Saskatchewan may launch a similar lawsuit.

The English First River Nation has selected lands for designation as Treaty Land Entitlement (TLE) that covers the mineral claims for the Millennium uranium deposit. The Saskatchewan government rejected this selection in December 2008, but the English First River Nation has challenged that rejection in the courts. The TLE process does not affect the rights of our mining joint ventures. It may, however, affect the surface rights and benefits ultimately negotiated as part of the development of Millennium, and we are monitoring developments on the TLE issue.

Kintyre
To proceed with development of Kintyre in Australia, we must reach an agreement with the Martu, the native land title holders for this property. Negotiations are ongoing, but we are uncertain whether we will able to reach this agreement.

Fuel fabrication defects and product liability
We fabricate nuclear fuel bundles, other reactor components and monitoring equipment. These products are complex and may have defects that can be detected at any point in their product life cycle. Flaws in the products could materially and adversely affect our reputation, which could result in a significant cost to us and have a negative effect on our ability to sell our products in the future. We could also incur substantial costs to correct any product errors, which could have an adverse effect on our operating margins. While we introduced a new rigorous process for review and control in 2007, there is no guarantee that we will detect all defects or errors in our products.
It is possible that some customers may demand compensation if we deliver defective products. If there are a significant number of product defects, it could have a significant impact on our operating results.

Agreements with some customers may include specific terms limiting liability to customers. Even if there are limited liability provisions in place, existing or future laws, or unfavourable judicial decisions may make them ineffective. We have not experienced any material product liability claims to date, however, they could occur in the future because of the nature of nuclear fuel products. A successful product liability claim could result in significant monetary liability and could seriously disrupt our fuel manufacturing business and the company overall.

7 – Industry risks

Industry competition and international trade restrictions

The international uranium industry, which includes supplying uranium concentrates and providing uranium conversion services, is highly competitive. We market uranium to utilities, and directly compete with a relatively small number of uranium mining and enrichment companies in the world. Their supply may come from mining uranium, excess inventories, including inventories made available from decommissioning of nuclear weapons, reprocessed uranium and plutonium derived from used reactor fuel, and from using excess enrichment capacity to re-enrich depleted uranium tails.

The supply of uranium is affected by a number of international trade agreements and policies. These and any similar future agreements, governmental policies or trade restrictions are beyond our control and may affect the supply of uranium available in the US, Europe and Asia, the world’s largest markets for uranium. If we cannot supply uranium to these important markets, it could have a material and adverse effect on our earnings, cash flows, financial condition or results of operations.

We compete with two other full scale commercial suppliers in the western world for UF₆ conversion services. We also compete with the availability of additional supplies from excess inventories, including those from decommissioning nuclear weapons and using excess enrichment capacity to re-enrich depleted uranium tails.

Any political decisions about the uranium market can affect our future prospects. There is no assurance that the US or other governments will not enact legislation that restricts who can buy or supply uranium, or facilitates a new supply of uranium.

Competition for sources of uranium

There is growing competition for mineral acquisition opportunities throughout the world, so we may not be able to acquire rights to explore additional attractive uranium mining properties on terms that we consider acceptable.

There is no assurance that we will acquire any interest in additional uranium properties, or buy additional uranium concentrates from the decommissioning of nuclear weapons or the release of excess government inventory, that will result in additional uranium concentrates we can sell. If we are not able to acquire these interests or rights, it could have a material and adverse effect on our future earnings, cash flows, financial condition or results of operations.

Even if we do acquire these interests or rights, the resulting business arrangements may ultimately prove not to be beneficial.

Deregulation of the electrical utility industry

A significant part of our future prospects is directly linked to developments in the global electrical utility industry.

Deregulation of the utility industry, especially in the US and Europe, is expected to affect the market for nuclear and other fuels and could lead to the premature shutdown of some nuclear reactors.

Deregulation has resulted in utilities improving the performance of their reactors to record capacity, but there is no assurance this trend will continue.

Deregulation can have a material and adverse effect on our future earnings, cash flows, financial condition or results of operations.
Alternate sources of energy

Nuclear energy competes with other sources of energy like oil, natural gas, coal and hydro-electricity. These sources are somewhat interchangeable with nuclear energy, particularly over the longer term.

If lower prices of oil, natural gas, coal and hydro-electricity are sustained over time, it may result in lower demand for uranium concentrates and uranium conversion services, which could lead to lower uranium prices. Growth of the uranium and nuclear power industry will depend on continuing and growing acceptance of nuclear technology to generate electricity. Unique political, technological and environmental factors affect the nuclear industry, exposing it to the risk of public opinion, which could have a negative effect on the demand for nuclear power and increase the regulation of the nuclear power industry. An accident at a nuclear reactor anywhere in the world could affect the acceptance of nuclear energy and the future prospects for nuclear generation, which could have a material and adverse effect on our future earnings, cash flows, financial condition, results of operations or prospects.

Legal proceedings

We discuss any legal proceedings that we or our subsidiaries are a party to in notes 18 and 25 to the 2010 financial statements.
Investor information

Share capital
Our authorized share capital consists of:
- first preferred shares
- second preferred shares
- common shares
- one class B share.

Preferred shares
We do not currently have any preferred shares outstanding, but we can issue an unlimited number of first preferred or second preferred shares with no nominal or par value, in one or more series. The board must approve the number of shares, and the designation, rights, privileges, restrictions and conditions attached to each series of first or second preferred shares.

Preferred shares can carry voting rights, and they rank ahead of common shares and the class B share for receiving dividends and distributing assets if the company is liquidated, dissolved or wound up.

First preferred shares
Each series of first preferred shares ranks equally with the shares of other series of first preferred shares. First preferred shares rank ahead of second preferred shares, common shares and the class B share.

Second preferred shares
Each series of second preferred shares ranks equally with the shares of other series of second preferred shares. Second preferred shares rank after first preferred shares and ahead of common shares and the class B share.

Common shares
We can issue an unlimited number of common shares with no nominal or par value. Only holders of common shares have full voting rights in Cameco.

If you hold our common shares, you are entitled to vote on all matters that are to be voted on at any shareholder meeting, other than meetings that are only for holders of another class or series of shares. Each Cameco share you own represents one vote, except where noted below. As a holder of common shares, you are also entitled to receive any dividends that are declared by our board of directors.

Common shares rank after preferred shares with respect to the payment of dividends and the distribution of assets if the company is liquidated, dissolved or wound up, or any other distribution of our assets among our shareholders if we were to wind up our affairs.

Holders of our common shares have no pre-emptive, redemption, purchase or conversion rights for these shares. Except as described under Ownership and voting restrictions, non-residents of Canada who hold common shares have the same rights as shareholders who are residents of Canada.

As at February 10, 2011, we had 394,435,383 common shares outstanding. These were fully paid and non-assessable.

As of February 10, 2011, there were 7,432,998 stock options outstanding to acquire common shares of Cameco under the company’s stock option plan.

Our articles of incorporation have provisions that restrict the issue, transfer and ownership of voting securities of Cameco (see Ownership and voting restrictions on pages 113 and 114).

Class B shares
The province of Saskatchewan holds our one class B share outstanding. It is fully paid and non-assessable.

The one class B share entitles the province to receive notices of and attend all meetings of shareholders, for any class or series.
The class B shareholder can only vote at a meeting of class B shareholders, and only as a class if there is a proposal to:

- amend Part 1 of Schedule B of the articles, which states that:
  - Cameco’s registered office and head office operations must be in Saskatchewan
  - the vice-chairman of the board, chief executive officer (CEO), president, chief financial officer (CFO) and generally all of the senior officers (vice-presidents and above) must live in Saskatchewan
  - all annual meetings of shareholders must be held in Saskatchewan
- amalgamate, if it would require an amendment to Part 1 of Schedule B of the articles, or
- amend the articles in a way that would change the rights of class B shareholders.

The class B shareholder can request and receive information from us to determine whether or not we are complying with Part 1 of Schedule B of the articles.

The class B shareholder does not have the right to receive any dividends declared by Cameco. The class B share ranks after first and second preferred shares, but equally with common shareholders, with respect to the distribution of assets if the company is liquidated, dissolved or wound up. The class B shareholder has no pre-emptive, redemption, purchase or conversion rights with its class B share, and the share cannot be transferred.

Ownership and voting restrictions

The federal government established ownership restrictions when Cameco was formed so we would remain Canadian controlled. There are restrictions on issuing, transferring and owning Cameco common shares whether you own the shares as a registered shareholder, hold them beneficially or control your investment interest in Cameco directly or indirectly. These are described in the Eldorado Nuclear Limited Reorganization and Divestiture Act (Canada) (ENL Reorganization Act) and our company articles.

The following is a summary of the restrictions listed in our company articles.

Residents

A Canadian resident, either individually or together with associates, cannot hold, beneficially own or control shares or other Cameco securities, directly or indirectly, representing more than 25% of the votes that can be cast to elect directors.

Non-residents

A non-resident of Canada, either individually or together with associates, cannot hold, beneficially own or control shares or other Cameco securities, directly or indirectly, representing more than 15% of the total votes that can be cast to elect directors.

Voting restrictions

All votes cast at the meeting by non-residents, either beneficially or controlled directly or indirectly, will be counted and pro-rated collectively to limit the proportion of votes cast by non-residents to no more than 25% of the total shareholder votes cast at the meeting.

There have been instances in prior years, including 2010, when we have limited the counting of votes by non-residents of Canada at our annual meeting of shareholders to abide by this restriction. This has resulted in non-residents receiving less than one vote per share.

Enforcement

The company articles allow us to enforce the ownership and voting restrictions by:

- suspending voting rights
- forfeiting dividends and other distributions
- prohibiting the issue and transfer of Cameco shares
- requiring the sale or disposition of Cameco shares
- suspending all other shareholder rights.
To verify compliance with restrictions on ownership and voting of Cameco shares, we require existing shareholders, proposed transferees or other subscribers for voting shares to declare their residency, ownership of Cameco shares and other things relating to the restrictions. Nominees such as banks, trust companies, securities brokers or other financial institutions who hold the shares on behalf of beneficial shareholders need to make the declaration on their behalf.

We cannot issue or register a transfer of any voting shares if it would result in a contravention of the resident or non-resident ownership restrictions.

If we believe there is a contravention of our ownership restrictions based on any shareholder declarations filed with us, or our books and records or those of our registrar and transfer agent or otherwise, we can suspend all shareholder rights for the securities they hold, other than the right to transfer them. We can only do this after giving the shareholder 30 days notice, unless he or she has disposed of the holdings and we have been advised of this.

Understanding the terms
Please see our articles for the exact definitions of associate, resident, non-resident, control, and beneficial ownership which are used for the restrictions described above.

Other restrictions
The ENL Reorganization Act imposes some additional restrictions on Cameco. We must maintain our registered office and our head office operations in Saskatchewan. We are also prohibited from:
- creating restricted shares (these are generally defined as a participating share with restrictive voting rights)
- applying for continuance in another jurisdiction
- enacting articles of incorporation or bylaws that have provisions that are inconsistent with the ENL Reorganization Act.

We must maintain our registered office and head office operations in Saskatchewan under the Saskatchewan Mining Development Corporation Reorganization Act. This generally includes all executive, corporate planning, senior management, administrative and general management functions.

Credit ratings
Credit ratings provide an independent, professional assessment of a corporation’s credit risk. They are not a comment on the market price of a security or suitability for an individual investor and are, therefore, not recommendations to buy, hold or sell our securities.

We provide rating agencies DBRS Limited (DBRS) and Standard & Poor’s (S&P) with confidential, in-depth information to support the credit rating process.

There is no assurance that a rating agency will keep the rating in effect for any given period of time, or that it will not revise or withdraw it in the future if it believes circumstances warrant it.

We have two series of senior unsecured debentures outstanding:
- $300 million of debentures that have an interest rate of 4.7% per year and mature September 16, 2015
- $500 million of debentures that have an interest rate of 5.67% per year and mature September 2, 2019.

Although we frequently issued commercial paper in the past, we did not have any outstanding commercial paper at February 10, 2011. The table below shows the DBRS and S&P ratings of our commercial paper and senior unsecured debentures:

<table>
<thead>
<tr>
<th></th>
<th>DBRS¹</th>
<th>S&amp;P²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial paper</td>
<td>R-1 (low)</td>
<td>A-1 (low)³</td>
</tr>
<tr>
<td>Senior unsecured debentures</td>
<td>A (low)</td>
<td>BBB+</td>
</tr>
</tbody>
</table>

¹ Current as of January 2011.
² Current as of August 2010.
³ A-1 (low) is the Canadian National Scale Rating (the Global Scale Rating is A-2).
Commercial paper
Rating scales for commercial paper are meant to indicate the risk that a borrower will not fulfill its near-term debt obligations in a timely manner.

The table below explains the credit ratings of our commercial paper in more detail:

<table>
<thead>
<tr>
<th>Rating</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>DBRS</td>
<td>R-1 (low)</td>
</tr>
<tr>
<td>S&amp;P</td>
<td>A-1 (low)</td>
</tr>
</tbody>
</table>

DBRS rates commercial paper by categories ranging from a high of R-1 to a low of D
- lower end of the R-1 category
- represents “satisfactory credit quality”
- third highest of 10 available credit ratings

S&P rates commercial paper by categories ranging from a high of A-1 (high) to a low of D
- represents “satisfactory capacity to meet its financial commitments on the obligation”
- the third highest of eight available credit ratings

Senior unsecured debentures
Long-term debt rating scales are meant to indicate the risk that a borrower will not fulfill its full obligations, with respect to interest and principal, in a timely manner.

The table below explains the credit ratings of our senior unsecured debentures in more detail:

<table>
<thead>
<tr>
<th>Rating</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>DBRS</td>
<td>A (low)</td>
</tr>
<tr>
<td>S&amp;P</td>
<td>BBB+</td>
</tr>
</tbody>
</table>

DBRS rates senior unsecured debentures by categories ranging from a high of AAA to a low of D
- lower end of the A category
- represents “satisfactory credit quality”
- third highest of 10 available credit ratings

S&P rates senior unsecured debentures by categories ranging from a high of AAA to a low of D
- higher end of the BBB category
- represents “adequate protection parameters”
- the fourth highest of 10 available credit ratings

Material contracts
We are required by law to describe our material contracts in this AIF (not including material contracts that we entered into as part of the ordinary course of business) that we:
- entered into in 2010 – there were none
- entered into before 2010 and remain in effect – there are two, which are described below.

Supplemental indentures
- We entered into the Third supplemental indenture with CIBC Mellon Trust Company (CIBC Mellon) on September 16, 2005, relating to the issue of $300 million in unsecured debentures at an interest rate of 4.7% per year and due in 2015.
- We entered into the Fourth supplemental indenture with CIBC Mellon on September 2, 2009, relating to the issue of $500 million in unsecured debentures at an interest rate of 5.67% and due in 2019.

See Senior unsecured debentures, above for more information about these debentures.

By law there are certain other contracts that must be described in an AIF, but we have not entered into any of these kinds of contracts.
Market for our securities

Our common shares are listed and traded on the Toronto Stock Exchange (under the symbol CCO) and the New York Stock Exchange (under the symbol CCJ).

We have a registrar and transfer agent in Canada and the US for our common shares:

<table>
<thead>
<tr>
<th>Canada</th>
<th>CIBC Mellon Trust Company</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>320 Bay Street, P.O. Box 1</td>
</tr>
<tr>
<td></td>
<td>Toronto, Ontario M5H 4A6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>US</th>
<th>Mellon Investor Services LLC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>29 Jersey City</td>
</tr>
<tr>
<td></td>
<td>New Jersey 07310</td>
</tr>
</tbody>
</table>

Trading activity

The table below shows the high and low closing prices and trading volume for our common shares on the TSX in 2010.

<table>
<thead>
<tr>
<th>2010</th>
<th>High ($)</th>
<th>Low ($)</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>35.00</td>
<td>28.75</td>
<td>20,062,146</td>
</tr>
<tr>
<td>February</td>
<td>30.86</td>
<td>27.11</td>
<td>20,116,486</td>
</tr>
<tr>
<td>March</td>
<td>29.18</td>
<td>27.23</td>
<td>27,302,434</td>
</tr>
<tr>
<td>April</td>
<td>27.95</td>
<td>24.36</td>
<td>28,880,932</td>
</tr>
<tr>
<td>May</td>
<td>26.07</td>
<td>24.03</td>
<td>24,501,621</td>
</tr>
<tr>
<td>June</td>
<td>25.62</td>
<td>22.63</td>
<td>19,135,471</td>
</tr>
<tr>
<td>July</td>
<td>26.97</td>
<td>21.64</td>
<td>24,109,817</td>
</tr>
<tr>
<td>August</td>
<td>27.38</td>
<td>25.40</td>
<td>21,267,840</td>
</tr>
<tr>
<td>September</td>
<td>28.72</td>
<td>26.07</td>
<td>20,244,783</td>
</tr>
<tr>
<td>October</td>
<td>31.93</td>
<td>28.05</td>
<td>19,446,730</td>
</tr>
<tr>
<td>November</td>
<td>38.57</td>
<td>31.29</td>
<td>33,114,817</td>
</tr>
<tr>
<td>December</td>
<td>40.95</td>
<td>37.00</td>
<td>23,242,251</td>
</tr>
</tbody>
</table>

Dividend policy

The board established a policy of paying quarterly dividends when we launched our initial public offering in 1991. It reviews the dividend policy from time to time in light of our financial position and other factors they consider relevant.

The table below shows the dividends per common share for the last three fiscal years. Under the policy, in December 2010, the board approved an increase in the annual dividend from $0.28 to $0.40 per share starting in 2011. The board approved an increase in the annual dividend in December 2009 (starting in 2010), and in December 2007 (starting in 2008).

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2010</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash dividends</td>
<td>$0.40</td>
<td>$0.28</td>
<td>$0.24</td>
</tr>
</tbody>
</table>
## Governance

### Directors

<table>
<thead>
<tr>
<th>Director</th>
<th>Board committees</th>
<th>Principal occupation or employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>John H. Clappison</td>
<td>Audit (Chair)</td>
<td>Corporate director as of 2006&lt;br&gt;1990 to December 2005 – managing partner of the&lt;br&gt;Toronto office of PricewaterhouseCoopers LLP</td>
</tr>
<tr>
<td>Toronto, Ontario, Canada</td>
<td>Human resources and compensation</td>
<td></td>
</tr>
<tr>
<td>Director since 2006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joe F. Colvin</td>
<td>Safety, health and environment (Chair)</td>
<td>June 2010 to present – President of American Nuclear Society&lt;br&gt;February 2005 to present – Corporate director and&lt;br&gt;president emeritus of the Nuclear Energy Institute</td>
</tr>
<tr>
<td>Kiawah Island, South Carolina, USA</td>
<td>Nominating, corporate governance and risk</td>
<td></td>
</tr>
<tr>
<td>Director since 1999</td>
<td></td>
<td></td>
</tr>
<tr>
<td>James R. Curtiss</td>
<td>Human resources and compensation (Chair)</td>
<td>April 2008 to present – principal of Curtiss law&lt;br&gt;1993 to March 31, 2008 – lawyer, partner,&lt;br&gt;Winston &amp; Strawn</td>
</tr>
<tr>
<td>Brookeville, Maryland, USA</td>
<td>Nominating, corporate governance and risk</td>
<td></td>
</tr>
<tr>
<td>Director since 1994</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donald H.F. Deranger</td>
<td>Reserves oversight</td>
<td>Athabasca Vice Chief of the Prince Albert Grand Council since 2003&lt;br&gt;President of Points Athabasca Contracting Ltd. since 2001</td>
</tr>
<tr>
<td>Prince Albert, Saskatchewan, Canada</td>
<td>Safety, health and environment</td>
<td></td>
</tr>
<tr>
<td>Director since 2009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>James K. Gowans</td>
<td>Reserves oversight</td>
<td>January 2011 to present – Managing Director, Debswana Diamond Company&lt;br&gt;March 2010 to December 2010 – COO and Chief&lt;br&gt;Technical Officer of DeBeers SA&lt;br&gt;April 2006 to December 2010 – CEO of DeBeers Canada Inc.&lt;br&gt;2002 to 2006 – Senior vice-president and COO of&lt;br&gt;PT Inco in Indonesia</td>
</tr>
<tr>
<td>Gaborone, Botswana</td>
<td>Safety, health and environment&lt;br&gt;Nominating, corporate governance and risk</td>
<td></td>
</tr>
<tr>
<td>Director since 2009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gerald W. Grandey</td>
<td>None</td>
<td>Chief Executive Officer since January 2003&lt;br&gt;January 2003 to May 2010 – President and Chief Executive Officer</td>
</tr>
<tr>
<td>Saskatoon, Saskatchewan, Canada</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Director since 2000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nancy E. Hopkins, Q.C.</td>
<td>Audit&lt;br&gt;Nominating, corporate governance and risk (Chair)</td>
<td>1984 to present – Lawyer, partner, McDougall Gauley LLP (Gauley &amp; Company merged with&lt;br&gt;McDougall Ready to form McDougall Gauley as of&lt;br&gt;January 2001)</td>
</tr>
<tr>
<td>Saskatoon, Saskatchewan, Canada</td>
<td></td>
<td></td>
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<tr>
<td>Director since 1992</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oyvind Hushovd</td>
<td>Reserves oversight</td>
<td>June 2005 to present – Corporate director&lt;br&gt;May 2003 to May 31, 2005 – Chairman and Chief Executive Officer of Gabriel Resources Ltd.</td>
</tr>
<tr>
<td>Kristiansand S, Norway</td>
<td>Audit&lt;br&gt;Human resources and compensation</td>
<td></td>
</tr>
<tr>
<td>Director since 2003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J.W. George Ivany</td>
<td>Audit&lt;br&gt;Safety, health and environment&lt;br&gt;Human resources and compensation</td>
<td>1995 to present – Corporate director</td>
</tr>
<tr>
<td>Kelowna, British Columbia, Canada</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Director since 1999</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Anne McLellan</td>
<td>Safety, health and environment&lt;br&gt;Human resources and compensation&lt;br&gt;Nominating, corporate governance and risk</td>
<td>July 2006 to present – Distinguished Scholar in Residence at Alberta Institute for American&lt;br&gt;Studies, University of Alberta&lt;br&gt;June 2006 to present – Lawyer, counsel at Bennett Jones LLP&lt;br&gt;1993 to 2006 – cabinet minister in various&lt;br&gt;portfolios with the Canadian government, most recently as Deputy Prime Minister of Canada from&lt;br&gt;2003 to 2006</td>
</tr>
<tr>
<td>Edmonton, Alberta, Canada</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Director since 2006</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
All of the directors are elected for a term of one year, and hold office until the next annual meeting unless he or she steps down as required by corporate law.

**Officers**

<table>
<thead>
<tr>
<th>Officer</th>
<th>Principal occupation or employment for past five years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victor J. Zaleschuk</td>
<td>November 2001 to present – Corporate director</td>
</tr>
<tr>
<td>Gerald W. Grandey</td>
<td>Assumed current position January 2003</td>
</tr>
<tr>
<td>Timothy S. Gitzel</td>
<td>Assumed current position May 2010</td>
</tr>
<tr>
<td>Gary M.S. Chad, Q.C.</td>
<td>Assumed current position January 2000</td>
</tr>
<tr>
<td>O. Kim Goheen</td>
<td>Assumed current position August 2004</td>
</tr>
<tr>
<td>Grant E. Isaac</td>
<td>Assumed current position July 2009</td>
</tr>
<tr>
<td>Kenneth A. Seitz</td>
<td>Assumed current position January 2011</td>
</tr>
<tr>
<td>Robert A. Steane</td>
<td>Assumed current position May 2010</td>
</tr>
</tbody>
</table>

To our knowledge, the total number of common shares beneficially owned, directly or indirectly, or that all the directors and officers as a group exercised direction or control over, was 845,451 as at February 10, 2011. This represents less than 1% of our outstanding common shares.

To the best of our knowledge, none of the directors, executive officers or shareholders exercising control or direction over 10% of any class of our outstanding securities, nor their associates or affiliates, have any material interests in material transactions which have affected, or will materially affect, the company.
Other information about our directors and officers

None of our directors or officers, or a shareholder with significant holdings that could materially affect control of us, was a director or executive officer of another company in the past 10 years that:

- was the subject of a cease trade or similar order, or an order denying that company any statutory exemptions for more than 30 consecutive days
- was involved in an event that resulted in the company being subject to one of the above after the director or executive officer no longer held that role with the company
- within a year of no longer acting in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold the assets of that company.

None of them have been directors, officers or promoters of other companies in the past 10 years which:

- were bankrupt
- made a proposal under any legislation relating to bankruptcy or insolvency,
- has been subject to or launched any proceedings, arrangement or compromise with any creditors, or
- had a receiver, receiver manager or trustee appointed to hold the assets of that company.

None of them has ever been subject to:

- penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or
- any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

About the audit committee

Audit committee charter

See appendix A for a copy of the audit committee charter. You can also find a copy on our website (cameco.com/responsibility/governance/board_committees).

Composition of the audit committee

The committee is made up of five members: John Clappison (chair), Nancy Hopkins, Oyvind Hushovd, George Ivany and Neil McMillan. Each member is independent and financially literate using criteria that meet the standards of the Canadian Securities Administrators as set out in Multilateral Instrument 52-110.

Relevant education and experience

John Clappison, a corporate director, is the former managing partner of the Toronto office of PricewaterhouseCoopers LLP. He currently serves on three other publicly traded companies, and the boards of other private and not-for-profit organizations. Mr. Clappison is a chartered accountant and a Fellow of the Institute of Chartered Accountants of Ontario.

Nancy Hopkins is a partner with the law firm of McDougall Gauley, LLP in Saskatoon where she concentrates her practice on corporate, commercial and tax law. She currently serves on two other publicly traded companies, the board of governors of the University of Saskatchewan, the board of the Saskatoon Airport Authority and the CPP Investment Board. She formerly served on the board of the Canadian Institute of Chartered Accountants. Ms. Hopkins has a Bachelor of Commerce degree and a Bachelor of Laws degree from the University of Saskatchewan.

Oyvind Hushovd, a corporate director, is the former Chair and Chief Executive Officer of Gabriel Resources Ltd., a Canadian-based precious metals exploration and development company, retiring in 2005. Prior to that he was the President and Chief Executive Officer of Falconbridge Limited from 1996 to 2002. He currently serves on the boards of two other publicly traded companies and three private companies. Mr. Hushovd received a Master of Economics and Business Administration degree from the Norwegian School of Business and a Master of Law degree from the University of Oslo.

George Ivany, a corporate director, is the former President and Vice-Chancellor of the University of Saskatchewan. Dr. Ivany received a Bachelor of Science degree in Chemistry and Physics and a diploma in education from
Memorial University of Newfoundland. He received a Master of Arts degree in Physics Education from the Teachers College, Columbia University and a Ph.D. in Secondary Education from the University of Alberta.

Neil McMillan is the President and Chief Executive Officer of Claude Resources Inc., a gold mining and oil and gas producing company based in Saskatoon, Saskatchewan. Prior to joining Claude Resources Inc., Mr. McMillan worked for RBC Dominion Securities as a registered representative and the Saskatoon branch manager. He currently serves on the boards of two other publicly traded companies (including Claude Resources Inc.) and previously sat on the board of Atomic Energy Canada Ltd. Mr. McMillan received a Bachelor of Arts degree in History and Sociology from the University of Saskatchewan.

Auditors’ fees

The table below shows the fees we paid to the external auditors for services in 2010 and 2009:

<table>
<thead>
<tr>
<th></th>
<th>2010 ($)</th>
<th>% of total fees (%)</th>
<th>2009 ($)</th>
<th>% of total fees (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Audit fees</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameco</td>
<td>1,697,700</td>
<td>62.6</td>
<td>1,739,900</td>
<td>48.7</td>
</tr>
<tr>
<td>Centerra and other subsidiaries</td>
<td>256,200</td>
<td>9.5</td>
<td>978,600</td>
<td>27.4</td>
</tr>
<tr>
<td>Total audit fees</td>
<td>1,953,900</td>
<td>72.1</td>
<td>2,718,500</td>
<td>76.1</td>
</tr>
<tr>
<td><strong>Audit-related fees</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameco</td>
<td>273,400</td>
<td>10.1</td>
<td>219,800</td>
<td>6.1</td>
</tr>
<tr>
<td>Centerra and other subsidiaries</td>
<td>–</td>
<td>0.0</td>
<td>32,300</td>
<td>0.9</td>
</tr>
<tr>
<td>Translation services</td>
<td>44,500</td>
<td>1.6</td>
<td>424,000</td>
<td>11.9</td>
</tr>
<tr>
<td>Pensions</td>
<td>20,000</td>
<td>0.7</td>
<td>17,000</td>
<td>0.5</td>
</tr>
<tr>
<td>Total audit-related fees</td>
<td>337,900</td>
<td>12.5</td>
<td>693,100</td>
<td>19.4</td>
</tr>
<tr>
<td><strong>Tax fees</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compliance</td>
<td>199,200</td>
<td>7.3</td>
<td>40,000</td>
<td>1.1</td>
</tr>
<tr>
<td>Planning and advice</td>
<td>219,500</td>
<td>8.1</td>
<td>122,400</td>
<td>3.4</td>
</tr>
<tr>
<td>Total tax fees</td>
<td>418,700</td>
<td>15.4</td>
<td>162,400</td>
<td>4.5</td>
</tr>
<tr>
<td><strong>All other fees</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>–</td>
<td>–</td>
<td>0.0</td>
<td>–</td>
<td>0.0</td>
</tr>
<tr>
<td>Total fees</td>
<td>2,710,500</td>
<td>100.0</td>
<td>3,574,000</td>
<td>100.0</td>
</tr>
</tbody>
</table>

1 The 2009 fees include amounts related to Centerra. We disposed of our entire interest in Centerra in December 2009.

Approving services

The audit committee must pre-approve all services the external auditors will provide to make sure they remain independent. This is according to our audit committee charter and consistent with our corporate governance practices. The audit committee can only pre-approve services up to a specific limit. If we expect the fees to exceed the limit, or the external auditors to provide new audit or non-audit services that have not been pre-approved in the past, then this must be pre-approved separately.

Any service that is not generally pre-approved must be approved by the audit committee before the work is carried out, or by the committee chair, or board chair in his or her absence, as long as the proposed service is presented to the full audit committee at its next meeting.

The committee has adopted a written policy that describes the procedures for implementing these principles.
Interest of experts

Our auditor is KPMG LLP, independent chartered accountants, who have audited our 2010 financial statements. KPMG LLP is independent within the meaning of the Rules of Professional Conduct of the Institute of Chartered Accountants of Saskatchewan.

The individuals who are qualified persons for the purposes of NI 43-101 are listed under Mineral reserves and resources starting on page 67. As a group, they beneficially own, directly or indirectly, less than 1% of any class of our outstanding securities.
Appendix A

Audit committee of the board of directors

Mandate

Purpose

The primary purpose of the audit committee (committee) is to assist the board of directors (board) in fulfilling its oversight responsibilities for (a) the accounting and financial reporting processes, (b) the internal controls, (c) the external auditors, including performance, qualifications, independence, and their audit of the corporation’s financial statements, (d) the performance of the corporation’s internal audit function, (e) risk management of financial risks as delegated by the board, (f) the corporation’s process for monitoring compliance with laws and regulations (other than environmental and safety laws) and its code of conduct and ethics, and (g) prevention and detection of fraudulent activities. The committee shall also prepare such reports as required to be prepared by it by applicable securities laws.

In addition, the committee provides an avenue for communication between each of the internal auditor, the external auditors, management, and the board. The committee shall have a clear understanding with the external auditors that they must maintain an open and transparent relationship with the committee and that the ultimate accountability of the external auditors is to the board and the committee, as representatives of the shareholders. The committee, in its capacity as a committee of the board, subject to the requirements of applicable law, is directly responsible for the appointment, compensation, retention, and oversight of the external auditors.

The committee has the authority to communicate directly with the external auditors and internal auditor.

The committee shall make regular reports to the board concerning its activities and in particular shall review with the board any issues that arise with respect to the quality or integrity of the corporation’s financial statements, the performance and independence of the external auditors, the performance of the corporation’s internal audit function, or the corporation’s process for monitoring compliance with laws and regulations other than environmental and safety laws.

Composition

The board shall appoint annually, from among its members, a committee and its chair. The committee shall consist of at least three members and shall not include any director employed by the corporation.

Each committee member will be independent pursuant to the standards for independence adopted by the board.

Each committee member shall be financially literate with at least one member having accounting or related financial expertise, using the terms defined as follows:

“Financially literate” means the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by the corporation’s financial statements; and

“Accounting or related financial expertise” means the ability to analyse and interpret a full set of financial statements, including the notes attached thereto, in accordance with Canadian generally accepted accounting principles.

In addition, where possible, at least one member of the committee shall qualify as an “audit committee financial expert” within the meaning of applicable securities law.

Members of the committee may not serve on the audit committees of more than two additional public companies without the approval of the board.

Meetings

The committee will meet at least four times annually and as many additional times as the committee deems necessary to carry out its duties effectively. The committee will meet separately in private with the external auditors, the internal auditor and management at each regularly scheduled meeting.
A majority of the members of the committee shall constitute a quorum. No business may be transacted by the committee except at a meeting of its members at which a quorum of the committee is present.

The committee may invite such officers, directors and employees of the corporation as it may see fit from time to time to attend at meetings of the committee and assist thereat in the discussion and consideration of any matter.

A meeting of the committee may be convened by the chair of the committee, a member of the committee, the external auditors, the internal auditor, the chief executive officer or the chief financial officer. The secretary, who shall be appointed by the committee, shall, upon direction of any of the foregoing, arrange a meeting of the committee. The committee shall report to the board in a timely manner with respect to each of its meetings.

Duties and responsibilities
To carry out its oversight responsibilities, the committee shall:

Financial reporting process
1. Review with management and the external auditors any items of concern, any proposed changes in the selection or application of major accounting policies and the reasons for the change, any identified risks and uncertainties, and any issues requiring management judgement, to the extent that the foregoing may be material to financial reporting.

2. Consider any matter required to be communicated to the committee by the external auditors under applicable generally accepted auditing standards, applicable law and listing standards, including the external auditors’ report to the committee (and management’s response thereto) on: (a) all critical accounting policies and practices used by the corporation; (b) all material alternative accounting treatments of financial information within generally accepted accounting principles that have been discussed with management, including the ramifications of the use of such alternative treatments and disclosures and the treatment preferred by the external auditors; and (c) any other material written communications between the external auditors and management.

3. Require the external auditors to present and discuss with the committee their views about the quality, not just the acceptability, of the implementation of generally accepted accounting principles with particular focus on accounting estimates and judgements made by management and their selection of accounting principles.

4. Discuss with management and the external auditors (a) any accounting adjustments that were noted or proposed (i.e. immaterial or otherwise) by the external auditors but were not reflected in the financial statements, (b) any material correcting adjustments that were identified by the external auditors in accordance with generally accepted accounting principles or applicable law, (c) any communication reflecting a difference of opinion between the audit team and the external auditors’ national office on material auditing or accounting issues raised by the engagement, and (d) any “management” or “internal control” letter issued, or proposed to be issued, by the external auditors to the corporation.

5. Discuss with management and the external auditors any significant financial reporting issues considered during the fiscal period and the method of resolution. Resolve disagreements between management and the external auditors regarding financial reporting.

6. Review with management and the external auditors (a) any off-balance sheet financing mechanisms being used by the corporation and their effect on the corporation’s financial statements and (b) the effect of regulatory and accounting initiatives on the corporation’s financial statements, including the potential impact of proposed initiatives.

7. Review with management and the external auditors and legal counsel, if necessary, any litigation, claim or other contingency, including tax assessments, that could have a material effect on the financial position or operating results of the corporation, and the manner in which these matters have been disclosed or reflected in the financial statements.

8. Review with the external auditors any audit problems or difficulties experienced by the external auditors in performing the audit, including any restrictions or limitations imposed by management, and management’s response. Resolve any disagreements between management and the external auditors regarding these matters.
9. Review the results of the external auditors’ audit work including findings and recommendations, management’s response, and any resulting changes in accounting practices or policies and the impact such changes may have on the financial statements.

10. Review and discuss with management and the external auditors the audited annual financial statements and related management discussion and analysis, make recommendations to the board with respect to approval thereof, before being released to the public, and obtain an explanation from management of all significant variances between comparable reporting periods. Obtain confirmation from management and the external auditors that the reconciliation of the audited financial statements to U.S. GAAP complies with the requirements of U.S. securities laws.

11. Review and discuss with management and the external auditors all interim unaudited financial statements and quarterly reports and related interim management discussion and analysis and make recommendations to the board with respect to the approval thereof, before being released to the public.

12. Obtain confirmation from the chief executive officer and the chief financial officer (and considering the external auditors’ comments, if any, thereon) to their knowledge:

(a) that the audited financial statements, together with any financial information included in the annual MD&A and annual information form, fairly represent in all material respects the corporation’s financial condition, cash flow and results of operation, as of the date and for the periods presented in such filings; and

(b) that the interim financial statements, together with any financial information included in the interim MD&A, fairly represent in all material respects the corporation’s financial condition, cash flow and results of operation, as of the date and for the periods presented in such filings.

13. Review earnings press releases, before being released to the public. Discuss the type and presentation of information to be included in earnings press releases (paying particular attention to any use of “pro-forma” or “adjusted” Non-GAAP, information).

14. Review any news release, before being released to the public, containing earnings guidance or financial information based upon the corporation’s financial statements prior to the release of such statements.

15. Review the appointment of the chief financial officer and have the chief financial officer report to the committee on the qualifications of new key financial executives involved in the financial reporting process.

16. Consult with the human resources and compensation committee on the succession plan for the chief financial officer and controller. Review the succession plans in respect of the chief financial officer and controller.

Internal Controls

1. Receive from management a statement of the corporation’s system of internal controls over accounting and financial reporting.

2. Consider and review with management, the internal auditor and the external auditors, the adequacy and effectiveness of internal controls over accounting and financial reporting within the corporation and any proposed significant changes in them.

3. Consider and discuss the scope of the internal auditors and external auditors review of the corporation’s internal controls, and obtain reports on significant findings and recommendations, together with management responses.

4. Discuss, as appropriate, with management, the external auditors and the internal auditor, any major issues as to the adequacy of the corporation’s internal controls and any special audit steps in light of material internal control deficiencies.

5. Review annually the disclosure controls and procedures, including (a) the certification timetable and related process and (b) the procedures that are in place for the review of the corporation’s disclosure of financial information extracted from the corporation’s financial statements and the adequacy of such procedures. Receive confirmation from the chief executive officer and the chief financial officer of the effectiveness of disclosure controls and procedures, and whether there are any significant deficiencies and material weaknesses in the
design or operation of internal control over financial reporting which are reasonably likely to adversely affect the 
corporation’s ability to record, process, summarize and report financial information or any fraud, whether or not 
material, that involves management or other employees who have a significant role in the corporation’s internal 
control over financial reporting. In addition, receive confirmation from the chief executive officer and the chief 
financial officer that they are prepared to sign the annual and quarterly certificates required by applicable 
securities law.

6. Review management’s annual report and the external auditors’ report on the assessment of the effectiveness of 
the corporation’s internal control over financial reporting.

7. Receive a report, at least annually, from the reserves oversight committee of the board on the corporation’s 
mineral reserves.

**External Auditors**

(i) **External Auditors’ Qualifications and Selection**

1. Subject to the requirements of applicable law, be solely responsible to select, retain, compensate, oversee, 
evaluate and, where appropriate, replace the external auditors, who must be registered with agencies mandated 
by applicable law. The committee shall be entitled to adequate funding from the corporation for the purpose of 
compensating the external auditors for completing an audit and audit report.

2. Instruct the external auditors that:

   (a) they are ultimately accountable to the board and the committee, as representatives of shareholders; and
   (b) they must report directly to the committee.

3. Ensure that the external auditors have direct and open communication with the committee and that the external 
auditors meet regularly with the committee without the presence of management to discuss any matters that the 
committee or the external auditors believe should be discussed privately.

4. Evaluate the external auditors’ qualifications, performance, and independence. As part of that evaluation:

   (a) at least annually, request and review a formal report by the external auditors describing: the firm’s internal 
       quality-control procedures; any material issues raised by the most recent internal quality-control review, or 
       peer review, of the firm, or by any inquiry or investigation by governmental or professional authorities, within 
       the preceding five years, respecting one or more independent audits carried out by the firm, and any steps 
       taken to deal with any such issues; and (to assess the auditors’ independence) all relationships between the 
       external auditors and the corporation, including the amount of fees received by the external auditors for the 
       audit services and for various types of non-audit services for the periods prescribed by applicable law; and

   (b) annually review and confirm with management and the external auditors the independence of the external 
       auditors, including the extent of non-audit services and fees, the extent to which the compensation of the 
       audit partners of the external auditors is based upon selling non-audit services, the timing and process for 
       implementing the rotation of the lead audit partner, reviewing partner and other partners providing audit 
       services for the corporation, whether there should be a regular rotation of the audit firm itself, and whether 
       there has been a “cooling off” period of one year for any former employees of the external auditors who are 
       now employees with a financial oversight role, in order to assure compliance with applicable law on such 
       matters; and

   (c) annually review and evaluate senior members of the external audit team, including their expertise and 
       qualifications. In making this evaluation, the audit committee should consider the opinions of management 
       and the internal auditor.

Conclusions on the independence of the external auditors should be reported to the board.

5. Review and approve the corporation’s policies for the corporation’s hiring of employees and former employees of 
the external auditors. Such policies shall include, at minimum, a one-year hiring “cooling off” period.
(ii) Other Matters

6. Meet with the external auditors to review and approve the annual audit plan of the corporation's financial statements prior to the annual audit being undertaken by the external auditors, including reviewing the year-to-year co-ordination of the audit plan and the planning, staffing and extent of the scope of the annual audit. This review should include an explanation from the external auditors of the factors considered by the external auditors in determining their audit scope, including major risk factors. The external auditors shall report to the committee all significant changes to the approved audit plan.

7. Review and approve the basis and amount of the external auditors' fees with respect to the annual audit in light of all relevant matters.

8. Review and pre-approve all audit and non-audit service engagement fees and terms in accordance with applicable law, including those provided to the subsidiaries of the corporation by the external auditors or any other person in its capacity as external auditors of such subsidiary. Between scheduled committee meetings, the chair of the committee, on behalf of the committee, is authorised to pre-approve any audit or non-audit service engagement fees and terms. At the next committee meeting, the chair shall report to the committee any such pre-approval given. Establish and adopt procedures for such matters.

Internal Auditor

1. Review and approve the appointment or removal of the internal auditor.

2. Review and discuss with the external auditors, management, and internal auditor the responsibilities, budget and staffing of the corporation's internal audit function.

3. Review and approve the mandate for the internal auditor and the scope of annual work planned by the internal auditor, receive summary reports of internal audit findings, management's response thereto, and reports on any subsequent follow-up to any identified weakness.

4. Ensure that the internal auditor has direct and open communication with the committee and that the internal auditor meets regularly with the committee without the presence of management to discuss any matters that the committee or the internal auditor believe should be discussed privately, such as problems or difficulties which were encountered in the course of internal audit work, including restrictions on the scope of activities or access to required information, and any disagreements with management.

5. Review and discuss with the internal auditor and management the internal auditor's ongoing assessments of the corporation's business processes and system of internal controls.

6. Review the effectiveness of the internal audit function, including staffing, organizational structure and qualifications of the internal auditor and staff.

Compliance

1. Monitor compliance by the corporation with all payments and remittances required to be made in accordance with applicable law, where the failure to make such payments could render the directors of the corporation personally liable.

2. The receipt of regular updates from management regarding compliance with laws and regulations and the process in place to monitor such compliance, excluding, however, legal compliance matters subject to the oversight of the safety, health and environment committee of the board. Review the findings of any examination by regulatory authorities and any external auditors' observations relating to such matters.

3. Establish and oversee the procedures in the code of conduct and ethics policy to address:

   (a) the receipt, retention and treatment of complaints received by the corporation regarding accounting, internal accounting or auditing matters; and

   (b) confidential, anonymous submissions by employees of concerns regarding questionable accounting and auditing matters.
Receive periodically a summary report from the senior vice-president governance, law and corporate secretary on such matters as required by the code of conduct and ethics.

4. Monitor management’s implementation of the code of conduct and ethics and the international business conduct policy and review compliance therewith by, among other things, obtaining an annual report summarising statements of compliance by employees pursuant to such policies and reviewing the findings of any investigations of non-compliance. Periodically review the adequacy and appropriateness of such policies and make recommendations to the board thereon.

5. Monitor management’s implementation of the anti-fraud policy; and review compliance therewith by, among other things, receiving reports from management on:
   (a) any investigations of fraudulent activity;
   (b) monitoring activities in relation to fraud risks and controls; and
   (c) assessments of fraud risk.

Periodically review the adequacy and appropriateness of the anti-fraud policy and make recommendations to the board thereon.

6. Review all proposed related party transactions and situations involving a director’s, senior officer’s or an affiliate’s potential or actual conflict of interest that are not required to be dealt with by an “independent committee” pursuant to securities law rules, other than routine transactions and situations arising in the ordinary course of business, consistent with past practice. Between scheduled committee meetings, the chair of the committee, on behalf of the committee, is authorised to review all such transactions and situations. At the next committee meeting, the chair shall report the results of such review. Ensure that political and charitable donations conform with policies and budgets approved by the board.

7. Monitor management of hedging, debt and credit, make recommendations to the board respecting policies for management of such risks, and review the corporation’s compliance therewith.

8. Approve the review and approval process for the expenses submitted for reimbursement by the chief executive officer.

Organizational matters

1. The procedures governing the committee shall, except as otherwise provided for herein, be those applicable to the board as set forth in Part 7 of the General Bylaws of the corporation.

2. The members and the chair of the committee shall be entitled to receive remuneration for acting in such capacity as the board may from time to time determine.

3. The committee shall have the resources and authority appropriate to discharge its duties and responsibilities, including the authority to:
   (a) select, retain, terminate, set and approve the fees and other retention terms of special or independent counsel, accountants or other experts, as it deems appropriate; and
   (b) obtain appropriate funding to pay, or approve the payment of, such approved fees; without seeking approval of the board or management.

4. Any member of the committee may be removed or replaced at any time by the board and shall cease to be a member of the committee upon ceasing to be a director. The board may fill vacancies on the committee by appointment from among its members. If and whenever a vacancy shall exist on the committee, the remaining members may exercise all its powers so long as a quorum remains in office. Subject to the foregoing, each member of the committee shall remain as such until the next annual meeting of shareholders after that member’s election.
5. The committee shall annually review and assess the adequacy of its mandate and recommend any proposed changes to the nominating, corporate governance and risk committee for recommendation to the board for approval.

6. The committee shall participate in an annual performance evaluation, the results of which will be reviewed by the board.

7. The committee shall perform any other activities consistent with this mandate, the corporation’s governing laws and the regulations of stock exchanges, as the committee or the board deems necessary or appropriate.