

### FISSION URANIUM CORP.

ANNUAL INFORMATION FORM

FOR THE FISCAL YEAR ENDED JUNE 30, 2016

**September 28, 2016** 

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## ANNUAL INFORMATION FORM FISSION URANIUM CORP.

#### PRELIMINARY NOTES

The information contained in this Annual Information Form ("AIF") is presented as of September 28, 2016 unless otherwise stated herein. Unless the context otherwise requires, all references to the "Company" or "Fission" shall mean Fission Uranium Corp.

You should read this AIF in conjunction with the audited annual financial statements and accompanying notes of Fission for the year ended June 30, 2016 and the management's discussion and analysis ("MD&A") thereon, which are available on Fission's SEDAR profile at <a href="www.sedar.com">www.sedar.com</a>. The Company presents its financial statements and MD&A in Canadian dollars and in accordance with International Financial Reporting Standards ("IFRS").

#### Currency

Unless otherwise specified, all references in the AIF to "dollars" or to "\$" are to Canadian dollars and all references to "US dollars" or to "US\$" are to United States of America dollars.

#### **Metric Equivalents**

For ease of reference, the following factors for converting metric measurements into imperial equivalents are provided:

To Convert From Metric	To Imperial	Multiply by
Hectares	Acres	2.471
Metres	Feet (ft.)	3.281
Kilometres (km.)	Miles	0.621
Tonnes	Tons (2000 pounds)	1.102
Grams/tonne	Ounces (troy/ton)	0.029

#### **Special Note Regarding Forward-Looking Statements**

This AIF and the documents incorporated into this AIF by reference, contain "forward-looking statements" within the meaning of applicable Canadian securities legislation (forward-looking information and forward-looking statements being collectively herein after referred to as "forward-looking statements") that are based on expectations, estimates and projections as at the date of this AIF or the dates of the documents incorporated herein by reference, as applicable. These forward-looking statements include but are not limited to statements and information concerning: statements relating to the business and future activities of, and developments related to Fission after the date of this AIF; market position, and future financial or operating performance of Fission; liquidity of the Common Shares; the ability of Fission to develop the PLS Property; anticipated developments in operations; the future price of uranium; CGN Mining's purchase of U<sub>3</sub>O<sub>8</sub> production through the PLS Property; the timing and amount of estimated future production; costs of production and capital expenditures; mine life of mineral projects, the timing and amount of estimated capital expenditure; costs and timing of exploration and development and capital expenditures related thereto; operating expenditures; success of exploration activities, estimated exploration budgets; currency fluctuations; requirements for additional capital; government regulation of mining operations; environmental risks; unanticipated reclamation expenses; title disputes or claims; limitations on insurance coverage; the timing and possible outcome of pending litigation in future periods; the timing and possible outcome of regulatory and permitted matters; goals; strategies; future growth; planned exploration activities and planned future acquisitions; the adequacy of financial resources; and other events or conditions that may occur in the future.

Any statements that involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions or future events or performance (often but not always using phrases such as "expects", or "does not expect", "is expected", "anticipates" or "does not anticipate", "plans", "budget", "scheduled", "forecasts", "estimates", "believes" or "intends" or variations of such words and phrases or stating that certain actions, events or results "may" or "could", "would", "might", or "will" be taken to occur or be achieved) are not statements of historical fact and may be forward-looking statements and are intended to identify forward-looking statements, which include statements relating to, among other things, the ability of Fission to continue to successfully compete in the market.

These forward-looking statements are based on the beliefs of Fission's management, as well as on assumptions which such management believes to be reasonable based on information currently available at the time such statements were made. However, there can be no assurance that the forward-looking statements will prove to be accurate. By their nature, forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Fission to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements, including, without limitation: risks related to Fission's limited business history; unknown environmental risks arising from past activities on Fission's properties; the limited number of exploration prospects relied on; risks related to future acquisitions and joint ventures, such as new geographic, political, operating, financial and geological risks or risks related to assimilating operations and employees; risks related to the prior business of Alpha; the potential for additional financings and dilution of the equity interests of Fission's shareholders; risks related to CGN Mining's anti-dilution rights in future financings of Fission; that Fission has no history of mineral production or mining operations; risks related to the nature of mineral exploration and development; discrepancies between actual and estimated mineral resources; risks caused by factors beyond Fission's control, such as uranium market price volatility, supply and demand for U<sub>3</sub>O<sub>8</sub> production; recovery rates of minerals from mined ore and demand for nuclear power; risks related to competition in the mineral industry; that Fission has no history of dividends; risks related to regulatory requirements, including Environmental Laws and regulations and liabilities, risks related to obtaining permits and licences and future changes to Environmental Laws and regulations; risks related to Fission's inability to obtain insurance for certain potential losses; risk related to uranium industry competition and international trade restrictions; the potential deregulation of the electrical utility industry; risks related to the public acceptance and perception of nuclear power; competition of nuclear power with other energy sources; environmental risks and hazards, including unknown environmental risks related to past activities; risks related to current or future litigation which could affect Fission's operations; risks related to political developments and policy shifts; risks related to costs of land reclamation; risks related to Fission's title to the PLS Property; risks related to dependence on key personnel; risks related to amendments to laws; risks related to the involvement of some of the directors and officers of Fission with other natural resource companies active in the same region as the PLS Property; risks related to the influence of third party stakeholders on the exploration and development of the PLS Property; risks related to the market value of the Common Shares; changes in labour costs or other costs of production; labour disputes; delays in obtaining governmental approvals or financing or in the completion of development or construction activities; the ability to renew existing licenses or permits or obtain required licenses and permits; increased infrastructure and/or operating costs; and risks of not meeting exploration budget forecasts. Some of the important risks and uncertainties that could affect forward-looking statements are described further under the heading "Risk Factors".

Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements. These forward-looking statements are made as of the date of this AIF and, other than as required by applicable securities laws, the Company assumes no obligation to update or revise them to reflect new events or circumstances.

#### Cautionary Note to U.S. Investors - Information Concerning Preparation of Resource and Reserve Estimates

This AIF has been prepared in accordance with the requirements of the securities laws in effect in Canada, which differ from the requirements of United States securities laws. Unless otherwise indicated, all resource and reserve estimates included in this AIF have been prepared in accordance with NI 43-101 and the Canadian Institute of

Mining and Metallurgy Classification System. NI 43-101 is a rule developed by the Canadian Securities Administrators which establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. NI 43-101 permits the disclosure of a historical estimate made prior to the adoption of NI 43-101 that does not comply with NI 43-101 to be disclosed using the historical terminology if the disclosure: (a) identifies the source and date of the historical estimate; (b) comments on the relevance and reliability of the historical estimate; (c) the key assumptions, parameters and methods used to prepare the historical estimate; (d) states whether the historical estimate uses categories other than those prescribed by NI 43-101; (e) includes any more recent estimates or data available; (f) comments on what work needs to be done to upgrade or verify the historical estimate as current mineral resources or mineral reserves; and (g) includes the disclaimers required by NI 43-101.

Canadian standards, including NI 43-101, differ significantly from the requirements of the SEC, and resource and reserve information contained herein may not be comparable to similar information disclosed by U.S. companies. In particular, and without limiting the generality of the foregoing, the term "resource" does not equate to the term "reserves". Under U.S. standards, mineralization may not be classified as a "reserve" unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made. The SEC's disclosure standards normally do not permit the inclusion of information concerning "measured mineral resources", "indicated mineral resources" or "inferred mineral resources" or other descriptions of the amount of mineralization in mineral deposits that do not constitute "reserves" by U.S. standards in documents filed with the SEC. U.S. investors should also understand that "inferred mineral resources" have a great amount of uncertainty as to their existence and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an "inferred mineral resource" will ever be upgraded to a higher category. Under Canadian rules, estimated "inferred mineral resources" may not form the basis of feasibility or pre-feasibility studies except in rare cases. Investors are cautioned not to assume that all or any part of an "inferred mineral resource" exists or is economically or legally mineable. Disclosure of "contained ounces" in a resource is permitted disclosure under Canadian regulations; however, the SEC normally only permits issuers to report mineralization that does not constitute "reserves" by SEC standards as in place tonnage and grade without reference to unit measures. The requirements of NI 43-101 for identification of "reserves" are also not the same as those of the SEC. Accordingly, information concerning mineral deposits set forth herein may not be comparable with information made public by companies that report in accordance with U.S. standards.

#### GLOSSARY OF NON-TECHNICAL TERMS

In the AIF or materials incorporated by reference, unless otherwise defined or unless there is something in the subject matter or context inconsistent therewith, the following terms have the meanings set forth herein or therein:

- "2013 Denison Arrangement" means the plan of arrangement under section 192 of the CBCA pursuant to which Denison acquired all of the issued and outstanding shares of Fission Energy and the Fission Business was transferred to Fission;
- **"2015 Denison Arrangement"** means the plan of arrangement under section 192 of the CBCA involving Denison and Fission which was jointly announced by Denison and Fission on October 13, 2015 and subsquently terminated for failure to obtain the required two-thirds shareholder approval from Fission Shareholders;
- "ABCA" means the *Business Corporations Act* (Alberta) and the regulations made thereunder, as now in effect and as they may be promulgated or amended from time to time;
- "AIF" or "Annual Information Form" means this annual information form and any appendices, schedules or attachments hereto;
- "Alpha Arrangement" means an arrangement under section 193 of the ABCA between Fission and Alpha pursuant to which Fission acquired all of the issued and outstanding shares of Alpha;
- "Alpha" means Alpha Minerals Inc.;
- "Arcadis" means Arcadis Canada Inc.;
- "Arrangement Agreement" means the arrangement agreement dated July 27, 2015, between Fission, Denison and 9373721 Canada Inc. in connection with the 2015 Denison Arrangement;
- "Bauer" means Bauer Foundations Canada Inc.;
- "BGC" means BGC Engineering Inc.;
- "Binding Letter Agreement" means the binding letter agreement dated July 6, 2015, between Fission and Denison in connection with the 2015 Denison Arrangement;
- "Broker Warrants" has the meaning ascribed to that term in this AIF under the heading "Description and General Development of the Business Year Ended June 30, 2014 Subscription Receipt Offering";
- "Cameco" means Cameco Corporation;
- "Canex" means Canex Energy Corp. (formerly Brades Resources Corp.);
- "Canex Shares" has the meaning ascribed to that term in this AIF under the heading "Description and General Development of the Business Year Ended June 30, 2014";
- "CanOxy" means Canadian Occidental Petroleum Ltd.;
- "CBCA" means the *Canada Business Corporations Act*, and the regulations made thereunder, as now in effect and as they may be promulgated or amended from time to time;
- "CGN Mining" means CGN Mining Company Limited;
- "Common Shares" has the meaning ascribed to that term in this AIF under the heading "Corporate Structure Name, Address and Incorporation";
- "Denison" means Denison Mines Corp.;
- "DRA" means DRA Taggart;
- "Dundee" means Dundee Securities Ltd.:
- "EA" means environmental assessment;
- "Environmental Laws" means all laws, imposing obligations, responsibilities, liabilities or standards of conduct for or relating to: (a) the regulation or control of pollution, contamination, activities, materials, substances or wastes in connection with or for the protection of human health or safety, the environment or natural resources (including

- climate, air, surface water, groundwater, wetlands, land surface, subsurface strata, wildlife, aquatic species and vegetation); or (b) the use, generation, disposal, treatment, processing, recycling, handling, transport, distribution, destruction, transfer, import, export or sale of hazardous substances;
- "Escrow Release Conditions" has the meaning ascribed to that term in this AIF under the heading "Description and General Development of the Business Year Ended June 30, 2014 Subscription Receipt Offering";
- "Final Prospectus" has the meaning ascribed to that term in this AIF under the heading "Description and General Development of the Business Year Ended June 30, 2014 Special Warrant Offering";
- "Fission" or the "Company" has the meaning ascribed to that term in this AIF under the heading "Preliminary Notes";
- "Fission 3.0" means Fission 3.0 Corp.;
- "Fission 3.0 Arrangement" means the plan of arrangement between Fission and Fission 3.0 under section 192 of the CBCA pursuant to which all of Fission's properties (and certain liabilities in connection with its properties), other than the PLS Property, were transferred to Fission 3.0 in exchange for common shares of Fission 3.0;
- **"Fission 3.0 Arrangement Circular"** means the Management Information Circular of Fission dated October 29, 2013, which is available on Fission's SEDAR profile at <a href="https://www.sedar.com">www.sedar.com</a>;
- "Fission Board" means the board of directors of Fission;
- "Fission Business" has the meaning ascribed thereto in this AIF under the heading "Description and General Development of the Business Three Year History";
- "Fission Energy" means Fission Energy Corp.;
- "Fission Option Plan" means the Fission Stock Option Plan dated July 30, 2013;
- "Fission Properties" has the meaning ascribed to that term in this AIF under the heading "Description and General Development of the Business Three Year History";
- "Fission Shareholder" means a holder of Common Shares:
- "Flow-Through Offering" has the meaning ascribed thereto in this AIF under the heading "Description and General Development of the Business Year Ended June 30, 2015";
- "Flow-Through Shares" has the meaning ascribed thereto in this AIF under the heading "Description and General Development of the Business Year Ended June 30, 2014 Subscription Receipt Offering";
- "IFRS" has the meaning ascribed thereto in this AIF under "Preliminary Notes";
- "Letter of Intent" means the binding letter of intent dated December 21, 2015 between Fission and CGN Mining pursuant to which CGN Mining and Fission agreed to proceed towards the execution of the Offtake Agreement and the Subscription Agreement;
- "MD&A" has the meaning ascribed to that term in this AIF under the heading "Preliminary Notes";
- "NI 43-101" means National Instrument 43-101 "Standards of Disclosure for Mineral Projects" of the Canadian Securities Administrators:
- "NI 52-110" means National Instrument 52-110 "Audit Committees" of the Canadian Securities Administrators;
- "NPV" means net present value;
- "NRC" has the meaning ascribed to that term in this AIF under the heading "Risk Factors Public Acceptance of Nuclear Energy Cannot Be Assured";
- "Offtake Agreement" means the offtake agreement dated January 11, 2016 between CGN Mining and Fission pursuant to which CGN Mining will purchase 20% of annual  $U_3O_8$  production and will have an option to purchase up to an additional 15%  $U_3O_8$  production from the PLS Property, after commencement of commercial production.
- "Options" means options to purchase Common Shares;
- "OTCQX" means OTCQX International exchange operated by OTC Markets Group Inc.;

- "PEA" means a preliminary economic assessment;
- "PLN Property" means the Patterson Lake North property located in the Athabasca Basin region of Saskatchewan, Canada;
- "PLS Property" or "Property" means the Patterson Lake South property located in the Athabasca Basin region of Saskatchewan, Canada, which, as of the date of this AIF, is Fission's only property;
- "PLS Property Technical Report" means the NI 43-101 Technical Report prepared by Jason J. Cox, P.Eng, of RPA, David A. Ross, M.Sc., P.Geo., of RPA, David M. Robson, P.Eng., MBA, of RPA, Volodymyr Liskovych, P.Eng., Ph.D., of DRA, and Mark Wittrup, P.Eng., P.Geo., of Clifton Associates (formerly of Arcadis), entitled "Technical Report on the Preliminary Economic Assessment of the Patterson Lake South Property, Northern Saskatchewan, Canada" with an effective date of September 14, 2015 and available under Fission's profile on SEDAR at <a href="https://www.sedar.com">www.sedar.com</a>;
- "Private Placement" means the private placement completed by Fission on January 26, 2016 pursuant to the Subscription Agreement whereby CGN Mining acquired 96,736,540 Common Shares at a price of \$0.85 per Common Share, for gross proceeds of \$82,226,059 equal to 19.99% of the issued and outstanding Common Shares upon closing;
- "Prospectus Flow-Through Offering" has the meaning ascribed thereto in this AIF under the heading "Description and General Development of the Business Year Ended June 30, 2015 Prospectus Flow-Through Offering";
- "Prospectus Flow-Through Offering Closing Date" has the meaning ascribed thereto in this AIF under the heading "Description and General Development of the Business Year Ended June 30, 2015 Prospectus Flow-Through Offering";
- "RPA" means Roscoe Postle Associates Inc.;
- "SEC" means the United States Securities and Exchange Commission;
- "SEDAR" means the System for Electronic Document Analysis and Retrieval as outlined in NI 13-101, which can be accessed online at <a href="https://www.sedar.com">www.sedar.com</a>;
- "Special Warrant Offering" has the meaning ascribed to that term in this AIF under the heading "Description and General Development of the Business Year Ended June 30, 2014 Special Warrant Offering";
- "Special Warrant Offering Closing Date" has the meaning ascribed to that term in this AIF under the heading "Description and General Development of the Business Year Ended June 30, 2014 Special Warrant Offering";
- "Special Warrants" has the meaning ascribed to that term in this AIF under the heading "Description and General Development of the Business Year Ended June 30, 2014 Special Warrant Offering";
- "Subscription Agreement" means the subscription agreement dated January 11, 2016 between CGN Mining and Fission pursuant to which CGN Mining agreed to subscribe for 96,736,540 Common Shares at a price of \$0.85 per Common Share, for gross proceeds of \$82,226,059 equal to 19.99% of the issued and outstanding Common Shares upon closing of the Private Placement;
- "Subscription Receipt Offering" has the meaning ascribed to that term in this AIF under the heading "Description and General Development of the Business Year Ended June 30, 2014 Subscription Receipt Offering";
- "Subscription Receipts" has the meaning ascribed to that term in this AIF under the heading "Description and General Development of the Business Year Ended June 30, 2014 Subscription Receipt Offering";
- "Subscription Receipt Underwriters" has the meaning ascribed to that term in this AIF under the heading "Description and General Development of the Business Year Ended June 30, 2014 Subscription Receipt Offering";
- "TMZ" has the meaning ascribed to that term in this AIF under the heading "Mineral Properties Geology and Mineralization":
- "Triple R" means the high grade uranium deposit associated with the PLS Property;
- "TSX" means the Toronto Stock Exchange;

<sup>&</sup>quot;TSX-V" means the TSX Venture Exchange; and

<sup>&</sup>quot;United States" or "U.S." means the United States of America, its territories and possessions, any State of the United States, and the District of Columbia.

#### GLOSSARY OF MINING TERMS AND ABBREVIATIONS

In this AIF or materials incorporated by reference, unless otherwise defined or unless there is something in the subject matter or context inconsistent therewith, the following terms have the meanings set forth herein or therein:

**Assay** The chemical analysis of mineral samples to determine the metal content.

**Capital Expenditure** All other expenditures not classified as operating costs.

**CCD** Counter-current decantation, one step in the uranium recovery process.

**Concentrate** A metal-rich product resulting from a mineral enrichment process such as gravity

concentration or flotation, in which most of the desired mineral has been

separated from the waste material in the ore.

**Cut-off Grade** The grade of mineralized rock, which determines as to whether or not it is

economic to recover its content by further concentration.

**Dip** Angle of inclination of a geological feature/rock from the horizontal.

**EM** Electro-magnetic; a type of geophysical survey used in mineral exploration.

**Grade** The measure of concentration within mineralized rock.

ha Hectares.

km Kilometre.

kt Kilotonne.

**lb** Pound.

m Metre.

Mineral Claim A lease area for which mineral rights are held.

RMR<sub>76</sub> Rock Mass Rating; a geotechnical system of classifying the condition of an

underground rock mass.

**Strike** Direction of line formed by the intersection of strata surfaces with the horizontal

plane, always perpendicular to the dip direction.

UCS Unconfined Compressive Strength; a measurement of rock strength.

#### CORPORATE STRUCTURE

#### Name, Address and Incorporation

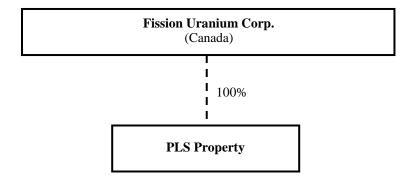
Fission was incorporated pursuant to the CBCA on February 13, 2013. Fission is a reporting issuer in each of the provinces of Canada, except Québec, and files its continuous disclosure documents with the relevant Canadian securities regulatory authorities. Such documents are available on Fission's profile on the SEDAR website at <a href="https://www.sedar.com">www.sedar.com</a>. The authorized capital of Fission is an unlimited number of common shares without par value (the "Common Shares").

The head office of Fission is located at Suite 700 – 1620 Dickson Avenue, Kelowna, British Columbia, V1Y 9Y2. The registered and records office of Fission is located at 700 - 595 Howe Street, Vancouver, British Columba, V6C 2T5.

The Company's Common Shares are listed on the TSX under the trading symbol "FCU", on the OTCQX marketplace in the U.S. under the symbol "FCUUF" and on the Frankfurt Stock Exchange under the symbol "2FU".

#### **Intercorporate Relationships**

Fission previously had one wholly-owned subsidiary, Alpha Minerals Inc., a company incorporated under the laws of the province of Alberta and continued under the CBCA on March 14, 2014. Effective April 1, 2014, Alpha amalgamated into the Company pursuant to the statutory procedures under Section 185 of the CBCA. The Company's corporate structure is set out below.



#### DESCRIPTION AND GENERAL DEVELOPMENT OF THE BUSINESS

Fission is a junior resource issuer primarily engaged in the growth and advancement of its core asset, the PLS Property, located in Saskatchewan, Canada. The management of Fission considers the PLS Property to be its only material property for the purposes of NI 43-101.

#### **Three Year History**

Fission was incorporated on February 13, 2013 as a wholly-owned subsidiary of Fission Energy. On April 26, 2013, Fission Energy completed the 2013 Denison Arrangement pursuant to which Denison acquired all of the issued and outstanding securities of Fission Energy and all outstanding shares of Fission were distributed to shareholders of Fission Energy, creating a new publicly-traded corporation holding the PLN Property, the PLS Property, Clearwater West property, North Shore property and the Macusani property located in Peru that were previously held by Fission Energy (collectively, the "Fission Properties"), \$17,518,145 in cash and certain other assets and liabilities (together with the Fission Properties, the "Fission Business").

#### Year Ended June 30, 2014

On July 23, 2013, Fission changed its auditor from Ernst & Young LLP to PricewaterhouseCoopers LLP.

On October 15, 2013, Fission and Canex jointly announced that they had signed a letter of intent to enter into a property option agreement whereby Canex could earn up to a 50% interest in Fission's Clearwater West property in the southwestern Athabasca Basin region of Saskatchewan, Canada by incurring \$5,000,000 of certain staged exploration expenditures on or before October 10, 2016 and issuing to Fission the number of common shares in the capital stock of Canex (the "Canex Shares") on closing that would comprise 9.9% of the then-issued Canex Shares. The Clearwater West property and the associated letter of intent with Canex were later transferred to Fission 3.0 pursuant to the Fission 3.0 Arrangement. See "Alpha and Fission 3.0 Arrangements", below.

#### Subscription Receipt Offering

On October 24, 2013, Fission completed a bought-deal private placement (the "Subscription Receipt Offering") of 8,581,700 (inclusive of an overallotment option) non-transferable subscription receipts of Fission (the "Subscription Receipts") at a price of \$1.50 per Subscription Receipt for aggregate total gross proceeds of \$12,872,550. Each Subscription Receipt was exchangeable for, upon satisfaction of certain conditions, including the completion of the Fission 3.0 Arrangement and the Alpha Arrangement (the "Escrow Release Conditions"), flow-through common shares ("Flow-Through Shares") of Fission after the completion of the Fission 3.0 Arrangement. The Subscription Receipt Offering was led by Dundee on behalf of a syndicate of underwriters, including Raymond James Ltd., Cantor Fitzgerald Canada Corp., Canaccord Genuity Corp., and Macquarie Capital Markets Canada Ltd. (collectively, and together with Dundee, the "Subscription Receipt Underwriters").

On December 9, 2013, following satisfaction of the Escrow Release Conditions, each Subscription Receipt was exchanged for one Flow-Through Share and the Subscription Receipt Underwriters received: (a) in respect of the first 7,670,500 Subscription Receipts distributed, a cash commission equal to 6.0% of the gross proceeds from the sale of such Subscription Receipts and that number of non-transferable broker warrants ("**Broker Warrants**") equal to 6.0% of that number of Subscription Receipts; and (b) in respect of the remaining 911,200 Subscription Receipts distributed, a cash commission equal to 6% of 40% of the gross proceeds from the sale of such Subscription Receipts and that the number of Broker Warrants equal to 6% of 40% of the number of Subscription Receipts. Each Broker Warrant was exercisable into one common share of the Company for a period of 24 months from the date of issuance of the Broker Warrants, at a price of \$1.50 per Common Share.

The gross proceeds of the Subscription Receipt Offering were deposited into escrow on October 24, 2013 immediately following the closing of the Subscription Receipt Offering and were released to Fission on December 9, 2013.

#### Alpha and Fission 3.0 Arrangements

On September 3, 2013, Fission and Alpha announced the signing of a non-binding letter of intent pursuant to which Fission proposed to acquire the Alpha shares. Alpha's primary asset was its 50% interest in the PLS Property, the other 50% of which was held by Fission.

On September 17, 2013, Fission signed an arrangement agreement with Alpha pursuant to which Fission agreed to acquire all of the outstanding Alpha shares through the Alpha Arrangement and to effect the Fission 3.0 Arrangement. Under the terms of the Alpha Arrangement, Fission agreed to offer shareholders of Alpha 5.725 Common Shares and a cash payment of \$0.0001 for each Alpha share held. Additionally, it was agreed that Alpha would transfer \$3,000,000 in cash and all of Alpha's properties, (other than Alpha's 50% interest in the PLS Property), marketable securities and property and equipment located in Alpha's office in Vancouver, BC to a newly-incorporated company (now known as Alpha Exploration Inc.), whose shares would be distributed to the shareholders of Alpha.

On December 6, 2013, Fission completed the Alpha Arrangement and the Fission 3.0 Arrangement. Upon completion of the Alpha Arrangement, in accordance with TSX-V requirements, the Alpha shares were delisted

from the TSX-V prior to the opening of markets on December 6, 2013. Subsequently, Alpha ceased to be a reporting issuer under the securities laws of British Columbia and Alberta.

As a result of Fission's acquisition of the Alpha shares pursuant to the Alpha Arrangement, as of the date of this AIF, Fission holds a 100% interest in the PLS Property.

Pursuant to the Fission 3.0 Arrangement, Fission transferred \$3,000,000 in cash and all of its properties (and certain liabilities in connection with such properties), other than its 50% interest in the PLS Property, to Fission 3.0 in exchange for 152,960,604 common shares of Fission 3.0. All outstanding shares of Fission 3.0 were then distributed to the shareholders of Fission, creating a new publicly-traded corporation holding certain exploration assets in Canada and in Peru that were previously held by Fission. A detailed summary of the Fission 3.0 Arrangement is contained in the Fission 3.0 Arrangement Circular, which is available on Fission's SEDAR profile at www.sedar.com.

Effective April 1, 2014, Alpha amalgamated into the Company pursuant to the statutory procedures under Section 185 of the CBCA.

#### Special Warrant Offering

On April 1, 2014 (the "Special Warrant Offering Closing Date"), Fission completed a private placement of 17,968,750 (inclusive of an overallotment option) special warrants (the "Special Warrants") at a price of \$1.60 per Special Warrant, for gross proceeds of \$28,750,000 (the "Special Warrant Offering"). The Special Warrant Offering was led by Dundee on behalf of a syndicate of underwriters including Cantor Fitzgerald Canada Corporation, Macquarie Capital Markets Canada Ltd., Raymond James Ltd., BMO Nesbitt Burns Inc., TD Securities Inc., Clarus Securities Inc. and Cormark Securities Inc.

Each Special Warrant was exercisable for one Common Share at any time after the Special Warrant Offering Closing Date for no additional consideration and all unexercised Special Warrants were deemed to be exercised at 4:00 p.m. (Toronto time) on the earlier of: a) the date that was four months and one day following the Special Warrant Offering Closing Date, and b) the first business day after a receipt was issued for a final prospectus (the "Final Prospectus") by the securities regulatory authorities where the Special Warrants are sold, qualifying the Common Shares issued upon exercise or deemed exercise of the Special Warrants.

On April 24, 2014, Fission filed the Final Prospectus in the provinces of British Columbia, Alberta, Saskatchewan, Ontario and New Brunswick qualifying the distribution of 17,968,750 Common Shares issuable upon the deemed exercise of the Special Warrants. The Common Shares underlying such Special Warrants were issued on April 28, 2014.

#### Year Ended June 30, 2015

On September 23, 2014, Fission completed a private placement of 9,602,500 (inclusive of an overallotment option) Flow-Through Shares, at a price of \$1.50 per Flow-Through Share, for gross proceeds of \$14,403,750 (the "Flow-Through Offering"). The Flow-Through Offering was conducted on a bought deal basis by a syndicate of underwriters led by Dundee, and including BMO Nesbitt Burns Inc., Raymond James Ltd., Macquarie Capital Markets Canada Ltd. and Cantor Fitzgerald Canada Corporation.

On October 8, 2014, Fission received final approval and began trading its shares on the TSX. Concurrently, Fission's shares were delisted from the TSX-V.

On January 9, 2015, Fission announced the results of an independent resource estimate for the R00E and R780E zones at its 100% owned PLS Property. The high-grade uranium deposit has been named the 'Triple R' deposit.

On February 23, 2015, Fission filed a technical report describing a first-time estimate of mineral resources on the PLS Property entitled "Technical Report on the Patterson Lake South Property, Northern Saskatchewan, Canada" on SEDAR.

#### Prospectus Flow-Through Offering

On April 29, 2015 (the "**Prospectus Flow-Through Offering Closing Date**"), Fission completed a bought deal offering of 13,340,000 (inclusive of an overallotment option) Flow-Through Shares at a price of \$1.50 per Flow-Through Share, for aggregate gross proceeds of \$20,010,000 (the "**Prospectus Flow-Through Offering**"). The Prospectus Flow-Through Offering was led by Dundee on behalf of a syndicate of underwriters including BMO Nesbitt Burns Inc., Macquarie Capital Markets Canada Ltd., Raymond James Ltd. and TD Securities Inc.

The Flow-Through Shares were offered by way of a short form prospectus filed in all of the provinces of Canada, except Quebec. The final short form prospectus was filed on April 16, 2015, resulting in Fission becoming a reporting issuer in the additional provinces of Manitoba, Nova Scotia, Prince Edward Island and Newfoundland.

#### Year Ended June 30, 2016

On September 15, 2015, Fission filed the PLS Property Technical Report describing the results of the preliminary economic assessment on SEDAR.

On October 13, 2015, Fission and Denison jointly announced the termination of an arrangement agreement dated July 27, 2015 between Fission, Denison and 9373721 Canada Inc. (the "Arrangement Agreement") pursuant to which Fission and Denison were to combine their respective businesses by way of a court-approved plan of arrangement. While a majority of Fission Shareholders voted in favour of the 2015 Denison Arrangement, the required two-thirds approval was not obtained.

On December 21, 2015, Fission entered into a binding letter of intent (the "Letter of Intent") with CGN Mining Company Limited ("CGN Mining"), pursuant to which CGN Mining and Fission agreed to proceed towards the execution of an offtake agreement (the "Offtake Agreement") and subscription agreement (the "Subscription Agreement").

On January 11, 2016, Fission executed the Offtake Agreement and Subscription Agreement which superseded the Letter of Intent with CGN Mining. Under the terms of the Offtake Agreement, CGN Mining will purchase 20% of annual  $U_3O_8$  production and will have an option to purchase up to an additional 15%  $U_3O_8$  production from the PLS Property, after commencement of commercial production.

On January 26, 2016, pursuant to the Subscription Agreement, Fission completed a private placement (the "**Private Placement**") with CGN Mining of 96,736,540 Common Shares at a price of \$0.85 per Common Share, for gross proceeds of \$82,226,059 equal to 19.99% of the issued and outstanding Common Shares upon closing. In addition, under the terms of the Subscription Agreement, CGN Mining appointed two members to the Fission Board and will have certain anti-dilution rights in future equity financings of Fission.

#### NARRATIVE DESCRIPTION OF THE BUSINESS

#### **Summary of the Business**

Fission is focused on advancing its core asset, the PLS Property, a uranium exploration property located in the Athabasca Basin region of Saskatchewan, Canada.

The management of Fission considers the PLS Property to be its only material property for the purposes of NI 43-101. For more information on the PLS Property, see "*Mineral Properties*" and the PLS Property Technical Report available under Fission's profile on SEDAR at <a href="www.sedar.com">www.sedar.com</a>.

#### **Competitive Conditions**

The uranium exploration and mining business is a competitive business. The Company competes with numerous other companies and individuals in the search for and the acquisition of attractive mineral properties. The success of the Company will depend not only on its ability to operate and develop its properties but also on its ability to select

and acquire suitable properties or prospects for development or mineral exploration. See "Risk Factors - Uranium Industry Competition and International Trade Restrictions".

#### **Employees**

As of the date of this AIF, Fission has 23 employees and 10 people working on a consulting basis. The operations of Fission are managed by its directors and officers. Fission engages reputable consulting firms from time to time for technical and environmental services as required to assist in evaluating its interests and recommending and conducting work programs. See "Risk Factors - Dependence on Key Personnel".

#### **Environmental Protection**

The Company's operations are subject to environmental regulations promulgated by government agencies from time to time. Environmental legislation provides for restrictions and prohibitions of spills, releases or emissions of various substances related to mining industry operations, which could result in environmental pollution. A breach of such legislation may result in imposition of fines and penalties. In addition, certain types of operations require submissions to and approval of environmental impact assessments. Environmental legislation is evolving, which means stricter standards and enforcement, fines and penalties for non-compliance are becoming more stringent. Environmental assessment of proposed projects carries a heightened degree of responsibility for companies and directors, officers and employees. There is no assurance that future changes in environmental regulation, if any, will not adversely affect the Company's operations, including its capital expenditures and competitive position. See "Risk Factors – Environmental Risks and Hazards".

#### **Foreign Operations**

The Company is incorporated pursuant to the laws of Canada and is a reporting issuer in each of the provinces of Canada, except Québec. The Company's material asset is its 100% interest in the PLS Property located in Saskatchewan, Canada. The Company is not dependent on any foreign operations.

#### Reorganizations

On December 6, 2013, in connection with the Fission 3.0 Arrangement, the Company transferred and sold \$3,000,000 in cash and all of its properties, other than its 50% interest in the PLS Property, to Fission 3.0, then a wholly-owned subsidiary, in exchange for 152,960,604 common shares of Fission 3.0. All outstanding shares of Fission 3.0 were then distributed to the shareholders of Fission, creating a new publicly-traded corporation holding certain exploration assets in Canada and in Peru that were previously held by Fission. See "General Development of the Business – Three Year History – Year Ended June 30, 2014 – Alpha and Fission 3.0 Arrangements".

#### MINERAL PROPERTIES

#### General

The Company's only mineral property is the PLS Property. Jason J. Cox, P.Eng., David A. Ross, M.Sc., P.Geo., David M. Robson, P.Eng., MBA, Volodymyr Liskovych, P.Eng., Ph.D. and Mark Wittrup, P.Eng., P.Geo., the authors of the PLS Property Technical Report, are independent qualified persons under National Instrument 43-101 and have approved of the summary of the PLS Property Technical Report provided below. The following summary is extracted from the PLS Property Technical Report, dated September 14, 2015. The PLS Property Technical Report is incorporated by reference in this AIF, a copy of which is available under the Company's profile on the SEDAR website at <a href="https://www.sedar.com">www.sedar.com</a> and on the Company's website at <a href="https://www.sedar.com">www.sedar.com</a> and on the Company's website at <a href="https://www.sedar.com">www.sedar.com</a>

#### **Summary**

RPA, BGC, DRA, and Arcadis were retained by the Company to prepare a PEA on the PLS Property, located in northern Saskatchewan, Canada. The purpose of the PLS Property Technical Report is to summarize the results of the PEA. The PLS Property Technical Report conforms to NI 43-101.

Fission is a Canadian exploration company, which is primarily engaged in the acquisition, evaluation, and development of uranium properties with a view to commercial production. It holds a 100% interest in the PLS Property.

Currently, the major asset associated with the PLS Property is the high grade Triple R uranium deposit.

The PEA is based on a combination of open pit and underground mining, and processing of 1,000 tonnes per day via acid leaching, solvent extraction, and precipitation. The PLS Property has the potential to produce up to 15 million lbs  $U_3O_8$  per year in the form of yellowcake.

The PLS Property Technical Report is considered by RPA to meet the requirements of a PEA as defined in Canadian NI 43-101 regulations. The economic analysis contained in the PLS Property Technical Report is based, in part, on inferred resources, and is preliminary in nature. Inferred resources are considered too geologically speculative to have mining and economic considerations applied to them and to be categorized as mineral reserves. There is no certainty that economic forecasts on which this PEA is based will be realized.

#### **Conclusions**

In RPA's opinion, the PEA indicates that positive economic results can be obtained for the PLS Property.

The economic analysis shows a post-tax internal rate of return of 34.2%, and a post-tax NPV (at a discount rate of 10%) of C\$1,019 million at a long term price of US\$65 per lb  $U_3O_8$ .

RPA offers the following conclusions by area:

Geology and Mineral Resources

The Triple R deposit is a large, basement hosted, structurally controlled, high grade uranium deposit. Drilling has outlined mineralization with three-dimensional continuity, and size and grades that can potentially be extracted economically. Fission's protocols for drilling, sampling, analysis, security, and database management meet industry standard practices. The drill hole database was verified by RPA and is suitable for mineral resource estimation work.

RPA estimated mineral resources for the Triple R deposit using drill hole data available as of July 28, 2015. At cutoff grades of  $0.20\%~U_3O_8$  for open pit and  $0.25\%~U_3O_8$  for underground, indicated mineral resources are estimated to total 2,011,000 tonnes at an average grade of  $1.83\%~U_3O_8$  containing 81 million pounds of  $U_3O_8$ . Inferred mineral resources are estimated to total 785,000 tonnes at an average grade of  $1.57\%~U_3O_8$  containing 27 million pounds of  $U_3O_8$ . Gold grades were also estimated and average 0.59~g/t for the indicated resources and 0.66~g/t for the inferred resources. Mineral reserves have not yet been estimated for the Triple R deposit.

The R600W zone, not currently included in mineral resources, is defined by 13 drill holes from the 2015 winter drill program. The R600W zone has a total grid east-west strike length of 60 m. Additional drilling is recommended.

The deposit is open in several directions. There is excellent potential to expand the resource with step-out drilling. There are, in addition to the Triple R deposit, other targets on the property to be drill tested.

#### Mining and Geotechnical Considerations

The Triple R deposit is a structurally controlled east-west trending sub-vertical high-grade uranium deposit. The deposit is overlain by 50 m to 60 m of sandy overburden, with the high grade mineralization located near the bedrock-overburden contact. Although the bedrock is generally competent, rock strengths in the mineralization have been degraded by radiological alteration. The deposit extends under Patterson Lake, and a key technical challenge to developing the operation will be water control related to Patterson Lake and saturated sandy overburden.

The PEA proposes a perimeter dyke and slurry cut-off wall – proven techniques successfully implemented at a number of Canadian mining operations, including the Diavik diamond mine and the Meadowbank gold mine. The development scenario does not require any new, untested, conceptual mining or construction methods. A number of issues impact estimates of construction time and cost for the dyke and slurry wall:

- Thickness and nature of lakebed sediments, affecting the stability of the perimeter dyke.
- Number and size of boulders within the sandy overburden, affecting the excavation of the slurry wall.
- Assessment of the extent of a Cretaceous mudstone unit that may affect the stability of the sandy overburden.

As part of the PEA, an open pit vs. underground trade-off study was conducted to determine the optimum mining method for developing the deposit. A hybrid option was selected, consisting of open pit mining of the smallest possible footprint that covers the high-grade resources (>4%  $U_3O_8$ ), in parallel with underground mining of the remainder of the deposit. Advantages include:

- Extraction of high-grade uranium without the use of specialized, high-cost, remote underground mining methods, such as those used at Cameco's Cigar Lake Mine.
- Maximizing resource extraction no crown pillar at the overburden/bedrock contact, no losses at depth (beyond the extents of a pit-only scenario).
- Minimizing the length of the dyke and slurry wall.
- Minimizing the footprint of disturbance within Patterson Lake.

Open pit mining of mineralized material and uranium bearing waste is proposed to be carried out by the owner. Overburden stripping and barren waste mining will be done by a contractor with a dedicated mining fleet (larger equipment) given the total volume to be excavated and the higher production rate required.

Underground mining will be carried out by contractor, using conventional longhole retreat methods in both transverse and longitudinal orientations.

Mineral Processing and Metallurgical Testing

Metallurgical test work completed to date indicates that a recovery of 95% is a reasonable assumption for the PEA.

The process route developed by DRA for the PLS Property is based on unit processes commonly used effectively in uranium process plants across the world, including northern Saskatchewan uranium mines, while utilizing some new innovations in some of these unit process designs to optimize plant performance.

While the Triple R deposit contains gold values that may be recoverable, a high-level economic analysis by RPA has shown this to have limited impact on overall project profitability at current market conditions and gold recovery was

thus excluded from this design. Should market forces change in the future, gold recovery could be reasonably easily engineered into the existing design and constructed without impacting throughput of the uranium process plant.

Environmental and Sociological Considerations

Key areas of consideration arising from the review of environmental and sociological aspects include:

- Consultation: while Fission has done preliminary community outreach and consultation, the level of
  consultation is very local and it will not be sufficient to support government duty to consult requirements
  and move the PLS Property into the environmental assessment process. Fission will need to address this
  soon to avoid project delays.
- Lake Impact: given the location of the deposit, impacts to Patterson Lake are inevitable. Regardless of the
  design, minimizing impacts to the lake will be very important to ensure that the lake remains navigable to
  fish and boats.
- Baseline Studies: Fission has been forward-looking by starting environmental baseline and monitoring
  work. The work has been somewhat selective and should be sufficient to start the environmental
  assessment process, however, it is not currently sufficient to support an environmental assessment
  document.
- Risk: the main physical danger to the operation is forest fire and Fission has maintained close relationships with the local wildfire management base in Buffalo Narrows.
- Radiation Management during Exploration: Fission has developed a centrifuge system for effectively removing potentially radioactive cuttings and fines from drilling fluids. This material is effectively handled and disposed of at an operating uranium mine. Fission has a radiation protection program in place and appears to be following it.

#### **Risks and Uncertainties**

RPA, BGC, DRA, and Arcadis have assessed critical areas of the PLS Property and identified key risks associated with the technical and cost assumptions used. In all cases, the level of risk refers to a subjective assessment as to how the identified risk could affect the achievement of the project objectives. The risks identified are in addition to general risks associated with mining projects, including, but not limited to:

- general business, social, economic, political, regulatory and competitive uncertainties;
- changes in project parameters as development plans are refined;
- changes in labour costs or other costs of production;
- adverse fluctuations in commodity prices;
- failure to comply with laws and regulations or other regulatory requirements;
- the inability to retain key management employees and shortages of skilled personnel and contractors.

A summary of key project related risks is shown in Table 1-1. The following definitions have been employed by RPA in assigning risk factors to the various aspects and components of the PLS Property:

- Low Risk Risks that could or may have a relatively insignificant impact on the character or nature of the deposit and/or its economics. Generally can be mitigated by normal management processes combined with minor cost adjustments or schedule allowances.
- Moderate Risk Risks that are considered to be average or typical for a deposit of this nature. These risks are generally recognizable and, through good planning and technical practices, can be minimized so that the impact on the deposit or its economics is manageable.
- **High Risks** Risks that are largely uncontrollable, unpredictable, unusual, or are considered not to be typical for a deposit of a particular type. Good technical practices and quality planning are no guarantee of successful exploitation. These risks can have a major impact on the economics of the deposit including significant disruption of schedule, significant cost increases, and degradation of physical performance.

TABLE 1-1 RISKS AND UNCERTAINTIES
Fission Uranium Corp. - Patterson Lake South Property

<b>Project Element</b>	Issue	Risk Level	Mitigation
Geology	Resource tonnes and grade estimates	Low	Infill drilling is required in areas classified as Inferred. There is upside potential to increase resources along strike and at depth.
Mining	Thickness and nature of lakebed sediments	Low	Conduct geotechnical assessment.
	Boulders in sandy overburden	Moderate	Conduct geotechnical assessment.
	Potential for low-stability Cretaceous mudstone unit in pit area	Low	Conduct geotechnical assessment.
	Ground conditions within the radiologically-altered rock	Low	Geotechnical drilling and analysis will further refine ground support requirements.
Process	Uranium recovery	Low	Test work supports recovery assumption. Additional test work will allow optimization of flowsheet.
Environment and Permitting	Permitting	Moderate	Begin EA process and wider consultation
-	Management of exposure to radiation	Low	Issues are well-understood for North Saskatchewan operations.
Construction Schedule	Seasonal impact on dyke-building and slurry wall construction	Moderate	Requires detailed planning and control. Further information on geotechnical conditions will refine schedule estimates.
Pre-production Capital Cost Estimate	Dyke-building and slurry wall construction	Moderate	Geotechnical data collection and analysis will result in refined cost estimates.
Operating Cost Estimate	Cost of key materials and supplies	Low	Close management of purchasing and logistics.

#### Recommendations

RPA recommends that Fission advance the PLS Property to the pre-feasibility stage, and offers the following recommendations by area:

#### Geology and Mineral Resources

- The PLS Property hosts a significant uranium deposit and merits considerable exploration and development work. The primary objectives are to advance engineering work, expand the Triple R resource, and explore elsewhere on the Property. Work will include:
  - 18,000 m for Triple R step-out and infill drilling; and
  - 6,000 m of drilling for a property-wide exploration.

#### Mining and Geotechnical Considerations

- A geotechnical investigation of soil mechanics should be undertaken to support the open pit development and the dyke and cut-off wall design, with a primary focus on addressing the risks identified above. The program will require approximately ten geotechnical boreholes drilled around the perimeter of the pit and dyke to depths of 50 m to 90 m, combined with a geophysics program.
- A geotechnical investigation of rock mechanics should be undertaken to support the open pit and underground design. The program will require drilling of approximately ten oriented core geotechnical holes in rock: four for the main pit, four for the underground (two for the crown and two for the rock mass), and two short holes for a small separate zone (the R00E pit). The total length is estimated at 2,000 m for the program.
- Mining of a greater proportion of the deposit by open pit methods appears to be economically feasible, however the trade-off is complex, involving both qualitative and quantitative factors. As resource drilling continues and the PLS Property advances to further studies, this trade-off should be revisited and optimized.

#### Mineral Processing and Metallurgical Testing

- To prove the performance and efficiency of the processing steps post leach, it is recommended that further test work be conducted in the next study phase. This test work should include:
  - Solid liquid separation test work to size the CCD circuit as efficiently as possible.
  - Uranium solvent extraction test work.
  - Impurity removal test work.
  - Yellowcake precipitation test work.

#### Environmental and Sociological Considerations

- Conduct a community outreach and consultation program addressing a wider body of project stakeholders.
- Continue baseline study field work.
- Begin the EA process, in parallel with engineering work.

#### Budget

RPA, BGC, DRA, and Arcadis propose the following budget for work carrying through to the end of a prefeasibility study:

TABLE 1-2 PROPOSED BUDGET Fission Uranium Corp. - Patterson Lake South Property

Item	\$ M
Drilling (~24,000 m)	10.0
Geotechnical Program - Soils	2.0
Geotechnical Program - Rock	2.0
Metallurgical Test work	0.5
Social, Permitting and Environmental Work	3.5
Pre-Feasibility Study	2.0
Total	20.0

#### **Economic Analysis**

The economic analysis was prepared using the following assumptions:

- No allowance has been made for cost inflation or escalation.
- No allowance has been made for corporate costs.
- The capital structure is assumed to be 100% equity, unleveraged.
- The model is assessed in constant Canadian dollars.
- No allowance for working capital has been made in the financial analysis.
- The PLS Property has no salvage value at the end of the mine life.

#### Economic Criteria

Economic criteria that were used in the cash flow model include:

- Long-term price of uranium of US\$65 per pound U<sub>3</sub>O<sub>8</sub> based on long-term forecasts.
- 100% of uranium sold at long-term price.
- The recovery and sale of gold was excluded from the cash flow model.
- Exchange rate of C\$1.00 = US\$0.85.
- Life of mine processing of 4,807 kt grading 1.00% U<sub>3</sub>O<sub>8</sub>.
- Nominal 350 kt of processed material per year during steady state operations.

- Mine life of 14 years.
- Leach recovery of 98.4%, solvent extraction recovery of 96.8%, and CCD recovery of 99.97%, for overall recovery of 95.3%, based on test work.
- Total recovered yellowcake of 100.8 million pounds.
- Transportation costs of C\$740.00 per tonne yellowcake, with assumed destination of Port Hope, Ontario.
- Royalties calculated in accordance with "Guideline: Uranium Royalty System, Government of Saskatchewan, June 2014".
- Unit operating costs of C\$346 per tonne of processed material, or C\$16.50 per pound of yellowcake.
- Pre-production capital costs of C\$1,095 million, spread over three years.
- Sustaining capital costs (including reclamation) of C\$239 million, spread over the mine life.

TABLE 1-3 CASH FLOW SUMMARY
Fission Uranium Corp. – Patterson Lake South Property

NING.	UNITS	TOTAL	Yr-3	Yr -2	Yr-1	Yr1	Yr 2	Yr3	Yr 4	Yr 5	9 1Y	Yr7	Yr 8	Yr 9	Yr 10	Yr 11	Yr 12	Yr 13	Yr 14	Yr
NING																				
pen Pit																				
Ore Tonnes mined per year	kt	1,561			116	198	401	387	252	137	68									
U308 Grade Contained U308	% 1000 lbs U3O8	2.21% 76.022	0.00%	0.00%	1.03% 2.637	3.11% 13.572	1.52% 13,428	1.49%	2.66% 14,792	4.42% 13,395	3.63% 5.476	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Overburden	1000 lbs U3O8	76,022 42,251	- :		2,637	13,572	13,428	12,722	14,792	13,395	5,476	- 1	- 1	- 1	- 1	- 1	- 1	- 1	- 1	
Waste Rock	l kt	13,356		_	400	4.026	5.244	2.883	666	104	32			_	_	_	_	_	_	
Total Moved	kt	57,168			23,677	23,314	5,646	3,271	918	242	101									
Total Moved by Owner	kt	3,664	-	-	516	701	700	702	702	242	101	-	-	-	-	-	-	-	-	
Stripping Ratio (Incl. OVB) Stripping Ratio (w/o OVB)	W:O W:O	35.6 8.6	:	:	203.2 3.5	116.7 20.3	13.1 13.1	7.4 7.4	2.6 2.6	0.8 0.8	0.5 0.5	-	:	-	:	-	:	:	:	
nderground																				
Ore Tonnes mined per year	ktpa	3,246						4	97	215	287	349	352	355	356	354	351	351	175	
U3O8 Grade	%	0.42%	0.00%	0.00%	0.00%	0.00%	0.00%	0.64%	0.56%	0.40%	0.61%	0.37%	0.40%	0.35%	0.37%	0.49%	0.37%	0.40%	0.38%	
Contained U3O8	1000 lbs U3O8	29,806	-	-	-	-	-	50	1,197	1,876	3,872	2,880	3,067	2,711	2,908	3,829	2,895	3,064	1,457	
del Servi Deservativa																				
otal Mine Production Ore Tonnes mined per year	let .	4,807			116	198	401	391	350	352	356	349	352	355	356	354	351	351	175	
U3O8 Grade	%	1,00%	0.00%	0.00%	1,03%	3,11%	1.52%	1.48%	2.07%	1,97%	1,19%	0.37%	0.40%	0.35%	0.37%	0.49%	0.37%	0.40%	0.38%	
Contained Pounds	1000 lbs U3O8	105,828	-	-	2,637	13,572	13,428	12,772	15,989	15,271	9,348	2,880	3,067	2,711	2,908	3,829	2,895	3,064	1,457	
OCESSING MIII Feed																				
Tonnes Processed	l kt	4,807				279	350	350	349	349	349	350	351	354	350	348	351	351	326	
Head Grade	%	1.00%	0.00%	0.00%	0.00%	2.26%	1.91%	1.61%	1.95%	1.95%	1.33%	0.42%	0.40%	0.36%	0.37%	0.46%	0.40%	0.40%	0.39%	
Contained U3O8	1000 lbs U3O8	105,828	-	-	-	13,915	14,713	12,430	15,019	15,044	10,223	3,278	3,126	2,827	2,845	3,494	3,075	3,067	2,772	
D B																				
Process Recovery Recovery		95%	95.3%	95.3%	95.3%	95.3%	95.3%	95.3%	95.3%	95.3%	95.3%	95.3%	95.3%	95.3%	95.3%	95.3%	95.3%	95.3%	95.3%	
Recovered U <sub>1</sub> O <sub>6</sub>	1000 lbs U3O8	100.801	50.376	50.076	50.076	13,253.6	14,014,1	11.839.7	14,305.9	14.329.3	9.737.5	3.122.5	2.977.5	2,692.8	2.710.0	3.328.0	2.928.6	2.921.5	2,639.9	
Recovered U308 - OP Portion	'000 bs U308	72,411				13,254	14,014	11,840	14,250	13,256	8,541	1,829	-	-	-	-	-	-,	-	
Recovered U3O8 - UG Portion	1000 lbs U3O8	28,390				-	-	-	56	1,073	1,196	1,293	2,977	2,693	2,710	3,328	2,929	2,922	2,640	
(EMILE	+																			
VENUE Metal Prices	Input Units																			
Long-Term U3O8 Price	US\$ / Ib U3O8	\$ 65			\$	65 \$	65 \$	65 \$	65 \$	65 \$	65 \$	65 \$	65 \$	65 \$	65 \$	65 \$	65 \$		65 \$	
Exchange Rate	US\$ / C\$	\$ 0.85			\$	0.85 \$	0.85 \$	0.85 \$	0.85 \$	0.85 \$	0.85 \$	0.85 \$	0.85 \$	0.85 \$	0.85 \$		0.85 \$	0.85 \$	0.85	
Realized Price	C\$ / lb U3O8	\$ 76			\$	76 \$	76 \$	76 \$	76 \$	76 \$	76 \$	76 \$	76 \$	76 \$	76 \$	76 \$	76 \$		76 \$	
Total Cross Bayerus	00,000	7 700 500				1 010 510	1.071.666	905.391	1.093.981	1 005 770	744 000	238,779	227,689	205.919	207.235	254,497	222 050	202 415	201 877	
Total Gross Revenue Transportation	C\$ 1000 C\$ 1000	\$ 7,708,309 \$ 33.835				1,013,513 4,449	1,071,666 4,704	3,974	1,093,981 4.802	1,095,773 4.810	744,632 3.269	238,779 1.048	227,689 999	205,919 904	207,235 910	254,497 1,117	223,950 983	223,411 981	201,875 886	
Net Smetter Return	C\$ 1000	\$ 7,674,474					1,066,962 \$	901,417 \$	1,089,179 \$	1,090,963 \$	741,363 \$	237,731 \$	226,689 \$	205,015 \$	206,325 \$	253,379 \$	222,967 \$		200,989	\$
					•		•	•	•		•	•	•	•	•					
Royalties						77.457		****		70.000		47.000	45.435			40.000	45.455	40.400	44.000	
Gov't SK Gross Revenue Royalty	C\$ 1000 C\$ 1000	\$ 556,399 \$ 556,399	-	-		73,157	77,355	65,353	78,965	79,095	53,749	17,235	16,435	14,864	14,959	18,370	16,165	16,126	14,572	
Total Royattles	C\$ 000	• 556,399			•	73,157 \$	77,355 \$	65,353 \$	78,965 \$	79,095 \$	53,749 \$	17,235 \$	16,435 \$	14,864 \$	14,959 \$	18,370 \$	16,165 \$	16,126 \$	14,572	•
Net Revenue	C\$ 1000	\$ 7,118,075				935,907 \$	989,607 \$	836,064 \$	1,010,213 \$	1,011,869 \$	687,614 \$	220,495 \$	210,254 \$	190,152 \$	191,367 \$	235,009 \$	206,802 \$		186,417	
Unit NSR - Tonnes Processed	C\$ / t proc	\$ 1,481			\$	3,355 \$	2,829 \$	2,389 \$	2,894 \$	2,896 \$	1,971 \$	630 \$	598 \$	538 \$	546 \$	675 \$	590 \$		572 \$	
Unit NSR - Pounds Produced	C\$ / Ib U3O8	\$ 71			\$	71 \$	71 \$	71 \$	71 \$	71 \$	71 \$	71 \$	71 \$	71 \$	71 \$	71 \$	71 \$	71 \$	71 \$	\$
ERATING COSTS	+ +	-																		
Open Pit Mining	C\$ '000	140,340	-	-	-	30,594	38,541	38,117	17,171	9,346	6,572	-	-	-	-	-	-	-		
Underground Mining	C\$ '000	598,192	-	-	-	-	-	28,619	39,577	53,475	54,622	54,480	55,312	54,097	53,800	53,944	52,112	50,590	47,563	
Processing	C\$ '000	548,763	-		-	36,599	40,145	41,261	42,556 27.575	43,029 27.575	43,152	40,815	39,326	39,371	37,083	36,659 27,166	36,609 26,415	36,637	35,522	
Surface & GA Total Operating Cost	C\$ '000 C\$ '000	375,646 1,662,941				25,135 92,327	25,124 103,810	27,586 135,584	27,575 126,879	27,575 133,425	27,575 131,920	27,166 122,461	27,165 121,804	27,165 120,633	27,166 118,048	27,166 117,769	26,415 115,137	26,415 113,642	26,416 109,502	
	34 303	.,,				02,02	100,010	100,004	120,010	100,420	101,020	122,401	121,004	120,000	110,040	,	110,107	110,042	100,002	
IT OPERATING COSTS	1																			
Open Pit Mining	C\$/t ore	90				154	96	98	68	68	96	-	-	-	-	-	-	-		
Underground Mining	C\$ / t ore	184				-	-	8,052	407	249	190	156	157	153	151	152	148	144	271	
Combined Mining	C\$ / t proc	154				110	110	191	163	180	175	156	157	153	154	155	149	144	146	
Processing	C\$/tproc	114				131	115	118	122	123	124	117	112	111	106	105	104	104	109	
Surface & GA	C\$ / t proc	78				90	72	79	79	79	79	78	77	77	78	78	75	75	81	
Total Operating Cost	C\$/tproc	346				331	297	387	364	382	378	350	347	341	337	338	328	324	336	
Open Pit Mining	C\$ / lb U3O8	1.94				2.31	2.75	3.22	1.20	0.71	0.77	_	_	_	_	_	_	_	_	
Underground Mining	C\$ / Ib U3O8	21.07				-	2.10	3.22	705.71	49.83	45.66	42.12	18.58	20.09	19.85	16.21	17.79	17.32	18.02	
Combined Mining	CS / Ib U3O8	7.33				2.31	2.75	5.64	3.97	4.38	6.28	17.45	18.58	20.09	19.85	16.21	17.79	17.32	18.02	
Processing	C\$ / Ib U3O8	5.44				2.76	2.75	3.48	2.97	3.00	4.43	13.07	13.21	14.62	13.68	11.02	12.50	12.54	13.46	
Surface & GA	C\$ / Ib U3O8	3.73				1.90	1.79	2.33	1.93	1.92	2.83	8.70	9.12	10.09	10.02	8.16	9.02	9.04	10.01	
	C\$ / Ib U3O8	16.50				6.97	7.41	11.45	8.87	9.31	13.55	39.22	40.91	44.80	43.56	35.39	39.31	38.90	41.48	
Unit Operating Cost																				
Unit Operating Cost																				
	C\$ '000 C\$ / t proc	\$ 5,455,134 5 1.135	-	-	-	843,580	885,797	700,480	883,334	878,443	555,694	98,034	88,451	69,519	73,319	117,241	91,666	92,661	76,915	

CAPITAL COST																				
Pre-Production Direct Cost																				
Open Pit Mining	C\$ '000	\$ 363,063 \$	139,112 \$	109,691 \$	114,260 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
Processing	C\$ '000	\$ 198,234 \$	5 - \$	79,294 \$	118,941 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
Infrastructure	C\$ 1000	\$ 116,714 \$	9,512 \$	12,532 \$	94,670 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
Total Direct Cost	C\$ 1000	\$ 678,011		201,517 \$	327.870 \$															
Total Direct Coot	0,000	,	140,024	201,011	021,010	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Indirect Costs																				
EPCM / Owners / Indirect Cost	CS 1000	5 208.623 \$	39.555 S	66,467 S	102.600 \$	. 5	- 5	- S	- \$	- 5		- 5			- 5		- 5		- 5	
Subtotal Costs	C\$ 1000	\$ 886,634			430,470 \$			- \$			. \$				- 1					
Subtotal Coets	C\$ 000	9 005,634 1	100,1/3	267,985 \$	430,470 \$	- \$	- \$					- •	- •			- •	- •			-
												_	_	_		_				
Contingency	C\$ '000	\$ 208,506 \$		66,996 \$	94,465 \$	- \$	- \$	- \$	- \$	- \$	- 5	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
Initial Capital Cost	C\$ 1000	\$ 1,095,139	235,224 \$	334,981 \$	524,935 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
Sustaining Capital																				
OP Mining	C\$ '000	\$ 76,356 \$	- \$	- \$	- \$	76,356 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
UG Mining Equipment	C\$ '000	\$ 62,895 \$	5 - \$	- \$	- \$	- \$	14,383 \$	19,040 \$	14,842 \$	8,951 \$	3,669 \$	- \$	2,011 \$	- \$	- \$	- \$	- \$	- \$	- \$	-
UG Mine Development	C\$ '000	\$ 26,174 \$	5 - \$	- \$	- \$	- \$	- \$	6,128 \$	12,265 \$	5,390 \$	2,366 \$	- \$	- \$	- \$	- \$	24 \$	- \$	- \$	- \$	-
Infrastructure	CS '000	\$ 23,894 \$	5 - 5	- 5	- 5	- \$	- 5	11,947 \$	- \$	- \$	11.947 \$	- 5	- 5	- \$	- \$	- 5	- 5	- \$	- 5	-
Total Sustaining Capital	C\$ 1000	\$ 189,320		- 1	- \$	76,356 \$	14,383 \$	37,115 \$	27,108 \$	14,340 \$	17,982 \$	- 1	2,011 \$	- \$	- \$	24 \$	- 1	- \$	- 1	-
	/	,	•	•	•							•		•	•	•	•	•	•	
Reciamation and Closure	CS 1000	\$ 50,000 \$		- S	- 5	. 5	- 5	- S	- 5	- S	- S	- S	- S	. 5	- 5	- S	- S	. 5	50,000 \$	
Total Capital Cost	C\$ 1000	\$ 1,334,459		334,981 \$	524,935 \$	76,356 \$	14,383 \$	37,115 \$	27,108 \$	14,340 \$	17,982 \$	1 1	2,011 \$		- \$	24 \$			50,000 \$	- :
Total Capital Cost	C# 000	• 1,004,400 4	233,224 •	334,301 #	324,333 \$	10,000 +	14,303 \$	37,113	27,100 \$	14,340 \$	17,302 \$		2,011			24 #			30,000	-
CASH FLOW																				
CASH FLOW																				
Operating Cash Flow	CS 1000	\$ 5,455,134 \$	s - s	- \$	- 5	843.580 \$	885.797 \$	700,480 \$	883,334 \$	878,443 \$	555,694 \$	98.034 \$	88.451 \$	69,519 \$	73.319 \$	117.241 \$	91,666 \$	92,661 \$	76.915 \$	_
Operating Cash Flow less Capital Costs	CS 1000	\$ 4,120,675		(334,981) \$	(524.935) \$	767.224 \$	871,414 \$	663.365 S	856,226 \$	864,103 \$	537,712 \$	98,034 \$	86,440 \$	69,519 \$	73,319 \$	117,216 \$	91,666 \$	92,661 \$	26,915 \$	
Operating Cashi low less Capital Costs	00 000	4,120,070	(200,224)	(004,501)	(024,500) 4	707,224 4	0/1,414	000,000	000,220 \$	004,100 \$	007,712 4	50,004	00,440 \$	05,015	70,015	117,210	31,000 \$	32,001 4	20,510 9	-
Pre-Tax Cashflow	CS 1000	\$ 4,120,675	(235,224) \$	(334,981) \$	(524,935) \$	767.224 \$	871,414 \$	663,365 S	856,226 \$	864,103 \$	537,712 \$	98,034 \$	86,440 S	69,519 \$	73,319 \$	117,216 \$	91,666 S	92,661 \$	26,915 \$	
Cumulative Pre-Tax Cashflow	C\$ '000		(235,224) \$	(570,204) \$	(1,095,139) \$	(327,916) \$	543,498 \$	1,206,863 \$	2,063,089 \$	2,927,192 \$	3,464,905 \$	3,562,939 \$	3,649,378 \$	3,718,897 \$	3,792,216 \$	3,909,432 \$	4,001,098 \$	4,093,759 \$	4,120,675 \$	4,120,675
Taxes																				
Less SK Profit Royalties	C\$ '000	\$ 657,879		- \$	- \$	- \$	97,109 \$	103,400 \$	133,141 \$	134,330 \$	83,861 \$	15,732 \$	13,946 \$	11,314 \$	11,890 \$	18,677 \$	14,713 \$	14,860 \$	4,906 \$	-
EBITDA	C\$ '000	\$ 4,797,254 \$		- \$	- \$	843,580 \$	788,688 \$	597,080 \$	750,193 \$	744,113 \$	471,834 \$	82,302 \$	74,505 \$	58,205 \$	61,430 \$	98,563 \$	76,952 \$	77,801 \$	72,009 \$	-
Less Deductions	C\$ '000	\$ 1,443,737 \$		652 \$	94,145 \$	391,541 \$	220,434 \$	171,168 \$	136,526 \$	105,920 \$	82,394 \$	63,134 \$	47,172 \$	35,329 \$	26,287 \$	19,575 \$	14,578 \$	10,861 \$	23,095 \$	-
Taxable Earnings	C\$ '000	\$ 3,353,517 \$	(928) \$	(652) \$	(94,145) \$	452,039 \$	568,254 \$	425,912 \$	613,667 \$	638,193 \$	389,439 \$	19,168 \$	27,333 \$	22,875 \$	35,143 \$	78,988 \$	62,375 \$	66,940 \$	48,915 \$	-
Corporate Taxes @ 27%	C\$ 1000	\$ 931,295 \$	5 - 5	- \$	- \$	122,051 \$	153,429 \$	114,996 \$	165,690 \$	172,312 \$	105,149 \$	5,175 \$	7,380 \$	6,176 \$	9,489 \$	21,327 \$	16,841 \$	18,074 \$	13,207 \$	-
Net Profit	CS 1000	\$ 2,422,222 \$	(928) \$	(652) \$	(94.145) \$	329,989 \$	414.825 \$	310,916 \$	447,977 \$	465,881 \$	284,291 5	13,992 \$	19,953 \$	16,699 \$	25,654 \$	57,662 \$	45,533 \$	48,866 \$	35,708 \$	-
	300	-,,	(320) 4	(302)	(2.,140)	,	,520			,	20.,251	,	,	,		,002	,	,	,,,,,,,	
After-Tax Cash Flow	CS 1000	\$ 2.531.500 \$	(235,224) \$	(334,981) \$	(524,935) \$	645.173 S	620.876 S	444.969 S	557.395 S	557.461 S	348.703 \$	77.126 S	65.114 S	52.028 S	51.941 \$	77.212 \$	60.111 S	59.727 S	8.803 S	_
Cumulative	C\$ 1000	2,000,000	(235,224) \$	(570,204) \$	(1.095,139) \$	(449,966) \$	170.910 \$	615.879 \$	1.173.274 \$	1.730.734 \$	2.079.438 \$	2.156.564 \$	2.221.678 \$	2.273.706 \$	2.325.647 \$	2,402,859 \$	2.462.970 \$	2.522.698 \$	2.531.500 \$	2.531.500
Curtualve	C\$ 000		(235,224) \$	(570,204) \$	(1,U30,109) \$	(449,900) \$	170,910 \$	010,079 \$	1,170,274 \$	1,730,734 \$	2,079,430 \$	2,130,304 \$	2,221,070 \$	2,2/3,/00 \$	2,323,047 \$	2,402,009 \$	2,402,970 \$	2,322,090 \$	2,551,500 \$	2,551,500
PROJECT ECONOMICS					_	_	_		_	_		_		_			_		_	
Pre-Tax Payback Period	yrs	1.4	0	0	0	1.00	0.38	-	-	-	-	-	-							
Pre-Tax IRR	%	45.7%																		
Pre-tax NPV @ 8%	C\$ '000	\$2,128,943																		
Pre-tax NPV @ 10%	C\$ '000	\$1,814,797																		
Pre-tax NPV @ 12%	C\$ '000	\$1,548,467																		
_																				
Post-Tax Payback Period	упъ	1.7	0	0	0	1.00	0.72	-	-	-	-	-	-							
Post-Tax IRR	%	34.2%																		
Post-Tax NPV @ 8%	C\$ 1000	\$1,224,795																		
Post-Tax NPV @ 8% Post-Tax NPV @ 10%	C\$ 1000 C\$ 1000	\$1,224,795 \$1,019,895																		
Post-Tax NPV @ 8%	C\$ 1000	\$1,224,795																		

#### Cash Flow Analysis

Based on the economic criteria discussed previously, a summary of the cash flow is shown in Table 1-4.

TABLE 1-4 SUMMARY OF CASH FLOW Fission Uranium Corp. – Patterson Lake South Property

Description	Units	Value
Gross Revenue	C\$ millions	7,708.3
Less: Transportation	C\$ millions	(33.8)
Net Smelter Return	C\$ millions	7,674.5
Less: Provincial Revenue Royalties	C\$ millions	(556.4)
Net Revenue	C\$ millions	7,118.1
Less: Total Operating Costs	C\$ millions	(1,662.9)
Operating Cash Flow	C\$ millions	5,455.2
Less: Capital Costs	C\$ millions	(1,334.5)
Pre-Tax Cash Flow	C\$ millions	4,120.7
Less: Provincial Profit Royalties	C\$ millions	(657.9)
Less: Taxes	C\$ millions	(931.3)
Post-Tax Cash Flow	C\$ millions	2,531.5

Based on the input parameters, a summary of the PLS Property economics is shown in Table 1-5.

**TABLE 1-5 SUMMARY OF ECONOMIC RESULTS**Fission Uranium Corp. – Patterson Lake South Property

Description	Units	Value
Pre-Tax		
Net Present Value at 8%	C\$ millions	2,128.9
Net Present Value at 10%	C\$ millions	1,814.8
Net Present Value at 12%	C\$ millions	1,548.5
Internal Rate of Return	%	46.7
Payback Period	years	1.4
After-Tax		
Net Present Value at 8%	C\$ millions	1,224.8
Net Present Value at 10%	C\$ millions	1,019.9
Net Present Value at 12%	C\$ millions	846.7
Internal Rate of Return	%	34.2
Payback Period	years	1.7

Sensitivity Analysis

The cash flow model was tested for sensitivity to variances in head grade, process recovery, input price of yellowcake, Canadian to United States dollar exchange rate, overall operating costs, and overall capital costs. The resulting post-tax  $NPV_{10\%}$  sensitivity is shown in Table 1-6.

TABLE 1-6 SUMMARY OF SENSITIVITY ANALYSIS Fission Uranium Corp. – Patterson Lake South Property

Description	Units	Low Case	Mid-Low Case	Base Case	Mid-High Case	High Case
Head Grade	%	0.80%	0.90%	1.00%	1.10%	1.20%
Overall Recovery	%	91.4%	93.3%	95.3%	97.2%	99.1%
Uranium Price	$C$ \$ / lb $U_3O_8$	\$61	\$69	\$76	\$84	\$92
Exchange Rate	US\$/C\$	0.72	0.78	0.85	0.94	1.04
Operating Costs	C\$/lb	14.0	15.3	16.5	19.4	22.3
Total Capital Cost	C\$ millions	1,134	1,234	1,334	1,568	1,802
Adjustment Factor						
Head Grade	%	-20%	-10%	NA	10%	20%
Overall Recovery	%	-4%	-2%	NA	2%	4%
Uranium Price	%	-20%	-10%	NA	10%	20%
Exchange Rate	%	-15%	-8%	NA	10%	22%
Operating Costs	%	-15%	-8%	NA	18%	35%
Capital Cost	%	-15%	-8%	NA	18%	35%
Post-Tax NPV @ 10%						
Head Grade	C\$ millions	589.2	805.0	1,019.9	1,234.7	1,449.6
Overall Recovery	C\$ millions	934.0	976.9	1,019.9	1,062.9	1,105.8
Uranium Price	C\$ millions	590.2	805.5	1,019.9	1,234.2	1,448.5
Exchange Rate	C\$ millions	1,379.3	1,197.1	1,019.9	834.4	651.1
Operating Costs	C\$ millions	1,080.9	1,050.4	1,019.9	948.6	876.3
Capital Cost	C\$ millions	1,157.7	1,088.8	1,019.9	859.1	698.3

Project cash flow is most sensitive to the price of uranium, head grade, and process recovery. Yellowcake is primarily traded in United States dollars, whereas capital and operating costs for the PLS Property are generally priced in Canadian dollars. Therefore, the Canadian and United States exchange rate also exerts significant influence over project economics. An extended sensitivity analysis was undertaken solely on uranium price. The results are displayed in Table 1-7.

TABLE 1-7 URANIUM PRICE SENSITIVITY ANALYSIS Fission Uranium Corp. – Patterson Lake South Property

Uranium Price	Uranium Price	Post-Tax NPV @ 10%
$(US\$ / lb U_3O_8)$	$(C\$ / lb U_3O_8)$	(C\$ Millions)
30	35	(186)
40	47	174
50	59	524
60	71	855
65 (Base Case)	76	1,020
70	82	1,185
80	94	1,514
90	106	1,847
100	118	2,175

Taxes, Provincial Royalties, and Depreciation

Taxes and depreciation for the PLS Property were modelled based on input from Fission's tax advisors and auditors.

In Saskatchewan, multiple royalties are applied to uranium projects. Royalties generally fall into two categories: revenue royalties and profit royalties. An explanation of the various royalties is provided below:

- Resource surcharge of 3% of net revenue (where net revenue is defined as gross revenue less transportation costs directly related to the transporting of uranium to the first point of sale).
- Basic royalty of 5% of net revenue (as defined above), less a Saskatchewan resource credit of 0.75% of net revenue, for an effective royalty rate of 4.25%.
- Tiered profit royalty, with a 10% royalty rate on the first C\$22.00 profit per kilogram of yellowcake, followed by 15% royalty on profits exceeding C\$22.00 per kilogram.

In the tiered profit royalty, the basic royalty and resource surcharge are not deductible for calculating profit royalties. Profits for the purposes of royalties are calculated by taking the net revenue, subtracting the full value of operating costs, capital costs, and exploration expenditures. Revenue royalties were included in the "pre-tax" cash flow results, while profit royalties are considered a tax, and are included in "post-tax" results.

Federal and provincial taxes were applied at a rate of 15% and 12%, respectively.

#### **Property Description**

The PLS Property consists of 17 contiguous mineral claims covering an area of 31,039 ha located in northwestern Saskatchewan, approximately 550 km northwest of the city of Prince Albert. It is centered at approximately 57°37' N Latitude and 109° 22' W Longitude within 1:50,000 scale NTS map sheets 74F/11 (Forrest Lake) and 74F/11 (Wenger Lake). The Property straddles all-weather gravel Highway 955 which leads northward to the past-producing Cluff Lake mine. The Triple R deposit is located on claim S-111376.

The PLS Property claims were ground staked and are considered to be legacy claims. As of the effective date of the PLS Property Technical Report, all claims are in good standing and are registered in the name of Fission. Assessment credits are available for multiple annual renewals.

#### **Existing Infrastructure**

With the exception of an all-weather gravel road which traverses the Property, there is no permanent infrastructure on the Property.

#### History

The Property was geologically mapped as part of a larger area by the Geological Survey of Canada in 1961.

In 1969, Wainoco Oil and Chemicals Ltd. completed photogeologic mapping and airborne radiometric and magnetic surveys. No interesting structures or anomalies were detected.

CanOxy completed extensive exploration on and around the Property from 1977 to 1981 including an airborne electromagnetic ("EM") survey; ground EM and magnetic, geological, geochemical, alphameter (radon), and radiometric surveys; and diamond drilling.

In 1977, CanOxy discovered a very strong six station alphameter (radon) anomaly with dimensions of 1.2 km by 1.7 km on current claim S-111375. This anomaly coincides with high uranium in soil values and anomalous

scintillometer (radiometric) values. It was suggested that this alphameter anomaly was responding to radioactive exotic boulders within the till of the Cree Lake Moraine, however, no follow-up work was done.

CanOxy's ground EM survey delineated the Patterson Lake Conductor Corridor that cuts across the middle of Patterson Lake on claim S-111376, and extends onto claim S-111375. Several disrupted conductors and inferred cross cutting features were identified as priority 1, 2, and 3 drill targets on claim S-111376.

CanOxy drill tested an airborne EM conductor on the west shore of Patterson Lake within claim S-111376. Drill hole CLU-12-79 intersected a 6.1 m wide sulphide-graphite "conductor" that contained anomalous uranium, copper, and nickel concentrations. Strong hematite and chlorite alteration was observed in the regolith and basement rock, and two curious spikes in radioactivity were detected in the fresh basement.

#### **Geology and Mineralization**

The east-west elongate Athabasca Basin lies astride two subdivisions of the Western Churchill Province, the Rae Subprovince on the west and the Hearne Subprovince to the east. These are separated by the northeast trending Snowbird Tectonic Zone, which beneath the Athabasca Basin is called the Virgin River-Black Lake shear zone. In the western Athabasca Basin, where the property is located, lithologies belonging to the Lloyd Domain of the Talston Magmatic Zone ("TMZ") underlie the Athabasca Basin. The TMZ is dominated by a variety of plutonic rocks and an older basement complex. The basement complex varies widely in composition from amphibolites to granitic gneisses to high grade pelitic gneisses.

The PLS Property lies within the northeastern limits of the Cretaceous Mannville Group which covers a large portion of western Saskatchewan. The Mannville Group consists of interbedded non-marine sands and shales overlain by a thin, non-marine calcareous member which is overlain by marine shales, glauconitic sands, and non-marine salt-and-pepper sands. The marine sequence is overlain by a paralic and non-marine sequence having a diachronous contact with the marine sequence.

The PLS Property is covered by a thick layer of sandy to gravelly quaternary glacial material. The quaternary material ranges in thickness from less than 10 m in the south east portion of the property to greater than 100 m directly west of Patterson Lake. No outcrop has been discovered on the Property to date.

Drilling to date indicates that the Athabasca Group is not present on the Property; although it may be possible that "islands" of Athabasca sandstone exist within the northeast extent of the Property. Regolith underlies and is distributed approximately parallel to the Pleistocene overburden and Cretaceous sediments.

The PLS Property covers two geological domains; the western portion covers the Clearwater Domain while the eastern portion covers the Lloyd Domain. To date, drilling has been focused on the basement rocks of the Lloyd Domain as the Clearwater Domain is primarily interpreted to be granitic in nature and therefore not as prospective for unconformity style uranium mineralization. In the vicinity of PLS Property mineralization the basement rocks are comprised of a northeast trending belt of variably graphitic pelitic gneisses bounded to the northwest and southeast by apparently thick packages of quartzo-feldspathic semi-pelitic gneiss.

Uranium mineralization at the PLS Property is hosted primarily within metasedimentary basement lithologies and, to a much lesser extent, within overlying sandstone currently thought to be Devonian in age. Additional work is recommended to determine the age of the overlying sandstone, and if it is confirmed to be Devonian, work is required to determine why these rocks are mineralized.

Basement hosted mineralization at the Property occurs in a wide variety of styles, the most common of which occurs within the graphitic pelitic gneiss and appears to be fine grained disseminated and fracture filling uranium minerals with a strong association with hydrocarbon/carbonaceous matter. Uranium minerals, where visible, appear to be concordant with the regional foliation and dominant structural trends identified through oriented core and fence drilling. Typically, mineralization within the graphitic pelitic gneiss is associated with pervasive, strong, grey-green chlorite and clay alteration. The pervasive clay and chlorite alteration eliminates the primary mineralogy of the host rock with only a weakly defined remnant texture remaining. Locally, intense rusty limonite-hematite alteration in

the pelitic gneisses strongly correlates with high grade uranium mineralization and a "rotten", wormy texture. Subordinate styles of uranium mineralization within the graphitic pelitic gneiss which are often associated with very high grade uranium include: semi-massive and hydrocarbon rich; intensely clay altered (kaolinite) with uranium-hydrocarbon buttons; and massive metallic mineralization. These zones of very high grade mineralization generally occur along the contact of the graphitic pelitic gneiss and silicified south side semi-pelite and comprise a high grade mineralized spine. This spine may represent a zone of intense structural disruption which has been completely overprinted by alteration and mineralization. However, drill holes which undercut the strongly mineralized spine have failed to show signs of significant structural damage. Particularly well mineralized drill holes are often associated with thin swarms of dravite-filled breccia.

Uranium mineralization within the north and south semi-pelites which bound the graphitic pelite generally occurs as fine grained disseminations and is almost always associated with pervasive whitish-green clay and chlorite alteration with local pervasive hematite.

#### **Mineral Resources**

RPA updated the mineral resource estimate for the Triple R deposit using drill hole data available to July 28, 2015 (Table 1-8). Estimated block model grades are based on chemical assays only. Gold grades were also estimated. Mineral reserves have not been estimated for the Triple R deposit.

TABLE 1-8 MINERAL RESOURCE SUMMARY Fission Uranium Corp. – Patterson Lake South Property

Classification	Tonnes	% U <sub>3</sub> O <sub>8</sub>	g/t Au	Pounds U <sub>3</sub> O <sub>8</sub>	Ounces Au
Indicated					
Open Pit	1,149,000	2.45	0.62	62,104,000	23,000
Underground	863,000	1.00	0.56	19,007,000	15,000
<b>Total Indicated</b>	2,011,000	1.83	0.59	81,111,000	38,000
Inferred					
Open Pit	74,000	8.61	1.64	14,060,000	4,000
Underground	711,000	0.84	0.56	13,097,000	13,000
<b>Total Inferred</b>	785,000	1.57	0.66	27,157,000	17,000

#### Notes

- 1. Canadian Institute of Mining, Metallurgy and Petroleum definitions were followed for mineral resources.
- 2. Mineral resources are reported within the preliminary pit design at a pit discard cut-off grade of 0.2% U3O8 and outside the design at an underground cut-off grade of 0.25% U3O8 based on a long-term price of US\$65 per lb U3O8 and PEA cost estimates.
- 3. A minimum mining width of 2.0 m was used.
- 4. Numbers may not add due to rounding.

A set of cross-sections and level plans were interpreted to construct three-dimensional wireframe models for a number of mineralized zones at a minimum grade of  $0.05\%~U_3O_8$ . Wireframes of the High Grade domain were created at a minimum grade of approximately  $5\%~U_3O_8$ . The High Grade domain consists of several lenses within the Main Zone, the largest continuous zone within the R780E area. Prior to compositing to two metre lengths, high  $U_3O_8$  assays were cut to 55% in the High Grade domain, to  $10\%~U_3O_8$  in all other domains, and to  $7\%~U_3O_8$  outside the wireframes, designated as Low Grade Halo.

Block model grades were interpolated by inverse distance cubed. Density values were estimated from more than 2,000 measurements to be 2.25 t/m³ for the R00E Zone, 2.32 t/m³ for the Main Zone and other zones in the R780E area, 2.35 t/m³ for the High Grade domain, and 2.39 t/m³ for the Low Grade Halo. Classification into the indicated and inferred categories was guided by the drill hole spacing and the continuity of the mineralized zones.

Table 1-9 compares the current mineral resource estimate to the initial mineral resource estimate announced in January 2015.

TABLE 1-9 COMPARISON TO PREVIOUS RESOURCE ESTIMATE Fission Uranium Corp. - Patterson Lake South Property

	Tonnage(t)	$U_{3}O_{8}\left(\%\right)$	$U_3O_8$ (lb)
Current Estimate			_
Indicated	2,011,000	1.83	81,111,000
Inferred	785,000	1.57	27,157,000
January 2015 Estima	ate		
Indicated	2,291,000	1.58	79,610,000
Inferred	901,000	1.30	25,884,000
Difference			
Indicated	-280,000	0.25	1,501,000
Inferred	-116,000	0.27	1,273,000
Percent Difference			
Indicated	-12%	16%	2%
Inferred	-13%	21%	5%

The increase in average grades is due to the higher cut-off grade of 0.2%  $U_3O_8$  for open pit and 0.25%  $U_3O_8$  for underground resources compared with the previous cut-off grade of 0.1%  $U_3O_8$  for all resources. This change in cut-off grade is also responsible for the decrease in resource tonnages; however, that decrease is offset by current reporting of underground tonnage below the open pit resources.

Overall, the current indicated mineral resources contain approximately 1.5 million more pounds of  $U_3O_8$  than the January 2015 estimate and the inferred mineral resources contain approximately 1.3 million more pounds of  $U_3O_8$  than the January 2015 estimate.

#### Mining Methods and Geotechnical Considerations

The PLS Property hosts the Triple R deposit, a structurally controlled east-west trending sub-vertical high grade uranium deposit. The deposit is overlain by 50 m to 60 m of sandy overburden, with the high grade mineralization located near the bedrock-overburden contact. The deposit extends under Patterson Lake, and will require a ring dyke and slurry wall to effectively isolate the deposit from the lake.

#### Geotechnical Conditions

BGC reviewed available geotechnical information and provided analysis on open pit slopes, underground stope sizing, and mining-related infrastructure.

Unconfined compressive strength ("UCS") testing shows that the average UCS for unaltered semi-pelites (both north and south) ranges from 80 MPa to 110 MPa. Alteration has a significant impact on the UCS of each rock type, with an average ranging from 42 MPa to 46 MPa in the semi-pelites, to 30 MPa in the pelites.

In addition to UCS, Rock Mass Rating ("**RMR**<sub>76</sub>") was reviewed. Statistically, the RMR<sub>76</sub> values range from 44 to 79, with an average value of 63 and a standard deviation of 10. The RMR<sub>76</sub> values cluster in two distributions: 40 to 60 and 60 to 80, corresponding to "fair rock" to "good rock". Based on the geological logs, the distinction between the two ranges appears to correspond to altered versus unaltered rock.

#### Ring Dyke

As the deposit extends under Patterson Lake, a dyke needs to be constructed that isolates the deposit from the lake. The total linear length of the dyke is approximately 2,550 m. The dyke has a top berm width of 25 m, and slope

angles of approximately 30°. The dyke will be built to a height of four to five metres above the lake elevation. The estimated quantity of rock fill required to build the dyke is approximately 1.2 million m<sup>3</sup>.

To build the dyke, fill material must be brought in from a borrow pit located approximately 30 km away from the site. Trucks would bring the material to the dyke location and continually advance the structure into Patterson Lake. The dyke would be initiated from both the north and south shore location, and meet approximately at the eastern extent of the dyke. Bulldozers and other equipment would continually pack and shape the fill material as it extends into the lake. The dyke core would then be vibro-compacted using specialized equipment. It is likely that fine-grained, soft lacustrine sediments are present at the lakebed surface which, if extensive, may require removal by dredging as part of foundation preparation activities. Rapid loading of lakebed sediments during dyke fill placement could result in slope instability from undrained shear failure. The potential for construction induced failure, including the potential for static liquefaction of underlying silts and fine sands should be investigated at the next project stage. The thickness of soft lakebed sediments (if present) is currently unknown and will require confirmation at the next phase of study.

#### Slurry Wall

The ring dyke alone is not sufficient to prevent water flowing into the open pit. To effectively isolate the pit from Patterson Lake, a system of slurry walls is proposed. Slurry walls have been used effectively in a number of northern Canadian mining projects, notably Diavik diamond mine and Meadowbank gold mine. The slurry wall concept was based on discussions between BGC and Bauer, the contractor responsible for cut-off wall construction at Diavik and the lead contractor responsible for the construction of the proposed new Diavik dyke cut-off. Bauer has experience constructing diaphragm walls to depths of more than 100 m in coarse, bouldery overburden deposits. The trench excavation for that project was completed by means of a combination of clamshell and hydromill technology. The former was used to remove particles up to cobble and small boulders, while the latter was used to advance through boulders that were too large to remove by clamshell.

Bauer expects that similar equipment could be used to construct a diaphragm wall to bedrock at the PLS Property, including a socket into the bedrock surface.

The slurry wall will completely circumnavigate the deposit (including the shore-based portion), with a total linear length of approximately 3,300 m. The slurry wall is planned to be one metre thick, with average depths of 60 m from the working surface.

#### Dewatering

After completion of the slurry wall, the enclosed pit will be dewatered. The enclosed pit contains an estimated 17.4 million m<sup>3</sup> of water, which would be pumped out of the pit over the course of one year. To accomplish this, six twelve-inch diameter pumps would be sourced from an equipment rental company.

#### Open Pit

Mining of mineralized material and uranium bearing waste is proposed to be carried out by the owner. The overburden stripping and barren waste mining will be exclusively done by a contractor with a dedicated mining fleet (larger equipment) given the total volume to be excavated and the higher production rate required.

The combination of owner-operated mining and contractor mining will be carried out using conventional open pit methods consisting of the following activities:

- Drilling performed by conventional production drills.
- Blasting using an emulsion explosive and a down-hole delay initiation system.

 Loading and hauling operations performed with hydraulic shovels, front-end loaders, and underground haulage trucks (mineralized material and some waste) and rigid frame trucks (overburden and remainder of waste)

The production equipment will be supported by bulldozers, a grader, and a water truck. Support fleets will be separated into contractor and owner fleets in order to minimize the amount of contractor equipment that is in contact with radioactive material.

#### Underground

The mining method for the underground will be longhole retreat mining in both transverse and longitudinal methods based on current block model information. The mining will retreat from the exhaust air raises towards the fresh air raises, and will be mined in blocks ranging from three to four levels for transverse mining. In the longitudinal areas of mining, the lenses will be mined bottom up.

The ventilation system will be a push-pull system with two fresh air raises and three exhaust air raises. The ventilation in the underground workings will be used once in the ore production areas. The air will be forced ventilated with a positive flow in the transverse and longitudinal headings (air will be pumped into the headings). Push-pull ventilation systems have been used extensively in uranium mines in the Athabasca Basin.

#### Life of Mine Plan

A three-year pre-production period is envisaged for the PLS Property. The critical path for completing construction revolves around completing the dyke and slurry wall, dewatering of the enclosed pit, and removal of overburden. In Year -3, the dyke will be completed by starting at both the north and south terminal points and linking the two at the eastern extent of the dyke. Rock material will be sourced from a location within Fission's claim boundaries, approximately 30 km south and east of the deposit. Concurrently in Year -3, the shore-portion of the slurry wall will commence. Slurry wall construction is weather dependent, and can only be accomplished during the period of April to October. In Year -2, the remaining portion of the slurry wall will be completed, as well as some surface buildings and other infrastructure. The process plant will begin construction in Year -2. Year -1 will see the enclosed pit being dewatered, overburden being removed, and all remaining surface and infrastructure facilities completed. Overburden removal will carry over into Year 1.

Operations begin with high grade mineralization being mined from an open pit from Year -1 to Year 6. Underground mining begins with capital development in Year 3 and continues to Year 14.

#### **Mineral Processing**

The conceptual mill design will have a nominal feed rate of 350,000 tonnes per annum, operate 350 days per year, and be able to produce nominally 15 million pounds per year of uranium concentrate. The mill design will have an estimated recovery of 95%, and is designed in a way that can accommodate fluctuations in ore grade that are expected when mining moves from open pit to underground.

The unit processes for uranium recovery are:

- 1. Grinding;
- 2. Acid leaching using hydrogen peroxide as oxidant;
- 3. Counter current decantation and clarification;
- 4. Solvent extraction using strong acid stripping;
- 5. Molybdenum removal from the pregnant aqueous solution;

- 6. Gypsum precipitation;
- 7. Yellowcake precipitation with hydrogen peroxide;
- 8. Yellowcake thickening and drying;
- 9. Tailings neutralization; and
- 10. Effluent treatment with monitoring ponds to confirm quality of effluent discharge.

#### **Project Infrastructure**

Project infrastructure will consist of:

- Access Road: Highway 955 cuts through the PLS Property and will need to be rerouted to direct local
  traffic around the mine site. The highway diversion will consist of approximately 3.5 km of new highway
  construction and will direct traffic further west of the mine site.
- Power Supply: a 12 megawatt diesel power generating station is planned for the PLS Property, consisting of six two megawatt generators. A power grid will be established on site to distribute the power to the underground mine, open pit mine, tailings area, and camp.
- Propane: liquefied propane gas will be used in several areas of the project, including in the process plant, and for heating air as it enters the underground mine.
- Fuel Storage: in addition to liquefied propane gas, the site will require diesel for several applications, as well as small amounts of gasoline for light-duty vehicles on surface. Areas needing diesel include the central power plant, surface mobile mine equipment, and underground mine equipment.
- Explosives: an explosives storage area is planned for the project, and will be located in an area that is a suitable distance away from other buildings and offices.
- Surface Buildings: required buildings include a maintenance shop, process building, dry facility, warehousing, and administration building.
- Permanent Camp: sized to house 250 people on a fly-in, fly-out rotation.
- Airstrip: an airstrip will be constructed at the PLS Property, and will function as the primary mechanism for moving people to and from the work site.
- Miscellaneous Services: allowances were made for miscellaneous services such as a site-wide fire
  protection system, sanitary waste disposal system, potable water system, and water effluent treatment
  system.
- Tailings Storage Facility: a tailing storage facility will be constructed to accommodate the estimated two million m<sup>3</sup> of tailings generated over the life of the project.
- Waste rock and overburden dumps and stockpiles.

#### **Environmental, Permitting, and Social Considerations**

In support of the PEA, a review of the licensing, permitting and environmental aspects of the PLS Property were examined through a literature search, examination of the appropriate acts and regulations, a review of the conceptual project, discussions with Fission, examination of some documents and a site visit.

Overall, the project appears to be in compliance with applicable regulations governing exploration, drilling and land use, and Fission staff and contractors are aware of their duties with respect to environmental and radiation protection. There have been some issues related to excess clearing of trails and near water bodies, but Fission has worked to repair those transgressions and reclaim them. The operations are neat and orderly and the level of clearing and disturbance is commensurate with similar projects in northern Saskatchewan. The PLS Property is visited frequently by Saskatchewan conservation officers to ensure compliance. Locally, this is a high profile project that gets a lot of scrutiny.

There were six key area of consideration arising from the review:

- 1. While Fission has done preliminary community outreach and consultation, the level of consultation is very local and it will not be sufficient to support government duty to consult requirements and move the project into the environmental assessment process. Fission will need to address this soon to avoid project delays.
- 2. Given the location of the deposit, impacts to Patterson Lake are inevitable. Regardless of the design, minimizing impacts to the lake will be very important to ensure that the lake remains navigable to fish and boats.
- 3. To avoid significant project delays related to Schedule 2 of the Metal Mining Effluent Regulations, any tailings management area must avoid using fish bearing waters.
- 4. Fission has been forward looking by starting environmental baseline and monitoring work. The work has been somewhat selective and should be sufficient to start the environmental assessment process, however, it is not currently sufficient to support an environmental assessment document.
- 5. The main physical danger to the operation is forest fire and Fission has maintained close relationships with the local wildfire management base in Buffalo Narrows.
- 6. Fission has developed a centrifuge system for effectively removing potentially radioactive cuttings and fines from drilling fluids. This material is effectively handled and disposed of at an operating uranium mine. Fission has a radiation protection program in place and appear to follow it.

The PLS Property is at a stage whereby, with proper planning, all of the above items can be addressed in a timely fashion within an orderly project approvals process. Some of the items, particularly consultation, need to be started very soon in order not to materially affect project timing. This will require consultation with the Canadian Nuclear Safety Commission and the Saskatchewan Government to ascertain the level of First Nations, Métis and stakeholder consultation they expect.

#### **Capital and Operating Costs**

Capital costs have been estimated for the PLS Property based on comparable projects, first-principles, subscription-based cost services, budgetary quotes from vendors and contractors, and information within RPA's project database. RPA is responsible for capital costs related to mining and certain infrastructure, while DRA is responsible for capital costs related to the process plant and other infrastructure. Arcadis and BGC have provided input, where appropriate, to develop the capital cost estimate. Broadly, pre-production capital costs are divided among four areas: open-pit mining, processing, general infrastructure, and project indirect expenses. Sustaining capital costs are related to the entire underground mine, some remaining capital costs from the open pit, and miscellaneous infrastructure that is built after commercial production has been declared.

TABLE 1-10 SUMMARY OF CAPITAL COSTS Fission Uranium Corp. – Patterson Lake South Property

Description	Units	Cost
Open-Pit Mining	C\$ millions	363.1
Processing	C\$ millions	198.2
Infrastructure	C\$ millions	116.7
<b>Subtotal Pre-Production Direct Costs</b>	C\$ millions	678.0
Pre-Production Indirect Costs	C\$ millions	208.6
Subtotal Direct and Indirect	C\$ millions	886.6
Contingency	C\$ millions	208.5
Initial Capital Cost	C\$ millions	1,095.1
Sustaining, Closure, and Misc.	C\$ millions	239.3
Total	C\$ millions	1,334.5

Note: Dyke and slurry wall construction costs are included in open pit mining. Underground development is part of sustaining capital, as it occurs during operations.

Operating costs were estimated for the project and allocated to one of mining, processing, or general and administration. Life of mine operating costs are summarized in Table 1-11.

**TABLE 1-11 LIFE OF MINE OPERATING COSTS Fission Uranium Corp. – Patterson Lake South Property** 

	LOM Cost	<b>Unit Cost</b>	<b>Unit Cost</b>
Description	(C\$ millions)	(C\$/t processed)	(C\$/lb U <sub>3</sub> O <sub>8</sub> )
Mining			
Open Pit Mining	140.3	90	1.94
<b>Underground Mining</b>	598.2	184	21.07
Combined Mining	738.5	154	7.33
Processing	548.8	114	5.44
General and Administration	375.6	78	3.73
Total	1,662.9	346	16.50

# RISK FACTORS

An investment in Fission is speculative and involves a high degree of risk due to the nature of the Company's business and the present stage of its development. The following risk factors, as well as risks not currently known to the Company, could materially adversely affect the Company's future business, operations and financial condition and could cause them to differ materially from the estimates described in forward-looking statements contained herein. Prospective investors should carefully consider the following risk factors along with the other matters set out herein:

## **Limited Business History**

Fission has a short history of operations and has no history of earnings. The likelihood of success of Fission must be considered in light of the problems, expenses, difficulties, complications and delays frequently encountered in connection with the establishment of any business. Fission has limited financial resources and there is no assurance that funding will be available to it when needed. There is also no assurance that Fission can generate revenues, operate profitably, or provide a return on investment, or that it will successfully implement its plans.

## **Unknown Environmental Risks for Past Activities**

Exploration and mining operations incur risks of releases to soil, surface water and groundwater of metals, chemicals, fuels, liquids having acidic properties and other contaminants. The risk of environmental contamination from present and past exploration or mining activities exists for mining companies. Companies may be liable for environmental contamination and natural resource damages relating to properties that they currently own or operate or at which environmental contamination occurred while or before they owned or operated the properties. No assurance can be given that potential liabilities for such contamination or damages caused by past activities at the PLS Property do not exist.

### **Limited Exploration Prospects**

The PLS Property is Fission's sole material property. Accordingly, the Company does not have a diversified portfolio of exploration prospects, either geographically or by mineral targets. The Company's operations could be significantly affected by fluctuations in the market price of uranium, as the economic viability of the Company's sole project is heavily dependent upon the market price for uranium.

## **Acquisitions and Joint Ventures**

Fission may evaluate from time to time opportunities to acquire and joint venture mining assets and businesses. These acquisitions and joint ventures may be significant in size, may change the scale of Fission's business and may expose it to new geographic, political, operating, financial and geological risks. Fission's success in its acquisition and joint venture activities will depend on its ability to identify suitable acquisition and joint venture candidates and partners, acquire or joint venture them on acceptable terms and integrate their operations successfully with those of Fission. Any acquisitions or joint ventures would be accompanied by risks, such as the difficulty of assimilating the operations and personnel of any acquired companies; the potential disruption of Fission's ongoing business; the inability of management to maximize the financial and strategic position of Fission through the successful incorporation of acquired assets and businesses or joint ventures; additional expenses associated with amortization of acquired intangible assets; the maintenance of uniform standards, controls, procedures and policies; the impairment of relationships with employees, customers and contractors as a result of any integration of new management personnel; dilution of Fission's present shareholders or of its interests in its subsidiaries or assets as a result of the issuance of shares to pay for acquisitions or the decision to grant earning or other interests to a joint venture partner; and the potential unknown liabilities associated with acquired assets and businesses. There can be no assurance that Fission would be successful in overcoming these risks or any other problems encountered in connection with such acquisitions or joint ventures. There may be no right for shareholders to evaluate the merits or risks of any future acquisition or joint venture undertaken except as required by applicable laws and regulations.

## Significant Shareholders of the Company Possibly Influencing the Company's Business Operations

To the best of our knowledge, CGN Mining and its affiliates hold approximately 19.99% of Fission's issued and outstanding Common Shares. For as long as CGN Mining maintains a significant interest in the Company, it may be in a position to affect the governance and operations of Fission. Pursuant to the Subscription Agreement, for so long as CGN Mining and their affiliates hold not less than 17% of our issued and outstanding Common Shares for any continuous period of at least twenty-four (24) months, CGN Mining is entitled to nominate two individuals to serve on the Fission Board in addition to having certain anti-dilution rights in future equity financings of Fission. For a full description of the provisions of the Subscription Agreement, please refer to the Subscription Agreement, which is available on Fission's SEDAR profile at <a href="https://www.sedar.com">www.sedar.com</a>.

In addition, CGN Mining may have significant influence over the passage of any resolution of Fission Shareholders (such as would be required to amend Fission's constating documents or take certain other corporate actions) and may for all practical purposes, be able to ensure the passage of any such resolution by voting for it or prevent the passage of any such resolution by voting against it. The effect of the influence by CGN Mining may be to limit the price that investors are willing to pay for the Common Shares.

## **Additional Financing and Dilution**

Fission is focused on advancing its core asset, the PLS Property, and will use its working capital to carry out such advancement and growth. However, Fission will require additional funds to further such activities. To obtain such funds, Fission may sell additional securities including, but not limited to, its Common Shares or some form of convertible security, the effect of which would result in a substantial dilution of the equity interests of Fission's shareholders.

There is no assurance that additional funding will be available to Fission for additional exploration or for the substantial capital that is typically required in order to bring a mineral project, such as the PLS Property, to the production decision or to place a property, such as the PLS Property, into commercial production. There can be no assurance that Fission will be able to obtain adequate financing in the future or that the terms of such financing will be favourable. Failure to obtain such additional financing could result in the delay or indefinite postponement of further exploration, advancement and growth of the PLS Property.

### **No History of Mineral Production or Mining Operations**

Fission has never had a uranium producing property. There is no assurance that commercial quantities of uranium will be discovered nor is there any assurance that Fission's exploration programs will yield positive results. Even if commercial quantities of uranium are discovered, there can be no assurance that the PLS Property will ever be brought to a stage where uranium resources can profitably be produced therefrom. Factors which may limit the ability to produce uranium resources include, but are not limited to, the spot price of uranium, availability of additional capital and financing and the nature of any mineral deposits. Fission does not have a history of mining operations that would guarantee it will produce revenue, operate profitably or provide a return on investment in the future. Fission has not paid dividends in the past and Fission does not have any plans to pay dividends in the foreseeable future.

## **Imprecision of Mineral Resource Estimates**

Mineral resource figures are estimates, and no assurances can be given that the estimated levels of uranium will be produced or that Fission will receive the prices assumed in determining its mineral resources. Such estimates are expressions of judgment based on knowledge, mining experience, analysis of drilling results and industry practices. Valid estimates made at a given time may significantly change when new information becomes available. While Fission believes that the mineral resource estimates included are well established and reflect management's best estimates, by their nature, mineral resource estimates are imprecise and depend, to a certain extent, upon statistical inferences which may ultimately prove unreliable. Furthermore, market price fluctuations, as well as increased capital or production costs or reduced recovery rates, may render mineral resources containing lower grades of

mineralization uneconomic and may ultimately result in a restatement of mineral resources. The evaluation of mineral resources is always influenced by economic and technological factors, which may change over time.

## **Preliminary Economic Assessments**

Preliminary economic assessments are considered to be preliminary in nature. They include inferred mineral resources that are considered too speculative to have the economic considerations applied that would enable their classification as mineral reserves. There is no certainty that the conclusions within a preliminary economic assessment will be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

### **Economics of Developing Mineral Properties**

Mineral exploration and development is speculative and involves a high degree of risk. While the discovery of a mineral deposit may result in substantial rewards, few properties which are explored are commercially mineable and ultimately developed into producing mines. There is no assurance that Fission's uranium deposits are commercially mineable.

Should any mineral resources and reserves exist, substantial expenditures will be required to confirm mineral reserves which are sufficient to commercially mine and to obtain the required environmental approvals and permitting required to commence commercial operations. The decision as to whether a property contains a commercial mineral deposit and should be brought into production will depend upon the results of exploration programs and/or feasibility studies, and the recommendations of duly qualified engineers and/or geologists, all of which involves significant expense. This decision will involve consideration and evaluation of several significant factors including, but not limited to: (1) costs of bringing a property into production, including exploration and development work, preparation of production feasibility studies and construction of production facilities; (2) availability and costs of financing; (3) ongoing costs of production; (4) uranium prices, which are historically cyclical; (5) environmental compliance regulations and restraints (including potential environmental liabilities associated with historical exploration activities); and (6) political climate and/or governmental regulation and control. Development projects are also subject to the successful completion of engineering studies, issuance of necessary governmental permits, and availability of adequate financing. Development projects have no operating history upon which to base estimates of future cash flow.

The ability to sell and profit from the sale of any eventual mineral production from the PLS Property will be subject to the prevailing conditions in the minerals marketplace at the time of sale. The global minerals marketplace is subject to global economic activity and changing attitudes of consumers and other end-users' demand for mineral products. Many of these factors are beyond the control of a mining company and therefore represent a market risk which could impact the long term viability of Fission and its operations.

### **Factors Beyond the Control of Fission**

The potential profitability of the PLS Property is dependent upon many factors beyond Fission's control. For instance, world prices of and markets for minerals are unpredictable, highly volatile, potentially subject to governmental fixing, pegging and/or controls and respond to changes in domestic, international, political, social and economic environments. Another factor is that rates of recovery of minerals from mined ore (assuming that such mineral deposits are known to exist) may vary from the rate experienced in tests and a reduction in the recovery rate will adversely affect profitability and, possibly, the economic viability of a property. Profitability also depends on the costs of operations, including costs of labour, equipment, electricity, environmental compliance or other production inputs. Such costs will fluctuate in ways Fission cannot predict and are beyond Fission's control, and such fluctuations will impact profitability and may eliminate profitability altogether. Additionally, due to worldwide economic uncertainty, the availability and cost of funds for advancing mineral projects and other costs have become increasingly difficult, if not impossible, to project. These changes and events may materially affect the financial performance of Fission.

Fission's potential future revenues will be directly related to the prices of uranium as its potential revenues are expected to be derived from uranium mining. Uranium prices are and will continue to be affected by numerous factors beyond Fission's control. Such factors include, among others, the demand for nuclear power; political and economic conditions in uranium producing and consuming countries such as Canada, the U.S., Russia and other former Soviet republics; reprocessing of used reactor fuel and the re-enrichment of depleted uranium tails; sales of excess civilian and military inventories (including inventories from the dismantling of nuclear weapons) by governments and industry participants; and production levels and costs of production in countries such as Russia and former Soviet republics, Africa and Australia. The effect of these factors, individually or in the aggregate, is impossible to predict with accuracy. A decline in uranium prices may also require Fission to write-down its mineral resources at the PLS Property, which would have a material adverse effect on its potential earnings and potential profitability.

## **Competition in the Mineral Industry**

The mineral industry is competitive in all of its phases. The Company competes with other companies, some of which have greater financial and other resources than the Company and, as a result, may be in a better position to compete for future business opportunities. The Company competes with other exploration and mining companies for the acquisition of mineral interests as well as for the recruitment and retention of qualified employees and other personnel. There can be no assurance that the Company can compete effectively with these companies.

# **No Dividend History**

Other than the distribution of common shares of Fission 3.0 to Fission Shareholders in connection with the Fission 3.0 Arrangement, no dividends on the Common Shares have been paid by Fission to date. Fission anticipates that for the foreseeable future it will retain future earnings and other cash resources for the operation and development of its business. Payment of any future dividends will be at the discretion of the Fission Board after taking into account many factors, including Fission's financial condition and current and anticipated cash needs.

## **Regulatory Requirements**

The current or future operations of Fission, including advancement activities and possible commencement of production on the PLS Property, requires permits from various federal and local governmental authorities, and such operations are and will be governed by laws and regulations governing prospecting, development, mining, production, taxes, labour standards, occupational health, waste disposal, toxic substances, land use, environmental protection, mine safety and other matters. Companies engaged in the development, advancement and operation of mines and related facilities generally experience increased costs and delays in production and other schedules as a result of the need to comply with the applicable laws, regulations and permits. There can be no assurance that all permits which Fission may require for the development and construction of mining facilities and conduct of mining operations will be obtainable on reasonable terms or that such laws and regulations would not have an adverse effect on any mining project which Fission might undertake.

Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions including orders issued by regulatory or judicial authorities causing operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment or remedial actions. Companies engaged in mining operations may be required to compensate those suffering loss or damage by reason of the mining activities and may have civil or criminal fines or penalties imposed upon them for violation of applicable laws or regulations.

Amendments or changes to current laws, regulations government policies and permits governing operations and activities of mining companies, or more stringent implementation thereof, could have a material adverse impact on Fission and cause increases in costs or require abandonment or delays in the advancement and growth of the PLS Property.

Worldwide demand for uranium is directly tied to the demand for electricity produced by the nuclear power industry, which is also subject to extensive government regulation and policies. The development of mines and

related facilities is contingent upon governmental approvals that are complex and time consuming to obtain and which, depending upon the location of the project, involve multiple governmental agencies. The duration and success of such approvals are subject to many variables outside Fission's control. Any significant delays in obtaining or renewing such permits or licenses in the future could have a material adverse effect on Fission. In addition, the international marketing of uranium is subject to governmental policies and certain trade restrictions, such as those imposed by the suspension agreements entered into by Canada with certain republics of the former Soviet Union. Changes in these policies and restrictions may adversely impact Fission's business.

### **Insurance**

Fission's business is capital intensive and subject to a number of risks and hazards, including environmental pollution, accidents or spills, industrial and transportation accidents, labour disputes, changes in the regulatory environment, natural phenomena (such as inclement weather conditions, earthquakes, pit wall failures and cave-ins) and encountering unusual or unexpected geological conditions. Many of the foregoing risks and hazards could result in damage to, or destruction of, the PLS Property or any future processing facilities, personal injury or death, environmental damage, delays in or interruption of or cessation of its exploration or advancement activities, delay in or inability to receive regulatory approvals to transport its uranium concentrates, or costs, monetary losses and potential legal liability and adverse governmental action. Fission may be subject to liability or sustain loss for certain risks and hazards against which it does not or cannot insure or which it may reasonably elect not to insure because of the cost. This lack of insurance coverage could result in material economic harm to Fission.

## **Uranium Industry Competition and International Trade Restrictions**

The international uranium industry, including the supply of uranium concentrates, is competitive, with supplies available from a relatively small number of western world uranium mining companies, from certain republics of the former Soviet Union and the People's Republic of China, from excess inventories, including inventories made available from decommissioning of nuclear weapons, from reprocessed uranium and plutonium, from used reactor fuel, and from the use of excess Russian enrichment capacity to re-enrich depleted uranium tails held by European enrichers in the form of UF6. The supply of uranium from Russia and from certain republics of the former Soviet Union is, to some extent, impeded by a number of international trade agreements and policies. These agreements and any similar future agreements, governmental policies or trade restrictions are beyond the control of Fission and may affect the supply of uranium available in the United States and Europe, which are the largest markets for uranium in the world. If Fission is unable to supply uranium to important markets in the U.S. or Europe, its business, financial condition and results of operations may be materially adversely affected.

## **Deregulation of the Electrical Utility Industry**

Fission's future prospects may be tied directly to those of the electrical utility industry worldwide. Deregulation of the utility industry, particularly in North America and Europe, is expected to impact the market for nuclear and other fuels for years to come, and may result in the premature shutdown of nuclear reactors. Experience to date with deregulation indicates that utilities are improving the performance of their reactors and achieving record capacity factors. There can be no assurance that this trend will continue.

## Public Acceptance of Nuclear Energy Cannot Be Assured

Growth in the demand for uranium and in the nuclear power industry will depend upon continued and increased acceptance of nuclear technology by the public as a safe and viable means of generating electricity. Growth of the uranium and nuclear power industry will also depend on continued and increased acceptance of nuclear technology as a means of generating electricity. Because of unique political, technological and environmental factors that affect the nuclear industry, the industry is subject to public opinion risks which could have an adverse impact on the demand for nuclear power and increase the regulation of the nuclear power industry. An accident or incident at a nuclear reactor anywhere in the world, or an accident or incident relating to the transportation or storage of new or spent nuclear fuel, could negatively impact the public's acceptance of nuclear power and the future prospects for nuclear power generation, which may have a material and adverse effect on Fission's business, financial condition and results of operations.

The March 2011 natural disaster in Japan, with the resultant effect on certain of the country's nuclear reactors, has caused concern internationally as to the safety of nuclear energy as an available source of power. Further, a number of heads of government and their legislative bodies have announced reviews and/or delays of plans to develop new nuclear power facilities. In the United States, the Chairman of the Nuclear Regulatory Commission ("NRC") has publicly stated that a more stringent review of design risks will be undertaken for both existing facilities and future applications for new nuclear power facilities. The additional scrutiny by the NRC could affect all parts of the organization including the licensing of new uranium production facilities. Other relevant regulatory bodies could also react to these recent events, resulting in additional delays or barriers in permitting and licensing new uranium production operations. It is too soon for Fission to determine the long-term impact such events will have on Fission's financial condition, results of operations and permitting plans.

## **Nuclear Energy Competes With Other Viable Energy Sources**

Nuclear energy competes with other sources of energy, including oil, natural gas, coal and hydro-electricity. These other sources are to some extent interchangeable with nuclear energy, particularly over the longer term. Sustained lower prices of oil, natural gas, coal and hydro-electricity may result in lower demand for uranium concentrates and uranium conversion services, which in turn may result in lower market prices for uranium, which would materially and adversely affect Fission's business, financial condition and results of operations.

### **Environmental Risks and Hazards**

All phases of Fission's operations are subject to environmental regulation in the jurisdictions in which it operates. These regulations mandate, among other things, the maintenance of air and water quality standards and land reclamation. They also set forth limitations on the transportation, storage and disposal of solid and hazardous waste. Environmental legislation is evolving in a manner which will require stricter standards and enforcement, increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and a heightened degree of responsibility for companies and their officers, directors and employees. There is no assurance that future changes in environmental regulation, if any, will not adversely affect Fission's operations. Environmental hazards may exist on the PLS Property which are unknown to Fission at present and which have been caused by previous owners or operators of the PLS Property. Reclamation costs are uncertain and planned expenditures estimated by management may differ from the actual expenditures required.

Fission is not insured against most environmental risks. Insurance against environmental risks (including potential liability for pollution and other hazards as a result of the disposal of waste products occurring from exploration and production) has not been generally available to companies within the industry. Fission will periodically evaluate the cost and coverage of the insurance against certain environmental risks that is available to determine if it would be appropriate to obtain such insurance.

Without such insurance, and if Fission becomes subject to environmental liabilities, the payment of such liabilities would reduce or eliminate its available funds or could exceed the funds Fission has to pay such liabilities and result in bankruptcy. Should Fission be unable to fund fully the remedial cost of an environmental problem, Fission might be required to enter into interim compliance measures pending completion of the required remedy.

## **Litigation Risk**

All industries, including the mining industry, are subject to legal claims, with and without merit. Defence and settlement costs can be substantial, even with respect to claims that have no merit. Due to the inherent uncertainty of litigation process, the resolution of any particular legal proceeding could have a material adverse effect on Fission's financial position and results of operations.

### **Political Risk**

Fission's future prospects may be affected by political decisions about the uranium market. There can be no assurance that the Canadian or other governments will not enact legislation restricting to whom Fission can sell

uranium or that the Canadian or other governments will not increase the supply of uranium by decommissioning nuclear weapons.

#### **Costs of Land Reclamation Risk**

It is difficult to determine the exact amounts which will be required to complete all land reclamation activities in connection with the PLS Property. Reclamation bonds and other forms of financial assurance represent only a portion of the total amount of money that will be spent on reclamation activities over the life of a mine. Accordingly, it may be necessary to revise planned expenditures and operating plans in order to fund reclamation activities. Such costs may have a material adverse impact upon the financial condition and results of operations of Fission.

## No Assurance of Title to Property

There may be challenges to title to the PLS Property. If there are title defects with respect to the PLS Property, Fission might be required to compensate other persons or perhaps reduce its interest in the PLS Property. Also, in any such case, the investigation and resolution of title issues would divert management's time from ongoing exploration and advancement programs at the PLS Property.

## **Dependence on Key Personnel**

Fission is dependent on a relatively small number of key personnel, particularly Ross McElroy, its President and Chief Operating Officer, and Devinder Randhawa, its Chief Executive Officer, the loss of any one of whom could have an adverse effect on Fission. At this time, Fission does not maintain key-person insurance on the lives of any of its key personnel. In addition, while certain of Fission's officers and directors have experience in the exploration of mineral producing properties, Fission will remain highly dependent upon contractors and third parties in the performance of its exploration and advancement activities at the PLS Property. There can be no guarantee that such contractors and third parties will be available to carry out such activities on behalf of Fission or be available upon commercially acceptable terms.

### Risk of Amendments to Laws

Amendments to current laws, regulations and permits governing operations and activities of mining companies, or more stringent implementation thereof, could have a material adverse impact on Fission and cause increases in capital expenditures or production costs or require abandonment or delays in the advancement and growth of the PLS Property.

### **Conflicts of Interest**

Some of the directors and officers of Fission are directors and officers of other companies, including Fission 3.0, which is active in the Athabasca Basin region of Saskatchewan, Canada. Some of Fission's directors and officers may continue to pursue the acquisition, exploration and, if warranted, the development of mineral resource properties on their own behalf and on behalf of other companies, some of which are in the same business as Fission, and situations may arise where such companies will be in direct competition with Fission. Fission's directors and officers are required by law to act in the best interests of Fission. They may have the same obligations to the other companies in respect of which they act as directors and officers. Discharge of their obligations to Fission may result in a breach of their obligations to the other companies and, in certain circumstances, this could expose Fission to liability to those companies. Similarly, discharge by the directors and officers of their obligations to the other companies could result in a breach of their obligation to act in the best interests of Fission. Such conflicting legal obligations may expose Fission to liability to others and impair its ability to achieve its business objectives.

## **Influence of Third Party Stakeholders**

The lands in which Fission holds an interest in at the PLS Property, or the exploration equipment and roads or other means of access which Fission intends to utilize in carrying out its work programs or general business mandates, may be subject to interests or claims by third party individuals, groups or companies. In the event that such third

parties assert any claims, Fission's work programs may be delayed, even if such claims are not meritorious. Such delays may result in significant financial loss and loss of opportunity for Fission.

### Fluctuation in Market Value of Common Shares

The market price of the Common Shares, as publicly traded shares, can be affected by many variables not directly related to the corporate performance of Fission, including the market in which it is traded, the strength of the economy generally, the availability and attractiveness of alternative investments, and the breadth of the public market for the stock. The effect of these and other factors on the market price of Common Shares in the future cannot be predicted. The lack of an active public market could have a material adverse effect on the price of Common Shares.

### **DIVIDENDS**

Other than the distribution of common shares of Fission 3.0 to Fission Shareholders in connection with the Fission 3.0 Arrangement, the Company has not, since the date of its incorporation, declared or paid any cash dividends on its Common Shares and does not currently have a policy with respect to the payment of dividends. For the immediate future Fission does not envisage any earnings arising from which dividends could be paid. The payment of dividends in the future will depend on the earnings, if any, and the Company's financial condition and such other factors as the Fission Board considers appropriate.

## DESCRIPTION OF CAPITAL STRUCTURE

#### Common Shares

The Company is authorized to issue an unlimited number of Common Shares. The holders of the Common Shares are entitled to one vote per share at meetings of shareholders, to receive dividends if, as and when declared by the Fission Board (subject to the rights of securities, if any, having priority over the Common Shares) and to receive *pro rata* the remaining property and assets of the Company upon its dissolution or winding-up (subject to the rights of securities, if any, having priority over the Common Shares).

As of the date of this AIF, there were 484,024,661 Common Shares issued and outstanding. The Common Shares are listed on the TSX under the symbol "FCU", on the OTCQX marketplace in the U.S. under the symbol "FCUUF" and on the Frankfurt Stock Exchange under the symbol "2FU".

## **Options**

As of the date of this AIF, there were 39,083,333 Options outstanding with a weighted average exercise price of \$1.0540 and expiry dates ranging from January 12, 2017 to February 5, 2021.

The Options are governed by the Fission Option Plan and each vested Option is exercisable for one Common Share upon the payment of the exercise price. A copy of the Fission Option Plan is available for review at the offices of the Company or the registered offices of the Company, at Suite 700 – 595 Howe Street, Vancouver, BC, V6C 2T5.

## MARKET FOR SECURITIES

#### Market

The Company's Common Shares are listed on the TSX under the symbol "FCU", on the OTCQX marketplace in the U.S. under the symbol "FCUUF" and on the Frankfurt Stock Exchange under the symbol "2FU".

## **Trading Price and Volume**

The following table shows the high and low trading prices and monthly trading volume of the Common Shares on the TSX for the periods indicated:

Date	High (\$)	Low(\$)	Volume
June, 2016	\$0.77	\$0.62	17,403,512
May, 2016	\$0.70	\$0.60	11,221,709
April, 2016	\$0.80	\$0.64	15,772,869
March, 2016	\$0.76	\$0.62	21,480,316
February, 2016	\$0.75	\$0.60	14,691,673
January, 2016	\$0.82	\$0.58	16,182,151
December, 2015	\$0.82	\$0.53	23,275,783
November, 2015	\$0.63	\$0.54	11,439,250
October, 2015	\$0.76	\$0.59	15,754,824
September, 2015	\$0.83	\$0.57	11,180,640
August, 2015	\$0.86	\$0.66	11,078,571
July, 2015	\$1.10	\$0.67	35,891,797

## **Prior Sales**

The following table summarizes the Options that were issued by the Company during the most recently completed financial year but not listed or quoted on a marketplace:

Date	Type of Security	Reason for Issuance	Number of Securities	Price or Exercise Price per Security
February 5, 2016	Options	Stock Option Grant	16,350,000	\$0.85

## **DIRECTORS AND OFFICERS**

The following table sets forth the name, province or state and country of residence and office held by each of our executive officers and directors as of the date of this AIF. Each director is elected at the annual meeting of shareholders or appointed pursuant to the provisions of our by-laws and applicable law to serve until the next annual meeting or until a successor is elected or appointed, subject to earlier resignation by the director.

Name, Office Held and Province/State and Country of Residence	Date Appointed	Principal Occupation for Preceding Five Years <sup>(1)</sup>
Devinder Randhawa British Columbia, Canada	February 13, 2013	Mr. Randhawa is the Chairman and CEO of Fission and President of RD Capital Inc., a privately held consulting
Director, Chairman and CEO		firm providing venture capital and corporate finance services to emerging companies in the resources and non-resource sectors both in Canada and the U.S. Prior to the completion of the 2013 Denison Arrangement, Mr. Randhawa was the Chairman and CEO of Fission Energy. Mr. Randhawa received an Honours Bachelor of Business Administration degree from Trinity Western College in Langley, British Columbia and an MBA from the University of British Columbia.

Name, Office Held and Province/State and Country of Residence	Date Appointed	Principal Occupation for Preceding Five Years <sup>(1)</sup>
Ross McElroy <sup>(5)</sup> British Columbia, Canada Director, President and COO	February 13, 2013	Mr. McElroy is the President and COO of Fission and a professional geologist with nearly 30 years of experience in the mining industry. Prior to the completion of the 2013 Denison Arrangement, Mr. McElroy was the President and COO of Fission Energy. Mr. McElroy has comprehensive experience with working and managing many types of mineral projects from grass roots exploration to feasibility and production and has held positions with both major and junior mining companies which include BHP Billiton, Cogema Canada (now AREVA) and Cameco. He was a member of the early stage discovery team of the MacArthur River uranium deposit. Mr. McElroy received a Bachelor of Science (B.Sc.) degree with a specialization in Geology from the University of Alberta and is a registered professional geologist in Alberta, Saskatchewan and Nunavut/Northwest Territories.
William Marsh <sup>(2)(3)(4)</sup> British Columbia, Canada Director	May 31, 2013	Mr. Marsh previously worked on domestic and international drilling programs for Chevron for 15 years both in Canada and internationally. Mr. Marsh was a former director of Pacific Asia China Energy until its sale to Green Dragon Gas wholly owned subsidiary, Greka China Ltd, for \$35.18 million in 2008. He was also a former director of Predator Capital Corp., Wolf Capital Corp. and Ballyliffin Capital Corp. Mr. Marsh has also provided consulting services to a number of resource exploration and production companies, both public and private, operating in Canada and internationally.
Jeremy Ross <sup>(5)</sup> British Columbia, Canada Director	August 7, 2014	Mr. Ross is a corporate development consultant with over 20 years experience in venture capital and marketing for small cap to mid-tier mining, oil and gas companies. He was previously a director of the Company from June 2013 to December 2013. Mr. Ross planned and implemented numerous marketing campaigns and headed up several successful programs for Fission Energy, named a Top 50 TSX-V company for its performance, prior to the completion of the 2013 Denison Arrangement. In addition, Mr. Ross ran a number of corporate development campaigns for Canamax Energy (TSX-V) (CAC), which sold to private equity group "Edge Natural Resources LLC" in 2015. He also headed up corporate development for Able Auctions and Smart Tire systems, both of which graduated from the OTC Bulletin Board (OTC-BB) to the Amex stock exchange

(NYSE).

Name, Office Held and Province/State and	Data Assault de la	D
Frank Estergaard <sup>(2)(3)(4)</sup> British Columbia, Canada Director	Pebruary 7, 2014	Principal Occupation for Preceding Five Years (1)  Mr. Estergaard is a Chartered Professional Accountant (CPA, CA). Mr. Estergaard served as a partner of KPMG for 38 years, providing audit, taxation and business advice to a wide range of clients as well as serving on KPMG's Management Committee and Partnership Board. Since retiring from KPMG, Mr. Estergaard has served as a director and chairman of the audit committee of QHR Technologies Inc. (TSX-V), CFO for Metalex Ventures Ltd. (TSX-V) and CFO and/or director for several private companies, including Rackforce Networks Inc. Prior to Denison's acquisition of Fission Energy, Mr. Estergaard was a director and chair of the audit committee of Fission Energy, and he is currently a director and chair of the audit committee for Fission 3.0. Mr. Estergaard also provides financial consulting services through Frannan Enterprises Ltd., of which he is President.
Anthony Milewski <sup>(2)(3)(4)(5)</sup> New York, USA Director	August 29, 2014	Mr. Milewski is an expert on uranium industry supply and demand dynamics, has considerable experience in paper and physical uranium trading and is a frequent speaker at industry conferences. He has also managed numerous mining investments at various stages of development, including exploration, development and production and has served as a director of both public and private companies. Prior to founding Black Vulcan Resources, Mr. Milewski worked at Firebird Management, a specialist emerging market fund, where he focused on natural resource investments in Africa, Central Asia and the Former Soviet Union.
Raffi Babikian <sup>(3)(5)</sup> Quebec, Canada Director	December 15, 2015	Mr. Babikian is a corporate finance and marketing advisor to global uranium mining companies. He was previously Vice-President, Investment Banking at Dundee Securities, where he was responsible for the firm's uranium mining practice. Mr. Babikian began his professional career at AREVA SA, the world's leading nuclear fuel cycle company, at the company's headquarters in Paris, France. His first responsibilities there involved evaluating growth opportunities for the company's reprocessing/recycling business. He subsequently joined Areva's Uranium Mining Business unit, working to identify, evaluate and implement merger and acquisition opportunities and associated marketing strategies. Mr. Babikian has a Bachelor of Engineering from McGill University, a MSc. from MIT, and an MBA from the Collège des Ingénieurs in Paris.

Name, Office Held and Province/State and	Data American	Purincipal Comment on four Provident Company (1)
Country of Residence  Jianhua Xing  Beijing, China  Director	Date Appointed January 26, 2016	Principal Occupation for Preceding Five Years (1)  Mr. Xing has 18 years of experience in corporate finance within the mining industry. He started his professional career at Jiangxi Yinggangling Mine in 1995. He now serves as the Senior Vice President and CFO of CGN Mining. The principal business of CGN Mining at present is development and trading of natural uranium resources for use by nuclear energy companies. Prior to his current role, Mr. Xing used to be the General Manager of CGN's Finance Department, General Manager of China Putian Information Industry Corporation's Finance Department and Head of Finance for Changsha Research Institute of Mining and Metallurgy. Mr. Xing holds a B.E. from Hutan Mining Institute, a Master of Accountancy and an MBA from Wuhan University of Technology. And he is a Certified Public Accountant of the Chinese Institute of Certified Public Accountants.
Shiming Ma Beijing, China Director	January 26, 2016	Mr. Ma is the director in charge of overseas M&A for CGN Mining. The principal business of CGN Mining at present is development and trading of natural uranium resources for use by nuclear energy companies. He started his professional career at PricewaterhouseCoopers as an auditor in the energy group. His clients included energy giants such as China Coal, China Datang Corporation and China Huaneng Power International Inc. He subsequently joined CGN Uranium Resources Co., Ltd., the mother company of CGN Mining in 2010. His role was to secure the nuclear fuel supply for CGN's growing nuclear fleet. He has procured more than 80 million pounds of natural uranium concentrates from Cameco, Areva, Paladin, Kazatomprom, Nukem and others. During this time he accumulated a wealth of experience in natural uranium concentrate trading. Mr. Ma holds a Bachelor of Economics and a MEcons. from Renmin University of China.
Paul Charlish  British Columbia, Canada  CFO and Corporate  Secretary	January 26, 2015	Mr. Charlish is the CFO and Corporate Secretary of Fission with over nearly 30 years of finance experience, including audit and tax in public practice, and financial reporting and tax for public companies. Mr. Charlish specializes in the mining sector and is well versed in the requirements of complex regulatory environments. Mr. Charlish has extensive knowledge in the areas of financial reporting in accordance with IFRS, risk management, international tax, ICFR/SOX and internal controls, as well as experience in public equity offerings in Canada. During the course of his career, Mr. Charlish has also played an instrumental role in a number of mergers, acquisitions, spin outs and divestments for mining companies, including Fission Energy and Fission. Mr. Charlish is also the CFO of Fission 3.0. Prior to the completion of the 2013 Denison Arrangement, Mr. Charlish was the VP Finance of Fission Energy.

#### Notes:

- (1) The information as to principal occupation, business or employment and shares beneficially owned or controlled is not within the knowledge of the management of the Company and has been furnished by the respective directors and officers. Unless otherwise stated above, any directors and/or officers named above have held the principal occupation or employment indicated for at least five years. This information is current to the date of this AIF.
- (2) Member of the Audit Committee.
- (3) Member of the Corporate Governance and Nominating Committee.
- (4) Member of the Compensation Committee.
- (5) Member of the Disclosure Committee.

As a group, the directors and executive officers of Fission beneficially own, or control or direct, 7,086,852 Common Shares or 1.46% of the issued and outstanding Common Shares.

### **Cease Trade Orders**

No director or executive officer of Fission is, at the date of this AIF, or within ten years before the date of this AIF, has been a director, chief executive officer or chief financial officer of any company (including Fission) that, while that person was acting in the capacity as director, chief executive officer or chief financial officer, or which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer, was subject to a cease trade or similar order, or an order that denied the relevant company access to any exemption under securities legislation that was in effect for a period of more than 30 consecutive days.

The foregoing, not being within the knowledge of the Company, has been furnished by the respective directors, executive officers and shareholders holding a sufficient number of securities of the Company to affect materially control of the Company.

#### **Penalties or Sanctions**

No director or executive officer of Fission, or a shareholder holding a sufficient number of securities of Fission to affect materially the control of Fission, has

- (a) been subject to any 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
- (b) been subject to 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 Fission.

The foregoing, not being within the knowledge of the Company, has been furnished by the respective directors, executive officers and shareholders holding a sufficient number of securities of the Company to affect materially control of the Company.

## Bankruptcies

No director or executive officer of Fission or a shareholder holding a sufficient number of securities of Fission to affect materially the control of Fission:

(a) is, as the date of the AIF, or has been within 10 years before the date of the AIF, a director or executive officer of any company (including Fission) that, while that person was acting in that capacity, or within a year of that person ceasing to act 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 its assets, state the fact; or (b) has within the 10 years before the date of this AIF, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or been 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 the director, executive officer or shareholder.

The foregoing, not being within the knowledge of the Company, has been furnished by the respective directors, executive officers and shareholders holding a sufficient number of securities of the Company to affect materially control of the Company.

### **Conflicts of Interest**

To the knowledge of Fission, and other than as disclosed herein, there are no known existing or potential material conflicts of interest among Fission, its directors and officers and any director or officer of Fission, or other members of management as a result of their outside business interests, except that certain of the directors or officers may serve as directors and officers of other companies, and therefore it is possible that a conflict may arise between their duties to Fission and their duties as a director or officer of such other companies. See "Risk Factors – Conflicts of Interest".

The directors of Fission are required by law to act honestly and in good faith with a view to the best interests of Fission and to disclose any interests that they may have in any material contract or material transaction. If a conflict of interest arises at a meeting of the board of directors of the Company, any director in a conflict is required to disclose his or her interest and abstain from voting on such matter. The directors and officers of Fission are aware of the existence of laws governing accountability of directors and officers for corporate opportunity and requiring disclosures by directors of conflicts of interest in respect of Fission and are required to comply with such laws in respect of any directors' and officers' conflicts of interest or in respect of any breaches of duty by any of its directors or officers.

## LEGAL PROCEEDINGS AND REGULATORY ACTIONS

To the best of the Company's knowledge, there are no material legal proceedings by or against the Company or the PLS Property or affecting any of its interests during the most recent fiscal year of the Company and as of the date of this AIF, nor is the Company aware that any such proceedings are contemplated.

Furthermore, there are no (a) penalties or sanctions imposed against the Company by a court relating to securities legislation or by a securities regulatory authority during its most recently completed financial year; (b) other penalties or sanctions imposed by a court or regulatory body against the Company that would likely be considered important to a reasonable investor in making an investment decision in the Company; or (c) settlement agreements the Company entered into before a court relating to securities legislation or with a securities regulatory authority during its most recently completed financial year.

#### **PROMOTERS**

No person has acted as a promoter of the Company between the Company's incorporation on February 13, 2013 and the end of the last financial year on June 30, 2016 or during the current financial year.

## INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Other than the Private Placement with CGN Mining described under the heading "Description and General Development of the Business – Year Ended June 30, 2016" or as otherwise disclosed in this AIF, and other than transactions carried out in the ordinary course of business of the Company or any of its subsidiaries, none of the directors or executive officers of the Company, any shareholder directly or indirectly beneficially owning, or exercising control or direction over, shares carrying more than 10% of the voting rights attached to the shares of the Company, nor an associate or affiliate of any of the foregoing persons has had, from incorporation of the Company on February 13, 2013 to the date of this AIF, any material interest, direct or indirect, in any transactions that materially affected or is reasonably expected to materially affect the Company or any of its subsidiaries.

## TRANSFER AGENT AND REGISTRAR

The Company's registrar and transfer agent is Computershare Trust Company of Canada with offices located at 100 University Avenue, 9th Floor, Toronto, Ontario, M5J 2Y1.

### MATERIAL CONTRACTS

The following is a summary of each material contract, other than contracts entered into in the ordinary course of Fission's business, that was entered into in the financial year ending June 30, 2016, or up to the date of this AIF, that is still in effect:

- 1. Underwriting Agreement dated September 23, 2014, between Fission, Dundee, BMO Nesbitt Burns Inc., Raymond James Ltd., Macquarie Capital Markets Canada Ltd. and Cantor Fitzgerald Canada Corporation in connection with the Flow-Through Offering.
- 2. Underwriting Agreement dated April 8, 2015, between Fission, Dundee, BMO Nesbitt Burns Inc., Macquarie Capital Markets Canada Ltd., Raymond James Ltd. and TD Securities Inc. in connection with the Prospectus Flow-Through Offering.
- 3. Binding Letter Agreement dated July 6, 2015, between Fission and Denison in connection with the 2015 Denison Arrangement;
- 4. Arrangement Agreement dated July 27, 2015, between Fission, Denison and 9373721 Canada Inc. in connection with the 2015 Denison Arrangement.
- 5. Subscription Agreement dated January 11, 2016, between Fission and CGN Mining in connection with the Private Placement.

## INTEREST OF EXPERTS

The disclosure with respect to the PLS Property contained in this AIF is based on the PLS Property Technical Report prepared by Jason J. Cox, P.Eng., of RPA, David A. Ross, M.Sc., P.Geo., of RPA, David M. Robson, P.Eng., MBA, of RPA, Volodymyr Liskovych, P.Eng., Ph.D.. of DRA, and Mark Wittrup, P.Eng., P.Geo. of Clifton Associates (formerly of Arcadis). To the best of the Company's knowledge, neither the qualified persons referenced above, nor any director, officer, employee or partner of such qualified persons, RPA, Arcadis or DRA, as applicable, has received or will receive a direct or indirect interest in the property of the Company or of any associate or affiliate of the Company. As at the date hereof, the aforementioned persons, and the directors, officers, employees and partners, as applicable, of the aforementioned company beneficially own, directly or indirectly, in the aggregate, less than one percent of the securities of the Company.

The auditor for the Company is currently PricewaterhouseCoopers LLP, Chartered Professional Accountants of Vancouver, British Columbia. PricewaterhouseCoopers LLP has advised the Company that it is independent within the meaning of the Rules of Professional Conduct of the Chartered Professional Accountants of British Columbia.

# ADDITIONAL INFORMATION

Additional information on the Company may be found on SEDAR at www.sedar.com. Additional information, including directors' and officers' remuneration and indebtedness to the Company, principal holders of the securities of the Company and securities authorized for issuance under equity compensation plans, is contained in the Company's management information circular for its most recent annual general meeting, which is available on SEDAR. Additional financial information is provided in the Company's audited annual financial statements, the notes thereto, the report of the external auditors and the MD&A for the year ended June 30, 2016, all of which are available on SEDAR.

## AUDIT COMMITTEE

Pursuant to the provisions of NI 52-110, reporting issuers are required to provide disclosure with respect to its audit committee including the text of the audit committee's mandate, composition of the committee, and the fees paid to the external auditor. Accordingly, the Company provides the following disclosure with respect to its Audit Committee.

## **Composition of the Audit Committee**

As of the date of this AIF, the Company's Audit Committee is comprised of Frank Estergaard (Chair), William Marsh and Anthony Milewski. As defined in NI 52-110, all of the Audit Committee members are "independent". Also as defined in NI 52-110, all of the Audit Committee members are "financially literate", meaning that they have the ability to read and understand financial statements of the Company.

## **Relevant Education and Experience**

All of the Audit Committee members are experienced businessmen with experience in financial matters; each has a broad understanding of accounting principles used to prepare financial statements and varied experience as to general application of such accounting principles, as well as the internal controls and procedures necessary for financial reporting, garnered from working in their individual fields of endeavour. In addition, each of the members of the Fission Audit Committee has knowledge of the role of an audit committee in the realm of reporting companies. Set out below is a description of the education and experience of each member of the Fission Audit Committee that is relevant to the performance of her or his responsibilities as an audit committee member.

Mr. Frank Estergaard

Mr. Estergaard is a Chartered Professional Accountant (CPA, CA). Mr. Estergaard served as a partner of KPMG for 38 years, providing audit, taxation and business advice to a wide range of clients as well as serving on KPMG's Management Committee and Partnership Board. Since retiring from KPMG, Mr. Estergaard has served as a director and chairman of the audit committee of QHR Technologies Inc. (TSX-V), CFO for Metalex Ventures Ltd. (TSX-V) and CFO and/or director for several private companies, including Rackforce Networks Inc. Prior to Denison's acquisition of Fission Energy, Mr. Estergaard was a director and chair of the audit committee of Fission Energy, and he is currently a director and chair of the audit committee for Fission 3.0 and the Company. Mr. Estergaard also provides financial consulting services through Frannan Enterprises Ltd., of which he is President.

Mr. William Marsh

Mr. Marsh previously worked on domestic and international drilling programs for Chevron for 15 years both in Canada and internationally. Mr. Marsh was a former director of Pacific Asia China Energy until its sale to Green Dragon Gas wholly owned subsidiary, Greka China Ltd, for \$35.18 million in 2008. He was also a former director of Predator Capital Corp., Wolf Capital Corp. and Ballyliffin Capital Corp. Mr. Marsh has also provided consulting services to a number of resource exploration and production companies, both public and private, operating in Canada and internationally.

Mr. Anthony Milewski

Mr. Milewski holds a B.A. in Russian history from Brigham Young University, an M.A. in Russian and Central Asian Studies from the University of Washington, and a J.D. from the University of Washington. He holds an LLM in Corporate Finance from the Russian Academy of Sciences. He is an expert on uranium industry supply and demand dynamics, has considerable experience in paper and physical uranium trading and is a frequent speaker at industry conferences. He has also managed numerous mining investments at various stages of development, including exploration, development and production and has served as a director of both public and private companies. Prior to founding Black Vulcan Resources, Mr. Milewski worked at Firebird Management, a specialist emerging market fund, where he focused on natural resource investments in Africa, Central Asia and the Former Soviet Union.

# **Audit Committee Mandate**

The Company has adopted a Mandate of the Audit Committee of the Board of Directors, which is attached as Schedule "A" to this AIF.

## **Audit Committee Oversight**

During the most recently completed financial year, the Company's Board of Directors has not failed to adopt a recommendation of the audit committee to nominate or compensate an external auditor.

## **Pre-Approval Policies and Procedures**

Fission's Audit Committee Mandate requires that management seek approval from the Audit Committee of all non-audit services to be provided to Fission or any of its subsidiaries by Fission's external auditor, prior to engaging the external auditor to perform those non-audit services.

## **External Auditor Service Fees**

In the following table, "audit fees" are fees billed by the Company's external auditor in each of the last two fiscal years. "Audit-related fees" are fees not included in audit fees that are billed by the auditor for assurance and related services that are reasonably related to the performance of the audit or review of the Company's financial statements. "Tax fees" are fees billed by the auditor for professional services rendered for tax compliance, tax advice and tax planning. "All other fees" are fees billed by the auditor for products and services not included in the foregoing categories.

The fees paid by the Company to its auditor in each of the last two fiscal years are as follows:

Financial Period Ending	<b>Audit Fees</b>	<b>Audit Related Fees</b>	Tax Fees	<b>All Other Fees</b>
June 30, 2016	\$60,000	\$80,500	Nil	\$18,605
June 30, 2015	\$47,250	\$43,300	Nil	\$40,363

## **SCHEDULE A**

### FISSION URANIUM CORP.

### AUDIT COMMITTEE MANDATE

### 1. Introduction

The Audit Committee (the "Committee" or the "Audit Committee") of Fission Uranium Corp. ("Fission" or the "Corporation") is a committee of the Board of Directors (the "Board"). The Committee shall oversee the accounting and financial reporting practices of the Corporation and the audits of the Corporation's financial statements and exercise the responsibilities and duties set out in this Mandate.

## 2. Membership

## Number of Members

The Committee shall be composed of three or more members of the Board.

## Independence of Members

Whenever reasonably feasible, members of the Audit Committee should be independent and shall have no direct or indirect material relationship with the Corporation. If less than a majority of the Board are independent, then a majority of the members of the Audit Committee may be made of members that are not independent of the Corporation, provided that there is an exemption in the applicable securities law, rule, regulation, policy or instrument (if any). "Independent" shall have the meaning, as the context requires, given to it in National Instrument 52-110 *Audit Committees*, as may be amended from time to time, subject to any exemptions or relief that may be granted from such requirements.

### Chair

At the time of the annual appointment of the members of the Audit Committee, the Board shall appoint a Chair of the Audit Committee. The Chair shall be a member of the Audit Committee, preside over all Audit Committee meetings, coordinate the Audit Committee's compliance with this Mandate, work with management to develop the Audit Committee's annual work-plan and provide reports of the Audit Committee to the Board.

## Financial Literacy of Members

At the time of his or her appointment to the Committee, each member of the Committee shall have, or shall acquire within a reasonable time following appointment to the Committee, 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 the issues that can reasonably be expected to be raised by the Corporation's financial statements.

## Term of Members

The members of the Committee shall be appointed annually by the Board. Each member of the Committee shall serve at the pleasure of the Board until the member resigns, is removed, or ceases to be a member of the Board. Unless a Chair is elected by the Board, the members of the Committee may designate a Chair by majority vote of the full Committee membership.

## 3. Meetings

### Number of Meetings

The Committee may meet as many times per year as necessary to carry out its responsibilities.

### Quorum

No business may be transacted by the Committee at a meeting unless a quorum of the Committee is present. A majority of members of the Committee shall constitute a quorum.

## Calling of Meetings

The Chair, any member of the Audit Committee, the external auditors, the Chairman of the Board, Chief Executive Officer or the Chief Financial Officer may call a meeting of the Audit Committee by notifying the Corporation's Corporate Secretary who will notify the members of the Audit Committee. The Chair shall chair all Audit Committee meetings that he or she attends, and in the absence of the Chair, the members of the Audit Committee present may appoint a chair from their number for a meeting.

## Minutes; Reporting to the Board

The Committee shall maintain minutes or other records of meetings (including resolutions) and activities of the Committee in sufficient detail to convey the substance of all discussions held. Upon approval of the minutes by the Committee, the minutes shall be circulated to the members of the Board. However, the Chair may report orally to the Board on any matter in his or her view requiring the immediate attention of the Board.

## Attendance of Non-Members

The external auditors are entitled to attend and be heard at each Audit Committee meeting. In addition, the Committee may invite to a meeting any officers or employees of the Corporation, legal counsel, advisors and other persons whose attendance it considers necessary or desirable in order to carry out its responsibilities. At least once per year, the Committee shall meet with management to discuss any matters that the Committee or management considers appropriate.

# Meetings without Management

The Committee shall hold unscheduled or regularly scheduled meetings, or portions of meetings, at which management is not present.

#### Procedure

The procedures for calling, holding, conducting and adjourning meetings of the Committee shall be the same as those applicable to meetings of the Board.

### Access to Management

The Committee shall have unrestricted access to the Corporation's management and employees and the books and records of the Corporation.

### 4. Duties and Responsibilities

The Committee shall have the functions and responsibilities set out below as well as any other functions that are specifically delegated to the Committee by the Board and that the Board is authorized to delegate by applicable laws and regulations. In addition to these functions and responsibilities, the Committee shall perform the duties required of an audit committee by any exchange upon which securities of the Corporation are traded, or any governmental or regulatory body exercising authority over the Corporation, as are in effect from time to time (collectively, the "Applicable Requirements").

## Financial Reports

## (a) General

The Audit Committee is responsible for overseeing the Corporation's financial statements and financial disclosures. Management is responsible for the preparation, presentation and integrity of the Corporation's financial statements and financial disclosures and for the appropriateness of the accounting principles and the reporting policies used by the Corporation. The auditors are responsible for auditing the Corporation's annual consolidated financial statements and for reviewing the Corporation's unaudited interim financial statements.

## (b) Review of Annual Financial Reports

The Audit Committee shall review the annual consolidated audited financial statements of the Corporation, the auditors' report thereon and the related management's discussion and analysis of the Corporation's financial condition and results of operation ("MD&A"). After completing its review, if advisable, the Audit Committee shall approve and recommend for Board approval the annual financial statements and the related MD&A.

## (c) Review of Interim Financial Reports

The Audit Committee shall review the interim consolidated financial statements of the Corporation, and the related MD&A. After completing its review, if advisable, the Audit Committee shall approve and recommend for Board approval the interim financial statements and the related MD&A.

### (d) Review Considerations

In conducting its review of the annual financial statements or the interim financial statements, the Audit Committee shall:

- (i) meet with management and the auditors to discuss the financial statements and MD&A;
- (ii) review the disclosures in the financial statements;
- (iii) review the audit report prepared by the auditors;
- (iv) discuss with management and/or the auditors, as requested, any litigation claim or other contingency that could have a material effect on the financial statements;
- (v) review the accounting policies followed and critical accounting and other significant estimates and judgements underlying the financial statements as presented by management;
- (vi) review any material effects of regulatory accounting initiatives or off-balance sheet structures on the financial statements as presented by management, including requirements relating to complex or unusual transactions, significant changes to accounting principles and alternative treatments under Canadian GAAP;
- (vii) review any material changes in accounting policies and any significant changes in accounting practices and their impact on the financial statements as presented by management;
- (viii) review management's report on the effectiveness of internal controls over financial reporting;
- (ix) review the factors identified by management as factors that may affect future financial results; and
- (x) review any other matters, related to the financial statements, that are brought forward by the auditors, management or which are required to be communicated to the Audit Committee under accounting policies, auditing standards or Applicable Requirements.

## (e) Approval of Other Financial Disclosures

The Audit Committee shall review and, if advisable, approve and recommend for Board approval financial disclosure in a prospectus or other securities offering document of the Corporation, press releases disclosing, or based upon, financial results of the Corporation and any other material financial disclosure, including financial guidance provided to analysts, rating agencies or otherwise publicly disseminated.

#### Auditors

## (a) General

The Audit Committee shall be responsible for oversight of the work of the auditors, including the auditors' work in preparing or issuing an audit report, performing other audit, review or attest services or any other related work.

## (b) **Nomination and Compensation**

The Audit Committee shall review and, if advisable, select and recommend for Board approval the external auditors to be nominated and the compensation of such external auditor. The Audit Committee shall have ultimate authority to approve all audit engagement terms and fees, including the auditors' audit plan.

## (c) Resolution of Disagreements

The Audit Committee shall resolve any disagreements between management and the auditors as to financial reporting matters brought to its attention.

## (d) **Discussions with Auditors**

At least annually, the Audit Committee shall discuss with the auditors such matters as are required by applicable auditing standards to be discussed by the auditors with the Audit Committee.

#### (e) Audit Plan

At least annually, the Audit Committee shall review a summary of the auditors' annual audit plan. The Audit Committee shall consider and review with the auditors any material changes to the scope of the plan.

## (f) Independence of Auditors

At least annually, and before the auditors issue their report on the annual financial statements, the Audit Committee shall obtain from the auditors a formal written statement describing all relationships between the auditors and the Corporation; discuss with the auditors any disclosed relationships or services that may affect the objectivity and independence of the auditors; and obtain written confirmation from the auditors that they are objective and independent within the meaning of the applicable Rules of Professional Conduct/Code of Ethics adopted by the provincial institute or order of chartered accountants to which the auditors belong and other Applicable Requirements. The Audit Committee shall take appropriate action to oversee the independence of the auditors.

## (g) Evaluation and Rotation of Lead Partner

At least annually, the Audit Committee shall review the qualifications and performance of the lead partner(s) of the auditors and determine whether it is appropriate to adopt or continue a policy of rotating lead partners of the external auditors.

## (h) Requirement for Pre-Approval of Non-Audit Services

The Audit Committee shall approve in advance any retainer of the auditors to perform any non-audit service to the Corporation that it deems advisable in accordance with Applicable Requirements and Board approved policies and procedures. The Audit Committee may delegate pre-approval authority to a member of the Audit Committee. The decisions of any member of the Audit Committee to whom this authority has been delegated must be presented to the full Audit Committee at its next scheduled Audit Committee meeting.

## (i) Approval of Hiring Policies

The Audit Committee shall review and approve the Corporation's hiring policies regarding partners, employees and former partners and employees of the present and former external auditors of the Corporation.

## (j) Financial Executives

The Committee shall review and discuss with management the appointment of key financial executives and recommend qualified candidates to the Board, as appropriate.

## **Internal Controls**

### (a) General

The Audit Committee shall review the Corporation's system of internal controls.

## (b) Establishment, Review and Approval

The Audit Committee shall require management to implement and maintain appropriate systems of internal controls in accordance with Applicable Requirements, including internal controls over financial reporting and disclosure and to review, evaluate and approve these procedures. At least annually, the Audit Committee shall consider and review with management and the auditors:

(i) the effectiveness of, or weaknesses or deficiencies in: the design or operation of the Corporation's internal controls (including computerized information system controls and security); the overall control environment for managing business risks; and accounting, financial and disclosure controls (including, without limitation, controls over financial reporting), non-financial controls, and legal and regulatory controls and the impact of any identified weaknesses in internal controls on management's conclusions;

- (ii) any significant changes in internal controls over financial reporting that are disclosed, or considered for disclosure, including those in the Corporation's periodic regulatory filings;
- (iii) any material issues raised by any inquiry or investigation by the Corporation's regulators;
- (iv) the Corporation's fraud prevention and detection program, including deficiencies in internal controls that may impact the integrity of financial information, or may expose the Corporation to other significant internal or external fraud losses and the extent of those losses and any disciplinary action in respect of fraud taken against management or other employees who have a significant role in financial reporting; and
- (v) any related significant issues and recommendations of the auditors together with management's responses thereto, including the timetable for implementation of recommendations to correct weaknesses in internal controls over financial reporting and disclosure controls.

# Compliance with Legal and Regulatory Requirements

The Audit Committee shall review reports from the Corporation's Corporate Secretary and other management members on: legal or compliance matters that may have a material impact on the Corporation; the effectiveness of the Corporation's compliance policies; and any material communications received from regulators. The Audit Committee shall review management's evaluation of and representations relating to compliance with specific applicable law and guidance, and management's plans to remediate any deficiencies identified.

### Audit Committee Hotline Whistleblower Procedures

The Audit Committee shall establish procedures for (a) the receipt, retention, and treatment of complaints received by the Corporation regarding accounting, internal accounting controls, or auditing matters; and (b) the confidential, anonymous submission by employees of the Corporation of concerns regarding questionable accounting or auditing matters. Any such complaints or concerns that are received shall be reviewed by the Audit Committee and, if the Audit Committee determines that the matter requires further investigation, it will direct the Chair of the Audit Committee to engage outside advisors, as necessary or appropriate, to investigate the matter and will work with management and the general counsel to reach a satisfactory conclusion.

#### Audit Committee Disclosure

The Audit Committee shall prepare, review and approve any audit committee disclosures required by Applicable Requirements in the Corporation's disclosure documents.

### Delegation

The Audit Committee may, to the extent permissible by Applicable Requirements, designate a sub-committee to review any matter within this mandate as the Audit Committee deems appropriate.

## 5. No Rights Created

This Mandate is a statement of broad policies and is intended as a component of the flexible governance framework within which the Audit Committee, functions. While it should be interpreted in the context of all applicable laws, regulations and listing requirements, as well as in the context of the Corporation's By-laws, it is not intended to establish any legally binding obligations.

# 6. Mandate Review

The Committee shall review and update this Mandate annually and present it to the Board for approval.