



**ANNUAL INFORMATION FORM  
FOR THE FINANCIAL YEAR ENDED DECEMBER 31, 2022**

**February 24, 2023**

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## ABOUT THIS ANNUAL INFORMATION FORM

In this annual information form (“AIF”), except as otherwise required by the context, reference to the “Corporation” or “NexGen” means, collectively, NexGen Energy Ltd. and its subsidiaries. All information contained in this AIF is at December 31, 2022, being the date of the Corporation’s most recently completed financial year, unless otherwise stated.

This AIF has been prepared in accordance with Canadian securities laws and contains information regarding NexGen’s history, business, mineral reserves and resources, the regulatory environment in which NexGen conducts business, the risks that NexGen faces as well as other important information for the Shareholders.

This AIF incorporates by reference NexGen’s management discussion and analysis (“MD&A”) for the year ended December 31, 2022 and accompanying audited consolidated financial statements which are available under the Corporation’s profile on SEDAR ([www.sedar.com](http://www.sedar.com)) and on EDGAR ([www.sec.gov/edgar.shtml](http://www.sec.gov/edgar.shtml)) as an exhibit to the Corporation’s Form 40-F.

## Financial Information

Unless otherwise specified in this AIF, all references to “dollars” or to “\$” or to “C\$” are to Canadian dollars and all references to “US dollars” or to “US\$” are to United States of America dollars. Financial information is derived from consolidated financial statements that have been prepared in accordance with the International Financial Reporting Standards as issued by the International Accounting Standards Board.

## Cautionary Note Regarding Forward-Looking Information and Statements

This AIF contains “*forward-looking statements*” within the meaning of the United States Private Securities Litigation Reform Act of 1995 and “*forward-looking information*” within the meaning of applicable Canadian securities legislation. Forward-looking information and statements include, but are not limited to, statements with respect to planned exploration and development activities, the future interpretation of geological information, the cost and results of exploration and development activities, future financings, the future price of uranium and requirements for additional capital. Generally, forward-looking information and statements can be identified by the use of forward-looking terminology such as “plans”, “expects”, “is expected”, “budget”, “scheduled”, “estimates”, “forecasts”, “intends”, “anticipates”, or “believes”, or the negative connotation thereof or variations of such words and phrases or state that certain actions, events or results “may”, “could”, “would”, “might” or “will be taken”, “occur” or “be achieved” or the negative connotation thereof.

Forward-looking information and statements are based on the then current expectations, beliefs, assumptions, estimates and forecasts about NexGen’s business and the industry and markets in which it operates. Forward-looking information and statements are made based upon numerous assumptions, including among others, that the results of planned exploration and development activities are as anticipated and on time, the price of uranium, the cost of planned exploration and development activities, there will be limited changes in any project parameters as plans continue to be refined, that financing will be available if and when needed and on reasonable terms, that third-party contractors, equipment, supplies and governmental and other approvals required to conduct NexGen’s planned exploration and development activities will be available on reasonable terms and in a timely manner, that there will be no revocation of government approvals and that general business, economic, competitive, social, and political conditions will not change in a material adverse manner. Although the assumptions made by the Corporation in providing forward-looking information or making forward-looking statements are considered reasonable by management at the time, there can be no assurance that such assumptions will prove to be accurate.

Forward-looking information and statements also involve known and unknown risks and uncertainties and other factors, which may cause actual results, performances and achievements of NexGen to differ materially from any projections of results, performances and achievements of NexGen expressed or implied by such forward-looking information or statements, including, among others, negative operating cash flow and dependence on third-party financing, uncertainty of additional financing, price of uranium, the appeal of alternate sources of energy, exploration risks, uninsurable risks, reliance upon key management and other personnel, imprecision of mineral resource estimates, potential cost overruns on any development, changes in climate or increases in environmental regulation, aboriginal title and consultation issues, deficiencies in the Corporation’s title to its properties, information security and cyber threats, failure to manage conflicts of interest, failure to obtain or maintain required permits and licenses, changes in laws, regulations and policy, competition for resources and financing, volatility in market price of the Corporation’s shares, and other factors discussed or referred to in this AIF under “Risk Factors”.

Although NexGen has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking information or 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 such information or statements will prove to be accurate, as actual results and future events could differ materially from those anticipated, estimated or intended. Accordingly, readers should not place undue reliance on forward-looking information or statements. The forward-looking information and statements contained in this AIF are made as of the date of this AIF and, accordingly, are subject to change after such date. NexGen does not undertake to update or reissue forward-looking information as a result of new information or events except as required by applicable securities laws.

### **Cautionary Note to U.S. Investors**

This AIF has been prepared in accordance with the requirements of the securities laws in effect in Canada, which differ materially from the requirements of United States securities laws applicable to U.S. companies. Information concerning NexGen's mineral properties has been prepared in accordance with the requirements of Canadian securities laws, which differ in material respects from the requirements of the United States Securities and Exchange Commission (the "**SEC**") applicable to domestic United States issuers. Accordingly, the disclosure in this AIF regarding the Corporation's mineral properties is not comparable to the disclosure of United States issuers subject to the SEC's mining disclosure requirements.

### **Technical Disclosure**

All scientific and technical information in this AIF has been reviewed and approved by Mr. Kevin Small, P.Eng., Senior Vice President, Engineering and Operations, and Mr. Jason Craven, P.Geo., Exploration Manager for NexGen. Each of Mr. Small and Mr. Craven is a qualified person for the purposes of National Instrument 43-101 Standards of Disclosure for Mineral Projects ("**NI 43-101**"). Mr. Craven has verified the sampling, analytical, and test data underlying the information or opinions contained herein by reviewing original data certificates and monitoring all of the data collection protocols.

For details of the Rook I Project, including the key assumptions, parameters and methods used to estimate the updated feasibility study (the "**Feasibility Study**") please refer to the technical report entitled Arrow Deposit, Rook I Project, Saskatchewan, NI 43-101 Technical Report on Feasibility Study dated March 10, 2021 (the "**Rook I FS Technical Report**"). The Rook I FS Technical Report is filed under the Corporation's profile on SEDAR ([www.sedar.com](http://www.sedar.com)) and EDGAR ([www.sec.gov/edgar.shtml](http://www.sec.gov/edgar.shtml)) but shall not be deemed to be incorporated by reference into this AIF.

## ABOUT NEXGEN

NexGen Energy Ltd. is engaged in uranium development and exploration. The Corporation's head office is located at Suite 3150-1021 West Hastings Street, Vancouver, British Columbia, V6E 0C3 and its registered office is located at 25th Floor, 700 West Georgia Street, Vancouver, British Columbia, V7Y 1B3. NexGen's website address is <https://www.nexgenenergy.ca>

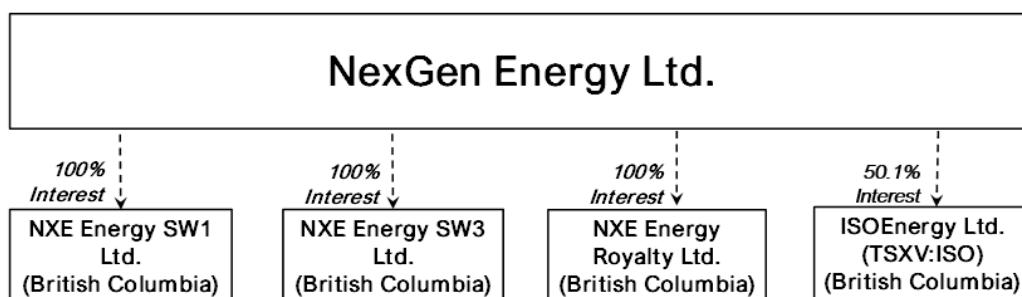
NexGen was incorporated on March 8, 2011 under the Business Corporations Act (British Columbia) (the "BCBCA") as "Clermont Capital Inc." and changed its name to "NexGen Energy Ltd." on April 19, 2013.

The Corporation's common shares (the "Shares") trade on the Toronto Stock Exchange ("TSX") and the New York Stock Exchange (the "NYSE") under the symbol "NXE", and on the Australian Securities Exchange (the "ASX") in the form of Chess Depositary Instruments ("CDIs") under the symbol "NXG".

NexGen is a reporting issuer in all provinces and territories of Canada. The Shares are also registered under the United States Securities Exchange Act of 1934, as amended, and NexGen files periodic reports with the SEC. NexGen was admitted to the official list of the ASX as an "ASX Foreign Exempt Listing".

### NexGen's Corporate Structure

NexGen does not have any material subsidiaries. An organizational chart for NexGen as at December 31, 2022 is as follows:



## GENERAL DEVELOPMENT OF THE BUSINESS

### Overview

NexGen is a British Columbia corporation with a focus on developing into production the 100% owned Rook I Project (the “**Rook I Project**”) located in the southwestern Athabasca Basin of Saskatchewan, Canada. NexGen has a highly experienced team of uranium industry professionals with a successful track record in the discovery of uranium deposits and in the development of projects from discovery to production. NexGen also owns a portfolio of highly prospective uranium properties in the southwestern Athabasca Basin of Saskatchewan, Canada.

The Rook I Project is the location of the Corporation’s Arrow Deposit discovery in February 2014. The Arrow Deposit has: Measured Mineral Resources of 2.18 million tonnes (Mt) at an average grade of 4.35%  $U_3O_8$  containing 210 M lbs of  $U_3O_8$ ; Indicated Mineral Resources of 1.57 Mt at an average grade of 1.36%  $U_3O_8$  containing 47 M lbs of  $U_3O_8$ ; for a total of 3.75 Mt grading 3.10%  $U_3O_8$  containing 257 M lbs  $U_3O_8$ . The Probable Mineral Reserves were estimated at 240 M lbs  $U_3O_8$  contained in 4.6Mt grading 2.37%  $U_3O_8$ . Details of all such resources and reserves can be found in the Rook I FS Technical Report.

The Corporation has also intersected numerous other mineralized zones on trend from the Arrow Deposit along the Patterson Corridor on the Rook I Project, which are subject to further exploration before economic potential can be assessed. The Rook I Project consists of thirty-two (32) contiguous mineral claims totaling 35,065 hectares.

### History

#### Year Ended December 31, 2020

##### Project Development

During the year, the Corporation progressed the Feasibility Study through the impacts of Covid-19 and all workflows continued in light of the health and economic climate.

##### Permitting, Regulatory and Engagement

On February 20, 2020, NexGen received a Record of Decision from the Canadian Nuclear Safety Commission (the “**CNSC**”) with respect to the CNSC’s *Decision on the scope of an environmental assessment for the proposed Project*. The Record of Decision confirmed, among other things, the CNSC’s receipt of the April 29, 2019 submission of the Project Description and that the Rook I Project will be subject to *Canadian Environmental Assessment Act, 2012*, with no additional factors. The Record of Decision confirmed that the applicable environmental assessment (the “**EA**”) will be required to consider Indigenous traditional and community knowledge, and that NexGen is required to prepare a draft environmental impact statement (“**EIS**”) in concordance with the *Generic Guidelines for the Preparation of an Environmental Impact Assessment pursuant to the Canadian Environmental Assessment Act, 2012*.

During 2020, work advanced on the EA for the Rook I Project, with continued technical, modelling and assessment work conducted in support of the development of the draft EIS submission. Similarly, work advanced on the licence application with the CNSC under the *Nuclear Safety and Control Act* in order to obtain a Licence to Prepare Site and Construction for the Rook I Project.

In 2020, the Corporation progressed engagement activities with the communities in proximity to the Rook I Project, as per the Study Agreements (as defined below) entered into with four Indigenous groups in the second half of 2019. In addition, during 2020, the Corporation executed a funding agreement with Ya’thi Nene Lands and Resources (YNLR) to undertake a Traditional Knowledge, Land Use Occupancy (TKLUO) study for incorporation into the draft EIS.

The Corporation continued to engage with the respective JWG (as defined below) to support the inclusion of each community’s traditional knowledge throughout the EA process and commenced incorporating information from the traditional land use study into the EA. The Corporation provided funding for all aspects of the above including the JWG to review and independently confirm all studies for inclusion into the EA.

Further, the Corporation commenced negotiating those impact or mutual benefit agreements that the Corporation agreed to negotiate in the Study Agreements (each, a “**Benefit Agreement**”) with communities within proximity to the Rook I Project. The Benefit Agreement negotiations were well advanced with the majority of the communities during 2020.

## Financings

### *US\$30 Million Financing*

On May 27, 2020, the Corporation completed a financing with Queen’s Road Capital Ltd. (“**QRC**”) raising an aggregate US\$30 million, comprising US\$15 million of Shares issued at a price per share of C\$1.80 for an aggregate of 11,611,667 Shares, and US\$15 million aggregate principal amount of 7.5% unsecured convertible debentures (the “**2020 Debentures**”) which are convertible into Shares at a conversion price of C\$2.34. The Corporation also issued 348,350 Shares at a price of C\$1.80 for the establishment fees of the 2020 Debentures, and 180,270 Shares at a deemed price of \$1.97 for a consent fee to the holders of the Debentures (as defined below) that were outstanding at the time.

The 2020 Debentures bear interest at the rate of 7.5% per annum and have a five-year term ending on May 27, 2025 (the “**Maturity Date**”). The 2020 Debentures are convertible at the holder’s option into Shares at a price of \$2.34 per share. Two-thirds of the interest (5% per annum) is payable in cash, while one-third (2.5% per annum) is payable in Shares issuable at a price equal to the 20-day volume weighted average trading price (“**VWAP**”) on the exchange on which the Shares are trading that has the greatest trading volume, ending on the day prior to the date such interest payment is due. The Corporation will be entitled, on or after the third anniversary of the date of the issuance of the 7.5% Debentures, at any time that the 20-day VWAP on the TSX exceeds 130% of the conversion price of \$2.34 per Share, to redeem the 2020 Debentures at par plus accrued and unpaid interest.

## Exploration

No field-based exploration activity occurred in 2020. On June 5, 2020, the Saskatchewan Ministry of Energy and Resources granted mineral assessment relief in response to the COVID-19 pandemic. The relief waved expenditure requirements for the current term and subsequent 12 months for mineral claims and leases that were active on March 18, 2020; the date in which a state of emergency was declared in Saskatchewan. The relief period granted by the Saskatchewan Ministry of Energy and Resources extended the good standing date on most mineral claims for an additional 2 years. The mineral dispositions that make up the Rook I Project are in good standing until at least June 14, 2039.

## Corporate

### *COVID-19 Pandemic*

At the commencement of the COVID-19 pandemic, the Corporation had postponed “yet to commence” work programs related to the Feasibility Study and an EA for the Rook I Project, with previously commenced “in progress” work programs (including environmental monitoring and community programs) continuing where the Corporation concluded that the function was not impacted by the applicable health authority guidelines. During the third quarter of 2020, the Corporation’s workflows that had been temporarily impacted by the COVID-19 pandemic for the Feasibility Study and EA resumed in what the Corporation believes is an orderly and safe manner.

## **Year Ended December 31, 2021**

### Project Development

On February 22, 2021, the Corporation announced positive results from its Feasibility Study for the Rook I Project. Details of the Feasibility Study, including an updated mineral resource estimate and an updated mineral reserve estimate, are provided in the Rook I FS Technical Report in respect of the Rook I Project.

For details of the Rook I Project, including the key assumptions, parameters and methods used to estimate the Mineral Resources and Mineral Reserves that are the subject of the Feasibility Study, please refer to the Rook I FS Technical Report dated 10 March 2021. The Rook I FS Technical Report is filed under the Corporation’s profile on SEDAR ([www.sedar.com](http://www.sedar.com)) and EDGAR ([www.sec.gov/edgar.shtml](http://www.sec.gov/edgar.shtml)).

The Front-End Engineering and Design (the “FEED”) proposals for the Rook I Project were received, evaluated and the contract awarded to Hatch Ltd. early in the fourth quarter. The FEED scope of work is expected to advance overall engineering to a 40-45% level of completion and includes an associated cost estimate, and defined long-lead procurement actions, and further refines execution planning to prepare the Rook I Project for the pending construction stage.

Concurrently, field work was completed in support of the FEED, which consisted of the following two components:

1. surface studies to confirm near-surface geotechnical conditions in locations of surface infrastructure and assess potential borrow pit locations to support the completion of the FEED, detailed engineering, and execution planning; and
2. diamond drilling to confirm rock mass characteristics proximal to the planned underground Life-of-Mine (“LOM”) infrastructure and Underground Tailings Management Facility (“UGTMF”).

The field work associated with the surface studies encompassed 18 sonic drill holes with various geophysical testing and piezometer installations, and the excavation of 93 test pits ± plate load testing. 72 of the test pits and all 18 of the sonic boreholes were dedicated to confirming the subsurface conditions beneath proposed surface infrastructure, such as the mine terrace, waste and ore storage stockpiles, the airstrip, access road, and various ancillary structures. The remaining 21 test pits evaluated potential borrow source materials.

The drilling of seven HQ diamond drill holes for a total of 5,076.45 metres (“m”) was completed as part of the 2021 program. All holes were geotechnically logged, nested VWP were installed in three holes, and four holes were sampled for geomechanical characterization. Point load testing, density measurements, and acoustic televiewer surveys were completed on all holes. Hydraulic packer testing was performed on all holes to measure water conductivity in various rock units and along structures. Results confirmed the rock mass within and proximal to the UGTMF and LOM infrastructure to be competent, largely unaltered and structureless, and measured to have low hydraulic conductivity which are all beneficial geotechnical and hydrogeological properties for the development and maintenance of underground infrastructure. The drilling validated the current design of LOM infrastructure and the final design of an UGTMF.

#### Permitting, Regulatory and Engagement

During 2021, work advanced on the EA for the Rook I Project, with continued technical, modelling and assessment work conducted in support of the development of the draft EIS submission.

Similarly, work advanced on the licence application in order to obtain a Uranium Mine and Mill Licence from the CNSC for the Rook I Project.

The Corporation continued its engagement with the communities within the proximity to the Rook I Project, as per the Study Agreements entered into with four Indigenous groups in Q4 2019. In 2021, the Corporation signed Benefit Agreements with the Birch Narrows Dene Nation (the “BNDN”) and the Buffalo River Dene Nation (the “BRDN”) covering all phases of the Rook I Project including closure.

The Rook I Project is located within the traditional territory of BRDN and BNDN. The Benefit Agreements define the environmental, cultural, economic, employment and other benefits to be provided to the BRDN and BNDN by NexGen in respect of the Rook I Project and confirm the consent and support of both BRDN and BNDN for the Rook I Project throughout its complete lifecycle, including reclamation. The Benefit Agreements were negotiated and developed in alignment with the Study Agreements. Under similar Study Agreements the Corporation continued to advance Benefit Agreement negotiations with the CRDN and the MN-S.

#### Exploration

On January 27, 2022, the Corporation announced the results of its 2021 exploration drilling program which focused on regional grassroots exploration targets at the SW2 Property.



## Financings

### *Conversion of US\$120 Million Convertible Debentures into Equity*

On February 18 and February 23, 2021, the Corporation received notice that the registered holders of US\$120 million aggregate principal amount of debentures had elected to convert their debentures into Shares pursuant to the terms of the trust indentures governing the debentures. The registered holders of the debentures were affiliates of CEF Holdings Limited (“**CEF**”) and its shareholders. The debentures consisted of US\$60 million aggregate principal amount of 7.5% unsecured convertible debentures issued by the Corporation in 2016 (the “**2016 Debentures**”) and US\$60 million aggregate principal amount of 7.5% unsecured convertible debentures issued by the Corporation in 2017 (the “**2017 Debentures**”) and, together with the 2016 Debentures, the “**Debentures**”), and were due to mature on July 22, 2022.

Under their terms, the Debentures are convertible into Shares at a price of US\$2.3261 for the 2016 Debentures and US\$2.6919 for the 2017 Debentures. An aggregate of 48,083,335 Shares were issued in connection with the conversion of the principal amount of the Debentures. Upon issuance, CEF’s percentage ownership of the issued and outstanding Shares increased from ~8.7% to ~18.7%. In addition, the Corporation is required to pay the interest that accrued on the Debentures prior to conversion, which it paid by issuing an aggregate of 177,045 Shares to CEF, such number of shares being calculated in accordance with the terms of the relevant trust indenture governing the Debentures.

The Corporation and the investors in the Debentures entered into an investor rights agreement dated July 21, 2017, which provides for, among other things, provisions relating to a director nominee (that will apply until such time the investors hold less than 15% of the Shares) and provisions relating to voting alignment, standstill and transfer restriction covenants (that will apply until such time as the investors hold less than 10% of the Shares) or until there is a change of control of the Corporation. See the “Material Contracts” section of this AIF.

### *Short Form Prospectus Financing*

On February 25, 2021, NexGen entered into an agreement with a syndicate of underwriters led by BMO Capital Markets and Canaccord Genuity Corp. (collectively, the “**Underwriters**”) under which the Underwriters agreed to buy on a bought deal basis 33,400,000 Shares at a price of \$4.50 per Share for gross proceeds of approximately \$150 million (the “**Offering**”). The Corporation also granted the Underwriters an option, exercisable at \$4.50 per Share for a period of 30 days following the Offering to purchase up to an additional 5,010,000 Shares to cover over-allotments, if any (the “**Over-Allotment Option**”). The Offering closed on March 11, 2021 and the Over-Allotment Option closed on March 16, 2021, for total gross proceeds of \$172.8 million.

## ASX Listing

On July 2, 2021, the Corporation’s Shares commenced trading as CDIs on the ASX under the symbol “NXG”. As part of the ASX listing, the Corporation issued 400,000 Shares, represented by CDIs, to Australian investors for total gross proceeds of \$2.1 million.

## Corporate

### *COVID-19 Pandemic*

To date, the Corporation’s operations and ability to raise funds have not been significantly impacted by the COVID-19 pandemic. The Corporation has implemented proper COVID-19 protocols at each of its locations that are in line with the respective regional health authorities COVID-19 guidelines.

### *Inaugural Sustainability Report*

On October 26, 2021, the Corporation announced the publication of its inaugural Sustainability Report highlighting its progress, initiatives, and commitments in the areas of health, safety, environmental, social and governance management for the calendar year 2020.

### *Change in Management*

On April 1, 2021, Harpreet Dhaliwal was appointed to the position of Chief Financial Officer.

## **Year Ended December 31, 2022**

### Project Development

During the year, the Corporation continued to advance FEED programs inline with it's objectives.

### Permitting, Regulatory and Engagement

#### *Impact Benefit Agreement with Clearwater River Dene Nation*

On April 25, 2022, the Corporation announced the signing of a Benefit Agreement with the Clearwater River Dene Nation (the "**CRDN**") which related to the environmental, cultural, economic, employment and other benefits to be provided to the CRDN by the Corporation in respect of the Rook I Project, and confirmed the consent and support of the CRDN for the Rook I Project.

#### *Submission of the Rook I Project Environmental Impact Study*

On June 21, 2022, the Corporation announced that it completed the submission of its draft EIS to the Saskatchewan Ministry of Environment ("ENV") and the CNSC. The EIS submission included letters of support for the Rook I Project from each of the CRDN, the BNDN, and the BRDN, which all have also endorsed the Rook I Project through the execution of Benefit Agreements with NexGen.

The submission of the draft EIS follows the provincial and federal EA processes that commenced in April 2019 following regulatory acceptance of NexGen's Project Description. On July 12, 2022, the CNSC announced their acceptance of the draft EIS which followed a 30-day period during which the CNSC conducted a conformance review of the EIS submission. Completion of the CNSC conformance marked the formal commencement of the 90-day federal technical and public EIS review period.

ENV technical review of the draft EIS advanced in parallel to the CNSC review with all technical review comments from the ENV received by NexGen on September 22, 2022.

On December 1, 2022, the Corporation announced the receipt of federal technical and public review comments. NexGen has commenced a review of comments and response activities, and is advancing the preparation of the final EIS for submission in accordance with respective provincial (ENV) and federal (CNSC) EA processes.

### Exploration

On July 28, 2022, the Corporation announced the results of its 2021 regional exploration drilling program at the Rook I Project, including intersections of mineralization in AR-21-268 (Below Arrow) and RK-21-140 (Camp East). On the same date, NexGen also announced the commencement of a 2022 exploration drill program focused on regional exploration targets at the Rook I Project and an extensive geophysical program over high priority areas (SW1, SW2, and SW3 properties) of NexGen's mineral tenure in the southwest Athabasca Basin, Saskatchewan.

### Corporate

#### *Up-listing to the New York Stock Exchange*

On March 4, 2022, the Shares were up-listed from the NYSE American and commenced trading on the NYSE under the symbol "NXE".

#### *Sustainability Report*

On November 3, 2022, the Corporation announced the publication of its second Sustainability Report highlighting its progress, initiatives, and commitments in the areas of health, safety, environmental, social and governance management for the calendar year 2021, establishing the groundwork for the Corporation to prepare its next Sustainability Report in accordance with Global Reporting Initiative ("GRI") standards.

## *COVID-19 Pandemic*

To date, the Corporation's operations and ability to raise funds have not been significantly impacted by the COVID-19 pandemic. The Corporation has implemented proper COVID-19 protocols at each of its locations that are in line with the respective regional health authorities COVID-19 guidelines.

## Subsequent to December 31, 2022

On January 6, 2023, NexGen established a \$250 million at-the-market equity program ("ATM Program") pursuant to the terms of an equity distribution agreement with Virtu ITG Canada Corp., as Canadian agent, and Virtu Americas LLC, as U.S. agent (together, the "Agents"). The ATM Program will be effective until the earlier of the sale of all of the Shares issuable pursuant to the ATM Program and January 29, 2025, unless terminated prior to such date by the Corporation or the Agents.

On January 31, 2023, NexGen appointed Mr. Ivan Mullany to its Board of Directors.

On February 8, 2023, the Corporation announced the commencement of a 2023 exploration drill program to systematically test priority conductors that have been highlighted by its 2022 drilling results, as well as geophysical survey results that identified drill-ready stacked anomalies. The Corporation also announced plans for a geophysical program in 2023 for drill target generation across high priority areas of NexGen's mineral tenure (SW1, SW2 and SW3) in the southwest Athabasca Basin, and the use of muon tomography as part of its 2023 program.

## **DESCRIPTION OF THE BUSINESS**

### **General**

The principal business activity of the Corporation has been, and continues to be, the development of the Rook I Project, and the exploration of its highly prospective portfolio of uranium properties, located in the southwestern section of the Athabasca Basin of Saskatchewan, Canada.

### **Principal Products**

The Corporation is in the mineral development and exploration business, does not have any marketable products at this time and is not distributing any products at this time. In addition, the Corporation does not know when or if certain of its properties will reach the development stage and if so, what the estimated costs would be to reach commercial production.

### **Specialized Skill and Knowledge**

The Corporation's business requires specialized skill and knowledge in the areas of geology, mineral development and exploration, business negotiations, accounting and management. To date, the Corporation has been able to locate and retain such employees and consultants and believes it will continue to be able to do so. See "*Risk Factors – Reliance upon Key Management and Other Personnel*" below.

### **Competitive Conditions**

The mineral development and exploration business is a competitive business. The Corporation competes with numerous other companies and individuals who may have greater financial resources in the search for and the acquisition of personnel, contractors, funding and attractive mineral properties. As a result of this competition, the Corporation may be unable to obtain additional capital or other types of financing on acceptable terms or at all, acquire properties of interest or retain qualified personnel and/or contractors. See "*Risk Factors – Competition*".

### **Environmental Protection**

The Corporation's exploration and development activities are subject to various levels of federal and provincial laws and regulations relating to the protection of the environment. If needed, the Corporation will make and will continue to make expenditures to ensure compliance with applicable laws and regulations. New environmental laws and regulations, amendments to existing laws and regulations, or more stringent implementations of existing laws and regulations could have a material adverse effect on the Corporation by potentially increasing capital and/or operating costs. See "*Risk Factors – Environmental and Other Regulatory Requirements*".

## **Employees**

As at December 31, 2022, the Corporation had 56 full time employees. The operations of the Corporation are managed by its directors and officers. NexGen engages consultants from time to time in the areas of mineral exploration and development geology and business negotiations and management. See *“Risk Factors – Reliance upon Key Management and Other Personnel”*.

## **Business or Seasonal Cycles**

Due to the excellent infrastructure in the Athabasca Basin area of Saskatchewan, Canada, exploration can be carried out year-round. Prospecting, mapping, and surface bedrock sampling activities are however limited by snow cover during the period from approximately December to May.

## **Economic Dependence**

The Corporation’s business is not substantially dependent on any contract upon which its business depends. It is not expected that the Corporation’s business will be affected in the current financial year by the renegotiation or termination of any contracts or sub-contracts.

## **Foreign Operations**

The Corporation’s principal assets are located in the Province of Saskatchewan. The Corporation is not dependent on any foreign operations.

## **Social and Environmental Policies**

The Corporation is committed to carrying out all of its activities in an ethical manner that prioritizes health and safety, recognizes the concerns of indigenous peoples, communities, local stakeholders and preserves the natural environment. The Corporation ensures that all employees are trained and instructed in their assigned tasks and that safety procedures are followed at all times. The importance of ethical behavior and preservation of the natural environment is stressed to all employees and contractors, and all are charged with monitoring operations to ensure they are being carried out in an environmentally-friendly manner. The Corporation ensures that it will work with and consult local communities, indigenous peoples and stakeholders, recognizing this practice as a benefit to all. To this end, the Corporation regularly engages with stakeholders and in the case of indigenous communities, provides frequent updates before and during program activity.

## **DETAILS OF THE ROOK I PROJECT**

On February 22, 2021, the Corporation announced positive results from the Feasibility Study for the Rook I Project. Details of the Feasibility Study, including an updated mineral resource estimate and an updated mineral reserve estimate, are provided in the Rook I FS Technical Report.

The information contained in this AIF report regarding the Rook I Project, including the below details, has been derived from the Rook I FS Technical Report (Arrow Deposit, Rook I Project, Saskatchewan, NI 43-101 Technical Report on Feasibility Study dated 10 March 2021 and authored by Mr. Mark Hatton, P.Eng., Stantec Consulting Ltd; Mr. Paul O’Hara, P.Eng., Wood Canada Limited; and Mr. Mark Mathisen, C.P.G., Roscoe Postle Associates (USA) Ltd. (now a part of SLR International Corporation), and was filed on March 10, 2021), is subject to certain assumptions, qualifications and procedures described in the Rook I FS Technical Report and is qualified in its entirety by the full text of the Rook I FS Technical Report. Reference should be made to the full text of the Rook I FS Technical Report, but the Rook I FS Technical Report shall not be deemed to be incorporated by reference into this AIF.

### **Project Description, Location and Access**

The Rook I Project is located in northwest Saskatchewan, approximately 40 km east of the Alberta–Saskatchewan border, 150 km north of the town of La Loche, and 640 km northwest of the city of Saskatoon. The Rook I Project can be accessed via all-weather gravel, Highway 955, which travels north-south approximately 8 km west of the Arrow Deposit. From Highway 955, a 13 km long all-weather, single-lane road provides access to the western portion of the Rook I Project, including the Arrow Deposit area.

The Rook I Project will take place in a region with a sub-arctic climate typical of mid-latitude continental areas. It is expected that mining activities will be conducted on a year-round basis.

The topography of the Rook I Project area is variable. Drumlins and lakes / wetlands dominate the northwest and southeast parts of the project area, respectively; and lowland lakes, rivers, and muskegs dominate the central part of the project area. The northwest part of the project area lies over portions of Patterson Lake and Forrest Lake, which are two of the largest waterbodies within 100 km of the Rook I Project. Elevations range from 583 m above sea level ("**masl**") on drumlins, to 480 masl in lowland lakes. The elevation of Patterson Lake is 499 masl.

The Rook I Project is covered by boreal forest common to the Canadian Shield. Bedrock outcrops are very rare, but are known to exist in areas of the eastern half of the project area.

The Property consists of 32 contiguous mineral claims with a total area of 35,065 ha. All claims are 100% owned by NexGen.

Six of the 32 claims are subject to a 2% net smelter return ("**NSR**") royalty payable to Advance Royalty Corporation ("**ARC**"), and a 10% production carried interest with Terra Ventures Inc. ("**Terra**"). The NSR may be reduced to 1% upon payment of \$1.0 million to ARC. The Arrow Deposit is located outside of these six claims.

As of December 6, 2012, mineral dispositions are defined as electronic mineral claims parcels within the Mineral Administration Registry Saskatchewan ("**MARS**") using a Geographical Information System ("**GIS**"). MARS is a web-based, electronic tenure system used for issuing and administering mineral permits, claims, and leases. Mineral claims are acquired via electronic map staking, and administration of the dispositions is also web-based.

As of the effective date of the Rook I FS Technical Report, all 32 mineral claims comprising the Rook I property are in good standing with expiry dates between June 2040 and June 2043, and are all registered in the name of NexGen.

Surface rights are distinct from subsurface or mineral rights. The Rook I Project is located on provincial Crown land; as the owner, the Province of Saskatchewan can grant surface rights under the authority of the *Forest Resources Management Act and the Provincial Lands Act*. Granting surface rights for the purpose of accessing the land to extract minerals is done by issuing a mineral surface lease subject to the Crown Resource Land Regulations. Mineral surface leases have a 33-year maximum term which may be extended, as necessary.

NexGen does not currently hold surface rights of the project area. Surface rights are obtained after the ministerial review and approval of the EA, and the successful negotiation of a mineral surface lease agreement with the Province of Saskatchewan.

## History

The Geological Survey of Canada in 1961 included the Rook I property as part of a larger area.

From 1968 to 1970, Wainoco Oil and Chemicals Ltd. completed airborne magnetic and radiometric surveys, and geochemical sampling programs. No structures or anomalies of interest were detected.

In 1974, Uranerz Exploration and Mining Ltd. completed geological mapping, prospecting, and lake sediment sampling around the property.

From 1976 to 1982, Canadian Occidental Petroleum Ltd. and other companies (e.g., Saskatchewan Mining and Development Corporation (SMDC, now Cameco)) completed airborne INPUT EM surveys. These surveys detected numerous conductors, many of which were subject to ground surveys prior to drilling.

Airborne magnetic-radiometric surveys were also completed and followed up on with prospecting, geological mapping, lake sediment surveys, and some soil and rock geochemical sampling. Few anomalies were found, other than those that were already located during the airborne and ground EM survey.

From 2005 to 2008, Titan Uranium Inc. ("**Titan**") carried out airborne time-domain EM surveys using MEGATEM and Versatile Time Domain Electromagnetic ("**VTEM**") systems, which detected numerous strong EM anomalies. A ground MaxMin II survey conducted in 2008 confirmed the airborne anomalies.

In 2012, pursuant to a mineral property acquisition agreement between Mega Uranium Ltd. (“**Mega**”) and Titan dated February 1, 2012, Mega acquired all nine dispositions comprising the Rook I Project. A gravity survey was completed over 60% of S-113921 through S-113933, which defined several regional features and some additional local smaller scale features. Simultaneously, Mega sampled organic-rich soils and prospected the same area. No soil geochemical anomalies or radioactive boulders were found.

In 2012, NexGen acquired Mega’s interest in the Rook I property.

### **Geological Setting, Mineralization and Deposit Types**

The Rook I property is located along the southwestern rim of the Athabasca Basin, a large Paleoproterozoic-aged, flat-lying, intracontinental, fluvial, redbed sedimentary basin that covers much of northern Saskatchewan and part of northern Alberta. The Athabasca Basin is ovalular at surface, with approximate dimensions of 450 km × 200 km. It reaches a maximum thickness of approximately 1,500 m near its centre.

The southwest portion of the Athabasca Basin is overlain by the flat-lying Phanerozoic stratigraphy of the Western Canada Sedimentary Basin, including the carbonate-rich rocks of the Lower to Middle Devonian Elk Point Group, Lower Cretaceous Manville Group sandstones and mudstones, moderately lithified diamictites, and Quaternary unconsolidated sediments.

South of the Athabasca Basin, where Athabasca sandstone cover becomes thin, paleo-valley fill and debris flow sandstones of the Devonian La Loche / Contact Rapids formation (Alberta) or Meadow Lake (Saskatchewan) formation unconformably overlie the basement rocks.

The Paleoproterozoic basement rocks of the Taltson Domain unconformably underlies the Athabasca Basin and the Phanerozoic stratigraphy within the extents of the Rook I property. The crystalline basement rocks comprise a spectrum of variably altered mafic to ultramafic, intermediate, and local alkaline rock types. The most abundant basement lithologies consist of gneissic, metasomatized-feldspar-rich granitoid rocks, and dioritic to quartz dioritic and quartz monzodioritic gneiss, with lesser granodioritic and tonalitic gneiss.

Mineralization occurs at the following seven locations on the property, and is exclusively hosted in basement lithologies below the unconformity that is overlain by the Athabasca Supergroup.

- Arrow Deposit
- South Arrow Discovery
- Harpoon occurrence
- Bow occurrence
- Cannon occurrence
- Camp East occurrence
- Area A occurrence

Of the seven mineralized locations, the Arrow Deposit has undergone the most investigation.

The Arrow Deposit is currently interpreted as being hosted chiefly in variably altered porphyroblastic quartz-flooded quartz-feldspar-garnet-biotite (± graphite) gneiss. Mineralization at the Arrow Deposit is defined by an area comprised of several steeply dipping shears that have been labelled as the A0, A1, A2, A3, A4, and A5 shears. The A0 through A5 shears locally host high-grade (“**HG**”) uranium mineralization.

The Arrow Deposit is considered to be an example of a basement-hosted, vein type uranium deposit.

### **Exploration**

Since acquiring the Rook I property in December 2012, and prior to the effective date of the Rook I FS Technical Report, NexGen carried out exploration activities consisting of the following.

- Ground gravity surveys
- Ground direct current (DC) resistivity and induced polarization surveys
- Airborne magnetic-radiometric- very low frequency (VLF) survey
- Airborne VTEM survey

- Airborne Z-Axis Tipper electromagnetic (ZTEM) survey
- Airborne gravity survey
- Radon-in-water geochemical survey
- Ground radiometric and boulder prospecting program.

Geophysical surveys and surface sampling identified a series of sub-parallel, southwest-northeast trends with locally coincident anomalies across multiple exploration methods. The trends were interpreted to be steeply dipping to sub-vertical with responses indicating structural disruption and associated alteration. Most trends have a relatively continuous strike length across the extent of the property, approximately 9 km each, while some are segmented and less developed causing their electromagnetic signatures to lapse and resume. Underlying geological setting means that targets include both unconformity and basement-hosted uranium mineralization. Emphasis was placed on basement mineralization proximal to the margin of the Athabasca Basin. NexGen noted several target areas for drill testing that were first investigated in the fall of 2013. A review of drill results is discussed below.

Subsequent to the effective date of the Rook I FS Technical Report, NexGen has carried out a ground gravity survey on central and eastern portions of the property. Anomalously low values coincident with conductors, interpreted as a proxy for altered basement rock, have provided new drill-ready target areas that will be tested in 2023 and future programs.

## Drilling

As of the effective date of the Rook I FS Technical Report, NexGen and its predecessors had drilled 754 holes totalling 380,051 m. From 2013 to the effective date of the Rook I FS Technical Report, NexGen drilled 716 holes totaling 374,917m.

Three types of drill core samples are collected at site for geochemical analysis and uranium assay.

- One-metre and 0.5-metre samples taken over intervals of elevated radioactivity, and one metre or two metres beyond radioactivity.
- Point samples taken at nominal spacings of five metres or 50 m for infill holes, which is meant to be representative of the interval or of a particular rock unit.
- Composite samples in the Devonian and Athabasca sandstone units where one-centimetre long pieces are taken and spaced throughout sample intervals ranging from one metre to 10 m long.

NexGen also conducted diamond drilling programs to test several targets on the Rook I property, which resulted in the discovery of the Arrow Deposit in drill hole AR-14-001 (formerly known as RK-14-21) in February 2014.

Mineralization at the Arrow Deposit is defined by an area comprising the A0 through A5 shears, which locally host HG uranium mineralization. The mineralized area is 315 m wide, with an overall strike of 980 m. Mineralization is noted to occur 100 m below surface, and it extends to a depth of 980 m. The individual shear zones vary in thickness from 2 m to 60 m. The Arrow Deposit is open in most directions and at depth.

Regional drilling completed by NexGen from 2015–2019 along the Patterson conductive corridor identified new uranium discoveries at the Harpoon, Bow, Cannon, Camp East, and Area A occurrences, and the South Arrow Discovery.

Subsequent to the effective date of the Rook I FS Technical Report, the Corporation successfully completed its 2021 exploration drilling program which focused on regional exploration targets at the Rook I property. The Rook I property is host to numerous electromagnetic (“EM”) conductors and structural corridors with high priority exploration targets within a 10 km radius of the Arrow Deposit, including along the Patterson Lake Corridor, which hosts the Arrow Deposit.

The 2021 exploration program completed 18 drill holes for a total of 10,849.04 m, of which 6,400.31 m targeted electromagnetic conductors (conductors) that neighbour the one hosting Arrow and 4,448.73 m targeted significantly below the current Arrow Deposit.

- AR-21-268 ("Below Arrow") intersected 8.5 m of total composite mineralization, including 6.5 m up to 3,530 counts per second (cps) from 1,128.5 to 1,135.0 m downhole. This intersection is located approximately 230 m below and SE of the current defined mineralized domains at Arrow.

- RK-21-140 (Camp East Target on the Patterson Corridor) intersected anomalous radioactivity up to 1,380 cps from 166.0 to 167.0 m downhole. Finely disseminated uraninite was intersected with associated hematite and sericite alteration in a silicified orthogneiss.
- Drilling on the Derkson and Derkson West conductors intersected intervals of brittle structural disruption and hydrothermal alteration consistent with those recognized in uranium bearing systems. Hole RK-21-136 (Derkson West target) intersected 0.5 m of anomalous radioactivity up to 3,100 cps from 166.5 to 167.0 m downhole.

Further details on the 2021 Exploration drill results can be found in the News Release dated January 27, 2022 and filed under the Corporation's profile on SEDAR ([www.sedar.com](http://www.sedar.com)) and EDGAR ([www.sec.gov/edgar.shtml](http://www.sec.gov/edgar.shtml)).

The 2022 drill program tested structural corridors with intersections exhibiting favourable features indicative of uranium bearing systems, including strong alteration, reactivated brittle fault zones, and local dravite clay coated fractures. Results indicate these structural corridors lie along significant rheological/lithological contrasts interpreted as potential hosts for uranium mineralization. The program completed 11,784.7 m in 35 drill holes (including 6 restarts relating to casing issues) within the following five (5) structural corridors: Patterson Corridor, Derkson West, Derkson, PLC East, and Mirror.

## **Sampling, Analysis and Data Verification**

### *Sample Preparation Methods*

On-site sample preparation consists of geological technicians splitting cores under the supervision of geologists. One-half of the core is placed in plastic sample bags pre-marked with the sample number, along with a sample number tag. The other half is returned to the core box and stored at the core storage area located near the logging facility on the project site. The bags containing the split samples are then placed in lidded buckets to be transported by NexGen personnel to SRC Geoanalytical Laboratories ("SRC"), a wholly independent laboratory in Saskatoon, Saskatchewan.

NexGen personnel perform full core bulk density measurements using standard laboratory techniques. In mineralized zones, average bulk density is measured from samples at 2.5 m intervals, where possible (i.e., approximately 20% of all mineralized samples). In order for density to be correlated with uranium grades across the data set, each density sample directly correlates with a sample sent to SRC for assay.

Samples are also collected for clay mineral identification using infrared spectroscopy in areas of clay alteration. Samples are typically collected at five-metre intervals and consist of centimetre-long pieces of core selected by a geologist.

### *Security*

As each hole is being drilled, drilling contractor personnel place the core in wooden boxes at the drill site and seal core boxes with screwed-on wooden lids. Core is then delivered to the Rook I Project core processing facility by the contractor twice daily. Only the contractor and NexGen geological staff are authorized to be at drill sites and in the core processing facility. After logging, sampling, and shipment preparation, samples are transported directly from the project site to SRC by NexGen staff.

SRC places a large emphasis on confidentiality and data security. Appropriate steps are taken to protect the integrity of samples at all processing stages. Access to the SRC premises is restricted by an electronic security system and patrolled by security guards 24 hours a day.

After the completion of analyses, data is sent securely via electronic transmission to NexGen. These results are provided as a series of PDFs and an Excel spreadsheet.

### *Assaying and Analytical Procedures*

SRC crushes each sample until 60% is capable of passing -10 mesh. It is then riffle-split to a 200 g sample, with the remainder retained as coarse reject. The 200 g sample is then milled to 90% passing -140 mesh.

All samples are analyzed at SRC by ICP-OES or ICP-MS for 64 elements including uranium. Samples with low radioactivity are analyzed using ICP-MS. Samples with anomalous radioactivity are analyzed using ICP-OES. Partial and total digestion runs are completed for most samples. For partial digestion, an aliquot of each sample is digested in HNO<sub>3</sub>/HCl for one hour at 95 °C, and then diluted using de-ionized water. For the total digestion, an aliquot of each sample is heated in a mixture of HF/HNO<sub>3</sub>/HClO<sub>4</sub> until completely dried, and the residue dissolved in dilute HNO<sub>3</sub>.



For uranium assays, an aliquot of sample pulp is completely digested in concentrated HCl:HNO<sub>3</sub>, and then dissolved in dilute HNO<sub>3</sub> before being analyzed using ICP-OES. For boron, an aliquot of pulp is fused in a mixture of NaO<sub>2</sub>/NaCO<sub>3</sub> in a muffle oven. The fused melt is dissolved in de-ionized water before being analyzed using ICP-OES.

Selected samples are also analyzed for gold, platinum, and palladium using traditional fire assay methods.

#### *Quality Control Measures*

NexGen's quality assurance and quality control (QA/QC) program includes the following.

- Standard reference materials (SRM) to determine accuracy.
- Duplicate samples to determine precision / repeatability.
- Blank samples to screen for cross-contamination between samples during preparation and analyses.

The QA/QC program used at the Arrow Deposit includes the insertion of SRMs, blanks, and duplicates into the sample stream at the frequency summarized in the table below.

#### **Laboratory QA/QC Protocols**

QA/QC Type	Insertion Frequency	Acceptance Criteria
Blank	1 in 50	Assay > 10% detection limit
Field Duplicate	1 in 50	Relative Difference $\leq \pm 20\%$
SRM	1 in 50	95% of samples $\leq \pm 2$ Std. Dev $\leq 1\%$ of samples $\geq \pm 3$ Std. Dev

Results from the QA/QC samples are continually tracked by NexGen as certificates for each sample batch are received. If QA/QC samples of a sample batch pass within acceptable limits, the results of the sample batch are imported into the master database.

#### **Data Verification Procedures**

The Qualified Person's (QP) data verification steps included site visits during which RPA, now part of SLR International Corporation (SLR), personnel reviewed core handling, logging, sample preparation and analytical protocols, density measurement system, and storage procedures. The QP also reviewed the Leapfrog model parameters and geological interpretation, reviewed how drill hole collar locations are defined, inspected the use of directional drilling methods, observed the data management system, obtained a copy of the master database, and obtained SRC laboratory certificates for all drilling assays.

A review of the database indicated no significant issues. A separate review of the assay table determined minimal errors, and all are most likely due to rounding. Limitations were not placed on the QP's data verification process.

#### **Mineral Processing and Metallurgical Testing**

NexGen conducted a metallurgical test program in 2018, which included a bench test program, a pilot plant, and paste backfill testing. Test work samples comprised three composite samples, consisting of low grade ("LG"), medium grade ("MG"), and high grade ("HG") material, and ten samples of localized deposit areas.

Completed bench test work included the following.

- Quantitative evaluation of materials by scanning electron microscopy (QEMSCAN), potential acid generation
- SAGDesign™ and Bond ball mill index
- Batch leach
- Optimization leaching
- Confirmation and variability
- Settling
- Solvent extraction (SX)
- Separating funnel shakeout
- Stripping

- Gypsum precipitation
- YC precipitation
- Preliminary sulfide flotation
- Diagnostic gravity separation

Additionally, two pilot leaching tests were performed in 2018 using two different feed samples.

In 2019, a series of tests were carried out to advance the process design. These tests were carried out at the SRC facilities and included the following. Wood's qualified person was involved in the design of the metallurgical test program, including the pilot program, review of the results and their use in the mineral process design. Wood's qualified person visited the metallurgical test facilities.

- Bench-scale testing to recover uranium from gypsum (June 2019).
- Trade-off study / test work of dewatering and washing technologies using belt filters (July 2019).
- Trade-off study / test work of dewatering and washing technologies using centrifuges (August 2019).

An advanced phase of the paste backfill testing program was conducted in 2019 using drill core samples from the pilot plant program. Geotechnical and geochemical evaluations were performed to validate the mine / mill design, and results will be used in for the Rook I Project's EA. Test work included investigating the following.

- Particle size distribution
- Whole rock analysis
- Mineralogy
- Static yield stress
- Rheology
- Transportable moisture limit
- Uniaxial compressive strength (UCS)
- Process water analysis
- Tailings and kinetic tests

The Rook I FS Technical Report assumes a metallurgical steady state uranium recovery of 97.6%. This value was determined based on the results of pilot plant test work, and by compiling the performance of unit operation uranium recoveries. Pilot leach testing results indicated uranium extractions of 99.3%. The washing efficiency in the counter current decantation was greater than 99.6%. All other unit operations in the pilot testing had uranium recoveries of greater than 99.6%.

The QEMSCAN analysis identified that there were no primary molybdenum-bearing minerals present. However, molybdenum did occur in chalcopyrite and galena solid solutions. Similarly, there were no arsenic-bearing minerals identified. No major deleterious elements have been identified to date that would affect the process.

## **Mineral Resource and Mineral Reserve Estimates**

### *Mineral Resource Estimation*

The Mineral Resource estimate for the Rook I Project was based on results from 521 diamond drill holes. It was reported using a \$50/lb U<sub>3</sub>O<sub>8</sub> price, at a cut-off grade of 0.25% U<sub>3</sub>O<sub>8</sub>.

- Measured Mineral Resources total 2.18 million tonnes ("Mt") at an average grade of 4.35% U<sub>3</sub>O<sub>8</sub>, for a total of 209.6 million pounds ("Mlb") of U<sub>3</sub>O<sub>8</sub>.
- Indicated Mineral Resources total 1.57 Mt at an average grade of 1.36% U<sub>3</sub>O<sub>8</sub>, for a total of 47.1 Mlb U<sub>3</sub>O<sub>8</sub>.
- Inferred Mineral Resources total 4.40 Mt at an average grade of 0.83% U<sub>3</sub>O<sub>8</sub>, for a total of 80.7 Mlb U<sub>3</sub>O<sub>8</sub>.

The effective date of the Mineral Resource estimate is July 19, 2019. From July 19, 2019 to the effective date of the Rook I FS Technical Report, no additional exploration drilling occurred at the Arrow Deposit. In the QP's opinion, as noted in the Rook I FS Technical Report, the Mineral Resource estimate remained current as of the effective date of Rook I FS Technical Report. Estimated block model grades are based on chemical assays only. The Mineral Resources were estimated by NexGen and audited by RPA, now part of SLR International Corporation (SLR). Mineral Resources are inclusive of Mineral Reserves. The QP noted, per the Rook I FS Technical Report, that the deposit is open in many directions.

The Arrow Deposit Mineral Resource estimate is based on the results of surface diamond drilling campaigns conducted from 2014–2019. The Mineral Resources of the Arrow Deposit are classified as Measured, Indicated, and Inferred based on drill hole spacing and apparent continuity of mineralization, as summarized in the following table:

**Mineral Resource Estimate – 19 July 2019**

Classification	Zone	Tonnage (t)	Grade (% U <sub>3</sub> O <sub>8</sub> )	Contained Metal (lb U <sub>3</sub> O <sub>8</sub> )
Measured	A2-LG	920,000	0.79	16,000,000
	A2-HG	441,000	16.65	161,900,000
	A3-LG	821,000	1.75	31,700,000
Measured Total	–	2,183,000	4.35	209,600,000
Indicated	A2-LG	700,000	0.79	12,200,000
	A2-HG	56,000	9.92	12,300,000
	A3-LG	815,000	1.26	22,700,000
Indicated Total	–	1,572,000	1.36	47,100,000
Measured + Indicated	A2-LG	1,620,000	0.79	28,100,000
	A2-HG	497,000	15.90	174,200,000
	A3-LG	1,637,000	1.51	54,400,000
Measured + Indicated Total	–	3,754,000	3.10	256,700,000
Inferred	A1	1,557,000	0.69	23,700,000
	A2-LG	863,000	0.61	11,500,000
	A2-HG	3,000	10.95	600,000
	A3-LG	1,207,000	1.12	29,800,000
	A4	769,000	0.89	15,000,000
Inferred Total	–	4,399,000	0.83	80,700,000

Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources are reported at a cut-off grade of 0.25% U<sub>3</sub>O<sub>8</sub>.
3. Mineral Resources are estimated using a long-term uranium price of US\$50/lb U<sub>3</sub>O<sub>8</sub> and estimated mining costs.
4. A minimum thickness of one metre was used.
5. Tonnes are based on bulk density weighting.
6. Mineral Resources are inclusive of Mineral Reserves.
7. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
8. Numbers may not sum due to rounding.
9. HG = High Grade, LG = Low Grade.

Per the Rook I FS Technical Report, the QP reviewed the geology, structure, and mineralization of the Arrow Deposit based on the results of 566 diamond drill holes. The QP also audited three-dimensional (“3D”) wireframe models developed by NexGen, which represent 0.05% U<sub>3</sub>O<sub>8</sub> grade envelopes with a minimum thickness of one metre.

Of the 566 holes completed, 45 drill holes were drilled on the South Arrow Discovery and were not used for the purposes of the Mineral Resource estimate. The wireframe models representing the Arrow Deposit mineralized zones are intersected in 418 of 566 drill holes. The updated 2019 Mineral Resource estimate does not account for HG domains within A3, which were accounted for in the previous 2017 Mineral Resource estimates. The A3-HG domains were found to be of relatively LG, with average grades just above the HG modelling threshold of 5% U<sub>3</sub>O<sub>8</sub>; after the 2019 infill drilling, the variability of grades was better handled with ordinary kriging (“OK”), where the locally varying mean, in conjunction with the density of data, counters grade smearing.

Based on 5,850 dry bulk density determinations for the Arrow Deposit, NexGen developed a formula that relates bulk density to grade. This formula was used to assign a density value to each assay. Bulk density values were then used to weight the grade estimation and convert volume to tonnage.

High grade values were capped, and their influence was further restricted during the block estimation process. High grade outliers were capped at 1%, 2%, 3%, 4%, 5%, 6%, 8%, 10%, 15%, 25%, and 30%  $U_3O_8$ , depending on the domain. This resulted in 428 capped assay values. No outlier assay values were identified in the HG domains. Therefore, no capping was applied to the assays as each HG domain dataset was determined to be stationary and appropriate for interpolation, with the exclusion of the A2-HG8, which was capped at 30%  $U_3O_8$ .

Variable density and grade multiplied by density (“**GxD**”) were interpolated using OK in the A2-HG domains (excluding A2-HG6 and A2-HG8), the A2-LG domain that envelopes a HG domain, and two large A3-LG domains (301 and 312). Inverse distance squared ( $ID^2$ ) was used on all remaining mineralized domains. Estimates used a minimum of one to three composites per block estimate, to a maximum of 50 composites per block estimate. The majority of the domains used a maximum of two composites per drill hole.

Sample selection criteria were based on sensitivity testing that compared the estimated block means of each domain to the composited mean. Unsourced intervals and samples below the detection limit within the domains were assigned a grade of zero and considered to be internal dilution. Hard boundaries were used to limit the use of composites between domains. Block grade was derived by dividing the interpolated GxD value by the interpolated density value for each block.

The block model was validated by swath plots, volumetric comparison, visual inspection, and statistical comparison. The average block grade at zero cut-off was compared to the average of the composited assay data to ensure that there was no global bias.

Per the Rook I FS Technical Report, the QP was not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate other than what has been described in the Rook I FS Technical Report.

#### *Mineral Reserve Estimation*

The vertical extent of the Mineral Reserves extends from approximately 320 m below surface to 680 m below surface.

Based on the cut-off grade assessment, an incremental cut-off grade of 0.30%  $U_3O_8$  was applied as the input parameter for designing stopes. This cut-off grade was applied at the level of stoping solids, after inclusion of waste and fill dilution. The Mineral Reserves are limited to the A2 and A3 veins within the Arrow Deposit.

A nominal amount of material between 0.03%  $U_3O_8$  (the regulatory limit between benign waste and mineralized material) and 0.26%  $U_3O_8$  (which is uneconomic to process) has been included in the mine plan, in addition to 88,100 tonnes of waste used to commission the mill and to keep the mill feed grade below 5.0%.

The Rook I Project assumes that both transverse stope and longitudinal retreat stope mining methods would be used. The assumed mining rate is nominally 1,300 tonnes per day (t/d). A total planned dilution of approximately 24% is projected for the longhole stopes. The unplanned or overbreak dilution is estimated at 12% total.

Fill dilution will occur when mining next to fill walls and mucking on fill floors; a 4% fill dilution was applied to secondary transverse stopes only, and a 1% fill dilution was applied to secondary longitudinal stopes. Extraction (mining recovery) is estimated at a combined 95.5% for longhole mining and ore development.

The Mineral Reserve estimate is reported using the 2014 CIM Definition Standards. The effective date of the Mineral Reserve estimate is 21 January 2021. The table below summarizes Mineral Reserves based on a US\$50/lb uranium price at a cut-off grade of 0.30%  $U_3O_8$ .

Factors that may affect the Mineral Reserve estimate include the following.

- Commodity price assumptions.
- Changes in local interpretations of mineralization geometry and continuity of mineralization zones.
- Changes to geotechnical, hydrogeological, and metallurgical recovery assumptions.
- Input factors used to assess stope dilution.
- Assumptions that facilities such as the UGTMF can be permitted.

- Assumptions regarding social, permitting, and environmental conditions.
- Additional infill or step out drilling.

#### Mineral Reserve Estimate

Classification	Recovered Ore Tonnes (thousands)	U <sub>3</sub> O <sub>8</sub> Grade (%)	U <sub>3</sub> O <sub>8</sub> lb (millions)
Proven	0	0	0
Probable	4,575	2.37%	239.6
<b>Total</b>	<b>4,575</b>	<b>2.37%</b>	<b>239.6</b>

Notes:

1. CIM definitions were followed for Mineral Reserves.
2. Mineral Reserves are reported with an effective date of 21 January 2021.
3. Mineral Reserves include transverse and longitudinal stopes, ore development, marginal ore, special waste, and a nominal amount of waste required for mill ramp-up and grade control.
4. Stopes were estimated at a cut-off grade of 0.30% U<sub>3</sub>O<sub>8</sub>.
5. Marginal ore is material between 0.26% U<sub>3</sub>O<sub>8</sub> and 0.30% U<sub>3</sub>O<sub>8</sub> that must be extracted to access mining areas.
6. Special waste in material between 0.03% and 0.26% U<sub>3</sub>O<sub>8</sub> that must be extracted to access mining areas. 0.03% U<sub>3</sub>O<sub>8</sub> is the limit for what is considered benign waste and material that must be treated and stockpiled in an engineered facility.
7. Mineral Reserves are estimated using a long-term metal price of US\$50/lb U<sub>3</sub>O<sub>8</sub>, and a 0.75 US\$/C\$ exchange rate (C\$1.00 = US\$0.75). The cost to ship the YC product to a refinery is considered to be included in the metal price.
8. A minimum mining width of 3.0 m was applied for all longhole stopes.
9. Mineral Reserves are estimated using a combined underground (UG) mining recovery of 95.5% and total dilution (planned and unplanned) of 33.8%.
10. The density varies according to the U<sub>3</sub>O<sub>8</sub> grade in the block model. Waste density is 2.464 t/m<sup>3</sup>.
11. Numbers may not add due to rounding.

#### Mining Operations

Based on the Rook I FS Technical Report, access to the underground (“UG”) Arrow Deposit will be via two shafts, an 8.0 m diameter Production Shaft (intake air) and a 5.5 m diameter Exhaust Shaft (second egress). Access to the working will be from the Production Shaft with stations on 500 and 590 Levels. Levels will be spaced 30 m apart UG and will be connected via an internal ramp.

Production will be via a conventional longhole mining. The longhole mining methods and mine design discussed in this section were chosen to optimize safety performance, reduce worker exposure to physical hazards and radiation, maximize Mineral Resource extraction, and increase operational flexibility and productivity by achieving simultaneous production from multiple mining fronts.

The estimated mill capacity is targeted at 1,300 tonnes per day (t/d) of ore. To realize this target, the mine plan will include longhole production on four separate mining blocks, with multiple stopes available per block. The estimated production rates of the stopes range from 250 t/d to 300 t/d. This will require approximately five stopes to be active to achieve 1,300 t/d, which will be feasible with that many stopes available. The grades will vary by mining block; this will facilitate the ability to provide a more consistent grade to the process plant with four active blocks. Production profile and head grade from UG are shown in the following figure.

**Underground Production Profile with Grade (U<sub>3</sub>O<sub>8</sub>)**



The tailings produced by the mill will be returned UG as either cemented paste backfill for the production stopes or as cemented paste tailings into stopes that will be created for this purpose. The UGTMF will be located on the north side of the deposit and will consist of approximately 97 waste stopes and related development.

The mining method will make use of mechanized equipment and conventional processes widely employed in the global mining industry.

Shaft sinking will occur through a variety of stable and unstable strata, including water saturated overburden, Devonian Sandstone, Cretaceous Shales and Athabasca Sandstones, and finally into the basement rocks. These domains consist of poor to very poor-quality rock masses; however, once these have been temporarily artificially frozen for shaft construction, these are not anticipated to be problematic. A 600 mm hydrostatic lining is considered to be the minimum practicable thickness for lining against a freeze wall. As such, a 600 mm liner will be installed to 175 m in the Production Shaft and 217 m in the Exhaust Shaft. To prevent migration of water down the back of the liner and into the shaft, a grout seal will be placed at the base of the hydrostatic pressure resisting liner.

The minimum distance between the shallowest mine excavation and the unconformity is approximately 250 m. This drastically reduces the risks associated with the crown pillar and therefore has not been investigated in detail.

The processing of uranium ore will generate several forms of waste. A portion of the waste will be used for paste backfill. The remainder will be permanently stored in purpose-built excavations / chambers in the footwall ("FW") of the deposit, in an area that is interpreted to have relatively minimal alteration or fault or shear structures. The Rook I FS Technical Report proposes the UGTMF will consist of 97 waste stopes, each approximately 25 m wide by 25 m long by 60 m high. The excavations will be arranged in a regular pattern with a minimum of 15 m pillars between openings. The first waste stopes will be located on the 500 Level and the top of the excavations will be approximately 250 m below the unconformity.

Backfill of mined stopes is planned to use a combination of process waste, cement, potential fillers (such as fly ash), and water. The creation of paste tailings is directly proportional to the amount of material processed through the plant. For each tonne of processed material, 0.82 m<sup>3</sup> of paste tailings will be created, along with 0.32 m<sup>3</sup> of combined waste precipitates. Based on a steady-state production rate, the total fill produced will be nominally 373,100 m<sup>3</sup> per year for paste tailings, and 145,600 m<sup>3</sup> per year for combined precipitates. Tailings not used for paste backfill will be stored in the UGTMF.

The Arrow Deposit is planned to be accessed via two shafts. Both shafts will be located in the FW of the deposit. The first shaft will be used as a Production Shaft, and for transportation of personnel and materials into the mine and will be sunk to a depth of 650 m below surface. The Production Shaft will have divided compartments so that fresh air that comes into contact with ore being skipped to surface will be immediately exhausted within the mine. The Production Shaft will have a permanent headframe and hoisting house. The second shaft will be used as an exhaust ventilation shaft. The Exhaust Shaft will be sunk to a depth of 533 m below surface and will be equipped with a secondary emergency escapeway system.

Thirteen levels, spaced at 30 m intervals sill to sill, are planned for the Arrow Deposit. Lateral development will be concentrated in the first four years to establish the production areas, the UGTMF areas, UG infrastructure and the permanent ventilation system. In addition to the lateral development, there will be an internal ramp system that will connect all mining levels.

Mine dewatering will be completed using a clean water system on the 500 Level. The 500 Level sumps will be capable of collecting and removing all strata and operational process water from the mine infrastructure, ongoing development, operational stopes, shaft inflow, and pastefill seepage. Run-of-mine water will decant through membranes; the clean water will be pumped to surface while the residual solids and water will be collected and placed into the ore handling system.

Transverse stope mining will be used in areas of wider stopes (generally greater than 12 m), while longitudinal retreat stope mining will be used in areas of thinner stope widths. Transverse longhole mining will be completed using primary and secondary stoping sequences to avoid leaving pillars. The order in which stopes are extracted will be largely driven by the head grade, with the overarching goal of processing 30 Mlb of U3O8 annually. Primary stopes will be recovered first, followed by primary stopes on two vertical levels above, and then secondary stopes on the original level.

Two separate vertical mining blocks (the Upper Block and Lower Block) will be established, and within each vertical block, the A2 and A3 veins can be mined independently. Mining activities will commence from both the Upper Block and Lower Block, and in the A2 and A3 veins, for a total of four separate production areas. A fifth production block will be created below the 620 Level.

The ore handling system will begin with load-haul-dump (“LHD”) units loading muck in transverse and longitudinal retreat stopes. The LHDs will tram muck to centrally located ore and waste passes. The bottom of the ore pass will be located on 590 Level, where a control system will direct ore on to a grizzly equipped with a remotely operated rock breaker. The grizzly openings will be 400 mm by 450 mm. The sized ore will be loaded onto a conveyor on the 620 Level and hauled to the shaft for skip loading.

There will be two separate waste handling systems. The waste from the UGTMF will report to a rockbreaker on the 500 Level, near the Production Shaft. The sized waste rock will be loaded onto the 620 Level conveyor and hauled to the shaft for skip loading. The second waste handling system will be located near the ore body and will handle all remaining lateral development. The system will be identical to the ore handling system.

The ventilation system is designed as a predominately negative or “pull” system. Fresh air will be distributed throughout the mine from the 500 and 590 Level shaft stations from the Production Shaft and internal ramp. The auxiliary ventilation system will utilize both flow-through and extraction ventilation to exhaust contaminated air from localized areas to return air drifts and raises.

The Rook I mine will be developed using a high degree of equipment mechanization. Each of the main pieces of equipment will have remote operating capability, and in some cases will be autonomous to reduce radiation exposure. A raisebore machine will be used for development of ore and waste passes, and internal ventilation raises.

The mobile equipment UG will be captive in the mine. The maintenance facility will be equipped to repair and service all captive equipment for the life of the operation.

### **Processing and Recovery Operations**

The process plant design developed by Wood for the Rook I Project is based on the metallurgical testing and on the latest unit processes successfully used in uranium process plants across the world, including plants in northern Saskatchewan. The design of tailings preparation has been improved to facilitate a more reliable tailings deposition strategy through the paste plant. The process plant will consist of the following.

- Ore sorting
- Grinding
- Leaching
- Liquid-solid separation via counter current decantation and clarification
- SX
- Gypsum precipitation and washing
- YC precipitation and washing

- YC drying, calcining and packaging
- Tailings preparation and paste tailings plant
- Effluent treatment

Plant throughput will be 1,300 t/d and design production will be 30 Mlb U<sub>3</sub>O<sub>8</sub> per annum. It is expected that a 3-month ramp-up period will be required to reach design throughput.

Water from the settling pond and fresh water from Patterson Lake will be fed to the process plant to provide the process requirements. The amount of water recycled from the settling pond has been further optimized to reduce the amount of fresh water required by using settling pond water for counter current decantation (“CCD”) wash water and using belt filter filtrate for paste process water.

The major reagents required will include sulphur, sulphuric acid, unslaked lime, hydrogen peroxide, flocculant, kerosene, tertiary amine, isodecanol, sodium carbonate, magnesia, barium chloride and ferric sulphate.

The process plant will require approximately 7.4 megawatts (MW) of power to operate at full capacity. The paste plant will require approximately 0.9 MW of power.

### **Infrastructure, Permitting and Compliance Activities**

#### *Project Infrastructure*

The key infrastructure contemplated for the Rook I Project includes the following.

- UG mine with two vertical shafts.
- UG infrastructure, including material handling systems, maintenance facilities, fuel bay, explosives magazine, ventilation, paste backfill and paste tailings distribution system, electrical and communications facilities, UG water supply, dewatering facilities.
- UGTMF.
- Surface support infrastructure for the mine, including headframe and hoist facilities, surface explosives magazine, and ventilation fans.
- Surface support infrastructure for the mill, including process plant, SX plant, effluent treatment plant, and acid plant.
- Site support infrastructure, including accommodation camp, Liquefied Natural Gas (LNG) facilities, LNG power plant, mine and mill dry facilities, analytical and metallurgical laboratory and maintenance, warehouse and security buildings.
- Surface ore storage stockpile facility.
- Waste rock storage facilities for potentially acid generating (PAG), non-potentially acid generating (NPAG) and special waste materials.
- Water management facilities, including: two site water runoff ponds, six contact water process ponds, a PAG stockpile runoff collection pond, and conveyance and diversion structures.
- Domestic / industrial waste management areas.
- Airstrip.
- LNG power plant.

From a study completed during the prefeasibility study, it was determined that the NexGen Rook I site would be powered by an on-site generation plant due to a lack of existing power infrastructure and a high cost for the installation of a new transmission line. An LNG power plant was progressed during the preparation of the Rook I FS Technical Report with a power requirement of 26.5 MW based on a nominal demand of 24.1 MW. An N+1 design is planned, with eight generators operating at 3.3 MW and one standby unit. The plant design includes LNG storage and filling facilities with the fuel being trucked to the site.

#### *Ore and Special Waste Stockpiles*

There will be an ore stockpile consisting of four piles of differing grades. Each pile will be approximately 6,500 m<sup>3</sup>.

It is estimated that about 1% of the waste rock brought to surface will be mineralized but will not contain high enough grade to be processed through the mill economically, and therefore is not stockpiled in the ore stockpile area. This material



is stored in the special waste rock stockpile area with an anticipated pile volume of 60,000 m<sup>3</sup>. The special waste will be processed during normal operations, to ensure the mill head grade remains below the 5% U3O8 design limit. The remaining special waste will be processed at end of mine life, with the resultant tailing being deposited UG in the UGTMF chambers.

Both the ore and special waste stockpiles will be dual lined with high-density polyethylene (HDPE) and will be self-contained facilities capable of holding a full probable maximum precipitation ("PMP") 24-hour event.

#### *Environmental Studies*

NexGen commenced collection of baseline data in 2015, with the majority of field studies commencing in 2018. Where necessary, some studies continued into 2019 and 2020 to complete the baseline data and information collection requirements, with some work ongoing into 2021. At the time of the Rook I FS Technical Report, NexGen had undertaken sufficient baseline data collection to complete a comprehensive EA.

#### *Waste Rock Management Facility*

Approximately 5.9 Mm<sup>3</sup> of waste rock will be generated over the course of the LOM. Of this total, 4.6 Mm<sup>3</sup> (78%) is PAG and 1.3 Mm<sup>3</sup> is NPAG. The PAG and NPAG waste rock will have separate storage areas. The PAG and NPAG waste rock will be stockpiled with 2H:1V side slopes and the top of the finished stockpile will tie into the hill to the south; the overall height will not exceed the highest nearby topography. The PAG storage area will be HDPE lined and the NPAG storage area will not be lined.

#### *Water Management*

The water management infrastructure has been designed to maximize the diversion of non-contact surface runoff water away from the general site footprint and developed features. Precipitation events and snow melt runoff that come in contact with disturbed infrastructure areas, or potential contact zones, are captured, collected, and directed to respective impound areas identified as site runoff ponds or collection areas.

All ponds and pads containing mineralized or radiologically contaminated material have been designed to accommodate a PMP 24-hour event. These areas are self-contained in that the initial precipitation events are contained within the feature itself. The initial precipitation event does not exit elsewhere until pumped. These contained waters are tested before release to the environment based on regulatory requirement; water that does not meet specification will report to the effluent treatment plant for treatment.

The capture zones for Site Runoff Pond #1 have potential contact with mineralized or radiologically contaminated material. Site Runoff Pond #1 is designed to capture a PMP 24-hour event. Draw down is by sump pump to the site settling pond.

Site Runoff Pond #2 is designed to capture a 1:100 year 24-hour precipitation event. The pond contents will be tested, and if suitable for release, will be released to environment. If tested and not suitable for release, pond contents will be pumped to the site settling pond. In the case of a PMP 24-hour precipitation event, Site Runoff Pond #2 will capture and collect runoff to full capacity of the pond, prior to overflowing additional precipitation to the west bermed runoff collection area.

Six contact water storage ponds are planned, including four fill-test-release monitoring ponds for treated effluent, one contingency pond, and one feed settling pond. Each monitoring pond and the contingency pond is sized for 5,000 m<sup>3</sup> of capacity and will maintain 1 m of freeboard as contingency for a PMP 24-hour event. The feed settling pond will have a capacity of 16,000 m<sup>3</sup> with 1 m freeboard. Approximately 1,100 m<sup>3</sup> of the settling pond capacity is reserved for a 1:100 year 24-hour precipitation event which includes runoff collecting immediately surrounding the Production Shaft and in the pipe containment corridor.

All other water conveyance and containment structures have been designed to accommodate a 1:100 year 24-hour precipitation event as well as the anticipated volumes of water generated under routine and non-routine operating conditions.

#### *Closure and Reclamation Planning*

Following the completion of mining and milling activities, a detailed decommissioning plan will be developed in accordance with provincial and federal regulations and guidelines. Once finalized, the plan and an application for approval to decommission will be submitted to provincial and federal authorities. Following approval, decommissioning activities will commence.

Decommissioning will be preceded by the orderly cessation of operations and transition of the operation into a safe inactive state. Production mining will be completed, and active mining areas backfilled and secured. The mill processing circuits will be systematically shut down, flushed, and cleaned. Surface facilities, infrastructure, and equipment will be cleaned, as necessary, scanned, and prepared for decommissioning.

Wherever practicable, surface and UG infrastructure, equipment, and materials not required during the decommissioning phase and which meet radiological criteria for off-site removal will be salvaged, sold, or transferred off-site for recycling or disposal. Remaining infrastructure, equipment and materials will undergo final decommissioning on-site.

### *Permitting*

There are several federal and provincial regulatory approvals required for a new uranium mine and mill development. Federally, under the authority of the *Nuclear Safety Control Act*, proponents wishing to carry out uranium mining and milling must first obtain a licence from the federal nuclear regulator, the CNSC. The CNSC licensing process is in progress. Before the CNSC can make a licensing decision, proponents are required to undergo an EA of the proposed project. As the Rook I Project falls under both federal and provincial jurisdictions for an EA, each of the CNSC and the Saskatchewan Ministry of Environment – Environmental Assessment Branch will require an EA prior to project approval.

On July 12, 2022 the CNSC announced their acceptance of the draft EIS which followed a 30-day period during which the CNSC conducted a conformance review of the EIS submission. Completion of the CNSC conformance marked the formal commencement of the 90-day federal public and technical EIS review period.

Provincial review of the draft EIS advanced in parallel to the CNSC review with technical review comments from the Saskatchewan Ministry of Environment provided to NexGen on September 22, 2022. The CNSC public and technical review concluded on October 12, 2022.

On December 1, 2022, the Corporation announced it had received all federal technical and public review comments and provincial technical review comments on the Rook I draft EIS.

As licensing applications are in progress, any findings, including any notable issues that could materially impact NexGen's ability to extract the Mineral Resources, were not available for inclusion in the Rook I FS Technical Report. Furthermore, no recommendations from the EA or licensing processes for future monitoring and/or management of environmental and social aspects of the Rook I Project were not available for inclusion in the Rook I FS Technical Report.

### *Social or Community Impacts*

NexGen has engaged regularly and established relationships with local communities and Indigenous groups since 2013. Community and Indigenous engagement have evolved since the submission of the 2018 Technical Report. Engagement mechanisms have included notification letters, meetings with leadership, establishing joint working groups (“JWGs”) for detailed discussions, and providing funding for traditional land use studies. The engagement process will continue throughout the EA and licensing processes.

In Q4 2019, NexGen entered into Study Agreements (the “**Study Agreements**”) with the following four Indigenous groups.

- Clearwater River Dene Nation
- Métis Nation – Saskatchewan (MN-S), including as on behalf of the Locals of MN-S Northern Region II
- Birch Narrows Dene Nation
- Buffalo River Dene Nation

The Study Agreements provide a framework for working collaboratively to advance the EA and exchange information that will be used to inform the Crown as the Crown undertakes its Duty to Consult.

The Study Agreements provide funding to each Indigenous group and outline a collaborative process for formal engagement to support the inclusion of Indigenous knowledge in the EA. The Study Agreements also outline processes for identifying potential effects to Indigenous rights, treaty rights, and socio-economic interests, and avoidance and accommodation measures in relation to the Rook I Project.

## Capital and Operating Costs

### Capital Cost Estimates

The estimate meets the classification standard for a Class 3 estimate as defined by Association for the Advancement of Cost Engineering (“AACE”) International and has an intended accuracy of  $\pm 15\%$ . The estimate is reported in Q4 2020 Canadian dollars. The table below outlines the estimated capital cost for supplying, constructing, and pre-commissioning the Rook I Project, and is inclusive of the early works activities.

Mining capital costs primarily comprise the following areas: shaft sinking, lateral mine development, and stationary mine infrastructure. Mine mobile equipment is assumed to be purchased on a lease-to-own basis, with the costs incurred in the lease payments. Process plant costs include the construction of the entirety of the process plant facility. Infrastructure costs include provision for the LNG power plant, as well as site preparation, permanent camp, maintenance shop, fuel storage, administration and dry facility, water treatment systems, airstrip, and site roads. Indirect costs include temporary construction facilities, construction services and supplies, and construction management (“CM”) costs, construction equipment, freight, Owner’s costs, and contingency.

NexGen is preparing a pre-commitment early works program that will encompass all scheduled activities planned for Year-4 Month 1 through Month 6. This plan will advance certain elements of the overall scope and mitigate project risks. The program includes work and the associated costs that NexGen intends on expending prior to an FID.

The scope of the pre-commitment early works program includes the following (at a high level).

- Clearing and grubbing.
- Site levelling and road construction.
- Batch plant construction.
- Initial camp construction.
- Shaft-sinking preparations, including freeze hole drilling, freeze plant installation, and sinking plant installations).

The pre-commitment early works are estimated in the Rook I FS Technical Report to cost approximately \$157.9 million.

### Total Capital Cost Estimate

Description	Units	Cost
<b>Pre-commitment early works</b>	<b>\$ million</b>	<b>157.9</b>
<b>Project Capital</b>		
UG Mining	\$ million	240.0
Processing	\$ million	216.4
Site Development	\$ million	27.7
On-Site / Off-Site Infrastructure	\$ million	118.9
<b>Subtotal Project Direct Costs</b>	<b>\$ million</b>	<b>602.9</b>
Project indirect costs	\$ million	326.5
Project Owner’s Costs	\$ million	97.9
<b>Subtotal Project Direct and Indirect Costs</b>	<b>\$ million</b>	<b>1,027.2</b>
Project Contingency	\$ million	114.8
<b>Total Project Capital</b>	<b>\$ million</b>	<b>1142.0</b>
<b>Pre-production Capital Cost (Pre-Commitment &amp; Project)</b>	<b>\$ million</b>	<b>1,299.9</b>
Sustaining	\$ million	362.4
Closure	\$ million	69.5
<b>Total</b>	<b>\$ million</b>	<b>1,731.8</b>

Notes:

1. Pre-commitment capital costs include contingency.
2. Totals may not sum due to rounding.

Sustaining capital incorporates all capital expenditures after the pre-production period of Year -4, Year -3, Year -2, and Year -1. Reclamation costs of \$78.6 million have been included in Years 12 through Year 16, less \$9.1 million in salvage value.

### *Operating Cost Estimates*

Operating cost estimates were developed in the Rook I FS Technical Report to present annual costs for production. Unit costs are expressed as \$/tonne processed and \$/lb U<sub>3</sub>O<sub>8</sub>. Operating costs were allocated to either mining, process, tailings facility and paste plant, or general and administration (G&A). LOM operating costs are estimated to be \$1,769.8 million. LOM operating costs are summarized in the table below.

UG mining occurs during Year -2 to Year 11 (note in Year -2 and Year -1, UG mining costs are capitalized). UG mining begins with capital development in Year -2 and the capitalized development continues through the LOM.

**Operating Cost Estimate Summary (Year 1 to Year 11 inclusive)**

<b>Description</b>	<b>LOM Cost (\$ million)</b>	<b>Average Annual (\$ million)</b>	<b>Unit Cost (\$/t processed)</b>	<b>Unit Cost (\$/lb U<sub>3</sub>O<sub>8</sub>)</b>
Mining	691.3	64.6	151.09	2.96
Processing	647.0	60.5	141.41	2.77
Tailing Facility and Paste Plant	144.0	13.5	31.46	0.62
General and administration	287.5	26.9	62.84	1.23
<b>Total</b>	<b>1,769.8</b>	<b>165.4</b>	<b>386.80</b>	<b>7.58</b>

Notes:

1. Totals may not sum due to rounding.
2. Average annual cost based on 10.7 years

G&A costs include labour, camp and catering costs, flights to and from site, insurance premiums, general maintenance of the surface buildings, and marketing and accounting functions. Allowances were included for reimbursable fees paid to the CNSC.

### **Economic Analysis**

The results of the economic analysis in the Rook I FS Technical Report represent forward-looking information that is subject to a number of known and unknown risks, uncertainties, and other factors that may cause actual results to differ materially from those presented here. Forward-looking statements in the Rook I FS Technical Report include, but are not limited to, statements with respect to future uranium prices, estimation of Mineral Resources and Mineral Reserves, estimated mine production and uranium recovered, estimated capital and operating costs, and estimated cash flows generated from the planned mine production. Actual results may be affected by the following.

- Differences in estimated initial capital costs and development time from what has been assumed in the Rook I FS Technical Report.
- Unexpected variations in quantity of ore, grade, or recovery rates, or presence of deleterious elements that would affect the process plant or waste disposal.
- Unexpected geotechnical and hydrogeological conditions from what was assumed in the mine designs, including water management during construction, mine operations, and post mine closure.
- Differences in the timing and quantity of estimated future uranium production, costs of future uranium production, sustaining capital requirements, future operating costs, assumed currency exchange rate, requirements for additional capital, unexpected failure of plant, or equipment or processes not operating as anticipated.
- Changes in government regulation of mining operations, environment, and taxes.
- Unexpected social risks, higher closure costs and unanticipated closure requirements, mineral title disputes or delays to obtaining surface access to the property.

If additional mining, technical, and engineering studies are conducted, these may alter the project assumptions presented in the Rook I FS Technical Report and may result in changes to the calendar timelines and the information and statements contained in the Rook I FS Technical Report.

Development and licensing approvals are not currently in place, and statutory permits, including environmental permits, are required to be granted prior to mine commencement.

The economic analysis in the Rook I FS Technical Report did not include any estimates involving the Mineral Resources that are not Mineral Reserves.

The Rook I Project has been evaluated using discounted cash flow analysis. Cash inflows consist of annual revenue projections. Cash outflows consist of project capital expenditures, sustaining capital costs, operating costs, taxes, royalties, and commitments to other stakeholders. These are subtracted from revenues to arrive at the annual cash projections.

Cash flows are taken to occur at the mid point of each period. To reflect the time value of money, annual cash flow projections are discounted to the Rook I Project valuation date using the yearly discount rate. The discount rate appropriate to a specific project can depend on many factors, including the type of commodity, the cost of capital to the project, and the level of project risks (e.g., market risk, environmental risk, technical risk, and political risk) in comparison to the expected return from the equity and money markets.

The base case discount rate for the Rook I FS Technical Report is 8%. The discounted present values of the cash flows are summed to arrive at the Rook I Project's NPV. In addition to the NPV, the IRR and the payback period are also calculated. The IRR is defined as the discount rate that results in an NPV equal to zero. The payback period is calculated as the time required to achieve positive cumulative cash flow for the Rook I Project from the start of production.

Taxes and depreciation for the Rook I Project were modelled based on input from NexGen, as well as a review of the Guideline: Uranium Royalty System, Government of Saskatchewan, June 2014. In addition, NexGen has opening balances of Canadian Exploration Expense ("CEE") and operating losses that were applied in the tax model.

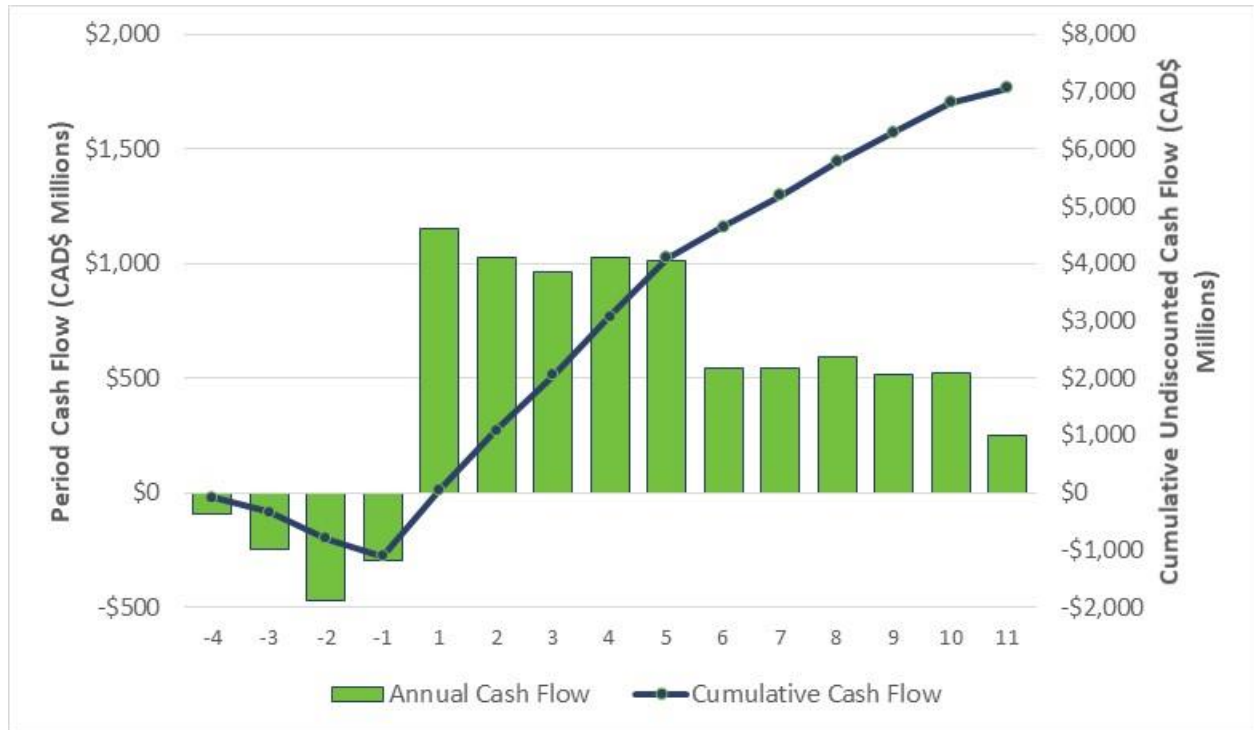
On a pre-tax basis, the NPV at 8% is \$5,577.0 million, the IRR is 64.9%, and the assumed payback period is 0.8 years. On a post-tax basis, the NPV at 8% is \$3,465.0 million, the IRR is 52.4% and the assumed payback period is 0.9 years.

A summary of the LOM cashflow is provided in the following table and "Undiscounted After-Tax Cash Flow" figure, each taken from the Rook I FS Technical Report.

**LOM Cashflow Forecast Summary Table**

<b>Description</b>	<b>Units</b>	<b>Value</b>
Gross revenue	\$ million	15,573.2
Less: transportation	\$ million	0
NSR	\$ million	15,573.2
Less: provincial revenue royalties	\$ million	(1,129.1)
Net revenue	\$ million	14,444.1
Less: total operating costs	\$ million	(1,769.8)
Operating cash flow	\$ million	12,674.3
Less: capital costs	\$ million	(1,573.9)
Pre-tax cash flow	\$ million	11,100.4
Less: provincial profit royalties	\$ million	(1,683.5)
Less: taxes	\$ million	(2,404.5)
<b>Post-tax cash flow</b>	<b>\$ million</b>	<b>7,012.4</b>

### Undiscounted After-Tax Cash Flow



The following table summarizes the economic results of the Rook I FS Technical Report, with the NPV at 8% base case highlighted.

### 2021 Feasibility Study Forecast Economic Results

Description	Units	Value
<b>Pre-Tax</b>		
NPV at 8%	\$ million	5,577
NPV at 10%	\$ million	4,745
NPV at 12%	\$ million	4,051
Internal rate of return	%	64.9%
Payback period	Years	0.8
<b>After-Tax</b>		
NPV at 8%	\$ million	3,465
NPV at 10%	\$ million	2,930
NPV at 12%	\$ million	2,484
Internal rate of return	%	52.4%
Payback period	Years	0.9

Note: Payback period is calculated from the start of production

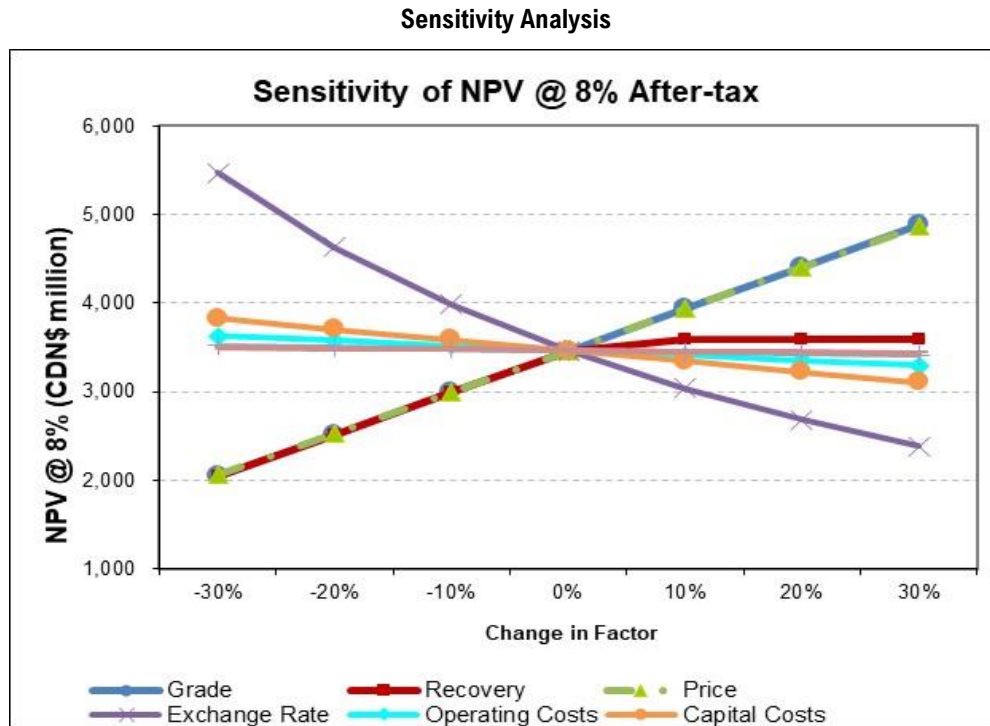
### Sensitivity Analysis

The cash flow model was tested for sensitivity to variances regarding the following.

- Head grade
- Process recovery
- Uranium price
- Overall operating costs
- Overall capital costs
- Labour costs

- Reagent costs
- CAD to USD exchange rate

The figure below illustrates the results of the sensitivity analysis. The anticipated Rook I Project cash flow is most sensitive to fluctuations in the price of uranium, head grade, and process recovery. YC is primarily traded in US dollars, whereas capital and operating costs for the Rook I Project are primarily priced in Canadian dollars. Therefore, the CAD to USD exchange rate may significantly influence project economics.



## Risks and Opportunities

NexGen and its lead consultants assessed critical areas of the Rook I Project and identified risks associated with the technical and cost assumptions used. The main risks identified in the Rook I Project include: assumptions around the prevalence of mineralized material in areas designated for mine infrastructure, assumptions around ground freezing and overall shaft development, adverse ground conditions as they relate to planned mining excavations, material handling systems unable to meet planned and peak production, commissioning of the UGTMF being slower than anticipated resulting in delays to first production, regulatory risks around permitting, and stakeholder engagement, and risks around cost escalation and project execution.

NexGen and its lead consultants performed an opportunities analysis. Opportunities that were recognized included: a potential expansion of Mineral Resources, and corresponding extension of the mine operating life, improvements to the mine extraction factor, reduction in mining operating costs and improved safety by considering remote or autonomous mining equipment, reductions in mining and process water usage through recycling, finalize the site water management philosophy and optimize the required infrastructure, consider heat recovery opportunities from the acid plant and power plant, evaluate alternative energy options including renewables and connecting to a provincial grid, and advancing critical early works construction packages to streamline overall project execution.

## Interpretation and Conclusions

Under the assumptions presented in the Rook I FS Technical Report, the Rook I Project indicates positive economics. The anticipated Rook I Project cash flow is most sensitive to the price of uranium, head grade, and process recovery. The Canadian dollar to United States dollar exchange rate significantly influences Rook I Project economics.

## **Exploration, Development and Production Recommendations**

### *Development and Production*

Due to the positive, robust economics, it is recommended in the Rook I FS Technical Report to advance the Rook I Project to the next phase of engineering. The recommended development path is to continue to advance the EA and licensing efforts while concurrently advancing key activities that will provide further project definition and reduce project execution timeline risks. Associated project risks are manageable and identified opportunities can provide enhanced economic value.

Engineering and field investigations should be advanced in support increased certainty of costs and project timelines in preparation for permit approvals and a FID.

The recommendations proposed are presented as a two-phase work program. Portions of the second recommended work phase are dependent on information generated in the first phase. The Phase 1 recommendations are projected to require a budget of \$9–10.5 million to complete. The Phase 2 recommendations are estimated at \$30–35 million.

The following subsections list the programs that are recommended for the next stage of engineering work for the Rook I Project.

### **Phase 1**

#### ***Site Investigations***

It is recommended in the Rook I FS Technical Report that NexGen proceeds with site investigations to support basic engineering, including the following.

- Detailed materials characteristics and quantification assessment to confirm borrow source locations and available volumes of aggregates.
- Drill hole investigations of nuisance mineralization observed in the FW of Arrow proximal to LOM infrastructure, the quartz vein observed in GAR-18-013 (Exhaust Shaft pilot hole), and the northern extents of the UGTMF.
- Hydrogeological studies to increase NexGen's understanding of the impact of groundwater on the UG mine and mine dewatering requirements.
- Investigate near surface and subsurface conditions in the area of proposed surface infrastructure, focusing on the Mine Terrace and Waste Rock Storage Facility.

The total estimated project cost in the Rook I FS Technical Report for the geotechnical, geomechanical, hydrological and surface material assessment is \$8–9 million.

#### ***Process Plant Optimizations***

The following studies are proposed in the Rook I FS Technical Report:

- Loaded strip acid recovery
- Gypsum belt filter optimization
- YC particle size enhancement
- YC belt filter optimization
- Clarifier optimization
- Paste plant optimization
- Geo-metallurgical characterization
- Mine water pre-treatment technology

The total estimated cost in the Rook I FS Technical Report for this program is \$1.0–1.5 million.



## **Phase 2**

### ***Engineering***

It is recommended in the Rook I FS Technical Report that NexGen proceeds to basic engineering. Basic engineering design forms the basis for later successful completion of the detailed engineering, procurement, construction, and commissioning work, and further provides NexGen valuable information to finalize internal discussion and evaluation of the feasibility of the Rook I Project. The work will include the following.

- Complete engineering to a 40–45% level of completion, in alignment with the AACE Class 2 estimate requirements.
- Develop Request for Proposal (RFP) packages for construction level quotations.
- Fully define long-lead procurement items and initiate procurement process for critical path items.
- Develop a Class 2 capital cost (CAPEX) estimate that will form the control budget for the Rook I Project.
- Develop a Level 4 Implementation Schedule for the Rook I Project.

The total estimated in the Rook I FS Technical Report cost for basic engineering is \$30–35 million.

### ***Exploration***

Current focus of exploration is on areas near possible future infrastructure to maximize economic viability of any newly identified resources and provide streamlined supply for eventual mill capacity. Once these areas are fully tested there will be a shift to geologically high priority targets across the Rook I Project.

Activities will include drilling of advanced targets while also completing geophysical surveys to create more drill-ready targets elsewhere. In conjunction, these methods will systematically evaluate the Rook I Project for additional uranium mineralization. Costs of such activity will vary based on methods used and amount of drilling completed.

## **RISK FACTORS**

The operations of the Corporation are speculative due to the high-risk nature of its business which is the exploration of mining properties. These are not the only risks and uncertainties that NexGen faces. Additional risks and uncertainties not presently known to the Corporation or that the Corporation currently considers immaterial may also impair its business operations. These risk factors could materially affect the Corporation's future operating results and could cause actual events to differ materially from those described in forward- looking statements relating to the Corporation.

### **Negative Operating Cash Flow and Dependence on Third-Party Financing**

The Corporation has no source of operating cash flow and there can be no assurance that the Corporation will ever achieve profitability. Accordingly, the Corporation is dependent on third-party financing to continue exploration activities on the Corporation's properties, maintain capacity and satisfy contractual obligations. Accordingly, the amount and timing of expenditures depends on the Corporation's cash reserves and access to third-party financing. Failure to obtain such additional financing could result in delay or indefinite postponement of further exploration and development of the Corporation's properties, including the Rook I Project, or require the Corporation to sell one or more of its properties (or an interest therein). In particular, there can be no assurance that the Corporation will have achieved profitability prior to the Maturity Date and may be required to finance the repayment of all or a part of the principal amount of the 2020 Debentures. Failure to repay the 2020 Debentures in accordance with the terms thereof would have a material adverse effect on the Corporation's financial position.

### **Uncertainty of Additional Financing**

As stated above, the Corporation is dependent on third-party financing, whether through debt, equity, or other means. Although the Corporation has been successful in raising funds to date, there is no assurance that the Corporation will be successful in obtaining required financing in the future or that such financing will be available on terms acceptable to the Corporation. The Corporation's access to third-party financing depends on several factors including the price of uranium, the results of ongoing exploration, the Corporation's obligations under the 2020 Debentures, a claim against the Corporation, a significant event disrupting the Corporation's business or uranium industry generally, or other factors may make it difficult or impossible to obtain financing through debt, equity, or other means on favourable terms, or at all. As previously stated, failure to obtain such additional financing could result in delay or indefinite postponement of further exploration and development of the Corporation's properties, including the Rook I Project, or require the Corporation to sell one or more of its properties (or an interest therein).

## **The Price of Uranium and Alternate Sources of Energy**

The price of the Corporation's securities is highly sensitive to fluctuations in the price of uranium. Historically, the fluctuations in these prices have been, and are expected to continue to be, affected by numerous factors beyond the Corporation's control. Such factors include, among others: demand for nuclear power; political and economic conditions in uranium producing and consuming countries; public and political response to a nuclear accident; improvements in nuclear reactor efficiencies; reprocessing of used reactor fuel and the re-enrichment of depleted uranium tails; sales of excess inventories by governments and industry participants; and production levels and production costs in key uranium producing countries.

In addition, nuclear energy competes with other sources of energy like oil, natural gas, coal and hydroelectricity. These sources are somewhat interchangeable with nuclear energy, particularly over the longer term. If lower prices of oil, natural gas, coal and hydroelectricity are sustained over time, it may result in lower demand for uranium concentrates and uranium conversion services, which, among other things, could lead to lower uranium prices. Growth of the uranium and nuclear power industry will also depend on continuing and growing public support for nuclear technology to generate electricity. Unique political, technological and environmental factors affect the nuclear industry, exposing it to the risk of public opinion, which could have a negative effect on the demand for nuclear power and increase the regulation of the nuclear power industry. An accident at a nuclear reactor anywhere in the world could affect acceptance of nuclear energy and the future prospects for nuclear generation.

All of the above factors could have a material and adverse effect on the Corporation's ability to obtain the required financing in the future or to obtain such financing on terms acceptable to the Corporation, resulting in material and adverse effects on its exploration and development programs, cash flow and financial condition.

## **Exploration Risks**

Exploration for mineral resources involves a high degree of risk and few properties that are explored are ultimately developed into producing mines. The risks and uncertainties inherent in exploration activities include but are not limited to: general economic, market and business conditions; the regulatory process and actions; failure to obtain necessary permits and approvals; technical issues; new legislation; competitive and general economic factors and conditions; the uncertainties resulting from potential delays or changes in plans; the occurrence of unexpected events; and, management's capacity to execute and implement its future plans. There is also no assurance that even if commercial quantities of ore are discovered that it will be developed and brought into commercial production. The commercial viability of a mineral deposit once discovered is also dependent upon a number of factors, most of which factors are beyond the control of the Corporation and may result in the Corporation not receiving adequate return on investment capital.

## **Uninsurable Risks**

Mining operations generally involve a high degree of risk. Exploration, development and production operations on mineral properties involve numerous risks, including but not limited to unexpected or unusual geological operating conditions, seismic activity, rock bursts, cave-ins, fires, floods, landslides, earthquakes and other environmental occurrences, and political and social instability, any of which could result in damage to, or destruction of, life or property, environmental damage and possible legal liability. Although the Corporation believes that appropriate precautions to mitigate these risks are being taken, operations are subject to hazards such as equipment failure or failure of structures, which may result in environmental pollution and consequent liability. It is not always possible to obtain insurance against all such risks and the Corporation may decide not to insure against certain risks because of high premiums or other reasons. Should such liabilities arise, they could reduce or eliminate the Corporation's future profitability and result in increasing costs and a decline in the value of the Shares. While the Corporation may obtain insurance against certain risks in such amounts as it considers adequate, the nature of these risks is such that liabilities could exceed policy limits or be excluded from coverage. The potential costs that could be associated with any liabilities not covered by insurance or in excess of insurance coverage may cause substantial delays and require significant capital outlays, thereby adversely affecting the Corporation's business and financial condition.

## **Reliance upon Key Management and Other Personnel**

The Corporation relies on the specialized skills of management in the areas of mineral exploration, geology, project development and business negotiations and management. The loss of any of these individuals could have an adverse affect on the Corporation. The Corporation does not currently maintain key-man life insurance on any of its key employees. In addition, as the Corporation's business activity continues to grow, it will require additional key financial, administrative and qualified technical personnel. Although the Corporation believes that it will be successful in attracting, retaining and training qualified personnel, there can be no assurance of such success. If it is not successful in attracting, retaining and training qualified personnel, the efficiency of the Corporation's business could be affected, which could have an adverse impact on its future cash flows, earnings, results of operation and financial condition.

## **Imprecision of Mineral Reserve and Resource Estimates**

Mineral reserve and resource figures are estimates, and no assurances can be given that the estimated levels of uranium will be produced. 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 the Corporation believes that its mineral resource estimate is well established and reflects management's best estimates, by their nature, mineral resource estimates are imprecise and depend, to a certain extent, upon geological assumptions based on limited data, and statistical inferences which may ultimately prove unreliable. Should the Corporation encounter mineralization or formations different from those predicted by past sampling and drilling, resource estimates may have to be adjusted.

These are not the only risks and uncertainties that NexGen faces. Additional risks and uncertainties not presently known to the Corporation or that the Corporation currently considers immaterial may also impair its business operations. These risk factors could materially affect the Corporation's future operating results and could cause actual events to differ materially from those described in forward-looking statements relating to the Corporation.

## **Pending Assay Results**

Due to the nature of uranium and immediate visibility of radioactive content, in the interest of good disclosure practices it is the Corporation's practice to measure the natural gamma radiation of all core using a Radiation Solutions Inc. RS-120 gamma-ray handheld scintillometer as soon as practicable and immediately announce the results thereof by news release. After core has been appropriately handled and logged, samples are dispatched for testing. Assay results historically are generally received between 30 and 120 days after receipt of samples by the laboratory. The total count gamma readings using the scintillometer may not be directly or uniformly related to uranium grades of the sample measured and are only a preliminary indication of the presence of radioactive minerals. Core interval measurements and true thicknesses are not determined until assay results are received. There can be no assurance that assay results, once received, will confirm the previously announced scintillometer readings.

## **Climate Change**

The exploration, development and future operations of NexGen's properties may be adversely affected by climate change. Governments are moving to introduce climate change legislation and treaties at all levels of government. Changes to the climate, such as increased greenhouse gases and diminishing energy and water resources, may affect the cost and profitability of developing the Corporation's properties. The scientific community has predicted an increase, over time, in the frequency and severity of extraordinary or catastrophic natural phenomena as a result of climate change. The Corporation can provide no assurance that NexGen will be able to predict, respond to, measure, monitor or manage the risks posed as a result. Physical climate change events, and the trend toward more stringent regulations aimed at reducing the effects of climate change, could impact the Corporation's decision to pursue future opportunities, which could have an adverse effect on the business and future operations. There is no assurance that efforts to mitigate the risks of climate changes will be effective and that the physical risks of climate change will not have an adverse effect on the Corporation's operations and profitability.

## **Aboriginal Title and Consultation Issues**

Aboriginal and treaty rights in Canada, as well as related consultation issues, may impact the Corporation's ability to conduct exploration, development and mining activities at its mineral properties in Saskatchewan. The Corporation's properties are located within areas subject to First Nation treaty rights and asserted aboriginal rights and title of the Métis, including an outstanding land claim that encompasses a large portion of northern Saskatchewan and Alberta. The legal requirements associated with aboriginal and treaty rights in Canada, including aboriginal title and land claims, are complex and constantly evolving. While the decision of the Supreme Court of Canada in *Tsilhqot'in Nation v. British Columbia* (2014 SCC 44) provided additional clarity in relation to the scope and content of aboriginal title in Canada, there remains considerable uncertainty about how aboriginal title claims will be reconciled with other interests in land. For example, the *Tsilhqot'in* decision did not fully address the impacts of a declaration of aboriginal title on third-party interests, including holders of mineral rights, within aboriginal title lands. The federal government has also recently introduced proposed legislation to implement the United Nations Declaration on the Rights of Indigenous Peoples in Canada, the impacts of which may not be fully understood for some time. Developing and maintaining strong relationships with First Nations and Métis people is a matter of paramount importance to the Corporation. However, there can be no assurance that aboriginal and treaty rights claims and related consultation issues, including outstanding land claims, will not arise on or impact the Corporation's mineral properties. These legal requirements and the risk of Indigenous Peoples' opposition may increase our operating costs and affect our ability to carry on our business. See "*Legal Proceedings and Regulatory Actions*".

## **Title to Properties**

NexGen has diligently investigated all title matters concerning the ownership of all mineral claims and plans to do so for all new claims and rights to be acquired. While to the best of its knowledge, titles to NexGen's mineral properties are in good standing, this should not be construed as a guarantee of title. NexGen's mineral properties may be affected by undetected defects in title, such as the reduction in size of the mineral titles and other third-party claims affecting NexGen's interests. Maintenance of such interests is subject to ongoing compliance with the terms governing such mineral titles. Mineral properties sometimes contain claims or transfer histories that examiners cannot verify. A successful claim that NexGen does not have title to any of its mineral properties could cause NexGen to lose any rights to explore, develop and mine any minerals on that property, without compensation for its prior expenditures relating to such property.

## **Information Systems and Cyber Security**

The Corporation's information systems are vulnerable to an increasing threat of continually evolving cybersecurity risks. Unauthorized parties may attempt to gain access to these systems or the Corporation's information through fraud or other means of deception. The Corporation's operations depend, in part, on how well the Corporation and those entities with which it does business, protect networks, equipment, information technology systems and software against damage from a number of threats. The failure of information systems or a component of information systems could, depending on the nature of any such failure, adversely impact the Corporation's reputation and results of operations.

Although to date the Corporation has not experienced any material losses relating to cyber-attacks or other information security breaches, there can be no assurance that the Corporation will not incur such losses in the future. The Corporation's risk and exposure to these matters cannot be fully mitigated because of, among other things, the evolving nature of these threats. As a result, cyber security and the continued development and enhancement of controls, processes and practices designed to protect systems, computers, software, data and networks from attack, damage or unauthorized access remain a priority.

## **Conflicts of Interest**

Directors and officers of NexGen are and may become directors of other public companies, or hold significant shareholdings in other mineral resource companies. The directors and officers of NexGen are required by law to, at all times, act honestly and in good faith with a view to the best interests of NexGen. In the event that any such director has a material interest in a material contract or transaction of NexGen that is subject to review and approval by the Board, such director is required to disclose such conflict to the Board and abstain from voting on any resolution in respect of such contract or transaction. NexGen and its directors will monitor and manage conflicts of interests in compliance with applicable laws.

## **Permits and Licences**

NexGen's exploration and development activities are subject to receiving and maintaining licenses, approvals and permits (collectively, "permits") from appropriate governmental and non-governmental authorities. NexGen may be unable to obtain on a timely basis or on reasonable terms or maintain in the future all necessary permits to explore and develop its properties, commence construction or operating of mining facilities and properties. Delays may occur in obtaining necessary renewals or modifications of permits for NexGen's existing activities, additional permits for existing or future operations and activities, or additional or amended permits associated with new legislation. Such permits will be subject to changes in rules, regulations and/or new legislation and in various operating circumstances. There can be no assurance that NexGen will be able to obtain all necessary permits required to carry out planned exploration, development and mining operations at any of its projects or that such necessary permits may not be refused or revoked in the future.

Development and operation of NexGen's Rook I Project requires approval from various governmental and non-governmental authorities in Canada. There can be no assurance that all future permits that NexGen requires for its operations at Rook I will be obtainable on reasonable terms, or at all. Delay or a failure to obtain required permits would materially affect NexGen's business.

## **Environmental and Other Regulatory Requirements**

Environmental and other regulatory requirements affect the current and future operations of NexGen, including exploration and development activities, require 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, exports, taxes, labour standards, occupational health, waste disposal, toxic substances, land use, environmental protection, mine safety and other matters. NexGen believes it is in substantial compliance with all material laws and regulations which currently apply to its activities. Companies engaged in the development and operation of mines and related facilities often experience increased costs, along with delays in production and other schedules, as a result of the need to comply with applicable laws, regulations and permits.

Additional permits and studies, which may include environmental impact studies conducted before permits can be obtained, may be necessary prior to operation of NexGen's mineral properties. There can be no assurance that NexGen will be able to obtain or maintain all necessary permits that may be required to commence construction, development or operation of mining facilities at NexGen's mineral properties on terms which enable operations to be conducted at economically justifiable costs. Further, such additional permits and studies may require significant capital outlays, impacting NexGen's earning power, or cause material changes in its intended activities.

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. Parties 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 for violations of applicable laws or regulations and, in particular, environmental laws.

Past or ongoing violations of mining or environmental laws could provide a basis to revoke existing permits or to deny the issuance of additional permits. In addition, evolving reclamation or environmental concerns may threaten NexGen's ability to renew existing permits or obtain new permits in connection with future development, expansions and operations.

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 NexGen and cause increases in capital expenditures or production costs or reductions in levels of production at producing properties or require abandonment or delays in development of new mining properties.

## **Political Regulatory Risks**

Any changes in government policy may result in changes to laws affecting ownership of assets, mining policies, monetary policies, taxation, rates of exchange, environmental regulations, labour relations and return of capital. Any such changes may affect both NexGen's ability to undertake exploration and development activities in respect of present and future properties in the manner currently contemplated, and its ability to continue to explore, develop and operate those properties in which it has an interest or in respect of which it has obtained exploration and development rights to date. The possibility that future governments may adopt substantially different policies, which might extend to expropriation of assets, cannot be ruled out.

## **Competition**

The mineral exploration business is a competitive business. The Corporation competes with numerous other companies and individuals who may have greater financial resources in the search for and the acquisition of personnel, funding and attractive mineral properties. As a result of this competition, the Corporation may be unable to obtain additional capital or other types of financing on acceptable terms or at all, acquire properties of interest or retain qualified personnel.

## **Trading Price and Volatility of Shares**

The trading price of the Shares may be subject to large fluctuations. The trading price of the Shares may increase or decrease in response to a number of events and factors, including: the price of metals and minerals including the price of uranium; the Corporation's operating performance and the performance of competitors and other similar companies; exploration and development of the Corporation's properties; the public's reaction to the Corporation's press releases, other public announcements and the Corporation's filings with the various securities regulatory authorities; changes in earnings estimates or recommendations by research analysts who track the Shares or the shares of other companies in the resource sector; changes in general economic conditions; the volume of Shares publicly traded; the arrival or departure of key personnel; and acquisitions, strategic alliances or joint ventures involving the Corporation or its competitors.

In addition, the market price of the Shares is affected by many variables not directly related to the Corporation's success and not within the Corporation's control, including: developments that affect the market for all resource sector shares; the breadth of the public market for the Shares; and the attractiveness of alternative investments. In addition, securities markets have recently experienced an extreme level of price and volume volatility, and the market price of securities of many companies has experienced wide fluctuations which have not necessarily been related to the operating performance, underlying asset values or prospects of such companies. As a result of these and other factors, the Corporation's share price may be volatile in the future and may decline below the price at which an investor acquired its shares. Accordingly, investors may not be able to sell their securities at or above their acquisition cost.

## **General Inflationary Pressures**

General inflationary pressures may affect labour and other costs, which could have a material adverse effect on the Corporation's financial condition, results of operations and the capital expenditures required to advance the Corporation's business plans. There can be no assurance that any governmental action taken to control inflationary or deflationary cycles will be effective or whether any governmental action may contribute to economic uncertainty. Governmental action to address inflation or deflation may also affect currency values. Accordingly, inflation and any governmental response thereto may have a material adverse effect on the Corporation's business, results of operations, cash flow, financial condition and the price of the Common Shares.

## **Potential Dilution from Future Financings**

Additional financing needed to continue funding the exploration, development and operation of the Corporation's properties may require the issuance of additional securities of the Corporation. The issuance of additional securities and the exercise of Share purchase warrants, stock options and other convertible securities will result in dilution of the equity interests of any persons who are or may become holders of Shares.

## **Negative Impacts by an Outbreak of Infectious Disease or Pandemic**

An outbreak of infectious disease, pandemic or a similar public health threat, such as the COVID-19 pandemic, and the response thereto, could adversely impact the Corporation, both operationally and financially. The global response to the COVID-19 pandemic has resulted in, among other things, border closures, severe travel restrictions and extreme fluctuations in financial and commodity markets. Additional measures may be implemented by one or more governments around the world in jurisdictions where the Corporation operates. Labour shortages due to illness, Corporation or government-imposed isolation programs, or restrictions on the movement of personnel or possible supply chain disruptions could result in a reduction or interruption of the Corporation's operations, including operational shutdowns or suspensions. The inability to continue ongoing exploration and development work could have a material adverse effect on the Corporation's future cash flows, earnings, results of operations and financial condition. The extent to which COVID-19 and any other pandemic or public health crisis impacts the Corporation's business, affairs, operations, financial condition, liquidity, availability of credit and results of operations will depend on future developments that are highly uncertain and cannot be accurately predicted, including new information which may emerge concerning the severity of and the actions required to contain the COVID-19 pandemic or remedy its impact, among others.

## **Loss of Foreign Private Issuer Status in the Future**

The Corporation may in the future lose its foreign private issuer status if a majority of the Shares are owned of record in the United States and the Corporation fails to meet the additional requirements necessary to avoid loss of foreign private issuer status. The regulatory and compliance costs to the Corporation under U.S. federal securities laws as a U.S. domestic issuer may be significantly more than the costs the Corporation incurs as a Canadian foreign private issuer eligible to use a multi-jurisdictional disclosure system (the "MJDS") adopted in the United States and Canada. If the Corporation is not a foreign private issuer, it would not be eligible to use the MJDS or other foreign issuer forms and would be required to file periodic and current reports and registration statements on U.S. domestic issuer forms with the SEC, which are more detailed and extensive than the forms available to a foreign private issuer.

## **DIVIDENDS**

Although not restricted from doing so, the Corporation has not paid any dividends since incorporation and the Corporation does not expect to pay dividends in the foreseeable future. Payment of dividends in the future will be made at the discretion of the Corporation's board of directors based upon, among other things, cash flow, the results of operations and financial condition of the Corporation, the need for funds to finance ongoing operations and such other considerations as the board of directors considers relevant.

## **DESCRIPTION OF CAPITAL STRUCTURE**

The authorized capital of NexGen consists of an unlimited number of Shares and an unlimited number of preferred shares. As at December 31, 2022, there were 482,530,145 Shares and no preferred shares issued and outstanding. As of the date hereof, there are 487,085,104 Shares and no preferred shares issued and outstanding.

Holders of Shares are entitled to receive notice of meetings of shareholders of the Corporation, to attend and to cast one vote per Share at all such meetings. Holders of the Shares are entitled to receive, on a *pro rata* basis, such dividends if, as and when declared by the Corporation's board of directors. In the event of any liquidation, dissolution or winding-up of the Corporation or other distribution of the assets of the Corporation among holders of Shares for the purposes of winding-up its affairs, the holders of Shares will be entitled, subject to the rights of the holders of any other class or series of shares ranking senior to the Shares, to receive on a *pro rata* basis the remaining property or assets of the Corporation available for distribution, after the payment of debts and other liabilities. The Shares do not have attached to them any conversion, exchange rights, exercise, redemption or retraction provisions.

## MARKET FOR SECURITIES AND TRADING PRICE AND VOLUME

The Shares are listed and posted for trading on the TSX and the NYSE under the symbol “NXE” and trade as CDIs on the ASX under the symbol “NXG”. The following table sets forth the high and low trading prices and trading volumes of the Shares on the TSX, NYSE and ASX on a monthly basis for the financial year ended December 31, 2022:

Month	High TSX (C\$)	Low TSX (C\$)	Volume TSX	High NYSE (US\$)	Low NYSE (US\$)	Volume NYSE <sup>(1)</sup>	High ASX (AUD\$)	Low ASX (AUD\$)	Volume ASX
January	6.21	4.77	44,180,771	4.86	3.71	53,393,389	6.74	5.21	81,993
February	6.73	5.04	39,444,736	5.30	3.96	33,066,736	6.90	5.68	1,483,127
March	7.34	6.48	49,578,773	5.85	5.08	62,693,164	7.99	6.85	147,391
April	7.95	6.32	38,066,736	6.33	4.93	54,346,571	8.90	6.98	2,061,343
May	6.50	5.06	40,785,707	5.12	3.88	64,191,033	7.15	5.69	2,014,555
June	6.43	4.55	32,344,333	5.12	3.51	73,268,434	7.35	5.21	629,054
July	5.58	4.55	21,106,642	4.36	3.50	33,255,404	6.14	5.20	312,727
August	5.84	4.67	27,399,235	4.44	3.58	45,705,879	6.55	5.22	71,809
September	6.07	4.79	27,114,509	4.65	3.50	64,198,865	6.80	5.46	455,492
October	5.79	5.00	28,066,745	4.25	3.58	66,898,819	6.60	5.69	44,934
November	6.38	5.47	28,368,763	4.74	3.98	56,046,040	6.87	6.08	51,784
December	6.14	5.43	30,108,810	4.56	3.96	47,338,389	7.08	6.01	37,256

The price of the Shares as quoted by the TSX at the close of business on December 30, 2022 (being the last trading day in 2022) was CAD\$5.99 and at the close of business on February 23, 2023 was CAD\$5.63. The price of the Shares as quoted by the NYSE at the close of business on December 30, 2022 was USD\$4.43 and at the close of business on February 23, 2023 was USD\$4.17. The price of the Shares as quoted by the ASX at the close of business on December 30, 2022 was AUD\$6.65 and at the close of business on February 23, 2023 was AUD\$6.45.

## PRIOR SALES

The following table sets forth the securities of the Corporation that were issued during the financial year ended December 31, 2022, but not listed or quoted on a marketplace:

Issue or Grant Date	Type of Security	Conversion / Exercise Price per Security (\$)	Number of Securities	Maturity / Expiry Date
January 18, 2022	Stock Options <sup>(1)</sup>	5.76	94,277	January 18, 2027
August 17, 2022	Stock Options <sup>(2)</sup>	5.31	3,640,000	August 17, 2027
October 4, 2022	Stock Options <sup>(1)</sup>	5.41	55,452	October 4, 2027
December 18, 2022	Stock Options <sup>(2)</sup>	5.57	5,955,000	December 18, 2027

### Notes:

- (1) Stock options have a term of five (5) years and vest one half annually, commencing one year after the grant date.
- (2) Stock options have a term of five (5) years and vest one third annually, commencing on the grant date.



## DIRECTORS AND OFFICERS

The following table sets forth the name, province/state and country of residence, position(s) held with the Corporation and principal occupation during the five (5) preceding years of each person who is a director and/or an executive officer of the Corporation as at the date hereof.

Name and Province/State and Country of Residence <sup>(1)</sup>	Position with NexGen and Employment for the Past Five Years
<b>Leigh Curyer<sup>(4)</sup></b> , British Columbia, Canada	President, CEO and Director of NexGen (April 19, 2013 to present); CEO and Director of NexGen's predecessor (2011 to April 2013); Director and Chairman of IsoEnergy Ltd. (February 2016 to present); and Partner, Head of Corporate Development of Accord Nuclear Resources Management (2008 to 2011).
<b>Chris McFadden<sup>(2)(4)</sup></b> , Brighton, Australia	Director of NexGen (April 19, 2013 to present); Chairman of NexGen (May 22, 2014 to present); Director of IsoEnergy Ltd. (April 2016 to present); President and CEO of NxGold Ltd. (February 2017 to March 2020); Business Development Manager, Newcrest Mining Limited (August 2015 to January 2017); Head of Commercial, Strategy and Corporate Development Tigers Realm Coal Limited (2013 to July 2015); General Manager, Business Development of Tigers Realm Minerals Pty Ltd. (2010 to 2013).
<b>Richard Patricio<sup>(2)(3)</sup></b> , Ontario, Canada	Director of NexGen (April 19, 2013 to present); President and CEO of Mega Uranium Ltd. (March 2015 to present) and Executive Vice President (2005 to 2015); Director of IsoEnergy Ltd. (April 2016 to present); CEO of Pinetree Capital Ltd. (February 2015 to April 2016); Vice-President, Legal and Corporate Affairs, Pinetree Capital Ltd. (investment firm) (2005 to February 2015).
<b>Trevor Thiele<sup>(2)(3)</sup></b> , Tennyson, Australia	Director of NexGen (April 19, 2013 to present); Director of NexGen's predecessor (2011 to April 2013); Director of IsoEnergy Ltd. (April 2016 to present).
<b>Warren Gilman<sup>(2)(4)</sup></b> , Hong Kong	Director of NexGen (July 2017 to present); Chairman and CEO of Queen's Road Central Capital Ltd. (2019 to present); Chairman of Queen's Road Capital Investment Ltd. (August 2019 to present); Director of Los Andes Copper (August 2021 to present); Director of Gold Royalty Corp. (March 2021 to present); Director of Chaarat Gold Holdings Limited (2019 to 2022); Director of Aurania Resources Ltd. (2019 to 2022); Director of Niobec Inc (2014 to 2019); Chairman and CEO of CEF Holdings (May 2011 to 2019); Managing Director and Head of Asia Pacific Region for Canadian Imperial Bank of Commerce (February 2002 to May 2011).
<b>Sybil Veenman<sup>(3)</sup></b> , Ontario, Canada	Director of NexGen (August 27, 2018 to present); Director Royal Gold Inc. (January 2017 to present); Director of Major Drilling International Inc. (December 2019 to present); Director IAMGOLD Corporation (December 2015 to May 2021); Director Noront Resources Ltd. (August 2015 to February 2020); General Counsel of Barrick Gold Corporation (July 2010 to September 2014).
<b>Karri Howlett<sup>(4)</sup></b> , Saskatchewan, Canada	Director of NexGen (August 27, 2018 to present); Director of Gold Royalty Corp. (February 2022 – present); Director of Saskatchewan Power Corporation (February 13, 2013 to May 2021); President and Director of RESPEC Consulting Inc. (July 1, 2018 to March 21, 2019); President and Director of North Rim Exploration (November 2, 2009 to July 1, 2018); President of Karri Howlett Consulting Inc. (November 2006 – present).
<b>Brad Wall</b> , Saskatchewan, Canada	Director of NexGen (March 21, 2019 to present); Director of Maxim Power Corp. (May 13, 2019 to present); Director of Whitecap Resources Inc. (July 30, 2019 to present); Director Dye and Durham (August 2020 to present); President of Flying W Consulting Inc. (November 2007 to present); Premier for the Province of Saskatchewan (November 2007 to February 2018).
<b>Don J Roberts</b> , Hong Kong	Director of NexGen (June 10, 2021 to present); Director of Queen's Road Capital Investment Ltd (February 2020); Director of CK Life Sciences International (Holdings) Inc. (July 2020 to present); Director of Hong Kong Electric Investments Ltd (December 2013 to present); and Director of CK Asset Holdings Ltd (March 2017 to present).
<b>Ivan Mullany</b> , Ontario, Canada	Director of NexGen (January 2023 to present); Senior Vice President Projects of Newmont Corporation (May 2019 to December 2022); Senior Vice President Technical Services of Goldcorp Inc. (August 2017 to May 2019), Global Director Mining & Mineral Processing of Hatch Ltd. (August 2015 to July 2017)

Name and Province/State and Country of Residence <sup>(1)</sup>	Position with NexGen and Employment for the Past Five Years
<b>Travis McPherson</b> , British Columbia, Canada	Chief Commercial Officer of NexGen (January 2023 – present), Senior Vice President, Corporate Development of NexGen (2020 to 2022); Vice President, Corporate Development of NexGen (2017 to 2019); Manager, Investor Relations of NexGen (2015 to 2017) and Consultant to NexGen (2014 to 2015).
<b>Kevin Small</b> , Ontario, Canada	Senior Vice President Engineering and Operations of NexGen (August 2022 to present), Operations Manager Sprott Mining (2021 to August 2022), President and CEO of Jerritt Canyon Gold (2020 to 2021), Vice President & General Manager of Jerritt Canyon Gold (2019 to 2020), Director of Mine Operations of RNC Minerals Beta Hunt Mine WA (2016 to 2019)
<b>Gillian McCombie</b> , British Columbia, Canada	Vice President of Human Resources of NexGen (2019 to present); Vice-President of Human Resources of Capstone Mining (2013 to 2018); Director of Human Resources of Capstone Mining (2011 to 2013); and Director of Human Resources of TELUS (2007 to 2011).
<b>Harpreet Dhaliwal</b> , British Columbia, Canada	Chief Financial Officer of NexGen (April 1, 2021 to present); and Chief Financial Officer of Leagold Mining Corp. (Aug 2016 to March 2020).

**Notes:**

- (1) The information as to place of residence and principal occupation is not within the knowledge of the management of NexGen and has been furnished by the respective directors and officers of NexGen
- (2) Member of the Audit Committee
- (3) Member of the Compensation Committee and Nominations and Governance Committee
- (4) Member of the Sustainability Committee

Directors are elected at each annual meeting of NexGen's shareholders and serve as such until the next annual meeting or until their successors are elected or appointed.

The directors and executive officers of NexGen, as a group, beneficially own, directly or indirectly, or exercise control or direction over 27,115,765 Shares, representing approximately 5.6% of the total number of Shares outstanding before giving effect to the exercise of options to purchase Shares held by such directors and executive officers. The statement as to the number of Shares beneficially owned, directly or indirectly, or over which control or direction is exercised by the directors and executive officers of NexGen as a group (i) is based upon information obtained from SEDI (the System for Electronic Disclosure by Insiders database) as at the date hereof and (ii) does not include Shares held by CEF and certain other investors, which Shares are subject to voting alignment provisions under the terms of the investor rights agreement disclosed under the "Material Contracts" section of this AIF (and summarized under the "General Development of the Business" section).

**Cease Trade Orders, Bankruptcies, Penalties and Sanctions**

To the knowledge of the Corporation, no director, executive officer or promoter of the Corporation is, or within ten years prior to the date hereof has been, a director, chief executive officer or chief financial officer of any company (including the Corporation) that, (i) was subject to a cease trade order, an order similar to a cease trade 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, that was issued while the director or executive officer was acting in the capacity as director, chief executive officer or chief financial officer; or (ii) was subject to a cease trade order, an order similar to a cease trade order or an order that denied the relevant Corporation access to any exemption under securities legislation, that was in effect for a period of more than 30 consecutive days, that was issued after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer.

To the knowledge of the Corporation, no director, executive officer or promoter of the Corporation, or a shareholder holding a sufficient number of securities of the Corporation to affect materially control of the Corporation, (i) is, or within ten (10) years prior to the date hereof has been, a director or executive officer of any company (including the Corporation) 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, or

(ii) has, within ten years prior to the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become 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.

To the knowledge of the Corporation, no director, executive officer or promoter of the Corporation, or a shareholder holding a sufficient number of securities of the Corporation to affect materially the control of the Corporation, has been subject to (i) 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 (ii) 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.

### **Conflicts of Interest**

To the best of the Corporation's knowledge, and other than as disclosed in this AIF, there are no known existing or potential conflicts of interest between NexGen and any director or officer of NexGen, except that certain of the directors and officers serve as directors and officers of other public companies, and therefore it is possible that a conflict may arise between their duties as a director or officer of NexGen and their duties as a director or officer of such other companies. See *"Risk Factors — Conflicts of Interest"*.

### **AUDIT COMMITTEE DISCLOSURE**

The Audit Committee has the responsibility of, among other things: recommending the Corporation's independent auditor to the Board of Directors, determining the extent of involvement of the independent auditor in reviewing unaudited quarter financial results, evaluating the qualifications, performance and independence of the independent auditor; reviewing and recommending approval of the Board of Directors of the Corporation's annual and quarter financial results and management's discussion and analysis and overseeing the establishment of "whistle-blower" and related procedures. A copy of the Audit Committee Charter is attached hereto as Schedule "A".

#### *Composition of the Audit Committee*

The Audit Committee currently comprises Messrs. Thiele (Chair), Gilman, McFadden and Patricio. All of the members of the Audit Committee are independent and financially literate, in each case, as defined under National Instrument 52-110 – *Audit Committees* ("NI 52-110"). A general description of the education and experience of each Audit Committee member which is relevant to the performance of his responsibilities as an Audit Committee member is contained in their respective biographies set out below:

#### Christopher McFadden, Chairman of the Board of Directors

Mr. McFadden is a lawyer with 24 years' experience in exploration and mining. Mr. McFadden was most recently the President and Chief Executive Officer of NxGold Ltd. from February 2017 to March 2020. Previously, Mr. McFadden was the Manager, Business Development at Newcrest Mining Limited and the Head of Commercial, Strategy and Corporate Development for Tigers Realm Coal Limited, which is listed on the ASX. Additionally, Mr. McFadden was General Manager, Business Development of Tigers Realm Minerals Pty Ltd. Prior to commencing with the Tigers Realm Group of companies in 2010 he was a Commercial General Manager with Rio Tinto's exploration division with responsibility for gaining entry into new projects either by negotiation with government or joint venture partners or through acquisition. Mr. McFadden has extensive international experience in managing large and complex transactions and has a broad knowledge of all aspects of project evaluation and negotiating project entry in challenging and varied environments. Mr. McFadden holds a combined law/commerce degree from Melbourne University and a MBA from Monash University.

#### Richard Patricio, Director

In March 2015, Mr. Patricio was appointed Chief Executive Officer and President of Mega Uranium Ltd., having been its Executive Vice-President since 2005. From February 2015 to April 2016, Mr. Patricio was the Chief Executive Officer of Pinetree Capital Ltd., having been its Vice-President, Corporate and Legal Affairs since 2005. Previously, Mr. Patricio worked as in-house General Counsel for a senior TSX-listed manufacturing company. Prior to that, Mr. Patricio practiced law at Osler LLP in Toronto where he focused on mergers and acquisitions, securities law and general corporate matters.

Mr. Patricio has built a number of mining companies with global operations and holds senior officer and director positions in several companies listed on stock exchanges in Toronto, Australia, London and New York. Mr. Patricio received his law degree from Osgoode Hall and was called to the Ontario bar in 2000.

#### Trevor Thiele, Director

Mr. Thiele has over 30 years' experience in senior finance roles in medium to large Australian ASX listed companies. He has been Chief Financial Officer for companies involved in the Agribusiness sector (Elders and ABB Grain Ltd, Rural Services Division) and the Biotechnology sector (Bionomics Limited). In these roles, he combined his technical accounting and financial skills with commercial expertise thereby substantially contributing to the growth of each of these businesses. During this time, Mr. Thiele was actively involved in IPOs, capital raisings, corporate restructures, mergers and acquisitions, refinancing and joint ventures. Mr. Thiele holds a Bachelor of Arts in Accountancy from the University of South Australia and he is a member of Chartered Accountants Australia & New Zealand.

#### Warren Gilman, Director

In 2019, Mr. Gilman was appointed Chairman and Chief Executive Officer of Queen's Road Central Capital Ltd. and Chairman of Queen's Road Capital Investment Ltd. (previously known as Lithion Energy Ltd.). From 2011 to 2019, Mr. Gilman was the Chairman and Chief Executive Officer of CEF Holdings Ltd. Prior to joining CEF, Mr. Gilman was Vice Chairman of CIBC World Markets. Mr. Gilman was previously Managing Director and Head of Asia Pacific Region for CIBC for 10 years where he was responsible for all CIBC's activities across Asia. Mr. Gilman is a mining engineer who co-founded CIBC's Global Mining Group in 1988. During Mr. Gilman's 26 years with CIBC, he ran the mining team in Canada, Australia and Asia and worked in the Toronto, Sydney, Perth, Shanghai and Hong Kong offices of CIBC. Mr. Gilman has acted as advisor to the largest mining companies in the world including BHP, Rio Tinto, Anglo American, Noranda, Falconbridge, Sumitomo Corp., China Minmetals, Jinchuan and Zijin and has been responsible for some of the largest equity capital markets financings in Canadian mining history. Mr. Gilman currently holds director positions in several companies listed on the stock exchanges in Toronto, New York, and London. Mr. Gilman received his B.Sc. in Mining Engineering at Queen's University and his MBA from the Ivey Business School at Western University.

#### *Audit Committee Oversight*

At no time since the commencement of NexGen's most recently completed financial year have any recommendations by the Audit Committee respecting the appointment and/or compensation of NexGen's external auditors not been adopted by the Board.

#### *Reliance on Certain Exemptions*

At no time since the commencement of the Corporation's most recently completed financial year has the Corporation relied on the exemption in Section 2.4 of NI 52-110 (*De Minimis Non-Audit Services*); Section 3.2 (*Initial Public Offerings*); Section 3.4 (*Events Outside Control of Member*); Section 3.5 (*Death, Disability or Resignation of Audit Committee Member*); an exemption from NI 52-110, in whole or in part, granted under Part 8 (*Exemptions*) of NI 52-110; the exemption in subsection 3.3(2) (*Controlled Companies*) or section 3.6 (*Temporary Exemption for Limited and Exceptional Circumstances*); or section 3.8 (*Acquisition of Financial Literacy*).

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

Pursuant to the terms of the Audit Committee Charter, the Audit Committee shall pre-approve all audit and non-audit services to be provided to NexGen by the external auditor.

### External Auditor Service Fees (By Category)

The aggregate fees billed by the external auditors, KPMG LLP, in each of the last two (2) financial years are as follows:

<u>Financial Year Ending</u>	<u>Audit Fees<sup>(1,5)</sup></u>	<u>Audit- Related Fees<sup>(2)</sup></u>	<u>Tax Fees<sup>(3)</sup></u>	<u>All Other Fees<sup>(4)</sup></u>
2021	\$330,610	Nil	\$5,489	Nil
2022	\$491,752	Nil	Nil	Nil

**Notes:**

- (1) In 2022, \$103,090 (2021 - \$80,250) of this amount related to IsoEnergy Ltd., a TSXV listed company. NexGen owned 50.1% of the outstanding common shares of IsoEnergy Ltd. as at December 31, 2022.
- (2) The aggregate fees for assurance and related services that are reasonably related to the performance of the audit or review of the Corporation's financial statements which are not included under the heading "Audit Fees"
- (3) The aggregate fees for professional services rendered for tax compliance, tax advice and tax planning
- (4) The aggregate fees for products and services other than as set forth under the headings "Audit Fees", "Audit Related Fees" and "Tax Fees"
- (5) \$121,965 of this amount in 2022 related to audit services performed in connection with securities filings.

### LEGAL PROCEEDINGS AND REGULATORY ACTIONS

On September 9, 2020, the MN-S filed a Statement of Claim against the Corporation in the Saskatchewan Court of Queen's Bench (the "**Action**") relating to the negotiation of a Benefit Agreement. The Statement of Claim alleges that the Corporation breached the Study Agreement between the Corporation and the MN-S by failing to negotiate a Benefit Agreement in good faith by the target date of June 30, 2020. The Statement of Claim does not quantify any damages sought by the MN-S.

On October 14, 2020, the Corporation filed its Statement of Defence in the Action. The Statement of Defence states that the Corporation has always acted in good faith with a view to furthering the objectives of the Study Agreement and formalizing a Benefit Agreement with the MN-S, and remains committed to doing so. The Statement of Defence denies that the Corporation breached any contractual or common law duty and states that the MN-S has not suffered any damages.

On November 17, 2020, the MN-S filed a Notice of Application ("**Injunction Application**"), seeking an injunction to prevent the Corporation from filing its draft EIS for the Rook I Project pending resolution of the Action. On July 12, 2021, the Court of Queen's Bench for Saskatchewan dismissed the Injunction Application.

The underlying Action is still pending, but no steps have been taken by MN-S to advance the Action since dismissal of the Injunction Application.

The Corporation remains committed to concluding a Benefit Agreement with the MN-S.

### INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Other than as described below and elsewhere in this AIF, no director, executive officer or person or company that beneficially owns, or controls or directs, directly or indirectly, more than 10% of the Shares of the Corporation or any associate or affiliate of any such person or company, has or had any material interest, direct or indirect, in any transaction either within the three most recently completed financial years or during the current financial year that has materially affected or is reasonably expected to materially affect the Corporation.

### TRANSFER AGENT AND REGISTRAR

The transfer agent and registrar for the Shares in Canada is Computershare Investor Services Inc. at its principal offices in Vancouver, British Columbia and Toronto, Ontario. The co-transfer agent and registrar for the Shares in the United States of America is Computershare Trust Company, N.A. in Louisville, KY. The co-transfer agent and registrar for the CDIs in Australia is Computershare Investor Services Pty Limited in Perth, Western Australia.

## **MATERIAL CONTRACTS**

The only material contracts entered into by the Corporation within the financial year ended December 31, 2022, or before such time that are still in effect, other than in the ordinary course of business, are as follows:

- The Shareholder Rights Plan Agreement dated April 22, 2017 between the Corporation and Computershare Investor Services Inc., as amended and restated on April 22, 2020.
- The Trust Indenture dated May 27, 2020 between the Corporation and Computershare Trust Company of Canada with respect to the issuance of the 2020 Debentures.
- The Investor Rights Agreement dated July 21, 2017 between the Corporation, CEF, and certain other investors.

Copies of the above material contracts are available under the Corporation's profile on SEDAR at [www.sedar.com](http://www.sedar.com).

## **INTERESTS OF EXPERTS**

KPMG LLP, Chartered Accountants, provided an auditors report dated February 23, 2023 in respect of the Corporation's financial statements for the year ended December 31, 2022. KPMG LLP are the auditors of the Corporation and have confirmed with respect to the Corporation that they are independent within the meaning of the relevant rules and related interpretations prescribed by the relevant professional bodies in Canada and any applicable legislation or regulations.

Mr. Kevin Small, P.Eng., Senior Vice President, Engineering and Operations, and Mr. Jason Craven, P.Geo., Exploration Manager for NexGen, who are each a "Qualified Person" within the meaning of this term in NI 43-101, has reviewed and approved sections of this AIF that are of a scientific or technical nature. To the knowledge of NexGen, each of Messrs. Small and Craven is the registered or beneficial owner, directly or indirectly, of less than one percent of the outstanding Shares.

The Rook I FS Technical Report was authored by Mr. Mark Hatton, P.Eng., Stantec Consulting Ltd; Mr. Paul O'Hara, P.Eng., Wood Canada Limited; and Mr. Mark Mathisen, C.P.G., Roscoe Postle Associates (USA) Ltd. (now a part of SLR International Corporation). Each of Messrs. Hatton, O'Hara and Mathisen, and Stantec Consulting Ltd, Wood Canada Limited and Roscoe Postle Associates (USA) Ltd. were independent in accordance with the requirements of NI 43-101.

To the knowledge of NexGen as of the date hereof, each of Messrs. Hatton, O'Hara and Mathisen, and Stantec Consulting Ltd, Wood Canada Limited and Roscoe Postle Associates (USA) Ltd. (now a part of SLR International Corporation) and each of their respective partners, employees and consultants who participated in the preparation of the Rook I FS Technical Report, or who were in a position to influence the outcome of such reports, are the registered or beneficial owner, directly or indirectly, of less than one percent of the outstanding Shares.

## **ADDITIONAL INFORMATION**

Additional information relating to the Corporation can be found on SEDAR at [www.sedar.com](http://www.sedar.com); or on NexGen's website at [www.nexgenenergy.ca](http://www.nexgenenergy.ca). Additional information, including directors' and officers' remuneration and indebtedness, principal holders of the Corporation's securities and securities authorized for issuance under equity compensation plans is contained in the management information circular of the Corporation dated May 9, 2022, which is available on SEDAR at [www.sedar.com](http://www.sedar.com). Additional financial information is provided in the Corporation's audited consolidated financial statements and management's discussion and analysis for the financial year ended December 31, 2022.

## SCHEDULE "A"



### AUDIT COMMITTEE CHARTER

#### I. ROLE AND OBJECTIVES

The Audit Committee is a committee of the Board of Directors (the "**Board**") of NexGen Energy Ltd. (the "**Corporation**") to which the Board has delegated certain oversight responsibilities relating to the Corporation's financial statements, external auditors, risk management, compliance with legal and regulatory requirements and management information technology. In this Charter, the Corporation and all entities controlled by the Corporation are collectively referred to as "**NexGen**".

The objectives of the Audit Committee are to maintain oversight of:

- (a) the Corporation's accounting and financial reporting processes
- (b) the audits of the Corporation's financial statements;
- (c) the integrity of the Corporation's financial statements, the reporting process and its internal control over financial reporting;
- (d) the reports, qualifications, independence and performance of the Corporation's external auditor;
- (e) the performance of the Corporation's internal audit function;
- (f) the Corporation's risk identification, assessment and management program;
- (g) the Corporation's compliance with applicable legal and regulatory requirements;
- (h) the Corporation's management of information technology related to financial reporting and financial controls; and
- (i) the maintenance of open channels of communication among management of the Corporation, the external auditors and the Board.

#### II. MEMBERSHIP AND POLICIES

The Board, based on recommendation from the Nomination and Governance Committee, will appoint or reappoint members of the Audit Committee. Each member shall serve until his or her successor is appointed unless the member resigns, is removed or ceases to be a director. The Board of Directors may fill a vacancy that occurs in the Committee at any time.

The Audit Committee must be composed of not less than three (3) members of the Board, each of whom must be independent pursuant to the rules and regulations of all applicable stock exchanges and United States and Canadian securities laws and regulations.

No member of the Audit Committee may have participated in the preparation of the financial statements of the Corporation or any of its then-current subsidiaries at any time during the immediately prior three years.

Each member of the Audit Committee must be financially literate, as determined by the Board, and be able to read and understand fundamental financial statements, including the Corporation's balance sheet, income statement, and cash flow statement. Additionally, at least one member of the Audit Committee must have accounting or related financial management expertise, as determined by the Board. A person who is an "audit committee financial expert" as defined in Item 407(d)(5)(ii) of Regulation S-K may be presumed to have accounting or related financial management expertise.

No member of the Audit Committee may serve simultaneously on the audit committee of more than two other public companies without prior approval of the Board.

The Board, in consultation with the Nomination and Governance Committee, will appoint or reappoint the Chair of the Audit Committee from amongst its members.

The Audit Committee may at any time retain outside financial, legal or other advisors as it determines necessary to carry out its duties, at the expense of the Corporation. The Corporation shall provide for appropriate funding, as determined by the Audit Committee in its capacity as a committee of the Board, for payment of: (i) compensation to the external auditor for the purpose of preparing or issuing an audit report or performing other audit, review or attestation services for the Corporation, (ii) compensation to any advisors employed by the Audit Committee, and

(iii) ordinary administrative expenses of the Audit Committee that are necessary or appropriate in carrying out its duties.

In discharging its duties under this Charter, the Audit Committee may investigate any matter brought to its attention and will have access to all books, records, facilities and personnel, may conduct meetings or interview any officer or employee, the Corporation's legal counsel, external auditors and consultants, and may invite any such persons to attend any part of any meeting of the Audit Committee.

The Audit Committee has neither the duty nor the responsibility to conduct audit, accounting or legal reviews, or to ensure that the Corporation's financial statements are complete, accurate and in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"); rather, management is responsible for the financial reporting process, internal review process, and the preparation of the Corporation's financial statements in accordance with IFRS, and the Corporation's external auditor is responsible for auditing those financial statements.

### **III. SUBCOMMITTEES**

The Audit Committee may, in its discretion, delegate any of its responsibilities that it is permitted by law to delegate, to the Chair or a subcommittee of the Audit Committee.

### **IV. FUNCTIONS**

#### **A. Financial Statements, the Reporting Process and Internal Controls over Financial Reporting**

The Audit Committee will meet with management and the external auditor to review and discuss annual and quarterly financial statements, management's discussion and analyses ("MD&A"), any earnings press releases, other financial disclosures and earnings guidance provided to analysts and rating agencies, and determine whether to recommend the approval of such documents to the Board and will produce the audit committee report required to accompany the annual financial statements.

- (a) In connection with these procedures, the Audit Committee will, as applicable and without limitation review and discuss with management and the external auditor:
  - i. the information to be included in the Corporation's financial statements and other financial disclosures which require approval by the Board including the Corporation's annual and quarterly financial statements, notes thereto, MD&A and any earnings press releases or earnings guidance provided to analysis and rating agencies, paying particular attention to any use of "pro forma", "adjusted" and "non-GAAP" information, and ensuring that adequate procedures are in place for the review of the Corporation's public disclosure of financial information extracted or derived from the financial statements;
  - ii. any significant financial reporting issues, including major issues regarding accounting principles and financial statement presentations, identified during the reporting period;
  - iii. any change in accounting policies, or selection or application of accounting principles, and their impact on the Corporation's financial results and disclosure;
  - iv. all significant estimates and judgments, significant risks and uncertainties made in connection with the preparation of the Corporation's financial statements that may have a material impact to the financial statements;
  - v. any significant deficiencies or material weaknesses identified by management or the external auditor, compensating or mitigating controls and the final assessment and impact of such deficiencies or material



weaknesses on disclosure;

- vi. any major issues as to the adequacy of the internal controls and any special audit steps adopted in light of material internal control deficiencies;
- vii. significant adjustments identified by management or the external auditor and the assessment of associated internal control deficiencies, as applicable;
- viii. any unresolved issues between management and the external auditor that could materially impact the financial statements and other financial disclosures;
- ix. any material correspondence with regulators, government agencies, any employee or whistleblower complaints and other reports of non-compliance which raise issues regarding the Corporation's financial statements or accounting policies and significant changes in regulations which may have a material impact on the Corporation's financial statements;
- x. the effect of regulatory and accounting initiatives, as well as any off-balance sheet structures;
- xi. significant matters of concern respecting audits and financial reporting processes, including any illegal acts, that have been identified in the course of the preparation or audit of the Corporation's financial statements; and
- xii. any analyses prepared by management and/or the external auditor setting forth significant financial reporting issues and judgments made in connection with the preparation of financial statements including analyses of the effects of IFRS on the financial statements.

(b) In connection with the annual audit of the Corporation's financial statements, the Audit Committee will review with the external auditor:

- i. prior to commencement of the annual audit, plans, scope, staffing, engagement terms and proposed fees;
- ii. reports or opinions to be rendered in connection with the audit including the external auditor's review or audit findings report including alternative treatment of significant financial information within IFRS that have been discussed with management and the associated impact on disclosure; and
- iii. the adequacy of internal controls, any audit problems or difficulties, including:
  - a) any restrictions on the scope of the external auditor's activities or on access to requested information;
  - b) any significant disagreements with management, and management's response (including discussion among management, the external auditor and, as necessary, internal and external legal counsel);
  - c) any litigation, claim or contingency, including tax assessments and claims, that could have a material impact on the financial position of the Corporation; and
  - d) the impact on current or potential future disclosures.

In connection with its review of the annual audited financial statements and quarterly financial statements, the Audit Committee will also review any significant concerns raised during the Chief Executive Officer ("**CEO**") and Chief Financial Officer ("**CFO**") certifications with respect to the financial statements and NexGen's disclosure controls and internal controls. In particular, the Audit Committee will review with the CEO, CFO and external auditor: (i) all significant deficiencies, material weaknesses or significant changes in the design or operation of NexGen's internal control over financial reporting that could adversely affect the Corporation's ability to record, process, summarize and report financial information required to be disclosed by the Corporation in the reports that it files or submits under applicable securities laws, within the required time periods; and (ii) any fraud, whether or not material, that involves management of NexGen or other employees who have a significant role in NexGen's internal control over financial reporting. In addition, the Audit Committee will review with the CEO and CFO, NexGen's disclosure controls and procedures and at least annually will review management's conclusions about the efficacy of disclosure controls and procedures, including any significant deficiencies, material

weaknesses or material non-compliance with disclosure controls and procedures.

The Audit Committee will also maintain a Whistleblower Policy, including procedures for the:

- (a) receipt, retention and treatment of complaints received regarding accounting, internal accounting controls or auditing matters; and
- (b) confidential, anonymous submissions of concerns regarding questionable accounting or auditing matters.

## **B. The External Auditor**

The Audit Committee, in its capacity as a committee of the Board, is directly responsible for overseeing the relationship, reports, qualifications, independence and performance of the external auditor and audit services by other registered public accounting firms engaged by the Corporation. The Audit Committee has responsibility to take, or recommend that the Board take, appropriate action to oversee the independence of the external auditor. The Audit Committee shall have the authority and responsibility to recommend the appointment and the revocation of the appointment of the external auditors engaged for the purpose of preparing or issuing an audit report or performing other audit, review or attest services, and to fix their remuneration.

The external auditor will report directly to the Audit Committee. The Audit Committee's appointment of the external auditor is subject to annual approval by the shareholders.

With respect to the external auditor, the Audit Committee is responsible for:

- (a) the appointment, termination, compensation, retention and oversight of the work of the external auditor engaged by the Corporation for the purpose of preparing or issuing an audit report or performing other audit, review or attest services for the Corporation, including the review and approval of the terms of the external auditors annual engagement letter and the proposed fees;
- (b) resolution of disagreements or disputes between management and the external auditor regarding financial reporting for audit, review or attestation services;
- (c) pre-approval of all audit services and legally permissible non-audit services to be provided by the external auditors considering the potential impact of such services on the independence of external auditors and, subject to any *de minimis* exemption available under applicable laws. Such approval of non-audit services can be given either specifically or pursuant to pre-approval policies and procedures adopted by the committee including the delegation of this ability to one or more members of the Audit Committee to the extent permitted by applicable law, provided that any pre-approvals granted pursuant to any such delegation may not delegate Audit Committee responsibilities to management of the Corporation, and must be reported to the full Audit Committee at the first scheduled meeting of the Audit Committee following such pre-approval;
- (d) obtaining and reviewing, at least annually, a written report by the external auditor describing the external auditor's internal quality-control procedures, any material issues raised by the most recent internal quality-control review, or peer review, of the firm, or by any inquiry or investigation by governmental or professional authorities, within the preceding five years, respecting one or more independent audits carried out by the firm, and any steps taken to deal with any such issues and all relationships between the external auditors and the Corporation;
- (e) obtaining a formal written statement delineating all relationships between the auditor and the Corporation, consistent with The Public Company Accounting Oversight Board Rule 3526, and discussing any disclosed relationships or services with the auditor and how they may impact the objectivity and independence of the auditor;

- (f) review of the external auditor which assesses three key factors of audit quality for the Audit Committee to consider and assess including: independence, objectivity and professional skepticism; quality of the engagement team; and quality of communications and interactions with the external auditor. A written comprehensive review of the external auditor to be considered if required each year and completed at least every five (5) years which will include an:
- i. assessment of quality of services and sufficiency of resources provided by the external auditor;
  - ii. assessment of auditor independence, objectivity and professional skepticism, including the review and evaluation of the lead partner of the external auditor; =
  - iii. assessment of value of services provided by the external auditor;
  - iv. assessment of written input from external auditor summarizing:
    - a) background of firm, size, resources, geographical coverage, relevant industry experience, including reputational challenges, systemic audit quality issues identified by Canadian Public Accountability Board ("CPAB") and Public Company Accounting Oversight Board ("PCAOB") in public reports;
    - b) industry experience of the audit team and plans for training and development of the team;
    - c) how the external auditor demonstrated objectivity and professional skepticism during the audit;
    - d) how the firm and team met all criteria for independence including identification of all relationships that the external auditor has with the Corporation and its affiliates and steps taken to address possible institutional threats;
    - e) involvement of engagement quality control review ("EQCR") partner and significant concerns raised by the EQCR partner;
    - f) matters raised to national office or specialists during the review;
    - g) significant disagreements between management and the external auditors and steps taken to resolve such disagreements;
    - h) satisfaction with communication and cooperation with management and the Audit Committee; and
    - i) findings and firm responses to reviews of the Corporation by CPAB and PCAOB;
  - v. communication of the results of the comprehensive review of the external auditor to the Board and recommending that the Board take appropriate action, in response to the review, as required. It is understood that the Audit Committee may recommend tendering the external auditor engagement at their discretion. In addition to rotation of the EQCR partner as required by law, the Audit Committee, together with the Board, will also consider whether it is necessary to periodically rotate the external audit firm itself. It will be at the discretion of the Audit Committee if the incumbent external auditor is invited to participate in the tendering process; and;
  - vi. setting clear hiring policies for the Corporation regarding partners and employees and former partners and employees of the present and former external auditor of the Corporation. Before any such partner or employee is offered employment by the Corporation, prior approval from the Chair of the Audit Committee must be received and a one year grace period must pass from the date any work was last completed on an audit engagement before an external auditor employee can be considered for contract or employment by the Corporation.

### **C. Risk Management**

The Audit Committee, in its capacity as a committee of the Board, is directly responsible for overseeing the risk identification, assessment and management program of the Corporation by discussing guidelines and policies to govern the process by which risk is identified, assessed and managed. At least annually, in conjunction with senior management, internal counsel and,

as necessary, external counsel and the Corporation's external auditors, the Audit Committee will review the following:

- (a) the Corporation's method of reviewing significant risks inherent in NexGen's business, assets, facilities, and strategic directions, including the Corporation's risk management and evaluation process;
- (b) discuss guidelines and policies with respect to risk assessment and risk management, including the Corporation's major financial risk exposures and the steps management has taken to monitor and control such exposures. The Audit Committee is not required to be the sole body responsible for risk assessment and management, but, as stated above, the committee must discuss guidelines and policies to govern the process by which risk assessment and management is undertaken.
- (c) the major financial risk exposures and steps management has taken to monitor and manage such exposures;
- (d) the Corporation's annual insurance report including its risk retention philosophy and resulting uninsured exposure, if any, including corporate liability protection programs for directors and officers;
- (e) the Corporation's loss prevention policies, risk management programs, disaster response and recovery programs in the context of operational considerations; and
- (f) other risk management matters from time to time as the Audit Committee may consider appropriate or the Board may specifically direct.

### **D. Internal Audit Review**

- (a) review and discuss the responsibilities, functions and performance of the Corporation's internal audit function, including internal audit plans, budget, staffing and the scope and results of internal audits;
- (b) ensure the reporting lines between the Audit Committee and the internal auditors are clearly understood and utilized; and
- (c) review and discuss any reports by management regarding the effectiveness of, or any deficiencies in, the design or operation of internal controls and any fraud, whether or not material, that involves management or other employees who have a significant role in the Corporation's internal controls.

### **E. Additional Duties and Responsibilities**

The Audit Committee will also:

- (a) report regularly to the Board on its discussions and actions, including any significant issues or concerns that arise at its meetings and discussion of the responsibilities, budget and staffing of the listed Corporation's internal audit function, and shall make recommendations to the Board as appropriate;
- (b) meet separately, and periodically, with management, internal auditors, the external auditor and, as is appropriate, internal and external legal counsel and independent advisors in respect of issues not elsewhere listed concerning any other audit, finance or risk matter;
- (c) review the appointment of the CFO and any other key financial executives who are involved in the financial reporting process;
- (d) review the Corporation's information technology practices as they relate to financial reporting;
- (e) annually review Directors' and Officers' Liability Insurance Coverage;

- (f) from time to time, discuss staffing levels and competencies of the finance team with the external auditor;
- (g) review incidents, alleged or otherwise, as reported by whistleblowers, management, the external auditor, internal or external counsel or otherwise, of fraud, illegal acts or conflicts of interest and establish procedures for receipt, treatment and retention of records of incident investigations;
- (h) facilitate information sharing with other committees of the Board as required to address matters of mutual interest or concern in respect of the Corporation's financial reporting;
- (i) assist Board oversight in respect of issues not elsewhere listed concerning the integrity of the Corporation's financial statements, the Corporation's compliance with legal and regulatory requirements, the independent auditor's qualifications and independence, the performance of the external auditors, and the performance of the internal audit function; and
- (j) have the authority and responsibility to recommend the appointment and the revocation of the appointment of registered public accounting firms (in addition to the external auditors) engaged for the purpose of preparing or issuing an audit report or performing other audit, review or attest services, and to fix their remuneration.

In addition, the Audit Committee will perform such other functions as are assigned by law and on the instructions of the Board.

## **V. MEETINGS**

The Audit Committee will meet quarterly, or more frequently at the discretion of the members of the Audit Committee, as circumstances require.

Notice of each meeting of the Audit Committee will be given to each member and, if applicable, to the external auditors. The notice will:

- (a) be in writing (which may be communicated by fax or email);
- (b) be accompanied by an agenda that states the nature of the business to be transacted at the meeting in reasonable detail;
- (c) include copies of documentation to be considered at the meeting and reasonably sufficient time to review documentation; and
- (d) be given at least 48 hours preceding the time stipulated for the meeting, unless notice is waived by the Audit Committee members.

A quorum for a meeting of the Audit Committee is a majority of the members present in person, by video conference, webcast or telephone.

If the Chair is not present at a meeting of the Audit Committee, a Chair will be selected from among the members present. The Chair will not have a second or deciding vote in the event of an equality of votes.

At each meeting, the Audit Committee will meet "in-camera", without management or external auditors present, and will periodically, and at least annually, meet in separate sessions with the lead partner of the external auditor and periodically with the internal auditor (or persons responsible for the internal audit function).

The Audit Committee may invite others to attend any part of any meeting of the Audit Committee as it deems appropriate. This includes other directors, members of management, any employee, the Corporation's internal or external legal counsel, external auditors, advisors and consultants.

Minutes will be kept of all meetings of the Audit Committee. The minutes will include copies of all resolutions passed at each meeting, will be maintained with the Corporation's records, and will be available for review by members of the Audit Committee, the Board, and the external auditor.

## **VI. OTHER MATTERS**

### **A. Review of Charter**

The Audit Committee shall review and reassess the adequacy of this Charter at least annually or otherwise, as it deems appropriate, and propose recommended changes to the Nomination and Governance Committee.

### **B. Reporting**

The Audit Committee shall report to the Board activities and recommendations of each Audit Committee meeting and review with the Board any issues that arise with respect to the quality or integrity of the Corporation's financial statements, the Corporation's compliance with legal or regulatory requirements, the performance and independence of the Corporation's external auditors, management information technology with respect to financial reporting matters, risk management and communication between the parties identified above.

### **C. Evaluation**

The Audit Committee's performance shall be evaluated annually by the Nomination and Governance Committee and the Board as part of the Board assessment process established by the Nomination and Governance Committee and the Board.

This Charter was last approved by the Board of Directors on April 20, 2022.