

NexGen Announces Submission of the Rook I Project Environmental Impact Statement

Vancouver, BC, June 21, 2022 - NexGen Energy Ltd. ("NexGen" or the "Company") (TSX: NXE) (NYSE: NXE) (ASX: NXG) is pleased to announce a major milestone in the advancement of regulatory approvals for the 100% owned Rook I Project ("Rook I" or the "Project") with the submission of the draft Environmental Impact Statement ("EIS") to the Saskatchewan Ministry of Environment ("ENV") and the Canadian Nuclear Safety Commission ("CNSC"). The EIS submission included letters of support for the Project from each of the Clearwater River Dene Nation (CRDN), Birch Narrows Dene Nation (BNDN), and Buffalo River Dene Nation (BRDN), which all have also endorsed the Project through the execution of Benefit Agreements with NexGen covering the entire lifespan of the Project.

The submission of the draft EIS follows the Provincial and Federal Environmental Assessment (EA) processes that commenced in April 2019 following regulatory acceptance of NexGen's Project Description. The Project, located in the uranium rich district of Saskatchewan's southwestern Athabasca Basin, includes underground and surface facilities to support the mining and processing of uranium ore from the Arrow deposit.

Leigh Curyer, Chief Executive Officer commented: "The submission of the draft EIS is an exciting and significant milestone for NexGen, and we are proud to be working alongside our local Indigenous partners and all our stakeholders as we deliver on this generational opportunity for Saskatchewan and Canada. The draft EIS incorporates best practise in every aspect of the Project's elite environmental performance and is a culmination of many years of detailed data collection, analysis and design. Upon review and approval of the Environmental Assessment, the Rook I Project will deliver enormous economic, social, and community benefits, while being a major supplier of carbon-free base load energy fuel, highlighting Canada's leading environmental commitment to the world.

On behalf of everyone at NexGen, I would like to congratulate and thank all our valued partners with whom we have been working side by side. The communities where we operate, the government of Saskatchewan and Canada and their regulatory bodies, our valued employees, consultants and investors in accomplishing this unique milestone. The NexGen team is dedicated to the optimal delivery of the Rook I Project and ready for the next exciting phase of development."

Luke Moger, Vice President, Environment, Permitting & Licensing commented: "Conducting the biophysical and socio-economic assessments in support of developing the draft EIS highlights the elite environmental and social outcomes of the Rook I Project resulting from NexGen's long-term and disciplined planning approach. Key environmental design features such as the permanent underground storage of all tailings as engineered cemented backfill and the consolidation and optimization of the Project footprint reflect the commitment of the team and the integrated approach taken, including the incorporation of valuable feedback from local Indigenous Groups and communities.

We are excited to share our draft EIS with the experienced Provincial and Federal regulatory teams and welcome the transition to the next stage of the EA process, including the technical and public review that will be led by the Canadian Nuclear Safety Commission and Saskatchewan Ministry of Environment."

Draft EIS

NexGen conducted the EA pursuant to *The Environmental Assessment Act* of Saskatchewan and the *Canadian Environmental Assessment Act, 2012* (collectively the "Acts"). The information and analysis conducted and submitted in the EIS represent the basis against which the environmental, social, and human health effects of the Project will be evaluated by the ENV and CNSC.

Since 2011, NexGen established an experienced team of subject matter experts and qualitied professionals across all aspects of the Project to conduct technical studies; engage with Indigenous Groups, communities, regulators, and public stakeholders; and prepare the EIS. The EIS represents the collection of reports that document NexGen's EA of the proposed Project and demonstrates the robust engagement undertaken over many years, the favorable geological setting of the Arrow deposit, NexGen's focused incorporation of environmental stewardship into the Project designs, and the generational positive long-term economic benefits the Project will provide to local communities, Saskatchewan, and Canada.

The draft EIS fulfills a key aspect of meeting Provincial and Federal requirements so that regulatory authorities can make an informed decision regarding Project approval. Data and analyses on the potential positive and adverse effects from the Project are included, as well as the mitigation measures and monitoring and management programs to be implemented by NexGen. Other important aspects of the EIS include the demonstration of meaningful engagement with affected Indigenous Groups, local communities, and the public, and the incorporation of Indigenous and Local Knowledge into the EA.

Engagement

In 2019, NexGen entered into Study Agreements with each of the Clearwater River Dene Nation ("CRDN"), Birch Narrows Dene Nation ("BNDN"), Buffalo River Dene Nation ("BRDN"), and Métis Nation – Saskatchewan (on behalf of Northern Region 2). NexGen has been working with local Indigenous Groups and communities since 2013, with the Study Agreements formalizing engagement approaches specifically designed to support participation in the EA process and providing capacity funding for engagement and retention of technical support. The Study Agreements also fully funded the completion of self-directed Indigenous Knowledge and Traditional Land Use Studies by each Indigenous Group that were valuable sources of information used by NexGen in conducting the EA.

In addition, NexGen has signed Benefit Agreements with the CRDN, BNDN, and BRDN to ensure provisions for ongoing engagement, financial and human resources to support Indigenous cultural and traditional values as well as environmental stewardship, employment, training, and economic development throughout the entire lifespan of the Project.

EIS Submission and Next Steps

With submission of the draft EIS, the ENV and CNSC have commenced their respective Provincial and Federal reviews. Under the Provincial EA review process, the ENV has commenced their technical review of the EIS. Under the Federal EA review process, the CNSC is currently undergoing a conformance review of the EIS in advance of conducting parallel technical and public review.

Through a cooperative Provincial-Federal EA process, the ENV and CNSC will share information and work to reduce regulatory duplication, while providing a comprehensive EA process in accordance with the separate requirements that apply and must be satisfied with respect to the Acts, regulations, and guidelines in place for each of the respective jurisdictions.

NexGen - Delivering a Generational Project

To support the submission of the draft EIS, NexGen has launched "Delivering a Generational Project" – a 10-minute video on NexGen's team and innovative approach, and the unique characteristics of the Rook I Project. The video can be found by visiting www.nexgenenergy.ca or www.saskatchewanuranium.ca

About NexGen

NexGen is a British Columbia corporation focused on the development of the Rook I Project located in the southwestern Athabasca Basin, Saskatchewan, Canada, into production. The Rook I Project is supported by a NI 43-101 compliant Feasibility Study which outlines elite environmental performance as well as industry leading economics. Rook I hosts the Arrow Deposit that hosts Measured Mineral Resources of 209.6 M lbs of U₃O₈ contained in 2.18 M tonnes grading 4.35% U₃O₈, Indicated Mineral Resources of 47.1 M lbs of U₃O₈ contained in 1.57 M tonnes grading 1.36% U₃O₈, and Inferred Mineral Resources of 80.7 M lbs of U₃O₈ contained in 4.40 M tonnes grading 0.83% U₃O₈.

NexGen has a highly experienced team of uranium industry professionals with a successful track record in the discovery of uranium deposits and in developing projects through discovery to production. The Company is the recipient of the 2018 PDAC Bill Dennis Award for Canadian mineral discovery and the 2019 PDAC Environmental and Social Responsibility Award.

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Technical Disclosure

All technical information in this news release has been reviewed and approved by Anthony (Tony) George, P.Eng., NexGen's Chief Project Officer, a qualified person under National Instrument 43-101.

A technical report in respect of the FS is filed on SEDAR (<u>www.sec.gov/edgar.shtml</u>) and is available for review on NexGen Energy's website (<u>www.nexgenenergy.ca</u>).

Cautionary Note to U.S. Investors

This news release includes Mineral Reserves and Mineral Resources classification terms that comply with reporting standards in Canada and the Mineral Reserves and the Mineral Resources estimates are made in accordance with NI 43-101. NI 43-101 is a rule developed by the Canadian Securities Administrators that establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. These standards differ from the requirements of the Securities and Exchange Commission ("SEC") set by the SEC's rules that are applicable to domestic United States reporting companies. Consequently, Mineral Reserves and Mineral Resources information included in this news release is not comparable to similar information that would generally be disclosed by domestic U.S. reporting companies subject to the reporting and disclosure requirements of the SEC Accordingly, information concerning mineral deposits set forth herein may not be comparable with information made public by companies that report in accordance with U.S. standards.

Forward-Looking Information

The information contained herein contains "forward-looking statements" within the meaning of applicable United States securities laws and regulations and "forward-looking information" within the meaning of applicable Canadian securities legislation. "Forward-looking information" includes, but is not limited to, statements with respect to mineral reserve and mineral resource estimates, the 2021 Arrow Deposit, Rook I Project and estimates of uranium production, grade and long-term average uranium prices, anticipated effects of completed drill results on the Rook I Project, planned work programs, completion of further site investigations and engineering work to support basic engineering of the project and expected outcomes. Generally, but not always, forward-looking information and statements can be identified by the use of words 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. Statements relating to "mineral resources" are deemed to be forward-looking information, as they involve the implied assessment that, based on certain estimates and assumptions, the mineral resources described can be profitably produced in the future.

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 mineral reserve and resources estimates and the key assumptions and parameters on which such estimates are based are as set out in this news release and the technical report for the property, the results of planned exploration activities are as anticipated, the price and market supply of uranium, the cost of planned exploration activities, 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 activities will be available on reasonable terms and in a timely manner and that general business and economic conditions will not change in a material adverse manner. Although the assumptions made by the Company 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 in the future.

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, the existence of negative operating cash flow and dependence on third party financing, uncertainty of the availability of additional financing, the risk that pending assay results will not confirm previously announced preliminary results, conclusions of economic valuations, the risk that actual results of exploration activities will be different than anticipated, the cost of labour, equipment or materials will increase more than expected, that the future price of uranium will decline or otherwise not rise to an economic level, the appeal of alternate sources of energy to uranium-produced energy, that the Canadian dollar will strengthen against the U.S. dollar, that mineral resources and reserves are not as estimated, that actual costs or actual results of reclamation activities are greater than expected, that changes in project parameters and plans continue to be refined and may result in increased costs, of unexpected variations in mineral resources and reserves, grade or recovery rates or other risks generally associated with mining, unanticipated delays in obtaining governmental, regulatory or First Nations approvals, risks related to First Nations title and consultation, reliance upon key management and other personnel, deficiencies in the Company's title to its properties, uninsurable risks, failure to manage conflicts of interest, failure to obtain or maintain required permits and licences, risks related to changes in laws, regulations, policy and public perception, as well as those factors or other risks as more fully described in NexGen's Annual Information Form dated February 25, 2022 filed with the securities commissions of all of the provinces of Canada except Quebec and in NexGen's 40-F filed with the United States Securities and Exchange Commission, which are available on SEDAR at www.sedar.com and Edgar at www.sec.gov.

Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in the forward-looking information or statements or implied by forward-looking information or statements, there may be other factors that cause results not to be as anticipated, estimated or intended. Readers are cautioned not to place undue reliance on forward-looking information or statements due to the inherent uncertainty thereof.

There can be no assurance that forward-looking information and 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 statements or information. The Company undertakes no obligation to update or reissue forward-looking information as a result of new information or events except as required by applicable securities laws.