

NexGen Achieves Major Permitting Milestone

- The Canadian Nuclear Safety Commission ("CNSC") has notified NexGen of successful completion of final Federal technical review.
- This is the key requirement to scheduling a Federal Commission Hearing date and subsequent Federal Project approval decision.
- The Federal Environmental Assessment ("EA") and License represent the final major approval steps after having received Provincial EA approval in November 2023.
- In production, the Rook I Project is poised to make NexGen one of the world's largest and most environmentally conscious mining companies.

Vancouver, BC, November 19, 2024 – NexGen Energy Ltd. ("NexGen" or the "Company") (TSX: NXE) (NYSE: NXE) (ASX: NXG) is excited and proud to announce a major milestone in the Federal EA process for its 100%-owned Rook I Project ("the Project"). The CNSC has provided NexGen formal confirmation that the Company has successfully addressed all information requests received as part of the Federal technical review. With completion of the CNSC technical review, the next and final steps in the Federal approval process include scheduling a Commission Hearing Date for the Project, subject to which the CNSC will render an approval decision on the Project.

This historic milestone marks a crucial step forward for the Project that has been undergoing Canada's robust and rigorous regulatory process since 2019. Completion of the Federal EA technical review stage follows the CNSC having deemed NexGen's Federal licence application sufficient in September 2023, and receipt of Provincial EA approval in November 2023. This development reinforces Canada's path to re-establish itself as the leader in global uranium supply and partner of choice.

Leigh Curyer, Chief Executive Officer, commented: "This exciting outcome is a testament to the exceptional efforts of our entire NexGen team, the collaborative support of our valued Indigenous Nation partners, and our transparent approach with the CNSC to ensure a robust and thorough review that meets the highest standards of environmental protection for the sustainable development of the Rook I Project. Since inception, our honest and innovative holistic approach to the successful development of this generational project has set new industry standards as to what is possible, whilst positively impacting all our valued stakeholders.

Together with the Clearwater River Dene Nation, Métis Nation – Saskatchewan Northern Region 2 and Métis Nation – Saskatchewan, Buffalo River Dene Nation, and Birch Narrows Dene Nation, we are construction ready to deliver transformative and unprecedented social, economic and environmental benefits to local communities, the Province of Saskatchewan, Canada, and the world.

We're not just developing a mine - we're building strong communities while shaping a sustainable and secure global energy future. With over \$800 million in cash and liquid assets, we are ready pending a positive Commission decision with all activities required to immediately commence major site works in place."

NexGen is poised to propel Canada back to the forefront of global clean energy fuel production. The Rook I Project embodies NexGen's commitment to elite environmental performance, unprecedented community inclusion, and responsible alignment with global net-zero goals.

About NexGen

NexGen Energy is a Canadian company focused on delivering clean energy fuel for the future. The Company's flagship Rook I Project is being optimally developed into the largest, low-cost producing uranium mine globally, incorporating the most elite standards in environmental and social governance. The Rook I Project is supported by a NI 43-101 compliant Feasibility Study which outlines the elite environmental performance and industry leading economics. NexGen is led by a team of experienced uranium and mining industry professionals with expertise across the entire mining life cycle, including exploration, financing, project engineering and construction, operations, and closure. NexGen is leveraging its proven experience to deliver a Project that leads the entire mining industry socially, technically, and environmentally. The Project and prospective portfolio in northern Saskatchewan will provide generational long-term economic, environmental, and social benefits for Saskatchewan, Canada, and the world.

NexGen is listed on the Toronto Stock Exchange and the New York Stock Exchange under the ticker symbol "NXE," and on the Australian Securities Exchange under the ticker symbol "NXG," providing access to global investors to participate in NexGen's mission of solving three major global challenges in decarbonization, energy security, and access to power. The Company is headquartered in Vancouver, British Columbia, with its primary operations office in Saskatoon, Saskatchewan.

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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 estimates for CapEx, OpEx and a payback period of 12 months, the appointment of a lead lender group, the availability of financing for the Project, the advancement of detailed engineering and contract negotiations, bolstering the globe's uranium supply chains to meet the rising demand for nuclear energy, the timing and cost of reclamation, including as part of the UGTMF and after-tax free cash flow remaining materially consistent with the FS, Free Cash Flow, Payback Period and IRR relative to various uranium prices, the delivery of clean energy fuel for the future, the development of the largest low cost producing uranium mine globally and incorporating elite standards in environmental and social governance, delivering a project that leads the entire mining industry socially, technically and environmentally, providing generational long-term economic, environmental and social benefits for Saskatchewan, Canada and the world, planned exploration and development activities and budgets, the interpretation of drill results and other geological information, mineral reserve and resource estimates (to the extent they involve estimates of the mineralization that will be encountered if a project is developed), requirements for additional capital, capital costs, operating costs, cash flow estimates, production estimates, the future price of uranium and similar statements relating to the economics of a project, including the Rook I Project. 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 NexGen's current expectations, beliefs, assumptions, estimates and forecasts about its 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 financing for the Project will be available in a timely manner and on terms acceptable to the Company, the results of planned exploration and development activities will be as anticipated and on time; the price of uranium; the cost of planned exploration and development activities; that, as plans continue to be refined for the development of the Rook I Project, there will be no changes in costs, engineering details or specifications that would materially adversely affect its viability; 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; that general business, economic, competitive, social and political conditions will not change in a material adverse manner; the assumptions underlying the Company's mineral reserve and resource estimates and updated/revised CapEx, OpEx, SusEx, and pay back period; assumptions made in the interpretation of drill results and other geological information; the ability to achieve production on the Rook I Project: and other estimates, assumptions and forecasts disclosed in the Feasibility Study for the Rook I Project. Although the assumptions made by the Company in providing forward-looking information or making forward-looking statements were considered reasonable by management at the time they were made, 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, the risk that pending assay results will not confirm previously announced preliminary results, the imprecision of mineral reserve and resource estimates, the price and appeal of alternate sources of energy, sustained low uranium prices, aboriginal title and consultation issues, development risks, climate change, uninsurable risks, reliance upon key management and other personnel, risks related to title to its properties, information security and cyber threats, failure to manage conflicts of interest, failure to obtain or maintain required permits and licences, changes in laws, regulations and policy, competition for resources, political and regulatory risks, general inflationary pressures, industry and economic factors that may affect the business, and other factors discussed or referred to in the Company's most recent Annual Information Form under "Risk Factors" and management's discussion and analysis under "Other Risks Factors" filed on SEDAR+ at www.sedarplus.ca and 40-F filed on 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.

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 are cautioned not to place undue reliance on forward-looking information or statements due to the inherent uncertainty thereof. 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.