



NexGen Announces Expanded 2023 Exploration Program

Vancouver, BC, February 8, 2023 - NexGen Energy Ltd. ("NexGen" or the "Company") (TSX: NXE) (NYSE: NXE) (ASX: NXG) is pleased to announce the commencement of an expanded 2023 exploration program designed to follow-up positive results from the 2022 exploration drill program and to test prospective areas that have been highlighted by detailed 2022 geophysical surveys. Additionally, NexGen has planned a substantial 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, Saskatchewan. The geophysical program includes cosmic ray muon tomography initiated in 2022 on the Patterson Corridor at NexGen's 100% owned Rook I property as part of Ideon Technologies' early access program for first implementation of innovative muon detecting instrumentation in boreholes.

Leigh Curyer, Chief Executive Officer, commented: "Through exploration drilling and strategic geophysical surveys, NexGen is progressing high priority targets to advance towards the discovery of additional material mineralization. The focus of this expanded exploration program is to test for new "Arrow-type" mineralized zones across our dominant land position in the southwest Athabasca Basin. The application of muon tomography in 2022 is another example of NexGen's identification and application of industry leading techniques which focuses on further optimization of drilling time, cost, and elite environmental management.

It's an exciting time at NexGen with the permitting and licensing of Rook I advancing, as we transition into detailed engineering and in parallel, a targeted drill program incorporating extensive data analysis. NexGen is delivering a key component in addressing three major global challenges – decarbonization, energy security and access to energy for all, in a manner that is setting new standards in sustainability for all stakeholders, incorporating a highly efficient use of capital."

Grant Greenwood, Vice President, Exploration, commented: "The 2022 exploration program has highlighted numerous areas for follow-up drilling in 2023 and speaks to the systematic testing of NexGen's vast and many prospective targets across NexGen's land tenure. The 2023 drill program builds upon previous drill results and the 2022 geophysical program has elevated numerous targets for further investigation where pronounced stacked anomalies are now drill-ready. Also, with the recent discovery of high-grade mineralization by F3 adjacent to NexGen's SW1 property, we are excited to refine approximately 12 km of strike length along this trend which exists on our property as just one component of the 2023 program."

2023 Drilling

2023 exploration drilling will systematically test priority conductors that have been highlighted by encouraging 2022 drilling results, as well as geophysical survey results that identified drill-ready stacked anomalies. This drill program – targeting nine (9) conductive trends – has a planned total of 22,500 metres with up to three (3) drill rigs in operation.

Drill target areas:

- **SW2** – 2023 drilling is planned for the fertile Patterson Corridor and seven (7) additional prospective conductive trends of which the majority have not been drilled to date by NexGen (listed below from west to east) that are parallel to the conductor hosting the Arrow Deposit (Figure 1).
 - **Patterson Corridor (PLC)** – Systematic testing along trend of Arrow. This fertile trend has a strike length of approximately 9 km on the Rook I property and remains prospective for further investigation. Five (5) drill holes for 3,000 metres are planned in 2023.
 - **PLC East** – During the 2022 exploration drill program, encouraging brittle structure and hydrothermal alteration was intersected on this segmented, conductive trend. This conductor is proximal to Arrow and 2,300 metres in seven (7) holes are planned in 2023.
 - **Derkson West** – Similar geometry to the PLC with a northeast-southwest trending conductor along magnetic gradient, coincident with local gravity lows. 2023 drilling will follow-up positive 2022 results. Four (4) holes for 1,500 metres are planned on this conductor.
 - **Derkson** – This high priority portion of the Derkson corridor for testing in 2023 contains discrete and strong conductive responses with interpreted structural disruption. Systematic drilling along prospective conductors in gravity lows is planned to include two (2) holes for 750 metres.
 - **Derkson East** – Targeting a significant flexure of an underexplored conductor within a gravity low interpreted as localized structural disruption. Two (2) holes for 750 metres are planned for 2023.
 - **Fury** – 2023 drilling to target gravity lows uncovered by the 2022 ground gravity survey that are coincident with pronounced conductors. Two (2) holes for 700 metres are planned.
 - **R Seven** – 2022 ground gravity has highlighted numerous sections of this complex and prospective conductive corridor that has approximately 32 km of verified conductive strike length that is underexplored. Approximately 5 km of this conductive trend is planned for initial testing in 2023 with ten (10) drill holes for 3,000 metres, spanning the Athabasca Basin boundary.
 - **Morrow** – Approximately 11 km of segmented conductors is present within this corridor with complex geometry that is coincident with gravity lows that have been highlighted by 2022 ground gravity. This corridor is untested and the 2023 program has ten (10) holes planned for 3,000 metres.
- **SW1** – 2023 drilling is planned on the SW1 portion of the fertile trend hosting F3 Uranium Corp's PLN discovery as well as on the prospective and underexplored Gartner Corridor along with (Figure 2).
 - **F3 Uranium Trend** – F3 Uranium Corp's recent PLN discovery is on a trend that is interpreted to extend onto the SW1 property. The NexGen portion of the trend has an approximate strike

length of 12 km and is actively undergoing analysis to bring the area to a drill-ready state in early 2023.

- **Gartner Corridor** – The 2022 ground EM survey highlighted numerous locations with interpreted structural disruption for focusing hydrothermal fluids along the approximately 13 km long, northwest-southeast striking Gartner conductive trend. Located in the central region of the SW1 property, fifteen drill holes for 7,500 metres are planned in 2023 along this corridor.

2023 Geophysics (Figure 3)

- **SW1** – Ground EM, resistivity, and gravity surveys are planned for high priority conductive trends on the SW1 property. Evaluation of historical geophysical surveys along strike to the northwest of F3 Uranium Corp's recent PLN discovery will determine drill targets or the requirement of additional geophysical surveys to develop the fertile trend for drilling. Approximately 12 km of strike length on this trend is interpreted to be on NexGen's SW1 property (Figure 2).
- **SW2** – In August 2022, six borehole muon detectors were deployed within hole AR-22-269, with the deepest positioned 540 m downhole, resulting in the ongoing successful capture of muons. Drill hole AR-22-269 tested down dip of South Arrow while also being ideally placed to image density contrast associated with South Arrow uranium mineralization. This high-resolution density survey will determine further drilling at South Arrow and inform additional muon tomography application along the fertile Patterson Corridor in 2023. Potential further application of muon tomography on the Patterson Corridor has the benefit of investigating more rock mass than conventional step-out drilling while reducing metres, cost, and environmental disturbance. See below for additional information on muon tomography technology.

Additionally, a high-resolution magnetic survey is planned over the complex R Seven corridor prior to drill testing this high priority area in summer 2023. The survey is designed to gain greater resolution across the conductor, highlighting prospective cross-cutting features to prioritize structure that can focus uranium mineralization associated with hydrothermal fluids.

- **SW3** – A ground gravity survey across the southeastern portion of the SW3 property is planned for 2023 along with ground resistivity on a prospective conductor in the north-central portion of the property. Both surveys are designed to image the subsurface for hydrothermal alteration associated with uranium mineralization and advance these prospective areas towards drilling in subsequent programs.

Muon Tomography

Muon Tomography uses energy from supernova explosions in space to provide 3D imaging down to 1km beneath the Earth's surface and is the only straight-line geophysical methodology that can accurately determine location of any density anomalies indicative of uranium mineralization. As part of the 2022 exploration program, NexGen partnered with Ideon Technologies' early access program for borehole muon tomography, becoming one of the first companies globally to embrace the innovative new approach to mineral exploration that integrates proprietary detectors, inversion technologies, and software algorithms to produce 3D density models of features – like uranium pods – underground. It provides the ability to accurately locate subsurface anomalies and reduces the need for expensive drilling activity while lowering environmental impact and increasing exploration certainty in the subsurface.

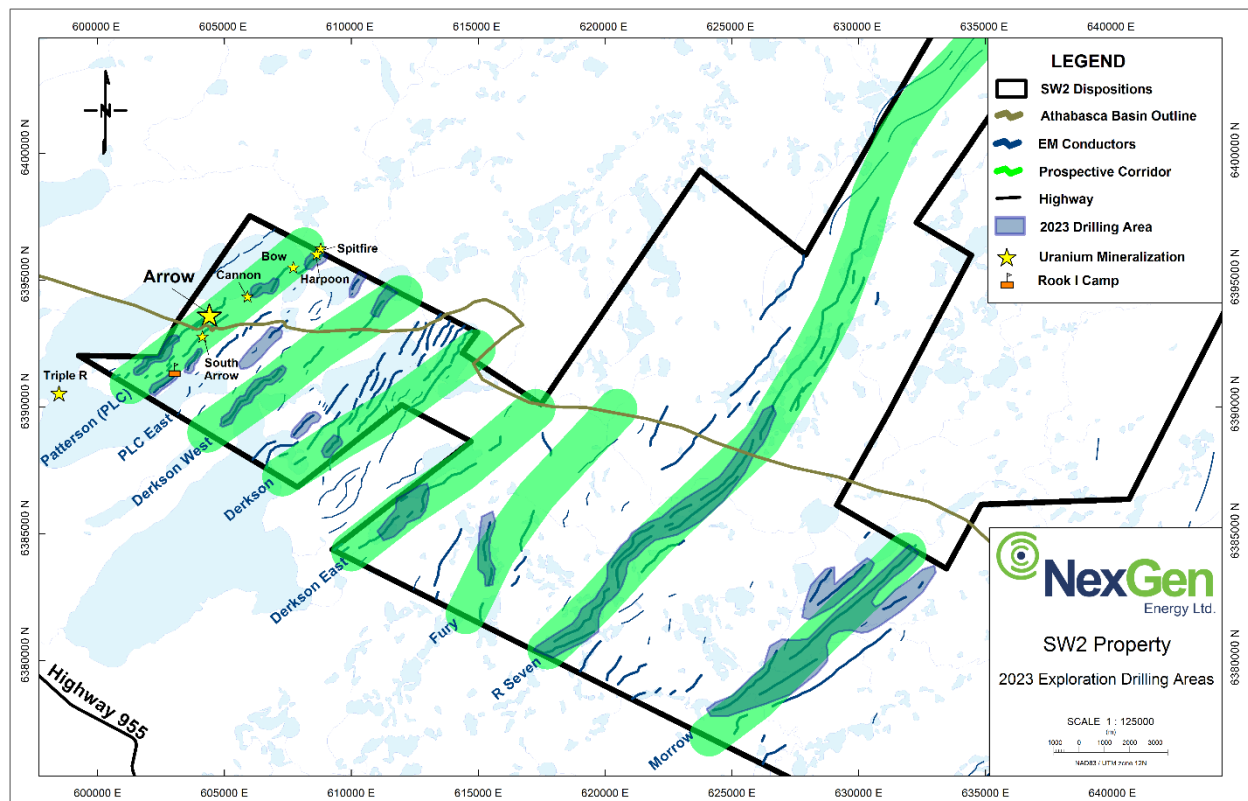


Figure 1: 2023 drill target areas (highlighted blue) across prospective corridors on the western half of NexGen's SW2 property.

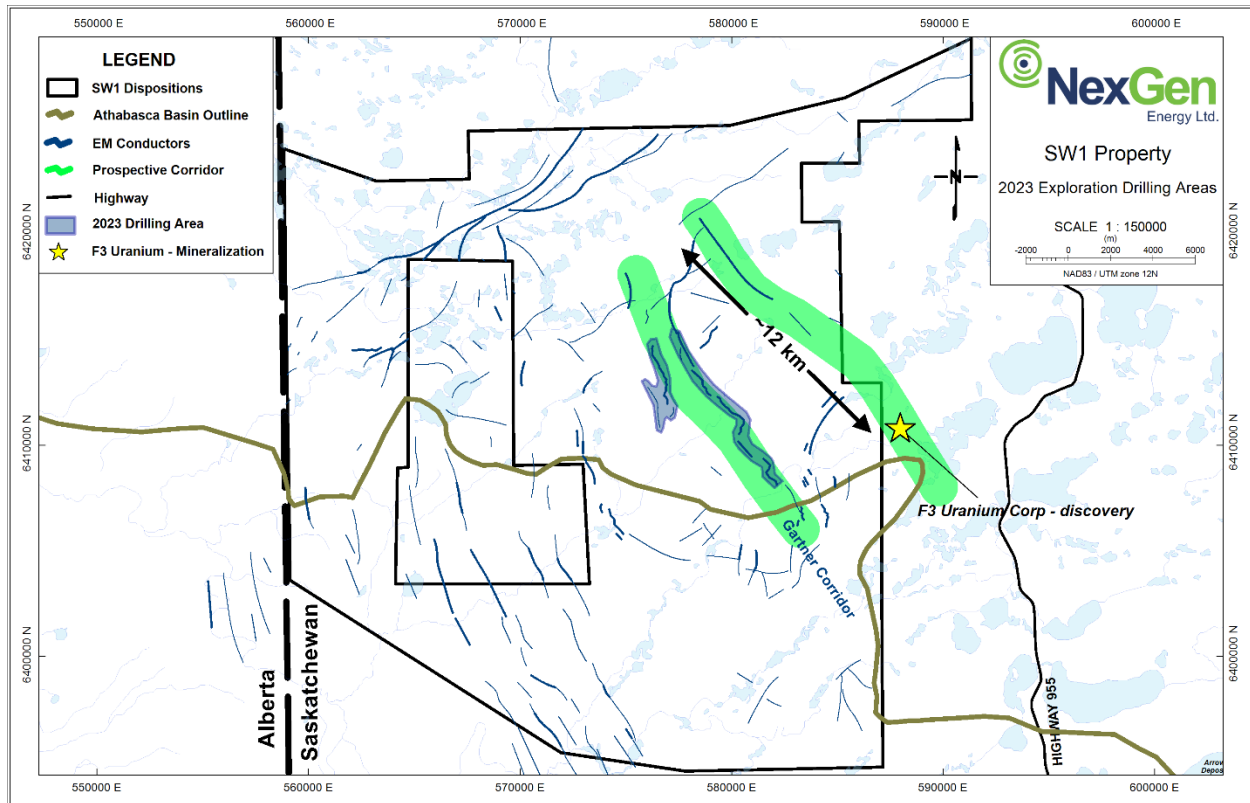


Figure 2: 2023 drill target areas (highlighted blue) within the Gartner Corridor on SW1. The fertile trend hosting F3 Uranium Corp's discovery is interpreted to extend onto NexGen's SW1 property.

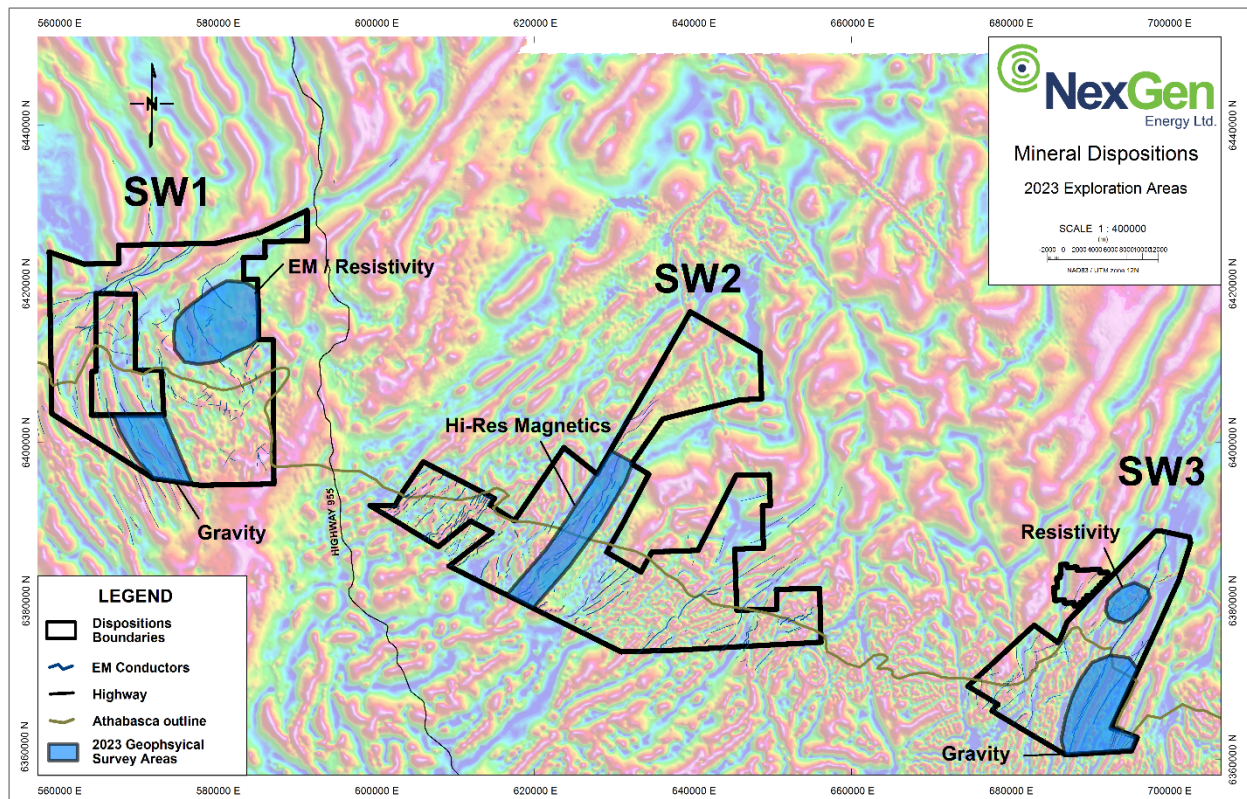


Figure 3: NexGen's southwest Athabasca tenure with magnetic tilt derivative in the background. 2023 geophysical survey areas highlighted blue.

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, 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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Technical Disclosure

All technical information in this news release has been reviewed and approved by Grant Greenwood, P.Geo, NexGen's Vice President, Exploration, a qualified person under National Instrument 43-101.

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

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.