

NexGen Announces Additional Mineralization Discovered at Patterson Corridor East, Assays from RK-24-183 and Commencement of Expanded Summer Exploration Program

Vancouver, BC, May 29, 2024 – NexGen Energy Ltd. ("NexGen" or the "Company") (TSX: NXE) (NYSE: NXE) (ASX: NXG) is pleased to announce drilling at Patterson Corridor East ("PCE") has intersected mineralization in RK-24-193 over 67.5 metres (m) (383.5 to 451 m) across various intervals including up to 7,500 cps over 1.5 m (Figures 1 to 4, Table 1). RK-24-193 is located 275 m southwest along strike of RK-24-183 (discovery hole) and at approximately the same depth below surface.

In addition, assays from RK-24-183 confirm high grade uranium veins across a 20 m interval with several intersections totalling 13.5 m at 0.78% U₃O₈ including 0.5 m (348.0 to 348.5 m) at 10% U₃O₈ and another 0.5 m (356.5 to 357 m) at 6.23% U₃O₈ (Table 2). For reference, the Arrow discovery hole RK-14-21 assayed 5.75 m at 0.37% U₃O₈, including 0.25 m at 5.77% U₃O₈.

Collectively, these results of multiple narrow intersections of mineralization in two holes represent a current strike length of 275 m at PCE, suggesting a potential upper edge to mineralization highly analogous to the early holes at Arrow (Figure 1). Consequently, the summer drilling program has been expanded to 4 drill rigs and targeting 22,000 m at PCE (Figure 2).

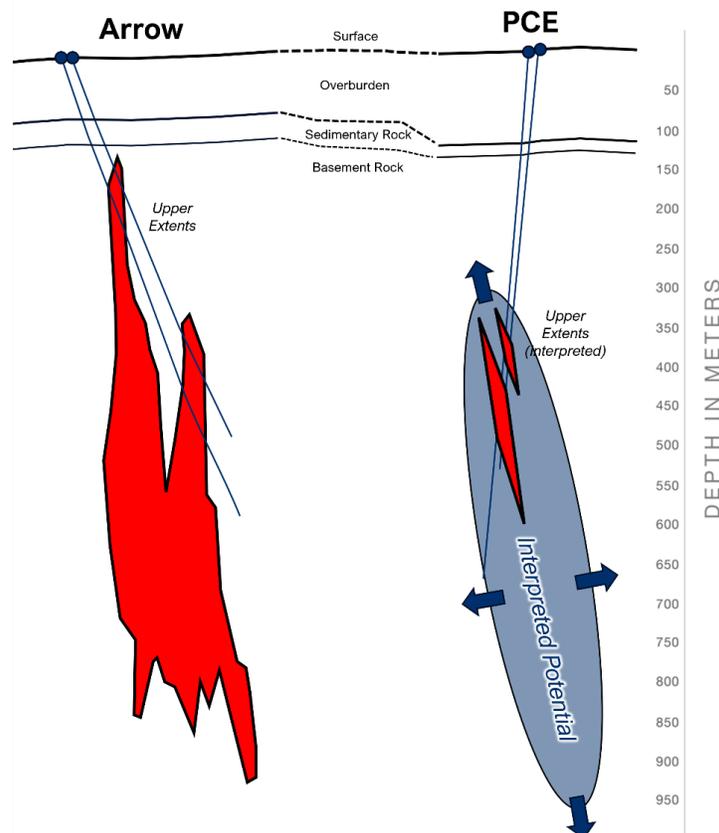


Figure 1: Schematic cross-section showing early holes at Arrow and PCE with relative depths of mineralization; follow up will primarily focus on blue shaded area down dip and along strike

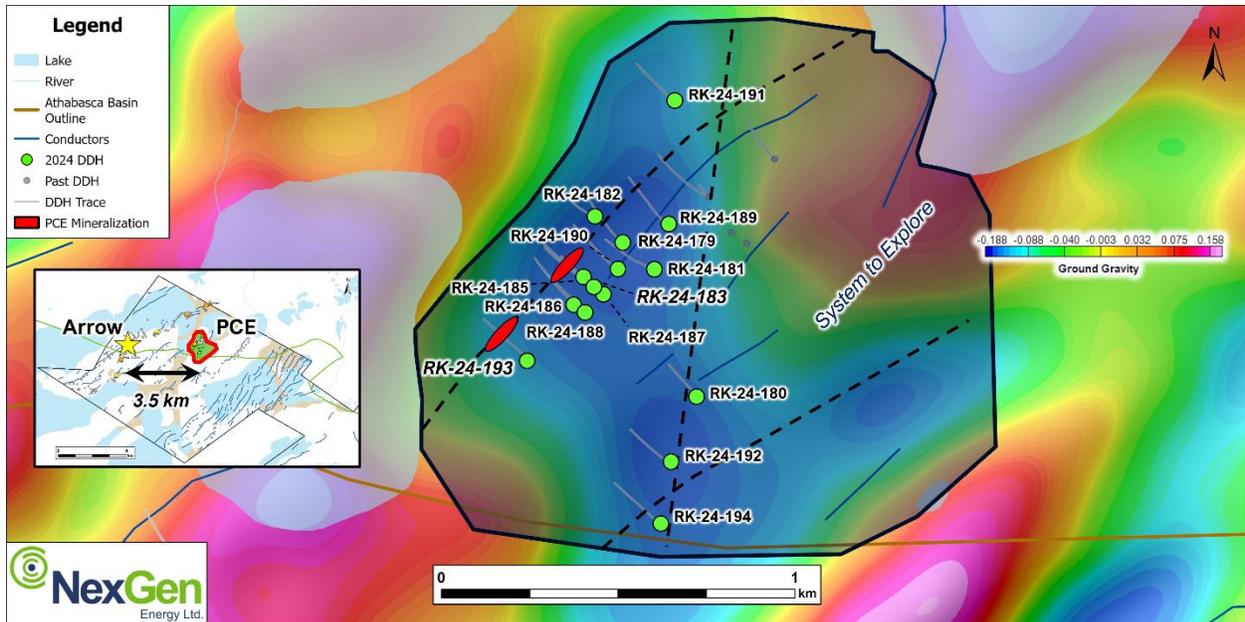


Figure 2: PCE showing with area of interest for further exploration outlined; 2024 drillholes shown as green dots, interpreted primary structures are represented by dashed lines

Leigh Curyer, Chief Executive Officer, commented: “Our team has assessed the geological similarities between RK-24-183 and RK-24-193 and the upper areas of Arrow, which indicates the high prospectivity of an additional mineralized system 3.5 km east of Arrow. Consequently, the growing potential of this latest discovery will drive the focus of the summer exploration program to determine the potential size and extent of mineralization. Efficient and bold testing of the overall system is the first priority.

It is an exciting time at NexGen with the Company recently advancing the Federal Environmental Assessment process for the Rook I Project through the submission of responses to the remaining Information Requests, as well as advancing detailed engineering and exploring a new discovery in parallel.”

RK-24-193

This new hole intersected elevated radioactivity over 67.5 m (Table 1) with mineralization style and alteration intensity strongly resembling up dip projections that were seen during the early discovery holes at Arrow.

In addition, drill results further south in RK-24-180, RK-24-192, and RK-24-194 indicate a possible repetition of prospective structure that correlates well with the local gravity low, a typical indicator of potential hydrothermal alteration. Numerous brittle reactivated structures and associated intense alteration within these three drillholes highlight a potential supplementary uranium-bearing trend within the same system. **This has doubled the size of the system to be tested this summer with an approximate extent of 1.5 km long by 1.2 km wide** (Figure 2). Potential remains in most directions within this highly prospective area.



Figure 3: Elevated radioactivity from RK-24-193 with maximum values shown for mineralized veins outlined in yellow. Replacement style mineralization is similar to the discovery hole, RK-24-183, with a notable upgrade of alteration intensity that included m-scale dravitic breccia.



Figure 4: Hydrothermal hematite, argillization, and uraninite blebs at 419.7 m with a maximum of 7,500 cps

Summer Drilling

Focus of the expanded summer program is on assessing the broad hydrothermal system at PCE (Figure 2) and expanding the mineralized footprint. Robust analysis and interpretation processes will be utilized to actively assess potential while efficiently testing priority targets.

Over 22,000 m of diamond drilling is planned for the PCE system utilizing four drill rigs. This represents a near tripling of drilling from the winter to summer program. Optionality exists with planning underway to increase the total based on drill results. Targets will primarily be tested between 400 and 700 m below surface to test potential depth extensions, as is present at Arrow. Summer drilling will significantly advance the investigation of PCE while highlighting geological relationships that can be applied elsewhere within NexGen's exploration portfolio (Figure 5).

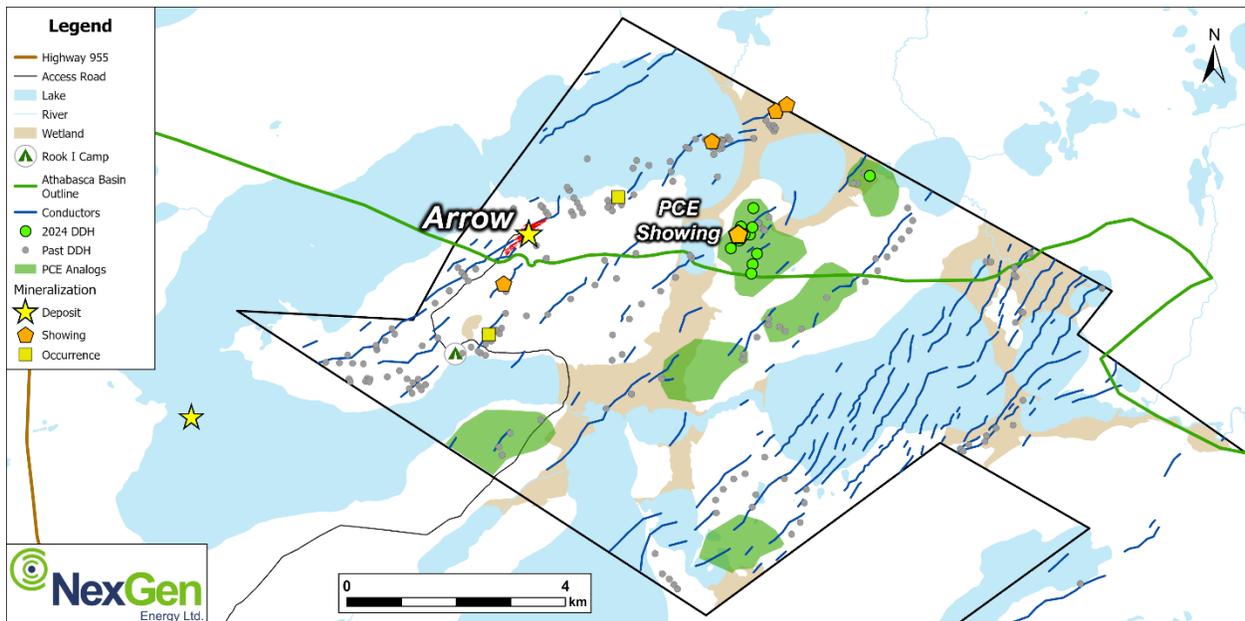


Figure 5: PCE and analogs, based on geological and geophysical similarities, shown as green shapes

Table 1: 2024 Spectrometer results to date

Drillhole				Unconformity Depth (m)	Handheld Spectrometer Results (RS-125)			
Hole ID	Azimuth	Dip	Total Depth (m)		From (m)	To (m)	Width (m)	CPS Range
RK-24-179	310	-70	462	138	141	141.5	0.5	<500 - 1,100
					150	151	1	<500
					154	155	1	<500 - 560
					156.5	157	0.5	<500
RK-24-180	310	-70	366	102.3	No Significant Intersections			
RK-24-181	310	-70	573	115.7	191.5	192	0.5	<500
RK-24-182	310	-70	411	N/A	No Significant Intersections			
RK-24-183	310	-70	501	125.3	347.5	350	2.5	500 - 52,000
					350	351	1	<500 - 1,200
					351	354	3	700 - 16,200
					354	355	1	<500 - 570
					355	358	3	1,300 - >61,000
					358	358.5	0.5	790 - 2,100
					358.5	362.5	4	<500 - 680
					362.5	363	0.5	<500 - 1,070
					363	365	2	<500
					365	365.5	0.5	800 - 7,700
					365.5	367	1.5	<500
367	367.5	0.5	<500 - 28,000					
RK-24-184	280	-70	534	137.7	No Significant Intersections			
RK-24-185	310	-70	396	N/A	312.5	313.5	1	<500
					335	335.5	0.5	<500
RK-24-186	310	-70	440	128.2	181.5	182	0.5	<500 - 700
					211	212	1	<500 - 600
RK-24-187	310	-70	501	116.8	163	164.5	1.5	<500
					191	191.5	0.5	<500 - 830
RK-24-188	310	-70	510	120.5	338	340	2	<500
					410.5	412.5	2	<500
					418.5	421.5	3	<500
RK-24-189	310	-70	537	130	No Significant Intersections			
RK-24-190	310	-70	547	123.8	No Significant Intersections			
RK-24-191	310	-70	402	N/A	266	267	1	<500 - 700
RK-24-192	310	-70	444	108.5	No Significant Intersections			
RK-24-193	310	-70	621	N/A	383.5	384.5	1	<500 - 820
					389.5	390	0.5	<500 - 1,330
					393.5	394	0.5	<500

					401.5	402.5	1	580 - 640
					413	413.5	0.5	<500
					417.5	418.5	1	<500
					419	420.5	1.5	<500 - 7,500
					423	425	2	<500 - 700
					426.5	428	1.5	<500 - 1,100
					428.5	429	0.5	<500
					430	430.5	0.5	<500 - 3,100
					432	434	2	<500 - 2,850
					435	437	2	<500
					442	443	1	<500 - 510
					449	451	2	<500 - 2,700
RK-24-194	310	-70	420	98.8	190.5	191	0.5	<500

- All depths and intervals are meters downhole, true thicknesses are yet to be determined.
- "Off-scale" refers to >61,000 cps total readings by gamma spectrometer type RS-125.
- Unconformity of 'N/A' denotes a lack of visible contact between Athabasca sandstone and basement rock.
- Maximum internal dilution 2.0 m downhole.
- Minimum thickness of 0.5 m downhole.
- All depths and intervals are metres downhole, true thicknesses are yet to be determined. Resource modelling in conjunction with an updated mineral resource estimate is required before true thicknesses can be determined.

Table 2: 2024 Assay results to date

Drillhole				Unconformity Depth (m)	SRC Geoanalytical Results (Cutoff 0.01%)			
Hole ID	Azimuth	Dip	Total Depth (m)		From (m)	To (m)	Width (m)	U ₃ O ₈ (wt%)
RK-24-179	310	-70	462	138	No Significant Intersections			
RK-24-180	310	-70	366	102.3	No Significant Intersections			
RK-24-181	310	-70	573	115.7	No Significant Intersections			
RK-24-182	310	-70	411	N/A	No Significant Intersections			
RK-24-183	310	-70	501	125.3	347.5	361	13.5	0.78
				<i>including</i>	348	348.5	0.5	10.0
				<i>including</i>	356.5	357	0.5	6.23
					362.5	363	0.5	0.07
					365	365.5	0.5	0.55
					367	367.5	0.5	1.42
					369.5	370	0.5	0.01
RK-24-184	280	-70	534	137.7	No Significant Intersections			
RK-24-185	310	-70	396	N/A	312.5	313.5	1	0.01
					335	335.5	0.5	0.05
RK-24-186	310	-70	440	128.2	No Significant Intersections			

RK-24-187	310	-70	501	116.8	No Significant Intersections			
RK-24-188	310	-70	510	120.5	412	412.5	0.5	0.02
					418.5	419	0.5	0.01
					419.5	420	0.5	0.01
					422.5	424	1.5	0.01
RK-24-189	310	-70	537	130	No Significant Intersections			
RK-24-190	310	-70	547	123.8	No Significant Intersections			
RK-24-191	310	-70	402	N/A	No Significant Intersections			
RK-24-192	310	-70	444	108.5	No Significant Intersections			
RK-24-193	310	-70	621	N/A	Assays Pending			
RK-24-194	310	-70	420	98.8	No Significant Intersections			

- *All depths and intervals are meters downhole, true thicknesses are yet to be determined.*
- *Unconformity of 'N/A' denotes a lack of visible contact between Athabasca sandstone and basement rock.*
- *Maximum internal dilution 2.0 m downhole.*
- *Minimum thickness of 0.5 m downhole.*
- *Cutoff grade 0.01% U₃O₈.*
- *All depths and intervals are metres downhole, true thicknesses are yet to be determined. Resource modelling in conjunction with an updated mineral resource estimate is required before true thicknesses can be determined.*

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 Jason Craven, NexGen's Manager, Exploration, a qualified person under National Instrument 43-101.

Natural gamma radiation in drill core reported in this news release was measured in counts per second (cps) using a Radiation Solutions Inc. RS-125 gamma spectrometer. The reader is cautioned that total count gamma readings may not be directly or uniformly related to uranium grades of the rock sample measured; they should be used only as a preliminary indication of the presence of radioactive minerals.

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 24, 2023 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.