FORM 51-102F3

MATERIAL CHANGE REPORT

ITEM 1. Name and Address of Company

NexGen Energy Ltd (the "**Company**") 3150 – 1021 West Hastings St Vancouver, BC V6E 0C3

ITEM 2. Date of Material Change

March 6, 2017

ITEM 3. News Release

The Company disseminated a press release in respect of the material change on March 6, 2017 through Canadian News Wire. The press release was also filed on SEDAR on March 6, 2017.

ITEM 4. Summary of Material Change

On March 6, 2017, the Company announced the results of its updated Mineral Resource estimate for the Arrow uranium deposit on the Company's 100% owned Rook 1 property in Saskatchewan's Athabasca basin.

ITEM 5. Full Description of Material Change

On March 6, 2017, the Company announced the results of its updated independent Mineral Resource estimate for the basement-hosted Arrow uranium deposit on the Company's 100% owned Rook I property in Saskatchewan's Athabasca Basin. Based on holes drilled to early November 2016 (AR-14-01 to AR-16-113c2), the estimate comprises an Indicated Mineral Resource of 179.5 M lbs of U308 contained in 1.18 M tonnes grading 6.88% U308, including the A2 High Grade Core of 164.9 M lbs of U308 contained in 0.40 M tonnes grading 18.84% U308 and an Inferred Mineral Resource of 122.1 M lbs of U308 contained in 4.25 M tonnes grading 1.30% U308.

Tables 1 and 2 summarize the Arrow Mineral Resource Estimates and Mineral Resource Sensitivity to Cut-Off Grade, respectively.

Structure	Tonnage (tonnes)	Grade (U3O8 %)	Metal U3O8 (U3O8 lbs)
	Indicated	Mineral Resources	
A2 High Grade	400,000	18.84	164,900,000
A2	790,000	0.84	14,500,000
Total	1,180,000	6.88	179,500,000
	Inferred	Mineral Resources	
A1	860,000	0.76	14,300,000
A2 High Grade	30,000	12.72	8,600,000
A2	1,100,000	0.76	18,500,000

Table 1 – Arrow Mineral Resource Estimate Summary – December 20, 2016 (the "Effective Date")

A3 High Grade	150,000	8.74	28,200,000
A3	1,460,000	1.16	37,300,000
A4	550,000	1.07	12,900,000
180 m SW	110,000	0.94	2,300,000
Total	4,250,000	1.30	122,100,000

Notes:

1. CIM Definition Standards were followed for Mineral Resources.

2. Mineral Resources are reported at a cut-off grade of 0.25% U3O8 based on a long-term price of US\$65 per lb U3O8 and estimated costs.

3. A minimum mining width of 1.0 m was used.

4. Numbers may not add due to rounding.

Cut-Off (U3O8 %)	Tonnage (tonnes)	Grade (U3O8 %)	Metal (U3O8 lbs)
	Indicat	ed Mineral Resources	
0.25	1,180,000	6.88	179,500,000
0.30	1,100,000	7.09	179,200,000
0.50	1,000,000	8.26	177,700,000
1.00	600,000	12.51	172,000,000
2.00	400,000	18.07	166,000,000
2.50	400,000	18.64	165,300,000
3.00	400,000	18.84	165,000,000
5.00	400,000	19.34	163,800,000
10.00	300,000	22.27	150,800,000
	Inferr	ed Mineral Resources	
0.25	4,250,000	1.30	122,100,000
0.30	3,800,000	1.42	119,500,000
0.50	2,600,000	1.89	109,200,000
1.00	1,300,000	3.12	88,500,000
2.00	500,000	5.74	65,200,000
2.50	400,000	6.80	59,400,000
3.00	300,000	7.57	55,600,000
5.00	200,000	9.68	45,600,000
10.00	100,000	13.58	22,200,000

Table 2 – Arrow Mineral Resource Sensitivity to Cut-Off Grade as of the Effective Date

Arrow is hosted entirely within basement rocks, and currently comprises a series of 5 parallel stacked sub-vertical mineralized lenses with a remarkable vertical extent. At its highest point, mineralization reaches the sub-Athabasca unconformity approximately 105 m below surface. The Mineral Resource estimate reported herein extends to a depth of 970 m below surface. Wide spaced drill holes beneath the Mineral Resource have intersected mineralization at depths of up to 980 m below surface. The deposit as defined in the Mineral Resource estimate has an overall strike length of 875 m, and the individual lenses vary in thickness from 1 m to 20 m.

Geology and Mineralization

The Rook I Property is located along the southwestern edge of the Athabasca Basin, straddling the Athabasca/basement unconformity. Basement rocks beneath the Athabasca Group belong to the Taltson Domain (previously Lloyd Domain) and consist of northeast trending Archean and Aphebian granitic and metasedimentary gneisses, the latter containing graphitic pelitic and semipelitic gneisses and granofels, which are favourable host rocks for uranium mineralization. Unconformably overlying the basement rocks are flat lying sandstones with conglomerate horizons that make up the mid-Proterozoic Athabasca Group. The thickness of the Athabasca Group varies on the property between 0 and 20 m. In the western part of the Rook I property, remnants of Devonian sandstones are occasionally seen in drill core overlying basement rocks and Athabasca Group. These are locally overlain by flat lying Cretaceous Mannville Group mudstones, siltstones and sandstones with minor sporadic coal horizons. Recent unconsolidated sandy glacial deposits are present over almost all of the property and vary in thickness from to 60 m.

Uranium mineralization at Arrow occurs within and proximal to structurally prepared basement rocks (graphitic mylonites) that show varying degrees of clay, chlorite, and hematite alteration. Structures have been reactivated multiple times, and five main parallel structural zones (namely the A1, A2, A3, A4, and A5 shears) have been recognized, with the A2 and A3 Shears hosting higher grade, thicker and more continuous mineralization than the others thus far. Mineralization consists predominantly of uraninite/pitchblende that occurs as massive to semi-massive accumulations, foliation controlled, mineral replacements and disseminations. A continuous zone of higher grade mineralization in the A2 shear is known as the A2 High Grade Domain.

Drilling, Sampling and Analytical

The updated Arrow Deposit Mineral Resource estimate is defined by a total of 200 diamond core drill holes. The drill hole spacing for the Indicated Mineral Resource estimate is approximately 25 m x 25 m, and hole spacing for Inferred Mineral Resource estimate is approximately 50 m x 50 m. All of the core collected is NQ sized (47.6 mm diameter). Mineralized intervals (defined as greater than 500 cps using handheld RS-120 scintillometer) were split on-site in 0.5 m and 1.0 m intervals and transported by company personnel to SRC Geoanalytical Laboratories (an SCC ISO/IEC 17025: 2005 Accredited Facility) of Saskatoon for geochemical analysis and U308 assay. Most samples were analyzed using ICP-MS (Inductively Coupled Plasma – Mass Spectrometry) for trace elements after partial and total digestions, plus ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry) for major and minor elements after a total digestion, and fusion solution of boron by ICP-OES. All mineralized samples for assay were analyzed for U308 by ICP-OES. Select samples were also analyzed for gold by fire assay. Analytical results were only accepted after internal QA/QC criteria had been passed. All grade data used in the Mineral Resource estimate were obtained from chemical assays, and no down-hole radiometric probe data was used.

Estimation Methodology

Mineral Resources were estimated by NexGen and reviewed and audited by Roscoe Postle Associates Inc. (RPA), an independent consulting company with substantial experience completing uranium Mineral Resource estimates in the Athabasca Basin, and around the globe. The interpretation of the threedimensional mineralized lenses (domains) was created in Leapfrog software, directly from the drill hole data using a threshold of 0.05% U3O8. All wireframes were then exported to Vulcan software to ensure wireframes were "snapped" to the drill holes to ensure that the boundaries accurately correspond to selected drill hole intervals. Five high grade portions of the deposit were modelled in the A2 shear and two high grade portions of the deposit were modelled in the A3 shear. All higher grade wireframes were based on a threshold of 5.0% U3O8. The higher grade wireframes are located within and completely encompassed by a 0.05% grade shell within the A2 and A3 shears. Figure 1 is an isometric cross section of the wireframes. Drill hole assay data were composited to 1.0 m lengths within the wireframes and tagged with the corresponding domain code.

Uranium (as U3O8) grades were interpolated with an ordinary kriging (OK) function for the A2 high grade and the A2 low grade enveloping domain. All other uranium grades (as % U3O8) were interpolated using ID^2 (inverse distance squared). All uranium grades were interpolated into a block model with blocks measuring 4 m (along strike) x 4 m (down dip) x 4 m (across strike), with sub-blocks to a minimum of 1 m x 1 m x 1 m. The grade shells were used as hard boundaries, such that only drill hole data inside of any given domain could inform the blocks within that domain. Very high grade assay values were capped at 40% U3O8 within the A3 High Grade Domain and grade caps ranged from 8% to 25% U3O8 in the lower grade domains.

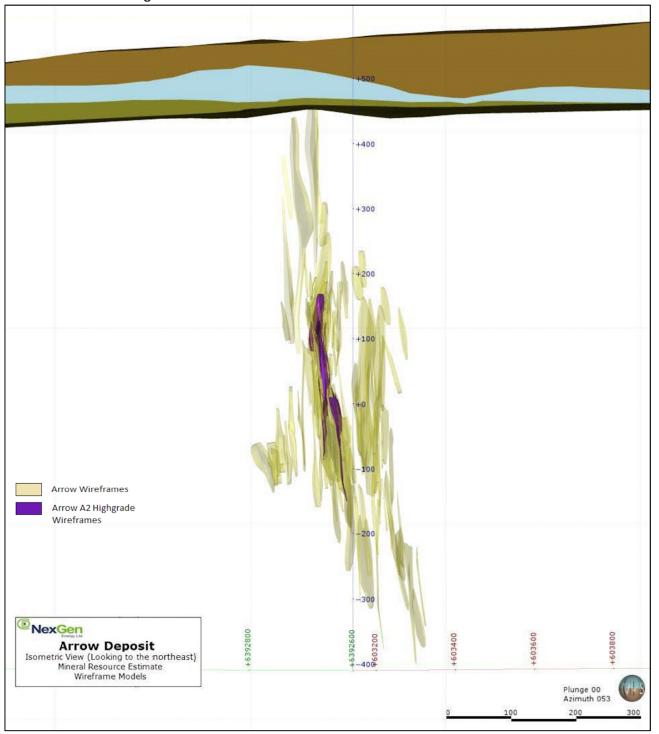
A total of 5,647 bulk density measurements have been collected on drill core samples. The measurements show a strong relationship between uranium grade and density at the Arrow deposit, with higher grade samples being more dense than lower grade samples. Therefore, the uranium grade was used to estimate the density of samples without density measurements, this was done with a polynomial formula which is based on a regression fit. Densities were then interpolated into the block model to convert mineralized volumes to tonnage, and were also used to weight the uranium grades interpolated into each block.

The resulting block model was validated by visual inspection, volumetric comparison, swath plots, and block grade estimation using an alternative method. As well, the mean block grade at zero cutoff was compared to the mean of the composited assay data to ensure no global bias.

Qualified Persons

The Mineral Resource estimate was audited and accepted by Mr. Mark Mathisen, C.P.G., Senior Geologist at RPA and Mr. David Ross, P.Geo., Director of Resource Estimation and Principal Geologist at RPA. Both are independent Qualified Persons in accordance with the requirements of National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("NI 43-101") and they have approved the disclosure herein. Additionally, the technical information in this material change report has been approved by Mr. Garrett Ainsworth, P.Geo., Vice President – Exploration & Development for NexGen. Mr. Ainsworth is a qualified person for the purposes of NI 43-101 and 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.

Figure 1: Isometric Cross Section View of the Wireframe Models



ITEM 6. Reliance on Subsection 7.1(2) of National Instrument 51-102

Not applicable.

ITEM 7. Omitted Information

No significant facts otherwise required to be disclosed in this report have been omitted.

ITEM 8. Executive Officer

The following executive officer of the Corporation is knowledgeable about the material change and may be contacted respecting the change:

Leigh Curyer Chief Executive Officer Phone: (604) 428- 4112 Email: lcuryer@nxe-energy.ca

ITEM 9. Date of Report

March 13, 2017

This material change report contains "forward-looking information" within the meaning of applicable Canadian securities legislation. "Forward-looking information" includes, but is not limited to, statements with respect to the activities, events or developments that the Company expects or anticipates will or may occur in the future, including, without limitation, planned exploration activities and the future price of uranium. 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 connation thereof.

Such forward-looking information and statements are based on numerous assumptions, including among others, that the results of planned exploration activities are as anticipated, the price of uranium, the anticipated cost of planned exploration activities, assumptions underlying mineral resource estimates, that general business and economic conditions will not change in a material adverse manner, that financing will be available if and when needed and on reasonable terms, and that third party contractors, equipment and supplies and governmental and other approvals required to conduct the Company's planned exploration activities will be available on reasonable terms and in a timely 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.

Forward-looking information and statements also involve known and unknown risks and uncertainties and other factors, which may cause actual events or results in future periods to differ materially from any projections of future events or results 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, uncertainties associated with estimating mineral resources, no known mineral reserves, assay results may not be consistent with preliminary results, alternative sources of energy, aboriginal title and consultation issues, reliance on key management and other personnel, potential downturns in economic conditions, actual results of exploration activities being different than anticipated, changes in exploration programs based upon results, availability of third party contractors, availability of equipment and supplies, failure of equipment to operate as anticipated; accidents, effects of weather and other natural phenomena and other risks associated with the mineral exploration industry, environmental risks, changes in laws and regulations, community relations and delays in obtaining governmental or other approvals.

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 implied by forward-looking information, 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 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.