

INCREASING TARGET AS NXE PEELS BACK RISK WITH FEASIBILITY STUDY RESULTS

Rook 1 'Full-Feas' - Better than a Short Squeeze!

OUR TAKE: NexGen announced the results of its Feasibility Study ["FS"] for the Arrow deposit at Rook 1 in the western Athabasca Basin. The new FS study further de-risks the Rook 1 project, host of the world class +330 Mlb U₃O₈ ultra high-grade Arrow deposit. **Summary results of the full feasibility study reflect very robust economics**, as expected for Rook 1, reinforcing and refining the conclusions of the Nov. 2018 PFS. **These results continue to confirm our thesis that the Rook 1 project, with its Arrow uranium deposit, is one of the best undeveloped mining projects in any commodity globally.** We have revamped our project model following the FS announcement, lowering OPEX assumptions (still 37% greater than FS OPEX), increasing our LoM resource, adopting a lower discount rate (8% vs 9% prior on de-risking), and reduced equity dilution, offset by a lower LoM average head-grade (see Figure 6 for changes to our model). **The net impact of our model adjustments drives a significant increase in our 12-month target to \$7.50 (from \$5.60). We continue to recommend accumulation of the stock given Arrow's world-class economics ahead of an expected rising uranium price.**

KEY HIGHLIGHTS

- ◆ **FS results refine and de-risk Rook 1 Project.** The highlights of the FS (and Δ vs PFS) include a **mine life of 10.7 years** (↑18.9%), **average annual production of 21.7 Mlb pa** (28.8 Mlb pa first 5-years) (↓14.6%), **after-tax NPV_{8%} of \$3.47B** (↓5.2%), **after-tax IRR of 52.4%** (↓440 bps), **after-tax payback of 0.9 years** (↓0.3 years), **pre-production CAPEX of \$1.3B** (↑4.0%), **LoM avg. OPEX of \$7.58/lb** or US\$5.69/lb (↑30.5%, but ↓1.0% on a per-tonne basis), driving **after-tax avg. annual net cash-flow of \$763M/year** (\$1.04B/year first 5-years). The FS base case utilizes a US\$50/lb uranium price and a USD/CAD exchange rate of \$0.75. See Figure 1 for more details.
- ◆ **Rook 1 provides strong uranium price leverage (resilience) as simple mining concept underpins world-class economics.** The conventional long-hole stoping mining method assumption in the FS is considered low-risk. The average mining rate in the FS increases ~16% based on a slight increase in the 'Probable Reserve' pounds (239.6M lbs U₃O₈ / 4.58Mt at 2.37% U₃O₈), offset by a reduction in average grade associated with inclusion of substantially more tonnage (↑33.5%) at a lower grade, impacted by more conservative grade capping with the introduction of 'Measured' resources in the global estimate (Figure 2). The FS indicates that **at a US\$40/lb uranium price** (↓20% base case) **Rook 1 has an after-tax NPV_{8%} of \$2.53B** (↓27%) **and an after-tax IRR of 44%**, **and at a US\$65/lb price** (↑30% base case) **NPV_{8%} rises to \$4.87B** (↑40%) **with a 62.8% IRR.**

OUTLOOK

- ◆ **Raising target on reduced uncertainty.** Our modelled OPEX cost profile was previously ~US\$10/lb, or more than 2x the PFS cost profile. With the added confidence of the FS, we have adopted a still-conservative, but lower cost profile, modelling LoM OPEX at US\$7.80/lb. The reduced cost profile was the largest factor driving our target price increase.

RECOMMENDED ACTION

Recommend accumulating NXE on asset quality ahead of uranium price recovery

- ◆ **NXE remains a Top Pick in the uranium sector due to the disruptive potential of the Arrow deposit, with its massive scale and strong economics.** We continue to be very bullish on NXE and believe it controls one of the best undeveloped resources globally, in any commodity.
- ◆ **Acquisition Attractiveness.** The Rook 1 FS underscores the strategic importance of this project. We believe there is a strong case for a producer to acquire NXE to gain control of this disruptive asset. **NXE is a 'must-own' for those looking for exposure to the uranium sector.**

CATALYSTS

1. **H2 2021:** Submission of Environmental Impact Statement and Licensing application.
2. **2021:** NexGen is well financed to advance the Rook 1 project and will continue to drive the project forward to a formal construction decision. 2021 technical work will include detailed engineering and permitting/licensing advancement.

PROJECTED RETURN

48%

RISK FACTOR

Very High

SCENARIO ANALYSIS

Downside Scenario	Current Price	Price Target
\$2.50	\$5.06	\$7.50
↓ 51%		↑ 48%

KEY STATISTICS AND METRICS

52-Week High/Low	\$5.41/\$0.76
YTD Performance	44%
Dividend Yield	NA
Shares O/S*	426M
Market Capitalization	\$2,156M
Cash (Feb. 18, 2021)	\$55M
Debt*	\$34M
Enterprise Value	\$2,134M
Daily Volume (3 mos.)	1,888,820
Currency	CAD

*Past Conversion

HAYWOOD ESTIMATES (CAD)

	2019A	2020E	2021E
U ₃ O ₈ Production	0.0	0.0	0.0
Revenue (\$M)	0.0	0.0	0.0
EBITDA (\$M)	(24.0)	(23.2)	(24.6)
CFPS (\$)	(0.02)	(0.05)	(0.05)

VALUATION

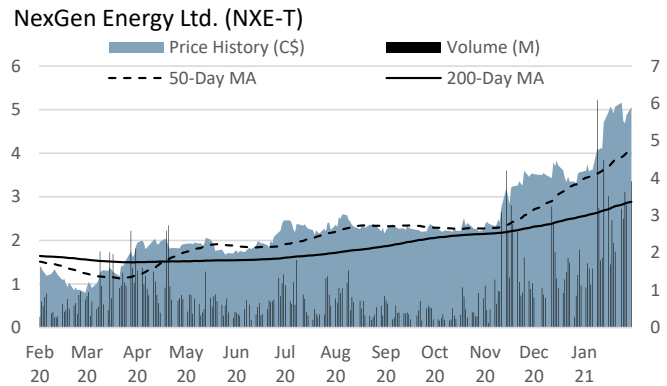
Our \$7.50 target is based on a 1.0x multiple of our estimated corporate net asset value (NAV) per share of \$7.47, based on a discounted cash flow (DCF_{8%}) analysis of our conceptual uranium mining operation at Arrow.

INVESTMENT THESIS

We believe NexGen is peerless in the Athabasca Basin and globally as an exploration / development play, as it controls a large, world-class, high-grade uranium deposit in a proven operating district, with the scale, grade and setting to be deliver top decile economics when developed.

- ◆ **We view the Arrow deposit as ‘the best undeveloped uranium asset globally and highly strategic’.** We believe that it is critical for existing major producers to control this deposit because of its disruptive potential and that this is their only option to preserve the value of their existing deposits and maintain their ability to affect price with production curtailments. The Arrow FS suggests cash operating costs of US\$5.69/lb and a \$2.53B project NPV_{8%} at US\$40/lb uranium price, implying an industry leading margin for a tier 1 scale operation.
- ◆ **We estimate NexGen controls the largest and most strategically important undeveloped high-grade uranium deposit in a world class jurisdiction, with expansion potential, as the deposit remains open in all directions.** Growth potential exists within and around the Arrow Zone. Future drilling could easily yield additional resource at the deposit with the potential to report to a future mining operation, serving to extend life and augment economics.
- ◆ **More than 80 Mlb U₃O₈ in resources not included in Feasibility Study suggests significant mine life extension beyond FS, and more attractive economics than those captured in ‘Probable Reserves’ alone.** NexGen has delineated 80.7 Mlb U₃O₈ in ‘Inferred Resources’ at Arrow that do not report to the FS mine plan but are very likely to be part of a future mining operation at the project. Our mining concept integrates ~50% of these ‘untapped’ resources, leaving still further upside.
- ◆ **Future exploration work at the Rook 1 property could lead to additional discovery.** NexGen also has the potential to discover new deposits on the Rook I project beyond the Arrow, with the Bow and Harpoon zones and from elsewhere within NexGen's expansive western Athabasca land package. Our valuation does not include any credit for this discovery potential.

SCENARIO ANALYSIS



TARGET PRICE

Our \$7.50 target is based on a 1.0x multiple of our estimated corporate net asset value (NAV) per share of \$7.47, based on a discounted cash flow (DCF_{8%}) analysis of our conceptual uranium mining operation at Arrow.

DOWNSIDE CASE

Our downside case is based on the strong base established in NexGen shares from July-December 2020, before the parabolic recent rise in the stock. NexGen's 52-week low of \$0.76 was set during the worst-case we can conceptualize (global pandemic-driven market crash). We do not expect to retest that level except in a similar, completely unforeseen volatility ‘event’.

Our downside scenario price is a theoretical case based on notional valuation metrics and market assumptions. The downside price is solely intended for demonstrative purposes and is not to be regarded as a reflection of all market possibilities. It is not a guarantee that this company's share price will not drop below this price level and hence should not be taken as such.

NexGen is a British Columbia corporation with a focus on the acquisition, exploration and development of Canadian uranium projects. Specifically, it's focused on advancing its portfolio of high-impact uranium projects across the Athabasca Basin.

Website

www.nexgenenergy.ca

Key Management

Leigh Curyer— CEO

KEY RISKS

- **Financial:** NexGen is a pre-revenue, development-stage company, and will almost certainly rely on external funding source in the form of future equity dilution or debt capital.
- **Commodity Price:** Our forecasts include a substantial increase in uranium price from current market prices. Failure for this to materialize would negatively impact our valuation.

NexGen Energy Ltd. TSX:NXE Price: \$5.06
February 22, 2021

Shares O/S (M) 425.6 Rating: Buy
MCap (C\$ M) \$2,154 Target (C\$): \$7.50 Return: 48%

Alpha: NexGen Energy is the premier pre-resource uranium exploration play globally, with an expansive, highly prospective land package on the southwestern perimeter of a prolific uranium district. The Athabasca Basin (Sask.) is an excellent operating jurisdiction, and home to multiple world class, ultra high-grade uranium deposits with an extensive history of uranium mine permitting and production.

Investment Highlights

• **NexGen - the Premier Global Pure Uranium Exploration Play:** With regional concentration becoming a reality, we expect NexGen will land peerless in the Athabasca Basin and globally, as it has just delivered a world class high-grade uranium resource exceeding 330 Mlb U₃O₈, setting up well for expansion, where the Arrow deposit remains open in most directions with growth potential both within the Arrow Zone, and from elsewhere within NexGen's expansive western Athabasca assets.

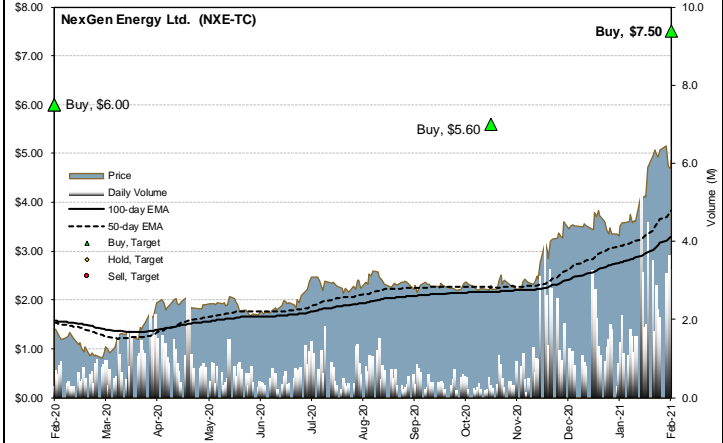
- **February 2021 Feasibility Study Highlights:**
 - Mine Life: 10.7 years
 - Average Annual Production: 21.7 Mlb pa (28.8 Mlb pa first 5-years)
 - After-Tax NPV8%: \$3.47B
 - After-Tax IRR: 52.4%
 - After-Tax Payback: 0.9 years
 - Pre-Production CAPEX: \$1.3B
 - LoM Avg. OPEX: \$7.58/lb (US\$5.69/lb)
 - After-Tax Avg. Annual Net Cash-Flow: \$763M/year (\$1.04B/year first 5-years)

• **Expansive Land Package with Exploration Upside:** When looking for needles in a haystack, it helps to be the dominant owner of the haystack: NexGen's Rook 1 claims represent the largest aggregate land position of any claimholder in the southwestern region of the Athabasca Basin.

Catalysts

H2 2021: Submission of Environmental Impact Statement and Licensing application.
2021: NexGen is well financed to advance the Rook 1 project and will continue to drive the project forward to a formal construction decision. 2021 technical work will include detailed engineering and permitting/licensing advancement.

NexGen Energy Ltd. Chart (GDNS)



Financials & Assumptions	F'15A	F'16A	F'17A	F'18A	F'19A	F'20E	F'21E
(Year-End Dec-31)	31-Dec-15	31-Dec-16	31-Dec-17	31-Dec-18	31-Dec-19	31-Dec-20	31-Dec-21
Spot Uranium (US\$/lb)	\$37	\$26	\$22	\$25	\$26	\$29	\$39
Long-term Uranium (US\$/lb)	\$47	\$40	\$31	\$31	\$32	\$33	\$46
C\$/US\$ FX Rate	1.24	1.26	1.35	1.33	1.33	1.34	1.28

Trading Statistics (C\$): Capital Structure		Average Daily Volume (90 day)	
52 Week High/Low	\$5.41 / \$0.76	1,855,053	

Ownership (M)	Management / Institutional	Major Shareholders
Shares	5,401,500	79,724,214
% O/S	1.3%	18.7%
		Kopernik Global Investors, LLC

Last Financing	
May-20	US\$30M: Equity of US\$15M (11.6M shrs. @ C\$1.80) + Debt of US\$15M in convertible debentures (5y, 7.5%, convertible at C\$2.34)
Jul-17	US\$110M: Equity of US\$50M (24.1M shrs. @ C\$2.70) + Debt of US\$60M in convertible debentures (5y, 7.5%, convertible at US\$2.69)
Shares O/S (million) - Basic / FD	425,621,872 / 454,131,033

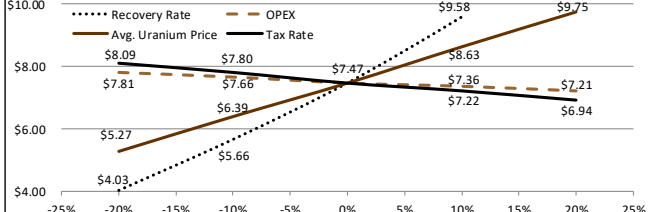
(C\$M)	Av Strike (C\$)	Units (M)	ITM Units (M)	Proceeds (C\$)
Working Capital				\$78.6
Options	\$2.43	28.51	28.51	\$69.3
Warrants		0.00	0.00	\$0
Total Cash & ITM	\$2.43	28.51	28.51	\$148

Revenue (C\$M)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Cost of Goods Sold (C\$M)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Corporate G&A (C\$M)	\$4.9	\$13.8	\$17.0	\$24.4	\$23.2	\$19.1	\$24.6
EBITDA (C\$M)	(\$4.9)	(\$14.0)	(\$17.2)	(\$24.6)	(\$24.0)	(\$23.2)	(\$24.6)
EV / EBITDA							
DD&A (C\$M) & Write downs	\$0.3	\$0.7	\$0.9	\$1.7	\$2.6	\$2.4	\$2.4
Earnings (C\$M)	(\$4.6)	(\$16.9)	(\$56.0)	\$2.3	(\$15.5)	(\$37.7)	(\$39.9)
Adjusted EPS (C\$)	(\$0.02)	(\$0.06)	(\$0.17)	\$0.01	(\$0.04)	(\$0.10)	(\$0.07)
Current Price / EPS	-	-	-	771.1x	-	-	-
Target Price / EPS	-	-	-	1142.9x	-	-	-
Cash Flow Before W/C Changes (C\$M)	(\$2.6)	(\$8.4)	(\$11.0)	(\$8.3)	(\$11.3)	(\$21.6)	(\$22.9)
Shares O/S, millions	287.2	307.6	328.1	352.0	358.4	427.1	434.4
CFPS, C\$	(\$0.03)	(\$0.03)	(\$0.02)	(\$0.04)	(\$0.02)	(\$0.05)	(\$0.05)
Current Price / CFPS	-	-	-	-	-	-	-
Target Price / CFPS	-	-	-	-	-	-	-
Operating Cash Flow (C\$M)	(\$2.7)	(\$8.0)	(\$11.1)	(\$8.5)	(\$12.8)	(\$10.0)	(\$22.9)
Financing Cash Flow (C\$M)	\$45.6	\$95.1	\$135.1	\$2.4	(\$1.4)	\$48.5	\$81.2
Investing Cash Flow (C\$M)	(\$22.4)	(\$91.3)	\$9.6	(\$37.8)	(\$57.7)	(\$20.0)	(\$57.6)
Change in Cash (C\$M)	\$20.5	(\$3.2)	\$133.9	(\$39.9)	(\$72.9)	\$18.5	\$0.7
Working Capital (C\$M)	\$33.8	\$77.0	\$162.6	\$119.2	\$48.7	\$66.4	\$67.1

NAV Summary, Target Generation and Sensitivity	Base	-20%	+10%	+20%
Average Realized Uranium Price (US\$/lb)	\$65	\$52	\$69	\$78

C\$ millions	NPV of Corporate CF	Total NAV (C\$M)	Other Project Credits (C\$M)	Corporate NAV (unadjusted) (C\$M)	Working Capital (est. Dec 2021)	Dilutive Capital	Total Corporate NAV (C\$M)	Corporate NAVPS	Current P/NAV	Target Price / NAV	Target (C\$)
Rook 1 (Arrow) Mine DCF	(\$8.0%)	\$3,547	\$0.0	\$3,320.4	\$67.1	\$69.3	\$3,456.8	\$7.47	0.7x	1.0x	\$7.50
NPV of Corporate CF	(\$8.0%)	\$226	\$0.0	\$2,443.8	\$67.1	\$69.3	\$2,580.2	\$5.27	1.0x	1.0x	\$5.30
Total NAV (C\$M)		\$3,320	\$0.0	\$2,443.8	\$67.1	\$69.3	\$2,580.2	\$6.39	0.8x	0.6x	\$6.40
Other Project Credits (C\$M)		\$0.0	\$0.0	\$0.0	\$67.1	\$69.3	\$136.3	\$8.63	1.0x	1.0x	\$8.60
Corporate NAV (unadjusted) (C\$M)		\$3,320.4	\$2,443.8	\$2,960.2	\$3,993.9	\$4,511.0					
Working Capital (est. Dec 2021)		\$67.1	\$67.1	\$67.1	\$67.1	\$67.1					
Dilutive Capital		\$69.3	\$69.3	\$69.3	\$69.3	\$69.3					
Total Corporate NAV (C\$M)		\$3,456.8	\$2,580.2	\$3,096.6	\$4,130.3	\$4,647.5					
Corporate NAVPS		\$7.47	\$5.27	\$6.39	\$8.63	\$9.75					
Current P/NAV		0.7x	1.0x	0.8x	0.6x	0.5x					
Target Price / NAV		1.0x	1.0x	1.0x	1.0x	1.0x					
Target (C\$)		\$7.50	\$5.30	\$6.40	\$8.60	\$9.80					

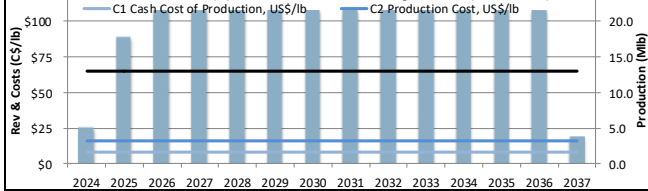
Select Project NAV Sensitivities



Rook 1 - Arrow Zone - Conceptual Resource & Mining Concept - Underlying Mining Inventory Assumption			
Haywood Est. Mining Inventory	k Tonnes	Grade (% U ₃ O ₈)	Insitu U ₃ O ₈ (M)lb
	4,870	2.62%	281.3

Rook 1 - Arrow Zone - Conceptual Resource & Mining Concept - Underlying Cost Assumptions			
CAPEX	US\$ M	OPEX	US\$/t
Total Pre-Production CAPEX	1099.5		
Sustaining Capital, Closure & Reclamation	262.7		
LoM Total CAPEX	1362.3	OPEX per t RoM ore: (incl. surface G&A)	382.2

Production (100%-basis) & Cash Cost Summary



Peer Group Comparables (Haywood Securities estimates & Bloomberg Consensus Data)							
Company Name	Price (LoC)	MCAP C\$M	EV C\$M	2020 CFPS*	P/CFPS*	Cons. Target†	Implied Return
NexGen Energy (NXE-T)	\$4.99	\$1,839	\$1,968	(\$0.05)		\$5.45	9%
Denison Mines (DML-T)	\$1.54	\$1,063	\$1,047	(\$0.03)		\$1.26	-18%
Fission Uranium (FCU-T)	\$0.58	\$320	\$318	(\$0.01)		\$1.02	75%
UEX Corporation (UEX-T)	\$0.34	\$145	\$143			\$0.47	42%

Production Profile (attributable)	31-Dec-24	31-Dec-25	31-Dec-26	31-Dec-27	31-Dec-28	31-Dec-29	31-Dec-30
Total U3O8 Production (Mlb)	-	5.1	17.8	21.6	21.6	21.6	21.6
Uranium - Realized Price, US\$/lb	-	\$65	\$65	\$65	\$65	\$65	\$65
C1 Cash Cost of Production, US\$/lb	-	\$7.8	\$7.8	\$7.8	\$7.8	\$7.8	\$7.8
C2 Production Cost, US\$/lb	-	\$15.7	\$15.7	\$15.7	\$15.7	\$15.7	\$15.7
Production Cost, US\$/lb (incl. royalties, interest)	-	\$54	\$34	\$32	\$31	\$30	\$29
All-in-After Tax Prod. Cost, US\$/lb	-	\$57	\$42	\$41	\$40	\$39	\$38

* Bloomberg Consensus Data Average: N/A 27%

Corporate Contact			
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Key Executive:	Curry, Leigh	Founder, President, CEO & Director	
Colin Healey, MBA - Research Analyst		Emma Boggio, MSA, CPA, CA - Research Associate	
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* "Production Cost" and "All-in Production Cost" are calculated based on a selling price of US\$65/lb U₃O₈, and fall proportionately with reduction in uranium price assumption, as they include revenue and profit sensitive costs (e.g. taxes, royalties).

Source: Bloomberg, Capital IQ, Company Reports, and Haywood Securities



Highlights: Rook 1 Feasibility Study Refines and De-Risks

Figure 1: Haywood Rook 1 Mining Concept vs NXE Feasibility Study vs. NXE 2018 PFS

Item	February 2021 Updated Haywood Conceptual Mine Base Case for Arrow Deposit (C\$ unless otherwise noted)	November 2018 PFS	February 2021 PFS	%Δ Feb '21 FS vs Nov. '18 PFS	%Δ NXE FS vs Haywood Concept
Supporting Assets:	Arrow Deposit at the Rook 1 Project (100%-owned), southwestern margin of Athabasca Basin - Haywood Mineable Resource Assumption: 281 Mlb U₃O₈ (4.87 Mt, at 2.62% U₃O₈)	PFS Reserves: 234.1 Mlb U₃O₈ (3.43 Mt, at 3.09% U₃O₈)	FS Reserves: 239.6 Mlb U₃O₈ (4.58 Mt, at 2.37% U₃O₈)	2.3%	(14.7)%
Production Rate:	LOM Average: 20.2 Mlb U₃O₈ per year steady state for 13 years (5.1 Mlb U ₃ O ₈ in Y1, 17.8 Mlb in Y2, 21.6 Mlb per year Y's 3-13)	LOM Average: 25.4 Mlb U₃O₈ per year for 9 years	LOM Average: 28.8 Mlb U₃O₈ per year for years 1-5, 21.7 Mlb U₃O₈ per year for LOM (10.7 years)	(14.6)%	0.5%
LOM Total Production:	268 Mlb U ₃ O ₈	~229 Mlb U ₃ O ₈	~232 Mlb U ₃ O ₈	1.3%	(13.4)%
Mining Method:	long hole stoping	long hole stoping	long hole stoping		
LOM Average Feed Grade:	Underground: 2.6% U₃O₈ (diluted)	3.1%	2.4%	(23.3)%	(8.8)% *
Process Recovery Rate:	Mining Recovery of 99%, Process Recovery of 95% assumed (net 94%)	97.6%	97.6%	-	3.8%
Mine Life:	14 years steady-state, (12 years including 1-year production ramp-up and 1-year ramp-down period)	~9	~10.7	18.9%	(23.6)%
CAPEX (C\$/lb U₃O₈):	\$1.37 billion pre-production	C\$1.25 billion	C\$1.30 billion	4.0%	(5.1)%
OPEX (C\$/lb U₃O₈) (C1 cash costs)	C\$9.86/lb U₃O₈ or US\$7.76/lb	C\$5.81 or US\$4.36	C\$7.58 or US\$5.69	30.5%	(26.7)%
NPV:	Post-tax: \$3,320 million (US\$65/lb U₃O₈, 8% discount rate, 10% interest rate, 100% debt-financed construction)	Post-tax: \$3,660 million (US\$50/lb U₃O₈, 8% discount rate)	Post-tax: \$3,470 million (US\$50/lb U₃O₈, 8% discount rate)	(5.2)%	4.5% **
IRR (%):		56.8%	52.4%	-440 bps	-
Payback (years):		1.2	0.9	(0.3)	-
Uranium Price Assumption:	US\$65 / lb U ₃ O ₈ (base case)	US\$50 / lb U ₃ O ₈ (base case)	US\$50 / lb U ₃ O ₈ (base case)	-	-
FX Assumption:	US\$0.787 per C\$	US\$0.75 per C\$	US\$0.75 per C\$	-	-

* Haywood mineral inventory differs from FS in grade/tonnage, as we incorporate assumptions relating to expected capture of a portion of inferred resources in a future mining operation and exclude certain lower grade tonnes that may ultimately be captured in a mining operation.

** % difference in NPV between Haywood mining concept and NXE FS are based on the respective base-case assumptions, which differ significantly in cost and commodity price assumption.

We note that the Rook 1 FS indicates a \$4.87B NPV8% at Haywood's US\$65/lb uranium price base-case assumption.

Source: NexGen Energy, Haywood Securities Inc.

Figure 2: Feasibility Study Reserves and Resources

Resources				Reserves								
FS Mineral Resource				FS Mineral Resource				Probable Mineral Reserves				
Structure	Tonnage (k tonnes)	Grade (U ₃ O ₈ %)	Contained Metal (U ₃ O ₈ M lb)	Structure	Tonnage (k tonnes)	Grade (U ₃ O ₈ %)	Contained Metal (U ₃ O ₈ M lb)	Structure	Tonnage (k tonnes)	Grade (U ₃ O ₈ %)	Contained Metal (U ₃ O ₈ M lb)	
Measured				Measured and Indicated				Total				
A2 LG	920	0.79	16.0	A2 LG	1,620	0.79	28.1	A2	2,594	3.32%	190.0	
A2 HG	441	16.65	161.9	A2 HG	497	15.9	174.2	A3	1,982	1.13%	49.5	
A3 LG	821	1.75	31.7	A3 LG	1,637	1.51	54.4	Total	4,575	2.37%	239.6	
Total:	2,183	4.35	209.6	Total:	3,754	3.1	256.7					
Indicated				Inferred								
A2 LG	700	0.79	12.2	A1 LG	1,557	0.69	23.7					
A2 HG	56	9.92	12.3	A2 LG	863	0.61	11.5					
A3 LG	815	1.26	22.7	A2 HG	3	10.95	0.6					
Total:	1,572	1.36	47.1	A3 LG	1,207	1.12	29.8					
				A4 LG	769	0.89	15.0					
				Total:	4,399	0.83	80.7					

- CIM Definition Standards were followed for Mineral Resources, Mineral Resources are reported inclusive of Mineral Reserves.
- Mineral Resources are reported at a cut-off grade of 0.25% U₃O₈ based on a long-term price of US\$50 per lb U₃O₈ and estimated costs.
- A minimum mining width of 1.0 m was used
- The effective date of Mineral Resources is June 19th, 2019
- Numbers may not add due to rounding.
- Mineral Resources that are not Mineral Reserves do not have demonstrated economics.

- CIM definitions were followed for Mineral Reserves.
- Mineral Reserves are reported with an effective date of January 21, 2021.
- Mineral Reserves include transverse and longitudinal stopes, ore development, marginal ore, special waste and a nominal amount of waste required for mill ramp-up and grade control.
- Stopes were estimated at a cut-off grade of 0.30% U₃O₈.
- Marginal ore is material between 0.26% U₃O₈ and 0.30% U₃O₈ that must be extracted to access mining areas.
- Special waste in material between 0.03% and 0.26% U₃O₈ that must be extracted to access mining areas. 0.03% U₃O₈ is the limit for what is considered benign waste and material that must be treated and stockpiled in an engineered facility.
- Mineral Reserves are estimated using a long-term metal price of US\$50 per pound U₃O₈ and a 0.75 US\$/C\$ exchange rate (C\$1.00 = US\$0.75). The cost to ship the yellow cake product to a refinery is considered to be included in the metal price.
- A minimum mining width of 3.0 m was applied for all long hole stopes.
- Mineral Reserves are estimated using a combined underground mining recovery of 95.5% and total dilution (planned and unplanned) of 33.8%.
- The density varies according to the U₃O₈ grade in the block model. Waste density is 2.464 t/m³.
- Numbers may not add due to rounding.

Source: NexGen Energy



Reserves and Resources Update

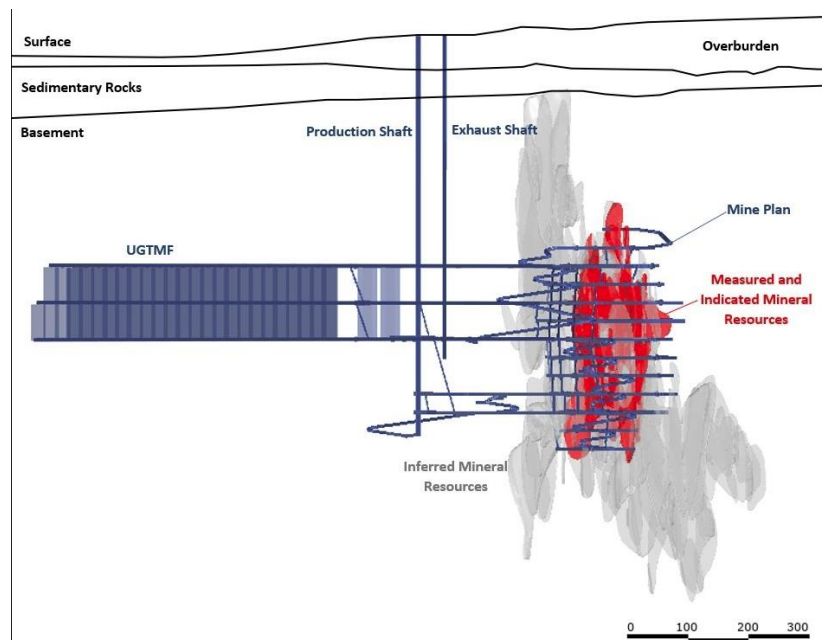
Reserve pounds up slightly, tonnage up significantly. The resource update accompanying the FS includes the introduction of ‘Measured’ category. The Arrow resource update (Figure 2) incorporates drilling carried out in 2018 and 2019. With the majority of project resource (62%) now sitting in the ‘Measured’ category for the first time (76% M&I). The Measured category includes the bulk of the A2 high-grade zone, which contributes ~162Mlb U₃O₈ (441kt grading 16.7% U₃O₈) to the ~210Mlb in Measured resources. At ~337 Mlb U₃O₈ All-in, the updated resource is ~3% smaller than that of the Nov. 2018 project resource, owing to the more stringent grade-capping constraints applied within the ‘Measured’ category. We see the reduction as immaterial as our focus from a valuation perspective is the cost to get the massive resource out of the ground.

From a Reserves perspective, the Probable Reserves defined in the FS of 239.6M lbs U₃O₈ contained in 4.58M tonnes grading 2.37% U₃O₈ reflect a nominal increase in contained pounds, but a 33.5% increase in tonnage, as grade-capping led to reduced resource grade, while additional tonnage was captured to offset. The PFS Reserves were 234M lbs U₃O₈ contained in 3.43M tonnes grading 3.09% U₃O₈. A natural consequence of this in the mine plan was the +30% OPEX cost escalation vs the PFS shown in Figure 1. Per tonne OPEX actually decreased nominally in the FS vs the PFS, but on a ‘per pound produced’ basis, OPEX increases as average life-of-mine head grade declines from 3.1% U₃O₈ in the PFS to 2.4% in the FS. Again, our pre-FS mining concept incorporated cost assumptions more the 2x those of the PFS, in anticipation of some cost swell. The FS, despite some cost creep, remains substantially below even our new revised, but still conservative assumptions, leaving significant cushion in our model to absorb any further cost swell without impacting our valuation or target.

Rook 1 provides strong uranium price leverage (resilience) as simple mining concept underpins world-class economics (Figure 3/4). The conventional long-hole stoping mining method assumption in the FS is considered low-risk. The average mining rate in the FS increases ~16% based on a slight increase in the ‘Probable Reserve’ pounds (239.6M lbs U₃O₈ / 4.58Mt at 2.37% U₃O₈), offset by a reduction in average grade associated with inclusion of substantially more tonnage (↑33.5%) at a lower grade, impacted by more conservative grade capping with the introduction of ‘Measured’ resources in the global estimate (Figure 2). The FS indicates that **at a US\$40/lb uranium price (↓20% base case) Rook 1 has an after-tax NPV_{8%} of \$2.53B (↓27%) and an after-tax IRR of 44%, and at a US\$65/lb price (↑30% base case) NPV_{8%} rises to \$4.87B (↑40%) with a 62.8% IRR** (Figure 3, LEFT).

Figure 3: LEFT: NPV and IRR Sensitivity to Uranium Price RIGHT: Arrow Mine Plane Including Innovative Underground Tailings Management

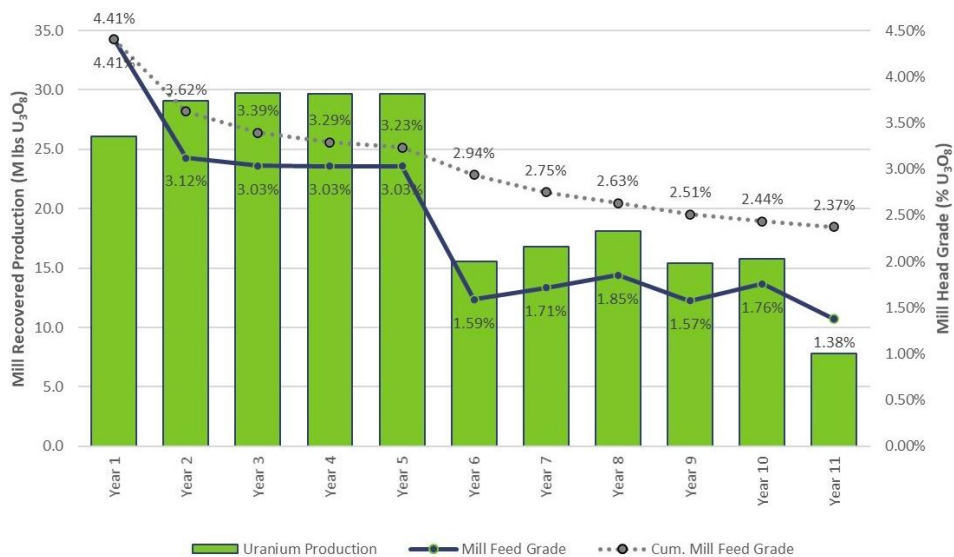
Uranium Price (\$ USD/lb U3O8)	After-Tax NPVs	After-Tax IRR
\$65/lb U3O8	CAD \$4.87 Billion	62.80%
\$60/lb U3O8	CAD \$4.40 Billion	59.50%
\$55/lb U3O8	CAD \$3.93 Billion	56.10%
\$50/lb U3O8 (Base Case)	CAD \$3.47 Billion	52.40%
\$45/lb U3O8	CAD \$3.00 Billion	48.40%
\$40/lb U3O8	CAD \$2.53 Billion	44.00%



Source: NexGen Energy



Figure 4: Production Profile

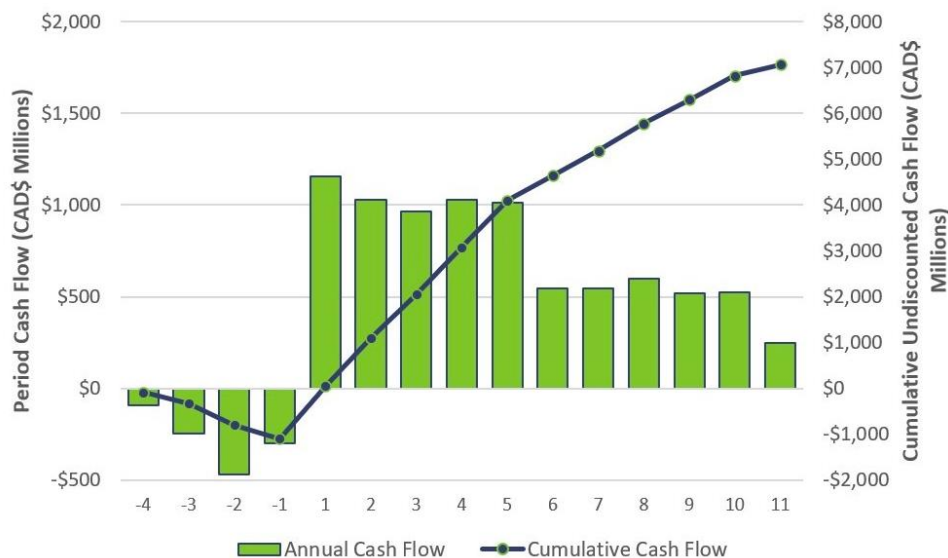


Source: NexGen Energy

Feasibility Study Highlights Incredible Mine Economics Potential

FS shows potential to generate ~\$7 billion in cumulative cash flow (Figure 5). The highlights of the FS (and Δ vs PFS) include a mine life of 10.7 years (↑18.9%), average annual production of 21.7 Milb pa (28.8 Milb pa first 5-years) (↓14.6%), after-tax NPV_{8%} of \$3.47B (↓5.2%), after-tax IRR of 52.4% (↓440 bps), after-tax payback of 0.9 years (↓0.3 years), pre-production CAPEX of \$1.3B (↑4.0%), LoM avg. OPEX of \$7.58/lb or US\$5.69/lb (↑30.5%, but ↓1.0% on a per-tonne basis), driving after-tax avg. annual net cash-flow of \$763M/year (\$1.04B/year first 5-years). The FS base case utilizes a US\$50/lb uranium price and a USD/CAD exchange rate of \$0.75. See Figure 1 for more details. Figure 5 below shows potential to generate more than \$1 billion in cash flow, on average for the first 5-years of the mine-life, owing to the higher initial feed grades shown in Figure 4. We review our more moderate assumptions in the “Outlook” section of this report. Differences in cash flow between our model and the FS aside, there is no question from our perspective, that the Rook 1 project has Tier 1 uranium asset economics.

Figure 5: Undiscounted After-Tax Cash Flow Profile



Source: NexGen Energy



Haywood Mining Concept Update & Outlook

Highly Strategic Asset with Improving Macro Picture

With major sources of uranium production curtailed due to COVID-19 and depressed uranium prices, the outlook for NexGen continues to improve. The fundamental picture for uranium supply/demand continues to improve. With major sources of production temporarily cut back, the market is soaking up inventory accumulated through years of oversupply and we expect to exit the pandemic with a more balanced “Production + Inventory” to “Demand” balance than we have seen throughout the 2010’s, leading to a uranium price more reflective of the global production cost curve plus normal profit.

We see NexGen as perfectly positioned to fill the supply gap beyond 2025. We expect Arrow will be ramping up production just as major sources of production (Cigar Lake) are nearing end-of-life. We believe the project will realize very robust economics with the scale to be disruptive and the quality, grade and simplicity necessary to evolve into a Tier 1 producer able to withstand commodity price fluctuations and capital swell; two of the major risks facing mining companies.

Haywood Mining Concept gets a refresh. We have revamped our project model following the FS announcement, lowering our embedded OPEX assumptions from ~US\$10/lb U₃O₈ pre- to ~US\$7.80/lb currently. This reflects a 37% greater average cost profile than that outlined in the FS, which is conservative in our view. At \$1.37 billion, our pre-production CAPEX profile was also conservative relative to the PFS, and now sits a slight premium to that outlined in the Feasibility Study (\$1.3B). Our LoM resource supporting the mine plan has increased to 281 Mlb U₃O₈ (from 262), as well feel comfortable incorporating ~50% of the ‘Inferred’ resources in our mine plan that the FS does not capture. We believe that a significant portion of the Inferred resource will eventually report to actual mine plan. With the higher degree of certainty embedded in the FS, and with our revised assumptions in our mining concept, we now adopt an 8% discount rate in our DCF NAV (9% prior), and reduced equity dilution, offset by a lower LoM average head-grade (see Figure 6 for changes to our model). **The net impact of our model adjustments drives a significant increase in our 12-month target to \$7.50 (from \$5.60).**

Figure 6: Haywood Rook 1 Mining Concept Update vs Prior

Item	Prior Haywood Conceptual Mine Base Case for Arrow Deposit (C\$ unless otherwise noted)	February 2021 Updated Haywood Conceptual Mine Base Case for Arrow Deposit (C\$ unless otherwise noted)	%Δ New vs Old Haywood Concept
Supporting Assets:	Arrow Deposit at the Rook 1 Project (100%-owned), southwestern margin of Athabasca Basin - Haywood Mineable Resource Assumption: 262 Mlb U₃O₈ (2.2 Mt, at 5.2% U₃O₈)	Arrow Deposit at the Rook 1 Project (100%-owned), southwestern margin of Athabasca Basin - Haywood Mineable Resource Assumption: 281 Mlb U₃O₈ (4.87 Mt, at 2.62% U₃O₈)	7.3%
Production Rate:	LOM Average: 20.1 Mlb U₃O₈ per year steady state for 12 years (18.9 Mlb over 13y) (5.1 Mlb U ₃ O ₈ in Y1, 15.4 Mlb in Y2, 20.5 Mlb per year Y’s 3-13)	LOM Average: 20.2 Mlb U₃O₈ per year steady state for 13 years (5.1 Mlb U ₃ O ₈ in Y1, 17.8 Mlb in Y2, 21.6 Mlb per year Y’s 3-13)	0.5%
LOM Total Production:	246 Mlb U ₃ O ₈	268 Mlb U ₃ O ₈	8.9%
Mining Method:	Conventional raise boring of high grade areas of A2 sub zone, underground long-hole stoping mainly in A3 shear zone	long hole stoping	
LOM Average Feed Grade:	Underground: 5.2% U₃O₈ (diluted)	Underground: 2.6% U₃O₈ (diluted)	(50.0)%
Process Recovery Rate:	Mining Recovery of 99%, Process Recovery of 95% assumed (net 94%)	Mining Recovery of 99%, Process Recovery of 95% assumed (net 94%)	-
Mine Life:	11 years steady-state, (13 years including 2-year production ramp-up period)	14 years steady-state, (12 years including 1-year production ramp-up and 1-year ramp-down period)	7.7%
CAPEX (C\$/lb U₃O₈):	\$1.3 billion pre-production (including process plant \$550 M)	\$1.37 billion pre-production	5.4%
OPEX (C\$/lb U₃O₈) (C1 cash costs)	\$12.15/lb U₃O₈ or US\$9.56/lb	C\$9.86/lb U₃O₈ or US\$7.76/lb	(18.8)%
NPV:	Post-tax: \$2,434 million (US\$65/lb U₃O₈, 9% discount rate, 10% interest rate, 100% debt-financed construction)	Post-tax: \$3,320 million (US\$65/lb U₃O₈, 8% discount rate, 10% interest rate, 100% debt-financed construction)	36.4%
Uranium Price Assumption:	US\$65 / lb U ₃ O ₈ (base case)	US\$65 / lb U ₃ O ₈ (base case)	-
FX Assumption:	US\$0.787 per C\$	US\$0.787 per C\$	-

* Haywood mineral inventory differs from FS in grade/tonnage, as we incorporate assumptions relating to expected capture of a portion of inferred resources in a future mining operation and exclude certain lower grade tonnes that may ultimately be captured in a mining operation.

Source: Haywood Securities Inc.



Key Valuation Sensitivities of our Mining Concept

Uranium price leverage is strong. With our more conservative cost structure than the FS, we generate lower DCF NAVs at a range of uranium prices in our sensitivity tests, but **the critical point still emerges. i.e., the Rook 1 project has the attributes necessary to potentially deliver positive margin even below current Long-Term uranium prices (UxC long-term price indicator is US\$32.50/lb U₃O₈, UxC 5-year price indicator is currently US\$34/lb U₃O₈).** See Figure 7 (upper table) for our uranium price sensitivity model output.

CAPEX Sensitivity is always on the radar during development. Given the advancing stage of the Rook 1 project, we also provide our DCF NAV sensitivity to up-front capital expenditures. Given the extremely low OPEX profile of Rook 1, its ability to withstand and compensate for CAPEX swell through the generation of big cash-flow early in the mine-life is very high, meaning we don't see large swings in the DCF NAV as we flex CAPEX within reason. e.g., increasing our CAPEX assumption 25% to \$1.7 billion, decreases our DCF NAV per share by just 6.8%, to \$6.96 from \$7.47. See Figure 7 (lower table) for our uranium price sensitivity model output.

Figure 7: Haywood Valuation Sensitivity Tables (upper: Uranium Price, lower: CAPEX)

Sensitivity to Uranium Price: 14-year Mine Life, 281 Mlb U3O8 Resource, 2.6% U ₃ O ₈ Avg. Grade, 394 ktpa Peak Mill Throughput							Average LoM Costs				Margin (%)
Uranium Price	Corporate NAV (C\$M)	Corporate NAVPS (C\$)	NAV (C\$M)	NAVPS (C\$)	NAV ₂₀₂₀ (C\$M)	NAVPS ₂₀₂₀ (C\$)	Costs (C1) (US\$/lb)	Costs (C2) (US\$/lb)	Costs (C3) (US\$/lb)	Cost of Production (US\$/lb)	
\$30	\$741	\$1.57	\$811	\$1.73	\$811	\$1.73	\$7.8	\$15.6	\$23.6	\$25.4	15%
\$35	\$1,122	\$2.38	\$1,192	\$2.54	\$1,192	\$2.54	\$7.8	\$15.6	\$24.1	\$27.1	23%
\$40	\$1,506	\$3.21	\$1,576	\$3.37	\$1,576	\$3.37	\$7.8	\$15.6	\$24.8	\$28.9	28%
\$45	\$1,890	\$4.06	\$1,960	\$4.22	\$1,960	\$4.22	\$7.8	\$15.6	\$25.5	\$30.8	32%
\$50	\$2,284	\$4.93	\$2,354	\$5.09	\$2,354	\$5.09	\$7.8	\$15.6	\$26.4	\$32.8	34%
\$55	\$2,682	\$5.79	\$2,752	\$5.95	\$2,752	\$5.95	\$7.8	\$15.6	\$27.3	\$34.8	37%
\$60	\$3,079	\$6.65	\$3,149	\$6.81	\$3,149	\$6.81	\$7.8	\$15.6	\$28.3	\$36.8	39%
\$65	\$3,477	\$7.51	\$3,547	\$7.67	\$3,547	\$7.67	\$7.8	\$15.7	\$29.2	\$38.9	40%
\$70	\$3,875	\$8.37	\$3,944	\$8.53	\$3,944	\$8.53	\$7.8	\$15.7	\$30.2	\$41.0	41%
\$75	\$4,272	\$9.24	\$4,342	\$9.40	\$4,342	\$9.40	\$7.8	\$15.7	\$31.3	\$43.1	43%
\$80	\$4,670	\$10.10	\$4,740	\$10.26	\$4,740	\$10.26	\$7.8	\$15.7	\$32.3	\$45.2	44%

- C1 cash Costs: mining, ore transport, milling & processing, ore purchase & freight, minesite G&A, concentrate transportation/shipping, smelting/refining, marketing Costs
- C2 cash Costs: C1 costs + depreciation, depletion & amortization (DD&A)
- C3 cash Costs: C2 costs + indirect costs, research & exploration, royalties and taxes (excluding income taxes), all project related interest expenses
- All-in After Tax Production Costs = C3 costs + all corporate taxes

Sensitivity to CAPEX: 14-year Mine Life, \$65 /lb, 281 Mlb U3O8 Resource, 2.6% U3O8 Avg. Grade, 394 ktpa Peak Mill Capacity									
Pre-production CAPEX (C\$M)	Resource Assumption (Mlb U ₃ O ₈)	Mill Throughput (ktpa)	Uranium Production (Mlbpa U ₃ O ₈)	Pre-production CAPEX (C\$M)	Sustaining CAPEX (C\$M)	Corporate NAV (C\$M)	Corporate NAVPS (C\$)	Production Costs (C2) (US\$/lb)	
\$1,031	281	394	18.9	\$1,031	\$246	\$3,691	\$7.97	\$14.2	
\$1,100	281	394	18.9	\$1,100	\$263	\$3,644	\$7.87	\$14.5	
\$1,168	281	394	18.9	\$1,168	\$279	\$3,597	\$7.77	\$14.8	
\$1,237	281	394	18.9	\$1,237	\$296	\$3,550	\$7.67	\$15.1	
\$1,306	281	394	18.9	\$1,306	\$312	\$3,504	\$7.57	\$15.4	
\$1,374	281	394	18.9	\$1,374	\$328	\$3,457	\$7.47	\$15.7	
\$1,443	281	394	18.9	\$1,443	\$345	\$3,410	\$7.37	\$16.0	
\$1,512	281	394	18.9	\$1,512	\$361	\$3,363	\$7.26	\$16.3	
\$1,581	281	394	18.9	\$1,581	\$378	\$3,317	\$7.16	\$16.6	
\$1,649	281	394	18.9	\$1,649	\$394	\$3,270	\$7.06	\$16.9	
\$1,718	281	394	18.9	\$1,718	\$410	\$3,223	\$6.96	\$17.2	

Source: Haywood Securities Inc.



Valuation – Increasing Target to \$7.50

Increasing Target on More Bullish Cost Profile, Decreased Equity Dilution – Reiterating ‘Top Pick’

We have revamped our project model following the FS announcement, lowering OPEX assumptions (still 37% greater than FS OPEX), increasing our LoM resource, adopting a lower discount rate (8% vs 9% prior on de-risking), and reduced equity dilution, offset by a lower LoM average head-grade (see Figure 6 for changes to our model). **The net impact of our model adjustments drives a significant increase in our 12-month target to \$7.50 (from \$5.60). We continue to recommend accumulation of the stock given Arrow’s world-class economics ahead of an expected rising uranium price.** Figure 8 reviews the changes in our valuation.

Our new target is based on 1.0x our corporate NAV, driven by our DCF_{8%} NAV of a conceptual uranium mining operation of Arrow. Our mining concept is more conservative than, and differs materially from, that of the existing FS both in cost and production profile. We are however, significantly more bullish on our uranium price assumption, carrying US\$65/lb U₃O₈ as our long-term uranium price throughout the mine model.

Figure 8: NAV Summary & Changes

NAV Summary, Target Generation and Sensitivity		NEW	OLD	% Δ
Average Realized Uranium Price (US\$/lb)		\$65	\$65	unch
<i>C\$ millions</i>				
Rook 1 (Arrow) Mine DCF	(@8.0%)	\$3,547	\$2,623	35%
NPV of Corporate CF	(@8.0%)	-\$226	-\$264	-14%
Total NAV (C\$M)		\$3,320	\$2,359	41%
Other Project Credits (C\$M)		\$0.0	\$0.0	unch
Corporate NAV (unadjusted) (C\$M)		\$3,320	\$2,359	41%
Working Capital (est. Dec 2021)		\$67.1	\$73.4	-9%
Dilutive Capital *		\$69.3	\$18.1	283%
Total Corporate NAV (C\$M)		\$3,457	\$2,451	41%
Corporate NAVPS		\$7.47	\$5.60	33%
Current P/NAV		0.7x	0.9x	-25%
Target Price / NAV		1.0x	1.0x	unch
Target (C\$)		\$7.50	\$5.60	34%

* note that at last valuation adjustment, NXE share price was ~\$2.00, and a significantly smaller credit for exercised option and warrant proceeds was captured in dilutive capital, as most were 'out-of-the-money'. For conservatism, we still applied the per-share dilution to the DCF NAV per-share calculation.

Source: Haywood Securities

Recommended Action

Maintaining ‘Top Pick’ Status for Best Undeveloped Mining Asset Globally – Position Ahead of Uranium Price Recovery

NXE remains a top pick in the uranium sector due to the disruptive potential of the Arrow deposit, with its massive scale and strong economics. We continue to be very bullish on NXE and believe it controls one of the best undeveloped resources globally, in any commodity.

Acquisition Attractiveness. The Rook 1 FS underscores the strategic importance of this project. We believe there is a strong case for a producer to acquire NXE to gain control of this disruptive asset. **NXE is a 'must-own' for those looking for exposure to the uranium sector.**



Important Information and Legal Disclosures

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Analyst Certification

I, Colin Healey, hereby certify that the views expressed in this report (which includes the rating assigned to the issuer's shares as well as the analytical substance and tone of the report) accurately reflect my/our personal views about the subject securities and the issuer. No part of my/our compensation was, is, or will be directly or indirectly related to the specific recommendations.

Important Disclosures

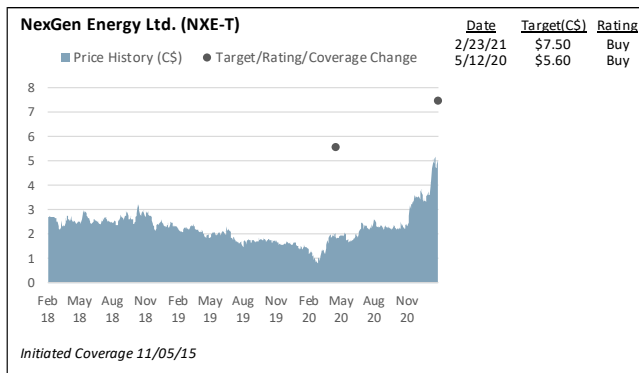
Of the companies included in the report the following Important Disclosures apply:

- ◆ Haywood Securities, Inc. has reviewed lead projects of Denison Mines Corp. (DML-T), NexGen Energy Ltd. (NXE-T) and a portion of the expenses for this travel may have been reimbursed by the issuer.
- ◆ Haywood Securities Inc. or one of its subsidiaries has managed or co-managed or participated as selling group in a public offering of securities for Denison Mines Corp. (DML-T) in the last 12 months.

Distribution of Ratings (as of February 23, 2021)

	%	#	IB Clients (TTM)
Buy	76.0%	79	87.1%
Hold	5.8%	6	6.5%
Sell	0.0%	0	0.0%
Tender	1.9%	2	0.0%
UR (Buy)	0.0%	0	0.0%
UR (Hold)	0.0%	0	0.0%
UR (Sell)	0.0%	0	0.0%
Dropped (TTM)	16.3%	17	6.5%

Price Chart, Rating and Target Price History (as of February 23, 2021)



B: Buy; H: Hold; S: Sell; T: Tender; UR: Under Review
Source: Capital IQ and Haywood Securities

Link to Research Policy: <http://haywood.com/what-we-offer/research/research-policy>

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