

# Industry Note

Equity Research

April 28, 2021

Metals &amp; Minerals

## Uranium Weekly: Wait and See

**The Ux Consulting (UxC) weekly spot price indicator, published earlier this week, declined to US\$28.65/lb (down \$0.55/lb), or -1.9% versus the previous week. Year-to-date, the spot price is now down 4.7%. According to UxC, spot market activity since the start of April has slowed significantly versus the torrid pace set in March. Just 1.7 million pounds of uranium have been transacted so far in April, which compares with ~10.9 million pounds in March. Over the past five years, excluding 2020, an average of ~5.0 million pounds had been transacted in the spot market in April. April 2020 was highly unusual, coinciding with the early days of the COVID-19 pandemic and the temporary closure of the Cigar Lake operation due to COVID-19 restrictions; total spot market volume in April 2020 was ~27.5 million pounds.**

**The uranium market appears to have taken a "wait and see" approach to both the spot and term markets over the past several weeks, following the buying frenzy in March led by pre-producers and uranium physical funds (Exhibit 1).** We believe that market participants have stepped to the sidelines waiting to see where the next round of buying emerges - and how much supply is waiting in the wings. With near-term utility demand limited, we expect producers to drive the next round of buying with Cameco, Orano, and Kazatomprom all indicating that they will be buyers, to various extents, this year.

**Canada slipped to the fourth spot among primary uranium producers in 2020, according to UxC's production data for last year.** The closure of McArthur River in 2018 and the extended closure of Cigar Lake during 2020 from April to August and again in December, resulted in Canada producing only ~10 million pounds, or about 8% of global production. Kazakhstan was the largest producer last year at ~51 million pounds (40.6% of global production). Australia was No. 2 at ~16 million pounds and Namibia was No. 3 at 14 million pounds. UxC estimates that total global primary uranium production in 2020 was ~125 million pounds, slightly higher than our previous estimate of 119 million pounds. We are projecting 2021 primary production at 126 million pounds, which compares with UxC's forecast of 127-131 million pounds.

**We believe that the missing piece of the puzzle for a sustained upward move in the uranium term price remains the resumption of a term-contracting cycle.** Uncovered utility demand is quite low for 2021 and 2022; uncovered demand for 2021 appears to be only several million pounds. Utilities seem to be prepared to meet this demand on a discretionary basis, while continuing to manage inventories.

Greg Barnes

Craig Hutchison, P. Eng

Derick Ma, CFA, CPA, CA

Joel Brown, P.Eng. (Associate)

# Industry Note

Equity Research

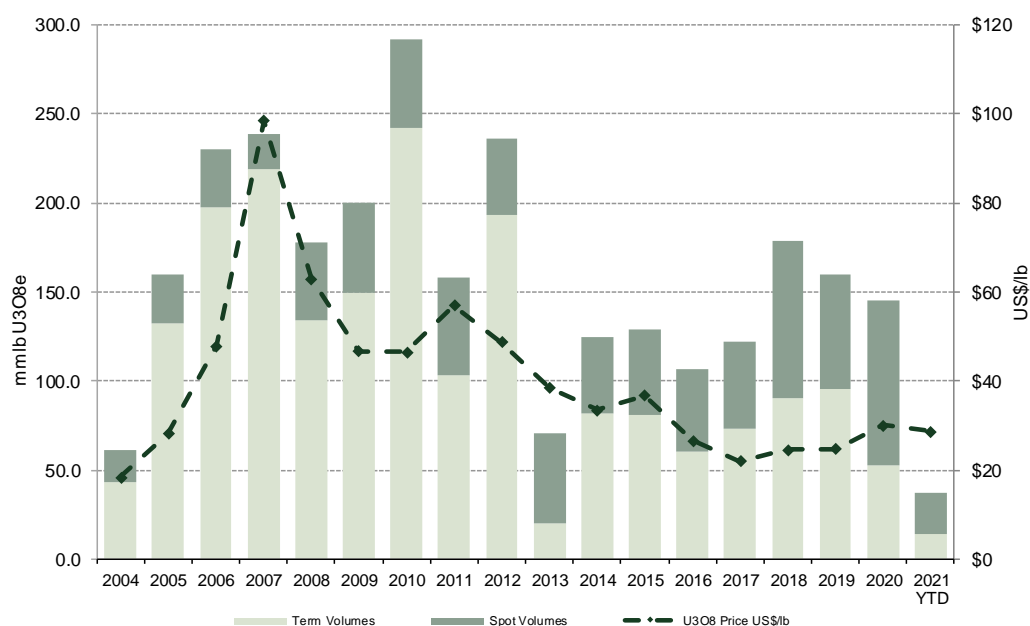
April 28, 2021

## Exhibit 1. Uranium company equity offerings and uranium purchases

Company	Date Equity Offering Announced	Equity Offering (US\$ millions)	Uranium Purchased or Planned to Purchase (million pounds)	Estimated Average Price of Uranium Purchases (Planned or Actual) (US\$/lb)
Yellow Cake	25-Feb-21	140.0	3.5	28.95
Denison Mines	15-Mar-21	86.0	2.50	28.50
Uranium Energy	17-Mar-21	30.5	1.4	29.00
Boss Energy	29-Mar-21	46.0	1.25	30.15
Uranium Energy	6-Apr-21	12.0	0.705	31.70
<b>Total/Average</b>		<b>302.5</b>	<b>9.355</b>	<b>29.20</b>

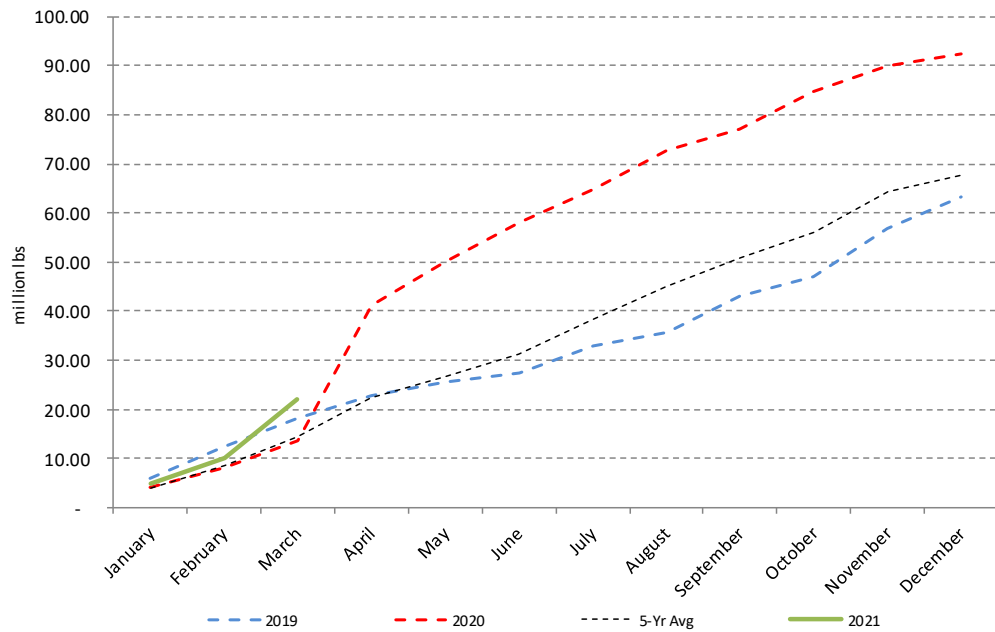
Source: Company reports; TD Securities Inc. estimates

## Exhibit 2. Spot and Term Volumes



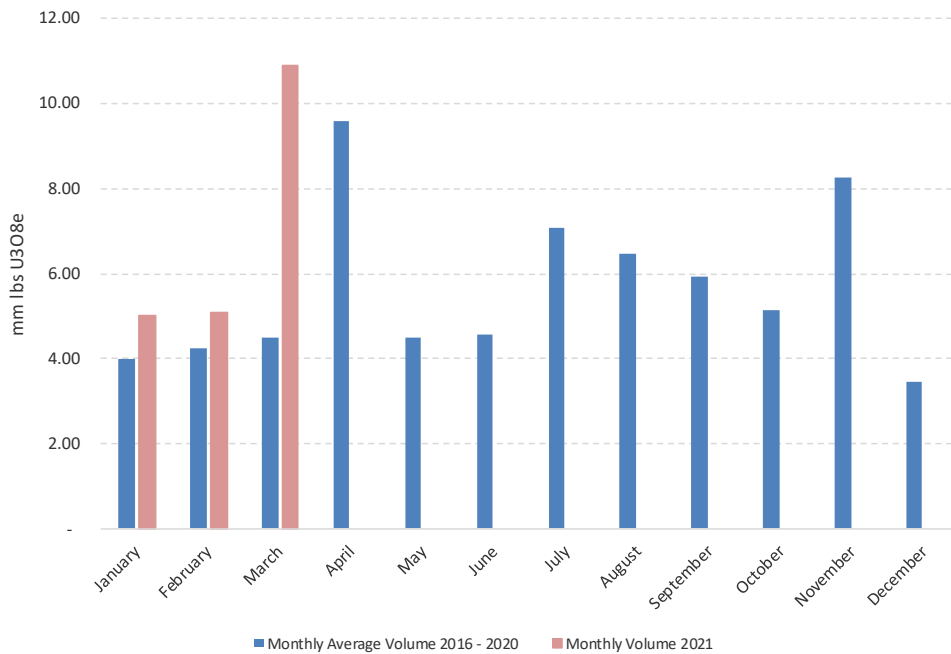
Source: UxC

**Exhibit 3. Historical versus 2021 Cumulative Monthly Spot Volumes**



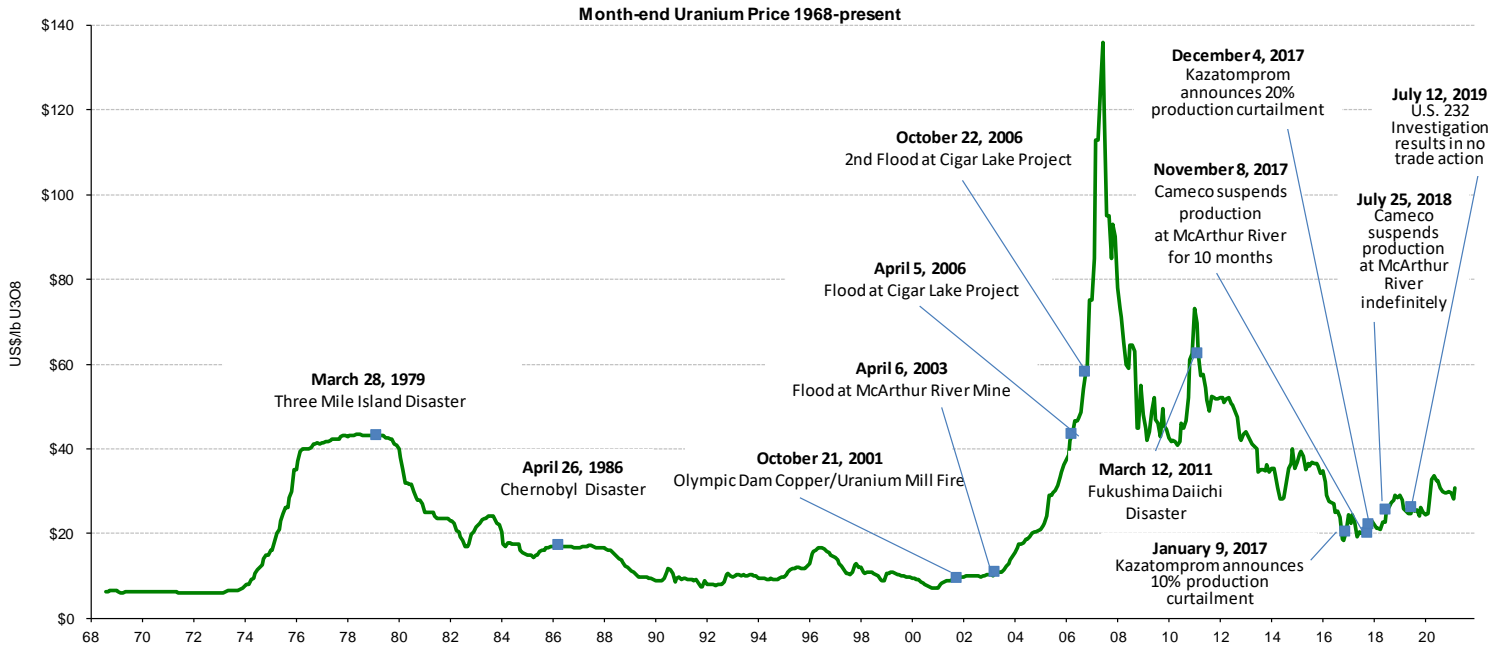
Source: UxC

**Exhibit 4. Monthly Average Spot Volumes**



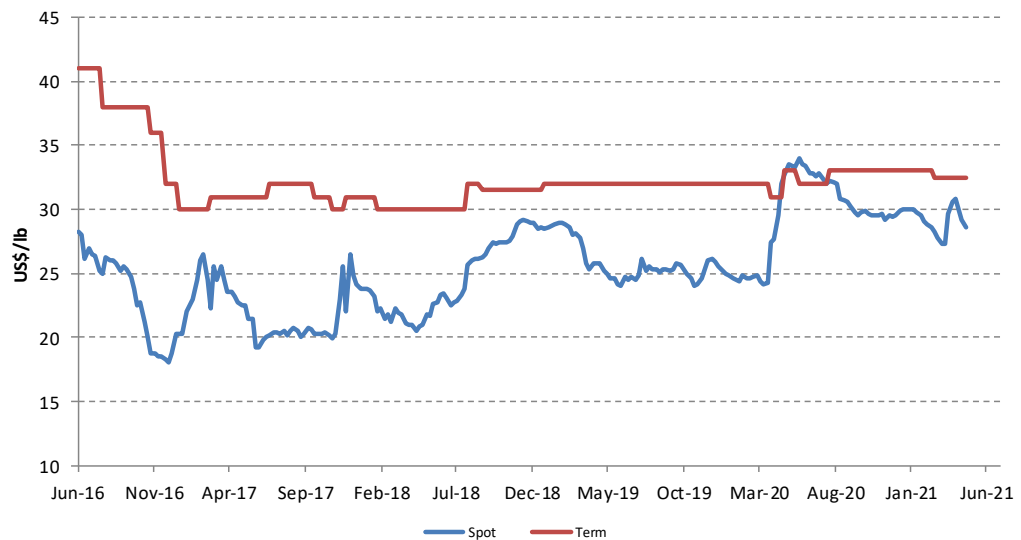
Source: UxC

## Exhibit 5. Historical Spot Price and Market Impacting Events (US\$/lb)



Source: UxC, Companies, TD Securities Inc.

## Exhibit 6. Spot and Term Uranium Prices (US\$/lb)



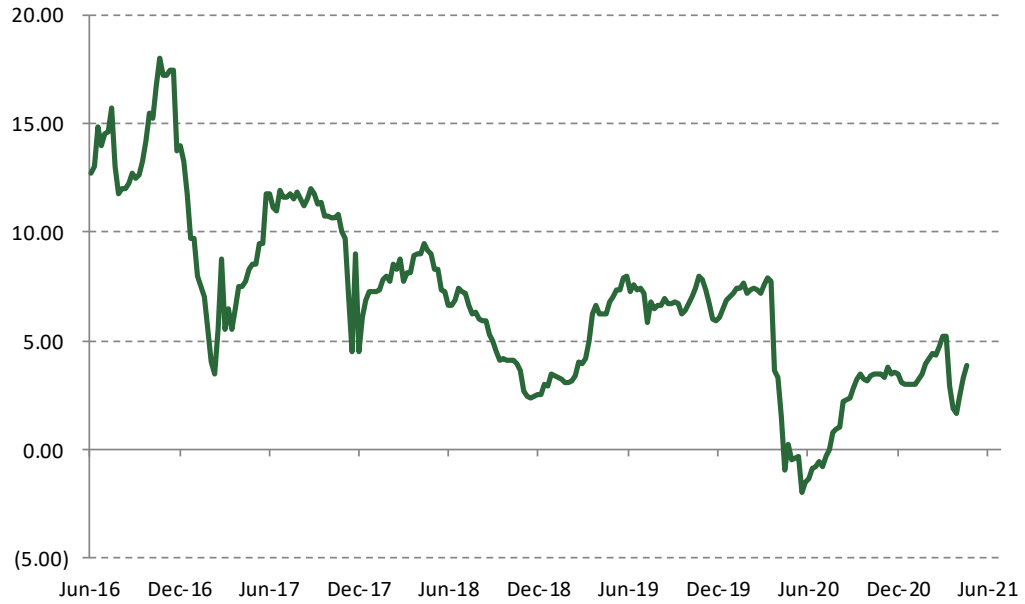
Source: UxC

## Exhibit 7. Uranium Term Price Premium to Spot (US\$/lb)

# Industry Note

Equity Research

April 28, 2021



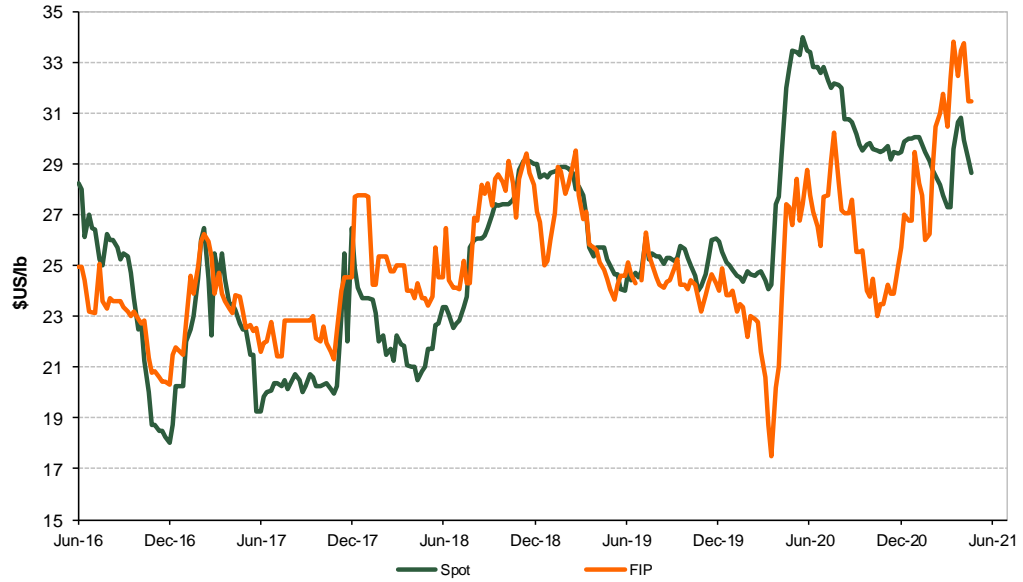
Source: UxC

**Exhibit 8. Uranium Prices — Spot, 3-year Forward, and 5-year Forward**



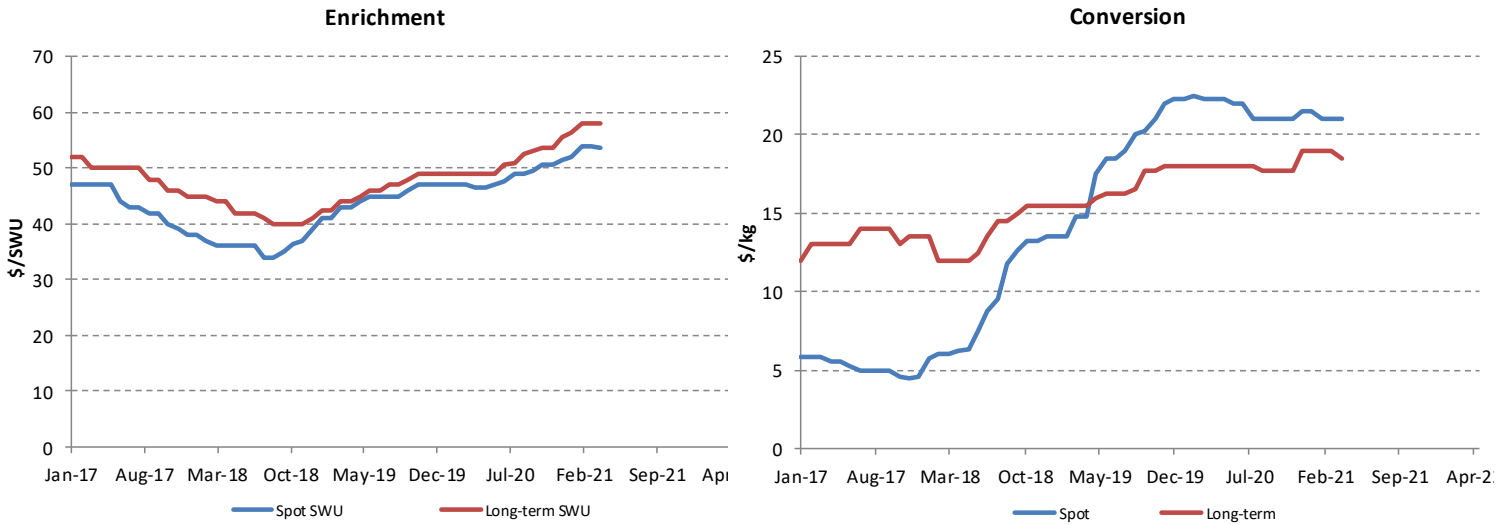
Source: UxC

**Exhibit 9. Fund Implied Price (FIP) and Spot Price**



Source: UxC

**Exhibit 10. Monthly SWU and Conversion Pricing**



Source: UxC

# Industry Note

Equity Research

April 28, 2021

## Exhibit 11. TD Securities' Uranium Supply/Demand Model

	2017	2018	2019	2020	2021E	2022E	2023E	2024E	2025E
<b>Mine Supply - Western World (Mlb U3O8)</b>									
Total Mine Supply - Western World	100	83	85	81	73	80	85	88	86
Net Eastern Mine Supply (lbs U3O8)	54	54	55	44	52	53	60	66	72
<b>Total World Mine Supply (Mlb U3O8)</b>	<b>154</b>	<b>138</b>	<b>140</b>	<b>125</b>	<b>126</b>	<b>132</b>	<b>145</b>	<b>154</b>	<b>158</b>
YoY % change	-7.6%	-10.2%	1.7%	-10.9%	0.7%	5.3%	9.1%	6.8%	2.6%
<b>Secondary Supply</b>									
Global underfeeding and tails re-enrichment*	19	18	18	16	16	15	15	14	14
Mixed Oxide Fuel (MOX)*	5	5	6	6	6	6	6	7	8
US government sales (DOE Proposed)*	3	2	2	1	0	0	0	0	0
Additional Russian secondary supply*	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0
<b>Total Secondary Supply (Mlb)</b>	<b>27</b>	<b>24</b>	<b>26</b>	<b>24</b>	<b>22</b>	<b>21</b>	<b>21</b>	<b>21</b>	<b>21</b>
Secondary supply as % of global reactor demand	16%	14%	15%	13%	12%	12%	12%	11%	11%
<b>Mobilization of Commercial Inventory</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>
<b>Total Supply</b>	<b>187</b>	<b>169</b>	<b>173</b>	<b>156</b>	<b>155</b>	<b>161</b>	<b>173</b>	<b>183</b>	<b>187</b>
<b>Total World Demand</b>									
Total World Nuclear Generating Capacity (MWe) *	358,819	368,571	372,978	374,420	384,508	385,211	389,242	394,906	398,885
Uranium requirements per MWe	472	472	472	472	472	472	472	472	472
Uranium demand (mmlb)	169	174	176	177	181	182	184	186	188
First Core Requirement (2 year lead)	-	-	-	-	-	-	-	-	-
<b>Total World Demand (Mlb U3O8)</b>	<b>169</b>	<b>174</b>	<b>176</b>	<b>177</b>	<b>181</b>	<b>182</b>	<b>184</b>	<b>186</b>	<b>188</b>
YoY % change	1.7%	2.7%	1.2%	0.4%	2.7%	0.2%	1.0%	1.5%	1.0%
<b>Supply / Demand Balance (Mlb)</b>	<b>18</b>	<b>-5</b>	<b>-3</b>	<b>-21</b>	<b>-27</b>	<b>-21</b>	<b>-11</b>	<b>-4</b>	<b>-2</b>
<b>Spot Uranium Price (US\$/lb U3O8)</b>	<b>\$22.12</b>	<b>\$24.82</b>	<b>\$25.94</b>	<b>\$29.52</b>	<b>\$32.99</b>	<b>\$36.00</b>	<b>\$38.00</b>	<b>\$40.00</b>	<b>\$45.00</b>

\* Source: World Nuclear Association - Nuclear Fuel Report 2019-2040 Reference Case

Note - TD LT price assumption starts in 2025; a flat US\$45/lb price is assumed for 2025 and beyond.

Source: UxC, Bloomberg, World Nuclear Association, TD Securities Inc.

# Industry Note

## Equity Research

April 28, 2021

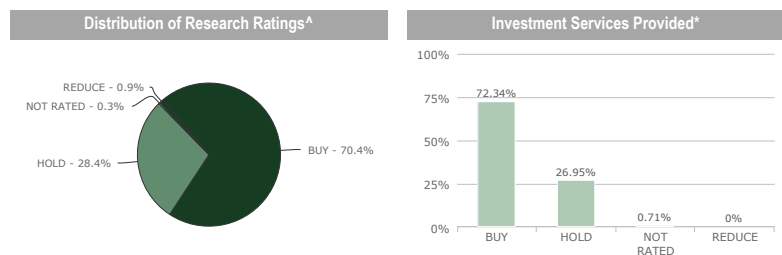
### TD Securities Equity Research Disclosures

Company	Ticker	Disclosures
1. TD Securities Inc., TD Securities (USA) LLC or an affiliated company has managed or co-managed a public offering of securities within the last 12 months with respect to the subject company.		
2. TD Securities Inc., TD Securities (USA) LLC or an affiliated company has received compensation for investment banking services within the last 12 months with respect to the subject company.		
3. TD Securities Inc., TD Securities (USA) LLC or an affiliated company expects to receive compensation for investment banking services within the next three months with respect to the subject company.		
4. TD Securities Inc. or TD Securities (USA) LLC has provided investment banking services within the last 12 months with respect to the subject company.		
5. A long position in the securities of the subject company is held by the research analyst, by a member of the research analyst's household, or in an account over which the research analyst has discretion or control.		
6. A short position in the securities of the subject company is held by the research analyst, by a member of the research analyst's household, or in an account over which the research analyst has discretion or control.		
7. A long position in the derivative securities of the subject company is held by the research analyst, by a member of the research analyst's household, or in an account over which the research analyst has discretion or control.		
8. A short position in the derivative securities of the subject company is held by the research analyst, by a member of the research analyst's household, or in an account over which the research analyst has discretion or control.		
9. TD Securities Inc. and/or an affiliated company is a market maker, or is associated with the specialist that makes a market, in the securities of the subject company.		
10. TD Securities Inc. and/or affiliated companies own 1% or more of the equity securities of the subject company.		
11. A partner, director or officer of TD Securities Inc. or TD Securities (USA) LLC, or a research analyst involved in the preparation of this report has, during the preceding 12 months, provided services to the subject company for remuneration.		
12. This security has Subordinate voting shares.		
13. This security has Restricted voting shares.		
14. This security has Non-voting shares.		
15. This security has Variable voting shares.		
16. This security has Limited voting shares.		

### Additional Important Disclosures

#### Price Graphs

Full disclosures for all companies covered by TD Securities can be viewed at <https://www.tdsresearch.com/equities/welcome.important.disclosure.action> by TD Securities' institutional equity clients.



Current as of: April 28, 2021

<sup>^</sup> Percentage of subject companies under each rating category: BUY (covering ACTION LIST BUY, BUY and SPECULATIVE BUY ratings), HOLD, and REDUCE (covering TENDER and REDUCE ratings) and NOT RATED (covering UNDER REVIEW, SUSPENDED, and NOT RATED).

<sup>\*</sup> Percentage of subject companies within each of the four categories (BUY, HOLD, REDUCE, and NOT RATED) for which TD Securities Inc. has provided investment banking services within the last 12 months.

### Definition of Research Ratings

**ACTION LIST BUY:** The stock's total return is expected to exceed a minimum of 15% (with higher thresholds for less liquid, more risky securities) over the next 12 months and it is a top pick in the Analyst's sector.

**BUY:** The stock's total return is expected to exceed a minimum of 10% (with higher thresholds for less liquid, more risky securities) over the next 12 months.

**SPECULATIVE BUY:** The stock's total return is expected to exceed a minimum of 30% over the next 12 months (with higher thresholds for less liquid securities); however, there is material event risk associated with the investment that could result in a significant loss.

**HOLD:** The stock's total return is expected to be between 0% and 10%, (with higher thresholds for less liquid, more risky securities) over the next 12 months.



# Industry Note

## Equity Research

April 28, 2021

**TENDER:** Investors are advised to tender their shares to a specific offer for the company's securities or to support a proposed combination reflecting our view that a superior offer is not forthcoming.

**REDUCE:** The stock's total return is expected to be negative over the next 12 months.

**SUSPENDED:** Due to evolving circumstances, we can no longer generate what we consider a defensible target price and rating at the current time.

**UNDER REVIEW:** Our rating is under review pending additional information and/or analysis. The prior rating should not be relied on.

**NOT RATED:** We do not currently produce a recommendation and a target price on this security.

Risk ratings are relative to other companies in the TD Securities Equity Research coverage universe. In order of increasing risk, our risk ratings are LOW, MEDIUM, HIGH, and SPECULATIVE. These risk ratings are not meant to be compared to ratings on other securities and asset classes outside our Equity Research coverage universe.

Overall Risk Rating in order of increasing risk: Low (6.0% of coverage universe), Medium (40.5%), High (46.2%), Speculative (7.3%)

### Research Dissemination Policy

TD Securities makes its research products available in electronic and/or printed formats. If there are any subsequent material changes to the reports it publishes, TD Securities will as soon as practicable distribute such reports with the relevant changes to its institutional clients who are entitled to receive them. Entitled institutional clients may also receive our research via third-party platforms including, but not limited to, Bloomberg, FactSet, Refinitiv, and S&P Capital IQ. All research is available by password to entitled institutional clients at <https://www.tdsresearch.com/equities>. TD Securities may also update proprietary models; these models may be obtained by entitled institutional clients by contacting the research analyst directly. There is no planned frequency of updates to these models.

### Analyst Certification

Each analyst of TD Securities Inc. whose name appears on page 1 of this research report hereby certifies that (i) the recommendations and opinions expressed in the research report accurately reflect the research analyst's personal views about any and all of the securities or issuers discussed herein that are within the analyst's coverage universe and (ii) no part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the provision of specific recommendations or views expressed by the research analyst in the research report.

### Disclaimer

This material is for general informational purposes only and is not investment advice nor does it constitute an offer, recommendation or solicitation to buy or sell a particular financial instrument. It does not have regard to the specific investment objectives, financial situation, risk profile or the particular needs of any specific person who may receive this material. No representation is made that the information contained herein is accurate in all material respects, complete or up to date, nor that it has been independently verified by TD Securities. Recipients of this analysis or report are to contact the representative in their local jurisdiction with regards to any matters or questions arising from, or in connection with, the analysis or report.

Historic information regarding performance is not indicative of future results and investors should understand that statements regarding future prospects may not be realized. All investments entail risk, including potential loss of principal invested. Performance analysis is based on certain assumptions, the results of which may vary significantly depending on the modelling inputs assumed. This material, including all opinions, estimates and other information, constitute TD Securities' judgment as of the date hereof and is subject to change without notice. The price, value of and income from any of the securities mentioned in this material can fall as well as rise. Any market valuations contained herein are indicative values as of the time and date indicated. Such market valuations are believed to be reliable, but TD Securities does not warrant their completeness or accuracy. Different prices and/or valuations may be available elsewhere and TD Securities suggests that valuations from other sources be obtained for comparison purposes. Any price or valuation constitutes TD Securities' judgment and is subject to change without notice. Actual quotations could differ subject to market conditions and other factors.

TD Securities disclaims any and all liability relating to the information herein, including without limitation any express or implied representations or warranties for, statements contained in, and omissions from, the information. TD Securities is not liable for any errors or omissions in such information or for any loss or damage suffered, directly or indirectly, from the use of this information. TD Securities may have effected or may effect transactions for its own account in the securities described herein. No proposed customer or counterparty relationship is intended or implied between TD Securities and a recipient of this document.

TD Securities makes no representation as to any tax, accounting, legal or regulatory issues. Investors should seek their own legal, financial and tax advice regarding the appropriateness of investing in any securities or pursuing any strategies discussed herein. Investors should also carefully consider any risks involved. Any transaction entered into is in reliance only upon the investor's judgment as to financial, suitability and risk criteria. TD Securities does not hold itself out to be an advisor in these circumstances, nor do any of its representatives have the authority to do so.

The information contained herein is not intended for distribution to, or use by, any person in any jurisdiction where such distribution or use would be contrary to applicable law or regulation or which would subject TD Securities to additional licensing or registration requirements. It may not be copied, reproduced, posted, transmitted or redistributed in any form without the prior written consent of TD Securities.

If you would like to unsubscribe from our email distribution lists at any time, please contact your TD Securities Sales Contact. If you are located in Europe, Asia, Australia or New Zealand you may also unsubscribe by emailing us at [Privacy.EAP@tdsecurities.com](mailto:Privacy.EAP@tdsecurities.com).

You can access our Privacy Policy here ([http://www.tdsecurities.com/tds/content/AU\\_PrivacyPage](http://www.tdsecurities.com/tds/content/AU_PrivacyPage)).

**Australia:** If you receive this document and you are domiciled in Australia, please note that this report is intended to be issued for general information purposes only and distributed through the Toronto Dominion Australia Limited ("TDAL"). TDAL does not hold itself out to be providing financial advice in these circumstances. TD Securities is a trademark and represents certain investment dealing and advisory activities of Toronto-Dominion Bank and its subsidiaries, including TDAL. The Toronto-Dominion Bank is not an authorized deposit-taking or financial services institution in Australia. TDAL is a holder of an Australian Financial Services License (404698) and is regulated by the Australian Securities and Investments Commission.

**Canada:** Canadian clients wishing to effect transactions in any security discussed herein should do so through a qualified salesperson of TD Securities or TD Securities Inc. TD Securities Inc. is a member of the Canadian Investor Protection Fund.

**China, India and South Korea:** Insofar as the document is received by any persons in the People's Republic of China ("PRC"), India and South Korea, it is intended only to be issued to persons who have the relevant qualifications to engage in the investment activity mentioned in this document. The recipient is responsible for obtaining all relevant government regulatory

# Industry Note

## Equity Research

April 28, 2021

approvals/licenses themselves, and represents and warrants to TD Bank that the recipient's investments in those securities do not violate any law or regulation, including, but not limited to, any relevant foreign exchange regulations and/or overseas investment regulations. The Toronto-Dominion Bank has a representative office in Shanghai, Mumbai and Seoul which should be contacted for any general enquiry related to The Toronto-Dominion Bank or its business. However, neither any of the Toronto-Dominion Bank offshore branches/subsidiaries nor its representative offices are permitted to conduct business within the borders of the PRC, India and South Korea. In locations in Asia where the Bank does not hold licenses to conduct business in financial services, it is not our intention to, and the information contained in this document should not be construed as, conducting any regulated financial activity, including dealing in, or the provision of advice in relation to, any regulated instrument or product. This publication is for general information only, without addressing any particular needs of any individual or entity, and should not be relied upon without obtaining specific advice in the context of specific circumstances.

**Hong Kong SAR (China):** This document, which is intended to be issued in Hong Kong SAR (China) ("Hong Kong") only to Professional Investors within the meaning of the Securities and Futures Ordinance (the "SFO") and the Securities and Futures (Professional Investor) Rules made under the SFO, has been distributed through Toronto-Dominion Bank, Hong Kong Branch, which is regulated by the Hong Kong Monetary Authority.

**Japan:** For Japanese residents, please note that if you have received this document from Toronto-Dominion Bank entities based outside Japan, it is being provided to qualified financial institutions ("QFI") only under a relevant exemption to the Financial Instruments and Exchange Act.

If you have received this document from TD Securities (Japan) Co., Ltd., it is being provided only to institutional investors. TD Securities (Japan) Co., Ltd. is regulated by the Financial Services Agency of Japan and is distributing this document in Japan as a Type 1 Financial Instruments Business Operator registered with the Kanto Local Finance Bureau under registration number, Kinsho 2992, and a member of Japan Securities Dealers Association.

**New Zealand:** The Toronto-Dominion Bank is not a "registered bank" in New Zealand under the Reserve Bank Act 1989.

**Singapore:** This report is distributed in Singapore by The Toronto-Dominion Bank, Singapore Branch, and recipients in Singapore of this report are to contact The Toronto-Dominion Bank, Singapore Branch in respect of any matters arising from, or in connection with, this report. The Toronto-Dominion Bank, Singapore Branch is regulated by the Monetary Authority of Singapore. Where this report is issued or promulgated in Singapore, it is only intended for distribution to a person who is an accredited investor, expert investor or institutional investor as defined in the Securities and Futures Act (Cap. 289), or the Securities and Futures (Prescribed Specific Classes of Investors) Regulations 2005, or the Securities and Futures (Classes of Investors) Regulations 2018 issued by the Monetary Authority of Singapore.

**United Kingdom and Europe:** This document is prepared, issued or approved for issuance in the UK and Europe by TD Securities Limited in respect of investment business as agent and introducer for TD Bank. The Toronto-Dominion Bank is authorised by the Prudential Regulation Authority and subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority. TD Securities Limited is authorised and regulated by the Financial Conduct Authority. Insofar as the document is issued in or to the United Kingdom or Europe, it is intended only to be issued to persons who (i) are persons falling within Article 19(5) ("Investment professional") of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the "Financial Promotion Order"), (ii) are persons falling within Article 49(2)(a) to (d) ("High net worth companies, unincorporated associations, etc.") of the Financial Promotion Order, or (iii) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000) in connection with the issue or sale of any securities may otherwise lawfully be communicated or caused to be communicated. European clients wishing to effect transactions in any security discussed herein should do so through a qualified salesperson of TD Securities Limited. Insofar as the information in this report is issued in the U.K. and Europe, it has been issued with the prior approval of TD Securities Limited.

**United States:** U.S. clients wishing to effect transactions in any security discussed herein must do so through a registered representative of TD Securities (USA) LLC.

TD Securities is a trademark of TD Bank and represents TD Securities Inc., TD Securities (USA) LLC and TD Securities Limited and certain investment and corporate banking activities of TD Bank and its subsidiaries.

© Copyright 2021 The Toronto-Dominion Bank. All rights reserved.

Full disclosures for all companies covered by TD Securities can be viewed at <https://www.tdsresearch.com/equities/welcome.important.disclosure.action>