

# Industry Note

Equity Research

December 9, 2020

## Metals & Minerals

### Uranium Weekly: Uranium Price Flat, but Equities Lift Off

**Over the past several trading days, uranium equities have had a spectacular run.** As measured by the Horizons Global Uranium Index ETF (HURA-T), uranium equities share prices have lifted by ~19% since last Friday. There does not appear to have been one specific catalyst, but we can point to several factors that likely contributed to the move:

- The U.S. Senate Committee on Environment and Public Works approved a bipartisan bill late last week, which will include an annual program for a U.S. National Strategic Uranium Reserve under the American Nuclear Infrastructure Act. Under the Act, U.S. Department of Energy can only acquire U.S.-origin material.
- There has been some concern that Cameco could be considering closing Cigar Lake again due to increasing COVID-19 cases in Northern Saskatchewan. Cameco reported a second COVID-19 case on Sunday at Cigar Lake. We understand that the COVID-19 cases at the operation were not transmitted at the site and the individuals have been isolated. Cameco believes that it has strong COVID-19 protocols in place at Cigar Lake and is working with regional health authorities.
- The incoming Biden administration has made some positive commentary on the importance of nuclear energy in a de-carbonizing world. With the U.S. looking to rejoin the Paris Climate Accord, and the Biden administration's proposed \$2 trillion infrastructure plan, there could be growing bi-partisan support for nuclear energy in the U.S., which would be supportive of long-term uranium demand and prices, in our view.

**Despite the recent excitement in the equity market, the uranium market itself seems unimpressed.** The spot price is effectively unchanged over the past week at ~\$29.50/lb. Spot market volume for November was below the seasonal average at ~4.9Mlbs and Ux Consulting is reporting that term activity remains moderate. Term activity for 2020 appears to be on track to be the lowest since 2013 at ~50Mlbs.

**In our view, supply/demand fundamentals in the uranium market have improved significantly, with recent COVID-19-related supply curtailments pushing the market into a supply deficit.** In addition, a number of trade policy issues that have hung over the market for several years (U.S. Section 232 investigation, Nuclear Fuel Working Group report, and Russian Suspension Agreement negotiations) have all been resolved, thereby eliminating trade-related friction for utilities with respect to uranium purchases. Although anecdotal evidence suggests that utilities are increasingly turning to the term market, they are not doing so in sufficient numbers or purchased volumes to put upward pressure on term pricing. 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.

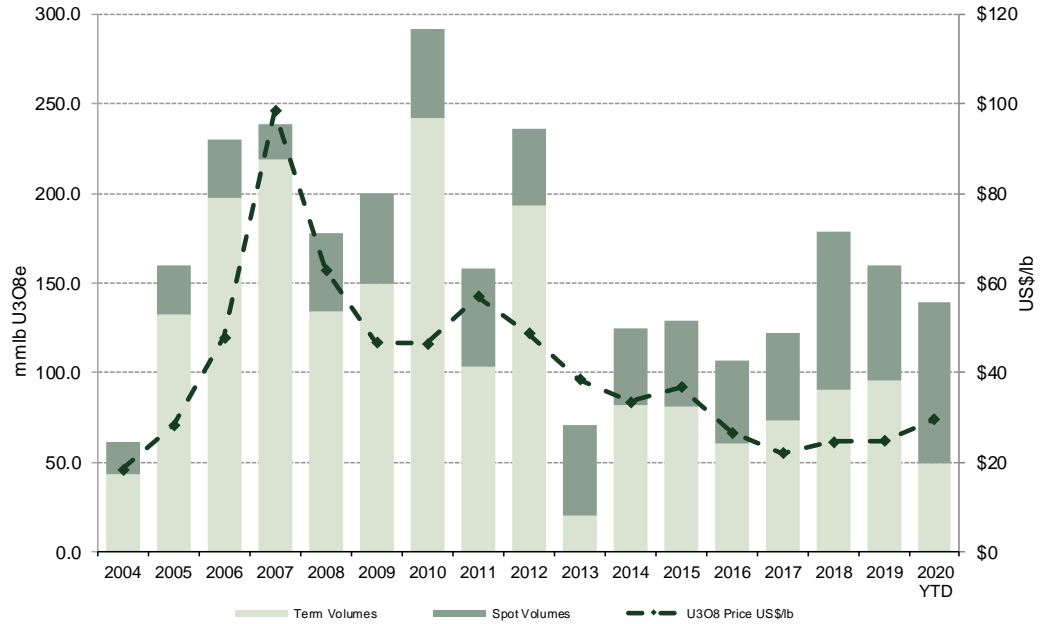
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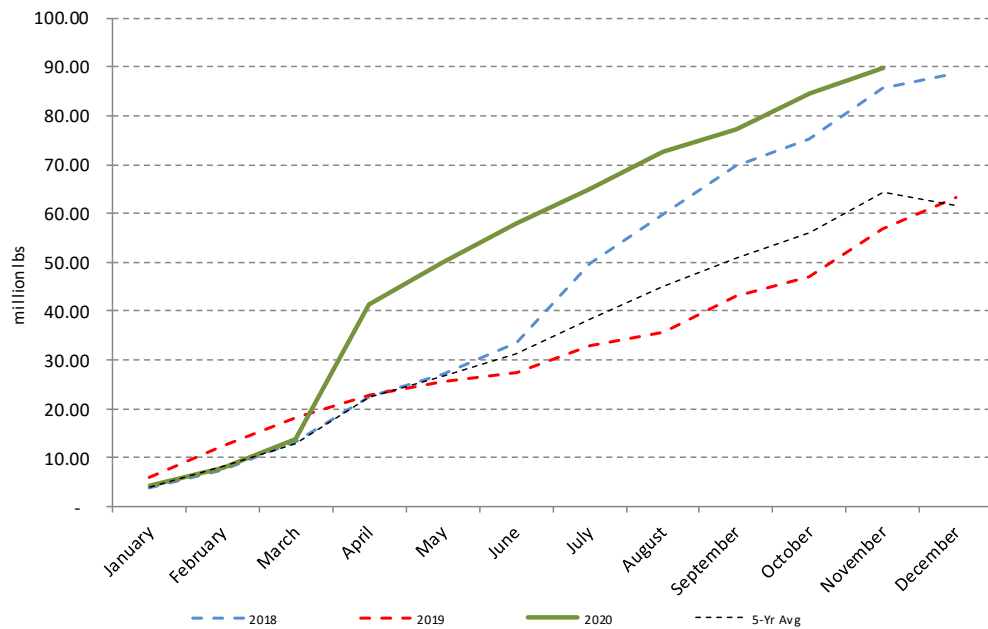


**Exhibit 1. Term Contracting Volumes Lagging in 2020**



Source: UxC

**Exhibit 2. Historical vs. 2020 Cumulative Monthly Spot Volumes**



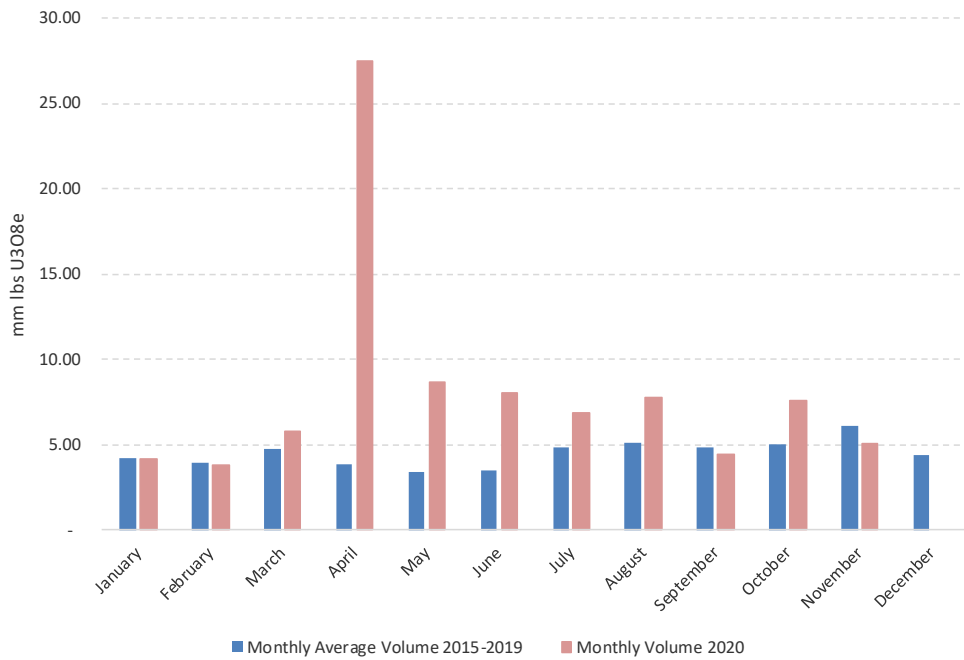
Source: UxC

# Industry Note

Equity Research

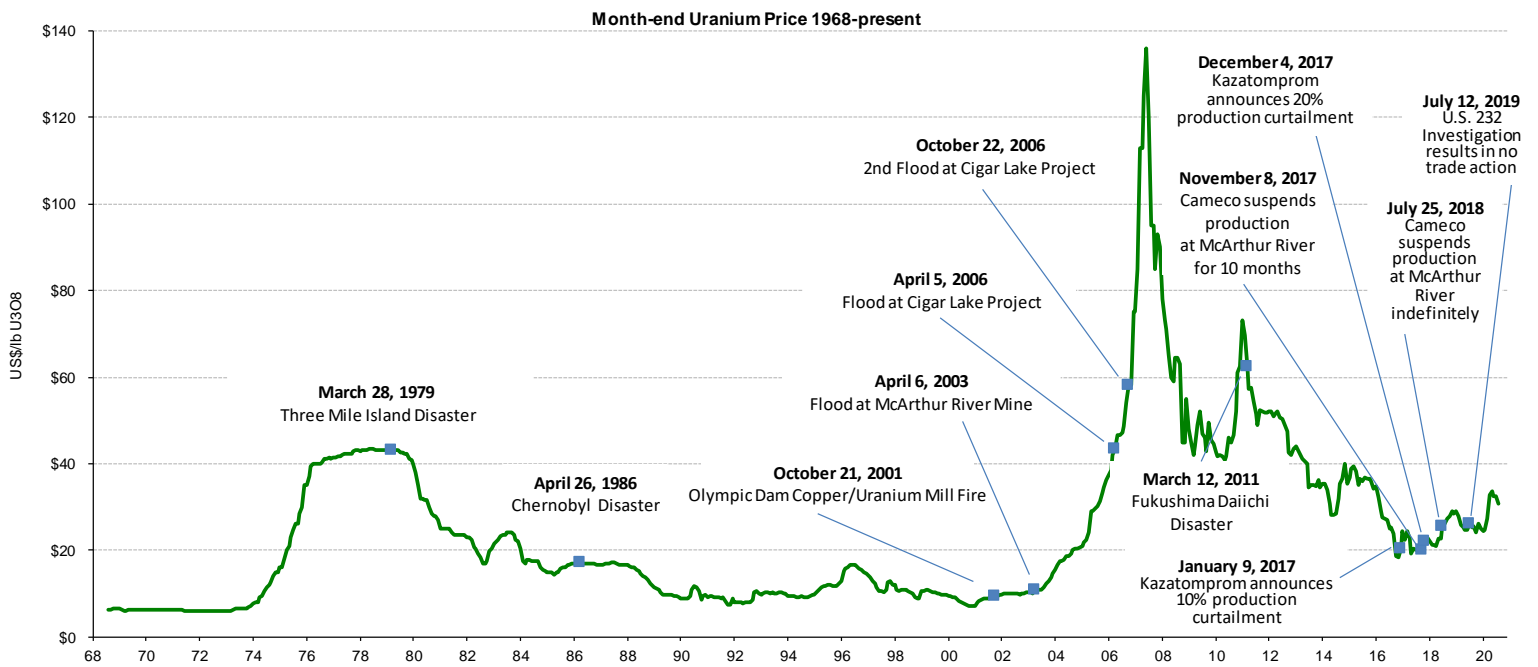
December 9, 2020

**Exhibit 3. Monthly Average Spot Volumes**



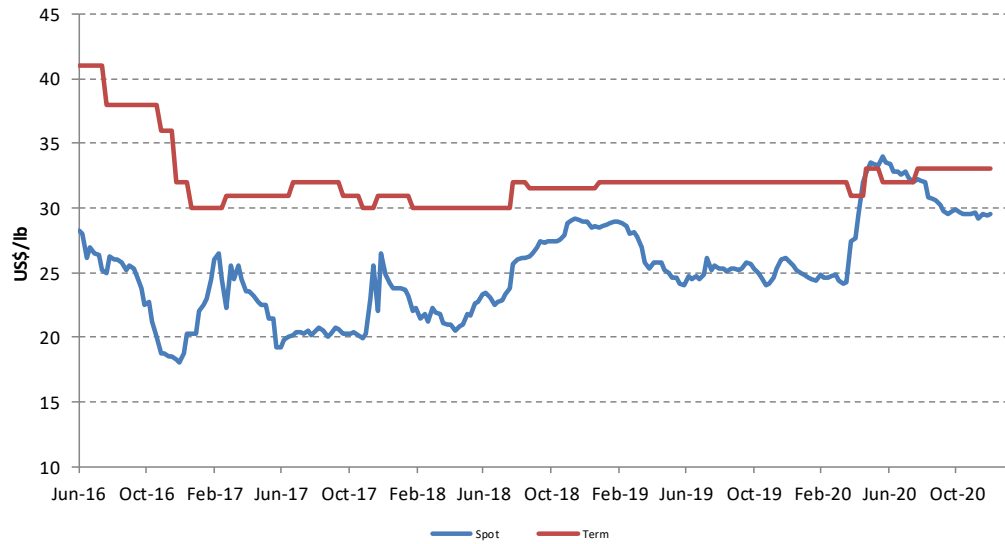
Source: UxC

**Exhibit 4. Historical Spot Price and Market-affecting Events (US\$/lb)**



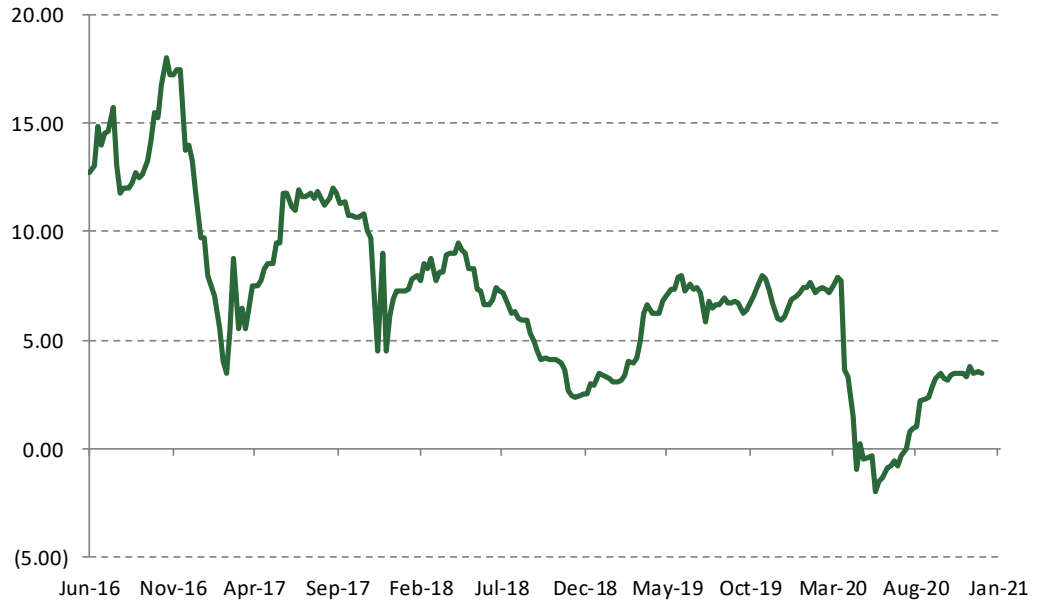
Source: UxC, companies, TD Securities Inc.

**Exhibit 5. Spot and Term Uranium Prices (US\$/lb)**



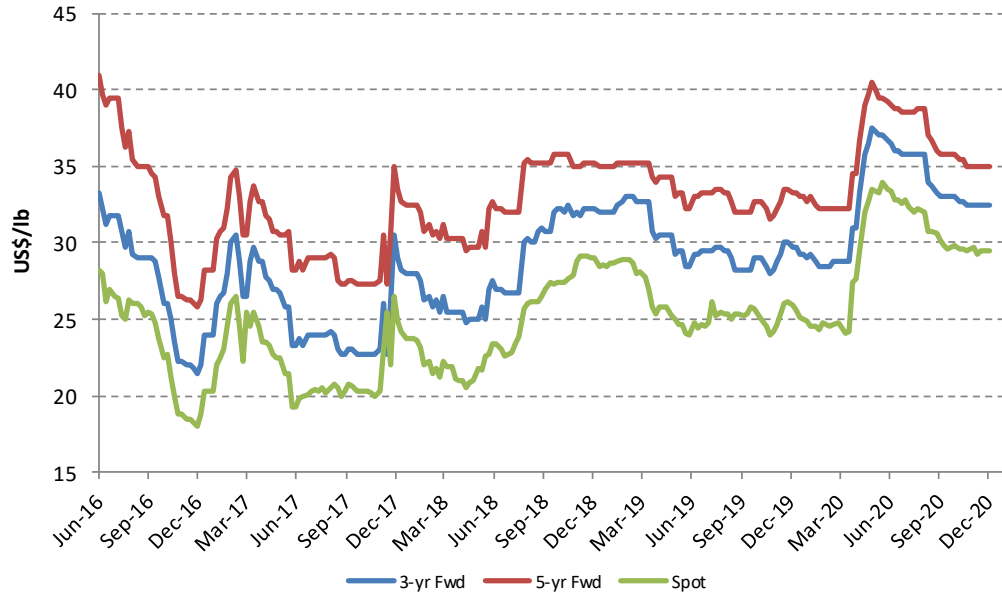
Source: UxC

**Exhibit 6. Uranium Term Price Premium to Spot (US\$/lb)**



Source: UxC

**Exhibit 7. Uranium Prices — Spot, 3-year Forward and 5-year Forward**



Source: UxC

**Exhibit 8. Fund Implied Price (FIP) and Spot Price**



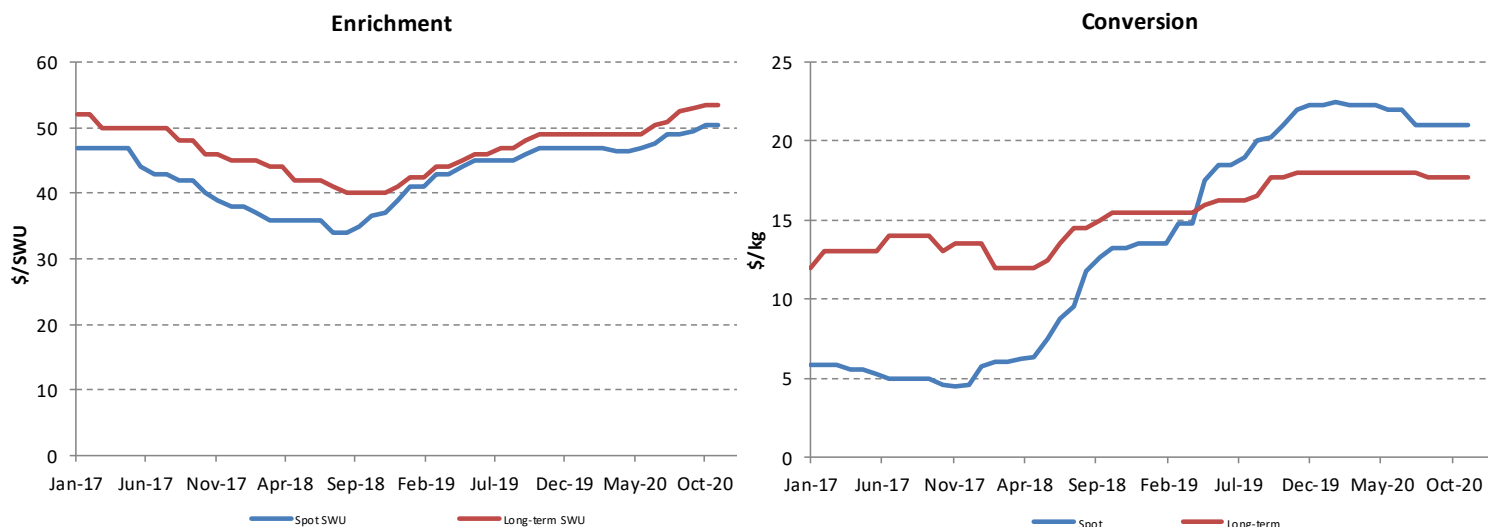
Source: UxC

# Industry Note

Equity Research

December 9, 2020

## Exhibit 9. Monthly SWU and Conversion Pricing



Source: UxC

## Exhibit 10. TD Securities Uranium Supply/Demand Model

	2015	2016	2017	2018	2019	2020E	2021E	2022E	2023E	2024E
<b>Mine Supply - Western World (mm lbs U3O8)</b>										
Total Mine Supply - Western World	106	104	100	83	85	75	81	80	85	88
Net Eastern Mine Supply (lbs U3O8)	57	62	54	54	55	44	49	53	60	66
<b>Total World Mine Supply (mmlb U3O8)</b>	<b>163</b>	<b>166</b>	<b>154</b>	<b>138</b>	<b>140</b>	<b>120</b>	<b>130</b>	<b>132</b>	<b>145</b>	<b>154</b>
YoY % change	12.2%	2.1%	-7.6%	-10.2%	1.7%	-14.7%	8.3%	2.2%	9.1%	6.8%
<b>Secondary Supply</b>										
Global underfeeding and tails re-enrichment*	20	18	19	18	18	16	16	15	15	14
Mixed Oxide Fuel (MOX)*	4	5	5	5	6	6	6	6	6	7
US government sales (DOE Proposed)*	7	4	3	2	2	1	0	0	0	0
Additional Russian secondary supply*	2	2	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
<b>Total Secondary Supply (mmlb)</b>	<b>34</b>	<b>29</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>
Secondary supply as % of global reactor demand	21%	17%	16%	14%	15%	13%	12%	12%	12%	11%
<b>Mobilization of Commercial Inventory</b>	<b>8</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>205</b>	<b>202</b>	<b>187</b>	<b>169</b>	<b>173</b>	<b>150</b>	<b>159</b>	<b>161</b>	<b>173</b>	<b>183</b>
<b>Total World Demand</b>										
Total World Nuclear Generating Capacity (MWe) *	345,377	351,271	358,819	368,571	372,978	374,420	384,508	385,211	389,242	394,906
Uranium requirements per MWe	464	474	472	472	472	472	472	472	472	472
Uranium demand (mmlb)	160	167	169	174	176	177	181	182	184	186
First Core Requirement (2 year lead)	-	-	-	-	-	-	-	-	-	-
<b>Total World Demand (mmlbs U3O8)</b>	<b>160</b>	<b>167</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>
YoY % change	3.4%	3.9%	1.7%	2.7%	1.2%	0.4%	2.7%	0.2%	1.0%	1.5%
<b>Supply / Demand Balance (mmlb)</b>	<b>44</b>	<b>35</b>	<b>18</b>	<b>-5</b>	<b>-3</b>	<b>-26</b>	<b>-23</b>	<b>-21</b>	<b>-11</b>	<b>-4</b>
<b>Spot Uranium Price (US\$/lb U3O8)</b>	<b>\$36.89</b>	<b>\$26.57</b>	<b>\$22.12</b>	<b>\$24.82</b>	<b>\$25.94</b>	<b>\$30.86</b>	<b>\$36.00</b>	<b>\$37.50</b>	<b>\$40.00</b>	<b>\$40.00</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

December 9, 2020

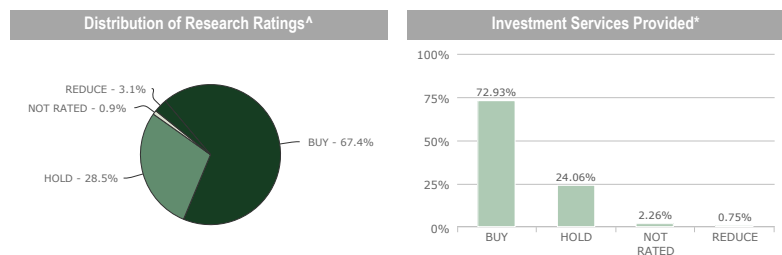
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# Industry Note

## Equity Research

December 9, 2020

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# Industry Note

## Equity Research

December 9, 2020

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