

# Industry Note

Equity Research

September 2, 2020

Metals &amp; Minerals

## Uranium Weekly: RSA and Contracting Activity Key Fall Catalysts

### Clarity on the RSA Could Boost U.S. Utility Contracting Activity

**Ux Consulting's (UxC) weekly price indicator declined 0.33% this week to US \$30.65/lb (from US\$30.75/lb).** The weekly price indicator has declined from its most recent peak of US\$34/lb in late-May on softer activity in the spot market. UxC also reported 3-year and 5-year U3O8 forward prices declining to \$33.25/lb and \$36.00/lb, respectively (\$33.75/lb and \$36.75/lb previously).

**The Russia Suspension Agreement (RSA) is set to expire at the end of this year and has been a roadblock for term contracting by U.S. utilities due to uncertainty about the outcome of negotiations to extend the agreement.** Our understanding is that the U.S. Department of Commerce is actively investigating and negotiating the terms of an extension to the Agreement. As a reminder, the RSA was initially established in 1992 and has been extended and amended on a rolling basis in the past. The RSA effectively imposes a quota on the import of Russian uranium limiting it to 20% of the U.S. market. The extension of the RSA is one of the key recommendations made by the Nuclear Fuel Working Group. We believe that uncertainty over the RSA extension has limited the ability for U.S. utilities to formulate appropriate medium and long-term fuel buying strategies resulting in lower term contracting by U.S. fuel buyers.

**Reported uptick in awarded term contracts towards the end of August.** Year-to-date, UxC is reporting that >33mmlbs of uranium has been contracted in the term market; this compares with average utility term contracting volumes over the past five years through to the end of August of ~48mmlbs. That being said, in recent years, term contracting volume has been very volatile with a peak of ~54mmlbs to the end of July in 2017 and low of just ~16mmlbs in 2018. During the peak term contracting years from 2006 through 2012, average annual term volume was ~176mmlbs.

**Term contracting could accelerate in mid-September.** In years past, the WNA Symposium, which will be held virtually from September 9-11, acted as an important forum for uranium producers, intermediaries, and buyers and was often followed with elevated levels of spot and term contracting. We expect that a similar uplift in spot and term activity could occur in mid-September following the conclusion of any potential late summer vacation plans.

**The catalyst that could support the next up-leg in spot and term prices would be a meaningful return of utilities to the term contracting market, in our view.** UxC has noted a recent pick-up in term contracting interest from both U.S. and non-U.S. utilities.

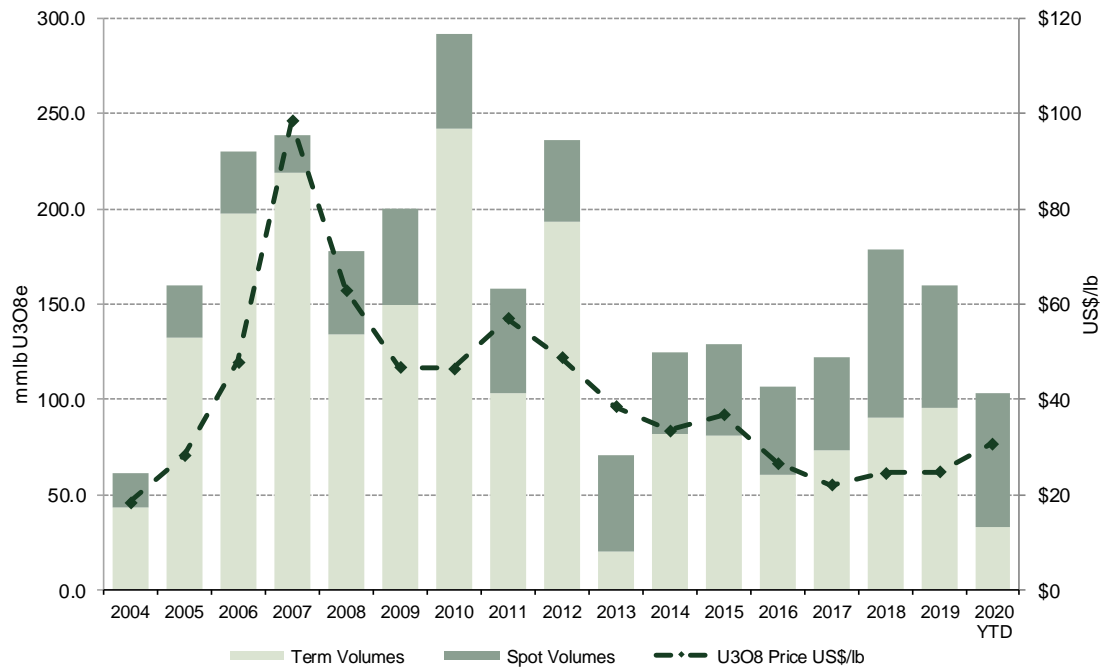
Greg Barnes

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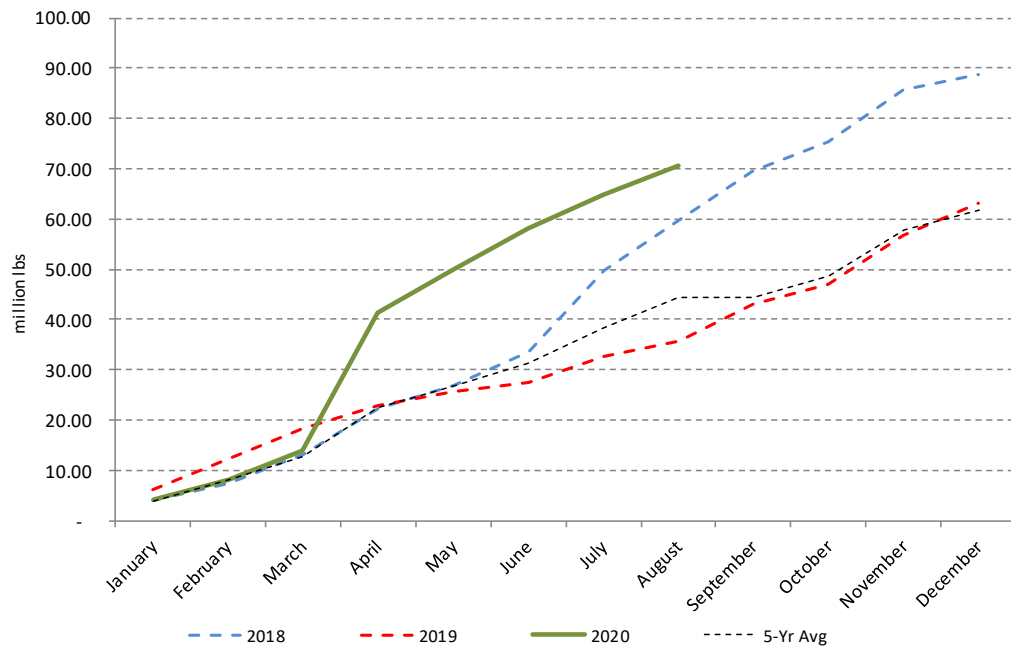
Joel Brown, P.Eng. (Associate)

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



Source: UxC

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



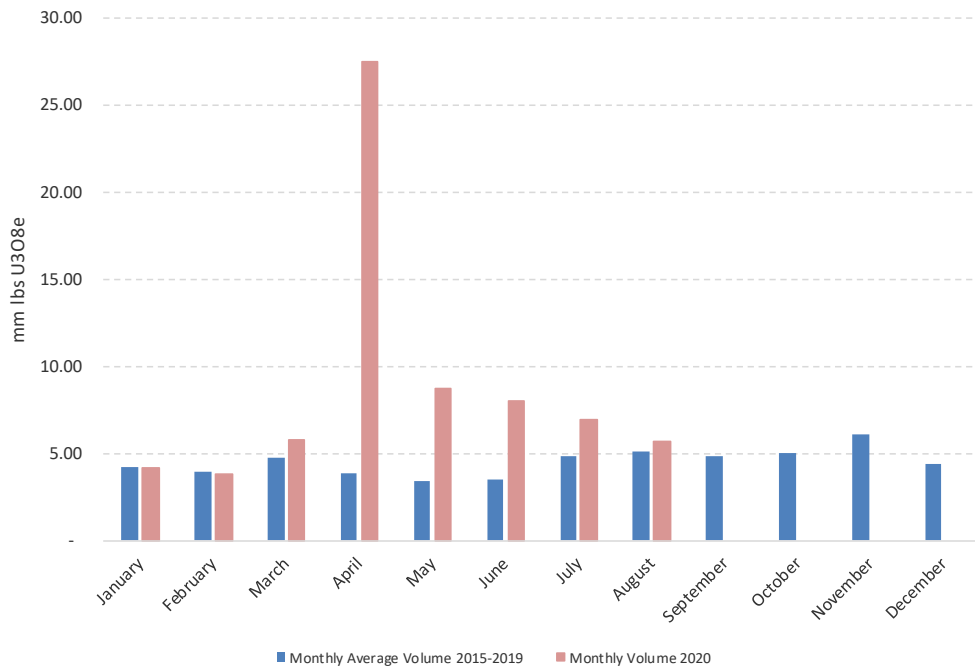
Source: UxC

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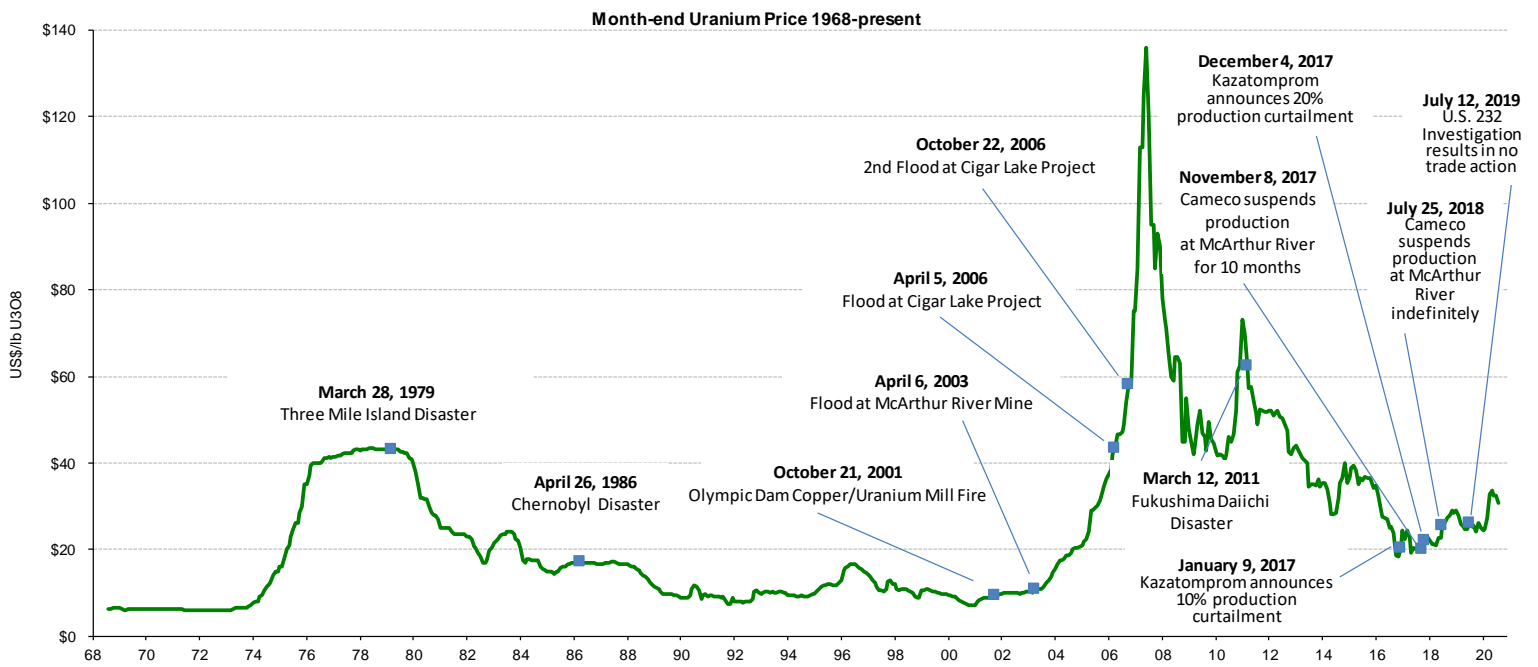
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**Exhibit 3. Monthly Average Spot Volumes**



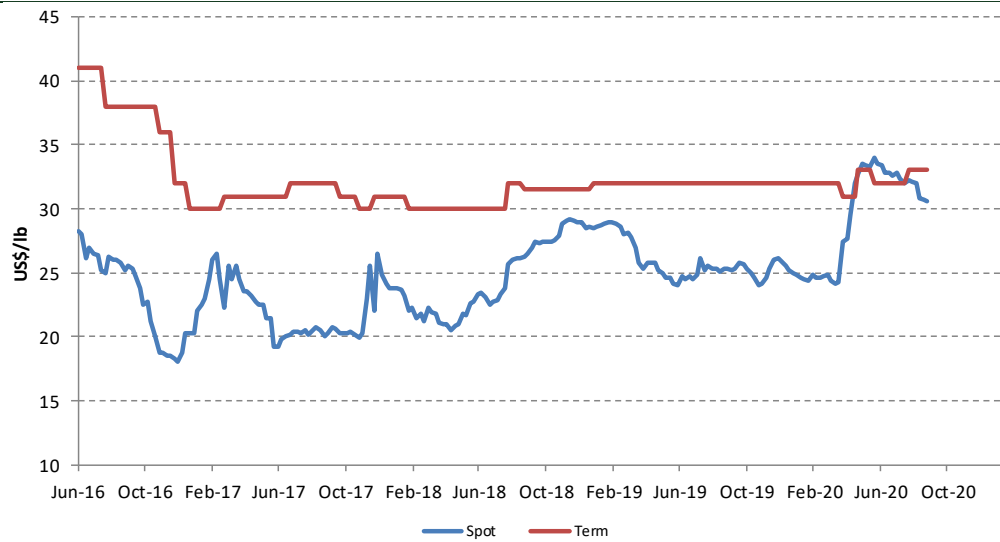
Source: UxC

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



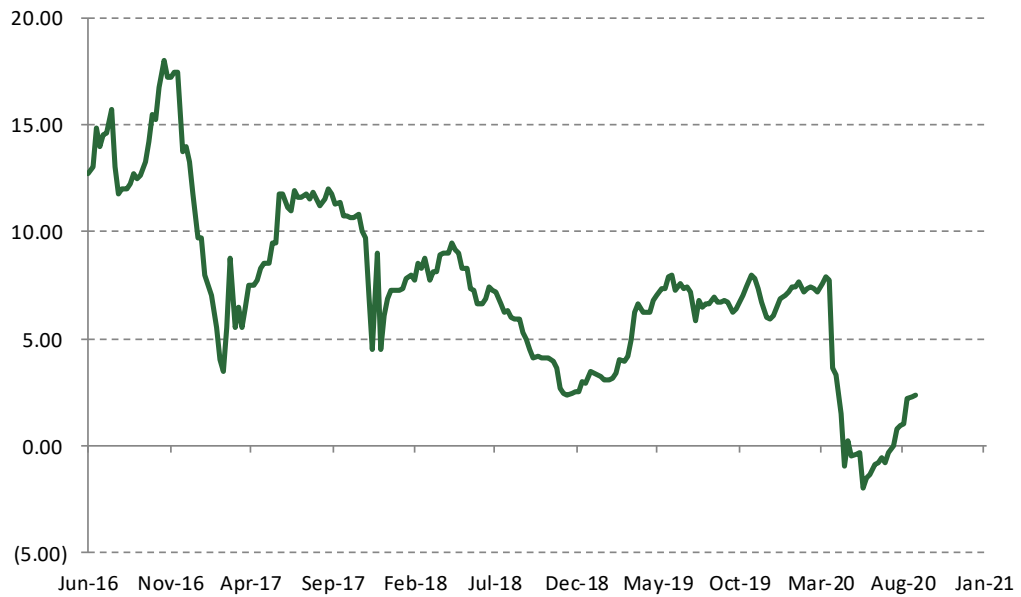
Source: UxC, Companies, TD Securities Inc.

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



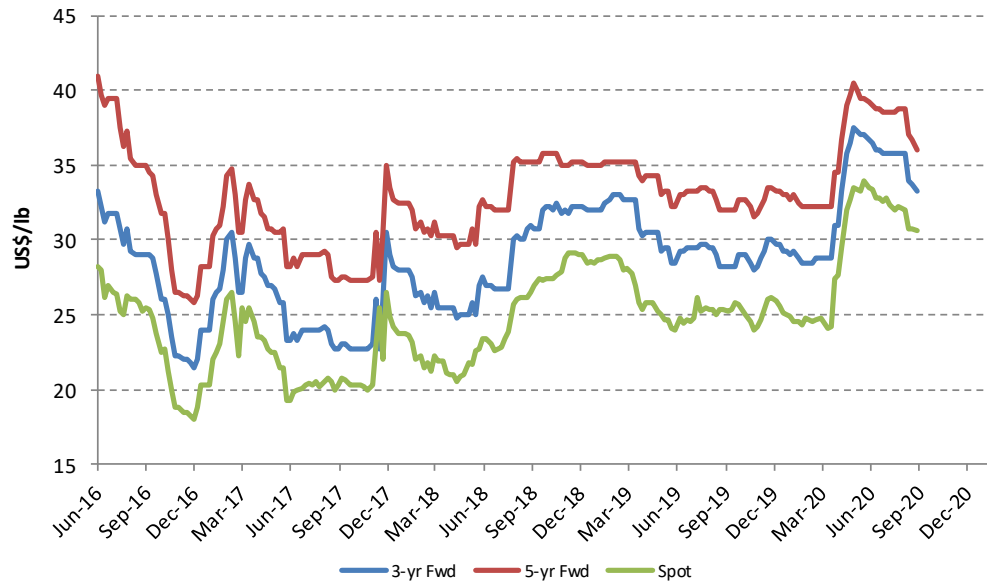
Source: UxC

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



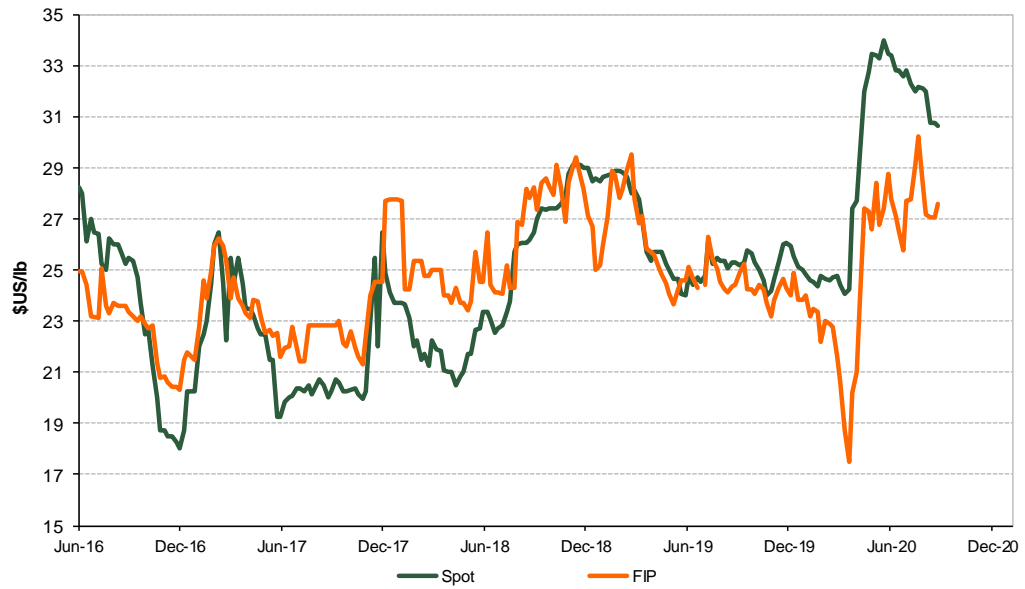
Source: UxC

**Exhibit 7. Uranium Prices – Spot, 3yr Fwd and 5yr Fwd**



Source: UxC

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



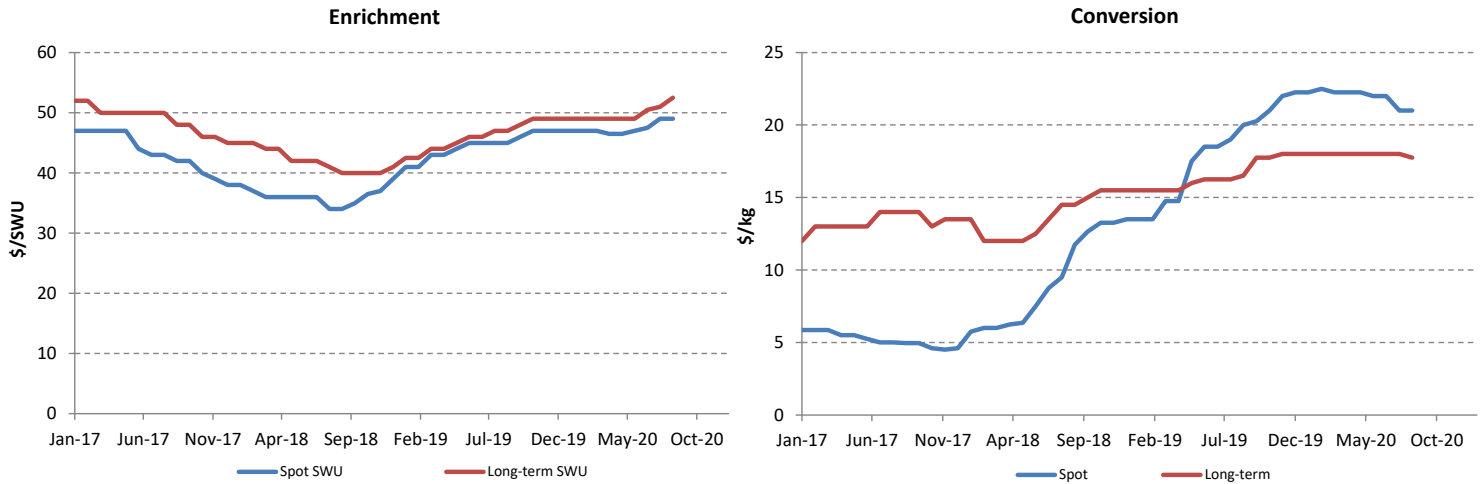
Source: UxC

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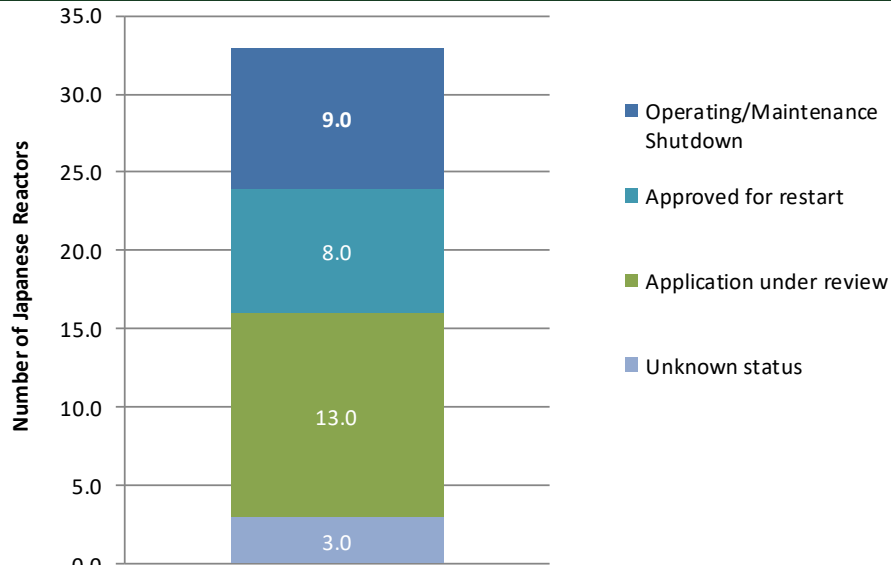
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**Exhibit 9. Monthly SWU and Conversion Pricing**



Source: UxC

**Exhibit 10. Japanese Reactor Status**



Source: UxC, Bloomberg, World Nuclear Association

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## Exhibit 11. 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	60	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>140</b>	<b>145</b>	<b>154</b>
YoY % change	12.2%	2.1%	-7.6%	-10.2%	1.7%	-14.7%	8.3%	7.8%	3.5%	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>168</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>-14</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>\$31.30</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.

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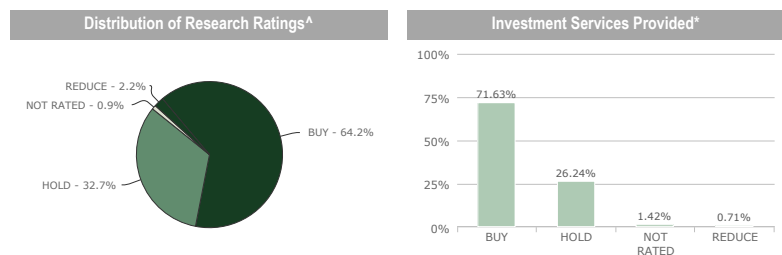
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