

# MZConsulting New Year's Message 2018



**2017 was another year of uncertainty for nuclear power. While efforts to save operating units in the USA are seeing some success, Westinghouse filed for Chapter 11 resulting in the cancelation of one of its US new build projects. On the other hand, Korean policy was challenged by the public as they supported continuing with new build and the German Energiewende is failing as nuclear plants are shut down.**

The spot price of uranium ended the year at \$22.32/lb, slightly higher than where it started the year; with the long-term price sitting at \$31. There was a short-term increase at the announcement by Cameco that it was temporarily stopping production at McArthur river. Now that suppliers have taken action to manage supply, the question is if this is sufficient for a price increase in 2018 or if a more negative view on demand will dominate.

	Price CDN\$	YTD (%)	1yr (%)	1yr (%)	1yr (%)	1yr (%)
Company	Dec 29/17	2017	2016	2015	2014	2013
Cameco CCO-T	11.61	-17.3	-17.8	-10.4	-13.6	+12.5
Denison DML-T	0.69	-1.42	0	-38.1	-12.4	-2.3
Forsys FYS-T	0.165	+50	+37.5	-52.9	-59.5	-47.5
Mega MGA-T	0.21	+50	+100	-44.0	+38.9	-25
Toro TOE-AX	0.042	+2.4	-37.9	-17.5	+9.4	-40.8
Paladin PDN-T	Delisted		-66	-25.4	-24.7	-59.5
Energy Fuels EFRT	2.26	+2.26	-46	-32.7		
Ur Part U-T	4.23	+11.3	+2.6	-0.40	-8.8	+4.6
UEX UEX-T	0.345	+40.8	-22.5	-47.4	-27.8	-33
Ur Energy URE-T	0.86	+21.1	-20.2	-10.1	-31.3	+73.5
Fission FCU-T	0.775	+21.1	-22	-4.7	-19.6	

\*June 12, 2017

## **Sustained low prices leaves uranium producers with few options**

The stock prices of the Canadian producers - Cameco and Denison, are once again in negative territory in 2017. That is symptomatic of a current supply-and-demand imbalance and Cameco's recent decision to suspend operations at McArthur River and Key Lake. However, Juniors such as Forsys, Mega, UEX and Fission, with highly prospective properties not in production, have done better in 2017 than previous years, particularly near year end as the result to announced production cutbacks by the largest players, Cameco and KazAtomProm. It is also perhaps indicative that, while the immediate

problem is oversupply, the market is finally seeing a brighter long-term future for uranium if suppliers can manage supply in the short term.

## **Crisis creates clarity in the role of nuclear power**

Effort continues to fight early closure for uneconomic plants in the deregulated parts of the US. New York and Illinois have taken decisions to support continued operations while discussion is ongoing in other states such as New Jersey. The Westinghouse bankruptcy resulted in the cancelation of one of its two US projects (Summer in South Carolina) while a positive decision to continue with the Vogtle plant in Georgia has been taken.

The US government has announced its withdrawal from the Paris climate agreement and to date, the Energy Secretary's proposal to support nuclear and coal for their resilience has failed.

On the SMR front Nuscale achieved an important licensing milestone and recently secured support from the NRC to approve its lack of back up power. This acknowledgement that its design is inherently safe provides a big boost to the potential for SMRs going forward. In Canada, Chalk River Nuclear Laboratory (CNL) published the results of its Request for Information (ROI) as it readies for the next step in potentially hosting a demonstration SMR plant.

Japan now has 5 units back in operation as it moves slowly towards bringing back further units as they are upgraded to meet new post Fukushima safety standards. More people are now able to return to their homes in towns surrounding Fukushima although many are not.

Germany remains committed to removing nuclear from its mix even as its Energiewende is failing. Another nuclear plant was closed permanently at the end of 2017. As the share of renewables in the mix is increasing as are electricity prices, there has been no improvement in carbon emissions.

This was the year that the myth of 100% renewables as a goal has started to crack. A paper by 21 prominent scientists was published to take issue with the well-known paper by Mark Jacobson that has suggested that 100% renewables is achievable in the US by 2050. Rather than address the criticism, Jacobson is suing, a shameful attack on the scientific process.

While the new president of Korea continues to push a policy that will eliminate nuclear over time replacing it with renewables and gas, a public jury set up to answer whether or not the two units under construction should be abandoned or completed decided by a strong margin to see these units completed. But now the president of the Korean utility KEPCO has had to resign over his lack of agreement to the long-term phase out policy. This has not stopped Korea from promoting exports. Its successful project in the UAE is near

operation and Nugen in the UK has decided to proceed with the Korean design for its project. There is no greater example than Korea of how a country can both benefit from nuclear power and excel at its implementation. Yet fear remains a dominant factor that can outweigh a range of strong benefits when considering options for the future.

The industry is united behind the WNA Harmony program targeting 1,000 GW of new nuclear by 2050 to reach 25% of electricity generation. As it becomes more and more apparent that renewables have a natural limit and cannot supply all the world's energy needs, the need for stable, reliable baseload low carbon supply will intensify.

### ***Focus on supply management***

With so much uncertainty the big uranium companies are focusing their attention on improving efficiency and managing supply.

Cameco has taken a big decision to stop production at the McArthur River mine and Key Lake Mill, the world's most prolific. They have laid off 845 people for a period expected to last 10 months to reduce supply.

Meanwhile, in December, Kazatomprom announced it will cut production by 20% over the next three years starting in January 2018 taking about 7.5% of total production out of the market.

### ***Big things happening in 2018***

2018 is expected to see some important milestones for the nuclear industry. The restructuring of both Westinghouse and the Areva nuclear business (now part of EDF) will be completed. It is also anticipated that the first units in the UAE are likely to load fuel and start down the path to production. And the first new Generation III reactors are nearing completion as China expects to complete its first AP1000 and its EPR at Taishan and EDF is also making good progress at Flamanville.

### ***About MZConsulting***

MZConsulting advises governments, utilities and others interested in new build nuclear and investment in uranium companies.