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ALTERNATIVE ENERGY

Burgeoning nuclear industry forced to dig deep for uranium

MARKET INSIGHT

The nuclear energy industry looks set for significant expansion with the price of oil surging and concerns about the environment increasing. However, there is a problem in that demand for uranium is outstripping supply.

Uranium prices have risen sharply in the past three years, attracting new risk capital and speculators and promising significantly higher earnings growth for existing players.

Nuclear energy accounts for 16 per cent of global power generation but capacity is increasing. There are 441 commercial reactors operating worldwide with 23 reactors being built in 11 countries.

China plans to build two new reactors each year while India has eight reactors under construction. Japan and Korea are also committed to strong growth in nuclear capacity. Dundee Securities believes there is potential demand for another 160 reactors worldwide.

The imbalance in the uranium market is not new. Consumption has outgrown primary (newly mined) supply for the past 10 years but the deficit has been satisfied by secondary supplies (existing stocks), mainly from Russian sources. The perceived abundance depressed uranium prices before 2001 and led to a lack of new mine development. However, the maximum available secondary supply covers only eight years of current reactor requirements, according to the World Nuclear Association.

The WNA model provides scenarios for the market, including projections for supply and demand growth. But, under its central case, a deficit will persist until 2015. On this scenario, global demand will rise from 182,400lbs of uranium oxide in 2006 to 211,959lbs by 2015, with demand exceeding supply in each of the next 10 years.

It is little surprise that prices are rising. Uranium oxide is trading at $37.50 a pound, up from less than $10 a pound in 2002. Prices are expected to reach about $40 a pound by the end of the year.

Uranium producers appear set for strong earnings growth as existing contracts roll off to be replaced by new arrangements, which lock-in higher price floors and provide exposure to further spot price gains.

As the world's largest and lowest cost integrated uranium producer, controlling about 20 per cent of global output, Cameco, a Canadian company, will be a big beneficiary of this trend.

RBC Capital Markets forecasts that Cameco's net earnings will grow from C$218m in 2005 to C$815m by 2008. About a quarter of Cameco's existing contracts roll off each year, so the full benefit of current high prices will be realised from 2008. Its shares have risen 611 per cent over the past three years.

The top eight producers control nearly 80 per cent of the world's mined uranium, so the market is highly consolidated. However, the supply response to high prices from the majors is expected to be relatively slow. The largest new mine, Olympic Dam in Australia, controlled by BHP Billiton, is not expected to start production before 2011. Output is forecast to rise from 3m pounds at start-up to 22m pounds by 2017.

Cameco has a 70 per cent interest in McArthur River, the world's largest high-grade deposit with 437m pounds of reserves, and a 50 per cent stake in a second high-grade mine, Cigar River, which is expected to start production next year and produce about 18m pounds of uranium oxide by 2010.

Little additional uranium production is expected from new mine developments until 2007 at the earliest. However, the spot price appreciation has attracted new entrants and significant amounts of fresh risk capital. UrAsia, a miner, raised $425m in November 2005 to acquire interests in three projects in Kazakhstan plus seven exploration licences in Kyrgyzstan. UrAsia plans to list on London's Alternative Investment Market in February. Also trading on Aim, Vane Minerals, which raised £3.7m in June 2004, is undertaking exploration work in Colorado.

Denison, a Canadian group, has supplied the industry for 50 years. It produces 1.3m pounds of uranium a year and has 10 years of reserves. Its share price has risen 220 per cent since it was spun out of Denison Energy in March 2004. Haywood Securities forecasts Denison's earnings will rise from C$0.9m in 2005 to $26m in 2007.

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