

Standard and Poors: Nuclear Power Carries High Business Risk

Financing counts for more than nuclear enthusiasm so this is a good analysis

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While junior uranium explorationists and newsletter writers proclaim the second coming of nuclear power, the reality of permitting, financing and building nuclear power plants might prove daunting.

In the research report, "Credit Aspects of North American and European Nuclear Power," issued Monday, Standard & Poors credit analysts suggested that nuclear generation generally carries "the highest overall business risk compared with other types of [power] generation." In fact, the decommissioning risk is probably one of the most critical obstacles facing the nuclear power industry, according to S&P.

To put off dealing with the issue of decommissioning, many plant owners are seeking license extensions and are refurbishing existing units, according to S&P Credit Analysts John Kennedy in New York, Andreas Zsiga in Stockholm, Laurie Conheady in Toronto and Paul Lund in London.

TRENDS

While no new nuclear plants have been built in the U.S. since the mid-1980s, utility companies and the federal government have tried to encourage new construction. "Still, this support may not be enough to mitigate the risks associated with operating issues and high capital costs that could hinder credit quality," noted S&P. Even if U.S. application processes are streamlined, "a new license would probably not be issued before 2010."

The Energy Policy Act of 2005 has tried to help reduce costs associated with nuclear investment and provided tax credits. However, S&P explained that the credits can only be applied to the first eight years of plant operation and are limited to a total of \$125 million per 1,000 megawatts of capacity. The act also extends the Price-Anderson Act limiting operator liability for nuclear accidents, and modifies the tax treatment of trusts used to decommission nuclear plants that are not in a rate base.

While S&P noted "these events create some sort of supportive platform for a nuclear renaissance in the U.S., it may not provide sufficient incentive to pursue new construction. From a credit perspective, these legislative measures may not be substantial enough to sustain credit quality and make this a practical strategy."

Canada's need to meet rising power demand and close coal-fired power plants in the province of Ontario, and replace aging nuclear plants in Ontario and New Brunswick, could mean the nation will undertake new nuclear power projects, according to the report. S&P predicts that "the province most likely to build new nuclear generation is Ontario. ...However, whether or not new plants will be built depends on the advice provided by the province's long-term electricity-planning body, the Ontario Power Authority."

"If nuclear power is the answer, an issue for the sector is that decisions will be required to be made in the next few years to allow adequate time to replace or refurbish a number of existing nuclear assets that are due to reach the end of their useful lives in the early to middle part of the next decade," the analysts suggested.

In the meantime, S&P called the outlook for European nuclear power "bright."

"Since it is driven by high gas and carbon dioxide emissions allowance prices, nuclear operating margins have increased substantially. The increase in nuclear fuel prices seen in recent years has only marginally tempered enthusiasm," said the analysts. "Furthermore, political sentiments have become more positive toward nuclear generation because of high oil prices, the raising abatement costs for reducing carbon dioxide emissions, and the concerns over security of supply resulting from the dependence on gas imports from non-EU countries."

"But the question is, if a change in political sentiments and improved profitability will be enough to result in a nuclear renaissance?" the analysts asked. "Developing new nuclear generation in the deregulated European market environment is a high-risk venture, given the long construction times and high capital costs. Siting issues are likely to be more sensitive today than in the 1970s and 1980s when most reactors were built. Furthermore, political support will remain fragile to nuclear safety performance worldwide."

S&P warned that "another Chernobyl-like accident can rapidly cool the current cordial sentiments. Fundamental issues, such as the final storage of nuclear waste and far-reaching social consensus, are still likely to be required before a potential large-scale renaissance can happen."

However, a new nuclear reactor is being built in Finland while one in France is in the advanced planning stages. Nevertheless, S&P believes that investments in new nuclear generation in Western Europe will be limited and, instead, directed toward lifetime extension and increased capacity. Slovakia and Bulgaria are among the Eastern European governments now trying to promote new nuclear power capacity.

CONSOLIDATION

Since 1999, U.S. nuclear plant ownership has consolidated, mainly among six large utilities, Exelon, PSEG Energy Holdings, FPL Group, Dominion Resources, and Constellation Energy Group. S&P's analysts asserted that "there is a strong probability that more nuclear plants could be sold and good chance that ownership could become more concentrated."

In Canada, nuclear power ownership is concentrated in province-owned utilities. The Canadian nuke power group has three owners and four operators with Ontario Power Generation owning about 90% of the nation's nuclear capacity. The fourth major player is Bruce Power, a consortium comprised of Canada's largest uranium miner, Cameco, TransCanada Pipelines, and the BPC Generation Infrastructure Trust.

In Europe, nuclear power assets are also concentrated. In France and Belgium and all Eastern European countries, all nuclear assets are owned by a single company, according to S&P. The analysts believe that nuclear power plant projects in Eastern Europe "could attract interest from Western European utilities aiming at increasing their nuclear know-how, and invest in nuclear without stirring controversy in their core markets."

REGULATION

S&P analysts found the decommissioning risk greater in the U.S. "because underfunding cannot be recovered through a regulatory process."

Meanwhile, Canadian nuclear generators benefit from regulated prices or price support mechanisms, according to the report.

In Europe, nuclear operators are not offered any regulatory protection as a consequence of the deregulation of European power markets. "This implies uncertainty about the ability to recover costs, including decommissioning costs," the analysts said. "In addition, operating risks is high, and has a political dimension in jurisdictions where the attitude toward nuclear is negative (as demonstrated by very high safety requirements and prolonged regulatory related outages for some German nuclear plants)."