

Candole challenges Temelin 3/4 economics

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Plans by Czech power giant CEZ to add two new reactors to its Temelin nuclear plant are economically unviable in the light of its declining profits and an overhang of debt from past and ongoing projects, according to a study by Prague-based consultancy Candole Partners.

The study looks at the state-controlled power company's likely financial situation in the run-up and aftermath of a decision on whether to proceed with the around Koruna 200 billion (€8 billion) expansion as well as the potential of the two units with minimum capacity of 1,000 MW to earn enough revenues to cover construction, operational and decommissioning costs over their lifetimes.

The stark outcome of the study is that there is a less than 46% likelihood that the Temelin expansion will turn even the most meagre profit, far below the around 95% certainty usually demanded by investors for projects with a long time-line to be approved, according to the analysis, presented January 17. "The conclusion is that the plant lacks economic justification and would likely be a losing investment," explained consultancy partner Jan Ondrich.

One of the main problems identified is that CEZ is currently trying to do too much at the same time. In addition to its plans to develop around 3,000 MW of wind power capacity in Germany, Poland and Romania, CEZ is building a coal-fired plant at Ledvice plant, two gas-fired plants at Melnik and Pocerady and a new CHP plant at Prunerov in the Czech Republic as well as new CHP units in Poland. Other ongoing projects are planned CCGT units at Dufi in Hungary, as part of its JV with MOL, and at Hatay in Turkey through its Akenerji JV. There is also the possibility of a new Slovak nuclear power plant at Jaslovske Bohunice resulting from its JV with Slovak state company JAVYS. A study on the prospects for the latter project should be delivered by the end of this year.

"CEZ is trying to handle too many things simultaneously," said author Ivan Kotev, pointing out that construction of some of the projects will continue into 2016, and in the case of Bohunice for at least another decade, with the financial burden continuing for longer.

With CEZ unlikely to raise any significant sums from divestments, it puts the spotlight on its ability to raise revenues itself and meet the shortfall from loans. Here, the Candole study highlights CEZ's declining net profits, which have shrunk every quarter, compared with the year earlier equivalent, since the start of 2009. On top of that, CEZ has to repay bonds worth around €5.6 billion by 2025, the target date for the commissioning of the second of the two new reactors, and faces longer delays in recovering payments from customers.

Candole reckons its assumptions in trying to calculate the economic justification of the Temelin expansion are generous as it does not factor in delays to construction, stricter regulatory requirements, higher insurance premiums, transmission improvement fees and the costs of a nuclear waste repository. The around €480 million costs of grid upgrades caused by Temelin are being covered by the Czech state-owned high voltage network company CEPS.

On the key issue of borrowing costs – one of the biggest burdens stemming from the proposed investment – the analysis assumes CEZ will cover 30% of the costs itself and seek loans, at the usual stipulated interest rate of 7.5%, for the remaining 70%. The study builds in an average annual rise in electricity prices of 2.5%, even though in recent years real price advances have usually undershot expectations. It found that electricity prices would have to be around three times current levels throughout the lifetime of the new reactors, at around €169/MWh for them to break even.

Ondrich says the Czech government, which has backed the Temelin expansion project in the face of growing pressure from Austria and Germany to abandon it, might seek to give loan guarantees to ease the financial burden on CEZ's borrowing. Some sort of guaranteed prices for nuclear-produced electricity, similar to the incentives in the past given for renewable power which the Czech government is now trying to avoid at all costs, might also be considered, he suggests. Both options could, however, be challenged by the European Commission if they appear to be market distorting state-aid.

CEZ, or rather its main shareholder, the state, could of course simply decide that the political stakes outweigh the economics and give Temelin the go-ahead. The risk if that were to happen, commented Ondrich, is a revolt by minority shareholders that the state is sacrificing their interests for its own.

CEZ told Platts said that it had not seen the study and could not comment in detail. The company is preparing to eliminate risks and a better picture of the situation should follow bidders' offers regarding financing and the state's contribution to cutting risk, spokesman Ladislav Kriz added. Many experts and studies had predicted 20 years ago that building the first two Temelin reactors would ruin the company but that had not happened, he recalled. Bids to build the new reactors should be submitted by Areva, Westinghouse and a consortium of Atomstroyexport and Skoda JS by July 2 with a decision on the contract due by the end of 2013.