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Statement for the public hearing on June 17th, 10.30-12pm for the Committee for Economic Affairs and Energy on the topic "State-aid for Hinkley Point C"

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The decision by the EU's Competition Commission to approve the funding for the Hinkley Point C (HPC) nuclear power plant is both incorrect and premature. The appropriate course for the European Commission now would be to nullify its approval and await the final details of the deal before carrying out a more rigorous review of the project funding.

The deal

A provisional deal was announced in October 2013[1] to build two nuclear power plants of the AREVA European Pressurised Water Reactor (EPR) at the Hinkley Point site. A UK state-owned body, the Low Carbon Contracts Company, would buy all the power from HPC for 35 years at a price that would go up in line with inflation. The price paid, under a Contract for Differences (CfD) would start at £92.5/MWh (in 2012 money), reported to be at least double the wholesale price at the time. The deal commits the British government to pay the plant owners about £77bn over the period of the contract.

The government has committed to provide sovereign loan guarantees for the borrowing required for the plant expected to amount to £17bn. This effectively means the financiers (through borrowing or bond issues) will be lending money to the UK government and, given the high credit rating of the UK, the cost of capital will be very cheap, representing a huge public subsidy. These guarantees will come from a four-year programme of sovereign loan guarantees, worth £40bn, announced in 2012 to guarantee major infrastructure projects, for example, in the energy, transport, education, housing and telecoms sectors.[2] HPC, which has prequalified in this scheme, will by itself, therefore consume more than 40 per cent of the guarantees available.[3]

The additional cost over and above the prevailing electricity market price would be paid for by a levy on consumers. First power was forecast for 2023. The plant would be owned and operated by a consortium, NNB Genco, yet to be established but expected to be led by the French state-controlled utility, Electricité de France (EDF), and to include Chinese investors, the reactor vendor AREVA and other investors yet to be identified.

[1] https://www.gov.uk/government/news/initial-agreement-reached-on-new-nuclear-power-station-at-hinkley
[2] https://www.gov.uk/government/news/government-uses-fiscal-credibility-to-unveil-new-infrastructure-investment-and-exports-plan
[3] https://www.gov.uk/government/publications/uk-guarantees-scheme-prequalified-projects/uk-guarantees-scheme-table-of-prequalified-projects

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This deal is a major precedent both for the UK and for other countries in the EU. In the UK, NNB Genco also plans to build a similar station at the Sizewell site while the Horizon consortium plans to build four reactors and the NuGen consortium expects to build three reactors. If the model planned for HPC is not viable, these projects are highly unlikely to go ahead. Outside the UK, about a dozen Member States have stated their desire for this model of funding to be available to them to fund their own nuclear programmes.[4]

The case

There are at least three grounds on which the decision is incorrect:

1. Lack of competitive procedures. The deal was the result of bilateral negotiations between the British government and EDF. The other two consortia, Horizon and NuGen, are not yet in a position to proceed and could not bid, while there was no attempt to establish whether the HPC deal was the most cost-effective way of meeting the objectives of meeting climate change goals and ensuring supply security it was claimed the project would meet. There was no test to determine whether, for example, energy efficiency measures or renewables, would be more cost-effective.
2. Fixed, non-market related power purchase agreement. It would be hard to think of purchase measures that are more destructive of the Commission's objective to create a Single European Market in electricity than the HPC deal. The purchase price is completely outside the market and if the nuclear plants the British government has said it would like to see ordered are built, that would represent at least 35 per cent of the electricity market pre-empted by nuclear power and not open to the competitive market. The Commission's revised guidelines on state-aid for the electricity sector that came into force in July 2014 recommend that: 'market-based instruments are the most important tools to achieve environmental and energy objectives.'[5] This deal runs completely counter to these objectives.
3. Pre-emption of public funding. The UK government is also funding the construction of renewables using CfDs. However, these contracts are typically only for 15 years, have not been allocated loan guarantees and were awarded after a competitive bidding process. The money to pay for these contracts will come from the same pot as the subsidy for HPC. The budget has yet to be finalised more than 5 years forward. The much longer lead-time for nuclear means that commitments for nuclear will have to be made well before commitments for renewables to come on-line in the same year must be made. There is therefore a strong risk that, if the UK government's nuclear programme goes ahead, there will be few funds left to pay for renewables, even though they might be more cost-effective than nuclear.

The main grounds for the Commission stated for accepting the deal appear to be that there will be a market failure that will mean nuclear power would not be built if left to the

[4] https://www.gov.uk/government/news/uk-at-forefront-of-european-nuclear-expansion
[5] http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014XC0628(01)&from=EN p 14

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market and the UK's assertion that Member States have a right to determine fuel mix for electricity generation. Neither ground stands up. The Commission defines market failures as: 'situations in which, markets, if left to their own devices, are unlikely to produce efficient outcomes.'[6] Neither the British government in its submission, nor the Commission in its evaluation provides any evidence that building nuclear power plants under the terms proposed would represent an efficient outcome. The right to determine fuel mix runs completely against the objective of a Single European Market in electricity. If Member States determine their fuel mix this will effectively return the European electricity system to the position that prevailed before the passing of the Electricity Directive in 1996 of national systems heavily influenced by government fuel choices.

The concessions that the Commission extracted from the UK government have minimal value. The higher provisions to pay the government back if the project comes in at below forecast cost are worthless. The number of nuclear power plant projects that come in under cost and ahead of time is very small. The vast majority come in late and significantly over-budget. Of the 18 reactors under construction around the world using designs that would be expected to meet European standards, 16 are at least two years late. The fee for the loan guarantees expected to cover all the borrowing required for HPC, expected to be about £17bn, was increased from 2.45 per cent to 2.95 per cent. This will cost the developers only £85m, an insignificant sum in the context of a project expected to cost £24.5bn.The revised ownership of AREVA (see below) being negotiated in June 2015 is expected to lower the credit rating of EDF[7] and this should be reflected in a higher fee.

Approval is premature

The deal announced in October 2013 and on which the Commission's verdict was based is no more than agreement on indicative terms. Either side could walk away tomorrow with no penalties whatsoever. The expected completion date for the first reactor of 2023 implies construction start in 2018 with perhaps a year before that for preparatory work and measures. So a final investment decision is not required before 2017. Indeed it would be foolhardy of EDF to make such a decision now and leave itself exposed to project price increases it could not pass on to consumers.

The indicative composition of the NNB Genco consortium announced in October 2013 was EDF with up to 50 per cent, two Chinese companies, CNNC and CGN with up to 40 per cent between them, AREVA with 10 per cent and other investors, yet to be identified taking up to 15 per cent. By March 2015, none of the members of the consortium other than EDF had made a firm commitment to participate. The dire financial condition of AREVA then became apparent and by June 2015, negotiations were still under way to find new owners for AREVA's reactor division. EDF was expected to be the main investor with Chinese companies and Mitsubishi also potential involved. The French government was said to be

[6] http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014XC0628(01)&from=EN p 13
[7] Moody's 'EDF's anticipated acquisition of AREVA NP majority stake could be credit Negative' June 4, 2015

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willing to pump significant new capital into the rescued company[8], but this would clearly require a state-aid investigation as well as investigation of anti-trust issues given that AREVA is the only reactor vendor still based in Europe and EDF is the largest market in Europe for reactor services. It is not expected that a rescue deal would be approved before end 2016. It is hard to believe that AREVA could take its expected 10 per cent stake, while the potential Chinese investors are reported to be asking for concessions that will be difficult to meet. These include protection from any losses the project might make, for rights to supply a significant proportion of the supply chain, as well as being able to acquire a UK site, Bradwell, where they could build reactors of Chinese design.

The consortium is therefore far from finalised and if, as seems a serious risk, it cannot be assembled, the project will collapse. Until the composition of the consortium is known, the cost of borrowing, the appropriate fee for loan guarantees will not be known and the purchase price will not be able to be finalised. The prevailing interest rates on international markets could change. The expected construction cost could also increase in real terms. Only a week before the October 2013 announcement, EDF was briefing the press that the construction cost of the two reactors (excluding finance) would be £14bn, yet a week later, the cost had risen to £16bn.

The technology is also highly problematic. Four reactors of this design have been ordered, the first in 2003, but none is yet in service despite construction starting between 5-10 years ago. A reactor in Finland, Olkiluoto, is now at least nine years late and three times over-budget, one in France, Flamanville, is also three times over budget and at least five years late and two in China are two years late but no cost information is available. Serious faults with the reactor pressure vessel[9] for the Chinese and French reactors were found in March 2015 and it will not be known whether these projects have to be abandoned until early 2016. In June, potentially serious faults with the pressuriser valves were also found.

Given this appalling record, until there is much greater assurance that the EPR can be built somewhere near to time and cost and would operate reliably, it would appear foolhardy to choose such a design. Indeed, it is far from clear that a reconstituted AREVA reactor company would continue to market the EPR given the significant role this design has had in bringing the company to its knees.

Conclusion

The Commission decision bears all the hallmarks of a rushed decision driven by political expediency. The final details of the HPC deal are probably two years from being determined. Given the very significant precedent allowing the HPC deal would create, only when these details are available, the Commission needs to carry out a much more rigorous and well-directed investigation.

[8] http://next.ft.com/90d3f2ea-0a13-11e5-a6a8-00144feabdc0
[9] Power in Europe 'Flamanville-3 flaws 'very serious' June 8, 2015, p 1

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