



# STRATEGIC FILE

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## Straw in the Wind: State Aid for Nuclear Energy in the UK and Lessons for Visegrad Countries

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*With as many as 12 EU Member States currently considering investment in nuclear builds, the European Commission's decision finding the UK's support for the Hinkley Point C nuclear plant as being compatible with the EU state aid law was met with relief not only by Whitehall, but also by governments across the European Union. Yet latest EU–British settlement is a point of reference, not a silver bullet. EU countries interested in new nuclear power plants, including those in the Visegrad Group, should draw lessons from the Commission's decision, and at the same time explore variant possibilities of state support.*

### The UK's Contract for Difference

In October 2013, the British government reached an initial agreement with NNB Generation (NNBG), a subsidiary of EDF, regarding the construction and operation of a new nuclear plant at the Hinkley Point site in Somerset. The investment, which if successful will constitute the first new nuclear energy plant in the UK since 1995, has provoked enormous controversy in the UK, and has undergone a long and cumbersome process of consultations and approvals related to environmental law, safety standards, and more.

The rather bleak recent track record of nuclear investments in the EU has led the British government to conclude that, in order to ensure that new nuclear plants are built in the UK, it is imperative to come up with a financing model that would properly protect the incentives for the investor as well as safeguard it from the excessive risks linked to this challenging sector. This, in turn, was the basis for the contract for difference (CfD), aimed at giving the low carbon electricity providers more stability and economic security. The arrangements basically fix the price (called “the strike price”) that investors will obtain for electricity provision over the agreed time period.

While it seemed that the conclusion of an agreement on principle between the UK and NNBG would mark the final major regulatory step, and at the same time would constitute the starting point for construction efforts, the state aid aspects of the potential contract between the UK and NNBG became the subject of fully fledged investigation opened by the European Commission in December 2013. In this case, the EC had to verify whether the project passes a two tier test of 1) addressing a common (widely defined) EU objective, and 2) complying with the conditions requiring that state support a) is indeed indispensable in

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achieving the pursued objectives (necessity); b) there is no other, less intrusive instrument, that a state can employ to achieve the objectives (appropriateness); and finally c) the amount of aid granted does not exceed the absolute minimum needed to achieve the aforementioned objectives (proportionality). Despite the strong initial scepticism indicated by the Commission in its decision to initiate an in-depth investigation, it concluded on 8 October 2014 that modified UK measures for Hinkley Point C were compatible with EU rules.

## **A Balanced Compromise**

The arguments presented by the Commission have shed some light on many elements of how nuclear energy can be supported in the EU. First, in order for the measure of state aid to be compatible with EU law, it has to meet the requirement of addressing a common EU objective. From the political point of view, this issue raises the most controversy. For those who oppose nuclear power (on safety or environmental grounds), including several EU Member States and environmental NGOs, nuclear is not perceived as serving EU objectives. At the same time, the Euratom treaty, part of the EU legal architecture, aims to promote and facilitate nuclear investment. In its decision, the European Commission confirmed that, due to the role assigned to nuclear energy by the Euratom treaty, investments in nuclear capacity are indeed addressing a common EU objective.

With regards to the three criteria of necessity, appropriateness and proportionality, the Commission recognised that state support is indispensable in order for the Hinkley Point C project to come to fruition. Due to its unparalleled financial scale, the investment would not be able to find financing purely from private sources, as the market is unable to accommodate an investment of such scale and within such a time framework. Furthermore, the scale of the investment has been considered as sufficient and reasonable justification for the lack of an open tender procedure. The arguments made by the British government, which tried to encourage multiple offers but was only approached by the EDF-owned NNBG consortium, were accepted by the European Commission. With regards to the form of aid used, it was considered that the instruments used (risk guarantees and price support through contract for difference) were chosen appropriately when taking into account both the scale and the lengthy time framework of the HPC project.

## **Proportionality First**

At the same time, the most ardent criticism levied by the Commission was clearly addressed at the proportionality of aid, in particular at the very generous conditions relating to the strike price and the discount rate, coupled with far-reaching risk reduction provided by state guarantees. Based on the agreement concluded between NNBG and the British government, the future nuclear provider has been granted a credit guarantee, a political risk guarantee to protect it from any potential shift in policy towards nuclear energy by a future government, and a contract for difference guaranteeing the price obtained by the NNBG for the energy produced by Hinkley Point for the 35 years following its commercial start, regardless of the price on the market. For that reason, a special public entity responsible for processing payments to (or receiving from, in case the market price is above the agreed strike price) NNBG has been created. The entity will be financed by consumers through a feed-in tariff integrated in electricity prices. The strike price has been established on the basis of market price forecasts and has been set in a way to ensure a reasonable rate of return that would provide an incentive for NNBG to construct a nuclear plant. That being said, the financing model is designed so that the company is close to guaranteed to obtain a satisfactory level of return, which will be financed by higher electricity prices paid by the British consumers. The decision on what exactly should be the “reasonable” or “satisfactory” level of return, and, as a consequence, what the strike price should be, was therefore understandably a very controversial one.

Following in-depth analysis of the financial side of the deal, the European Commission was firm in its assertion that the conditions agreed by the EDF and Whitehall were not proportionate, in that they provided the consortium with profits above the level strictly necessary to incentivise EDF to invest in Hinkley Point C. As a result, it took six months and numerous updated proposals for the British government, working closely with the Commission’s officials, to finally come up with a financing structure that was more adequate to the true risk profile of the investment. The result of these negotiations was

threefold. First, the price paid by NNBG for the credit guarantee provided by the British government has increased by €1 billion. Secondly, a claw back mechanism for construction costs has been introduced, according to which construction cost savings above a certain threshold will be divided between the company and the public entity in charge of CfD. Thirdly, the adequate rate of return has been decreased, and a two-tier claw back mechanism has been introduced for windfall profits above the agreed rate of profit. More specifically, two profit thresholds have been established. Every penny of profit earned by the EDF above the first limit will be divided equally between the company and the CfD public entity, with the proportion changing to three quarters of every penny going to the public entity when profits surpass the second threshold. In turn, this will allow the entity to decrease the burden of payment on British citizens. Following those changes, the Commission found the new proposal to be proportionate, and therefore the state aid support measures were judged to conform to EU state aid rules.

## Lessons for the Visegrad Countries

While the Commission underlined that the Hinkley Point C decision will not create a blueprint for further cases concerning nuclear investments, the green light given by Brussels offers some clarity in a field that had previously been riddled with uncertainty. Because of this, for the decision has long been awaited by countries committed to new nuclear investments, including those in the Visegrad Group. They constitute a major pro-nuclear bloc in the EU, yet their approach to facilitating and encouraging new nuclear builds varies significantly.

Currently only Slovakia is building new nuclear blocks (Mochovce 3 and 4). Slovenské elektrárne a.s. handles the investment.<sup>2</sup> But the company is currently in the process of being sold, and the new investor should provide sources of debt funding. The need for this is augmented by the Mochovce investment, as the project has been plagued by delays and cost overruns, partly due to increased EU safety concerns following the Fukushima disaster in 2011.

The Czech Republic had ambitions to extend Temelin by two units, but last year, the day after the government had refused CEZ's request for CfDs, the tender was cancelled. Currently the country aims to build two blocks (at Temelin and in Dukovany) and is discussing whether and what kind of state commitment is needed. CfDs are on the table.

The Czech perspective comes close to the state of affairs in Poland, where it is admitted that expansion of the nuclear sector requires strong and sustained government support. However, it has not yet been determined that Poland will choose CfDs.

A very different approach is taken in Hungary. The Russian-Hungarian intergovernmental agreement stipulates a €10 billion loan from Russia for the Paks nuclear plant expansion. Yet this raises serious doubts about compliance with EU competition law and the Euratom treaty. All in all, it is beyond doubt that, sooner or later, each of the Visegrad countries will have to come up with a viable financing model commensurate to their plans.

Irrespective of their final choice, Visegrad countries should derive lessons from the final decision on CfD at Hinkley Point C, regarding the kinds of conditions the Commission was willing to accept. The recognition that investments in nuclear power meet the requirement of addressing the common EU interest as per Euratom treaty is of particular importance. As a result, governments that consider providing state aid to nuclear projects can rely on the Euratom provisions, and can therefore focus resources on proving that a market failure requiring intervention exists, and that the proposed solution is adequate and proportional.

This might be easier said than done, as the analysis undertaken by the Commission was very case specific. In particular, state aid to nuclear investment was entirely derived from the impossibility in the UK of finding private financing for a project of such scale. In consequence, just as the fact that the Olkiluoto III nuclear energy facility in Finland is financed without state support had no impact on the conclusions of the Hinkley Point C decision, future investigations will similarly focus on country, market and project specific conditions in assessing whether or not there a market failure exists in a particular case. It is of course reasonable to

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<sup>2</sup> An electric utility owned by Italian Enel Produzione S.p.A. (66%) and The National Property Fund of the Slovak Republic; Enel's assets are currently in the process of being sold.

assume that, having recognised that nuclear investment on such a scale would fail to attract the required commercial financing in the UK, the European Commission will accept similar arguments coming from V4 countries, as the latter have much weaker capital markets. At the same time, it has to be recognised that, in general, the Hinkley Point C decision provides no template that would allow the Visegrad governments to sidestep constructing a comprehensive, in-depth argument about the merits of their case.

While the final outcome of the investigation is of course driven by case specific considerations, the text of the decision can serve as a useful “roadmap” for guiding efforts aimed at building a case in favour of state support for nuclear investments among the Visegrad countries. Of particular importance, as showcased by the Hinkley Point C saga, is the issue of proportionality, or of ensuring that the subsidy is the minimum necessary and that it will not result in an undue burden on consumers. The level of analytical and financial sophistication required by the Commission and the heavy involvement of experts from the chief economist’s team at the Directorate General for Competition, clearly show that considerable attention and expertise have to be dedicated to ensuring that the costs to consumers are minimised. In this context, the experience of the UK government may prove invaluable for those Visegrad countries what choose to follow the CfD model. One can identify several elements that allow rationalising the costs of nuclear investment financing through CfD. Among them, claw back mechanisms play a central role and appear to be a tool that the Commission favours, for they were mentioned in the (discarded) draft nuclear chapter of the Energy and Environmental Aid Guidelines. What is more, the decision gives some (even if strongly context-specific) insights into what the Commission considers as constituting an adequate rate of return for an investment of such a scale.

While the European Commission's decision should be welcomed in pro-nuclear EU capitals as an encouraging sign, two caveats apply. First, the College of Commissioners was strongly divided over the issue, leading to a rare instance of a competition decision being decided by a vote rather than by consensus. Member States that are the staunchest opponents of nuclear energy are keen to take actions to ensure that the Hinkley Point C decision was an exception rather than the new norm. In particular, the Austrian government has already announced that it will challenge the decision in the European courts. While this decision is a result of lengthy, meticulous analysis and fine-tuning, with respect to both its legal and economic aspects, there still remains some risk that it might be overturned. The second issue is more general, that it could prove to be a naive mistake not to heed the finer, more nuanced lessons from the Hinkley Point C proceedings. While the Commission indeed decided that the measure does comply with EU state aid law, it required the EDF and the Whitehall to alter the terms of their original agreement considerably, in order to be in line with the economic principles guiding state aid enforcement. As a result, the issues of strict and precise delineation of market failure, of proper design of the measure so that it addresses only this failure while preserving the market forces as much as possible, and of preventing overcompensation, should be the guiding lights driving the attempts by Visegrad governments to introduce nuclear energy in V-4 countries.

## **A Broader Take on State Backing**

The high capital cost, long construction period, and long return on investments make a nuclear project, in respect to finance, unique. To this day, it is probably correct to say that no truly privately financed nuclear power plant has ever been built.<sup>3</sup> Therefore, the CfD model offers a very interesting approach to how a state may back nuclear investment, but saying that it is a blueprint would be an overstatement. In spite of the current trend to promote CfD, providing conditions to investors wishing to invest in a nuclear power plant (particularly for the first unit) may take different forms too. Governments may provide financial guarantees, such as the concept of an overrun guarantee, introduced by the U.S. government. For some countries, especially in deregulated markets, long-term power purchase agreements can reduce risks by ensuring long revenue flows. Moreover, governments may utilise specific revenues or funds, for example Polish Investments for Development (Polskie Inwestycje Rozwojowe) or the European Fund for Strategic Investments. Taking into account the fact that major Visegrad energy companies are partly state-owned, the room to manoeuvre in ownership policy (with regard to dividends) may be an important factor in

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<sup>3</sup> *Issues to Improve the Prospects of Financing Nuclear Power Plants*, IAEA Nuclear Energy Series No. NG-T-4.1, Vienna, 2009, p. 3.

facilitating investments. Last but not least, budgetary revenues generated through auctions in the Emissions Trading System should be taken into consideration.

It is perhaps worth mentioning that the British financing model of coupling CfD with numerous state guarantees is considered to be among the costliest for consumers. Conversely, its proponents argue that it offers the best chances for the investment to be concluded on time and to budget. It is up to the V4 governments to decide where their priorities lie, and to choose a financing structure that best fits the broader circumstances of the energy markets, long-term energy strategy, and budget realities. At the end of the day, each state's objective, regardless of the chosen model and state aid proceedings, should be ensuring that successful investment in nuclear energy comes at the lowest possible cost to the consumers, while offering the highest possible return for each penny spent from the public purse.