

Financing Hinkley Point C

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1. Introduction

EDF was subject to severe criticism at hearings carried out in June 2020 by a French regulatory body, Autorité des Marchés Financiers (AMF),³ followed up by further censure by the French public audit body, the Cour des Comptes. These bodies exposed what was known perhaps as far back as 2016, that EDF has no credible means to finance the Hinkley Point C (HPC) project. As a result of EDF not informing its shareholders of this problem, AMF handed down a fine of €5m to EDF and of €50,000 to Henri Proglio.

In short, the mission of the AMF is to look after the interests of shareholders, while the mission of the Cour des Comptes is to audit the use of French public funds. So the French government, as majority shareholder for EDF (83.7%) is covered by both bodies.

Our concerns are the interests of British electricity consumers and taxpayers, how well EDF has informed the British public about a project that entails huge financial risks to them, how well EDF kept the British and French governments informed and how well, in turn, the British government has monitored the project and informed the British public of its actions.

2. The AMF

2.1. The AMF's remit

The remit of the AMF is:⁴

The Autorité des Marchés Financiers (AMF) regulates the French financial market-place, its participants and the investment products distributed via the markets. It also ensures that investors are properly informed and is a driving force behind regulatory change at both European and international levels. As an independent public authority, it has regulatory powers and a substantial level of financial and managerial independence.

In particular, it is to ensure: *'Investors are properly informed'*.

2.2. The AMF's concerns

The AMF hearings took place in June 2020. The reports of the hearings identify a number of specific allegations.⁵ These include that EDF disseminated false information to the market in 2014, and then delayed disclosing inside information in 2015. On the former, when the European Commission approved the deal under state-aid legislation EDF promptly informed the market that it had obtained the approval of the European authorities with a press release. It

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³ <https://www.amf-france.org/en/news-publications/news-releases/enforcement-committee-news-releases/amfs-enforcement-committee-fines-edf-and-its-former-chairman-and-chief-executive-officer>

⁴ <https://www.amf-france.org/en/amf/our-missions>

⁵ <https://www.lesechos.fr/finance-marches/marches-financiers/edf-risque-une-sanction-de-10-millions-deuros-1219011>

is this press release that is considered “litigious” by the AMF. The press release stated that ‘*the main elements of the October 2013 agreements remain unchanged while the measures aimed at sharing potential future gains with consumers will be strengthened*’. However, according to the AMF, the essential conditions of the contract **had** been modified since 2013. The UK Treasury had added new clauses likely to significantly affect the Sovereign credit guarantee, such as the requirement of a minimum amount of equity to be provided by partners.⁶

AMF further criticizes EDF and its current CEO for having delayed communicating important information to the market. AMF claimed that on September 21, 2015, the electricity group indicated that Hinkley Point would be financed by equity and that this major transaction would be consolidated by full integration into EDF's accounts, which was not what EDF had planned. AMF alleged that EDF should have communicated this information to the market three months earlier.

It would not be appropriate for us to make a judgement on these specific allegations but we wish to place events in the broader context of the interests of the British and French public rather than just EDF shareholders.

3. The Cour des Comptes⁷

3.1. The remit of the Cour des Comptes

‘The Cour des Comptes is the supreme body for auditing the use of public funds in France. It is independent from the Government and Parliament. It has financial jurisdiction and is in charge of auditing, issuing rulings and certifying the State and Social Security accounts, as well as contributing to the evaluation of public policies.’

3.2. The criticisms of the Cour des Comptes⁸

The criticism focused on the ability of EDF to build EPR technology in general with specific criticism of each of the three EPR projects in Europe on which construction had started. The report questioned EDF’s ability to construct EPRs within acceptable costs and time-frames.⁹ The Flamanville 3 EPR in France was estimated to cost €3.3bn at construction start and has been under construction since 2007. EDF acknowledges it will not be complete before 2023 at the earliest at a cost of €12.4bn. The Cour des Comptes claimed EDF underestimated this cost by €6.7bn, making the total cost €19.1bn with power expected to cost €110-120/MWh.¹⁰ In his response to the report, the CEO of EDF did not dispute this analysis. The report puts the blame for the 2015 financial collapse of the EPR vendor on mismanagement of the Olkiluoto plant in Finland. This led to the Areva reactor vendor business having to be taken over by EDF.

For Hinkley, there were several criticisms. The Cour des Comptes report characterises the Hinkley project as representing a “high financial risk” for the French state electricity group. It criticises the CEO of EDF, Jean-Bernard Lévy, for suppressing a 2015 internal review labelling the Hinkley project as ‘risk- laden’. The review stated that “organisation and governance” of

⁶ Note that ‘equity’ is used in two senses in this document. In this case it is the shareholding of a partner in a joint venture. Elsewhere it is used to mean the proportion of an investment provided by a company from its own resources as opposed to borrowing.

⁷ <https://www.ccomptes.fr/en>

⁸ <https://www.ccomptes.fr/fr/publications/la-filiere-epr>

⁹ <https://www.telegraph.co.uk/business/2020/07/11/doubts-cast-edfs-ability-build-power-stations-time-budget/>

¹⁰ https://www.lemonde.fr/economie/article/2020/07/09/pierre-moscovici-l-epr-fait-face-a-une-derive-financiere-a-tous-les-etages_6045709_3234.html

the project “were not efficient enough to guarantee that risks would be controlled”, that the timetable was unrealistic and that there were “worrying industrial weaknesses” in the supply chain. The financing of this project [HPC] was said to weigh heavily on EDF’s accounts and that the fall in the internal profitability of the project will make it very difficult, if not impossible, to bring in new private investors.” It noted that Brexit had made the project riskier.

4. The Hinkley Point C project

EDF’s two thirds share of the HPC project is expected to be at least £14.3-15.5bn on the most recent cost estimates¹¹ plus the financing costs, which EDF claimed might add around 50% to this.¹² The rest will be paid by the Chinese company, China General Nuclear (CGN). At the centre of our concerns is the UK government’s offer of credit guarantees to cover all the borrowing expected to be needed to finance HPC. To understand how this problem arose, it is useful to look at the timeline of statements by EDF and by the UK government and other official bodies going back to 2013, when the announcement was first made of the outline of the deal to build HPC. It was then that the power sale price or strike price was fixed at £92.5/MWh (2012 prices) and therefore when EDF should have had a firm enough grasp of their costs, including the cost of capital to be able to commit to this price. The offer of credit guarantees was seen as crucial to unlocking the deal to build HPC, as it would allow EDF to borrow money at extremely low interest rates because, effectively, the guarantees meant financiers were lending to the British government, which clearly has a far superior credit rating to EDF.

4.1. 2013

In June 2013, the UK government announced that credit guarantees would be offered to the consortium that would build HPC, New Nuclear Build (NNB): the statement said only that the guarantees would be ‘multi-billion’.¹³ It later emerged that the guarantees would be in the form of guarantees to bonds that EDF would have to sell rather than guarantees to loans from financial institutions. This offer appeared to facilitate financing of the project and allowed the October 21 2013 agreement of the basic terms for HPC. The power sale price of £92.5/MWh was based on estimated construction costs of £14bn. EDF anticipated taking only 45-50% of NNB (£6.3-7bn of the cost), with other investors expected to include China General Nuclear (CGN) and China National Nuclear Corporation (CNNC) (30-40% between them), Areva (10%) and other unspecified investors taking up to 15%.¹⁴ EDF stated the: *‘Project will benefit from the Government’s Infrastructure Guarantee Scheme under terms and conditions to be agreed upon.’*¹⁵

¹¹ <https://www.edfenergy.com/media-centre/news-releases/update-on-hinkley-point-c-project>

¹² Julia Pyke, Nuclear Development Director, EDF Energy at Energy Policy Debate: The Regulated Asset Base (RAB) Consultation, Nuclear Institute, September 25, 2019

¹³ <https://www.gov.uk/government/speeches/speech-by-chief-secretary-to-the-treasury-danny-alexander-investing-in-britains-future>

¹⁴ https://www.edf.fr/sites/default/files/contrib/groupe-edf/espaces-dedies/espace-finance-en/investors-analysts/events/special-announcements/agreement_reached_on_commercial_terms_for_the_planned_hinkley_point_c_nuclear_power_station.pdf

¹⁵ https://www.edf.fr/sites/default/files/contrib/groupe-edf/espaces-dedies/espace-finance-en/investors-analysts/events/special-announcements/agreement_reached_on_commercial_terms_for_the_planned_hinkley_point_c_nuclear_power_station.pdf

The agreement of a take-or-pay contract for 35 years at a fixed real price meant that the price risk of the project, that is, that the wholesale electricity price would be lower than the HPC's costs, would be borne wholly by British electricity consumers. However, the technology risk, particularly that the construction cost would be higher, the construction time would be longer and the reliability of the plant poorer than forecast would be borne by the plant owners because the strike price would not be altered if costs increased. All expenditures up to the point of the signing of contracts (in 2016) were at the risk of the British government or EDF so if one party withdrew, the other party could not recover the expenses they had incurred.¹⁶

The project was referred to the European Commission by the British government, as it was required to do, because of the potential for it to be in violation of the EU state-aid legislation.

4.2. 2014

One of the key elements of the EC state-aid inquiry was examining the credit guarantees. The EC approved the deal in October 2014. It found that the credit guarantees were indeed state-aid but the EC claimed that the provisions of the Treaties on the Functioning of the European Union, especially Euratom and the Lisbon Treaty,¹⁷ took priority over the state-aid legislation.¹⁸ Nevertheless, one of the conditions of acceptance of the deal was an increased fee for providing the credit guarantees from about 2.25% to 2.95%. This would not seem to be a major factor in deciding whether to take the guarantees as for example, £10bn in guarantees, would incur fees of £70m, a small price to pay for the very low interest rates sovereign credit guarantees would offer for loans lasting decades.

The existence of a 'Base Case Condition' (BCC) was revealed. *'The Base Case Condition is that satisfactory evidence has been provided that Flamanville 3 has completed the trial operation period and that the requirements of the Guarantor in respect of performance during such period have been met. The Guarantor has the option to extend the date for meeting the Base Case Condition into the future by increasing the amount of Base Equity and procuring that such increase benefits from the required credit support. The Base Case Condition date cannot fall later than 31 December 2020.'*¹⁹ In short, if Flamanville 3 is not in commercial operation by the end of 2020, the offer of credit guarantees will be withdrawn. The rationale for this condition was the credit guarantees should not be given to fund an untested technology.

4.3. 2015

In September 2015, the UK Chancellor announced that the credit guarantees would be in two tranches, a small initial one of £2bn and a much larger one to cover the rest of the borrowing, then expected to be about £10bn.²⁰ The common assumption was that finance for Hinkley would be about 70% debt (borrowing) and 30% equity (EDF's and CGN's own resources) so the remaining £5bn of the £17bn cost then forecast would be equity provided by EDF and CGN. The terms of the first tranche were subsequently summarised in the June 2017 UK

¹⁶ CGN only took up its 33.5% stake in NNBG in 2016 when the CfD and the SoSIA were signed

¹⁷ The EC argued that under Euratom, member states were required to promote nuclear power and under the Lisbon Treaty, member states had the right to determine energy mix. It claimed that not allowing the loan guarantees would prevent a member state from fulfilling its obligations under these Treaties.

¹⁸ https://ec.europa.eu/competition/elojade/isef/case_details.cfm?proc_code=3_SA_34947

¹⁹ Op cit, p 50

²⁰ <https://www.bbc.co.uk/news/uk-england-somerset-34306997>

National Audit Office (NAO) report on HPC.²¹ The offer had to be taken up by December 2018 and the bonds repaid by end of 2020. The second tranche was then stated to be up to £13.1bn. These terms for the first tranche seemed to make it unattractive unless the guarantees would be replaced by new ones in 2020.

In October 2015, more details of the deal were agreed between the British government and EDF on the credit guarantees.²² *'The initial £2bn of the scheme was announced by the Chancellor last month during his visit to China.'* It must be assumed the conditions were made known to EDF in September as it appears EDF had decided by October not to take up the first tranche: *'The project is due to be equity funded by each partner, at least during a first stage.'* This rejection was confirmed by the UK government in 2016.²³

However, EDF said: *'The project will also benefit from the Government's Infrastructure Guarantee Scheme.'* This clearly suggests EDF was at least retaining the option to take up the second tranche. The reports of the AMF's questioning imply the AMF believes EDF had in fact also decided not to take up the second tranche of credit guarantees then. At that time, EDF was forecasting that Flamanville 3 would be completed in the fourth quarter of 2018 meaning the BCC would be fulfilled. However, there must have been some concern in EDF that this would not be possible because of the numerous delays already suffered and, specifically, it had discovered flaws in the reactor pressure vessel that would inevitably delay its completion. Subsequently the French safety authority, ASN, decided that Flamanville 3 could start-up without repairs or replacements to the affected parts but that in 2024 the reactor vessel lid would have to be replaced.²⁴ The HPC reactor vessels already manufactured for HPC contained the same flaw and had to be scrapped.

The additional investors foreseen by EDF in 2013 did not materialise apart from CGN, leaving EDF with 66.5% of the project. The expected cost had increased to £16bn, so instead of taking 45% of £14bn i.e. £6.3bn, EDF was left with 66.5% of £16bn i.e. £10.7bn. The UK government did require that EDF's ownership should not fall below 50% of the project and while EDF did state its intention to subsequently sell some of its stake, there is no evidence that there were or now are credible investors.

Provisional agreement on two follow-on stations was announced. Sizewell C, expected to be a copy of HPC would be 80% owned by EDF and 20% by CGN in the development stage and Bradwell B, which would use CGN's Hualong One technology and, in the development stage, would be 66.5% owned by CGN and the rest owned by EDF.

4.4. 2016

In June 2016, EDF took a 'Final Investment Decision' on HPC and in September 2016, the UK government announced that agreement had been reached with EDF²⁵ and the Contract for

²¹ <https://www.nao.org.uk/report/hinkley-point-c/>

²² <https://www.edfenergy.com/energy/nuclear-new-build-projects/hinkley-point-c/news-views/agreements-in-place>

²³ <https://www.parliament.uk/business/publications/written-questions-answers-statements/written-statement/Commons/2016-10-25/HCWS216/>

²⁴ <http://www.french-nuclear-safety.fr/Information/News-releases/Flamanville-EPR-reactor-ASN-issues-its-opinion>

²⁵ <https://www.gov.uk/government/speeches/hinkley-point-c> and <https://www.edfenergy.com/energy/nuclear-new-build-projects/hinkley-point-c/news-views/EDF-release-150916>

Difference (CfD)²⁶ under which the power would be sold, and the Secretary of State Investment Agreement²⁷ were signed. It was from this point that the deal could not be cancelled by one side without compensation and that CGN took its stake in NNB. EDF has refused to comment on whether CGN would be liable for a share of cost escalation or whether its contribution was capped at £5.3bn.²⁸ No mention was made in the government's or EDF's statements of credit guarantees.

In 2015, EDF had made it clear that it was not going to take up the offer of at least the first if not the second tranche of credit guarantees²⁹ and this meant there was a need for a major programme to generate capital aimed at providing €14bn by 2020 by sale of non-core assets (€10bn) and a share issue (€4bn). How far this was to generate capital to fund HPC as well as the other major call on capital, life-extension (Grand Carénage) of the French reactors, expected to cost at least €6bn per year (more than €100bn in the period 2015-2030³⁰), was not specified. By end 2019, EDF reported €10.9bn (EDF's share €7.3bn) had been spent on HPC of which only €0.3bn was interest charges implying nearly all the costs to that point had been paid out of equity from EDF and CGN and that a significant proportion of the capital generated had gone to fund HPC.

4.5. 2017

The NAO report on the HPC project was published in June 2017 and was highly critical of it on several grounds among which are:

- *'EDF has stated that it does not currently expect NNBG to draw on the initial guarantee.'* The implication is that at the time of publication by the NAO, EDF had not rejected the second tranche or if it had, the British government had not informed NAO of this.
- *'EDF's financial position has weakened since 2013. EDF has posted persistent negative cash flows with higher levels of capital expenditure than expected and earnings below financial analysts' expectations, which has reduced its credit rating in recent years. It recently announced a detailed strategy to address this, which included a capital injection by the French State. A further deterioration of EDF's financial profile or costs escalating at HPC could raise questions about its ability to fund HPC's construction.'* This makes it clear that at least two years before the French government's rescue operation for EDF was launched (see below), EDF's financial position was demonstrably parlous.
- *'These factors mean there is a risk that NNBG will seek further financial support from the government, notwithstanding the contractual terms of the deal.'*

²⁶

https://www.lowcarboncontracts.uk/sites/default/files/Contract%20for%20Difference%20%28Redacted%29%20539640822_1.pdf

²⁷ <https://www.lowcarboncontracts.uk/sites/default/files/Redacted%20SOSIA.PDF>

²⁸ Nuclear Intelligence Weekly 'Can Beijing-Paris Nuclear Relations Withstand Washington?' August 14, 2020, p 5.

²⁹ <https://www.nao.org.uk/report/hinkley-point-c/>

³⁰ <http://www.world-nuclear-news.org/RS-EDF-faces-EUR100-billion-reactor-upgrade-bill-says-audit-office-1102164.html>

The NAO concluded: *'the Department's deal for HPC has locked consumers into a risky and expensive project with uncertain strategic and economic benefits.'*

4.6. 2018

In 2018, EDF announced that about 70 critical welds needed repair at Flamanville including eight that would require robotic techniques that did not exist then. EDF has stated it does not expect approval for these robotic techniques from ASN before the end of 2020. This removed the last hope for EDF that it could fulfil the BCC and by 2020, EDF was forecasting loading of fuel at Flamanville (typically about a year before commercial operation would be possible) would not be before end 2022. In December 2018, first structural concrete was poured for the first reactor at HPC, conventionally the point marking start of construction. Concrete was poured for reactor 2 in December 2019.

4.7. 2019

Neither EDF nor the British government has ever announced EDF would not take up the second tranche of credit guarantees although in November 2019, BEIS acknowledged in a personal communication that EDF had refused the second tranche.³¹ It is not therefore known when EDF took the decision, presumably at some point between 2015 and 2018, and whether it was because fulfilling the BCC was impossible or because EDF had chosen not to take up the offer for other reasons.

The continuing deterioration of EDF's financial position led to the need for a major rescue and restructuring of EDF, Opération Hercule (far from complete by mid-2020), not least because of EDF's clear inability to finance its investment needs. EDF acknowledged it could not finance its 80% share of Sizewell C and began to lobby for the Regulated Asset Base (RAB) model of financing which would mean majority ownership of the plant would be in hands other than EDF's.³² The British government launched a consultation on this proposal in July 2019 with responses required by October 2019. However, despite consistent press reports since the beginning of 2020 that publication of the government's response was imminent, by June 2020, the results had not been published.³³ One of the key features of the RAB model is that, if it is to be attractive to investors such as pension funds and sovereign wealth funds, the price risk must fall on consumers as for HPC, but unlike HPC, the technology risk must also fall on consumers. Investors will be guaranteed a fixed rate of return on the money they invest, and the electricity price charged will be as high as is necessary to ensure this rate of return is paid.

While the EDF share sale had raised the €4bn targeted in 2016, asset sales had raised only €8bn with no other significant saleable assets apparently available. This €12bn had clearly helped EDF meet its capital requirements for 2016-18 but since then EDF's debts have risen sharply and there is a clear need for new sources of capital to meet its investment needs, particularly in Grand Carénage and HPC and this will be the central challenge Opération Hercule must solve.

In 2019, EDF increased the estimated construction cost of HPC from £19bn to £21.5-22.5bn. It also warned that the target completion date for the first reactor of 2025 was at significant risk

³¹ Correspondence with Ms Alison Downes, Stop Sizewell C

³² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/825119/rab-model-for-nuclear-consultation.pdf

³³ For a critique of the proposals, see S Thomas, P Bradford, T Burke, P Dorfman 'The proposed RAB financing model' Submission to the consultation on the RAB model for new nuclear projects.

of slipping to 2027 and if this occurred, costs would go up by an additional £0.7bn making the range £21.5-23.2bn (2016 money).³⁴ EDF's share of HPC's costs would be up to £15.5bn, or £17.2bn if CGN's contribution was capped at £5.3bn, compared to the £6.3bn it had planned in 2013.

5. New Nuclear and China

There appears to be increasing political opposition to allowing Chinese companies to take a significant role in infrastructure projects such as the 5G mobile phone network, high-speed trains, and nuclear power plants. This puts the future of CGN's Bradwell project in doubt and if, for whatever reason, Bradwell does not go ahead, this may well have repercussions for HPC. The main rationale for CGN's role in HPC and SZC was clearly as door-openers for a project using Chinese technology. For EDF, CGN was little more than a source of capital, although EDF has repeatedly referenced the "value of our partnership with CGN".³⁵ The SZC project is at an early stage and given that, under RAB, neither EDF nor CGN would take a significant financial stake in the plant, if CGN was to withdraw, the consequences may be relatively small. However, if Bradwell did not go ahead, it is hard to see why CGN would want to continue to invest in HPC. By the end of 2019, it should have contributed just over £3bn of the £9bn spent so far on HPC. If CGN was to walk away, given the evident anger of the Chinese government at the reluctance of the UK to use Chinese companies for major infrastructure, it seems unlikely CGN could be forced to pay compensation for not fulfilling its contractual obligations. More likely it would demand compensation from the British government for its investment to date. EDF would also face the unwelcome prospect of having to find CGN's share of the remaining costs, perhaps £7bn if we include finance costs. The only credible replacement investor is probably the British government given how badly the project is going. Otherwise the British government would have to let the project collapse probably compensating EDF for its investment as well as paying for remediation of the site. This would be humiliating for the British government but, in the long-term, consumers would still be better off than if they had to pay for HPC's extortionately expensive power.

6. Conclusions

Without sovereign credit guarantees and full insulation from any electricity market, nuclear projects are difficult to finance because of the high cost of nuclear power, well above alternatives such as energy efficiency programmes and renewables – the price risk. The poor record of projects being built to time and cost which makes it clear to financiers that nuclear projects are extremely risky – the technology risk. The fact that EDF and CGN are bearing the technology risk for HPC probably means commercial loans (debt funding) without guarantees would, at best, be prohibitively expensive and at worst impossible. The near doubling of estimated construction cost before much construction has taken place with no increase in the power purchase price makes the profitability of the project to EDF and CGN questionable and illustrates the risk of lending to a nuclear project without strong insulation from this risk.

³⁴ <https://www.edfenergy.com/media-centre/news-releases/update-on-hinkley-point-c-project>

³⁵ <https://www.edfenergy.com/media-centre/news-releases/second-epr-reactor-china%E2%80%99s-taishan-nuclear-power-plant-about-enter> and <https://www.sizewellsupplychain.co.uk/edf-partner-cgn-announced-morning-unit-1-taishan-nuclear-power-plant-china-become-worlds-first-epr-reactor-enter-commercial-operation/>

EDF's net indebtedness, after a decade of being relatively stable at €33-34bn rose sharply in 2018 to €41bn when proceeds of assets and shares sales had been used up and EDF's 2019 Reference Document³⁶ implied net indebtedness would rise to €47bn in 2020. The COVID-19 pandemic is drastically reducing electricity demand and is likely to make utilities like EDF loss-makers and will increase further its indebtedness. In June 2020, Standard & Poors (S&P) reduced EDF's credit rating from A- to BBB+, still 'investment grade' but S&P stressed that EDF's credit rating was only this high because: *'the group, supported by the French government [it owns 83.67% of the shares], will initiate the implementation of an action plan [Opération Hercule] aimed at protecting its balance sheet.'*

The alternative to borrowing of funding solely by 'equity', effectively reinvesting profits rather than passing them on to shareholders, is understandably unpopular with shareholders and, given the low level of EDF's profits, not feasible. It is hard to avoid the conclusion that EDF has been proceeding with HPC since as long ago as 2015 on the assumption that the HPC project and EDF as a whole is too big to fail and that some means of supporting it will emerge. The only options remaining appear to be the granting of sovereign credit guarantees by either the UK or French government, unlocking debt finance or, as foreseen by the NAO, a renegotiation of the contract terms removing the technology risk from EDF.

The role of the British government must also be questioned given the exposure of the British public to what the NAO described as a *'risky and expensive deal'*. When did it know that EDF was not going to take up the second tranche of credit guarantees and why did it choose not to make this information known, not even to the NAO if the decision was taken before June 2017? Why did it not question EDF on how it was going to finance HPC in the absence of credit guarantees? These are not questions that can be evaded as being commercially confidential to EDF. If the project collapses or requires a costly rescue package, it will be British taxpayers and electricity consumers left to foot the bill. There will also be the opportunity cost of the options not pursued for more than a decade because it was assumed that HPC would provide 7% of our electricity, with a further 12% to come from the follow-on stations of Sizewell C and Bradwell B. While the French government was not a party to the negotiations on HPC, its role as majority shareholder in EDF meant it should have ensured it was fully informed of the terms of the project. In addition, because its key role in the French energy system, EDF is regarded as being too big to fail and the cost of any rescue was always going to fall on the French public. The collapse of the French reactor vendor and fuel cycle company, Areva, in 2016, which cost French taxpayers billions of Euro and was to a large extent related to losses on the Olkiluoto EPR project in Finland, should have been a warning signal of the need for vigilance over publicly controlled companies engaging in risky projects like HPC.

³⁶ <https://www.edf.fr/en/the-edf-group/dedicated-sections/investors-shareholders/reference-documents>