



8 The Bartons, Yeabridge  
South Petherton  
Somerset TA13 5LW  
val@stophinkley.org

EDF Trading (Global headquarters)  
3rd Floor, Cardinal Place  
80 Victoria Street  
London SW1E 5JL

12 February 2016

Dear EDF Energy,

We are writing to you the day before another EDF Board Meeting at which it is rumoured a final investment decision on Hinkley Point C could be made to urge you to scrap this project altogether.

As has been widely reported, the managers' union CFE-CGC, which has a seat on EDF's board, has voiced its concern about the significant financial issues raised by investing in Hinkley Point C and says such a huge commitment could put the very future of EDF as a company in danger. The Association of Employee Shareholders (EAS) - has asked for the project to be halted. (1)

We understand that EDF's financial problems include:

- Debts of €37 billion (£28 billion) and its share price has fallen from €29 in April 2014 to €10.32 last week. Financing a massive project like Hinkley Point C will clearly place a significant strain on finances. (2) The union notes that the debt related to Hinkley Point C will need to be 100% fully consolidated into the EDF accounts – an amount which exceeds the market capitalization of the Group.
- EDF is now facing a €100m bill for upgrading its nuclear power stations in France according to a report by French Government auditor – the Cour des Comptes – rather than €55bn previously estimated. (3)
- EDF has also agreed to buy between 51 and 75% of the struggling French reactor builder Areva NP which is valued at €2.7bn. So will have to find at least €1.4bn for that.
- The French waste agency Andra has estimated that the cost of its deep geological disposal project could be as high as €30bn rather than the €20bn estimated by EDF. (4) French energy minister Ségolène Royal has signed a decree setting the 'reference cost' at €25 billion – still a jump of €5bn for EDF. (5)
- The unions also mention the need for EDF to invest in renewable energy across the globe. In France the Parliament passed a law last year to reduce the share of electricity provided by nuclear power from 75% to 50%. The Cour des Comptes says this could lead to the closure of 17 to 20 reactors.

The union has also highlighted the construction problems at reactors similar to the Hinkley design at Flamanville in Normandy and Olkiluoto in Finland. Flamanville is currently 6 years late and around €7.2bn over budget. Olkiluoto is expected to be 10 years behind schedule and €5.5bn over budget. On top of all this the French nuclear regulator ASN now says it won't decide until the end of this year what to do about weak spots in steel of the pressure vessel at Flamanville. If ASN decides that Areva needs to replace the reactor vessel or lid because of the weak spots, the Flamanville project could face significant further delays and cost overruns. (6)

[www.stophinkley.org](http://www.stophinkley.org)

PATRONS

Raymond Briggs, Julie Christie, Terry Jones, Caroline Lucas MP,  
Jonathon Porritt, Molly Scott Cato MEP and John Williams

The Union wants to know how EDF can assume a 9-year construction time for Hinkley Point C when 10-15 years has been the norm so far, and why the company is considering embarking on the construction of two more EPR reactors when none have yet been completed anywhere in the world.

Like the unions we at Stop Hinkley believe the EDF Board would be foolhardy to commit to building two EPRs at Hinkley Point C when the Company is in such a precarious position. It is not difficult to see why EDF's employee shareholders fear that the project could sink the company altogether. The Company is in no fit state to finance such a massive new project.

But as people who live in the vicinity of the proposed Hinkley Point C, our main concern is not the future of EDF as a Company. Our concern is about the future of our community.

Whatever EDF decides at its Board meeting on 16<sup>th</sup> February we find it very hard to believe that this project will ever come to fruition. We have lived with the threat of Hinkley Point C (in this incarnation), and all the disruptions that that entails, for a decade now, and yet all we have got to show for it is a big hole in the ground. If you make a positive final investment decision tomorrow the uncertainty and disruption created by this project will continue.

If you read the Energy Press, as we are sure you do, you will know by now that many commentators consider baseload power as a concept to be obsolete. A system powered 100% by renewables supported by a backbone of electricity storage, smart grid technology and demand management, energy efficiency, and 21st century technology is perfectly feasible now. In fact, not only is it feasible, but strong market and social forces mean that such a system is increasingly the only kind of system that makes any sense.

There are huge renewable resources available in the South-West which are capable of boosting our rural economy and ensuring our energy security. All that is holding us back from a renewable revolution is a failure of political will. Regen South West has pointed out that if the UK Government puts in place the policies needed to meet 15% of the South West's energy requirements (N.B. Energy, not just electricity, i.e. including heat and transport) this will deliver £10bn of investment and 24,000 jobs. The UK is committed, under EU rules, to meeting a 15% target for energy by 2020. (7)

The South-West region has the renewable energy resources to meet more than 100% of its total energy needs, including replacement of liquid fuels and electrifying railways. We should aim to do this by 2050. According to a recent report by The Resilience Centre the South-West has the potential to generate an estimated 68TWh of energy made up of 43TWh of electricity energy, and 25TWh of thermal energy. This equates to just over 100% of total future energy needs for the South-West assuming a 40% powering down due to energy efficiency measures by 2050. A programme to deliver a 100% renewable energy target would create 122,000 jobs. The capital cost of delivering such a programme would be £59,484m, including £8,784m on Smart Grid energy storage. This is 72% of equivalent nuclear costs for delivering the same amount of energy. (8)

When renewables become the dominant source of power, baseload power stations get in the way because they have to operate as close to full-time as possible and cannot power up or down quickly. These old-fashioned plants are not merely a problem, they become an obstruction. Instead, it is necessary to have power sources whose power can be adjusted up and down quickly. According to UBS Bank, "*Large-scale power generation ... will be the dinosaur of the future energy system: Too big, too inflexible, not even relevant for backup power in the long run.*" (9) Large baseload power stations, such as nuclear and large coal-fired power stations are not flexible because they are hard to turn on and off. So building more baseload power stations would actually undermine moving towards a clean energy future. It would simply mean that during peak times when renewables are supplying lots of electricity, some of that power will go to waste. (10)

A large-scale experiment, called Kombikraftwerk, started in Germany on 1<sup>st</sup> January 2006. This is a computer model which uses actual real time power output from a number of wind,

PV and biogas electricity generators. It has demonstrated the feasibility of operating a virtually 100% renewable electricity system. (11)

Most utilities are now looking at how they can carve out a future for their companies in a world which is dominated by decentralised energy. For instance the Chief Executive of Engie UK Mr Petrie says he wants Engie to "... *focus is on the demand side. The future is going to be much more about decentralized energy*". (12)

We urge you, as a Company, to ditch the Hinkley Point C proposals which threaten to trash our communities and the very future of EDF itself. Instead you should embrace the decentralised energy revolution and help us in South-West England to get on with planning our 100% renewable energy future.

**Yours faithfully**

**Stop Hinkley Co-ordinating Team**

1. Guardian 13th November 2015  
<http://www.theguardian.com/environment/2015/nov/13/hinkley-point-nuclear-plan-puts-survival-edf-at-risk-say-employee-shareholders>
2. Times 27th January 2016  
[http://www.thetimes.co.uk/tto/business/industries/industrials/article4675395.ece?CMP=OTH-gnws-standard-2016\\_01\\_27](http://www.thetimes.co.uk/tto/business/industries/industrials/article4675395.ece?CMP=OTH-gnws-standard-2016_01_27)
3. FT 10th February 2016 <http://www.ft.com/cms/s/581cb61a-d00d-11e5-92a1-c5e23ef99c77.html>
4. Power Engineering International 13th Jan 2016  
<http://www.powerengineeringint.com/articles/2016/01/edf-disputes-french-nuclear-waste-agency-estimates-on-costs.html>
5. World Nuclear News 18th Jan 2016 <http://www.world-nuclear-news.org/WR-Minister-sets-benchmark-cost-for-French-repository-1801165.html>
6. Reuters 20th Jan 2016 <http://www.reuters.com/article/edf-france-nuclear-idUSL8N1541PE>
7. RegenSW Manifesto [http://www.regensw.co.uk/wp-content/uploads/2015/04/Manifesto\\_2015.pdf](http://www.regensw.co.uk/wp-content/uploads/2015/04/Manifesto_2015.pdf)
8. The Power to Transform the South West, Resilience Centre and European Greens April 2015 [http://mollymep.org.uk/wp-content/uploads/The-power-to-transform-the-South-West\\_FINAL1.pdf](http://mollymep.org.uk/wp-content/uploads/The-power-to-transform-the-South-West_FINAL1.pdf)

9. Will solar, batteries and electric cars re-shape the electricity system? UBS Global Research 20th August 2014  
<http://knowledge.neri.org.nz/assets/uploads/files/270acd1V0tO4LmKMZuB3.pdf>
10. Clean Technica 4th Feb 2015 <http://cleantechnica.com/2015/02/04/big-expensive-power-plants-undermine-clean-energy-future/>
11. See Barnham, K The Burning Answer: A User's Guide to the Solar Revolution, Weidenfeld & Nicolson, 2014, pages 153-6 and Barnham, K et al Energy Policy 54 (2013) 385-390
12. Times 2nd Jan 2016  
<http://www.thetimes.co.uk/tto/business/industries/utilities/article4654409.ece>