Renewable energy

Nuclear plans 'should be rethought after fall in offshore windfarm costs'

https://www.theguardian.com/environment/2017/sep/11/huge-boost-renewable-power-offshore-windfarm-costs-fall-record-low

Lib Dems and green groups say reduced price of state support should sound death knell for plants such as Hinkley Point C

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Adam Vaughan
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Wind turbines on the Kentish Flats offshore windfarm, near Whitstable and Herne Bay. Photograph: Chris Laurens/Getty Images/VisitBritain RM

The government is under pressure to reconsider its commitment to a new generation of nuclear power stations after the cost of offshore wind power reached a record low.

Experts said green energy had reached a tipping point in the UK after two windfarms secured a state-backed price for their output that was nearly half the level awarded last year to Britain's first new nuclear power site in a generation, Hinkley Point C.

Vince Cable, the leader of the Liberal Democrats, said the breakthrough should prompt a rethink of the government's energy plans, which have pencilled in atomic plants at Wylfa in Wales, Sizewell in Suffolk and Bradwell in Essex.

"The spectacular drop in the cost of offshore wind is extremely encouraging and shows the need for a radical reappraisal by government of the UK's energy provision," he said.

Offshore windfarms are to be built for around half the price of previous ones

Guaranteed price of power per megawatt hour



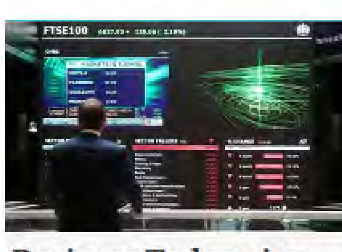
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The government spending watchdog this year described Hinkley as a "risky and expensive" project that generations of British consumers will have to pay for through electricity bills. Experts hailed Monday's auction results, for a group of windfarms that will open early in the next decade, as evidence that large scale renewable projects had come of age in Britain.

"The epoch of renewables as the most cost competitive technology has arrived," said energy analysts Cornwall Insight, while the Economist Intelligence Unit said they showed "the trajectory of cheaper renewable technologies is irreversible".

Ministers said the multimillion-pound pot of subsidies would generate clean power for 3.6m homes. Two windfarms - the Hornsea 2 project off the Yorkshire coast and the Moray offshore windfarm in Scotland - secured a guaranteed price for their power of £57.50 per megawatt hour (MWh) from the government. This is far below the £92.50 awarded to Hinkley last year.

Richard Harrington, the energy minister, said: "The offshore wind sector alone will invest £17.5bn in the UK up to 2021 and thousands of new jobs in British businesses will be created by the projects announced today."



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Although Hinkley's operator, French state-owned EDF, has signed a contract to build the £20.3bn plant in conjunction with China's government-owned nuclear firm, campaigners said Monday's news called into question the rationale for the site in Somerset.

Caroline Lucas, the Green party's co-leader, said: "This massive price drop for offshore wind is a huge boost for the renewables industry and should be the nail in the coffin for new nuclear."

Green Alliance, a politically centre-ground thinktank, said the nuclear industry had to cut its costs or face the fate of carbon capture and storage (CCS) for fossil fuel plants, a technology that ministers previously supported but ditched in 2015.

"The challenge for nuclear is they now need to drop their costs or risk being in the same situation as CCS," said Dustin Benton, the group's executive director.

The auction results are unlikely to halt the Hinkley project. But they pose a serious dilemma for EDF, its Chinese partner and other consortiums hoping to build other new nuclear power plants around the UK and are likely to feed into a flagship government review of energy costs out next month. Most industry watchers had expected future nuclear projects to cost £80-£90 per MWh, a long way from the £62.14 average awarded to offshore windfarms.

Unlike Hinkley, where the price was agreed in negotiations between EDF and government officials, the offshore windfarms' backers used an auction-style process to offer the lowest guaranteed price for their electricity. The government offers to underwrite a "strike price" which is a top-up payment above the daily market price for electricity, which is around £40 per MWh. The lower the strike price, the more electricity generating capacity can be built. The government had allocated £240m a year for the subsidies but the competitive prices mean it now expects them to hit £176m a year at most.

The winning developers were Germany's Innogy, which will receive £74.75 per MWh for Triton Knoll, off the coast of Lincolnshire, Denmark's Dong Energy at £57.50 for its Hornsea project and Spain's EDP with £57.50 for the Moray windfarm.

The higher price for Triton Knoll reflects the fact it will be delivered slightly earlier, in 2021-22; the other two will come onlinein 2022-23.

In total, they will have a generating capacity of 3.2GW, the same as Hinkley Point C, though they should be operational at least two years before the pair of new reactors.

Matthew Wright, the managing director for Dong Energy UK, said: "This is a breakthrough moment for offshore wind in the UK and a massive step forward for the industry." The industry body, RenewableUK, called the prices astounding.

Industry and campaigners used the auction results to pile pressure on the government to commit to a timetable for the further £440m-a-year of subsidies that officials have allocated but which ministers have not confirmed since the general election in June.

Keith Anderson, the chief corporate officer of Scottish Power, said: "The government should be pleased the industry has delivered and, with a healthy pipeline of projects ready to go, they should press on quickly with further auction rounds."

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Energy UK, which represents the UK's big energy companies, also urged the government to provide certainty on timing for future auctions.

"Today's exceptionally low results are further evidence of how the cost of clean energy is continuing to fall, and the move to a low carbon future is delivered at the lowest cost to consumers," said Lawrence Slade, the group's chief executive.

The price of building offshore windfarms has fallen by nearly a third since 2012 as the technology matured. Developers believe that a new generation of even bigger turbines mean they can achieve further cost reductions. The sector is perceived by investors to be much less risky than it was five years ago, bringing down the cost of capital.

In Germany, some new offshore windfarms have even secured contracts in auctions that are effectively subsidy-free.

"Offshore wind's success was undoubtedly buoyed by the decreasing costs of capital in the sector and the wider downward trend of subsidy levels witnessed in other European tender processes," said Robert Marsh of law firm Norton Rose Fulbright.

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freeranger22 6m ago | 0
So why aren't they stringing floating hydro barriers inbetween the wind turbines in order to generate more electricity?
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adams46 12m ago | 0
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Bit late for that!
Dave the Brave and Ozzie sorted it all out with the French and Chinese (amongst others) long ago so goodness knows what it would cost to try breaking the Contracts with those awful Foreigners!
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