

 SCOTTISH OFFSHORE WIND AND LARGE NUCLEAR • THE FIGURES SIDE BY SIDE

Wind or nuclear: the same money, side by side

Paid for by the public: as electricity billpayers, and as taxpayers standing behind the loans.

This page sets the published figures for Scottish offshore wind beside those for large nuclear power stations. Each figure carries a label saying where it comes from and the price year it is in. A cell that reads “not published” is blank because no figure was found. It has not been filled with an assumption.

Labels used: OFFICIAL = a government, regulator or audit-body document; FILED = a company's own filed accounts; PRESS = a company release or trade press; COMPUTED = exact arithmetic on published figures; ESTIMATE = this site's arithmetic or an assumption, shown; INDICATIVE = not yet final. No figure has been re-based to another price year unless it is marked estimate and the arithmetic is shown.

1. The headline

Billpayers across the UK have paid at least £97bn for renewables so far, of which about £16bn went to Scottish renewables (the bill, the real cost). Hinkley Point C's whole cost is £35–36bn in 2015 prices for 3.2GW. Sizewell C's baseline is £38.2bn in 2024-25 prices.

Price bases, plainly: the £97bn is COMPUTED from three official series, two in the money of the day and one in 2024 prices (2023-24 prices in the NAO's figure note); the £16bn is an ESTIMATE. The Hinkley figure is OFFICIAL, from a National Audit Office (NAO) table of EDF's latest scenarios, February 2026, in 2015 prices. The Sizewell figure is OFFICIAL, the NAO's report of 20 May 2026, in 2024-25 prices. The £97bn is money paid so far, and it includes about £9.1bn for managing the grid bottleneck. The nuclear figures are costs to build. They measure different things, and this page does not subtract one from the other.

2. Two ledgers

One row per question. Torness, an older station, appears where the question is about operating record, capacity, working life, ownership or decommissioning. Where no figure was found the cell says so.

ITEM	SCOTTISH OFFSHORE WIND	LARGE NUCLEAR: HINKLEY POINT C (HPC), SIZEWELL C (SZC); TORNESS FOR OPERATING RECORD
Cost to build	£13.7–16.1bn for the ten Scottish-water farms built, including their offshore transmission assets. Nominal money spent 2007–2026, price years mixed. FILED, PRESS, ESTIMATE With Inch Cape, under construction: £17.2–19.7bn. FILED, PRESS, ESTIMATE Low and high are the lowest and highest whole-project figures found, not a forecast.	HPC: £35–36bn, 2015 prices (EDF's latest cost scenarios, as printed by the NAO, February 2026). OFFICIAL HPC in 2024–25 prices: about £49.0bn. ESTIMATE The NAO says SZC's baseline is 22% lower than the lowest current HPC estimate; $38.2 \div (1 - 0.22) = 48.97$. Inferred, not stated in one line. SZC: £38.2bn baseline, 2024–25 prices. OFFICIAL (NAO, May 2026). DESNZ's headline is “around £38 billion (2024 prices)”. OFFICIAL Whether the cost figures include interest during construction is not known; EDF's 2019 figure excluded it.
Capacity	4,300.8 MW operating at the end of 2025. OFFICIAL, DESNZ Inch Cape, 1,080 MW, under construction. PRESS, FILED	HPC: 3.2 GW (2 × 1.6 GW). OFFICIAL, NAO SZC: 3,278 MW planning capacity. OFFICIAL, DESNZ Torness: 1,200 MW. OFFICIAL, DUKES 2026
Share of the time running	23.5% in 2025, Scottish offshore wind. OFFICIAL, DESNZ REGIONAL TABLE This is $8,870.24 \text{ GWh} \div (4,300.775 \text{ MW} \times 8,760 \text{ h})$. COMPUTED UK offshore wind: 36.1% in 2025. OFFICIAL, DUKES 6.3 Caveat. The Scottish figure divides by year-end capacity, so a farm that came online part-way through the year counts at full size for the whole year. Neart na Gaoithe, for example,	Torness: 82% in 2025 (8.6 TWh). PRESS, EDF'S OWN FIGURE 75.6% in 2024 and 68.5% in 2022. ESTIMATE (EDF output ÷ DUKES capacity) UK nuclear fleet: from 56.82% (2021) to 72.85% (2018) across 2018–2025; 64.04% in 2025. OFFICIAL, DUKES 5.10.B EDF attributes the lower 2025 output to an extended outage at Hartlepool. PRESS

ITEM	SCOTTISH OFFSHORE WIND	LARGE NUCLEAR: HINKLEY POINT C (HPC), SIZEWELL C (SZC); TORNESS FOR OPERATING RECORD
	reports all 54 turbines commissioned and fully generating in May 2025 (FILED). DESNZ's workbooks do not say why Scotland is below the UK figure; switch-off (curtailment) and commissioning are possibilities, not findings. DESNZ also allocates offshore wind to a country by where the cable comes ashore.	Sizewell B: 99% in 2025. PRESS, EDF HPC and SZC are not yet operating. DESNZ models SZC at 90%: an assumption, not an outcome. OFFICIAL
Guaranteed price per MWh	Moray East: £82.34, indexed, 22 Sep 2026 (base strike £57.50, 2012 prices). Beatrice: £205.70, indexed, 22 Sep 2026 (strike £140, 2012 prices). Both contracts are two-way: billpayers pay, or receive, the difference from the market price. OFFICIAL, LCCC DATA, AS SHOWN ON RISK.HTML Latest auction, Scottish fixed offshore wind (AR7): £89.49 (2024 prices) and £64.23 (2012 prices). OFFICIAL, DESNZ	HPC: £129, fixed in real terms, 2025 prices. OFFICIAL, NAO The contract price is £89.50 (2012 prices), cut from £92.50 after SZC's final investment decision. OFFICIAL, NAO SZC has no contract price of this kind: it is paid through a regulated asset base. The NAO gives an “equivalent strike price” of £131–155 (summary) or £133–155 (paragraph 1.22), 2024–25 prices, and £152–178 without “the consumer subsidy” (the NAO's term). OFFICIAL, NAO The two NAO low ends differ; both are shown. The equivalent price converts a different mechanism and is not a contract price.
Contract length	NOT PUBLISHED Risk and return records that the contract term is not confirmed from a document: the LCCC data gives start dates and no end-date field (risk.html).	HPC: 35 years from generation starting. OFFICIAL, NAO 2017 SZC: regulated asset base, paid by consumers through bills from after November 2025. OFFICIAL, NAO No contract length is in the research file.
Working life	30 years for fixed offshore wind (22 years in the 2016 report). OFFICIAL, DESNZ GENERIC ASSUMPTION This is an assumption for a generic plant,	SZC: 60 years, as modelled by DESNZ. OFFICIAL A generic nuclear plant: 60 years in the 2016 report. OFFICIAL

ITEM	SCOTTISH OFFSHORE WIND	LARGE NUCLEAR: HINKLEY POINT C (HPC), SIZEWELL C (SZC); TORNESS FOR OPERATING RECORD
	not a published life for any Scottish farm.	Torness: commissioned 1988; planned end of generation March 2030, which EDF gives as an estimate to be kept under review; the youngest advanced gas-cooled reactors were originally due to stop in 2023. PRESS, EDF
Owner, and where the profits go	Moray East: three owners, all outside the UK, traced through holding companies; the Equitix holding company's register lists a Guernsey parent (75% or more) and also a UK-incorporated Equitix entity (more than 25%). 2025 dividend £104.2m, 231% of that year's profit after tax, funded substantially from reserves. COMPUTED, FROM FILED FIGURES Beatrice: 40% held by SSE plc. Dividends £84.1m, 59.7% of profit after tax; of which £21.025m to Red Rock Power (China) and £14.7175m to TRIG, a Guernsey vehicle as reported. COMPUTED; THE TWO PAYMENTS AS REPORTED Dividends to owners outside the UK in the latest filed years: £139.9m, on the ownership described above. COMPUTED, FROM FILED FIGURES	SZC shareholders: DESNZ 44.9%, La Caisse 20%, Centrica 15%, EDF 12.5%, Amber Infrastructure 7.6%. Equity up to £8.5bn, nominal. Expected post-tax equity return 10.8–13.0%, nominal. OFFICIAL, NAO The research file holds no dividend figures. HPC: built by NNB Generation Company (HPC) Limited, owned 66.5% by EDF and 33.5% by China General Nuclear Power Group (CGN). OFFICIAL, NAO 2017 Torness: EDF.
Who stands behind the loans	Moray East: Japan's JBIC agreed in November 2018 to lend up to about £743m; Denmark's export credit agency EKF was to guarantee part of the private banks' loan. PRESS, JBIC'S OWN RELEASE The wind farm's filed accounts do not name these lenders. Beatrice: 2016 financing from 13 commercial lenders and the European Investment Bank, with EKF guaranteeing £300m of the EIB's	SZC: National Wealth Fund debt up to £36.6bn, nominal; commercial lenders £5bn, nominal; a proposed £5bn guarantee from France's export credit agency; government equity stake 44.9%, initial. Government and investors are committed to fund up to the higher regulatory threshold of £47.7bn, 2024–25 prices. OFFICIAL, NAO AND DESNZ

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	loan. PRESS Refinanced in July 2019; the current lenders and any guarantee are not in the files held. FILED These are foreign state bodies, not UK taxpayers. On the grid side, SSEN Transmission has an £800m UK National Wealth Fund guarantee, undrawn at 31 March 2026. FILED (risk.html)	HPC: NNBG expected to finance the build in full from its two investors. OFFICIAL, NAO 2017
Bill impact during construction	NOT PUBLISHED No bill figure for a construction period is in the research files. LCCC lists Seagreen, Moray West and Inch Cape as not yet started, with no payment rows. OFFICIAL	SZC: about £1 a month for a typical household, on average over construction. OFFICIAL, DESNZ SZC: £4 in 2025-26 on a typical household bill, building to a peak of £19-21 a year in the first decade of operation, 2024-25 prices. OFFICIAL, NAO HPC: the Department's estimate, reported by the NAO in 2017, was £10-15 a year of the average household bill up to 2030, in 2012 prices. OFFICIAL

Costs the headline price leaves out

These sit outside the guaranteed price in the table above. The two columns are not like for like: the scopes differ, as each cell says.

ITEM	SCOTTISH OFFSHORE WIND	LARGE NUCLEAR
Grid built for it	Scotland: £8.8-29bn of transmission built or approved. Figures as stated, in mixed price bases (2009-10 to 2023/24, one nominal outturn); two carry no price year. ESTIMATE Low: built projects (low) plus Eastern Green Link 1 and 2 and the Orkney link. High: built projects (high) plus Eastern Green Link 1, SSEN's £22bn	Hinkley Connection (Hinkley-Seabank): Ofgem capital cost allowance £655.7m, 2017/18 prices. OFFICIAL National Grid asked for about £716m. About £199/kW of HPC's contract capacity. ESTIMATE (655.7m ÷ 3,287.16 MW)

ITEM	SCOTTISH OFFSHORE WIND	LARGE NUCLEAR
	programme and SPT's load-labelled lines. Low and high are not additive. The research file counts each line's whole cost; the share attributable to wind is not quantified for most lines. Offshore transmission assets are inside the wind farm costs above, not counted here.	Recovered through transmission charges over 45 years, not through the strike price. No outturn cost found. The scope is one 400 kV connection, 49 km overhead and 8.5 km underground.
Switch-off payments	£1.9bn in 2025-26, Britain-wide. OFFICIAL, NAO 2024 prices in the NAO's text; its figure note says 2023-24 prices. The series covers payments to wind farms to turn down and to gas stations to turn up, so it is not Scotland-only or wind-only. In 2024/25 wind turn-down cost £370m and gas turn-up £910m. OFFICIAL Scottish offshore wind, calendar 2025: £181.32m of switch-off payments, which also sits inside the Britain-wide series (the periods differ). INDICATIVE, ELEXON	NOT PUBLISHED No nuclear figure is in the research files.
Stability contracts	Scotland, Stability Pathfinder Phase 2: £323m for 10 contracts with four companies, 10 years from April 2024; five synchronous condensers and five grid-forming batteries. OFFICIAL, NESO 2021 prices, undiscounted. NESO links the need to “The imminent closure of nuclear power stations in Scotland and northern England, and the rising number of onshore and offshore wind farms in Scotland”.	NO £ FIGURE NESO's 2023 siting note: “Nuclear (SMR) generation is a form of synchronous plant, which would support system stability requirements” where inverter-based supply dominates. The note is “highly indicative” and is about small reactors. OFFICIAL, NESO NESO: “Stability has traditionally been supplied as an inherent by-product of synchronous generation.” No figure was found for inertia or fault-level contribution from a large reactor.
Largest single loss	NOT PUBLISHED	NESO: “The minimum inertia of 102 GVA.s is based on a future largest

ITEM	SCOTTISH OFFSHORE WIND	LARGE NUCLEAR
	No equivalent figure is in the research files.	loss of 1800 MW". OFFICIAL, NESO FREQUENCY RISK AND CONTROL REPORT, MAY 2025 Ofgem asked NESO for more information on the 102 GVA.s proposal on 12 December 2025; the outcome was not found. NESO also says: "As our largest loss size increases, with sites such as Hinkley-C power station connecting to the network in the future" it expects a significant increase in response requirements. OFFICIAL, NESO The file does not say 1,800 MW is Hinkley's own size. NESO recommends an additional 200 MW of DC-Low response. No £ figure was found.
Decommissioning and waste	Operators pay under the Energy Act 2004 "polluter pays" regime; Beatrice is already accruing a provision (risk.html). FILED DESNZ's generic assumption for fixed offshore wind: £265,200/MW, 2024 prices, medium case, inside its cost of generation. OFFICIAL This is not a published figure for any Scottish farm.	Funded Decommissioning Programme. New nuclear operators must have secure financing for the full cost of decommissioning and their full share of waste management and disposal. OFFICIAL, DESNZ HPC: about £2/MWh inside the strike price (price year not stated). OFFICIAL, DESNZ NNBG's estimate of decommissioning and waste costs is £7.3bn, 2016 prices. OFFICIAL, NAO SZC: £2.3–2.5bn real (2024-25 prices) paid into an investment fund over the operating life. OFFICIAL, NAO NDA legacy provision: £114.5bn, discounted, at 31 March 2026. OFFICIAL, NDA This belongs to older stations , not to HPC or SZC. Torness is one of seven advanced gas-cooled stations not yet in it; £22bn undiscounted is a contingent figure for the seven together,

ITEM	SCOTTISH OFFSHORE WIND	LARGE NUCLEAR
		estimated by their current owner. OFFICIAL, NDA
Is the cost published?	No, for three items: vessel day rates, contract values and the capital cost of Shetland HVDC Link 2 are not published. Notices name vessels and jobs but give no rates or values; SSEN, Ofgem and NESO have published no cost for the link. OFFICIAL (real-cost.html , shetland2.html)	Totals are published by the NAO. But DESNZ withholds project costs as “commercial sensitivity”. DESNZ, Electricity Generation Costs 2025, lines 1200–1202 of sources/crawl/assets.publishing.service.gov.uk/media/gencosts2025/electricity-generation-costs-report-2025.txt : “Project-specific and confidential costs and technical assumptions were used by DESNZ analysts for both projects but cannot be made available in this report because of their commercial sensitivity.” OFFICIAL · DESNZ · G25:1200–1202
Sources: research/NUCLEAR-COMPARISON.md (sections 1, 2, 4 to 9); research/SCOT-OFFSHORE-COST-1-CAPEX.md, -2-TRANSMISSION.md, -3-STABILITY.md, -4-RUNNING.md; counter/real-cost.html and counter/risk.html for the figures already on this site. Scotland's 2019–2024 offshore wind load factors are not in the files held: DESNZ's 2025 article tabulates 2025 only, and the load-factor spreadsheet it refers to is not held. The research file's own estimates for those years (48.6, 44.8, 33.8, 42.5, 25.2 and 23.2%) use the average of opening and closing capacity and may be biased either way where capacity was added during the year.		

3. The government's own cost comparison

The 2025 DESNZ report gives offshore wind £103/MWh for projects commissioning in 2030 and £98 for 2035, in 2024 prices. It gives no nuclear figure. The latest DESNZ/BEIS report found with both on one basis is from 2016, in 2014 prices: nuclear £95, offshore wind £100.

REPORT	PRICE YEAR	COMMISSIONING	LARGE NUCLEAR, £/MWH	FIXED OFFSHORE WIND, £/MWH	CLASS
DESNZ, Electricity Generation Costs 2025	2024	2030	NOT PUBLISHED	103	OFFICIAL
		2035	NOT PUBLISHED	98	OFFICIAL
BEIS, Electricity Generation Costs, November 2016	2014	2025	95 (first-of-a-kind)	100 (first-of-a-kind)	OFFICIAL
		2030	78 (nth-of-a-kind)	95 (nth-of-a-kind)	OFFICIAL

The 2016 report is old. Its nuclear cost was a first-of-a-kind estimate set before HPC's cost rises, and its offshore wind life of 22 years is below today's 30. The 2020 report says it carries the 2016 nuclear assumptions forward; the 2023 report uses them together with publicly available Hinkley Point C data. The two rows of the table are different bases and are not mixed.

On what the comparison leaves out, the 2016 report says:

“As the definition of levelised costs relates only to those costs accruing to the owner/operator of the generation asset, it does not cover wider costs that may in part fall to others, such as the full cost of system balancing and network investment, or air quality impacts.”

OFFICIAL · BEIS, ELECTRICITY GENERATION COSTS, NOVEMBER 2016 · G16:256–259

The 2025 report lists the same thing under “Out of scope”:

“Wider system costs beyond those faced by the developer, and wider system benefits of deploying generation assets. These cannot be assessed without whole power system modelling.”

OFFICIAL · DESNZ, ELECTRICITY GENERATION COSTS 2025 · G25:266–268

DESNZ's own reasoning, as reported by the NAO (paragraph 1.23): its modelling shows “the greater cost of generation is outweighed by other benefits”, because standard metrics “do not capture wider system costs associated with intermittent generation, such as transmission costs, reserve generation capacity and other balancing services”. That is a modelling claim, not a measured outcome. The NAO also records that the benefits depend on events several decades ahead, with a break-even point “not until 2064 in the most favourable of the core scenarios”. OFFICIAL, NAO

4. Calculator: how borrowed money grows

ILLUSTRATION · ESTIMATE This is a simple model, not a forecast of any project. The starting values are placeholders chosen for the illustration. They are not published figures for any wind farm or power station. Change them and the results update.

INPUTS

CAPITAL COST, £BN

25

BUILD YEARS

12

BUILD STARTS, YEAR

2012

CAPACITY, GW

2.4

SHARE OF TIME
RUNNING, 0 TO 1

0.85

RUNNING COST, £/MWH

25

SELLING PRICE, £/MWH

100

INTEREST RATE, %

4.5

RESET TO THE STARTING VALUES

DEBT AT SWITCH-ON

£32.2bn

DEBT IN 2050

£37.8bn

YEAR PAID OFF

not paid off by 2080

YEARS PRODUCING BY 2050

27

Working: switch-on in 2024. Output 17.87 TWh a year. Margin after running costs £1.34bn a year.

ILLUSTRATION, ESTIMATE · RESULTS SHOWN ARE FOR THE STARTING VALUES

NET ZERO, FOR COMPARISON: OWED IN 2050 IF FINANCED

ESTIMATE · THIS SITE'S ARITHMETIC ON THE CCC'S OWN INVESTMENT FIGURES

SAVINGS
ARRIVE

AT 3.5%

AT 5%

AT 7%

All
savings

£377bn

£563bn

£910bn

Half

£780bn

£1,038bn

£1,509bn

None

£1,182bn

£1,513bn

£2,108bn

Inputs, OFFICIAL: the Climate Change Committee's Seventh Carbon Budget costing data, sheet "Whole economy charts", rows 165 and 166, 2025 to 2050. Additional capital spend sums to £670.1bn; net operating cost sums to -£562.2bn (a negative figure is a saving). Prices as in the CCC data, 2023. Each year: balance = balance $\times$ (1 + r) + capital spend + the share of the saving that arrives.

Caveats. It treats all investment as financed and rolled up; in practice part is paid in cash. It does not count the value of the assets in 2050. It is UK-wide and covers all sectors, not Scotland or power only. It excludes spending before 2025. The CCC itself presents a net cost, not a financed balance. Working in research/NETZERO-DEBT-2050.md.

The formula in plain words

1. The capital cost is spent evenly over the build years, starting in the year given; build years and start year are rounded to whole years. Each year's spend is the capital cost divided by the number of build years.
2. Each build year: balance = last year's balance $\times$ (1 + interest rate) + that year's spend. The balance after the last build year is the debt at switch-on.
3. Output each year = capacity in GW $\times$ 8,760 hours $\times$ share of time running. Margin each year = (selling price – running cost) $\times$ that output.
4. Each year after switch-on: balance = last year's balance $\times$ (1 + interest rate) – the margin.
5. The year paid off is the first year the balance reaches zero or below, up to 2080. If that does not happen, the result reads "not paid off by 2080". Debt in 2050 is the balance at the end of 2050, shown as zero if it has

been paid off.
6. Years producing by 2050 counts the years from switch-on to 2050, inclusive. Every year is taken as 8,760 hours; no tax, inflation or price change is modelled.

All of this is an ILLUSTRATION, ESTIMATE. It shows how the numbers interact: with the starting values the yearly margin is smaller than the yearly interest, so the debt grows after switch-on.

5. What each does for the grid

A checklist of what the research files say. A statement about one kind of plant is not carried over to the other. Where the files hold nothing, the cell says so.

QUESTION	WIND	NUCLEAR	SOURCE
Runs whatever the weather	Observed share of time running, 2025: Scottish offshore wind 23.5%; UK offshore wind 36.1%. OFFICIAL The files record no statement of cause for the Scottish figure. DESNZ, as reported by the NAO, refers to “wider system costs associated with intermittent generation” when comparing SZC with renewables (see section 3).	Observed share of time running, 2025: Torness 82%; UK nuclear fleet 64.04%, lower in 2025 after an extended outage at Hartlepool. PRESS, OFFICIAL DESNZ says SZC has the technical capability for load-following but models it as baseload, because it is unclear whether that will be used. OFFICIAL	NUCLEAR-COMPARISON.md sections 5, 6 and 9c; NAO paragraph 1.23
Steadies frequency (inertia)	NESO: “Renewables like wind and solar don't synchronise with the grid in a way that provides inertia”. NESO buys inertia from other sources: Scotland's Phase 2 contracts are five synchronous condensers and five grid-forming batteries. OFFICIAL, NESO	NESO's 2023 siting note: “Nuclear (SMR) generation is a form of synchronous plant, which would support system stability requirements” where inverter-based supply dominates. The note is “highly indicative” and covers small reactors. OFFICIAL, NESO In the ONR's assessment of one small-reactor design (BWRX-300), the requesting party said it	SCOT-OFFSHORE-COST-3-STABILITY.md sections 2 and “Context”; NUCLEAR-COMPARISON.md section 6

QUESTION	WIND	NUCLEAR	SOURCE
		could not meet two Grid Code requirements with the current design, one of them frequency response. OFFICIAL, ONR No figure for a large reactor was found.	
Supports fault level	NESO: “large coal and gas generation create five times more fault current compared to wind and solar”. The £323m Phase 2 contracts “primarily solve insufficient Short Circuit Levels” in Scotland. OFFICIAL, NESO	The same 2023 NESO note treats nuclear (SMR) as synchronous plant that supports stability. NESO says fault level “helps us to maintain system voltage”. OFFICIAL, NESO No figure for fault-level contribution from a large reactor or an advanced gas-cooled reactor was found.	SCOT-OFFSHORE-COST-3-STABILITY.md; NUCLEAR-COMPARISON.md sections 6 and 10
Can restart a dead grid (black start)	NO SOURCE FOUND The research files hold no statement either way for wind. A northern-regions restoration tender of £53.8m (eight contracts) covers the North West, North East and Scotland; the providers and the Scottish share are not published. OFFICIAL, NESO	NO SOURCE FOUND No NESO or ONR statement that nuclear can, or cannot, provide black start was found. NESO says a provider must be able to start from an on-site auxiliary generator without external supplies. OFFICIAL, NESO	NUCLEAR-COMPARISON.md sections 6 and 10 (item 6); SCOT-OFFSHORE-COST-3-STABILITY.md section 2d
Needs backup in calm weather	Not stated in these terms in the research files. DESNZ's reasoning, as reported by the NAO, refers to “reserve generation capacity and other balancing services” associated with intermittent generation. That is a modelling claim,	Not stated in the research files. DESNZ models SZC as baseload at 90%; nuclear fleet output ranged from 56.82% to 72.85% across 2018–2025. OFFICIAL No reserve or balancing cost attributable to large nuclear units was found.	NAO paragraph 1.23, as quoted in NUCLEAR-COMPARISON.md section 9d; NUCLEAR-COMPARISON.md sections 5b and 6

QUESTION	WIND	NUCLEAR	SOURCE
	not a measured outcome. OFFICIAL, NAO		
Needs grid reinforcement far from demand	DESNZ: “a plant built a long distance from centres of high demand will increase transmission network costs”. OFFICIAL Scottish transmission built or approved: £8.8–29bn (section 2). North Scotland carries the highest generation transmission tariff of the 27 zones for conventional plant: £36.182993/kW in NESO's 2025/26 example for low-carbon plant such as nuclear (75% load factor). OFFICIAL, NESO	Hinkley Connection: Ofgem allowance £655.7m, 2017/18 prices, recovered over 45 years. OFFICIAL NESO: “The total amount of generation connected to any one point cannot exceed the amount of response available.” OFFICIAL Whether HPC is near or far from demand is not stated in the research files.	NUCLEAR-COMPARISON.md sections 4, 6 and 7; SCOT-OFFSHORE-COST-2-TRANSMISSION.md; FACT-SHEET.md fact 28

6. Both track records

Hinkley Point C: cost and timing

DATE	WHOLE-PROJECT COST	PRICE YEAR	UNIT 1 START, AS THEN STATED	CLASS
July 2016, final investment decision	£18bn	2016 prices	2025 (end of year); the NAO's “original” date was 2023	OFFICIAL, NAO
3 July 2017	£19.6bn	not stated in the saved article	by the end of 2025	PRESS
25 September 2019	£21.5–22.5bn	2015 sterling, excluding interim interest	end of 2025	PRESS, EDF RELEASE
27 January 2021	£22–23bn	2015 prices	June 2026	PRESS
20 May 2022	£25–26bn	2015 prices	June 2027	PRESS

DATE	WHOLE-PROJECT COST	PRICE YEAR	UNIT 1 START, AS THEN STATED	CLASS
23 January 2024	£31–34bn, plus £18bn	2015 prices	2029, 2030 (base case) or 2031	PRESS
February 2026, EDF 2025 results	£35–36bn	2015 prices	2030 to 2031; unit 2 2031 to 2032	OFFICIAL, NAO TABLE CITING EDF

The £18bn and £35–36bn are in different price years (2016 and 2015) and have not been re-based. The NAO's earliest entry is £17.9bn in 2015 prices. The EDF group's own statements were not retrievable; rows between 2017 and 2024 rest on trade press and an EDF release. No NAO value-for-money report on HPC after June 2017 was found.

Sizewell C: what is planned

SZC's baseline is £38.2bn with the plant **fully operational in July 2039**. DESNZ's lower regulatory threshold is £40.5bn, October 2039; the higher is £47.7bn, August 2043. All are in 2024–25 prices. OFFICIAL, NAO The final investment decision was on 22 July 2025. These are forecasts at that date, not an outturn.

Connect and manage: the 2010 forecast against the outturn

MEASURE	FORECAST IN 2010	OUTTURN
The increment caused by the rule	Central £195m present value over 2010–20, 2009 prices, about £18m a year. Range £160m to £992m. OFFICIAL, FORECAST	Attributed to the rule by National Grid, reported by Ofgem: £4.4m (Apr 2011 to Aug 2012); £22.2m (Sep 2012 to Sep 2013); £69.4m (Oct 2013 to Sep 2014); £121.7m (Oct 2014 to Sep 2015). Not reported after 2015 in the files held. OFFICIAL
The total of all constraint costs	Central £999m present value over 2010–20. Range £571m to £2,019m. OFFICIAL, FORECAST	NAO thermal constraint costs by year, £bn: 0.56 (2018-19), 0.52, 0.65, 1.21, 1.04, 1.54, 1.65, 1.90 (2025-26). 2024 prices in the NAO text; 2023-24 prices in its figure note. OFFICIAL

Not like for like. The forecast is the increment over the alternative rule; the outturn series is the total. The forecast is a present value in 2009 prices; the outturn is annual, in 2023-24 or 2024 prices. Only 2018-19 and 2019-20 fall inside the forecast window. Read side by side, not subtracted. Ofgem's sixth monitoring report (December 2015) said National Grid expected these costs to “drop

to nearly zero in 2017/18”; the NAO says Ofgem forecast they would fall to zero by 2023-24. Detail on [the real cost page](#).

Shetland HVDC Link 2: the case behind it

Ofgem's stated need case was three prospective wind farms. Press reporting of NESO's 2024 recommendation put them at 2.8GW. PRESS In March 2026 the 500MW Arven South option was handed back to Crown Estate Scotland, its board citing “specifically the lack of a viable grid connection”; Ocean Winds keeps its lease for the larger 1.8GW Arven site. PRESS That leaves 2.3GW: Arven 1.8GW and Stoura 500MW. PRESS The capital cost of Link 2 is not published. See [the Shetland link page](#).

SOURCES

Project research files, compiled 4 and 5 October 2026: research/NUCLEAR-COMPARISON.md; research/SCOT-OFFSHORE-COST-1-CAPEX.md, -2-TRANSMISSION.md, -3-STABILITY.md and -4-RUNNING.md; research/CONNECT-AND-MANAGE.md; research/NETZERO-DEBT-2050.md; FACT-SHEET.md facts 22, 26 and 28; and the figures already on this site in [real-cost.html](#) and [risk.html](#). Primary sources behind them: NAO, Sizewell C (HC 33), 20 May 2026, and Hinkley Point C (HC 40), 23 June 2017; DESNZ Electricity Generation Costs 2025 and its Annex A, and the BEIS Electricity Generation Costs report of November 2016; DESNZ Sizewell C final investment decision press release and value-for-money assessment, July 2025; DESNZ Regional Renewable Statistics, 2025; DUKES 2026 tables 5.10.B, 5.11 and 6.3; EDF Energy fleet update for 2025, its release on the Hinkley Point C project of September 2019, and its Torness material; Ofgem decision on the Hinkley–Seabank project, May 2020; NESO Frequency Risk and Control Report, May 2025, the Stability Pathfinder Phase 2 results of April 2022 and NESO's 2023 nuclear siting note; ONR assessment of the BWRX-300 electrical engineering design; NDA Annual Report and Accounts 2025/26; DESNZ Hinkley Point C Funded Decommissioning Programme; Low Carbon Contracts Company data; Ellexon indicative balancing data for 2025; DECC impact assessment URN 10/899, 27 July 2010, and Ofgem connect and manage monitoring reports 2011 to 2015; Climate Change Committee, Seventh Carbon Budget costing data, May 2025; filed company accounts for the wind farms. Also relied on directly by this page: NAO, Upgrading the electricity transmission network (HC 589), 11 September 2026; DESNZ Reformed National Pricing delivery plan, 2026; DESNZ Contracts for Difference Allocation Round 7 results; guidance on decommissioning offshore renewable energy installations under the Energy Act 2004, March 2019; World Nuclear News articles of 3 July 2017, 27 January 2021, 20 May 2022 and 23 January 2024; Shetland News, 19 March 2024 and 20 March 2026; Ofgem tCSNP2 consultation, 1 August 2024; Ofgem Frequency Risk and Control Report 2025 decision, 12 December 2025; Ofgem's Hinkley Point C grid link announcement; NESO Final TNUoS Tariffs 2025/26, its black start guide, its northern-regions restoration services release and its explainer on grid stability; JBIC's Moray East release, November 2018; IJGlobal and Pinsent Masons on the Beatrice financing, 2016; Red Rock Power's Inch Cape financial close release, January 2025; SSE plc Annual Report 2026; the Companies House register of persons with significant control. Full file and line citations are in the research files. Related pages: [who pays](#), [the missing figures](#), [the evidence register](#).

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