THE £125M GRI

Revealed, how public has been misled over the cost of the SNP's wind power dream

SPECIAL INVESTIGATION

by Jonathan Brocklebank

IN the space of very few years they have risen to become the most visible feature of the Scottish countryside after the landscape itself. Standing more than 400ft high, the towering steel monsters now peppering the terrain are almost too numerous to count – and the biggest barrier to any attempt at a tally is the fact more are springing up all the time.

But the proliferation of wind farms, the public is repeatedly assured, is both necessary and desirable as Scotland embraces the cleaner, greener energy solutions of the 21st Century.

Furthermore, the renewables lobby and the Scottish Government insist, turbines make better economic sense. It was, of course, the industry's best known apologist, one Alex Salmond, who told us: 'The wind comes for free.'

But a Daily Mail investigation has exposed the multi-million pound con of wind power, a deception which deflects legitimate concerns over the huge costs involved in juggling scores of intermittently active turbines along with conventional power providers on the National Grid.

At a time of soaring energy giants' profits, our probe shines a devastating new light on the scandal of wind farm constraint payments – the vast sums received by their operators for switching off and doing nothing. And it reveals the public are misled every time they are told constraint payments to fossil fuel-burning power providers are much higher than to wind operators.

Indeed, even when confronted with evidence to the contrary, industry body Scottish Renewables continued to insist fossil fuel-powered generators cost the public more for sitting idle than wind does.

One charity which studies the renewables industry described the perpetuation of this fiction as both 'irresponsible and reprehensible'

Dr Lee Moroney, principal analyst for the Renewable Energy Foundation (REF) said: 'This myth has been used to distract attention from the excessive prices charged by wind farms to stop generating, which are themselves a clear and worrying sign of the spiralling system management costs of the government's over-ambitious wind program.'

The Mail's investigation follows revelations that, in the first fortnight of 2015, Scottish wind farms earned more than £8million for powering down and contributing no electricity – more than they would have received had they been operational.

In an eight month period last year wind farms made £31.55million from sitting idle – while the figure for the last five years is around £103million. All this is bankrolled by our electricity bills.

Yet, for reasons critics argue can only be political, the renewables industry and the Scottish Government still insist gas-fired generators are a much bigger problem in the complex arena of constraint payments.

The fiction they offer is that those gas generators earn much more for standing idle than wind farms do, which is patently untrue. In fact, when gas-powered stations earn their constraint payments, they are almost always supplying more electricity for the system, not less.

Yet, in his defence of wind farm constraint payments, Niall Stuart, chief executive of industry body Scottish Renewables, says, quite falsely: 'Payments made to fossil fuel generators to reduce output or shut down completely in order to balance the grid remain substantially higher than those made to wind farms.'

Other statements, such as Scottish Renewables senior policy manager Michael Rieley's claim that gas-burning energy providers were paid almost four times the sum received by wind farms in constraint payments, are wildly misleading – relying on the word 'constraint' to convey the impression both wind and gas were supplying less power.

In fact, wind received £31.55million for sitting idle while gas received £125million for boosting production – ironically, often to make up for the shortfall in wind.

The Scottish Government plays the same trick, telling the public: 'Far greater constraint payments are paid to gas than wind.'

Time and again, it seems, 'constraint payments' are taken to mean payments for providing less power. It is true in the case of wind. But constraint payments received by gas-powered generators almost always mean extra money for supplying extra power.

Indeed, the real situation is the very opposite of that implied by the renewables lobby. Typically, when a fossil fuel generator reduces output from a pre-agreed level, it pays National Grid, not the other way round. Conversely, when it increases output – burning more fuel to supply more of its product – National Grid pays it extra.

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Crucially, wind farms are only ever paid extra by the National Grid for providing less power. And, in the topsy turvy world of wind farm economics, the most profitable site could easily be that which never had to operate at all.

'This myth is both irresponsible and reprehensible'

At the root of this bizarre financial arrangement lies in the subsidy of around £45 which wind farms receive for every megawatt hour of electricity produced.

When they power down they miss out on this green energy subsidy and therefore expect to be paid for coming off-stream. This sum received from National Grid compensates them for the lost subsidy and the lost sale.

But why are constraints necessary at all? National Grid explains that running its network is a 24-hour a day balancing act. Head of network strategy Phil Sheppard says: 'A constraint arises where power cannot be transmitted to where it is needed, usually due to congestion at one or more points on the transmission network. When this happens, we need to take action to "balance" the network. This is similar to occasionally using traffic lights to manage the flow of cars joining a motorway during a busy period.'

Figures retrieved by REF show wind farms make much of their money from this balancing of the network. And far more balancing is necessary, they say, because of the proliferation of wind farms in Scotland.

Dr Moroney, who attended a National Grid forum last week, said: 'It is clear life in the control room at National Grid has changed dramatically over the last five years, with many more instructions issued to generators and more complex decision making to balance the system.

'This was attributed variously to the increased number of generators – all the new wind farms, the fact that wind is a less reliable source which requires complex forecasting software and, finally, the increased dispersion of the generation fleet further from areas of demand which requires more and longer cable which, in turn, introduces new difficulties with balancing.'

She said National Grid was doing its best to rise to the renewable energy 'challenge', but added: 'They will not put their heads above the parapet to point out, from their expert point of view, that meeting the Government's aspirations will be very costly for the consumer and introduce new risks to security of supply.'

More worrying still is the economics of the grid balancing system.

In the pre-wind-farm days, says REF director Dr John Constable, balancing the National Grid was relatively cost-effective. When a conventional generator was asked to power down, another, elsewhere, powered up. Financially, that meant

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Lost beauty: The Braes O'Doune wind farm towers over Stirling Castle

Blot on the landscape: Turbines overshadow Broughty Ferry, Dundee

Blighted view: Historic Dunvegan Castle, Skye, menaced by turbines

Power struggle: Planning chief Thomas Prag, above, and Grid strategist Phil Sheppard, below

paying extra to one generator but receiving money back from the other one which was, after all, saving coal or gas which could be burned another day.

But powering down a wind farm while powering up a fossil fuel burning generator elsewhere means extra money being paid out in both directions.

Rather than mitigating the cost, National Grid pays out on both sides of the deal – and passes to the bill on to consumers.

There are, of course, two governments at work here. At Westminster, Communities Secretary Eric Pickles is accused of turning down wind farm applications right left and centre to shore up votes in the Conservative Party's English heartlands.

But in Holyrood the Scottish Government's passion for wind farms remains fervent as it pushes towards its target of ensuring the equivalent of 100 per cent of the nation's electricity needs are provided by renewables by 2020.

Among the latest applications is the proposal to plonk eight massive turbines on the hillside next to Culzean Castle in Ayrshire, the National Trust of Scotland's most visited attraction.

In the Highlands, meanwhile, 527 turbines already constructed, approved or in the planning system are within a 22 mile-radius of Loch Ness, another iconic Scottish attraction.

As one senior Highlands councillor points out, rejecting the deluge of wind farm applications dominating planning committee business does not make them simply go away.

'Householders will just be steamrollered'

Planning committee chairman Thomas Prag said: 'If we made a policy statement to say there was a moratorium in Highland, then the chances are that developers would still apply. We might try to refuse them but they could just go to appeal.'

The appeal body is, of course, the Scottish Government – best friend to the wind farm and the power giants filling ever more of Scotland's countryside with forests of turbines.

So many factors make Scotland the ideal target for wind farms that the proliferation appears almost the result of a perfect storm. As Dr Constable explains: 'It is windier so they are going to get more generation from their plant. Because the Grid is weak in Scotland, they also stand to make more money out of constraint payments. And it's far easier to get through planning in Scotland, partly because the population is less dense and in rural Scotland, it's very low indeed. Even if some people are very badly affected they are unlikely to stop a development. There may be four or five households who have a horrific time, but they will just be steamrollered.'

A National Grid spokesman said gas generators sometimes received payments for decreasing production through pre-arranged bi-lateral contracts. The spokesman confirmed, however, that gas generators routinely paid National Grid through a system called the balancing mechanism. Wind farms, on the other hand, were invariably paid for coming off the system.

Duncan Burt, head of commercial operations at National Grid, said: 'Predominantly gas is increasing output and the wind is decreasing output.'

He said taking wind off the Grid would almost inevitably increase constraint payments for gas because gas generators would be brought in to increase power to balance the system.

When challenged over its portrayal of the system, the Scottish Government stuck to its guns. A spokesman said: 'The overwhelming majority of [constraints and balancing] payments do not go to the wind sector, but instead to gas power stations.

'National Grid publish a Balancing Services Summary every month, which breaks down these costs by fuel type and it shows that gas has received four times more than wind in the current financial year to date.'

The spokesman added: 'Wind farms will attract constraint and balancing payments from National Grid only when they offer the lowest cost option. The bulk of payments for flexing output – both up and down – and to manage Grid stability accrue to fossil fuel generators.'

Scottish Renewables, meanwhile, refused to admit its chief executive Niall Stuart had misled the public by claiming fossil fuel generators received 'substantially more' to reduce or shut down output than wind farms.

A spokesman said: 'Fossil fuel generators like coal and gas have received payments when required to reduce output or shut down by National Grid for a number of years now, and it continues to be our understanding that these significantly exceed the level of constraint payments which have been received by wind farms.

'Figures from National Grid for April to November 2014 show total constraint and balancing payments made to wind farms was £31.55million, compared to payments to gas of £125million.

'If you only take payments to specifically manage constraints, and do not include payments to rebalance the system, gas was paid £38.1million – £6.5million more than wind received – over the same period.'

There is no denying the financial arrangements involved in the constraints system are complex, and it is possible that even those speaking on behalf of the renewables industry do not fully understand them.

But these arrangements are not a matter of opinion. Our investigation has revealed a fundamental disagreement on the facts of how hundreds of millions of pounds, passed on to consumers in their bills, has been spent. And the dispute is between people whose job it is to know the industry inside out.

Only one side can be right. How many more steel monsters will loom onto the landscape before the public is told, unequivocally, which side that is?

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