



Briefing: Longannet Ministerial Statement, 3rd September

SCOTLAND'S ONGOING ENERGY TRANSITION

Following more than 40 years of operation, Longannet's closure has been inevitable for some time. It is an important step in Scotland's ongoing energy transition. This transition should be embraced, in order to secure the economic benefits of almost fully-renewables based electricity generation. Independent research shows that this is technically feasible and achievable by 2030. Longannet's early closure threatens neither security of supply nor Scotland's position as a net-exporter of electricity to the rest of Great Britain. Ministers should now set out a clear strategy for ensuring a just transition to a clean energy future.

Key Points

- The closure of Longannet is a commercial decision of Scottish Power, reflecting a combination of factors, including plant age, EU air pollution rules, carbon pricing and transmission charging. The Scottish Government have long assumed that Longannet would close by 2020.
- **Longannet is Scotland's single biggest source of climate emissions.** The end of coal fired electricity generation in Scotland is an important step in Scotland's clean energy transition.
- Independent analysis by DNV-GL shows that **almost fully-renewables based electricity generation in Scotland is technically feasible and achievable in 2030**, with Scotland playing to strength by continuing to export electricity to the rest of the shared and secure GB grid.
- The Economy, Energy & Tourism Committee's Security of Supply inquiry has received ample expert evidence that **Longannet's closure poses no threat to Scottish electricity supply.**
- **Following Longannet's closure, Scotland will continue to be a net-exporter of electricity to the rest of Great Britain.** Scottish renewable electricity will continue to be essential in keeping the lights on in England. Creating mutual security of supply through sharing electrons back and forth across local and national boundaries is increasingly common-place across Europe.
- Scotland is at the forefront of an energy transition being experienced across Europe. **The Scottish Government's response to Longannet's closure should include a commitment to a new electricity strategy** that concentrates on securing the benefits, in terms of jobs and community benefits, of concentrating on renewable electricity generation.

Longannet's closure has been inevitable for some time

Longannet is now over 40-years old and is Scotland's single biggest emitter of climate pollution. Its inevitable closure has been long anticipated by the Scottish Government, for example in the Scottish Government's climate action plan, the Report on Proposals and Policies, and in the Scottish Government's Electricity Generation Policy Statement, both of which assumed that Longannet would be closed by 2020.

The **decision to close Longannet is a commercial decision of Scottish Power, and a consequence of multiple factors.** Longannet's closure is being driven by a combination of factors, including the age of the plant, the cost of retrofitting to comply with the EU Industrial Emissions Directive, the Carbon Price Floor, and transmission charging.

It is widely recognised that coal power has no future as part of the UK's energy mix. Prior to the UK General Election, the Conservatives, Labour and Liberal Democrats all committed to ending the use of unabated coal for electricity generation. UK coal plant closures have taken place in recent years at Kingsnorth, Didcot A, Ironbridge B, Ferrybridge I and II, Cockenzie and Uskmouth.

Longannet closure poses no threat to security of supply in Scotland

Great Britain's electricity grid is one of the most secure in the world. Even without Longannet, Scotland's electricity supply continues to be secure. Furthermore, Scotland will maintain its position as a net exporter of electricity to the rest of the GB grid. **Therefore, any concern about the forthcoming closure of Longannet should not be about meeting peak demand for power (either at Scotland or GB level) or maintaining the import/export balance in Scotland's favour.**

"There is not a generation adequacy issue impacting Scottish security of supply as a result of the potential closure of Longannet."

"The transmission system in Great Britain, [which] at 99.99995% is the most reliable network in Europe."

National Grid, written supplementary evidence to Scottish Parliament EET Committee Security of Supply inquiry¹

At GB level, there is also more than adequate generation to meet peak demand. Because there is a fully integrated grid shared across the constituent parts of Great Britain, operated as a single entity, capacity margins are calculated at the GB level. **The capacity margin for the forthcoming winter is 5.1%².** Any use of a 1.2% figure is erroneous, as it does not take account of additional balancing tools procured by National Grid. As the EET Committee's Convenor pointed out, none of the 9 energy experts who gave evidence to the Committee on the 20th May believed that this margin was too low:

"Professor Bell [of the University of Strathclyde] was very clear during that evidence session [20th May]. He did not believe that the capacity margin set by National Grid was too low. I asked the rest of the panel if anyone disagreed with him, and nobody did."

Murdo Fraser MSP, speaking at EET Committee, 17th June³

In terms of wider system services, National Grid have procured a contract from Peterhead gas plant for voltage control services, to ensure system stability until additional interconnection capacity with the rest of the GB grid becomes fully operational.

¹ National Grid evidence, available on [EET Committee website](#)

² [National Grid Winter Review and Outlook Consultation 2015/16](#)

³ Economy, Energy & Tourism Committee, 17th June 2015, [Col 2](#)

The closure of Longannet poses no threat to Scotland's position as a net exporter of electricity to the remainder of the GB grid:

"[Following Longannet's closure] there will still be—probably for the majority of the time—a large export from Scotland to the rest of the network."

Mike Calviou, National Grid, 11th March, Economy, Energy & Tourism Committee meeting

"We at present export most of the time. National Grid gave evidence to Murdo Fraser's committee recently stating that Scotland will continue to be a net exporter [after Longannet's closure] ... We believe that there should be a common market and therefore flows north and south are a good thing, not a bad thing."

Fergus Ewing MSP, Minister for Business, Energy & Tourism, 19th August 2015⁴

On days with low wind, electrons will flow to Scotland through transmission links to the rest of Great Britain but the flows the majority of the time will be the other way around. This is an entirely normal system dynamic, and an efficient one, reflecting that Scotland increasingly plays to its natural energy resource strengths. Whilst electricity interconnection is likely to be used more frequently in future to mutually secure supply, this is increasingly the case across all of Europe, with increased interconnection a key feature of the EU Energy Union initiative.

Scotland should embrace its ongoing energy transition

The early closure of Longannet should be seen within a context of a wider energy transition that is occurring in Scotland, and indeed across the world. **The economics of thermal power means that Scotland is rapidly moving towards a localised, environmentally-friendly, smart and increasingly cost-competitive renewables-centred system.** This reflects the natural strengths of Scotland's geography.

Independent research, undertaken by internationally-renowned engineering consultancy firm DNV GL, has shown that **almost fully-renewables based electricity generation in Scotland is technically feasible and achievable in 2030**, with Scotland playing to its strengths by continuing to export electricity to the rest of the shared and secure Great Britain grid.

This transition should be embraced by the political parties. **Embracing this ongoing energy transition enables focus on securing the opportunities provided**, in terms of jobs, community empowerment and local economic renewal. A new Scottish electricity strategy is needed, and should put Scotland on course for an almost entirely renewable electricity system in 2030. Greater focus should also be put on reducing electricity demand (the most cost-effective approach to securing supply), with a new Scottish strategy for reducing demand for electricity.

Any attempts by the Scottish Government to artificially resuscitate unabated thermal power in Scotland are likely to be unsuccessful, due to the economic realities for new thermal power across the whole UK, as well as being counterproductive for Scotland's climate ambitions.

Independent research undertaken by independent engineering consultancy DNV-GL⁵ and by Ricardo AEA (forthcoming) show that **a new unabated gas plant of 1GW would have to sit idle the vast bulk of the time, presumably at vast cost to the consumer, to be compatible with Scotland's climate targets** and the Scottish Government's energy decarbonisation target for 2030. It is therefore welcome news that Scottish Power also announced that it would not proceed with its proposed new unabated Cockerzie gas plant.

⁴ Speaking on BBC Scotland's Good Morning Scotland programme

⁵ **Pathways to Power**, commissioned by WWF Scotland,

Whilst WWF Scotland continues to support the testing of CCS at Peterhead, the pace of commercialisation suggests that it would be very imprudent to rely on its widespread availability in the 2020s, risking lock-in to high carbon electricity generation if 'CCS-ready' plants are developed in Scotland.

WWF Scotland's suggested response by Scottish Government to Longannet's closure

WWF Scotland hopes to see the following included in the Scottish Government's response to Longannet's closure:

- A commitment to embrace Scotland's energy transition, **by producing a new electricity strategy that puts Scotland on course for almost entirely renewable electricity generation in 2030**. This should incorporate:
 - A new strategy to reduce electricity demand by at least 1%/year to 2030, with a challenge fund to boost the profile of electricity demand reduction.
 - Continued engagement with industry and the UK Government to find a solution to incentivise the development of electricity storage.
 - **Proposals for ensuring that the rest of Scotland's wider energy transition is a just transition.**
- There are understandable concerns about the impact of Longannet's closure on the local economy. Efforts to support affected communities should continue.
- A continued commitment to making energy policy consistent with the Climate Change (Scotland) Act. By way of example, seeking a new unabated gas plant would be inconsistent with the Climate Change Act.

Key questions for the Scottish Government to answer

- When will the Scottish Government update the Electricity Generation Policy Statement to reflect the economic realities of new thermal power, and increase attention on reducing electricity demand and improving electricity storage?
- How will the Scottish Government prevent the same transitional issues arising with future thermal plant closures and ensure that there is a clear strategy to manage the inevitable transition for communities and workers affected?

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