Submission to DECC Review of the Security of Energy Supply of Ireland's Electricity and Natural Gas Systems



Wholesale Electricity and Gas Policy Division
Department of the Environment, Climate and Communications
29-31 Adelaide Road
Dublin.
D02 X285

Submission on

Review of the security of energy supply of Ireland's electricity and natural gas systems

A chara,

I submit that some other issues have not been adequately addressed in this review

Risks

- 1. The big unmentioned risk is the complete failure of our public service (elected and appointed) to take action to avoid/mitigate security of supply risks, given that this has been publicly known for years. In addition to statements in a series of Generation Adequacy reports, it has been clear for at least 20 years that on-shore wind energy generation was unlikely to meet increasing demand for electricity from sustainable sources. This clearly pointed to the need for offshore wind generation facilities, with appropriate policies for
 - 1.1. licensing and permitting offshore wind generation
 - 1.2. grid connections;
 - 1.3. market design

being drawn up in much the same way as local authorities are obliged to draw up development plans on a five yearly basis.

Yet, little or nothing appears to have been done until ???? Given these delays, what confidence can we have in the capacity and ability of our public service to overcome risk of *implementation disorder deficit* on this critical issue?

This is yet another example of public service focus on grand gestures which get headlines. This has replaced the quiet competent planning which secures our comfort and safety by ensuring the conditions of cooperation on issues that go beyond electoral or business cycles. This is a failure to grasp the complexities on which our society depends. Other examples are housing, passenger transport in urban areas, HSE IT systems which were known to be vulnerable long before the May 2021 cyber attack

Submission to DECC Review of the Security of Energy Supply of Ireland's Electricity and Natural Gas Systems

Mitigation Options

- 2. Of the mitigation options outlined, I ask that
 - 2.1. *additional gas reserves from existing exploration licences* be moved in the feasibility of deployment by 2030, given that it is
 - 2.1.1. deemed possible;
 - 2.1.2. reports suggest that such gas supplies exist offshore eg. Barryroe;
 - 2.1.3. no provision has been made for
 - 2.1.3.1. any gas storage in this island, even though natural gas has become the main fuel for electricity generation;
 - 2.1.3.2. securing electricity supplies apart from assuming that gas -fuelled capacity would be readily available for shock scenarios 1 and 2 set out in par 6.2.

As a weakly connected offshore island, relying on international supply chains to deliver energy in a just-in-time mode displays the of naivety which gave rise to cargo cults. This was not the approach adopted in response to the oil crises of the 1970s, when Moneypoint was planned and built. Nor is it applied to the storage of oil products, even if there is doubt about the capacity to get oil from the privately-owned Whiddy Island terminal, in a crisis which limited availability of even small tankers.

3. Additional scenarios are needed arising from

- 3.1. UK and English politics which has led to unreliability in sticking to international agreements, which could lead to longer disruptions than set out in Scenario 5;
- 3.2. The Russian invasion of Ukraine and events following that eg. the sabotage of some Baltic Sea pipelines suggests that the same type of sabotage could happen to electricity interconnectors which this review puts forward as a mitigation measure.

4. Electricity Storage

Hydro pumped storage must be given a much higher priority. It is simply not good enough for this major review to rely on one project (ie. Silvermines Hydro) when considering this option. Governing for our common good is more that the bureaucratic mediation of interest groups (including state owned enterprises) and lobbying by promoters for special treatment.

Other freshwater sites probably exist. Why has this review overlooked a site within Northern Ireland for which equipment was designed and built, but never installed? I gather that this equipment was stored in the UK until about 20 years ago, when it was scrapped.

It is critically important that generation capacity auctions provide for different sizes of pumped storage in different parts of the island, rather than being distorted because of one project.

Submission to DECC Review of the Security of Energy Supply of Ireland's Electricity and Natural Gas Systems

In addition to meeting demand for generation from time-to-time, Turlough Hill hydro pumped storage has proved very useful for maintaining grid stability. As it is policy to make the most of our natural resources by increasing intermittent generation capacity, it is critical that additional pumped storage is added. Climate change probably means higher rainfalls in Ireland. The costs of grid stability should also be listed as a separate line item on electricity bills, given the net energy yield of having electricity storage

5. A different Secondary fuel?

Given that the lack of effective action to ensure adequate electricity generation capacity to match the policies of the electrification of transport and heating, why not extend the life of Moneypoint? Coal is available from many different sources and can be stored on the island. Yes, it does mean more CO2 emissions, which will need mitigation eg. on-site Carbon Capture and Storage.

What is the difference between this and ordering jet engines (open cycle gas turbines) to provide security of supply over the next 3-4 years? Are emissions from these being specially mitigated?

6. Firm electric power

People/society have come to rely on firm electric power. This should be clearly stated and operational in any market-based measures arising from this review. The full costs of the delivery of firm power must be transparent to all. Energy bills should now show, as separate line items, the costs of delivery of firm power eg

- 6.1. Fuel;
- 6.2. Transmission and distribution costs
- 6.3. All forms of storage (gas and electricity, regardless of technology)

at a minimum.

It is simply not acceptable that electricity suppliers mislead customers with claims about the nature of the fuel used to generate electricity by hiding the costs of green certificates in other unspecified charges (eg. standing charges), if recent newspaper reports are true.

Even if this is acceptable at EU level, we simply must set our own standards to promote popular understanding of the networked energy supplies on which we rely and apply them consistently. Given our island position, this would not be a distortion of a non-existent common EU market for energy supplies, as Germany has shown.

Is mise