

Review of the Security of Energy Supply of Ireland's Electricity and Natural Gas Systems' Consultation

A Submission to the Public Consultation

By: [REDACTED] 28 October 2022

The Consultation Process

Section 9 of the Consultation Document sets out the consultation questions. It appears that the consultation seeks to solicit the views of the general public. Most members of the public have little knowledge of or interest in these mainly technical issues. They rely on the politicians they elect and the officials and "experts" these politicians appoint or retain to formulate, enact and implement appropriate policy decisions.

How will submissions by the public, if any are submitted, be assessed? What impact, if any, will they have on the subsequent decision-making process? Will their submissions be given the more, the same or less weight than submissions by persons with knowledge, competence and experience in or by economic actors in the energy sector?

The consultation process lists 10 questions across three areas:

- Risks;
- Mitigation Options; and
- Policy Measures.

It forces prospective participants to accept the methodology employed by the consultancy firm retained by the Department and the conclusions advanced. Prospective participants may only embellish or add to the analysis or conclusions.

This is a total travesty of a consultation process. As usual, the Department will act as judge and jury on any views expressed.

¹ [REDACTED] is an independent energy economics consultant working primarily in the areas of gas industry structure and regulation with a specific interest in the development, financing and pricing of services on gas transmission and distribution networks. He has also applied the common principles and procedures of the financial and economic analysis of investment in specific, long-lived assets to assignments in the oil, electricity and other utility and infrastructure service industries, since these industries are also characterized by this type of asset.

Beginning with significant involvement in gas market liberalisation in Great Britain – including advising the gas regulator and the then Monopolies and Mergers Commission (subsequently re-configured, via the Competition Commission, as the Competition & Markets Authority) - the geographical scope of his work has expanded and he has considerable international experience throughout Europe, Africa, the Middle East, Russia and East Asia. He has provided advice to the European Commission on its gas market liberalization programme and evaluated gas interconnection and storage projects under the European Energy Programme for Recovery. He has worked for gas market participants throughout the EU in the context of gas market liberalisation and has worked on a number of gas industry projects in Ireland over the last 35 years. He has written a paper which sets out a basis for developing the mandated Entry-Exit pricing of gas transmission in the context of the EU Gas Target Model:

<http://www.oxfordenergy.org/wpcms/wp-content/uploads/2010/11/NG23-Entry-ExitTransmissionPricingwithNotionalHubsCanItDeliverAPanEuropeanWholesaleMarketInGas-PaulHunt-2008.pdf>

Risks

1. Are there any other security of supply risks that you can identify in addition to those set out in section 6?

The Consultation Document sets what out it describes as demand-side "risks" and supply-side "risks".

- Sustained low temperatures increasing peak period demand for gas and electricity;
- Low wind speeds increasing demand for gas in electricity generation;
- Significant increased demand from LEUs;
- Electrification of heat and transport;
- Combined demand risk events;
- Interruptions of or shortfalls in gas imports from the UK;
- Knock-on impacts of reduced gas availability in the UK or in Europe;
- Reduced availability of electricity generating capacity – including low availability of wind generation capacity in both Ireland and NW Europe, possibly combined with sustained low temperatures;

These aren't "risks" in any meaningful sense; most are either events that are almost certain to occur at some point as part of the normal operation of gas and electricity industries or that are the result of previous decisions, or inevitable outcomes of policy decisions, with the only uncertainty being about the severity, duration and the imminence of the impacts. However, many of the impacts are likely to be more severe because of previous and continuing failures and deficiencies in the policy, administrative and regulatory governance of the electricity and gas industries.

Excessive reliance on renewable energy

For example, there is such a reliance on must-run, intermittent, non-dispatchable, zero marginal cost renewables (mainly wind) and ample mainly gas-fired generation must be available almost instantaneously to plug any gaps that a period of sustained low temperatures or low wind speeds (or a mix of both) will impose significant additional costs on other generators (and on the system generally) – and ultimately on final consumers and this, inevitably, will put both the gas and electricity systems under stress.

Much of this reliance can be attributed to the exertions of key members of what can be described as the Green energy movement. The current Minister, as the leader of the political wing of this movement – the Green party, during his previous term (between 2007 and 2011) when he was the Minister responsible for energy, represented Ireland on the European Council when the EU's binding 20:20:20 by 2020 energy targets were agreed. These targets were a 20% reduction in CO2 emissions, a 20% increase in energy efficiency and a 20% renewable share in primary energy consumption.

It goes without saying that we have failed miserably on some counts and any progress made was made at an excessive cost to final consumers. Achieving a 20% renewable share in primary energy consumption was always going to be a big ask (even if a revised national target of 17% was agreed). As a result, it was decided to target a renewable share in electricity generation of 40% as a means of meeting the primary energy target.

This imposed huge costs on the electricity system which were ultimately borne by final consumers. The ESB Group was relaxed because it could expand its empire, it could pass through the higher costs associated with a massive increase in investment to final consumers and, in addition, and even more importantly, it was able to levy transmission and distribution tariffs that extracted from final consumers a share of the up-front financing of investment (which, more properly, should have been advanced by the state as the majority shareholder.) Wind (or, more accurately, subsidy) farmers were granted licences to print money.

Excessive increases in the demand for electricity

Again, it is inevitable that the public policy of pandering to firms in the MNC enclave by facilitating and, almost by default, encouraging an expansion in the scale and number of data centres, together with effectively uncapped proposals to massively increase the electrification of heating and transport, is putting both the gas and electricity systems under even more stress.

Excessive reliance on gas pipeline import from Great Britain

And this has been compounded by an increasing reliance on gas imports by pipeline from Great Britain. The inevitability of this reliance was established as far back as early 2001 when the then government decided to approve the construction of a second gas interconnector between Ireland and Scotland. Previously, Bord Gáis Éireann, in co-ordination with the Department, had commissioned a joint study of natural gas demand to the year 2025 (Gas 2025) to determine the optimal long-term transmission infrastructure necessary to cater for the projected demand. An international consortium of Sofregaz, JP Kenny, Penspen and MCOS, under the direction of a Consultant Project Director appointed by Bord Gáis, was contracted to perform this study. This study dismissed options which would diversify the sources of supply and the modes of gas delivery, in particular, the import and regasification of LNG, and concluded that a second interconnector to Scotland was the most appropriate solution. In addition, production from existing indigenous gas reserves was declining quite rapidly.

In December 2000, the ESRI published gas demand projections that estimated that gas consumption would grow by between 6.4% and 9.9% over the next half-decade up to 2005 and by between 5.8% and 7.6% over the decade up to 2010. Partly on foot of these projections and facing the risk of gas supply shortfalls in the near term, the decision was made to construct the second interconnector and it was commissioned in 2003.

However, the projected increase in gas consumption during the first half-decade of the 2000s did not happen. Rather than growing between 6.4% and 9.9%, gas consumption grew by 0.3%. The EU Electricity Directive (96/92/EC) included provisions to encourage and facilitate competition in electricity generation. These encouraged the provision of new generation capacity by competing providers and constrained the provision of new capacity by the ESB as the dominant provider. However, the provision of this capacity by competing providers was slow to emerge and didn't begin to emerge until the second half-decade of the 2000s. It was only then that the additional capacity provided by the second gas interconnector was required.

The Shannon LNG project was advanced initially while the second interconnector was being constructed. The sponsors were advised that all of the official parties to the decision to construct the second gas interconnector (that included Bord Gáis, the Minister (and the then government), the Department, the energy regulator and the extended government apparatus in the energy sector) were opposed to the import and regasification of LNG. However, the sponsors progressed with the project, the expected official opposition was not expressed and the sponsors expended considerable resources and applied for and secured most of the permits and consents required.

It was clear, though, to any party which gave consideration to the matter that LNG imports (plus the Corrib field production expected in the near term) would result in a significant decline in the use of the gas interconnectors – in particular, the second interconnector. But the state and its agencies – in particular, Bord Gáis – were not prepared to consider any stranding of the interconnector assets; full revenue recovery would be pursued. The Commission for Energy Regulation (CER) – now the Commission for the Regulation of Utilities (CRU) – began an extended consultation process in 2011 when the LNG project sponsors believed they were getting close to a Financial Investment Decision (FID). This consultation process concluded in 2012 with a decision that the interconnectors should be integrated with the onshore transmission system and the Entry-Exit tariff mechanism modified accordingly. In this way indigenous producers and LNG importers, even though they were diversifying the sources and modes of gas supply, were required to contribute to the cost of the alleged security of supply the unused interconnector capacity would provide.

This was and remains totally unjustified. It led to the indefinite suspension of the Shannon LNG project, though the current energy crisis in Europe is enhancing its relevance. This regulatory decision, the delay in arriving at it, the willingness of the state and its agency to contest and ensure the rejection of a judicial review of the decision, when combined with the extended delay in bringing forward production from the Corrib Field, have seriously damaged Ireland's reputation as a location for efficient investment in the energy sector.

But the decision was inevitable once all other options to diversify the sources and modes of gas supply were rejected in the late 1990s and the state and its agencies, in particular, Bord Gáis, were absolutely determined to construct a second interconnector. Had they been chosen, one or more of these options could have been implemented within the timescale required to avoid shortfalls in supply.

As a result, Ireland, on its own, has not been able to satisfy the 'N-1' infrastructure standard set out in Article 5 of the Gas Security of Supply Regulation (EU) 2017/1938 which replaced Regulation (EU) 994/2010 and sets out a range of requirements that apply to EU Member States in relation to the security of gas supply. Prior to Brexit Ireland was able to do so only on a regional basis with the UK. From 1 January 2021, following the end of the Brexit transition period, Ireland has not been in a position to meet the infrastructure standard and the UK is not required to provide solidarity to Ireland during natural gas supply disruptions under Article 13 of the Regulation.

In the Consultation Document the Department advises that there is a joint protocol for load shedding in gas supply emergencies between Gas Networks Ireland and National Grid. However, this is simply an agreement between two commercial entities – the former an Irish 'semi-state' and the latter a UK plc. There is nothing to prevent the UK government over-riding this protocol if it deems that this is required.

Placing Ireland's gas security of supply almost totally at the whim of a UK government, and, in particular, a UK government which is committed to pursuing a hard Brexit and has serious issues about the NI Protocol, is one of the most stupid public infrastructure decisions made in this island. And there seems to be absolutely no accountability in the same way as there is no accountability for the damaging impacts of the other policy decisions outlined earlier. The inquiry led by a former civil service secretary-general commissioned by the Minister has been designed to avoid the imposition of any accountability.

In conclusion on this question, these self-generated "risks" are more than enough to be going on with. Any other risks one might consider would pale in to insignificance.

- 2. If there are other risks that you have identified, could you outline some mitigation options to address the risk(s)?***

The focus has to be on the self-generated "risks" identified.

3. *Are the five shock scenarios that were considered, and the additional scenarios related to the Russian invasion of Ukraine, sufficiently broad?*

An assessment of these "shock scenarios" is a matter for those with the relevant technical expertise. It is disingenuous to seek approval of these without making all the underlying data available.

Mitigation Options and Policy Measures

- 4. *Do you have any additional mitigation options that you think should be considered?***
- 5. *Which gas supply mitigation options, if any, should be considered for implementation?***
- 6. *Which electricity supply mitigation options, if any, should be considered for implementation?***
- 7. *What measures should be considered on the demand side to support security of supply of electricity and gas?***
- 8. *Do you have any views on how the mitigation options should be implemented?***
- 9. *Do you support the policy measures proposed in section 8 of the consultation paper?***
- 10. *What further tools and measures do you think would contribute the most to Ireland's energy security of supply?***

These specific questions are almost totally nonsensical. It is not possible to form or express a valid view on the basis of the information provided or the manner in which they have been couched.

A number of options have been short-listed.

- Gas Storage Facility
- Floating LNG Terminal
- Gas Mitigation Package
- Onshore Energy Storage
- Natural Gas Demand Management
- Additional Electricity Interconnection
- Additional Electricity Storage – Pumped hydro
- Additional generation capacity – dispatchable low carbon
- Increased secondary fuel storage at gas-fired stations

These should be assessed in the context of the short-term (this winter and the next), the medium-term (to 2030) and the longer-term (to 2050). Most of these options will have no meaningful impact in the short-term. Obviously, those that might have some impact should

be implemented. But it is clear that we are relying on the goodwill of the British authorities in the short-term.

No option should be ruled out in the medium to longer-term, but much more analysis will be required to assemble an implementable package of measures. The biggest hindrance is the Green party opposition to the import of gas from tight gas reserves, the transformation of natural gas to hydrogen, the use of hydrogen on modified existing gas networks for home heating, CCUS and nuclear power.

These options must be on the table as well. The only hope is that the Green party will lose all or most of its seats at the next general election – as it did in 2011. Then we might begin to address these challenges effectively. It will be a long hard grind as there have been numerous, successive and cumulative policy failures and deficiencies.