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Wholesale Electricity and Gas Policy Division
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By email: (energyconsultation@decc.gov.ie)

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Security of Supply of Ireland's Electricity and Natural Gas Systems,

Dear Sir/Madam,

lbec, the group that represents Irish business, welcomes the opportunity to present its views on the review of Ireland's Electricity and Natural Gas Systems. Ibec is the largest business representative organisation in Ireland. We speak for businesses across a range of industrial, commercial, and non-profit sectors. The organisation and its sector associations strive for business conditions that enable sustainable economic growth.

Overview - a secure transition to net zero emissions

Russia's invasion of Ukraine and the resulting energy supply and affordability crisis has revealed fundamental weaknesses in Europe's energy system, including a failure to transition away from imported fossil fuels. The crisis has also highlighted Ireland's own overdependence on fossil imports. To advance security of supply, climate, and European security goals, Ireland must make big steps this decade to break free from its overreliance on imported fossil fuels and deliver a net zero energy system. Accordingly, Ibec supports the national climate ambition to reduce emission by 51% (on 2018 levels) this decade and achieve carbon neutrality by 2050.

The transition to net zero will greatly enhance Ireland's energy resilience as we take advantage of indigenous renewable resources and as energy efficiency improvements reduce total demand. But the journey to net zero must be carefully planned and managed to avoid periods of constraint and fuel shortages.

Ireland faces significant energy challenges in the short to medium term. EirGrid projects electricity capacity deficits every year until 2031 and the Minister for Environment, Communications, Climate is in a position where he cannot rule out the possibility of blackouts for winter 2022/23. The reason we are in this situation is in part because of poor long term energy planning and a failure to recognise, until it was too late, the critical need for new modern gas fired generation to support renewables and a growing economy.

In May 2019 Ibec's Low Carbon Roadmap called on Government to undertake a comprehensive study into security of supply out to 2035. In June 2020, Ibec again called on all party leaders to commit to a comprehensive review of Ireland's energy security as it transitions away from fossil fuels, noting how four fifths of respondents to an Ibec survey had expressed concerns about security of supply. It is of great frustration to the business community that a commitment to review Ireland's security of supply has taken so long to materialise. Had this review been completed earlier, we would be better prepared for the challenges we face today and we could have avoided the need for electricity users to pay for costly emergency generation during an energy affordability crisis.

Ibec member workshop on energy security – 17 October 2022

Earlier this month, Ibec held a member workshop to gather member feedback on the energy security review and accompanying CEPA analysis. In attendance were energy suppliers and energy users across a wide range of sectors including pharmaceuticals, food and drink manufacturing, medical devices, cement, technology, retail, data storage, and hospitality. The comments below reflect the concerns and issues raised at this workshop.

General comments

For Ibec, the review and accompanying analysis represents a missed opportunity to conduct a deeper and more comprehensive review of Ireland's energy needs. The decision to focus exclusively on electricity and natural gas systems means that the analysis overlooks nearly 80% of Ireland's energy imports. Our energy system should be seen as one complex interconnected system where the supply, demand, affordability, and phase-out (where required) of all fuels must be carefully managed. By including liquid fuels in its scope, the review could have helped develop a more robust timeline and planned phase out of liquid fossil fuels and could also have aided investment in new liquid biofuels that will play a critical role in some hard-to-mitigate sectors.

Another key shortcoming in the CEPA document is the lack of any thorough cost benefit analysis or quantitative carbon impact assessment. This would have greatly aided comparison of the different mitigation options and helped better inform technology and policy choices. Absent such information, the rationale behind the shortlisting of technologies appears somewhat subjective, particularly where options have been rejected on economic or carbon lock-in grounds. It is unclear why this analysis is excluded from the study, given CEPA's undoubted expertise and capability to provide just such a grounding to their discussion.

The remainder of this submission focuses on the specific questions raised by DECC.

Risks

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

Ibec's central concern with the CEPA analysis is that the core baseline scenario modelled assumes the full delivery of planned energy infrastructure and capacity. The baseline includes CRU's Electricity Security of Supply Programme of Work and its delivery of 2GW of enduring flexible gas-fired generation capacity by 2030, and the delivery of 5GW of offshore wind by 2030. The expected RES E share in the core baseline scenario is 80% dropping only to 77% in the baseline 2 scenario. The core baseline also assumes no additional delays to the Celtic, North-South, and Greenlink Interconnectors or to the build-out of enabling infrastructure such as the development of deep-water port facilities for offshore delivery and new grid infrastructure.

The risk of delays and under-delivery is not unfounded. Ireland has longstanding problems with the timely delivery of infrastructure projects, especially energy projects. Energy supply projects can take up to a decade to bring from pre-planning to completion. The major drivers of these delays are a cumbersome planning system, a lack of resources in key agencies, and the high frequency of lengthy judicial review challenges. Another key barrier to developing energy projects in Ireland is the electricity grid, including high levels of uncertainty around when projects will receive firm access to the grid. Such uncertainty creates risk for project developers. These planning, licensing, and grid issues are compounded by flaws in the capacity market system which has seen expected capacity withdrawn. If these issues are not swiftly resolved, they could have a chilling effect on inward investment over the coming years.

Ibec also believes the study could be impacted materially by Ireland's emergency response to its own electricity supply constraints and by the EU response to the European energy crisis. The European energy crisis has provoked an unprecedented EU policy response. Mandatory gas and electricity demand reductions are planned for winter 2022/23 along with windfall levies on some electricity and fossil fuel producers. Meanwhile measures to decouple electricity and gas prices are being considered, with the European Commission planning to begin reforms of the electricity market in early 2023. Meanwhile, Ireland's own capacity-constrained electricity generation system is being addressed through unprecedented state intervention and the delivery of emergency modular

generation. While most of these measures are short term in nature, some could have a lasting impact on Europe and Ireland's energy system in the decade ahead. Any failure to address these short-term challenges could greatly impact the roll out of planned capacity.

One risk not addressed in the CEPA study is greater post-Brexit divergence between Ireland/EU and the UK. Ireland's energy system is heavily linked with that of Britain and Northern Ireland. We share an all-island wholesale electricity market, and our gas market functions effectively as one market with trades and flows taking place seamlessly. Ireland's emergency plans rely heavily on cooperation and coordination with the UK, which is not subject to EC Regulation 2022/1854. While some of the shock scenarios modelled in the CEPA study could be driven by political or regulatory divergence between the UK and the EU/Ireland, these are not explicitly mentioned as potential causes. Ibec believes that strong efforts are needed in the coming years to bring the UK and EU systems closer together. UK exclusion from EU energy forums is not in Ireland's or the EU's interest.

lbec members also noted the complete omission of cyber security risks from the report. As energy technologies become progressively more connected to modern, digital technologies and networks, the functioning of the energy system becomes increasingly exposed to cyberattacks and cybersecurity incidents. The EU Security Union Strategy, presented in July 2020, identifies the energy sector as requiring dedicated support to ensure its resilient against physical, cyber and hybrid threats.

Finally, Ibec notes that the CEPA analysis is primarily informed by data from 2020 and 2021 when the review commenced. Given the delays to the report and the significant energy and global economic developments that have happened in 2022, it would make sense to update some of the assumptions in the study. For example, Ibec notes that the CEPA analysis is informed by EirGrid's 2021 Generation Capacity Statement (GCS). The recently published 2022 GCS presents a far more challenging electricity constraint over the next decade and could have a strong bearing on this report. Meanwhile the likelihood of a European recession on the back of the energy crisis could have a lasting impact on energy demand in the short-medium term.

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

The additional risks identified above are largely related to problems in our costly and cumbersome planning system, the lack of resources in key agencies, and the high frequency of lengthy judicial review challenges. While new systems are being set up to help delivery Climate Action 2021 renewable targets and the 5GW of

offshore capacity, these new regimes have yet to be tested. Ibec's 2019 <u>Better Planning</u> report includes a host of policy recommendations which would help tackle some of problems project developers face while also protecting important rights and processes.

Ibec has also repeatedly called for additional resources to be given to key departments and agencies involved in the delivery of energy projects. This includes the CRU, DECC, the Office of the Planning Regulator, the EPA, and especially the new Maritime Area Regularity Authority (MARA) which will be of critical importance to the processing of maritime area consents for prospective offshore generation.

Ibec recommends that the CEPA analysis be strengthened with the addition of a sensitivity analysis which could account for the risks of non-delivery of key energy infrastructure and failures to meet key renewable targets.

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

Ibec agrees with the selection of the five shock scenarios as they are sufficiently broad and informative. Our concerns relate more to underlying assumptions and expected progress towards meeting our national climate targets and the delivery of planned energy infrastructure. If a sixth shock scenario were to be considered it should be a cyber security incident.

Mitigation Options

4. Do you have any additional mitigation options that you think should be considered?

Ibec members questioned the stated rationale for not shortlisting the option of enhanced indigenous gas resources from existing licenses in an economy which, it is widely accepted, will continue to rely on natural gas for its energy requirements for another two decades or more. The explanation given is two-fold; "additional domestic production of natural gas above forecasted demand could result in Ireland being locked into a high-gas energy market" and there being "unknown volume of any potential additional natural gas discoveries". If there is an unknown volume of indigenous gas, how can it be said that the volume discovered would exceed projected demand? The omission of the further development of indigenous gas supplies as a mitigating option in the CEPA report, coupled with the shortlisting of other import gas options, indicates a continued national policy preference for other countries to carry out the exploration, development and production necessary for serving our medium-term national gas demand. It has also been well documented

that internationally piped gas and LNG have a higher carbon footprint than domestically produced gas. This would have been highlighted in a thorough carbon impact comparison of the mitigation options.

In a similar vein to the omission of shortlisting indigenous gas resources, we would question the decision to exclude certain storage options, such as underground gas storage. At present Ireland has no gas storage. Ireland's ambitious renewable electricity targets will further drive the need for seasonal storage. Whilst other renewable and short-term storage initiatives (such as short cycle batteries, etc.) can and will play an assisting role, to meet this scale, Ireland's energy system may also require much larger scale storage solutions. It is worth noting that even a Floating Storage and Regasification Unit would be unable to provide more than a week or so of backup in the event of a complete outage at Moffat, in contrast to a strategic onshore LNG terminal.

As noted in the introduction, the absence of thorough cost benefit analysis makes it difficult to compare the options and test the rationale for failing to short-list certain measures.

Ibec members also questioned the complete omission of carbon capture. This is inexplicable given that the technology is recognised by the European Commission and Climate Action Plan 2021 as being a key element in the net zero transition.

5. Which gas supply mitigation options, if any, should be considered for implementation?

For Ibec all options must be considered, and preference given to those options that deliver on key energy security, cost, and sustainability goals. Key factors like the feasibility of delivering the project/intervention in the next decade, cost effectiveness (recognising that the costs will likely fall on the consumer), and future proofing/consistency with climate goals must be carefully considered. Finding a mitigation option that meets all these goals will be challenging and some compromises will likely be required. For this reason, the lack of a comprehensive carbon impact analysis and costing of options is regrettable and makes selection and shortlisting very difficult.

Of the options shortlisted, Ibec believes that LNG, gas storage for emergency use, gas decarbonisation through biomethane and hydrogen, and gas demand reduction incentives could all play a role in a secure energy transition.

LNG, gas storage and gas decarbonisation

The war in Ukraine has exposed critical weakness in Europe's gas supply. EU member states have responded to the crisis by reducing gas demand, accelerating gas storage, new solidarity arrangements, and the development of new and more

secure LNG supply lines. Despite these unprecedented and largely successful interventions, Europe is unlikely to avoid a recession. Ireland has managed to avoid these problems and need for such a response because of our strong and diverse gas supply from Corrib (circa 20%) and through our interconnection to the British gas network. Our relative resilience in the face of this European gas crisis is largely one of good fortune and geography. The future however is uncertain. Ireland's Corrib field supply is declining. The potential benefits of future-proofed emergency gas storage in Kinsale and/or back-up direct access to emergency LNG would give important security to our system as we transition to a fully renewable system.

lbec acknowledges the expressed concerns with the carbon impacts of these measures. But if used for emergency relief only (and especially if the future proofing includes hydrogen-compatibility) such interventions could remain consistent with ambitious carbon budgets. To address concerns about fracked gas, measures could be introduced to better control the contracted gas use to fill LNG reserves. Ibec notes that some fracked gas most likely already enters the Irish system through commingled piped gas from Britain.

As Ireland transitions to a net zero energy system, any use of natural gas must be accompanied by a decarbonisation and transition plan. Ibec strongly supports measures to decarbonise the gas supply through the development of hydrogen, biomethane, and carbon capture and storage/use. Ibec submitted a response to the recent DECC consultation on the development of a hydrogen strategy for Ireland setting out our key asks. The final strategy and resulting policies should be considered as part of this security review.

6. Which electricity supply mitigation options, if any, should be considered for implementation?

Of the options shortlisted, Ibec believes that additional electricity interconnection, additional demand side responses, new electricity (battery) storage, market reforms, and hydrogen could all play a role in securing our electricity system while avoiding any carbon lock in.

Demand response

lbec is currently surveying medium and large electricity users to better understand the barriers and opportunities for additional demand side response. Unfortunately, this information will only be available in mid-November 2022. Ibec would welcome an opportunity to present the findings of the work to policymakers and submit a follow up contribution to this consultation.

Interconnection

lbec strongly supports the principle of a better connected and more efficient European electricity system. Ibec has been a strong supporter of both the North South Interconnector and Celtic Interconnector projects. However, it is critical that all new interconnection proposals are subject to individual assessment of costs and benefits given that the costs associated with interconnection development fall primary on electricity users. Ibec members did agree with CEPA's finding that the security of supply value of interconnection would be reduced at times when connected jurisdictions face their own supply challenges.

Secondary fuel option

lbec members have concerns about the costs and viability of demanding that gas fired generators increase the volume of secondary fuel on site to deal with gas supply emergencies. The CEPA study seems to favor this intervention. However, Ibec believes the costs and impact on consumers associated with this move have not been adequately modelled. There are also practical, planning, and environmental challenges with increasing the volume of secondary fuel supply. Not all sites will have nearby space for additional storage and planning and licensing delays could become a delaying factor. The CEPA study reports that after considering plant availability, emissions limits, and technical issues, 69% of total installed gas fired capacity would be available to operate on secondary fuel at a given time. Ibec members with specific expertise of the sector have questioned this number. Such a policy intervention would need a more robust dedicated assessment.

New biomass plant

Ibec members raised concerns about the viability of additional biomass to support a new unplanned biomass plant. The prospects of converting Moneypoint 1 and 2 plants to biomass are very low given the daily volume of sustainably sourced biomass feedstock that would be required.

7. What measures should be considered on the demand side to support security of supply of electricity and gas?

With energy costs reaching exceptional heights in Q3 2022, most commercial and industrial users will have taken all measures within their ability to improve energy efficiency and thereby reduce consumption. Ibec is also aware that demand for SEAI supports, energy consultants, and energy contractors are at record levels as businesses look to renewables and energy efficiency investments to reduce their exposure to rising costs. While the war in Ukraine may have been a big driver in this

regard, many firms were already reassessing their energy efficiency in late 2021 after prices briefly soared in the aftermath of the Covid lockdown. Ibec has repeatedly called on government to introduce new, more accessible, and generous supports to help businesses transition away from fossil fuels and enhance their efficiency. Ibec has recently concluded a survey of firms seeking information on how they are responding to rising costs. Ibec expects that this data will provide a crucial insight into the opportunities and challenges businesses face in reducing energy demand. Ibec would welcome an opportunity to present the findings of this research to DECC and SEAI in the coming weeks.

Ibec is also currently surveying medium and large electricity users to better understand the barriers and opportunities for additional demand side response. Unfortunately, this information will only be available in mid-November 2022. Ibec would welcome an opportunity to present the findings of the work to policymakers and submit a follow up contribution to this consultation.

8. Do you have any views on how the mitigation options should be implemented?

N/A

Policy Measures

9. Do you support the policy measures proposed in section 8 of the consultation paper?

lbec supports the proposals to begin annual joint electricity and gas assessments to provide a more holistic assessment of our energy needs. Ibec also supports the development of two-yearly technical reviews of Ireland's energy security and deeper reviews every four years. Ibec believes these reviews should cover the entire energy system, not just electricity and gas. The deeper reviews should also be strengthened with stronger modelling and carbon and cost assessments of mitigation options. It would be beneficial to include industry stakeholders in such exercises.

10. What further tools and measures do you think would contribute the most to Ireland's energy security of supply?

N/A

Future engagement opportunities

As a follow-up to this consultation, we would welcome an opportunity to share the results from two important pieces of research lbec is undertaking at present, namely:

- a member survey on energy affordability and impacts of the European energy crisis, and
- a survey of medium and large energy users with potential to join or participate more fully in the DSR market.

We believe this research will address some significant data blind spots when it comes to business energy costs and impacts.

Yours sincerely,

Senior Executive, Energy and Climate Policy, Ibec