EPUKI Response to Department of Energy, Climate, and Communications Review of Energy Security of Supply

EP UK Investments Ltd. (EPUKI) welcomes the opportunity to respond to the Review of Security of Energy Supply of Ireland's Electricity and Natural Gas System. As an owner and operator of generation assets in Ireland and Northern Ireland, EPUKI plays a key role in the Single Electricity Market (SEM) in ensuring availability and reliability of conventional generation. As Ireland completes its transition to a low-carbon system, we are preparing for the role of conventional generation to adapt and evolve to a supportive one, facilitating greater renewable penetration.

EPUKI supports a review of Ireland's energy security at a critical time for the country. As we transition to a low-carbon electricity it is essential to ensure that adequate capacity exists to keep the lights on. While some of the measures proposed in the consultation paper may benefit Security of Supply, we believe that improved performance of key parties is required to ensure energy security.

Improved performance and greater transparency from the relevant system operators and regulatory authorities is necessary to ensure investment in the Irish market, and infrastructure capable of supporting this investment. EPUKI has identified several obstacles which currently exist to delivering New Capacity and has been attempting to address these obstacles through modifications to the market rules.

We encourage DECC to undertake an urgent review of short-term Security of Supply and performance of the CRM. While the SEMC are currently undertaking a review of the Capacity Remuneration Mechanism (CRM), we have concerns about the failure of the SEMC review to acknowledge challenges in delivering capacity through the CRM to date. This includes an 89% termination rate for new gas units over the course of three capacity auctions (T-4 2022/23, 2023/24, 2024/25). Similarly, the SEMC recently published a decision to reject a modification which was submitted to the SEMC with significant industry support. This modification sought to allow relief to New Capacity projects as a result of external third-party delays and thus avoid the potential for the project to terminate its capacity contract. We believe that unless urgent actions are taken to address the CRM in the short-term, we will face a worsening of the Security of Supply crisis.

This response addresses each of the questions set out in Section 9 of the Consultation document.

Risks

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

CEPA have broadly sorted risks into three categories, namely:

- 1. Demand Side Risks;
- 2. Supply Side Risks; and
- 3. Shock Scenarios

EPUKI recognises the risks which exist as a result of increased demand, particularly due to changing weather or an increase in Large Energy Users (LEUs). However, we have some concerns about the categorisation of heat and transport electrification as a demand side risk. The Commission for Regulation of Utilities (CRU) published its Price Review 5 (PR5) submission in December 2020 in which electrification of heat and transport was identified as a key objective.

PR5 provided access to almost €4.5bn revenue to the Distribution System Operator (DSO) and over €1 billion of operating expenditure to the Transmission System Operator (TSO) for the period from 2021-

2025. Considering the significant funding made available to address electrification, we do not think it should be portrayed as a risk. Instead, it needs to be considered as a workstream which both the System Operators and Regulatory Authorities have been aware of for a number of years. As such, any Security of Supply risk arising from electrification would represent an abject failure of these entities in exercising their functions.

In terms of Supply Side risks, we believe that many of the key risk items have been identified. In terms of Shock Scenario risks we acknowledge the difficulty in forecasting or analysing such scenarios but believe the range presented by CEPA appears comprehensive.

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

N/A

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

EPUKI considers the five shock scenarios presented to be broadly comprehensive in covering possible outcomes which may strain Security of Supply.

Mitigation Options

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

EPUKI believes that flexible conventional generation will have a role to play in energy Security of Supply both in the short-term future and in a world with greater volumes of renewable generation. This idea has been supported and expressed by both DECC and the CRU in policy statements in the last 12-24 months. As such, it is unclear why it has not been included as an option in CEPA's review, considering it would be highly effective and highly feasible, compared to some other options presented.

Flexible conventional generation provides high reliability and availability, with short start-up times. This means that as intermittent generation (such as wind and solar) become increasingly prevalent on the Irish system, conventional generation will play a more flexible, adaptive role. When the renewable generation is not available, this flexible generation will be required to come on and meet demand needs. This is more efficient and less carbon intensive than traditional conventional generation which would require approximately four hours start-up time.

Investment in this form of flexible conventional generation is currently at risk as a result of policy decisions in the Capacity Remuneration Mechanism (CRM) and lack of regulatory clarity of revenue streams (such as the DS3 System Services Future Arrangements). Additionally, new investment in this kind of generation is currently being exposed to possible termination as a result of soaring inflation costs and third-party delays such as challenges to planning applications or grid connections. We urge DECC to engage with both the CRU and the TSO to ensure these challenges are alleviated. This generation is an 'easy win' for Security of Supply and an absolute necessity in the short to medium term if generation adequacy is to be ensured in the coming years.

Failure to address these risks, and secure generation capability through the CRM, will also result in increased costs to consumers in procuring temporary emergency generation. The CRU has already allocated €478m to the procurement of this generation, by winter 2023/2024. If new investment, which has already been awarded contracts in the CRM is not secured, emergency generation will likely be required in future years as well. It is completely unacceptable for consumers to be paying such high prices for temporary generation when more cost-efficient options are available through the CRM. Additionally, a continued reliance on such generation would only suspend (rather than solve) any Security of Supply issues in the long-term.

Furthermore, we believe it is imperative that Ireland's TSO should not be allowed to own or develop assets which compete in or interact with the SEM Capacity Market. Currently, the TSO owns the East West Interconnector and will likely take ownership of the upcoming Celtic Interconnector and emergency generation. This represents a highly questionable conflict of interest, whereby the TSO sets parameters for Capacity Auctions and benefits from Interconnector capacity contracts and electricity deficit. We understand that this review is intended as a longer-term assessment of Security of Supply, but if these pressing issues are not addressed in the near-term, we will be playing catch-up in the years going forward, making it difficult to deliver a secure system by 2030.

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

EPUKI believes that the most effective mitigation options are those which could be feasibly implemented in the short-term. Options which could be implemented by 2030, while possibly useful in the long-term, are of limited value to Ireland's immediate Security of Supply. Additionally, while there is merit in forward-looking solutions, it is difficult to predict how the world will look in 2030. If the renewable transition continues in Ireland, it is more likely that gas will play a lesser role in our Security of Supply, with flexible conventional operating as a support for solar and wind energy. As such, the impact of these measures may not be as significant by 2030.

EPUKI agrees with the Natural Gas Demand Management mitigation option presented by CEPA in the consultation paper. This option is compatible with the Climate Action Plan and transition from gas use in domestic settings, to electrification. As mentioned above, continued electrification will likely result in greater electricity demand which will need to be planned and accounted for accordingly.

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

As outlined above, we believe the most effective measures are those which are feasible in the coming years, particularly as Ireland is currently suffering from Security of Supply concerns.

In the consultation paper CEPA propose an increase to the stocks of secondary fuel which gas providers would be required to hold. This is similar to a consultation held by Utility Regulator of Northern Ireland (UREGNI) in August 2022. EPUKI has significant concerns around this proposal and what it means for Security of Supply responsibilities in Ireland.

Gas-fired power plants are already required to hold secondary fuel equal to up to five-days running at full output (three days for lower merit units). This fuel is reserved for emergency events and represents a significant cost to generators through the procurement, storage, and maintenance of same. Any increase in secondary fuel holding obligations would be incurred at greater cost and likely require on-site modifications to facilitate greater volumes of fuel. This type of regulatory risk and

additional costs may result in older plant no longer being economically viable and deciding to close, further exasperating the Security of Supply issues.

To date, the current standard (i.e., five days holding), has been sufficient for ensuring Ireland's Security of Supply. We believe that the current Security of Supply concerns have been driven in a large part due to the failures of the TSO and CRU in carrying out their functions efficiently and effectively. As such, it would be unequitable to place a greater burden of cost and responsibility on gas generators (who have already delivered to date), as a result of the shortcomings of the state bodies in the TSO and CRU.

As outlined in response to Question 4, Security of Supply issues would be addressed much more effectively by ensuring a functional CRM which facilitates the delivery of New Capacity. Capacity in Ireland is typically procured through the CRM with four years in advance (T-4). In practice, however, the lead time for delivery of such projects is three and a half years (on account fo the auction timing and delivery date) Eight of the nine new gas units which were awarded capacity for delivery in the 22/23, 23/24, and 24/25 T-4 auctions in Ireland have been terminated prior to delivering capacity. This represents an 89% rate of termination of New Capacity and demonstrates significant obstacles to capacity delivery in Ireland. These obstacles include lack of indexation in the CRM, restrictive price caps in the CRM, inflexible Strike Price exposing units to unavoidable downside, and third-party (TSO) delays resulting in contract erosion and termination. The CRU is aware of these issues and industry has prepared a number of modifications to the Trading and Settlement Code (TSC) and Capacity Market Code (CMC). EPUKI would consider it completely unacceptable to increase the resource and cost burden on gas participants before any attempts to remedy issues within the CRM. in Ireland have been terminated prior to delivering capacity. This represents an 89% rate of termination of New Capacity and demonstrates significant obstacles to capacity delivery in Ireland. These obstacles include lack of indexation in the CRM, restrictive price caps in the CRM, inflexible Strike Price exposing units to unavoidable downside, and third-party (TSO) delays resulting in contract erosion and termination. The CRU is aware of these issues and industry has prepared a number of modifications to the Trading and Settlement Code (TSC) and Capacity Market Code (CMC). EPUKI would consider it completely unacceptable to increase the resource and cost burden on gas participants before any attempts to remedy issues within the CRM.

Similarly, we believe stronger performance is required by the TSO in order to ensure Security of Supply. In many cases, Security of Supply issues are localised rather than on a national level. These issues typically arise as a result of network constraints restricting the supply of electricity from one point to another. Some of these constraints have been in place for many years without alleviation. Similarly, Security of Supply issues in Dublin have been identified as far back as 2017 but no transmission infrastructure has been developed in Dublin since then. This is an abject failure of the TSO's responsibilities to develop and maintain the transmission network which is now causing Security of Supply issues. The outcome of such failings should not be further burden on gas-fired generation.

Of the other options presented in the consultation paper, it is difficult to comment on the most appropriate for implementation as no economic analysis (or costs) have been presented as part of the analysis. However, EPUKI is confused as to why interconnectors have been included as an option to mitigate Security of Supply concerns. During a number of recent system scarcity events interconnectors have been exporting rather than importing electricity. As such, it does not seem practical to treat these units as a mitigation to Security of Supply risks. It would be more pragmatic to give a higher weighting to flexible conventional generation, which has the ability to switch on during unexpected scarcity events (such as when another unit trips or expected wind doesn't show up). This

provides greater system security than an interconnector which may (and often is) exporting power from the system during periods of scarcity.

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

The consultation paper outlines a package for Demand Side Reduction (DSR) and batteries as a potential Security of Supply support. We believe there is potential in such mechanisms by enabling the reduction of consumption at times of high stress. In order to deliver such reductions however, it may be necessary to increase the financial incentive available to units for such a reduction. If DSR is currently not contributing at times of system strain, it would suggest that consumers are not willing to reduce their usage in exchange for the payment on offer. Thus, a recalibration of this incentive may be necessary. Currently, the RO Strike Price acts as a price cap, above which generators must pay Difference Charges. In order to enable full utilisation of DSR, we would propose the Strike Price be recalibrated to facilitate higher prices at times of system strain. This would not be expected to result in higher prices when there is no scarcity, as downward pressure applies as a result of competitiveness in the SEM.

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

As outlined above, a significant volume of analysis is required before any of the options are implemented. No economic analysis of any kind has been provided alongside this paper. At the very least a cost-benefit analysis would need to be carried out on each of the options prior to advancing any further.

Additionally, further public consultation is requested to discuss specific details on each of the options if they are to be progressed. Stakeholders should feed into how options are progressed, and details required to do so.

EPUKI expects any procurement associated with advancing these options to be public and, where possible, competitive. It would not be appropriate for any of the options to be procured without sufficient transparency and competition.

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

EPUKI broadly supports the policy measures presented in section 8 but question whether these measures would result in an improvement to Ireland's Security of Supply. The three policy measures in the consultation paper are either already in place or have a very similar measure already in place.

The paper presents joint planning panel consisting of the operators of transmission and distribution gas and electricity networks as a policy option to improve Security of Supply. While we acknowledge the importance of an interface between gas and electricity, (particularly when renewable gas and hydrogen are expected to play greater roles in the future), we would expect the system operators to be engaged in this kind of planning already. This kind of engagement between key parties in the development and maintenance of key infrastructure is the absolute bare minimum which should be expected in order to maintain Security of Supply standards. We believe that this policy objective would be better served by continuing and expanding wider stakeholder engagement which has been an

approach for the last number of years. Examples include EirGrid's FlexTech initiative and DS3 Advisory Council, or the CRU's Network Stakeholder Engagement Panel (NSEEP). These forums provide all industry stakeholders with the opportunity to provide feedback and recommendations to key operators to ensure the most effective development of networks. Failure to provide holistic opportunities for engagement would represent a shortcoming in any joint planning approach to Security of Supply.

The paper also suggests regular Security of Supply reviews are carried out assessing a number of key metrics on energy security. EPUKI believes that a lot of this information is already available as a result of various annual publications in place for the system operators. These include EirGrid's Generation Capacity Statement, and Winter Outlook Statements. The CRU separately publish a regular update and review of their Security of Supply workplan. While this information is already available, the report also mentions the possibility of DECC carrying out an energy security review at least every four years. We believe there would be merit in this approach, particularly if it results in holistic objectives and actions to be applied following each review.

The final proposed policy measure in the consultation paper is amendments to international arrangements with the EU and the UK for gas. It is unclear from the consultation paper exactly what amendments are being proposed through this policy measure or how it would benefit Security of Supply. If analysis or forecasts can demonstrate a clear benefit to developing such arrangements, we would be in support of this measure. Additionally, we would expect some arrangements to be developed naturally as part of other workstreams (i.e., Celtic Interconnector). Such arrangements may be monitored, but should not be prioritised, in order to ensure energy security.

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

As outlined above, we believe that greater stakeholder engagement would deliver high value to energy security of supply and development of energy infrastructure. Similarly greater regulatory stability and transparency will help to support investment in required generation capacity and other infrastructure. There remains a shroud of uncertainty around key future workstreams for electricity generators, such as with the DS3 System Services Future Arrangements.

Separately, a recent decision made by the SEMC has resulted in a potential reduction to CRM revenues for new OCGT units which will likely discourage New Capacity from entering the market. This decision will reduce OCGT unit capacity revenues by up to 86% if they are subject to Annual Run-Hour Limitations (ARHL). This direction is an example of a high-risk decision, which discourages new investment into a volatile regulatory environment. The decision was made after a five-day consultation window, which was inadequate given the potential impact of the change on both the Capacity Auction and participants' revenue streams.

We believe that consideration is required for measures beyond parties solely related to the electricity and gas process. Planning currently represents a major hurdle for both generation assets, and key transmission infrastructure which would relieve constraints on the electricity network. We believe that either the planning system as a whole, or specifically for strategic energy security assets should be changed to allow for a more efficient process. As well as streamlining key projects, this would help to attract investment in Ireland by removing what is currently a key obstacle to delivery.

As outlined earlier in this response, an increased focus on the effectiveness and efficiency of key energy infrastructure would be beneficial in supporting energy efficiency. This requires strong performance from the respective system operators of electricity and gas transmission and distribution systems (EirGrid, ESB Networks, and Gas Networks Ireland). We believe that the mechanisms for delivering strong performance are already in place through the regulatory performance incentives. However, we would urge DECC to coordinate with the CRU as to how these incentives can be optimised to deliver the best outcomes for the system.

We are grateful for the opportunity to respond to this consultation and look forward to further engagement in the future. We would like to request a bi-lateral to discuss our response and recommendations in more detail.

Sincerely

Director of Commercial Finance (All-Island)

EP UK Investments Ltd.