

Wholesale Electricity and Gas Policy Division
Department of the Environment, Climate and Communications
29-31 Adelaide Road
Dublin 2
D02 X285

VEPIL Reference: COR-01-VE-DC-0021

28 October 2022

By email: <a href="mailto:energyconsultation@decc.gov.ie">energyconsultation@decc.gov.ie</a>

Re: Review of the security of energy supply of Ireland's electricity and natural gas systems consultation- Corrib operator response

Dear Sir / Madam,

<u>Introduction</u> – Vermilion Exploration & Production Ireland Limited (VEPIL) welcomes the opportunity to respond to the consultation on the "Review of the security of energy supply of Ireland's electricity and natural gas systems" (the "Consultation"). VEPIL is responding to this Consultation in its capacity as the operator of the Corrib gas field (the "Corrib Operator"); the Corrib gas field is the only indigenous operating gas field in Ireland. The Corrib Operator has the support of all of the current Corrib joint venture partners in this response; the Corrib JV currently consists of the following companies:

- Nephin Energy Limited
- Equinor Energy Ireland Limited
- Vermilion Energy Ireland Limited
- Vermilion Exploration & Production Ireland Limited

The Corrib Operator is a member of the Irish Offshore Operators Association (IOOA), the representative organisation for the exploration industry in Ireland. IOOA is submitting its own response to this Consultation; the Corrib operator has contributed to the IOOA response and fully supports it. The views expressed below are in addition to the observations and comments in the IOOA response to this Consultation.

## Additional Scenarios (New):

Cybersecurity: - VEPIL finds it concerning that cyber security risks and the associated threats are out of scope of the report considering the acknowledgement at EU and National level as to the level of threat posed by cyber security attacks on critical infrastructure.

The EU Network and Information Systems Directive, 2016/1148<sup>1</sup> places responsibilities on the State and on businesses in relation to cybersecurity that are wide ranging, but, among other things, involve the application of a set of binding security obligations to a wide range of critical infrastructure operators, (i.e. Operators of Essential Services) which includes energy infrastructure.

There are several examples of critical infrastructure being compromised and shut down in response to cyber-attacks e.g. In 2021 in the U.S., the Colonial Pipeline Company proactively shut down its pipeline system for five days in response to a ransomware attack resulting in critical fuel shortages in parts of the U.S. In August 2022, the Italian Energy Company Eni was subject of a ransomware attack followed shortly afterwards with another cyberattack affecting *Gestore dei Servizi Energetici* (GSE), the Italian energy agency that runs the country's electricity market. This led Italy's National Cyber Security Agency to warn that attacks on energy operators and infrastructure are increasing.

On this basis, and considering that companies and utilities in Ireland that have been officially designated as Operators of Essential Services are now subject to an onerous set of security requirements as set out in Regulation 17 of SI No. 360 of 2018, the Consultation should equally assess the high level of threat posed to our import energy and network systems by cyber security attacks and the associated actions required to mitigate such risks.

Indigenous gas: As the operator of the Corrib gas field, VEPIL supports the position put forward by IOOA that the exclusion of future indigenous gas (additional gas reserves from existing exploration licences) from the short-list of mitigation options to be unjustified on the basis of the current seriousness of supply constraints due to the Ukraine-Russian war but also the impending threats of other supply disruptions that will continue, and in some cases may even become more pronounced, up to and post 2030.

The reason for rejecting indigenous gas as a viable option based on the statement that "Additional domestic production of natural gas above forecasted demand could lock Ireland into a high-gas energy market" does not stand up to scrutiny and diminishes the technical integrity of the Consultation. Simply put, it is accepted by all competent bodies and subject matter experts that natural gas will be a requirement in Ireland for at least a further two (if not three decades) to support other sources of energy, subject to the planned renewable energy projects being fully integrated into the Irish electricity and gas network within that time period. Given the uncertainties around the ability to deliver the planned 2GW of enduring flexible gas-fired generation by 2030, along with the 5GW of offshore wind over the same period, any fair and reasonable analysis would indicate that future indigenous gas exploration and development should be re-inserted as a viable option for consideration in any post consultation review and discussion of security of supply.

As the Corrib Operator, VEPIL understands the exploration potential of the acreage surrounding the Corrib Field area and indeed in the wider setting of the Slyne-Erris basin. A number of gas exploration prospects exists that have been the subject of detailed investigation and analysis by a number of multinational energy companies to date. Contrary to the statement that "the volume of additional

<sup>&</sup>lt;sup>1</sup> Transposed into Irish law by the European Union (Measures for a High Common Level of Security of Network and Information Systems) Regulation 2018 (S.I. 360 of 2018)

natural gas discoveries cannot be known", it is possible to scientifically assess the volumes and risks attached to such prospects and indeed, the Department is already well served with the relevant competence and experience to substantiate this view. Furthermore, in an area with proven commercial gas reservoirs and existing pipelines, it is vital that the acreage local to such infrastructure is actively assessed for satellite fields that can be tied back via in place gas infrastructure. As satellite fields, by their nature, may only be economic due to their proximity to existing infrastructure, it is important that the acreage local to the Corrib gas field is properly assessed for its tie-back potential which could, in a relatively short period of time, be developed to provide enhanced energy security for Ireland.

Consequently, we strongly believe that it is imperative that opportunities for future gas development(s) are maintained and actively pursued in order to enhance Ireland's future energy security independence.

In addition to the exclusion of future indigenous gas from the Consultation, no consideration has been given to the low  $CO_2$  intensity of indigenous gas when compared to imported gas. Based on available industry data from 2020, the Corrib gas facilities had a  $CO_2$  which was approximately five times lower than the UK North Sea average. The reason for this lower intensity is twofold, firstly emissions are limited by the design of the Corrib facilities and secondly, the proximity of the terminal to the national grid means the energy required to transport gas into the national grid is low. In deciding upon potential mitigation options, the  $CO_2$  intensity of the delivered gas to Ireland needs to be considered.

## **Options:**

Cost Benefit Analysis (CBA): The absence of a CBA in the Consultation supporting documents for any of the proposed mitigation options is a serious omission. The cost of developing some of the proposed mitigation options would involve very large capital costs which will ultimately be paid for by the Irish consumer. A proper CBA is required to determine the costs of developing such options and the associated impact on the economy should any of the shock scenarios occur. In parallel, a separate analysis is required estimating the opportunity cost to Ireland of not implementing each of the proposed mitigation options for each of the shock scenarios. This would help DECC and industry in general to understand the potential benefit to the Irish economy of the proposed mitigation options, understand the cost of developing such options and enable DECC to determine whether in some cases, the large investment costs in such options can be supported or not.

An example of the requirement for a CBA is the potential option to re-open the now decommissioned SW Kinsale storage facility in the Celtic Sea, offshore Ireland. Gas storage facilities are normally operated to optimise the use of the gas network by moving gas into storage at times of lower demand and withdrawing gas at times of higher demand, thus removing the need to build expensive additional pipeline infrastructure that might only be required at times of peak demand. In Ireland, the only viable large scale natural gas storage options is storage within existing depleted offshore gas reservoirs.

Taking SW Kinsale as an example of a potential offshore storage site, the benefit provided to Ireland when it was operated in this capacity a number of years ago was that it was capable of providing approximately 26 GWh per day of gas into the GNI gas network over a period of approx. 90 days at peak demand times (winter), enabling gas imports to be reduced when in operation. However, the SW Kinsale facility has now been fully decommissioned and is no longer available as a working gas storage facility. In addition, natural gas storage facilities are not normally operated as strategic storage sites due to the

expense of constructing, filling and operating such a facility in the absence of a commercial rationale being available. It should also be noted that the development (including drilling new wells, installing subsea pipelines, and filling with cushion gas) and operation of an offshore gas storage facility is a very costly solution and has no basis for consideration unless the development, operational and commercial implications are fully costed and understood. This supports VEPIL's recommendation that a CBA is required to fully understand the viability or otherwise of all the potential mitigation options being proposed.

## Mitigations

Security of Supply Reviews: Security of energy supplies in Ireland, exacerbated by the war between Russia and Ukraine, was already a matter of concern for many commentators and experts as a result of Brexit, as well as other international risks affecting energy supply shortages. It is critically important, following on from the current consultation process, that momentum is maintained to follow up on all reasonable findings and inputs. Consequently, it is our view that a senior Departmental official should be appointed to head up a joint Government-Industry grouping to look at all potential solutions and associated timelines in an independent and objective manner via a series of themed workshops. These workshops would comprise industry subject matter experts combined with inter-departmental expertise on policy and regulatory frameworks with the aim of high-grading and implementing the most robust of the options under consideration.

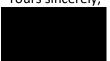
## Recommendations

In addition to the IOOA submission, VEPIL recommends that the following recommendations should be considered by DECC to ensure completeness of the Ireland's electricity and natural gas systems security of energy review:

- The strong potential for future mitigation through new indigenous sources of natural gas has largely been dismissed as a viable option which we believe is a serious omission and we strongly recommend that it should be included for consideration.
- The Technical Report in the Consultation should be updated to assess the energy system's cyber vulnerabilities and the impact that these might have on the Irish energy system.
- A Cost Benefit Analysis for all potential mitigation options needs to be completed to ensure a
  holistic view of the potential mitigation options is carried out and to enable informed decisions
  to be made on future proposed energy mitigation options by DECC.
- A senior departmental official should be appointed to head up a joint Government-Industry committee to look at all potential solutions and associated timelines in an independent and objective manner via a series of themed workshops.

We wish to thank you for the opportunity to contribute to this important review. VEPIL, acting on behalf of the Corrib JV and as operator of the Corrib gas field is available to meet with DECC and its consultants in person should any aspect of our submission to this Consultation be unclear.

Yours sincerely,



Managing Director