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Mr J French
The Utility Regulator
Queens House
14 Queens Street
Belfast
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By email - ElecGenLicensing@uregni.gov.uk

25 July 2024

Dear Mr French,

Response to Consultation on proposal to grant an electricity transmission licence to TI LirIC Limited

Transmission Investment (TI) is a leading independent electricity transmission business in the UK, with over ten years of experience developing, acquiring and managing large complex infrastructure projects. We are one of the largest managers of offshore wind transmission in GB, in total we currently have a portfolio of approximately 4GW and £3bn in capital employed. Transmission Investment is also leading the development of interconnector projects in support of the UK's Net Zero ambition. This includes the FAB Link interconnector between GB and France and, the subject of this consultation, the LirIC project, a proposed 700MW link from Northern Ireland to Scotland.

We welcome the opportunity to respond to the UR's proposal to grant an electricity transmission licence to TI LirIC Limited ("the consultation"). The LirIC interconnector project was first initiated in 2019, and we have been proactively engaging on topics such as licencing with the Utility Regulator ("UR") since 2020, with a transmission licence application being formally submitted in May 2023.

In addition to the detailed response set out in the Annexes to this letter, we wish to highlight the key points from our response:

(i) We strongly support the UR's proposal to grant a transmission licence to TI LirIC Limited, and we welcome UR's pragmatic approach to grant the licence in two steps. We welcome the recognition that granting of a "basic" transmission licence at this time is necessary to provide investors with certainty of being able to operate the infrastructure once built, as well as providing TI LirIC Limited with the necessary powers to ensure land assembly for the project.

(ii) We are supportive of UR's proposed timeline to publish the decision whether or not to grant TI LirIC Limited a transmission licence in Q4 2024. We would like to impress the importance of timely decisions relating to both step 1 and step 2 of the licence, and associated processes such as TSO Certification, to ensure the project is able to progress effectively along its critical path.

(iii) Early indication of any proposed regulatory mechanism, such as a Cap and Floor, to support interconnector delivery will support investor confidence and accelerate the delivery of social economic welfare benefits to Northern Ireland's consumers. If no regulatory regime is proposed, then the project would require exemptions from the relevant regulations, with respect to use of revenue and third party access, to increase investment certainty in the project to allow for the required capital to be raised.

(iv) The need and benefits of further interconnection between SEM and GB has been recognised in a number of studies to date. Further interconnection will bring socio-economic welfare ("SEW") benefits to consumers, support security of supply, aid in the reduction of wind curtailment, and

help to support net zero objectives. Our updated modelling suggests that LirIC continues to provide an overall net SEW benefit , and should contribute to a reduction in renewable curtailment in the long term.

We look forward to working with UR on the specifics of the TI LirIC Limited licence, as well as inputting into the needs case assessment for further interconnection in Northern Ireland. If there are any questions on the content of this letter, we would be happy to discuss.

Yours faithfully,

Keith Morrison

Keith Morrison
LirIC Project Director

Annex 1 – Detailed responses to consultation questions

Section 1 - Introduction

Q1. Do respondents have any objections to the UR's proposal to grant a transmission licence (which includes the terms and conditions set out in a draft of the proposed licence) to TI? If so, please set out the basis and reasons for any such objection.

As stated in UR's consultation, TI LirIC Limited is seeking a transmission licence to support the further development of the proposed 700MW interconnector between Northern Ireland and Scotland.

We welcome the UR's proposal to grant a transmission licence to TI LirIC Limited, and as such have no objections. The terms and conditions in the draft licence have been designed to fully protect Northern Ireland consumers, for example by not including any revenue entitlement and the use of a sunset clause that limits the timeframe within which to develop the project.

The draft licence is, in large part, replicating that which applies to Moyle. However, given the difference in potential revenue arrangements, there may be merit in reconsidering some conditions to reflect the range of potential outcomes for TI LirIC Limited (i.e. either a project exempt from the use of revenue requirements or a regulated commercial arrangement that may be different to the mutual model applied to Moyle). Examples are where the Moyle licence include specific protections to drive efficient costs or disposal of assets to a third party where they were consumer funded. Further, conditions 4, 8, 9, 9A, 12 appear to be relevant where the consumer is funding or has an exposure to the costs of operation. For example, Condition 4 would oblige the project to economically purchase services. This would not be required, unless there is an ability to pass through costs to the consumer (relevant for Moyle). For TI LirIC Limited there is a strong natural incentive to maximise efficiency to protect its profitability, without the possibility of sharing cost or revenue risk with the consumer.

We have included a confidential annex (Annex 2) to our response outlining suggested amendments of the licence conditions in the draft. We look forward to working with UR to confirm the specifics of the licence in due course.

Section 2 – Our approach to grant a transmission licence to TI LirIC Ltd.

Q2. Do respondents agree with the UR's proposed two-step approach UR. Please provide any supporting information.

It is clear, as referenced by UR in paragraph 4.3 (and evidence provided by TI to the Northern Ireland Select Committee) that interconnection, such as LirIC, is predicted to bring benefits to energy consumers in Northern Ireland. We therefore welcome the UR's pragmatic approach that will enable the project to progress.

Applying for a transmission licence at this early stage of the project is necessary to support the development and de-risking of the project in several areas. Granting a Transmission Licence would provide investors with certainty of being able to operate the infrastructure once built and establish a clearer pathway to an overall regulatory arrangement in Northern Ireland. In addition, the nature of interconnector development requires land assembly along a linear path. This has the potential for landowners to hold 'ransom strips' where small land parcels prevent completion of route and stifle the progress of a development until unreasonable financial demands are met. The aim of granting a basic licence to operate at this stage of development is to mitigate this risk as noted by the UR in its consultation "*Becoming a licence holder would afford TI the opportunity to progress the application of these compulsory purchase powers with respect to land acquisition"*. Note that such powers are only

necessary where a reasonable negotiated solution cannot be achieved and serve very much as an option of last resort.

This approach is typical in other jurisdictions and in July 2021 TI LirIC Limited was granted an electricity interconnector licence in GB[1].

Q3. What are respondents' views pertaining to consumer impact, or any other impact, in granting a licence without specified operational revenue regime licence conditions? Please provide further information which lends support to the views expressed.

We agree with UR's assessment that this approach will have no adverse or direct financial impact to Northern Ireland consumers, based on the proposed drafting of the licence, which does not include any regulated revenue conditions at present. As mentioned in the UR's consultation, this approach mirrors that used in other jurisdictions, such as GB, where a licence to own and operate the asset on a fully commercial basis is initially granted, and further details pertaining to any proposed regulatory arrangement with respect to the revenues are consulted upon and added at a later date, if appropriate.

The application of a regulatory arrangement to the revenues of the interconnector ("regulated commercial arrangement") increases the likelihood of securing the right type of investment in the project by providing increased certainty of revenue over the long-term. This is a key requirement to be able to access the broadest range of investors from whom to raise the significant capital required to construct the interconnector. Such a regulated commercial arrangement may be in the form of a Cap and Floor t, as used in other jurisdictions such as GB, Republic of Ireland and Belgium, or it could be in another form. As the LirIC project supports overall UK climate change ambitions, it may be beneficial to consider the extent to which any regulatory regime promotes a fair distribution across the totality of UK citizens to avoid any disproportionate impacts on the small consumer base in Northern Ireland.

In the absence of a regulated commercial arrangement, projects have sought long-term capacity contracts from market participants. These arrangements typically use an 'open season' auction/tendering approach and rely on achieving an exemption[2] from the relevant EU Regulations on Use of Revenues for a 25-year period and Third Party Access to enable pay back to the original infrastructure investors. The granting of an exemption from the relevant regulations has proven to be uncertain and the track record of market participants being willing to enter into sufficiently valued, long-term fixed contracts to justify investment is unproven. This increases the uncertainty that the interconnector investment will progress on schedule to deliver the benefits to Northern Ireland consumers.

Q4. What are respondents' views on the risks and benefits of the proposed approach?

We are supportive of the pragmatic two-step approach to allow for the continued development of the project, whilst UR undertakes a programme of work to establish a needs case for interconnection and the appropriateness of a potential regulated commercial arrangement for such a project, for example a Cap and Floor.

UR's proposed two step approach ensures no risk to Northern Ireland consumers in the first stage of project development, as the proposed licence does not include any specific regulated operating revenue licence conditions. The format of the proposed licence therefore leaves all the risk with TI LirIC Limited as a commercial entity. As outlined in our response to question 5, the need and benefits of

[1] 7 July 2021, Ofgem Notice to grant an electricity interconnector licence to TI LirIC Ltd: TI LIRIC Ltd - Notice of grant of an electricity interconnector licence | Ofgem

[2] Article 17 of Regulation 714/2009 allows for new direct current interconnectors to request exemption from certain provisions in the Regulation and in the Directive 299/72/EC.

further interconnection between the SEM and GB has been recognised in numerous independent and credible studies to date.

The two-step approach allows an assessment to be made, following the grant of the licence, on whether it is appropriate for the Northern Ireland consumer to share some of the risk of the investment for a gain in the benefits and profits. The preferred regulated commercial arrangement for the whole project (the Northern Ireland and GB share) could potentially be an arrangement that is determined through collaboration with the GB regulator, Ofgem. This is a process well established in other jurisdictions, such as GB. Further, the licence includes a revocation schedule (Schedule 2) which would allow for the licence to be revoked *"if the licensee has not commenced carrying on the Interconnector Business within [10] years of the date of the Grant".*

Q5. Are there any additional risks or benefits regarding further interconnection? If so, please provide supporting evidence.

Further interconnection will bring socio-economic welfare benefits to consumers, support security of supply, aid in the reduction of wind curtailment, and help to support net zero objectives.

The need for further interconnection between SEM and GB has been recognised in numerous studies in recent years. Below we list the latest independent studies which highlight the opportunity and benefits of further interconnection between these markets.

SONI's Draft Transmission Development Plan for Northern Ireland 2023-2032[3] noted, *"UK policy recognises the economic and technical benefits associated with increased interconnection and therefore seeks to promote interconnection between Great Britain, Northern Ireland, and Ireland's transmission systems. Increased interconnection between transmission networks results in a larger energy market. With increased market integration there is greater competition and the potential for prices to be reduced. There is also access to a broader generation base which enhances the networks' security of supply. This can potentially defer the need for additional generation to be constructed to meet security of supply standards or requirements."* Additionally, they recognised the potential for new interconnection to Scotland, representing an effective benefit to UK collectively.

As noted in the consultation, in summer 2023, the Department of the Environment, Climate and Communications in Ireland ("DECC") published their National Policy Statement on Electricity Interconnection[4], accompanied by a study undertaken by DNV which recognised that new interconnection between GB and SEM would support Ireland's 2030 energy objectives and support offshore wind development. In addition, their Draft Offshore Renewable Energy Future Framework Policy Statement 2024[5] considered analysis of additional interconnectors up to 16.7GW to facilitate the potential increase of Offshore Renewable Energy.

Most recently (in March 2024[6]), National Grid Electricity System Operator published its Interconnector Analysis Report as part of its Beyond 2030 suite of reports. That analysis shows the optimal future electrical interconnection to other countries. The report identifies further interconnection to the Island of Ireland, and more specifically Northern Ireland to Scotland (Ireland - Zone 1 in the report), as being optimal in multiple scenarios and delivering significant overall socio-economic welfare benefits.

This wealth of recent, directly relevant evidence should provide confidence to the Department of the Economy ("the Department") and Utility Regulator that there is clear need to progress inflight projects,

[3] Draft Transmission Development Plan Northern Ireland and SEA 2023-2032 | SONI Consultation Portal
[4] DECC, National Policy Statement on Electricity Interconnection 2023
[5] DECC, Consultation on the offshore renewable energy (ORE) Future Framework Policy Statement, January 2024
[6] NGESO March 2024, Interconnector Analysis Report

such as LirIC, and analysis should be focussed on what is needed beyond those projects to achieve the ambition of Northern Ireland and benefit consumers.

As such, the progression of the LirIC project, which is being developed as a privately financed project, is expected to bring multiple benefits to Northern Ireland consumers such as lower electricity prices, supporting the UR's principle objective to protect the interests of Northern Ireland energy consumers[7]. In 2022 TI LirIC Limited commissioned market experts LCP Delta to produce a Socio-Economic Welfare ("SEW") study ("2022 SEW study") of the LirIC project. The modelling is sufficiently detailed and considers inputs such as network constraints in SEM and GB, network developments into the future, and other elements such as geospatial wind correlation between SEM and GB. LCP has a wealth of modelling experience with respect to power market modelling, revenue forecasting, energy economics and finance, supporting clients in understanding complex market dynamics to inform policy and/or investment decisions. They utilise the EnVision modelling framework, established in 2012 and has been developed in-house over the past decade specifically for the GB and Irish markets..

The 2022 SEW study has been shared with UR previously and outlines the significant benefits that accrue to SEM from this investment, with overall positive total SEW for SEM and Northern Ireland. Further evidence, using more up to date data (e.g. Tomorrow's Energy Scenarios 2024) suggests that LirIC continues to provide an overall net benefit SEW. We value the ongoing engagement with UR on this topic and look forward to presenting the updated analysis upon request.

We understand some stakeholders are concerned about the impacts increased interconnection into Northern Ireland may have on current system constraints, which lead to operational actions such as dispatch-down[8]. Our updated results consider the impact LirIC may have on known network constraints, such as System Non-Synchronous Penetration ("SNSP") and the minimum generation constraint ("MinGen") in SEM and Northern Ireland. The results suggest that although constraint costs may increase by a small amount, overall the net benefits to SEM are overwhelmingly positive, and renewable curtailment is expected to decrease in the long term.

The technology available for interconnectors continues to evolve, and the latest solutions are integrating 'grid forming capability', whereby interconnectors can act like a traditional generator, through the concept of a 'virtual synchronous machine'[9]. Incorporating grid forming capability into the LirIC interconnector could support the reduction of key constraints, assuming SONI/Eirgrid operational policy allows. Adoption of this technology on LirIC should enable the interconnector to be treated as synchronous generation in the calculation of the SNSP limit and may also be able to provide a service to relieve the MinGen. Our updated modelling suggests that if LirIC were to be considered as synchronous generation, it would impact constraint costs positively, causing an overall net benefit to the system.

In addition, as further outlined in our response to question 8, it would be expected that there would be further development of market based solutions which will seek to optimise the utilisation of assets such as interconnectors.

Finally, the LirIC project connecting Scotland and Northern Ireland is of strategic importance to the realisation of the UK's net zero target and carbon budget under the Climate Change Act 2008. Ensuring adequate interconnection between the two jurisdictions in the UK is integral to supporting the realisation of ambitious targets. In the context of the wider challenge for decarbonisation, decarbonising current electricity demand only represents 14%[10] of the overall Northern Ireland energy consumption. It also fails to consider the potential to add value through the renewable energy

[7] *Article 12(1) of the Energy (Northern Ireland) Order 2003:* The Energy (Northern Ireland) Order 2003 (legislation.gov.uk)

[8] "Dispatch-down" refers to periods where the system operator, SONI, has to apply security-based limits which reduce the amount of renewable generators on the system. The two primary reasons for dispatch-down includes constraints, for localised network reasons, and curtailments for system-wide reasons.

[9] A Virtual Synchronous machine is used to simulate the traditional synchronous generator.

[10] Centre for Advanced Sustainable Energy (CASE) Report, A Pathway to our Renewable Future, June 2023

generated beyond Northern Ireland's current demand, supporting for example hydrogen production, the electrification of transport, and creation of alternate fuels. The potential to realise the economic benefits that could be achieved rely upon the required electricity being supplied into the system. Progressing interconnectors because they are therefore no regret projects will avoid delaying inflight projects which clearly support the delivery of Net Zero energy targets.

Q6. Do respondents have any views regarding the anticipated timelines outlined?

We note the proposed timeline outlined by UR in the consultation and are supportive of the intention to decide on the transmission licence in Q4 2024. We would like to impress the importance of timely decisions for this and step 2 of the licencing process, as well as associated processes such as TSO Certification, to ensure the project is able to progress effectively along its critical path and deliver its associated benefits.

We note that step 2 of the process, which assumes the transmission licence has been granted, has less specific timeline definition providing an overview of the steps UR expect to take whilst considering a potential regulated commercial arrangement for TI LirIC Limited. As outlined in our evidence to the Northern Ireland Select Committee, coordination between the regulatory authorities is key to the success of interconnector projects and we continue to encourage dialogue between Ofgem and UR to seek to develop a regulatory arrangement that serves all citizens both locally and across the UK.

Eligibility for the third Cap and Floor window in GB requires connection prior to the end of 2032. To ensure LirIC can meet this timeline, the project will need to reach Final Investment Decision (FID) by 2026/27. FID is the decision point where potential investors make a firm commitment to provide the necessary capital to the project. To allow the equity and debt providers to make such a commitment, it is essential that the regulatory regime in Northern Ireland for the LirIC interconnector is confirmed and suitably well defined. We note that the UR's Forward Work Programme 2024-25[11] includes a commitment to progressing Strategic objective 2 - Project 3, to assess and identify future interconnector projects of strategic importance which can also provide cost benefits to electricity consumers in Northern Ireland by Q4 (i.e. by March 2025). Delivering to this timeline is on the critical path to secure this new essential infrastructure for Northern Ireland and the UK overall. We stand ready to provide any input or support to UR and the Department with their assessment of the needs case for further interconnection.

We note that paragraphs 4.10 and 4.11 of the consultation go into the details of the Department's expected workplan following their consultation on the Smart Systems and Flexibility Plan in January 2024. Whilst we recognise and support the importance of developing a wider framework for interconnection, we would encourage the Department and UR to ensure that any future policy development in relation to frameworks for interconnection continues to take the timely development of interconnectors into account.

Section 3 – The proposed licence

Q7. Are there other provisions that stakeholders consider should be included in the licence conditions and/or the revocation schedule? Please provide details and supporting rationale.

We do not believe any additional provisions should be included in the licence conditions. In Annex 2 we provide detailed response to the licence conditions in the draft. We look forward to working with UR to confirm the licence in due course.

[11] FWP - FINAL PUBLISHED.pdf (uregni.gov.uk)

Section 4 – Establishing the needs case for interconnection and associated revenue regime

Q8. What are the specific issues of further interconnection that are most likely to need specific regulation? Please provide your reasons.

To support the delivery of maximum benefits to the system, and therefore consumers, the correct tools and mechanisms need to be in place to maximise efficient utilisation of interconnector assets. In our view, to ensure this is delivered effectively, these services need to be designed ensuring that they provide the necessary operational support to parties such as SONI, but also reflect the commercial nature of the interconnector asset.

The need for increased flexibility has been recognised as an essential element of a decarbonised electricity system. As such, we welcomed the Department's consultation earlier this year on design considerations for a Northern Ireland Smart Systems and Flexibility Plan ("NI SSFP")12. In particular, it is welcomed that interconnection is recognised as an essential element of a flexible low carbon electricity system in Northern Ireland, alongside the other flexibility levers. Not only is it essential to ensure that the assets can be built, but also that markets exist to ensure they can deliver the necessary flexibility services to support the system. We again welcome the recognition in the NI SSFP of the need to ensure the necessary signals and incentives for developers exist to deliver both the infrastructure and flexibility services required to deliver and operate a safe, reliable and affordable electricity system. To support this, there still needs to be a clear regulatory route for developing such markets, and the role interconnectors can play should be considered.

Q9. Do respondents have any views on the proposed approach in relation to a potential regulated Cap and Floor operating revenue regime?

On the assumption UR grants the transmission licence for the LirIC interconnector project, we welcome the inclusion of the commitment for UR to work in partnership with the Department to establish the needs case assessment for further interconnection in Northern Ireland, and to consider the appropriateness of a Cap and Floor regime for the LirIC interconnector.

We recognise the need for the Department and UR to undertake studies with respect to the potential welfare benefits further interconnection could provide to Northern Ireland. As stated in our response to question 5, the 2022 SEW study outlined the significant benefits that accrue to SEM from the LirIC project, with overall positive total SEW. Further evidence, using more up to date data (e.g. Tomorrow's Energy Scenarios 2024) suggests that LirIC continues to provide an overall net SEW benefit.

The market and regulatory drivers in the SEM and GB are similar, therefore it would be logical to assume that an interconnector Cap and Floor[13] regime, as implemented in GB and available in the Republic of Ireland, would also be suitable in Northern Ireland to enable investment in this sector. Under this model consumers underwrite the shortfall in market revenue where developers are not able to cover minimum costs (the floor), allowing the interconnector to continue to operate and consumers to enjoy the supply security and carbon benefits of the interconnector. In return, they also benefit when revenues are in excess of the cap as these additional revenues are transferred to consumers. The Cap and Floor regime comes into effect once the interconnector is operational, meaning there is no underwriting or investment from consumers in the development and construction phases of the project. This approach was applied to the Greenlink interconnector between Republic of Ireland and Wales.

[12] Design considerations for a Northern Ireland Smart Systems and Flexibility Plan | Department for the Economy (economy-ni.gov.uk)

[13] Ofgem 2016, Interconnector Cap and Floor Brochure

Developing an appropriate Cap and Floor regime in Northern Ireland would support investor confidence and accelerate the delivery of social economic welfare benefits to Northern Irish consumers. A regulatory regime such as the Cap and Floor mechanism operates in a way similar to other support regimes in existence for other technologies, such as the Contracts for Difference used for wind in GB, by helping to provide certainty of revenues to pay back the initial investment.

Ofgem undertook an assessment of the success of the regime to date in GB as part of its interconnector policy review[14]. Their conclusions included that the regime had been successful in incentivising the development of interconnection capacity in GB in the interest of consumers, attracted new investment from new entrants and a range of financing solutions. In the current climate, where there is a global push to decarbonise the energy system, there is increased necessity to support an attractive investment environment. Providing early indication of any proposed regulated commercial arrangement would provide confidence to investors to commit the funds to develop the LirIC project at pace.

[14] Interconnector Policy Review - Decision | Ofgem