Centre for Advanced Sustainable Energy (CASE) response to the Consultation on proposal to grant an electricity transmission licence to TI LIRIC LIMITED July 2024

The Centre for Advanced Sustainable Energy (CASE) is an industry-led, sustainable energy research centre based in Northern Ireland. While headquartered at Queen's University Belfast, CASE is a cross-institution organisation with Ulster University and AFBI as the other partners in the collaboration. CASE bridges the gap between academia and industry and funds industrially driven research undertaken by the partner institutions. Our work helps to position Northern Ireland at the forefront of the global sustainable energy market; by integrating leading research into the local industrial base, for the benefit of the business community and the wider economy.

Response on behalf of CASE

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.

CASE do not have any objections to the granting of a transmission licence and CASE strongly supports the need to increase the number and capacity of interconnectors to GB and beyond. Interconnectors will be essential to manage stable supplies of electricity as electricity generation becomes more distributed and dependent on wind, solar and other renewable generation methods. As a general point, CASE would argue that by 2040 a higher capacity interconnection to GB will be required in order to mitigate against low wind/solar conditions that will reduce local renewable energy generation. The UR has included references to some of the key studies that agree with this view.

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

The UR does not list what further studies are required so it is difficult to make a conclusion on the two-stage approach. It is also not clear as to whether the approach will stall progress or if the developer and their investors are willing to progress before the Cap and Floor is agreed. Our concern here is that while the two-stage process may give the appearance of allowing more rapid progress it may not reduce the risk profile sufficiently to make this an investable project given globally there are many other low-risk options for investment funds.

Delays in construction of the interconnector could disadvantage NI consumers as this could mean supply of lower cost electricity is constrained as well as conceivably increasing the risk that insufficient NI generation could result in restrictions to consumer supply. Equally, all NI based generators risk not being able to fully access GB markets when prices are high.

Ultimately, what is required is a model of NI's power requirements in 2040 and 2050 covering a whole year and including: likely renewable generation capacity; forecast short-to-long term energy storage plus stabilisation requirements; including seasonal variability of renewable

power generation and energy consumption. Without this model it is difficult to conclude exactly what the interconnection requirements will be from GB to NI (and the SEM). A quick analysis would indicate that current and planned interconnections are insufficient for a resilient network for consumer/industry electricity supply.

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.

There is insufficient information given to determine what will be the economic cost to NI consumers. A risk is probably that prices may stay higher than otherwise due to the throttle on supplies from GB.

There is a wider question here on how best to manage the cost of energy to those consumers least able to afford it. Additional cap and floor costs on electricity bills would not be welcome but ultimately security of supply, resilience and decarbonisation need to be paid for through a realistic, whole system cost to consumers. Insisting on a lowest possible price for electricity has major disbenefits to wider society, economic development and the environment. Management of fuel poverty could be better targeted by grant or special tariffs, but CASE accepts this is out of scope for this consultation.

Other risks were given in the response to Q2.

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

Basically, the key risk is that the project does not go ahead without the cap and floor model. Other risks have been identified in responses to previous questions.

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

Greater interconnectivity increases electricity supply resilience and increases competition, both are good for the consumer. Without a greater number of interconnectors NI risks not being able to meet legal decarbonisation targets under the climate act. This is especially so since the electrification of heat and transport will place much greater demands on generation and supply. Currently (2021), only c.14% of NI's energy use is electricity. Converting the heating and transport demands to electricity will result in large efficiency savings but these may be offset to an extent by green hydrogen and e-fuels production. The demand could be x3 to x5 (or more) than the 2021/22 NI electricity supply by 2050 depending on the assumptions made.

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

The concern is on how long the two-step process takes. A single exercise looking at the full request would probably be quicker, especially as this current consultation would be unnecessary. The incoming UK government have rightly identified the unnecessarily protracted

processes for getting major energy infrastructure underway and the significant disadvantages this brings.

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.

CASE has no additional suggestions.

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

No comment.

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

This will heavily depend on the models used to predict future demand, the likelihood of attracting investment (i.e. guaranteed rate of return) and future NI energy policy amongst many factors. Cap and floor has been successful in driving forward some interconnector projects and it would be interesting to know how many proposed projects went ahead without this incentive and how many were withdrawn.