

Mr Declan McAleer MLA Chair AERA Committee c/o Mr Nick Henry Clerk to Committee Room 242, Parliament Buildings, Ballymiscaw,Stormont, Belfast, BT4 3XX

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6th July 2021

Ref: AERA Committee - Call for evidence and views on the Climate Change Bill

Dear Chair,

SONI, the electricity transmission system operator for Northern Ireland, are writing in response to the AERA Committee call for evidence and views on the Climate Change Bill and we offer our thanks for the opportunity to respond. SONI welcomes the introduction of a Climate Change Bill in Northern Ireland and will continue to work with the Committee and other partners in Northern Ireland to tackle the climate crisis.

SONI have a unique set of roles. Our central role is to plan and operate the electricity system in Northern Ireland. In addition, through the joint venture SEMO, we operate the all-island wholesale electricity market known as the Single Electricity Market. We also manage power flows on interconnectors with our neighbours. This gives SONI the deep expertise needed to deliver a low-carbon, cost-effective power system. That is why we are taking real responsibility for many elements of the energy transition and are collaborating across Stormont, industry, consumers, landowners and communities to deliver the best outcomes for Northern Ireland.

SONI recognises the vital importance of a Climate Bill for Northern Ireland, and we believe that the declaration of a Climate Emergency is an appropriate indicator of the importance of this legislation. We believe the Bill should facilitate Northern Ireland's Climate obligations including the Paris Climate Agreement, the UK's Net Zero Emissions 2050 commitments and support the Stormont Executive Green Growth Agenda, Programme for Government, Infrastructure, Health and Community Priorities as well as acting as an enabler to the Department for the Economy's forthcoming Energy Strategy. We also note the recent evidence Lord Deben of the Climate Change Committee has given to the AERA Committee and agree that any target must be achievable and not put undue burden on certain sectors, in particular rural communities. It is vital that the Bill facilitates a just transition, where measures are put in place to support and protect the most vulnerable in our society.

Climate Targets

We believe a strong strategy looking out to 2050, with a clear roadmap, checkpoints and ambitious measurable targets is essential. SONI supports an ambitious renewable energy target for 2030, and believes that Northern Ireland should aspire to deliver net zero Greenhouse Gas emissions by 2050. SONI is ready to provide navigation and leadership with other key stakeholders, in decarbonising the electricity sector and supports sectoral decarbonisation policies. As such, any targets for the electricity sector must reflect the context and unique characteristics of the Northern Ireland power system, such as:

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- Ensuring that targets are clear and fully tested in terms of creating the desired behaviours; consideration of incentive schemes and their interaction with other existing incentives or market-based mechanisms. For example, the new integrated all island Single Electricity Market (SEM) design went live in October 2018; this facilitated real time trading and greatly enhanced trading across the interconnectors putting downward pressure on prices. It will be important that efficient trading arrangements are considered as part of the target setting.
- Interconnection between Northern Ireland and the Republic of Ireland is currently insufficient. Currently there is a single 275kV tie-line and 2 smaller 110kV tie-lines in the west between the grids of Ireland and Northern Ireland. This means that it is difficult to maximise the value of renewables on the system even at current levels. This is costing SEM consumers in the region of £20m/year. The North South Interconnector is the solution; SONI estimates that consumers across the island of Ireland will save in the order of up to £40m-60m per year by 2030 because the North South Interconnector will remove constraints or bottlenecks on the grid. The project is also critical to the delivery of Northern Ireland's renewable energy ambitions and to support security of supply.
- To realise the value from additional renewable sources, up to 70% and higher in the future, it will be important that this major constraint is addressed as soon as possible. The Ten Year Network Development Plan (TYNDP) 2020¹ assesses the 70% scenario and the effect of interconnection on emissions. The lack of sufficient interconnection is directly related to emissions targets. This constraint means that indigenous renewable generation which could benefit Northern Ireland or neighbouring jurisdictions goes unused and that fossil fuels are used instead; this may be able to be avoided if network capacity was available thereby affecting emissions and reducing the cost to consumers.

The backbone of the power system in Northern Ireland is the 275kV transmission system which is a very strong ring providing high levels of reliability to consumers in Northern Ireland. The population spread and geographical topology of Northern Ireland has resulted in two challenging traits:

- Circa 75% of demand is located in the South and East of Northern Ireland; and
- Wind projects are generally located in the North and West of Northern Ireland and connected via the weaker 110kV transmission grid.

It is important that the geographical impact of any targets is considered.

SONI has recently concluded its consultation seeking the views of stakeholders and the wider public on how new renewable generation capacity can be delivered whilst at the same time minimising the impact to the transmission network, through our 'Shaping Our Electricity Future' consultation². This important project also analysed the changes required in wholesale electricity markets and the evolution needed in how we operate the transmission system; in order to facilitate increasing amounts of electricity from renewable sources. The findings from this consultation will ultimately influence the development of our

¹ https://tyndp.entsoe.eu/

² https://consult.soni.ltd.uk/consultation/industry-consultation-shaping-our-electricity-future



Transmission Development Plan for Northern Ireland (TDPNI)³, where we outline the projects necessary to meet demand and address the geographical and technical challenges we face in decarbonising our electricity system. In addition to reinforcing the electricity grid, our roadmap will consider the changes that will be required to the way the grid is operated as well as the way the electricity markets need to evolve. This will be essential as the mix of generation moves from one dominated by large fossil fuelled power stations to one largely powered by renewables.

We have briefed Minister Poots MLA in relation to '*Shaping Our Electricity Future*'; and among the attendees at several of our events were officials from DAERA. We were pleased to have received a response from colleagues in DAERA's Strategic Environmental Assessment Team.

The consultation to support our analysis was the most extensive we have undertaken. We are now reviewing the feedback we have received and are in the process of formulating our roadmap to achieving Northern Ireland's 2030 renewable ambitions.

We will be fulfilling our commitment to update stakeholders in relation to the 'Shaping Our Electricity Future' final roadmap towards the end of the year.

Establishment of a Climate Commissioner for Northern Ireland

Realising the full potential of Clean Energy for the Northern Ireland economy will require action and input from the NI Executive, the UK Government, Regulatory Authorities, industry participants and wider society.

Considering this is such an important area, SONI believes that there are advantages to the creation of an independent Northern Ireland Climate Commission. The Commissioner can avail of the expertise of the UK Climate Change Committee and other international bodies and focus on those areas that are most relevant to the local region. SONI would be pleased to support the Commissioner with our expertise.

In addition, as climate policy is influenced by decisions and policies across multiple government departments, the Commissioner could support the delivery of policy considering all aspects of the devolved administration, as well as holding them to account against targets. The Commissioner could also undertake a key role in educating consumers on the implementation plan and how everyone can play a part in achieving this crucial government objective.

This is a pivotal time for the energy and electricity sector. SONI are committed to playing a leadership role in supporting Northern Ireland's response to climate change. We know that demand for power will grow as both heating and transport switch to electricity. This change cannot happen unless the power system is transformed from one based on burning fossil fuels, to one able to perform reliably with close to 100% renewable energy on the grid. Working in partnership with DfE as well as DAERA is important to this success.

³ https://www.soni.ltd.uk/media/documents/SONI-Transmission-Development-Plan-Northern-Ireland-2020-2029.pdf



SONI welcomes the opportunity to provide evidence to the AERA committee and please do not hesitate to contact us if any further information is required.

Yours sincerely,

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Alan Campbell Managing Director SONI Ltd