EirGrid Statement to the Joint Oireachtas Committee on

Communications, Climate Action and the Environment

January 16th, 2018

Chair and members of the Committee

I would like thank you for inviting this evening to participate in this discussion and provide an overview of our role in assisting the country in achieving our key climate change targets.

Integrating Renewables onto the grid

Over the 10 years since EirGrid came into existence, we have placed a key emphasis in ensuring that our grid - the national electricity transmission grid – was adaptable and flexible. This flexibility has meant that we have to date been able to accommodate the increasing levels of renewable energy being generated.

Working with policy-makers such as yourselves, the Energy Department, aswell as with the broader renewable energy industry, Ireland has now become a world leader in the integration of renewables onto the electricity grid.

As a country, we are now able to integrate over 60% of our renewables onto the grid – or what my engineering colleagues call SNSP - System Non Synchronous Penetration. Our stated aim is to increase this to at least 75% by end of 2020. This is significantly advanced from our European counterparts and we believe will assist considerably in helping this country to achieve our 2020 and 2030 targets.

Recently an EirGrid-led consortium has been awarded Horizon 2020 funding from the European Commission to see how the successful integration renewables in Ireland might be transferred to the wider European electricity grid. The project is called the Sysflex Project. When finished in 2022, we hope that the learning and success in Ireland will lead the way in helping to decarbonise the European electricity supply.

Delivering an Integrated Single Electricity Market

Another major milestone that we will achieve this year – 2018 - is the delivery of the Integrated Single Electricity Market or ISEM.

Building on the success of the Single Electricity Market on the island of Ireland, which was a key success story of the Peace Process, the next phase is for us to integrate with the European electricity markets.

From May this year, when ISEM goes live, we will benefit from increased competition which we expect to deliver cheaper electricity and increased

energy security. But most importantly, we believe that the more competitive market that ISEM will deliver will bring a better price for renewable energy onto the electricity system.

Planning our energy future

Against the backdrop of all the change in the electricity market, and the key requirement to ensure we can cater for the new renewable energy sources, EirGrid have undertaken a new initiative to bring greater scenario planning into our work.

Based on best practise across Europe, our 'Tomorrow's Energy Scenarios' document published last year sets out 4 comprehensive scenarios on how electricity is both generated and consumed in Ireland over the coming decades. A lengthy engagement with a large cross section of stakeholders, state agencies and policy-makers was followed up with a public consultation to produce these scenarios.

Based on a range of inputs such as economic performance, population growth, government policies, technology developments and changes in consumer behaviour and attitudes have helped us create 4 different scenarios. These scenarios will ultimately allow us to ensure that the grid requirements of the future are planned appropriately.

These scenarios themselves are:

1. Steady Evolution – which would see renewable electricity generation maintaining a steady pace of growth. There is steady improvements in the economy and in the technologies which generate electricity. New consumer technologies help to increase energy efficiency in homes and businesses.

2. Low Carbon Living – which shows the economy enjoying high economic growth. This would in turn encourage the creation and rollout of new technologies for low carbon electricity generation. A strong public demand to reduce greenhouse gas emissions, in addition to high carbon prices and incentives for renewables, creates a high level of renewable generation on the grid.

3. Slow Change – where we see there is little change in the way electricity is generated due to slow economic growth and a slow response to renewable policies. The adoption of new technologies at residential, commercial and electricity generation levels has been slow due to a risk adverse approach.

   And finally,

4. Consumer Action – where a strong economy leads to high levels of consumer spending ability. The public want to reduce greenhouse gas emissions. Electricity consumers enthusiastically limit their energy use and generate their own energy. This results in a large number of community led energy projects and a rapid adoption of electric vehicles and heat pumps in the home.

We believe these 4 scenarios are a relatively accurate synopsis of the how electricity usage will develop. As policy-makers and legislators, the decisions taken here in the Dáil and the Seanad will be pivotal on which of these scenarios is realised by the country.

As a state-owned organisation, we can assure you that the national electricity grid will be able to fully cater for each of these scenarios.

While EirGrid do not advocate for any particular technology – traditional generation or renewable - we can assure this Committee of our ability and willingness to integrate greater levels of renewables onto the national electricity grid – be they from onshore wind, offshore wind, solar or other renewable sources.

Conclusion

I would thank the Chair and Committee for the opportunity to update on our work on integrating renewables and we can provide more detail on any of our work if Members require it.

Thank you.

ENDS.