Coom Green Energy Park

Questions from Technical Workshop 2 –
Engineering: Grid/Construction/Transport/Storage
May 14th, 2019

Questions were asked about road access to forested areas – protection of flora and fauna and traffic levels during construction.

To access the proposed site, existing forestry access tracks will be utilised where possible. Re-use of existing forestry tracks to minimize soil disturbance is a key design feature of Coom Green Energy Park. Works involved will include surfacing, strengthening where required and roadside drainage. A full ecological assessment will be included in the Environmental Impacts Assessment Report.

A traffic impact assessment report will be included as part of the planning application and will detail projected trips associated with the construction stage of the proposed development. Mitigation measures will be designed to minimize the impacts of traffic and transportation associated with the construction of the project. This shall include an Outline Traffic Management Plan.

Can you tell us more about the type and scale of turbine being proposed for the wind farm?

A maximum tip height of 169m will be applied for in the planning application. The environmental impact assessment report will assess the impact of turbines of this height. The turbine model will be decided after the planning application stage if the application is successful. This is common practice in renewable energy development, as delays to the process occur which can result in a significant period of time passing before construction begins. During this time, improvements in technology can result in more efficient turbine models being available to the market which may produce more energy, make less noise etc. Therefore, it is accepted by planning authorities that the finalisation of turbine model type is not required until later in the development stage. The model which is chosen will be required to comply with all planning conditions attached to the consent if the proposed development receives planning permission. Once a model is selected, the developer

will be required to submit details of the model to the planning authority for agreement.

How much of the forest would be impacted by the development and will replanting take place to compensate for removal of trees?

The total area of permanent tree removal will be replanted in a suitable alternative location which will be considered in the assessment of the project permanently removed to facilitate the proposed development. Any areas where temporary felling is required to facilitate the construction process will be replanted. All tree removal will occur under license. Existing forestry access tracks will be utilized where possible. Impact on forestry will be considered in the Environmental Impact Assessment Report.

Questions were raised about the volume of trucks likely to be on the road during construction and delivery of the turbines.

A detailed traffic impact assessment will be included as part of the planning application which will detail the projected numbers of HGVs associated with the construction phase. A detailed strategy for the delivery of turbines and other materials will be submitted to the planning authority.

The traffic and transport impact assessment report included as part of the planning application will detail projected trips associated with the construction stage of the proposed development. Mitigation measures will be designed to minimize the impacts of traffic and transportation associated with the construction of the project. This shall include an Outline Traffic Management Plan

Can the turbines be retrofitted with new technology as it comes to the market in the future?

It is possible to retrofit turbines during the operational lifetime of a project. This process could require environmental assessment, public consultation and a new planning consent.

There was a lot of discussion and concern around battery storage – particularly in relation to potential explosions and fires, what mitigation

measures the project team was planning to take to ensure the safety of the local community, etc.

The battery storage facilities will be located at the substation compounds. The compounds will be secure and remotely monitored with CCTV and security lighting. Typical battery storage is housed in sealed shipping containers and are monitored and controlled for performance, temperature and safety factors. The likelihood of a fire is very low and the containers will be fireproof and house all the necessary control and safety systems including a fire detection and suppression system such as the Siemens Sinorix, Novec 1230 or similar.

Large scale battery storage projects are being permitted and constructed in significant numbers worldwide and are deemed safe by relevant authorities subject to industry standard controls. The planning application will be assessed by the Fire Authority.

Questions were raised about installing cabling on the public roads, who would be responsible for resurfacing the roads, whether this would impact local people looking for planning permission on their own properties, etc.

Where underground cabling is required to be installed in the public road, cabling will be installed in line with ESB Networks and EirGrid standards and reinstated to the satisfaction of the local authority. The contractor responsible for the works will be required to reinstate the road following the installation of the cable.

With regard to cable installation and the impact on future planning permission/development, the proposed cable, much like other buried services, will not impact on the installation of new services. Where other services require buried installation, access can be made above or below the installed cable. The cable will be installed to ESB Networks / EirGrid specifications. There are no other known impacts or restrictions on potential future planning permissions associated with the proposed cable.

The traffic and transport impact assessment report included as part of the planning application will include potential impacts associated with the construction of the grid connection cable route. Mitigation measures will be designed to minimize the impacts of traffic and transportation associated with the construction of the cable route. This shall include an Outline Traffic Management Plan

Where will the substations be located and what is the set back distance from residential dwellings.

The substations are located in areas screened by forestry.

A substation compound is proposed in the townland of Knockacullata north of T15. The site is located approximately 750m from the local road in a forested area. The second proposed substation compound is located in the townland of Lackendarragh North, east of T23. The site is located approximately 250m from the public road.

There were a number of questions raised about the electricity created by the windfarm – 110kv or 220kv and whether the electricity generated would be exported for use abroad. A number of attendees said that the turbines should be put offshore, rather than in the middle of a small rural community. Suggestion was that if the electricity wasn't going to be used locally, why should the local community have the windfarm in their area?

The energy produced by the Coom Green Energy Park will be sold directly to the Irish national grid, operated by EirGrid. When sent to the national grid, electricity is fed to a central pool for distribution throughout the country.

Renewable energy is a national effort supported by European, National and Local policy. Wind energy development is supported by subsidies from the government in the form of guaranteed prices for energy output. This aims to encourage the provision of renewable electricity in Ireland in order to meet our targets set by the EU which our government have agreed to. The government do not directly develop renewable energy and therefore support its development through this mechanism allowing for it to be economically viable for private companies to provide renewable energy to the grid. The recently published Climate Action Plan indicates that over 4 GW of additional onshore wind energy development as well as 3.5 GW of offshore wind energy development will be required in order to mitigate the worst effects of climate change up to 2030.

Concerns were raised about broadband coverage and whether the turbines would interfere with her broadband service.

As part of the environmental assessment, potential impact on telecommunications will be assessed. It is unlikely that current broadband services will be impacted and if there was an impact the wind farm would work to resolve this.

Questions were asked about the impact of the development on groundwater quality, particularly given that the water table is very high. This related to the construction process, pouring of concrete, etc.

As part of the environmental impact assessment process, hydrology and hydrogeology will be studied to determine potential impacts on ground water. If impacts on groundwater are likely, alternative means of construction or an alternative design will be considered. Water quality will be assessed during the process at agreed points throughout the site.

Why are Hydrology and Geology reports not completed at this stage and when will they be available?

Hydrology and geological assessments are ongoing. The results of the assessment will be included in the Environmental Impact Assessment Report which will be submitted with the planning application. The results will inform the final design and layout of the project.