

Ms Eileen Deegan
The Commission for Energy Regulation
The Exchange
Belgard Square North
Tallaght
Dublin 24

Western Development Commission (WDC) Response to the CRU Consultation on the Draft EirGrid Transmission Development Plan 2021-2030 CRU202222

Dear Ms Deegan,

The Western Development Commission<sup>1</sup> (WDC) welcomes this opportunity to make a short response to the above consultation on EirGrid's Draft Transmission Development Plan (TDP) 2021-2030.

The WDC is a statutory body with a remit to promote and encourage economic and social development in the Western Region (counties Donegal, Sligo, Leitrim, Mayo, Galway, Roscommon, and Clare). It operates under the aegis of the Department of Rural and Community Development.

The WDC regards the provision of quality energy infrastructure as essential to underpin the economic development of the region. Likewise, the WDC recognises the importance of the low carbon transition and is particularly concerned that the issues for our region are addressed<sup>2</sup>. Our region has very significant on and offshore renewable energy resources and it is important both to the economic development of the region, and to the achievement of the national renewable energy targets, that these resources are used to best advantage. In addition, recent geopolitical events have highlighted the need to accelerate Ireland's transition from imported fossil fuels, and our region can make a significant contribution to this.

The transmission network in the region is underdeveloped (as noted in the Draft TDP Section 5.2) and the WDC is concerned that the projects listed in the Draft TDP will not address the region's need especially in relation to the RES integration necessary to achieve government climate targets.

In this brief submission we highlight a number of issues for electricity transmission in the Western Region particularly relating to the Renewable Energy Sources and briefly answer the questions posed by the CRU in the consultation document on the draft TDP.

# **Our Submission**

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<sup>&</sup>lt;sup>1</sup> For more information about the Western Development Commission see <a href="https://www.wdc.ie">www.wdc.ie</a>

<sup>&</sup>lt;sup>2</sup> https://westerndevelopment.ie/policy/publications/making-the-transition-to-a-low-carbon-society-in-the-western-region-key-issues-for-rural-dwellers-august-2020-full-report/



As noted above, in the submission we first consider how the Transmission Development Plan 2021-2030 addresses some of the issues for the transmission system in the Western Region. These are:

- 1. Network development in the north west and west
- 2. Offshore wind
- 3. Other aids to grid stabilisation

# 1. Network development in the north west and west

As noted in Section 5.2 of the TDP 2021-2030 the existing transmission network in the region (most of the Western Region under the WDC remit is in EirGrid's BMW region) is predominantly 110kV and 220kV with limited 400kV infrastructure in the southern part of the region. The northwest in particular is relatively isolated from the 220kV network and mainly comprises long lines of 100kV grid. There is a strong wind resource and already significant wind generation in the region. This along with the lower levels of electricity demand, means that the level of generation is great than the capacity of the network resulting in local constraints.

There is, and has been for a number of years, a very clear need for significant investment in the network in region. The wind resource is the best in Ireland, and it is essential to ensure that this resource, which gives rise to excellent wind farm capacity factors, is made best use of in order to efficiently achieve national climate action targets. Lack of investment in the region's network undermines our capacity to achieve this potential.

We are, therefore, very concerned that the North West Project (CP0800) has been cancelled, and removed from the PCI list, and that no project has been put in its place to address the serious issues in the northwest and in Donegal in particular. The need for investment in the electricity network in the northwest has been clear for many years and yet, while the proposed North West Project has been cancelled with no clear explanation in the draft TDP, there is no indication of what will replace it, when a replacement project will be developed, and what potential capacity improvements would arise from any new project.

While we welcome the progress with the North Connacht project in the west (Mayo-Roscommon), we are also concerned that it will be at full capacity by the time it is commissioned and that more investment will be needed in the area.

A very significant increase in renewable electricity will be required to achieve targets for 2030 and beyond to 2050. Given the time it takes to plan and develop the transmission network, a longer term view needs to be taken to ensure investment we make in this decade will have capacity to meet our needs in the longer term. This is especially important in the Western Region which has significant resources for renewable energy but has been left behind in terms of network development.

#### 2. Offshore wind

In its discussion of offshore wind farms (Section 6.4.1 of the TDP 2021-2030), the focus is on the east coast and there is no mention of the potential for significant and rapid development of floating



offshore wind (FOW) on the west coast. The Western Region has some of the best conditions for offshore wind in the world, with a long coastline and consistently high wind speeds. We need to unlock the potential of our deeper waters and stronger winds on the west coast. This is the key to the energy transition in Ireland to allow us to meet our long term net zero target. The Programme for Government specifically refers to at least 30GW of floating offshore wind potential off the west coast by 2050.

We believe that the focus on projects off the east coast in section of the TDP is too narrow and that EirGrid must consider the opportunities off the West coast. The speed at which FOW technology has developed has been very rapid, and this pace of growth is likely to continue up to and beyond 2030, so it is important that we allow for these projects to develop as soon as possible. The WDC believes that the speed of development of offshore floating wind elsewhere (particularly in Scotland, but also Norway, Portugal and across the globe) shows that some of the assumptions used by EirGrid about opportunities for offshore generation may underestimate the potential for rapid development of offshore wind on the west coast

Moneypoint 400kV substation can facilitate offshore wind capacity located off the Clare coast. However, any offshore wind generation located north of Galway along the Atlantic will require the development of new grid infrastructure. Although we recognise that projects are at an early stage of development, we are also conscious that planning and development of appropriate grid connection for large offshore wind farms on the west coast must commence immediately so that their completion aligns with potential commissioning dates for offshore projects.

#### 3. Increasing demand as an aid to grid stabilisation

While we strongly urge more focus on network development and reinforcement in the Western Region, we also note that incentivising the location of large demand could help to support the transmission network in the region. This is likely to include large users like data centres. While the location of centres of demand such as data centres outside the Greater Dublin Area is considered in EirGrid's State of our Electricity Future (300MW of data centre demand is assumed to connect on the 220kV network outside Dublin) the possible impacts of this is not discussed in the draft TDP. Likewise, there is no discussion of the CRU direction<sup>3</sup> to the System Operators in relation to the data centre grid connection processing which directs them to prioritise processing of data centre connection applications outside a constrained region (Greater Dublin) of the electricity system. The impact of new centres of demand in the Western Region on the transmission system in the region is not considered.

In addition, innovation and changing market conditions for Power-to-X also need to be considered. Green hydrogen is a key example of this, with hydrogen production and storage facilities expected to help support a highly variable RES E system. A number of projects are currently in development in our region (Mercury Renewables being the most advanced, but others at are early stages of development). Such innovation support could allow the areas of the Western Region with low

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<sup>&</sup>lt;sup>3</sup> <a href="https://www.cru.ie/document\_group/data-centre-grid-connection/">https://www.cru.ie/document\_group/data-centre-grid-connection/</a>



network capacity to make the most of abundant wind resources (both on and offshore) and provide a local demand which can help to support the grid in the region.

The EU directive outlining the requirements for the TDP (see more below) notes the importance of taking into account demand response. We do not believe this draft TDP does this.

### 4. Consultation Questions

**Q1.** Does the content and format of the document adequately reflect the intent and purpose of the TDP as set out in legislation?

The Directive (EU) 2019/944 common rules for the internal market for electricity as linked in the CRU consultation document notes that

When elaborating the ten-year network development plan, the transmission system operator shall fully take into account the potential for the use of demand response, energy storage facilities or other resources as alternatives to system expansion, as well as expected consumption, trade with other countries and investment plans for Union-wide and regional networks.

We do not consider that there is sufficient consideration of the use of demand response, energy storage facilities or other opportunities in the draft TDP.

While we acknowledge, and welcome, some of the improvements in the TDP format over recent years, we believe that it is still more of a progress report on projects which are already at a relatively advanced stage of development (Steps 4-6 of EirGrid's six-step process for developing the Grid). There is no information about other network developments which may be needed by 2030, and little on what is in early stage development but will be advanced or completed by 2030. The draft TDP does not seem to reflect the intent of the legislation.

**Q2.** Section 2 of the TDP 2021-2030 describes investment drivers and system needs. Does the document outline sufficient actions to address the drivers and needs presented? If not, please highlight the specific areas where additional actions may be required.

Section 2 of the TDP provides a general review of the investment drivers and system needs but does not give any specifics or details relating to particular areas or investments. Thus, issues outlined above (the need for investment in the north west and west, the requirements of potential offshore wind developments on the west coast and the location of demand) have not been discussed in any detail. A more detailed picture of the issues, with data on current and future demand and supply issues trends as they impact the transmission network, would be helpful.

**Q3.** The North-West (section 3.2) has, for some time been identified as being an area where there is particular difficulty with network development. Does the TDP 2021-2030 adequately detail the plan to now resolve it?

No, as noted above, we are very concerned that North West Project (CP0800) has been cancelled. As the previous TDP (2020-2029) noted (p39) the project comprised reinforcement of the grid in the north-west. The driver of this project was RES integration. The amount of renewable generation seeking to connect in Donegal is in excess of the local demand and the capacity of the network. This generation therefore needs to be transferred out of the area to relieve congestion on the network. Despite this clear need the TDP 2021-2030 does not give any information about why the decision to



cancel the North West Project was made and how it plans to resolve issues and invest in the network in the north west network in the northwest. There is no indication that there is a plan in place, or even that such planning has commenced noting only that:

"The need for new network development in the north west, between Srananagh substation and substations in county Donegal, remains and has been identified in Shaping Our Electricity Future. However, the scope of the plausible scale of solutions has changed to include additional technologies, and to include investigation of connection to a number of substations in Donegal. Consequently, a new project will be started to replace CP0800 and reported in future TDPs." (p35)

#### It also notes

We will continue to assess reinforcement needs in the North-West through our System Needs Assessment report and to identify candidate solutions as part of the Shaping Our Electricity Future project, aiming to find new projects required in the area beyond those already progressing through the grid development process (p46)

Neither of these statements provide adequate detail on a plan to resolve network issues in the north west.

**Q4.** Would it be helpful to link projects to the specific challenge they are addressing? Examples of this would include the North-West project as identified in the Renewable Integration Development Project and the Dublin Security of Supply constraint as set out in CRU paper CRU/18/228 dated 05 October 2020. If yes, would it be helpful to include the date and source of that challenge identification, and the timeline for addressing that challenge along with the associated project(s) completion date(s)?

Yes, it would be helpful to link project to specific challenges and to provide some detail on the challenges which drive the project need. While links can usefully be given to the documents more information should be provided in the TDP itself.

**Q5**. The TDP currently provides general and non-project specific reasons for changes in project status e.g., from Active to On Hold or Removed. Is there a benefit to the transmission system development in providing project specific reasons for these changes, with an exception where there is a commercial sensitivity? If yes, please specify the benefits.

Yes, there would be benefit in doing this. It allows the reader to better understand the reasons for the changes, for example in relation to the North West Project and to have more confidence in the TSOs decision making and an understanding that there are good reasons for the decisions made. It would also allow, where appropriate, users of the document to engage with the reasons given or data provided. This would make the TDP a more useful document.

**Q6.** Are there any current network constraints that are not included in the TDP and will not be resolved by the successful completion of projects set out in the TDP 2021-2030?

As noted above (Q3) in relation to the north west, we are very concerned that the existing network issues in the north west and the lack of capacity for increased RES integration are not addressed in the Draft TDP. In addition, while we welcome the progress with the North Connacht 110kV We have noted the importance of ensuring that the network in the west is has capacity for significant future



offshore wind connection on the west coast. No reference is made to this, but developments are likely to be required and commissioned at or around the end date of this TDP.

**Q7.** Does this paper raise any concerns around delivery capability considering the challenges ahead? CRU notes that there are 145 live projects in the 2021 report and at the time of the freeze date, 15 were completed and 43 due were scheduled for completion in 2021. 30 are scheduled for completion in 2022. Comparing this to previous reports, the 2020 report showed 11 projects completed in the previous year, the 2019 showed 23 projects completed, and the 2018 report had 26 projects completed.

There has been a significant increase in the number of projects but given the importance of increasing renewable generation of electricity and the electrification of much energy use in Ireland's climate actions, and current instability in global energy markets, it is likely that there will be an even greater increase in require projects in the coming years. It is therefore essential that EirGrid develops its delivery capabilities so that delays are minimised.

**Q8.** CRU is proposing that the document should include a link to the related PR5 submission from EirGrid. This could constitute information on how many projects are on schedule, or ahead of schedule, relative to that submission. Would respondents consider this link helpful, and if so, is there related information that should also be considered?

If the timelines of the PR5 and the TDP are aligned this may be helpful.

# Conclusion

The WDC is pleased to make this submission to the consultation on EirGrid's Draft Transmission Development Plan 2021-2030. If there are any queries concerning this submission, please contact me.

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