Enduring Connection Policy 2.4

Solar and Wind Constraints Report: Results for Area E

Version 1.0

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Document Structure

This document is for customers wishing to see the estimated Total Dispatch Down for Area E. For information on the study assumptions, methodology, abbreviations and terms used for the Constraint Analysis reports, please see the area non-specific Assumptions and Methodology report found on the ECP-2.4 webpage[1].

This document contains two main sections:

Section 1: Results for Area E: outlines the area covered by this report. This section provides a network diagram of Area E and an overview of the results for Area E.

Section 2: Area E Node Results: provides a table of results for every node in the area. This table documents the installed capacity, available energy, surplus, curtailment and constraint for every node in Area E.

[1] https://www.eirgridgroup.com/customer-and-industry/general-customer-information/ecp-2.3-constraint-report/index.xml

Important Note

This ECP-2.4 constraints report presents an estimate of the reduction in available solar and wind generation based on the study assumptions described. The reduction in available generation has been split into three categories for the purposes of this study: surplus, curtailment, and constraint.

Following the Judicial decision on the SEM-22-009 Decision Paper on Dispatch, Redispatch and Compensation Pursuant to Regulation EU 2019/943, the detailed design for implementing Articles 12 and 13 is yet to be determined and may differ from the implementation for Total Dispatch Down used in this study. Therefore, an assumed interpretation will be used for ECP-2.4 Constraint Analysis that applies a grandfathering[2] approach to resolving Surplus and Constraint conditions. However, in addition to the Core ECP 2.4 constraint forecast studies a set of sensitivity studies are also included in the study scenarios which employs pro-rata allocation of constraints.

This report uses the term "Total Dispatch Down" to refer to the total reduction in available solar and wind generation i.e., the sum of surplus, curtailment, and constraint, and is considered the key indicator for the results. However, it is important to note that the term "dispatch down" is more correctly applicable only to TSO instructions to reduce generation output from a market position, as is the case for curtailment and constraint, and is not necessarily applicable to a generator reducing its own output from its availability to a market position so that supply and demand are balanced, as is the case for surplus.

The results presented in this report are based on the simulation and modelling assumptions described. The findings are indicative only and this report should in no way be read as a guarantee as to future levels of surplus, curtailment, and constraint. The modelling of interconnectors is kept consistent with ECP 2.3 constraint forecast.

The battery sensitivity is termed as "ECP Battery", in which the non-connected batteries from the ECP scenario has been removed.

[2] 'Grandfathering' is where an old rule continues to apply to some existing situations while a new rule will apply to future cases. In the context of Article 12 and Article 13, grandfathering refers to the distinction between how priority dispatch renewable generators (those installed prior to 4th July 2019) and non-priority dispatch renewable generators (those installed on and after 4th July 2019) are treated in the SEM.

1 Results for Area E

1.1 Introduction

This section provides the surplus, curtailment and constraint results for Area E that are estimated by this analysis. There is a total of six core ECP-2.4 studies and nine sensitivity studies (including without maintenance) presented in this report. The study scenarios and the associated assumptions can be found in the Assumptions and Methodology report. An overview and discussion of the results is provided in this Section. The surplus, curtailment, and constraint results for each node in Area E are provided in Section 2 of this report.

1.2 Study Notes

A list of the major study assumptions is provided in the Assumptions and Methodology report. For Area E, there are a number of key assumptions which drive the results, including network outages and capacity factors. These are thus reiterated here. Similarly, it is worth highlighting again the differences between the various components of Total Dispatch Down.

1.2.1 Network Outages

The scenarios in this report are intended to give a view of average long-term levels of surplus, curtailment, and constraint, subject to installed generation, demand, interconnection, operational constraints, and reinforcement delivery.

The ECP-2.4 constraints forecast analysis applies a similar transmission outage schedule to the ECP-2.3 constraints analysis. This was kept consistent with last year's schedule following positive feedback from industry. This schedule allows a representation of outage impact in each geographical area to be included in the studies.

This representative transmission outage schedule is given in Appendix A of the Assumptions and Methodology report. However, at times, longer duration outages may be required for certain connections, reinforcement works or forced outages work. These are not considered in this analysis and may result in higher wind and solar constraints in reality.

1.2.2 Benefit of Capacity Factor

In practice, a specific windfarm may be located at a site with higher wind speeds or may have a better performing type of wind turbine; the result is a higher capacity factor than neighbouring windfarms. This report does not reflect such localised diversity between windfarm sites. In reality, a windfarm with a higher capacity factor may see lower percentage surplus, curtailment, or constraint levels than an adjacent windfarm with a lower capacity factor. This is because at times of medium or low wind speed, the high-capacity factor windfarm can generate power when the low-capacity factor windfarm cannot.

1.2.3 Notes on Surplus, Curtailment and Constraint Modelling

1.2.3.1 Surplus

During generation reduction for surplus, a distinction is made between the treatment of priority and non-priority renewable generators, with non-priority generators being dispatched down ahead of priority generators. Within these two categories of generation, surplus is applied pro-rata across the all-island system for all non-priority renewable generators.

For any hour of the study, the surplus level will depend on system demand and interconnector flow capacity. In general, surplus is expected to increase with increasing installed renewable capacity.

It is expected that the further interconnection of the all-Island network with mainland UK and Europe will decrease the frequency of surplus conditions occurring.

In general, increased interconnector capacity with mainland UK may not necessarily eliminate surplus generation as solar and wind profiles in mainland UK will largely be in line with those in Ireland. In the Future Grid study year however, when both the Celtic and 2nd Ireland-France interconnectors are connected, there will be a greater export capacity during times of abundant renewable generation to mainland Europe where similar wind and solar generation in Ireland and mainland Europe is not expected.

Therefore, dispatch down due to surplus generation may not occur as frequently once both the Celtic and 2nd Ireland-France interconnectors are connected.

1.2.3.2 Curtailment

In this report, for each hour of the study, the curtailment is shared pro-rata on a system-wide basis with no distinction made between priority and non-priority generators. This means that both curtailment reductions and curtailment increases are shared system wide.

Solar generation has different reported levels of curtailment compared to wind due to different capacity factors and annual profile shapes.

The applied curtailment is broadly constant across the system. However, due to differences in wind and solar profiles and capacity factors between areas, the percentage of average curtailment differs between areas.

1.2.3.3 Constraints

The constraints on the renewable generation are treated differently in different years. In 2029 and Future Grid scenario, for the constraint of renewable generation, a distinction is made between priority and non-priority generators, with non-priority generators being dispatched down ahead of priority generators across the relevant transmission nodes within the subgroup. Such application is termed as grandfathering of constraints. However, in 2027 study the constraints are allocated pro-rata to all renewable generator nodes within the subgroup. Additionally, in relevant sensitivity scenarios, grandfathering or pro-rata constraints allocation are applied accordingly. More details on the approach assumed in this study for the application of constraints to renewable generation can be found in the main ECP 2.4 Assumptions and Methodology report.

In general, there is a tendency for renewable bulk power to flow towards the demand in Dublin and the interconnectors. These flow patterns are relevant when seeking to understand constraint apportionment in the simulation.

When presented as percentage values, the constraint results look different for solar and wind, as they have a low correlation due to different profile shapes driven by weather patterns.

1.3 Generation Overview

A detailed system-level overview of the renewable generation scenarios used in these studies is given in Section 2 of the area non-specific Assumptions and Methodology report. The distribution of generation in each scenario based on technology, area and node is given in Appendix B of the Assumptions and Methodology report. The node-level installed wind and solar generation for Area E in the "ECP" scenario is given in Table 1-1.

Node	SO	Status	Solar	Wind
Athea	TSO	connected		23
Athea	TSO	connected		34
Ballinknockane	TSO	due to connect	50	
Ballyvouskil 220	TSO	due to connect	13	
Ballyvouskil 220	TSO	due to connect		42
Boggeragh	TSO	due to connect	12	
Boggeragh	DSO	connected		23
Boggeragh	DSO	due to connect		3
Boggeragh	DSO	connected		20
Boggeragh	TSO	connected		123
Charleville	TSO	due to connect	165	
Charleville	DSO	connected		51
Charleville	DSO	connected		18
Clahane	TSO	due to connect	34	
Clahane	TSO	connected		52
Cloghboola	DSO	connected		55
Cloghboola	TSO	connected		46
Coomagearlahy	TSO	due to connect	7	
Coomagearlahy	TSO	connected		81
Coomataggart	DSO	connected		43
Coomataggart	TSO	connected		114
Cordal	DSO	connected		58
Cordal	TSO	connected		90
Dromada	TSO	connected		28
Drombeg	TSO	due to connect	94	
Drombeg	DSO	due to connect		25
Garrow	DSO	connected		10
Garrow	TSO	connected		59
Garrow	DSO	connected		5
Glanlee	TSO	connected		30
Glenlara	DSO	connected	5	
Glenlara 220Kv Side	DSO	connected		14
Glenlara	DSO	connected		26
Glenlara 220Kv Side	DSO	connected		27
Kilpaddoge	DSO	connected		18
Kilpaddoge	TSO	connected		37
Knockacummer	TSO	connected		100
Knockearagh	DSO	due to connect	5	
Knockearagh	DSO	connected		9
Knockearagh	DSO	connected		4
Limerick	DSO	due to connect	5	
Mallow	DSO	connected	5	
Mallow	DSO	due to connect	5	

Moneypoint 220Kv	TSO	due to connect		450
Moneypoint	TSO	connected		17
Oughtragh	DSO	due to connect	9	
Oughtragh	DSO	connected		9
Pollagh	TSO	due to connect	128	
Pollagh	TSO	due to connect		50
Rathkeale	DSO	connected		28
Rathkeale	DSO	connected		5
Reamore	DSO	due to connect		30
Reamore	DSO	connected		58
Reamore	DSO	connected		2
Tralee	DSO	due to connect	15	
Tralee	DSO	connected		15
Tralee	DSO	connected		33
Trien	DSO	due to connect	4	
Trien 220Kv Side	DSO	connected		7
Trien	DSO	connected		8
Trien 220Kv Side	DSO	connected		40
Trien	DSO	connected		19
Total			556	2039

Table 1-1 Wind and Solar Generation Summary (MW) in Area E for Generation Scenario "ECP"

Table 1-2 and Table 1-3 show installed solar and wind generation for Ireland and Area E, and the available solar and wind generation for Area E for each generation scenario.

Solar	ECP	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Ireland (MW)	7005	7005	7005	7005
Installed Area E (MW)	556	556	556	556
Installed Controllable Area E (MW)	556	556	556	556
Available Controllable Area E (GWh)	651	651	651	651

Table 1-2- Installed MW and Available GWh for Area E - Solar

Wind	ECP	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Ireland (MW)	7358	10432	12358	12358
Installed Area E (MW)	1588	2038	2038	2038
Installed Controllable Area E (MW)	1501	1951	1951	1951
Available Controllable Area E (GWh)	4861	6851	6851	6851

Table 1-3 - Installed MW and Available GWh for Area E - Wind

1.4 Network Overview

Area E, in the southwest of the country includes a mix of wind and solar generation. A summary of this generation is given in Table 1.1.

The transmission network in Area E and the surrounding area is shown in Figure 1-1. The 400 kV circuits are shown in red, the 220 kV circuits are shown in green and the 110 kV circuits in black. Possible future transmission stations and lines for the connection of new generation are also shown on the map below.

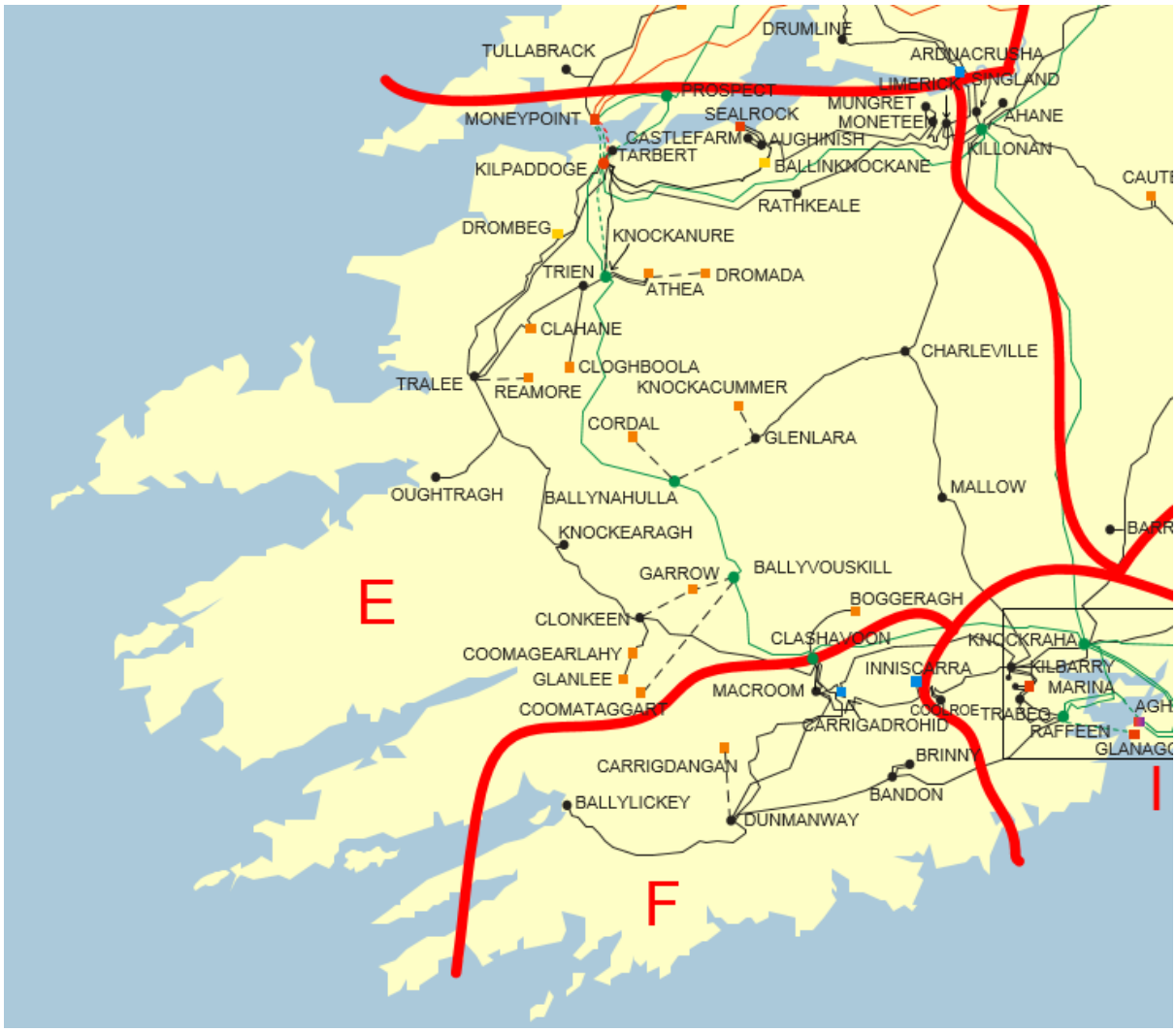

Figure 1-1 Network Map for Area E

At times of high renewable generation, there is a net export of power from Area E, and the dominant power flows tend to be from Area E towards the load centres on the east coast and the interconnectors. These flow patterns are relevant when seeking to understand constraint apportionment in the simulation.

Constraints in Area E can be caused both by local and wider system issues. Constraints in the model are optimised on a system-wide basis so, in theory, an increase in the installed generation in another area can increase constraints in Area E.

Also, the power flowing out of Area E meets and joins with power flows from other areas, as the power flows towards the demand centres and interconnectors. A transmission bottleneck between Area E and the east is shared with power flows coming from other areas.

With the addition of the Celtic interconnector in 2029 and the Future Grid horizons, during high renewable scenarios the power flow changes and flows towards the interconnector connected at Knockraha.

1.5 Future Grid Sensitivity Scenario

In line with the previous ECP constraint forecasts, and in response to feedback from industry, the Future Grid scenario is included in the analysis. All reasonable efforts have been made to align the network assumptions in the Future Grid scenario to the Shaping Our Electricity Future (SOEF) 1.1 Roadmap. The network projects included in the study are given in Appendix A of the Assumptions and Methodology report found on the ECP-2.4 webpage. Additionally, any project that has progressed to stage three of the six stage project planning process after the publication of the SOEF 1.1 Roadmap are also included in the Future Grid studies. Note however, that the wind and solar generation portfolio in the ECP-2.4 Future Grid scenario differs from the wind and solar portfolio considered in the SOEF 1.1 Roadmap. This is done to maintain alignment with the ECP-2.4 process. The ECP study scenario includes all wind and solar projects which have applied through connection processes, whereas the SOEF 1.1 study includes prospective list of generators to achieve the capacity volumes stated in the Climate Action Plan 23.

The Future Grid study includes a base renewable generation scenario (ECP), along with four sensitivity generation scenarios (ECP + 3.1 GW offshore, ECP + 5 GW offshore, ECP + 5 GW offshore without LirIC and 2nd France IC, and a maintenance sensitivity study). The scenarios with additional offshore wind have been included to show the potential impact of increasing offshore wind on Total Dispatch Down levels.

The demand modelled for the Future Grid scenario is based on the medium demand scenario for 2030 as published in the All-Island Resource Adequacy Assessment 2025-2034.

The purpose of the Future Grid scenario is to provide insights on the potential impact of the SOEF 1.1 Roadmap network reinforcement portfolio on the dispatch down of wind and solar generators. This study is not intended to be exhaustive; it is not intended to remove all transmission constraints and it does not give individual generators guarantee that their Total Dispatch Down will change to the estimated levels.

1.6 Area E – Average Results

The Total Dispatch Down results for Area E are provided below in Table 1-5 to Table 1-16 and Figure 1-3 to Figure 1-8. These include the breakdown between surplus, curtailment, and constraint. The Table 1-6, Table 1-8, Table 1-10, Table 1-12, Table 1-14 and Table 1-16 gives the results of constraint sensitivity scenario. The Total Dispatch Down percentages are based on the total available energy. The Total Dispatch Down is the sum of surplus, curtailment, and constraint. The node level breakdown of surplus, curtailment and constraint are given in Section 2. The results show that the system level Total Dispatch Down increases with additional installed capacity due to a significant increase in surplus. However, the Total Dispatch Down reduces when the 2029 studies are compared with 2027 and there is a further reduction in the Future Grid scenario owing to increased demand, network reinforcement, interconnection, and relaxed system level operational limits.

For each generation type in Area E (solar non-priority, wind non-priority and wind priority), the total installed capacity in MW and total available generation in GWh are given in Table 1-5, to Table 1-16. The total generation in GWh after dispatch down and the corresponding percentage Total Dispatch Down are also included in the tables for each scenario. Details on the generation and network scenarios are given in Section 2 of the Assumptions and Methodology report.

1.6.1 Offshore Wind Sensitivity Studies

Results for the offshore wind-based sensitivity studies are included, along with results for the core scenarios. The general trend is that with increasing levels of offshore wind, Total Dispatch Down increases due to significant increases in the available wind energy, which in turn leads to increased levels of surplus.

1.6.2 Impact of Article 12 and 13

Higher Total Dispatch Down is observed for non-priority generators due to the impact of the implementation of grandfathering of surplus and constraints, which results in non-priority generators being reduced ahead

of priority generators for surplus and constraint reasons. More detail on the Article 12 clause is available in Section 3.6 of the Assumptions and Methodology report.

Another factor that contributes to the higher total dispatch down for non-priority wind and solar units is the proportion of priority to non-priority units within a subgroup. If a subgroup has a high volume of priority wind/solar units to non-priority wind/solar units, then this can result in the constraints that would usually be allocated to the priority units only allocated to the non-priority units (due to the grandfathering of constraints). This can result in high constraints percentage for non-priority units within a subgroup.

1.6.3 Battery Sensitivity

The ECP 2.4 constraint forecast study scenarios include a battery sensitivity study. The installed capacity of wind and solar is same as that of ECP scenario while the network and demand are of 2029 study year. The constraint allocation is based on grandfathering. The results show a higher level of Total Dispatch Down especially contributed by the surplus component. During higher RES conditions, with the batteries included, the excess energy available are stored and utilized during low RES available. A detailed breakdown of the Total Dispatch Down components with batteries are given in the section 2 of this report.

1.6.4 Future Grid Sensitivity Study

The results of the Future Grid scenario show a notable reduction in Total Dispatch Down over the core study years (2027 and 2029) due to the impact of the SOEF 1.1 Roadmap network reinforcements, increased demand levels, increased interconnection, and the relaxation of operational constraints. However, increases in installed wind and solar generation, as seen in the offshore wind scenarios, result in rising surplus levels, causing an increase in Total Dispatch Down levels. A detailed breakdown of the Total Dispatch Down components for Area E under the Future Grid scenarios and associated sensitivity case is given in Table 1-5 to Table 1-16. Further node level details can be viewed in Section 2.

1.6.5 Area Subgroups

The constraint forecast study, which is performed using PLEXOS software, applies mathematical optimisation to find the lowest cost generator dispatch schedule to meet demand, subject to several system and transmission level constraints. To ensure the model is impartial, the assumptions on the cost of renewable generators remain the same, irrespective of technology or location, and are always lower than that of conventional plants. This ensures renewable generators are given priority in the PLEXOS optimisation. However, due to network congestion caused by line limits and N-1 contingency security checks, the power flows in certain lines are limited, causing dispatch down in RES generators which may affect one generator or multiple generators chosen by PLEXOS' internal logic. During various initial studies, it was observed that PLEXOS may repeatedly choose the same generator(s) to dispatch down to manage an issue in a region shared by multiple generators.

There is often a post-processing step between the PLEXOS simulation and this report to ensure an appropriate allocation of constraints among generators sharing the bottlenecks. This is done by creating constraint subgroups within an area or spanning multiple different areas. The subgroups are selected based on an assessment of the raw PLEXOS results and based on TSO experience of dispatch down on the real system. The subgroups are chosen to group those generators into a constraint group that are expected to experience similar constraint levels. The subgroups are selected on the basis that they share a common transmission bottleneck, or they are electrically close to a congested area within the network.

The power from Area E tends to flow onto the 220 kV circuit connecting Tarbert 220 kV station to Knockraha 220 kV station. Any issues with the 220 kV circuit or with parallel paths can limit the generation in this area. The power flows towards either direction depending on the wind availability in the region. The area also benefits from the Celtic interconnector connecting to Knockraha in 2029 and in the Future Grid study scenario. Additionally, the issues binding for the circuits in Area E can create additional stress in the Area F and Area I circuits, as they merge with rescue flows towards Knockraha.

Contingencies in this area were seen to affect adjacent areas as the rescue flow utilizes the available parallel path formed by 110 kV circuits. The contingencies and overloaded lines associated with the area are included in Appendix C of the Assumptions and Methodology report. The contingency in this area improves in the year 2029 and Future Grid scenario with additional reinforcements.

Analysis of Area E identified a constraint subgroup for solar and wind generation combining Area E, Area F and Area I. The subgroup nodes are given in Table 1-4. A number of nodes in the north of Area E are included in the D and E North subgroup. The individual node level dispatch down is given in Section 2.

Subgroup	Nodes
D and E North	Ballinknockane
	Limerick
	Moneypoint
	Moneypoint 220 kV
	Rathkeale
E, F & I	Athea
	Ballyvouskil 220 kV
	Boggeragh
	Charleville
	Clahane
	Cloghboola
	Coomagearlahy
	Coomataggart
	Cordal
	Dromada
	Drombeg
	Garrow
	Glanlee
	Glenlara
	Glenlara 220kv
	Kilpaddoge
	Knockacummer
	Knockearagh
	Mallow
	Oughtragh
	Pollagh
	Reamore
	Tralee
	Trien
	Trien 220 kV side

Table 1-4 Area E generators nodes and their subgroups

Figure 1-2 Subgroups E, F & I and D & E North (subgroups outlined by blue dashed line)

The solar non-priority data is given in the following table.

Area E (E,F & I)	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	98	300	501				
Installed Capacity (MW)	2029	98	300	501	501			
Installed Capacity (MW)	FG			501		501	501	501
Available Energy (GWh)	2027	115	351	587				
Available Energy (GWh)	2029	115	351	587	587			
Available Energy (GWh)	FG			587		587	587	587
Generation (GWh)	2027	111	317	473				
Generation (GWh)	2029	113	333	513	467			
Generation (GWh)	FG			541		508	480	444
Surplus (%)	2027	1 %	6 %	14 %				
Surplus (%)	2029	0 %	3 %	9 %	15 %			
Surplus (%)	FG			5 %		11 %	16 %	21 %
Curtailment (%)	2027	1 %	2 %	4 %				
Curtailment (%)	2029	0 %	1 %	3 %	5 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027	2 %	2 %	1 %				
Constraint (%)	2029	1 %	0 %	1 %	0 %			
Constraint (%)	FG			1 %		1 %	1 %	1 %
Total Dispatch Down (%)	2027	3 %	10 %	19 %				
Total Dispatch Down (%)	2029	2 %	5 %	12 %	20 %			
Total Dispatch Down (%)	FG			8 %		14 %	18 %	24 %

Table 1-5 - Surplus, Curtailment and Constraint for Solar Non-priority in Area E (E, F & I)

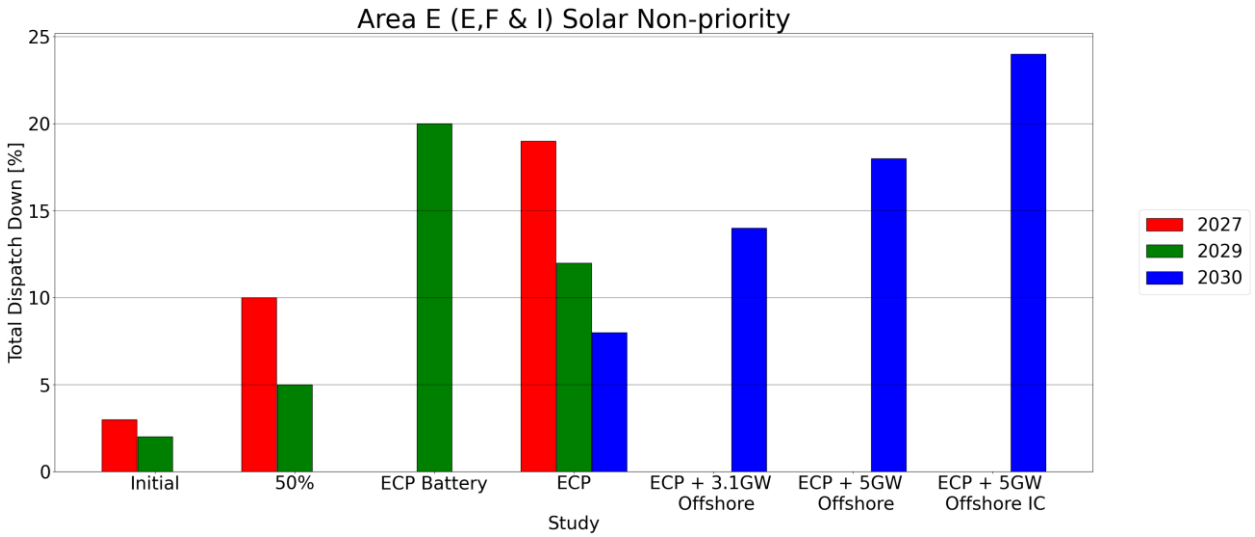

Figure 1-3 - Results Solar Non-priority Area E (E, F & I)

Area E (E,F & I)	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	300	
Installed Capacity (MW)	2029 (pro-rata)	300	
Installed Capacity (MW)	FG (pro-rata)		501
Available Energy (GWh)	2027 (GF)	351	
Available Energy (GWh)	2029 (pro-rata)	351	
Available Energy (GWh)	FG (pro-rata)		587
Generation (GWh)	2027 (GF)	317	
Generation (GWh)	2029 (pro-rata)	333	
Generation (GWh)	FG (pro-rata)		508
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	3 %	
Surplus (%)	FG (pro-rata)		11 %
Curtailment (%)	2027 (GF)	2 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	2 %	
Constraint (%)	2029 (pro-rata)	0 %	
Constraint (%)	FG (pro-rata)		1 %
Total Dispatch Down (%)	2027 (GF)	10 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		14 %

Table 1-6 - Surplus, Curtailment and Constraint for Solar Non-priority with sensitivity in Area E (E, F & I)

The wind non-priority data is given in the following table.

Area E (E,F & I)	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	274	324	374				
Installed Capacity (MW)	2029	274	324	374	374			
Installed Capacity (MW)	FG			374		374	374	374
Available Energy (GWh)	2027	887	1048	1210				
Available Energy (GWh)	2029	887	1048	1210	1210			
Available Energy (GWh)	FG			1210		1210	1210	1210
Generation (GWh)	2027	843	929	976				
Generation (GWh)	2029	822	952	1054	999			
Generation (GWh)	FG			1096		890	871	761
Surplus (%)	2027	1 %	6 %	13 %				
Surplus (%)	2029	0 %	2 %	6 %	9 %			
Surplus (%)	FG			3 %		12 %	23 %	31 %
Curtailment (%)	2027	1 %	3 %	4 %				
Curtailment (%)	2029	0 %	1 %	2 %	3 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	7 %	6 %	5 %	6 %			
Constraint (%)	FG			6 %		12 %	3 %	3 %
Total Dispatch Down (%)	2027	5 %	11 %	19 %				
Total Dispatch Down (%)	2029	7 %	9 %	13 %	17 %			
Total Dispatch Down (%)	FG			9 %		26 %	28 %	37 %

Table 1-7 - Surplus, Curtailment and Constraint for Wind Non-priority in Area E (E, F & I)

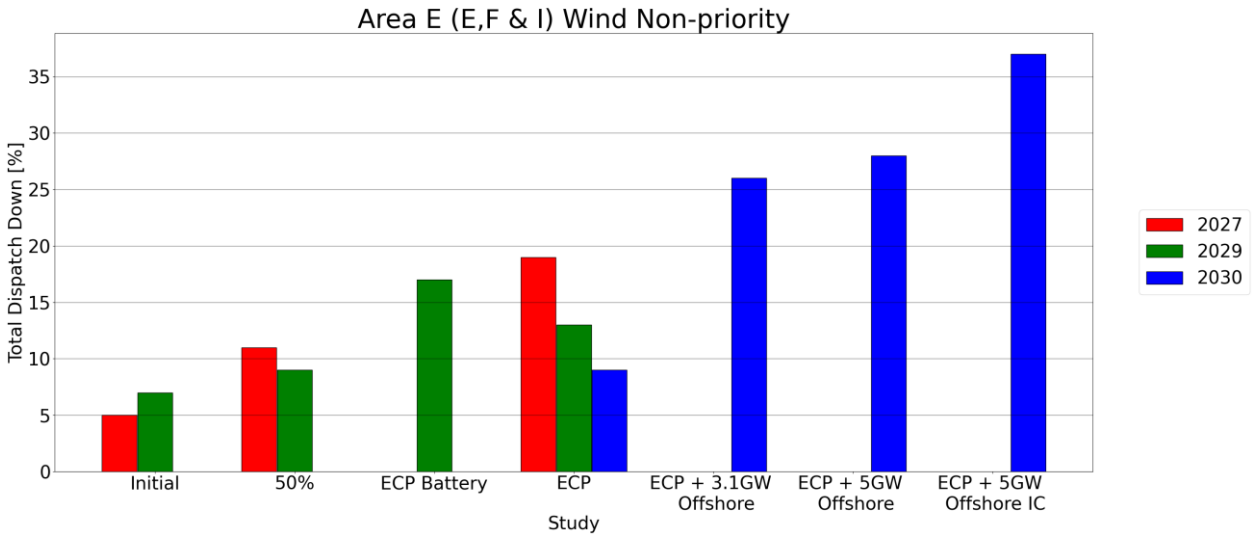

Figure 1-4 - Results Wind Non-priority Area E (E, F & I)

Area E (E,F & I)	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	324	
Installed Capacity (MW)	2029 (pro-rata)	324	
Installed Capacity (MW)	FG (pro-rata)		374
Available Energy (GWh)	2027 (GF)	1048	
Available Energy (GWh)	2029 (pro-rata)	1048	
Available Energy (GWh)	FG (pro-rata)		1210
Generation (GWh)	2027 (GF)	854	
Generation (GWh)	2029 (pro-rata)	999	
Generation (GWh)	FG (pro-rata)		996
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	2 %	
Surplus (%)	FG (pro-rata)		12 %
Curtailment (%)	2027 (GF)	3 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	10 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	19 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		18 %

Table 1-8 - Surplus, Curtailment and Constraint for Wind Non-priority with sensitivity in Area E (E, F & I)

The wind priority data is given in the following table.

Area E (E,F & I)	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	1083	1083	1083				
Installed Capacity (MW)	2029	1083	1083	1083	1083			
Installed Capacity (MW)	FG			1083		1083	1083	1083
Available Energy (GWh)	2027	3507	3507	3507				
Available Energy (GWh)	2029	3507	3507	3507	3507			
Available Energy (GWh)	FG			3507		3507	3507	3507
Generation (GWh)	2027	3358	3283	3209				
Generation (GWh)	2029	3496	3455	3396	3358			
Generation (GWh)	FG			3479		3411	3376	3344
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	6 %				
Curtailment (%)	2029	0 %	1 %	3 %	4 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	4 %	6 %	8 %				
Total Dispatch Down (%)	2029	0 %	1 %	3 %	4 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 1-9 - Surplus, Curtailment and Constraint for Wind Priority in Area E (E, F & I)

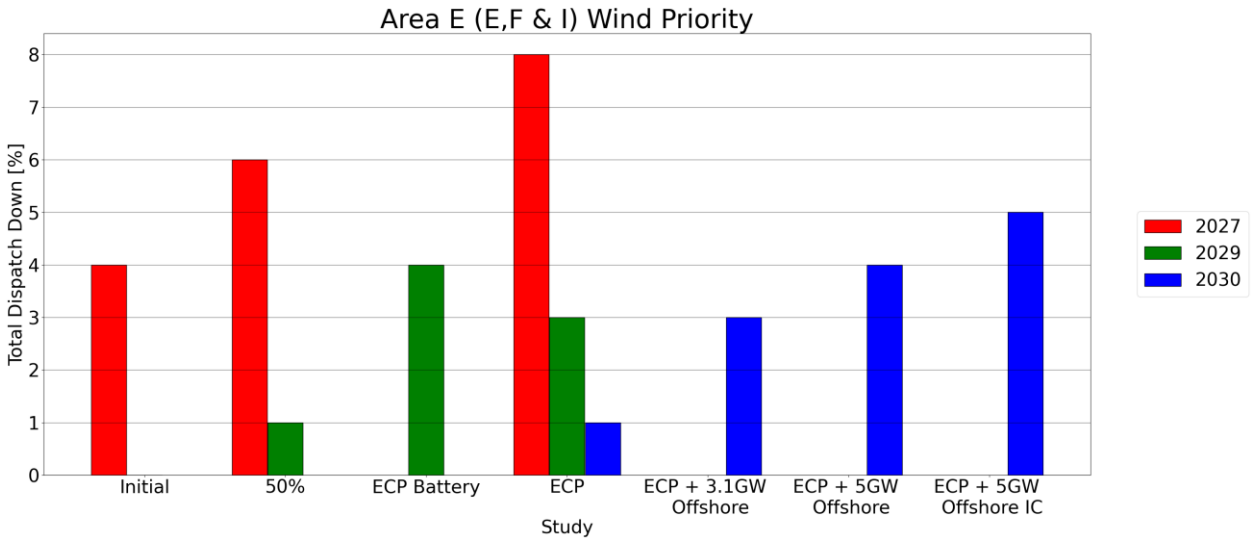

Figure 1-5 - Results Wind Priority Area E (E, F & I)

Area E (E,F & I)	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	1083	
Installed Capacity (MW)	2029 (pro-rata)	1083	
Installed Capacity (MW)	FG (pro-rata)		1083
Available Energy (GWh)	2027 (GF)	3507	
Available Energy (GWh)	2029 (pro-rata)	3507	
Available Energy (GWh)	FG (pro-rata)		3507
Generation (GWh)	2027 (GF)	3368	
Generation (GWh)	2029 (pro-rata)	3401	
Generation (GWh)	FG (pro-rata)		3294
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		6 %

Table 1-10 - Surplus, Curtailment and Constraint for Wind Priority with sensitivity in Area E (E, F & I)

The solar non-priority data is given in the following table.

Area E (D and E North)	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	50	52	55				
Installed Capacity (MW)	2029	50	52	55	55			
Installed Capacity (MW)	FG			55		55	55	55
Available Energy (GWh)	2027	59	61	64				
Available Energy (GWh)	2029	59	61	64	64			
Available Energy (GWh)	FG			64		64	64	64
Generation (GWh)	2027	58	56	53				
Generation (GWh)	2029	58	59	57	51			
Generation (GWh)	FG			60		56	53	49
Surplus (%)	2027	1 %	6 %	14 %				
Surplus (%)	2029	0 %	3 %	9 %	15 %			
Surplus (%)	FG			5 %		11 %	16 %	21 %
Curtailment (%)	2027	1 %	2 %	4 %				
Curtailment (%)	2029	0 %	1 %	3 %	5 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027	0 %	0 %	0 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	2 %	8 %	18 %				
Total Dispatch Down (%)	2029	1 %	5 %	12 %	20 %			
Total Dispatch Down (%)	FG			6 %		13 %	17 %	24 %

Table 1-11 - Surplus, Curtailment and Constraint for Solar Non-priority in Area E (D and E North)

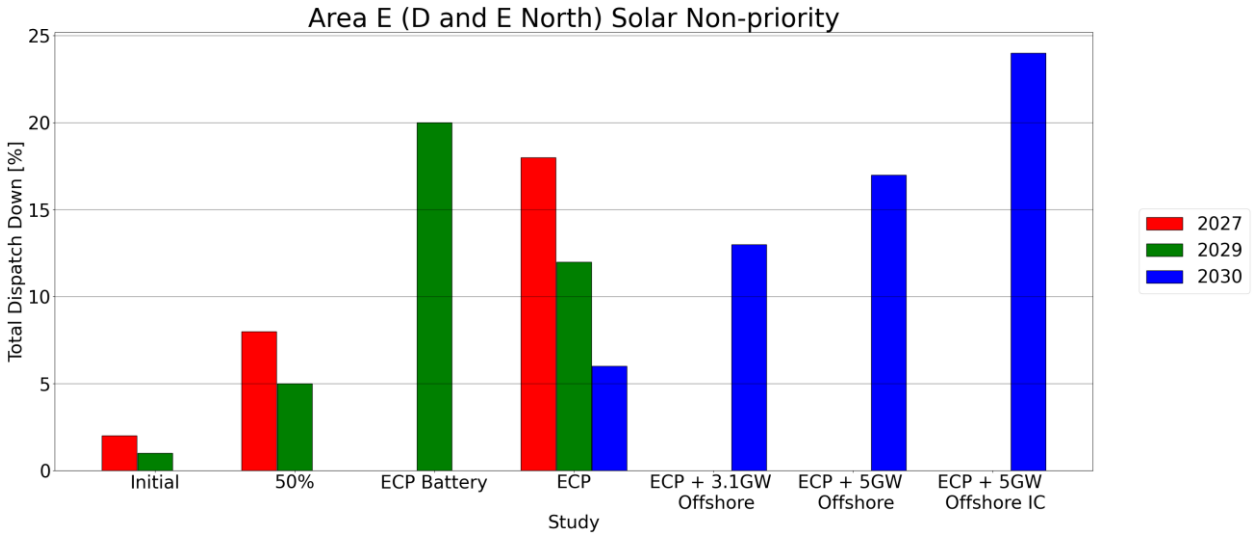

Figure 1-6 - Results Solar Non-priority Area E (D and E North)

Area E (D and E North)	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	52	
Installed Capacity (MW)	2029 (pro-rata)	52	
Installed Capacity (MW)	FG (pro-rata)		55
Available Energy (GWh)	2027 (GF)	61	
Available Energy (GWh)	2029 (pro-rata)	61	
Available Energy (GWh)	FG (pro-rata)		64
Generation (GWh)	2027 (GF)	56	
Generation (GWh)	2029 (pro-rata)	59	
Generation (GWh)	FG (pro-rata)		56
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	3 %	
Surplus (%)	FG (pro-rata)		11 %
Curtailment (%)	2027 (GF)	2 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	0 %	
Constraint (%)	FG (pro-rata)		0 %
Total Dispatch Down (%)	2027 (GF)	8 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		13 %

Table 1-12- Surplus, Curtailment and Constraint for Solar Non-priority with sensitivity in Area E (D and E North)

The wind non-priority data is given in the following table.

Area E (D and E North)	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027							
Installed Capacity (MW)	2029							
Installed Capacity (MW)	FG					450	450	450
Available Energy (GWh)	2027							
Available Energy (GWh)	2029							
Available Energy (GWh)	FG					1990	1990	1990
Generation (GWh)	2027							
Generation (GWh)	2029							
Generation (GWh)	FG					1728	1512	1367
Surplus (%)	2027							
Surplus (%)	2029							
Surplus (%)	FG					10 %	20 %	28 %
Curtailment (%)	2027							
Curtailment (%)	2029							
Curtailment (%)	FG					2 %	2 %	2 %
Constraint (%)	2027							
Constraint (%)	2029							
Constraint (%)	FG					1 %	2 %	1 %
Total Dispatch Down (%)	2027							
Total Dispatch Down (%)	2029							
Total Dispatch Down (%)	FG					13 %	24 %	31 %

Table 1-13 - Surplus, Curtailment and Constraint for Wind Non-priority in Area E (D and E North)

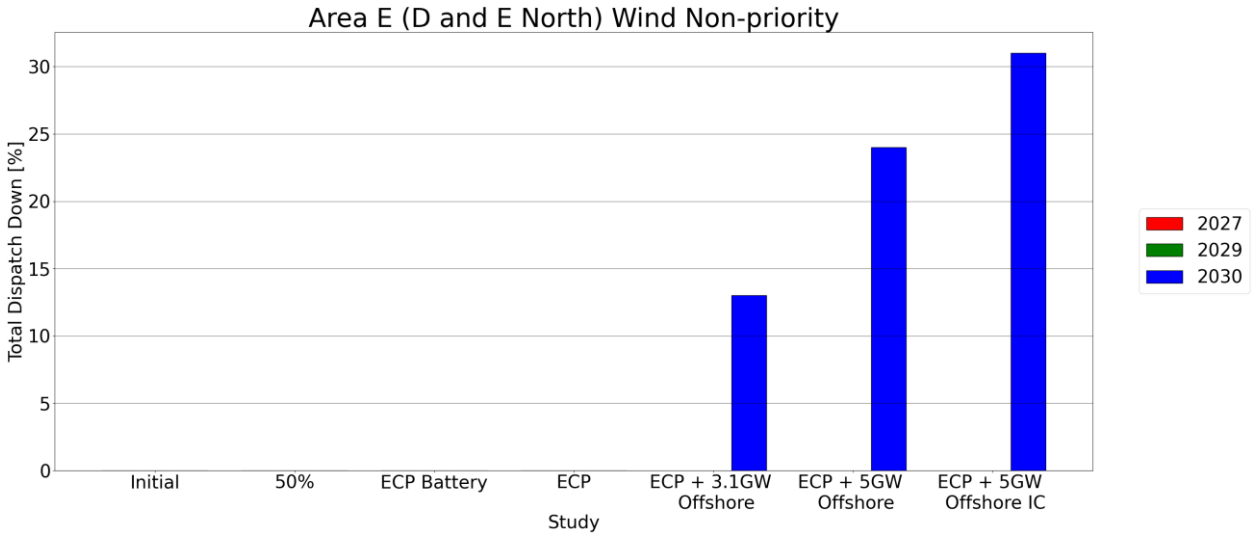

Figure 1-7 - Results Wind Non-priority Area E (D and E North)

Area E (D and E North)	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)		
Installed Capacity (MW)	2029 (pro-rata)		
Installed Capacity (MW)	FG (pro-rata)		450
Available Energy (GWh)	2027 (GF)		
Available Energy (GWh)	2029 (pro-rata)		
Available Energy (GWh)	FG (pro-rata)		1990
Generation (GWh)	2027 (GF)		
Generation (GWh)	2029 (pro-rata)		
Generation (GWh)	FG (pro-rata)		1733
Surplus (%)	2027 (GF)		
Surplus (%)	2029 (pro-rata)		
Surplus (%)	FG (pro-rata)		10 %
Curtailment (%)	2027 (GF)		
Curtailment (%)	2029 (pro-rata)		
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)		
Constraint (%)	2029 (pro-rata)		
Constraint (%)	FG (pro-rata)		1 %
Total Dispatch Down (%)	2027 (GF)		
Total Dispatch Down (%)	2029 (pro-rata)		
Total Dispatch Down (%)	FG (pro-rata)		13 %

Table 1-14 - Surplus, Curtailment and Constraint for Wind Non-priority with sensitivity in Area E (D and E North)

The wind priority data is given in the following table.

Area E (D and E North)	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	45	45	45				
Installed Capacity (MW)	2029	45	45	45	45			
Installed Capacity (MW)	FG			45		45	45	45
Available Energy (GWh)	2027	145	145	145				
Available Energy (GWh)	2029	145	145	145	145			
Available Energy (GWh)	FG			145		145	145	145
Generation (GWh)	2027	142	139	136				
Generation (GWh)	2029	144	143	140	139			
Generation (GWh)	FG			144		141	139	138
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	6 %				
Curtailment (%)	2029	0 %	1 %	3 %	4 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	1 %	0 %	0 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	2 %	4 %	6 %				
Total Dispatch Down (%)	2029	0 %	1 %	3 %	4 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 1-15 - Surplus, Curtailment and Constraint for Wind Priority in Area E (D and E North)

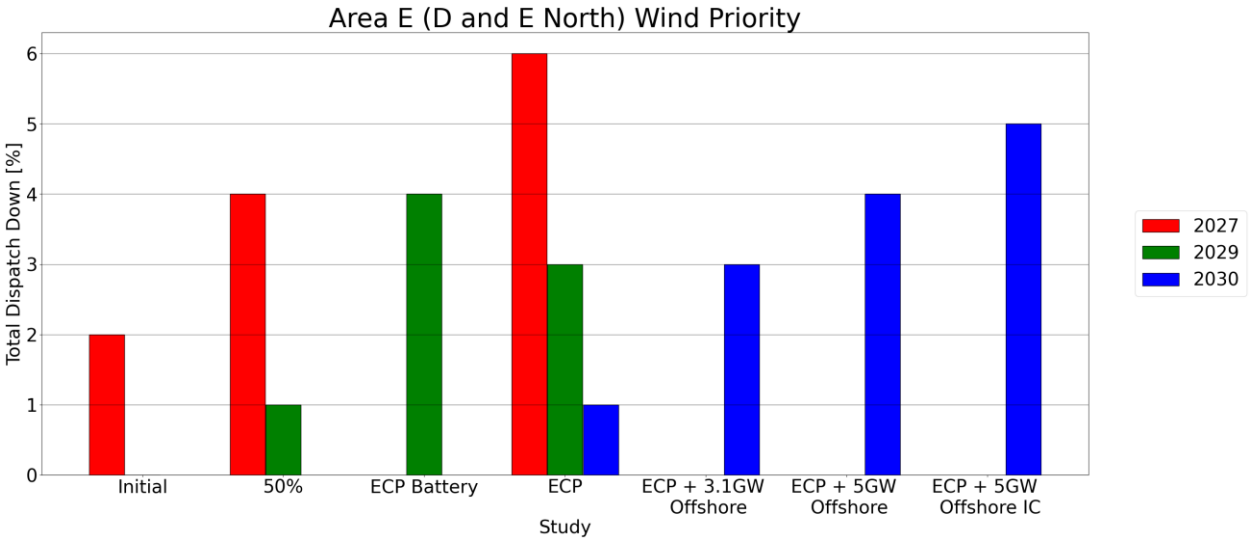

Figure 1-8 - Results Wind Priority Area E (D and E North)

Area E (D and E North)	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	45	
Installed Capacity (MW)	2029 (pro-rata)	45	
Installed Capacity (MW)	FG (pro-rata)		45
Available Energy (GWh)	2027 (GF)	145	
Available Energy (GWh)	2029 (pro-rata)	145	
Available Energy (GWh)	FG (pro-rata)		145
Generation (GWh)	2027 (GF)	139	
Generation (GWh)	2029 (pro-rata)	143	
Generation (GWh)	FG (pro-rata)		140
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	0 %	
Constraint (%)	FG (pro-rata)		1 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	2 %	
Total Dispatch Down (%)	FG (pro-rata)		4 %

Table 1-16 - Surplus, Curtailment and Constraint for Wind Priority with sensitivity in Area E (D and E North)

1.7 Conclusion – Results for Area E

This section provides an overview of the estimated surplus, curtailment and constraint values for Area E for a range of scenarios based on a number of installed generation assumptions (generation scenarios) and the study year (network and demand assumptions). The results highly depend on the study assumptions, which are described in the Assumptions and Methodology report.

Section 2 contains the detailed results consisting of available energy (GWh) and percentage surplus, curtailment, and constraint values for each node for both solar and wind in Area E.

2 Area E Node Results

This section presents the results of the modelling analysis for Area E. The levels of surplus, curtailment and constraint that controllable solar and wind generators in Area E might expect to experience are reported on a nodal basis for the study scenarios. Details on the generation capacity at each node are also provided along with the assumed amount of controllable generation.

This section also presents a list of the generators at each node that are included in the study.

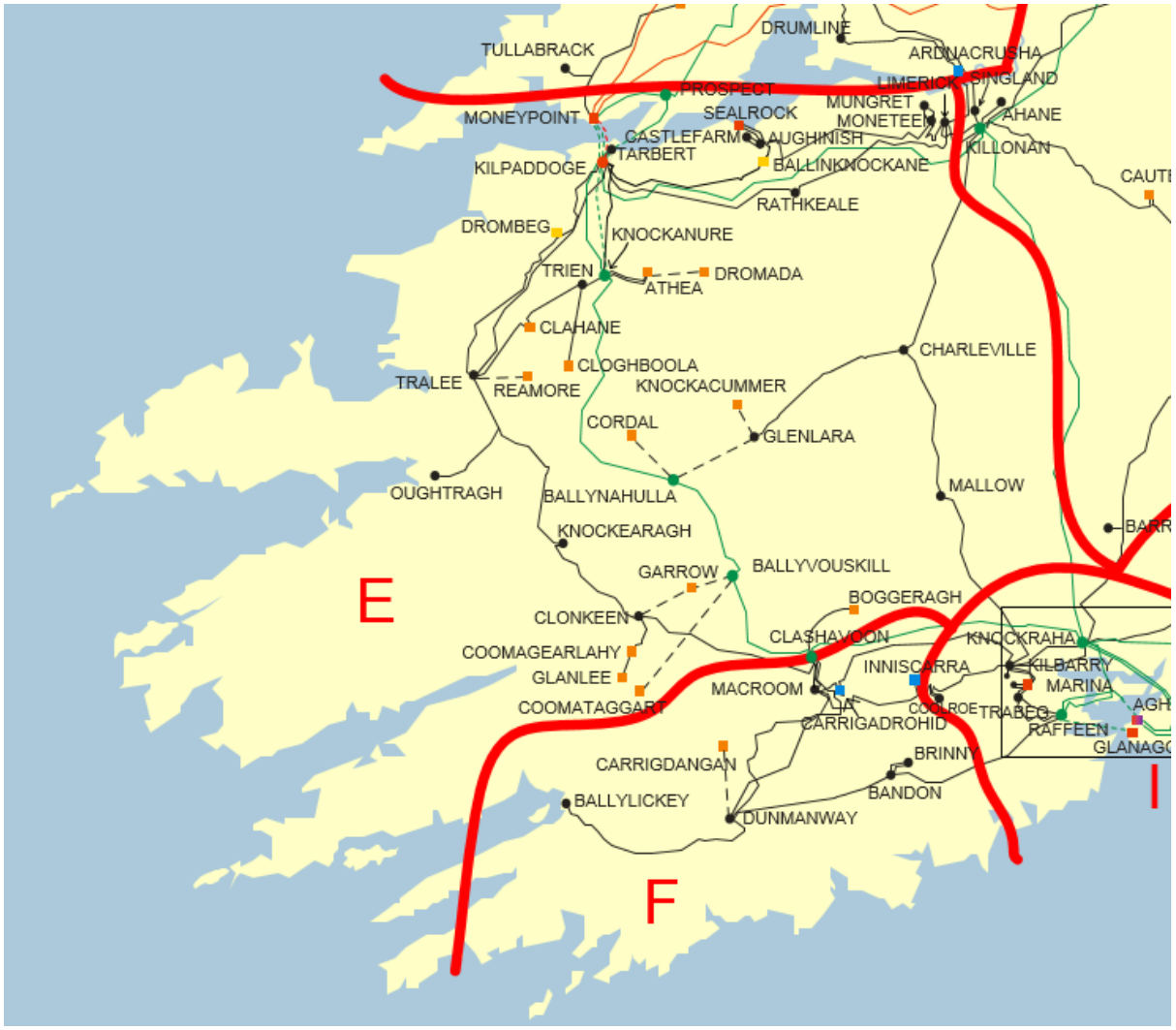

Figure 2-0 Area E

2.1 Athea

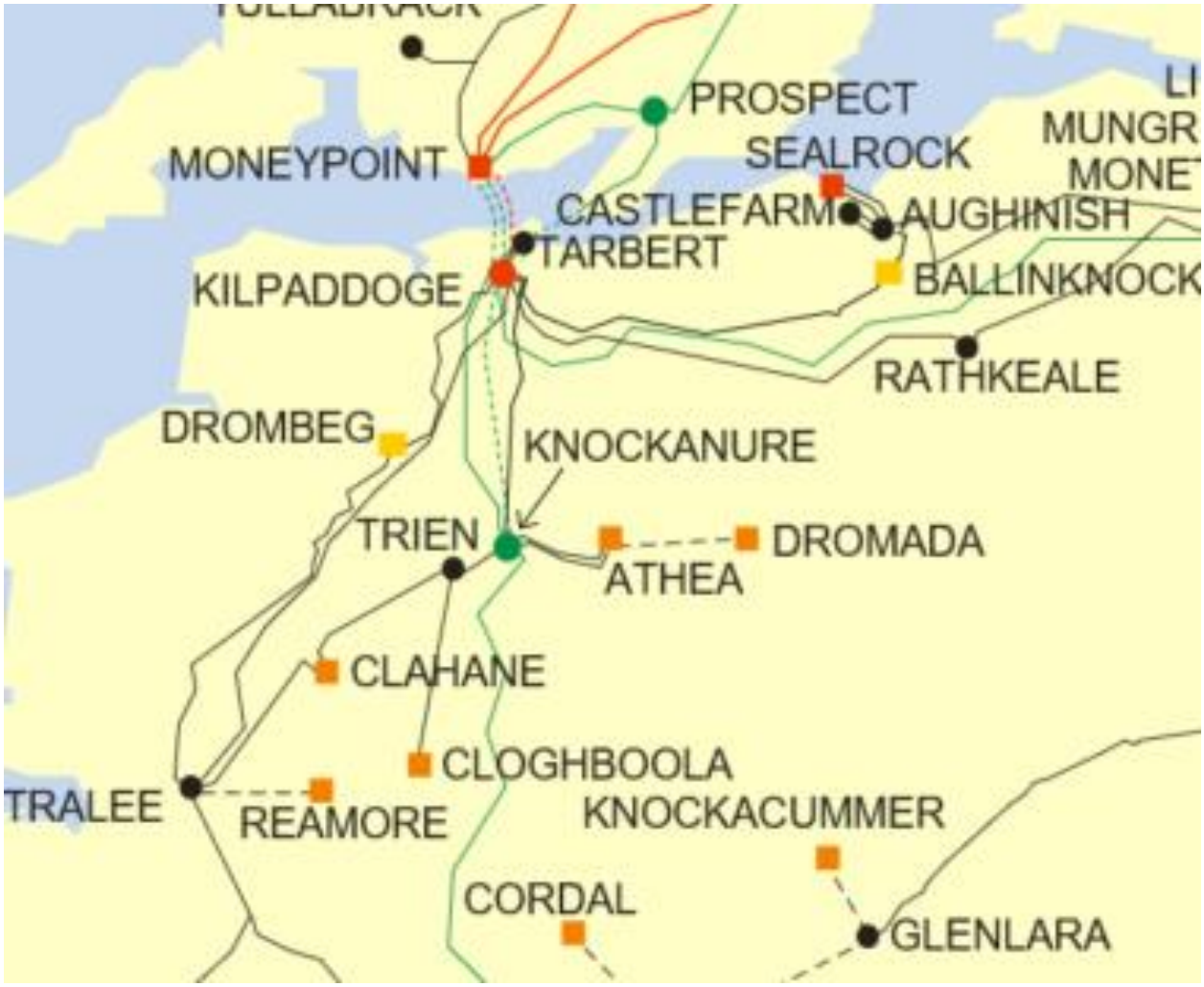

Figure 2-1 - Location of node Athea

Generator	SO	Capacity	Type	Status
Beenanaspock and Tobertooreen Wind Farm	TSO	23.0	wind not priority	connected
Athea (1)a	TSO	34.35	wind priority	connected

Table 2-1 - Generation Included in Study for Node Athea

The wind not priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	23	23	23				
Installed Capacity (MW)	2029	23	23	23	23			
Installed Capacity (MW)	FG			23		23	23	23
Available Energy (GWh)	2027	74	74	74				
Available Energy (GWh)	2029	74	74	74	74			
Available Energy (GWh)	FG			74		74	74	74
Generation (GWh)	2027	71	66	60				
Generation (GWh)	2029	69	68	65	61			
Generation (GWh)	FG			67		55	54	47
Surplus (%)	2027	1 %	6 %	13 %				
Surplus (%)	2029	0 %	2 %	6 %	9 %			
Surplus (%)	FG			3 %		12 %	23 %	31 %
Curtailment (%)	2027	1 %	3 %	4 %				
Curtailment (%)	2029	0 %	1 %	2 %	3 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	7 %	6 %	5 %	6 %			
Constraint (%)	FG			6 %		12 %	3 %	3 %
Total Dispatch Down (%)	2027	5 %	11 %	19 %				
Total Dispatch Down (%)	2029	7 %	9 %	13 %	17 %			
Total Dispatch Down (%)	FG			9 %		26 %	28 %	37 %

Table 2-2 - Surplus, Curtailment and Constraint for Wind non-priority for Node Athea

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	23	
Installed Capacity (MW)	2029 (pro-rata)	23	
Installed Capacity (MW)	FG (pro-rata)		23
Available Energy (GWh)	2027 (GF)	74	
Available Energy (GWh)	2029 (pro-rata)	74	
Available Energy (GWh)	FG (pro-rata)		74
Generation (GWh)	2027 (GF)	61	
Generation (GWh)	2029 (pro-rata)	71	
Generation (GWh)	FG (pro-rata)		61
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	2 %	
Surplus (%)	FG (pro-rata)		12 %
Curtailment (%)	2027 (GF)	3 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	10 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	19 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		18 %

Table 2-3 - Surplus, Curtailment and Constraint for Wind non-priority with sensitivity for Node Athea

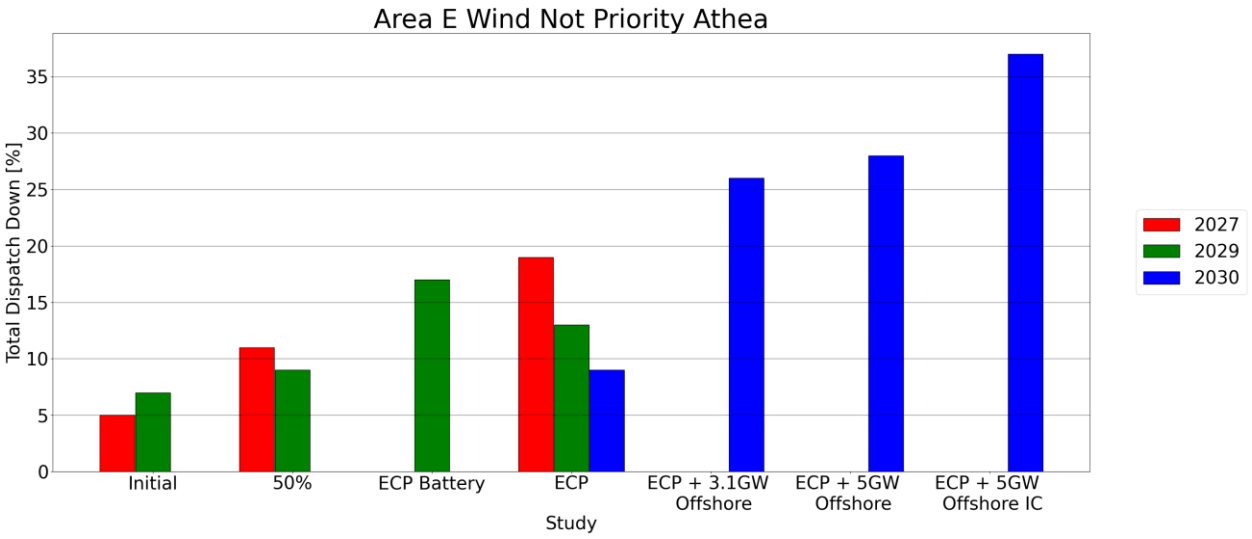

Figure 2-2 - Total Dispatch Down for Wind not priority for Node Athea

The wind priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	34	34	34				
Installed Capacity (MW)	2029	34	34	34	34			
Installed Capacity (MW)	FG			34		34	34	34
Available Energy (GWh)	2027	111	111	111				
Available Energy (GWh)	2029	111	111	111	111			
Available Energy (GWh)	FG			111		111	111	111
Generation (GWh)	2027	106	104	102				
Generation (GWh)	2029	111	110	108	106			
Generation (GWh)	FG			110		108	107	106
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	6 %				
Curtailment (%)	2029	0 %	1 %	3 %	4 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	4 %	6 %	8 %				
Total Dispatch Down (%)	2029	0 %	1 %	3 %	4 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-4 - Surplus, Curtailment and Constraint for Wind priority for Node Athea

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	34	
Installed Capacity (MW)	2029 (pro-rata)	34	
Installed Capacity (MW)	FG (pro-rata)		34
Available Energy (GWh)	2027 (GF)	111	
Available Energy (GWh)	2029 (pro-rata)	111	
Available Energy (GWh)	FG (pro-rata)		111
Generation (GWh)	2027 (GF)	107	
Generation (GWh)	2029 (pro-rata)	108	
Generation (GWh)	FG (pro-rata)		104
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		6 %

Table 2-5 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Athea

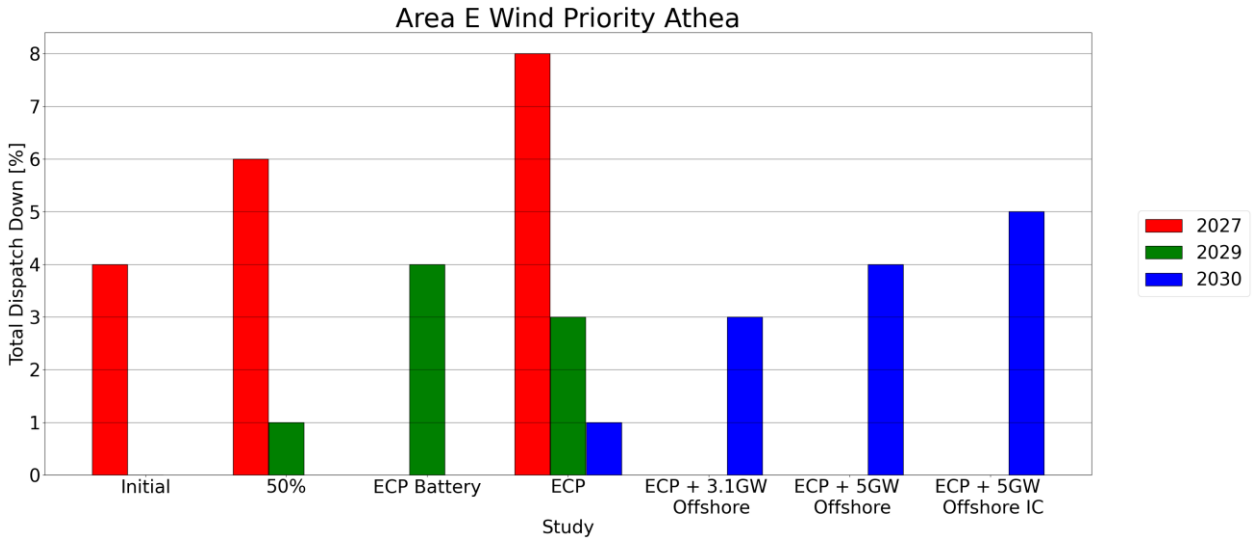

Figure 2-3 - Total Dispatch Down for Wind priority for Node Athea

2.2 Ballinknockane

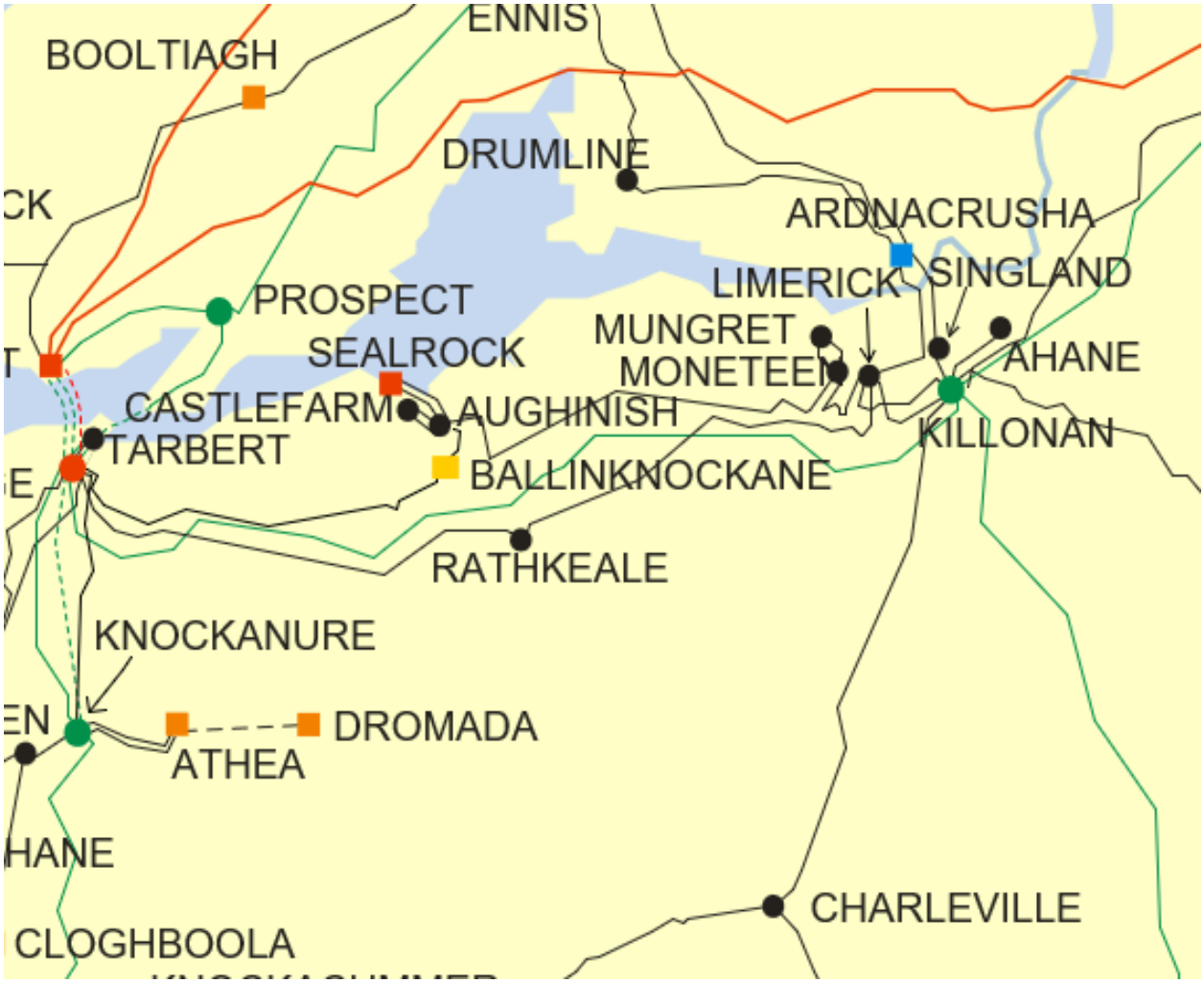

Figure 2-4 - Location of node Ballinknockane

Generator	SO	Capacity	Type	Status
Ballinknockane Solar Farm	TSO	50.0	solar not priority	due to connect

Table 2-6 - Generation Included in Study for Node Ballinknockane

The solar not priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	50	50	50				
Installed Capacity (MW)	2029	50	50	50	50			
Installed Capacity (MW)	FG			50		50	50	50
Available Energy (GWh)	2027	59	59	59				
Available Energy (GWh)	2029	59	59	59	59			
Available Energy (GWh)	FG			59		59	59	59
Generation (GWh)	2027	58	54	48				
Generation (GWh)	2029	58	56	52	47			
Generation (GWh)	FG			55		51	48	45
Surplus (%)	2027	1 %	6 %	14 %				
Surplus (%)	2029	0 %	3 %	9 %	15 %			
Surplus (%)	FG			5 %		11 %	16 %	21 %
Curtailment (%)	2027	1 %	2 %	4 %				
Curtailment (%)	2029	0 %	1 %	3 %	5 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027	0 %	0 %	0 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	2 %	8 %	18 %				
Total Dispatch Down (%)	2029	1 %	5 %	12 %	20 %			
Total Dispatch Down (%)	FG			6 %		13 %	17 %	24 %

Table 2-7 - Surplus, Curtailment and Constraint for Solar non-priority for Node Ballinknockane

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	50	
Installed Capacity (MW)	2029 (pro-rata)	50	
Installed Capacity (MW)	FG (pro-rata)		50
Available Energy (GWh)	2027 (GF)	59	
Available Energy (GWh)	2029 (pro-rata)	59	
Available Energy (GWh)	FG (pro-rata)		59
Generation (GWh)	2027 (GF)	54	
Generation (GWh)	2029 (pro-rata)	56	
Generation (GWh)	FG (pro-rata)		51
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	3 %	
Surplus (%)	FG (pro-rata)		11 %
Curtailment (%)	2027 (GF)	2 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	0 %	
Constraint (%)	FG (pro-rata)		0 %
Total Dispatch Down (%)	2027 (GF)	8 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		13 %

Table 2-8 - Surplus, Curtailment and Constraint for Solar non-priority with sensitivity for Node Ballinknockane

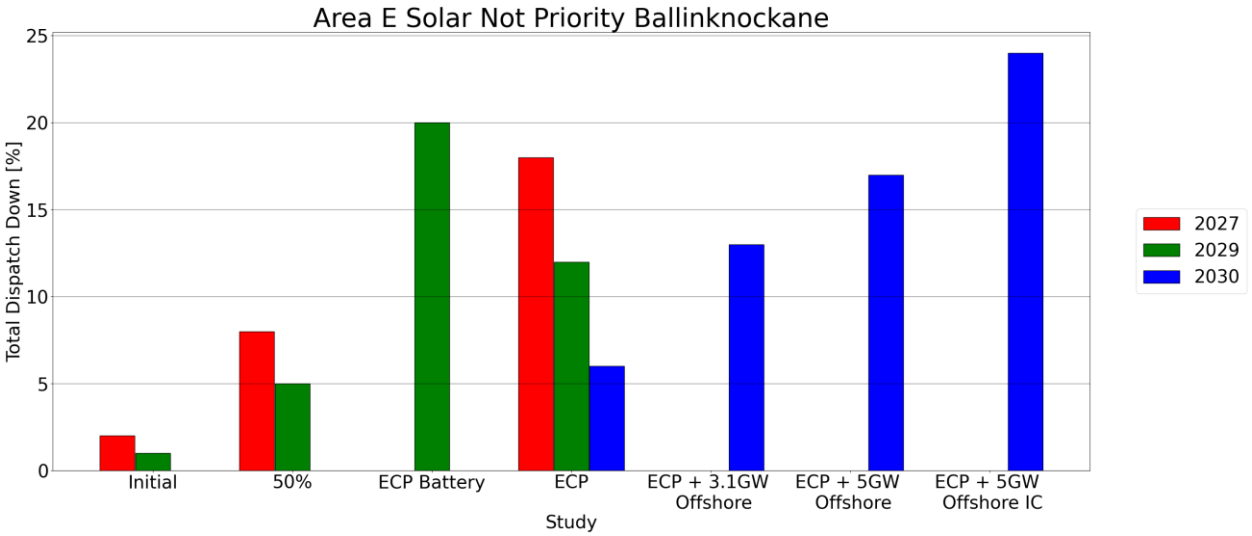

Figure 2-5 - Total Dispatch Down for Solar not priority for Node Ballinknockane

2.3 Ballyvouskil 220

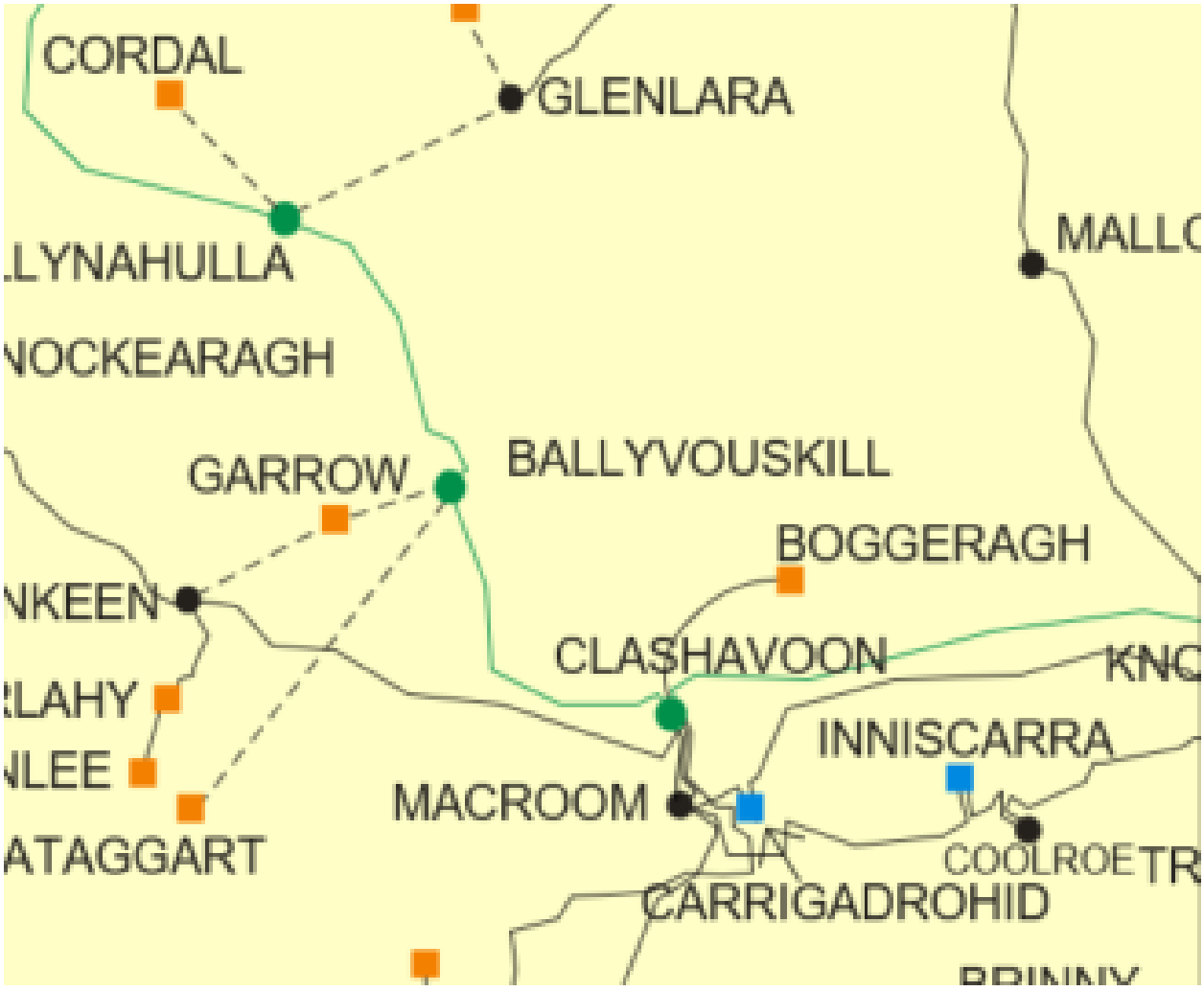

Figure 2-6 - Location of node Ballyvouskil 220

Generator	SO	Capacity	Type	Status
Knocknamork solar	TSO	13.0	solar not priority	due to connect
Knocknamork wind	TSO	42.0	wind not priority	due to connect

Table 2-9 - Generation Included in Study for Node Ballyvouskil 220

The solar not priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027		6	13				
Installed Capacity (MW)	2029		6	13	13			
Installed Capacity (MW)	FG			13		13	13	13
Available Energy (GWh)	2027		8	15				
Available Energy (GWh)	2029		8	15	15			
Available Energy (GWh)	FG			15		15	15	15
Generation (GWh)	2027		7	12				
Generation (GWh)	2029		7	13	12			
Generation (GWh)	FG			14		13	12	12
Surplus (%)	2027		6 %	14 %				
Surplus (%)	2029		3 %	9 %	15 %			
Surplus (%)	FG			5 %		11 %	16 %	21 %
Curtailment (%)	2027		2 %	4 %				
Curtailment (%)	2029		1 %	3 %	5 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027		2 %	1 %				
Constraint (%)	2029		0 %	1 %	0 %			
Constraint (%)	FG			1 %		1 %	1 %	1 %
Total Dispatch Down (%)	2027		10 %	19 %				
Total Dispatch Down (%)	2029		5 %	12 %	20 %			
Total Dispatch Down (%)	FG			8 %		14 %	18 %	24 %

Table 2-10 - Surplus, Curtailment and Constraint for Solar non-priority for Node Ballyvouskil 220

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	6	
Installed Capacity (MW)	2029 (pro-rata)	6	
Installed Capacity (MW)	FG (pro-rata)		13
Available Energy (GWh)	2027 (GF)	8	
Available Energy (GWh)	2029 (pro-rata)	8	
Available Energy (GWh)	FG (pro-rata)		15
Generation (GWh)	2027 (GF)	7	
Generation (GWh)	2029 (pro-rata)	7	
Generation (GWh)	FG (pro-rata)		13
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	3 %	
Surplus (%)	FG (pro-rata)		11 %
Curtailment (%)	2027 (GF)	2 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	2 %	
Constraint (%)	2029 (pro-rata)	0 %	
Constraint (%)	FG (pro-rata)		1 %
Total Dispatch Down (%)	2027 (GF)	10 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		14 %

Table 2-11 - Surplus, Curtailment and Constraint for Solar non-priority with sensitivity for Node Ballyvouskil 220

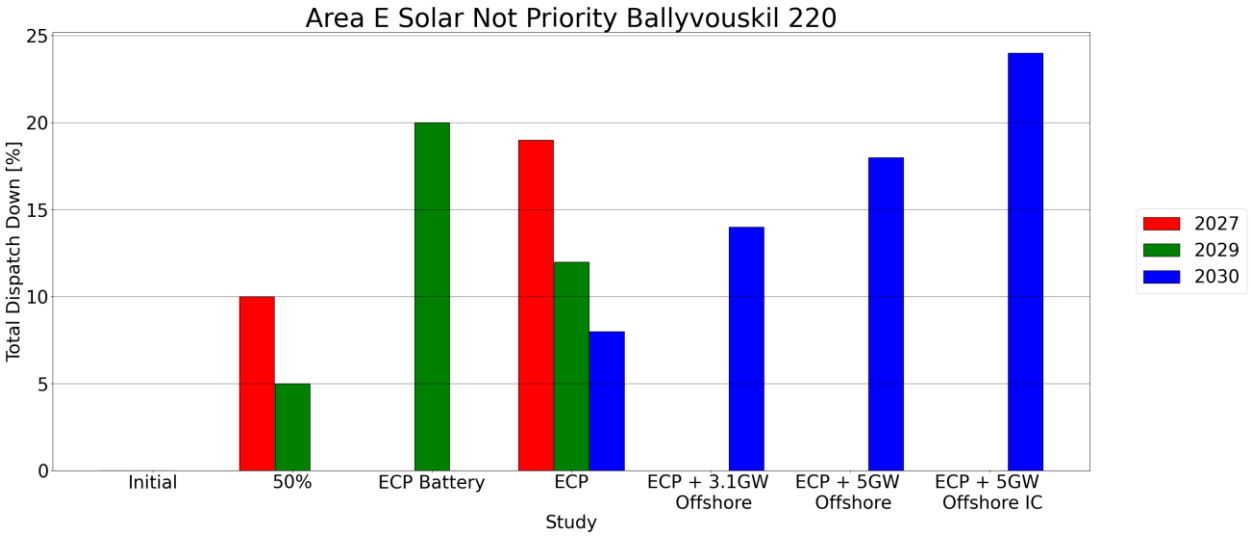

Figure 2-7 - Total Dispatch Down for Solar not priority for Node Ballyvouskil 220

The wind not priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027		21	42				
Installed Capacity (MW)	2029		21	42	42			
Installed Capacity (MW)	FG			42		42	42	42
Available Energy (GWh)	2027		68	136				
Available Energy (GWh)	2029		68	136	136			
Available Energy (GWh)	FG			136		136	136	136
Generation (GWh)	2027		60	110				
Generation (GWh)	2029		62	118	112			
Generation (GWh)	FG			123		100	98	86
Surplus (%)	2027		6 %	13 %				
Surplus (%)	2029		2 %	6 %	9 %			
Surplus (%)	FG			3 %		12 %	23 %	31 %
Curtailment (%)	2027		3 %	4 %				
Curtailment (%)	2029		1 %	2 %	3 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027		2 %	2 %				
Constraint (%)	2029		6 %	5 %	6 %			
Constraint (%)	FG			6 %		12 %	3 %	3 %
Total Dispatch Down (%)	2027		11 %	19 %				
Total Dispatch Down (%)	2029		9 %	13 %	17 %			
Total Dispatch Down (%)	FG			9 %		26 %	28 %	37 %

Table 2-12 - Surplus, Curtailment and Constraint for Wind non-priority for Node Ballyvouskil 220

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	21	
Installed Capacity (MW)	2029 (pro-rata)	21	
Installed Capacity (MW)	FG (pro-rata)		42
Available Energy (GWh)	2027 (GF)	68	
Available Energy (GWh)	2029 (pro-rata)	68	
Available Energy (GWh)	FG (pro-rata)		136
Generation (GWh)	2027 (GF)	55	
Generation (GWh)	2029 (pro-rata)	65	
Generation (GWh)	FG (pro-rata)		112
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	2 %	
Surplus (%)	FG (pro-rata)		12 %
Curtailment (%)	2027 (GF)	3 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	10 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	19 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		18 %

Table 2-13 - Surplus, Curtailment and Constraint for Wind non-priority with sensitivity for Node Ballyvouskil 220

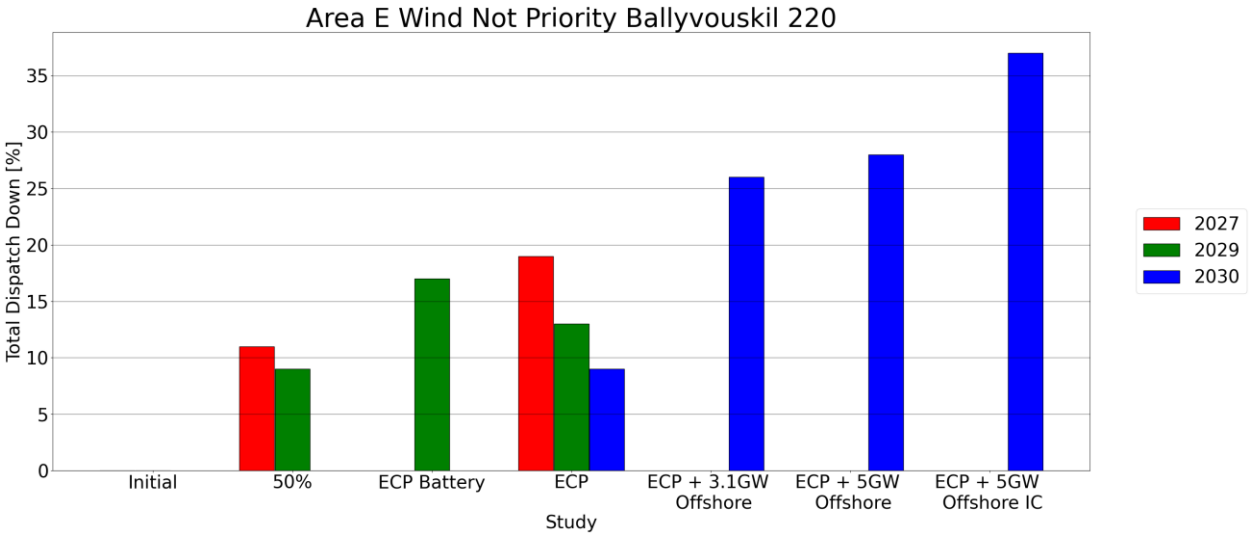

Figure 2-8 - Total Dispatch Down for Wind not priority for Node Ballyvouskil 220

2.4 Boggeragh

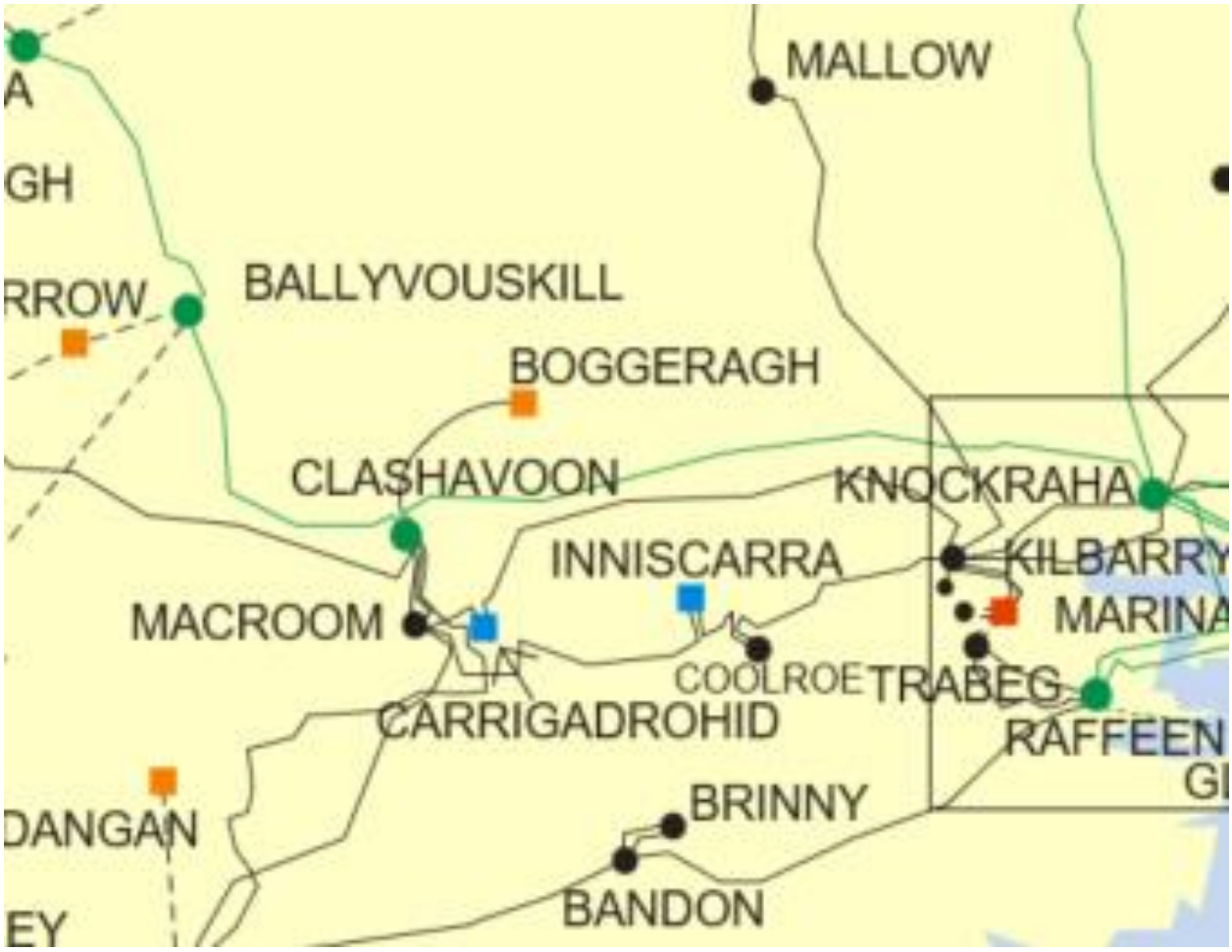

Figure 2-9 - Location of node Boggeragh

Generator	SO	Capacity	Type	Status
Carrigcannon (1)	DSO	20.0	wind priority	connected
Boggeragh (1)	TSO	57.0	wind priority	connected
Esk (1)	DSO	5.95	wind not priority	connected
Boggeragh 2	TSO	65.7	wind priority	connected
Esk Wind Farm (sub metered Gneeves 2 Merge)	DSO	5.4	wind not priority	connected
ESK Wind Farm Phase 2	DSO	12.0	wind not priority	connected
Carrigcannon (2)	DSO	3.0	wind not priority	due to connect
Carrigraigue Solar Extension	TSO	11.5	solar not priority	due to connect

Table 2-14 - Generation Included in Study for Node Boggeragh

The solar not priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027		6	12				
Installed Capacity (MW)	2029		6	12	12			
Installed Capacity (MW)	FG			12		12	12	12
Available Energy (GWh)	2027		7	13				
Available Energy (GWh)	2029		7	13	13			
Available Energy (GWh)	FG			13		13	13	13
Generation (GWh)	2027		6	11				
Generation (GWh)	2029		6	12	11			
Generation (GWh)	FG			12		12	11	10
Surplus (%)	2027		6 %	14 %				
Surplus (%)	2029		3 %	9 %	15 %			
Surplus (%)	FG			5 %		11 %	16 %	21 %
Curtailment (%)	2027		2 %	4 %				
Curtailment (%)	2029		1 %	3 %	5 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027		2 %	1 %				
Constraint (%)	2029		0 %	1 %	0 %			
Constraint (%)	FG			1 %		1 %	1 %	1 %
Total Dispatch Down (%)	2027		10 %	19 %				
Total Dispatch Down (%)	2029		5 %	12 %	20 %			
Total Dispatch Down (%)	FG			8 %		14 %	18 %	24 %

Table 2-15 - Surplus, Curtailment and Constraint for Solar non-priority for Node Boggeragh

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	6	
Installed Capacity (MW)	2029 (pro-rata)	6	
Installed Capacity (MW)	FG (pro-rata)		12
Available Energy (GWh)	2027 (GF)	7	
Available Energy (GWh)	2029 (pro-rata)	7	
Available Energy (GWh)	FG (pro-rata)		13
Generation (GWh)	2027 (GF)	6	
Generation (GWh)	2029 (pro-rata)	6	
Generation (GWh)	FG (pro-rata)		12
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	3 %	
Surplus (%)	FG (pro-rata)		11 %
Curtailment (%)	2027 (GF)	2 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	2 %	
Constraint (%)	2029 (pro-rata)	0 %	
Constraint (%)	FG (pro-rata)		1 %
Total Dispatch Down (%)	2027 (GF)	10 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		14 %

Table 2-16 - Surplus, Curtailment and Constraint for Solar non-priority with sensitivity for Node Boggeragh

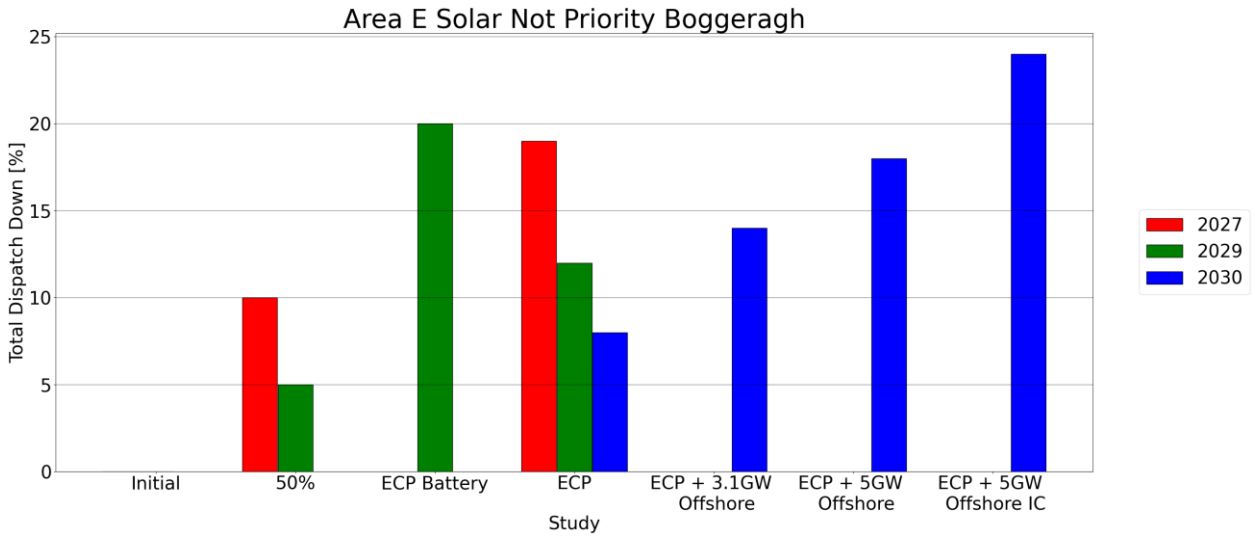

Figure 2-10 - Total Dispatch Down for Solar not priority for Node Boggeragh

The wind not priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	23	25	26				
Installed Capacity (MW)	2029	23	25	26	26			
Installed Capacity (MW)	FG			26		26	26	26
Available Energy (GWh)	2027	76	80	85				
Available Energy (GWh)	2029	76	80	85	85			
Available Energy (GWh)	FG			85		85	85	85
Generation (GWh)	2027	72	71	69				
Generation (GWh)	2029	70	73	74	70			
Generation (GWh)	FG			77		63	61	54
Surplus (%)	2027	1 %	6 %	13 %				
Surplus (%)	2029	0 %	2 %	6 %	9 %			
Surplus (%)	FG			3 %		12 %	23 %	31 %
Curtailment (%)	2027	1 %	3 %	4 %				
Curtailment (%)	2029	0 %	1 %	2 %	3 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	7 %	6 %	5 %	6 %			
Constraint (%)	FG			6 %		12 %	3 %	3 %
Total Dispatch Down (%)	2027	5 %	11 %	19 %				
Total Dispatch Down (%)	2029	7 %	9 %	13 %	17 %			
Total Dispatch Down (%)	FG			9 %		26 %	28 %	37 %

Table 2-17 - Surplus, Curtailment and Constraint for Wind non-priority for Node Boggeragh

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	25	
Installed Capacity (MW)	2029 (pro-rata)	25	
Installed Capacity (MW)	FG (pro-rata)		26
Available Energy (GWh)	2027 (GF)	80	
Available Energy (GWh)	2029 (pro-rata)	80	
Available Energy (GWh)	FG (pro-rata)		85
Generation (GWh)	2027 (GF)	66	
Generation (GWh)	2029 (pro-rata)	77	
Generation (GWh)	FG (pro-rata)		70
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	2 %	
Surplus (%)	FG (pro-rata)		12 %
Curtailment (%)	2027 (GF)	3 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	10 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	19 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		18 %

Table 2-18 - Surplus, Curtailment and Constraint for Wind non-priority with sensitivity for Node Boggeragh

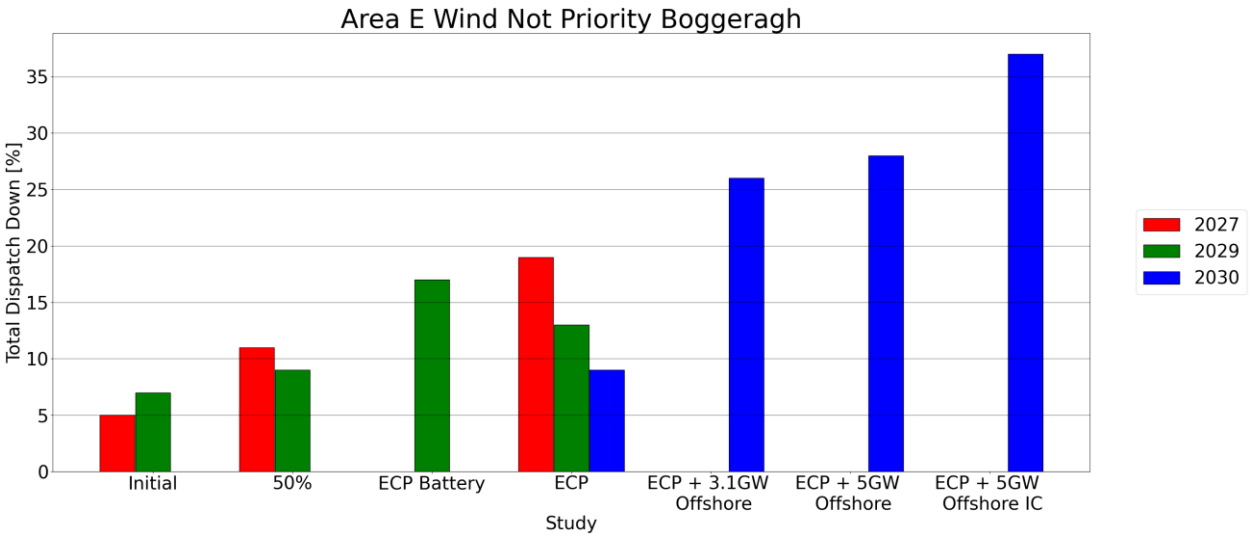

Figure 2-11 - Total Dispatch Down for Wind not priority for Node Boggeragh

The wind priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	143	143	143				
Installed Capacity (MW)	2029	143	143	143	143			
Installed Capacity (MW)	FG			143		143	143	143
Available Energy (GWh)	2027	462	462	462				
Available Energy (GWh)	2029	462	462	462	462			
Available Energy (GWh)	FG			462		462	462	462
Generation (GWh)	2027	442	433	423				
Generation (GWh)	2029	461	455	447	442			
Generation (GWh)	FG			458		449	445	441
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	6 %				
Curtailment (%)	2029	0 %	1 %	3 %	4 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	4 %	6 %	8 %				
Total Dispatch Down (%)	2029	0 %	1 %	3 %	4 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-19 - Surplus, Curtailment and Constraint for Wind priority for Node Boggeragh

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	143	
Installed Capacity (MW)	2029 (pro-rata)	143	
Installed Capacity (MW)	FG (pro-rata)		143
Available Energy (GWh)	2027 (GF)	462	
Available Energy (GWh)	2029 (pro-rata)	462	
Available Energy (GWh)	FG (pro-rata)		462
Generation (GWh)	2027 (GF)	444	
Generation (GWh)	2029 (pro-rata)	448	
Generation (GWh)	FG (pro-rata)		434
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		6 %

Table 2-20 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Boggeragh

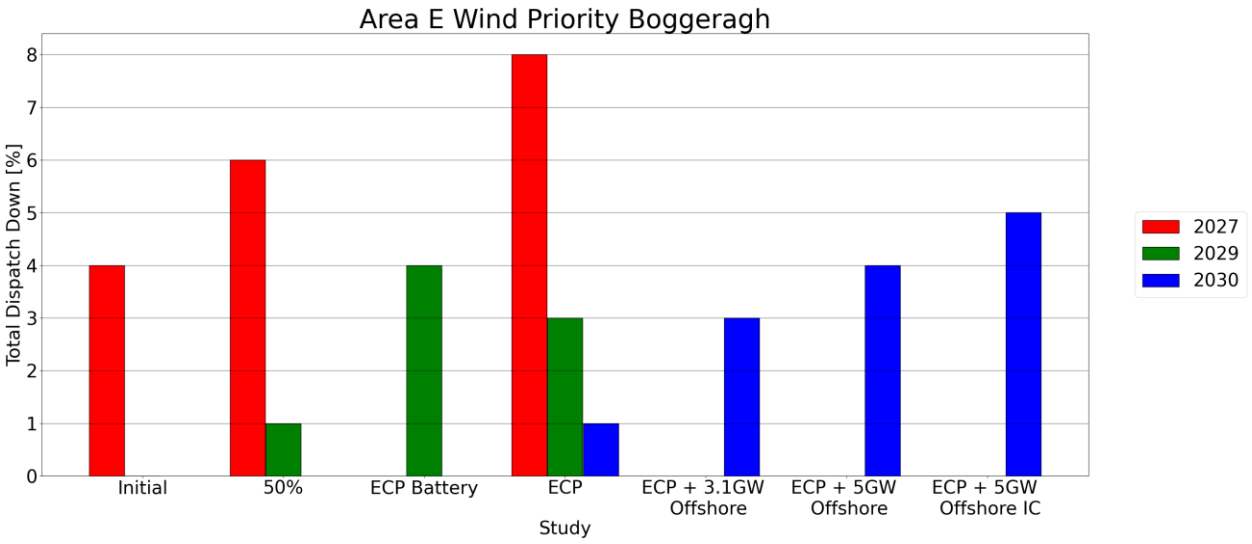

Figure 2-12 - Total Dispatch Down for Wind priority for Node Boggeragh

2.5 Charleville

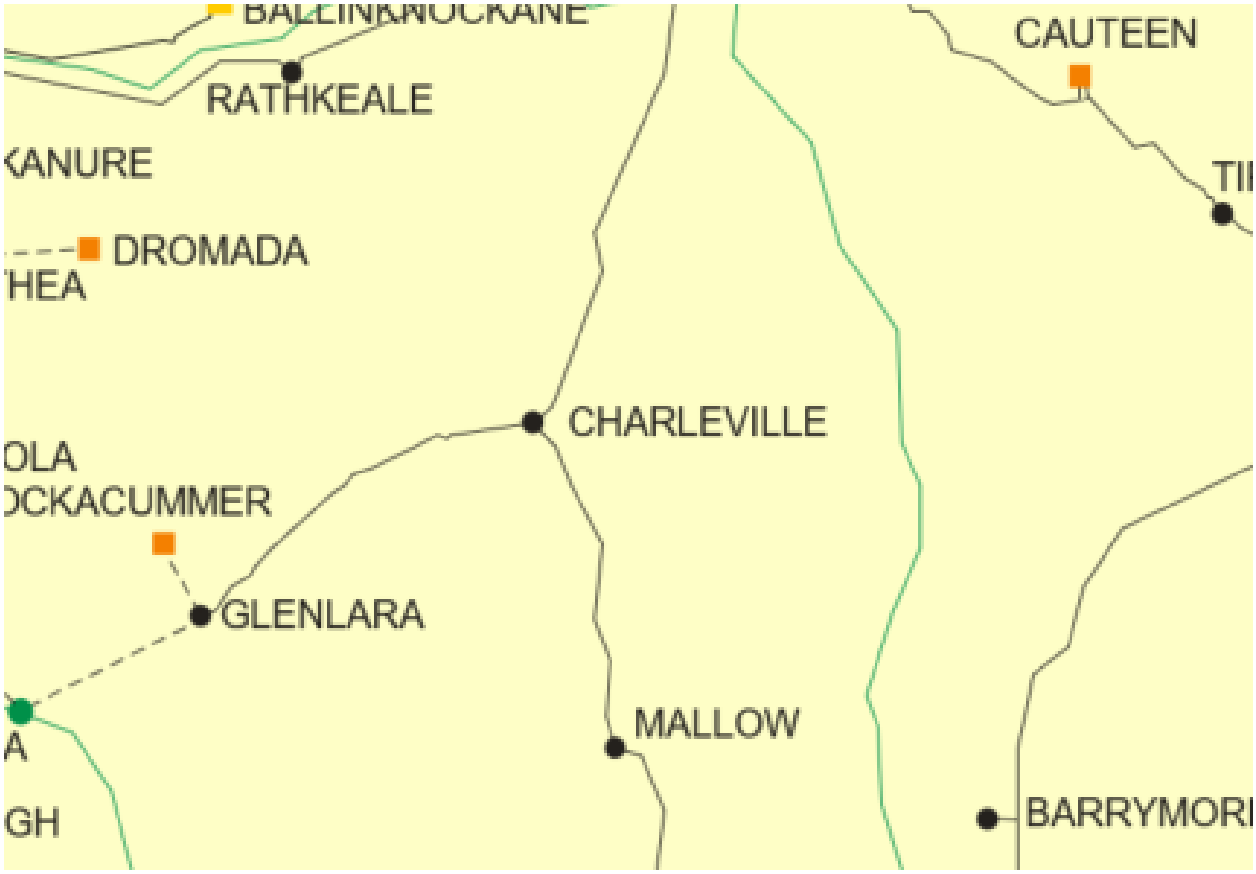

Figure 2-13 - Location of node Charleville

Generator	SO	Capacity	Type	Status
Boolard Wind Farm (Charlevile)	DSO	4.45	wind uncontrolled	connected
Rathnacally (1)	DSO	4.45	wind uncontrolled	connected
Castlepook (1)	DSO	33.1	wind priority	connected
Knocknatallig	DSO	18.3	wind priority	connected
Kilberehert (1)	DSO	4.799	wind uncontrolled	connected
Kilmeedy (1)	DSO	4.7	wind uncontrolled	connected
Ballyroe Solar	TSO	120.0	solar not priority	due to connect
Ballyroe Solar Extension	TSO	45.0	solar not priority	due to connect

Table 2-21 - Generation Included in Study for Node Charleville

The solar not priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027		82	165				
Installed Capacity (MW)	2029		82	165	165			
Installed Capacity (MW)	FG			165		165	165	165
Available Energy (GWh)	2027		97	193				
Available Energy (GWh)	2029		97	193	193			
Available Energy (GWh)	FG			193		193	193	193
Generation (GWh)	2027		87	156				
Generation (GWh)	2029		92	169	154			
Generation (GWh)	FG			178		167	158	146
Surplus (%)	2027		6 %	14 %				
Surplus (%)	2029		3 %	9 %	15 %			
Surplus (%)	FG			5 %		11 %	16 %	21 %
Curtailment (%)	2027		2 %	4 %				
Curtailment (%)	2029		1 %	3 %	5 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027		2 %	1 %				
Constraint (%)	2029		0 %	1 %	0 %			
Constraint (%)	FG			1 %		1 %	1 %	1 %
Total Dispatch Down (%)	2027		10 %	19 %				
Total Dispatch Down (%)	2029		5 %	12 %	20 %			
Total Dispatch Down (%)	FG			8 %		14 %	18 %	24 %

Table 2-22 - Surplus, Curtailment and Constraint for Solar non-priority for Node Charleville

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	82	
Installed Capacity (MW)	2029 (pro-rata)	82	
Installed Capacity (MW)	FG (pro-rata)		165
Available Energy (GWh)	2027 (GF)	97	
Available Energy (GWh)	2029 (pro-rata)	97	
Available Energy (GWh)	FG (pro-rata)		193
Generation (GWh)	2027 (GF)	87	
Generation (GWh)	2029 (pro-rata)	92	
Generation (GWh)	FG (pro-rata)		167
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	3 %	
Surplus (%)	FG (pro-rata)		11 %
Curtailment (%)	2027 (GF)	2 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	2 %	
Constraint (%)	2029 (pro-rata)	0 %	
Constraint (%)	FG (pro-rata)		1 %
Total Dispatch Down (%)	2027 (GF)	10 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		14 %

Table 2-23 - Surplus, Curtailment and Constraint for Solar non-priority with sensitivity for Node Charleville

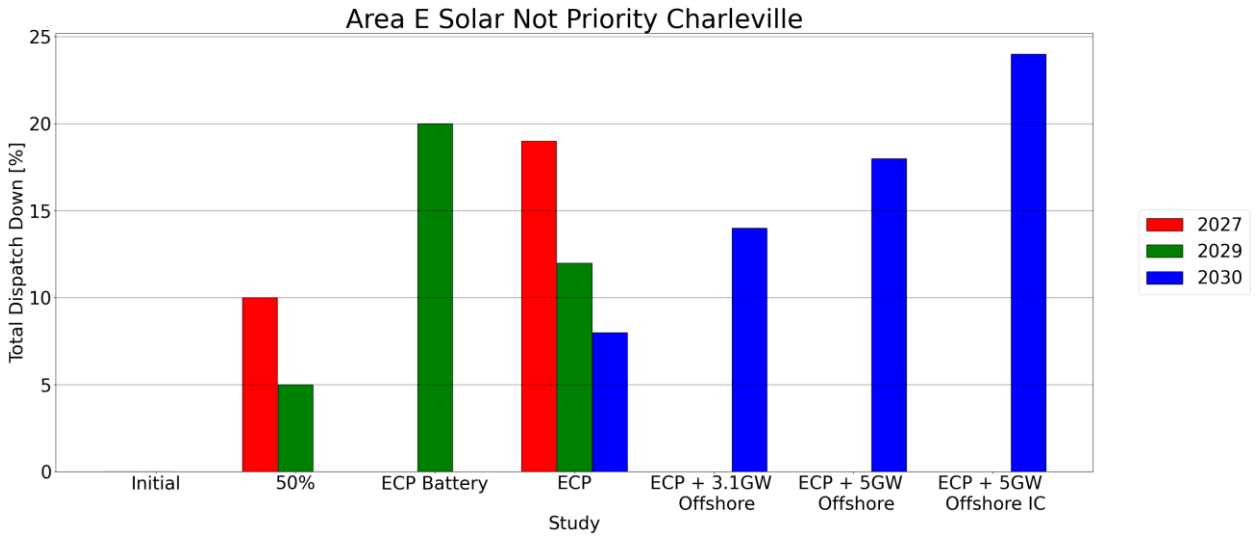

Figure 2-14 - Total Dispatch Down for Solar not priority for Node Charleville

The wind priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	51	51	51				
Installed Capacity (MW)	2029	51	51	51	51			
Installed Capacity (MW)	FG			51		51	51	51
Available Energy (GWh)	2027	166	166	166				
Available Energy (GWh)	2029	166	166	166	166			
Available Energy (GWh)	FG			166		166	166	166
Generation (GWh)	2027	159	156	152				
Generation (GWh)	2029	166	164	161	159			
Generation (GWh)	FG			165		162	160	159
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	6 %				
Curtailment (%)	2029	0 %	1 %	3 %	4 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	4 %	6 %	8 %				
Total Dispatch Down (%)	2029	0 %	1 %	3 %	4 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-24 - Surplus, Curtailment and Constraint for Wind priority for Node Charleville

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	51	
Installed Capacity (MW)	2029 (pro-rata)	51	
Installed Capacity (MW)	FG (pro-rata)		51
Available Energy (GWh)	2027 (GF)	166	
Available Energy (GWh)	2029 (pro-rata)	166	
Available Energy (GWh)	FG (pro-rata)		166
Generation (GWh)	2027 (GF)	160	
Generation (GWh)	2029 (pro-rata)	161	
Generation (GWh)	FG (pro-rata)		156
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		6 %

Table 2-25 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Charleville

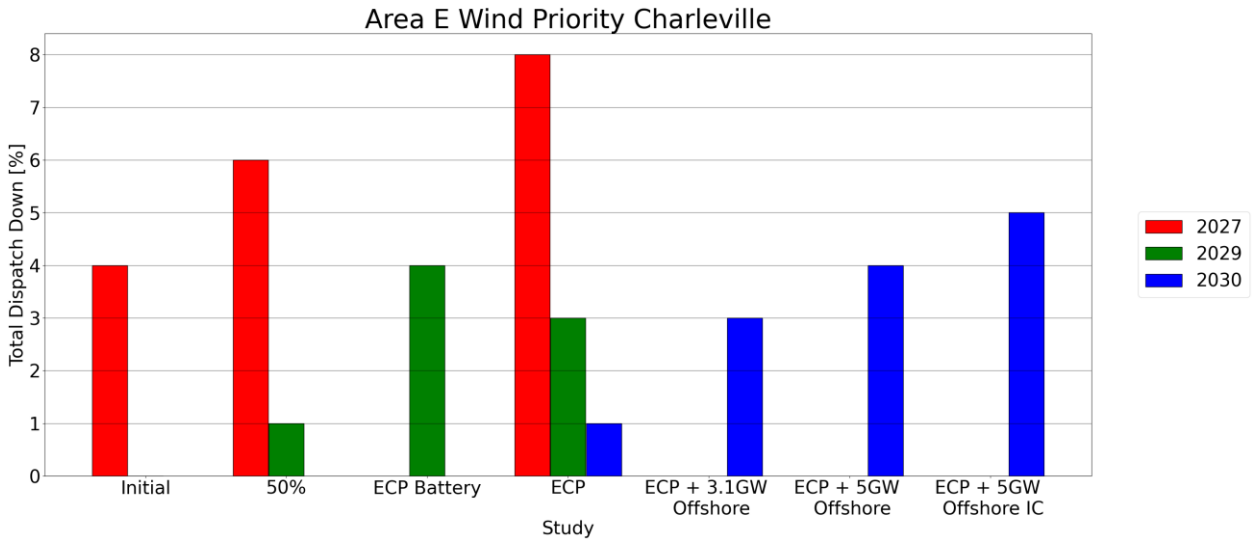

Figure 2-15 - Total Dispatch Down for Wind priority for Node Charleville

2.6 Clahane

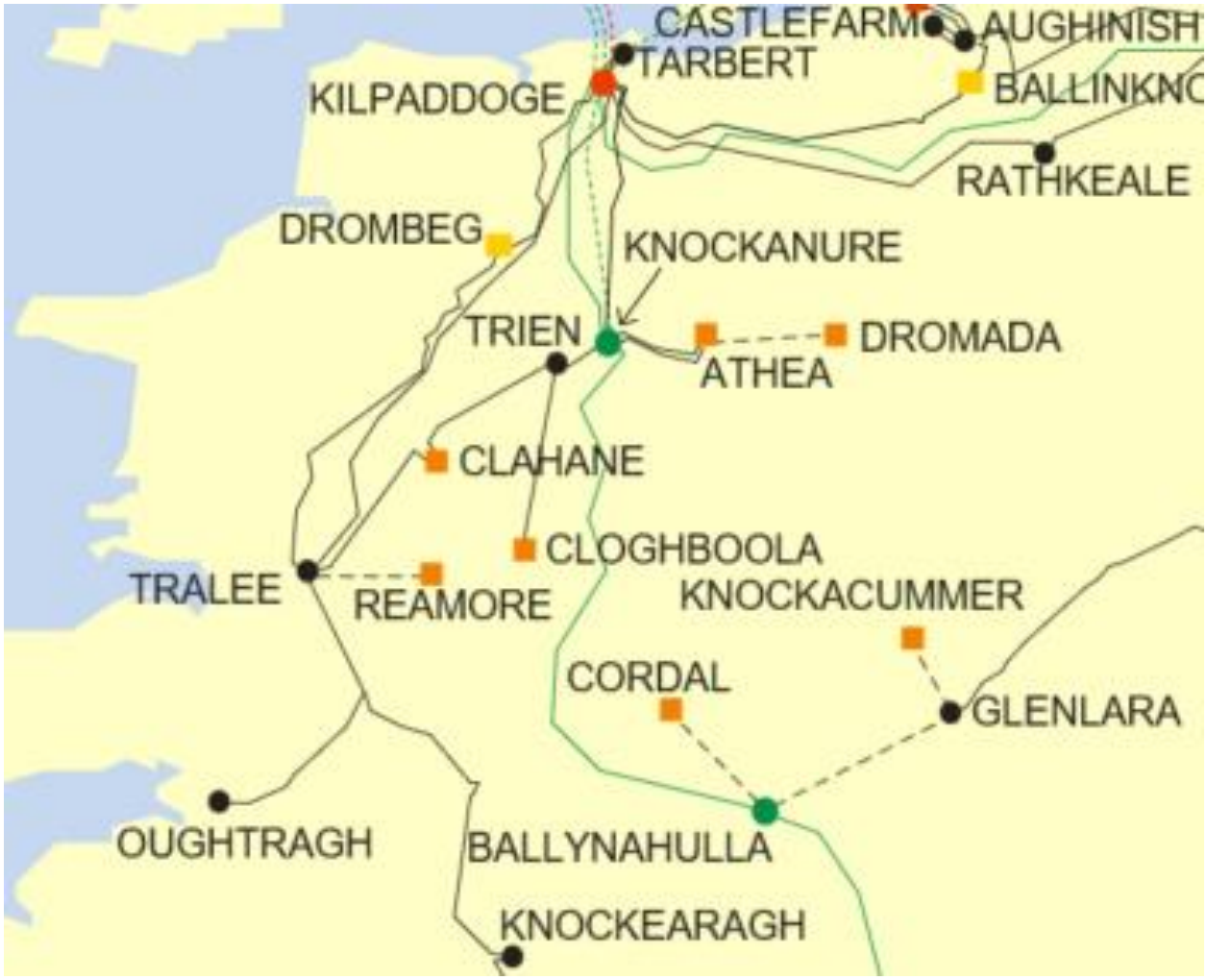

Figure 2-16 - Location of node Clahane

Generator	SO	Capacity	Type	Status
Clahane (1)	TSO	37.8	wind priority	connected
Clahane (2)	TSO	13.8	wind priority	connected
Banemore Solar Farm	TSO	34.0	solar not priority	due to connect

Table 2-26 - Generation Included in Study for Node Clahane

The solar not priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	34	34	34				
Installed Capacity (MW)	2029	34	34	34	34			
Installed Capacity (MW)	FG			34		34	34	34
Available Energy (GWh)	2027	40	40	40				
Available Energy (GWh)	2029	40	40	40	40			
Available Energy (GWh)	FG			40		40	40	40
Generation (GWh)	2027	39	36	32				
Generation (GWh)	2029	39	38	35	32			
Generation (GWh)	FG			37		34	33	30
Surplus (%)	2027	1 %	6 %	14 %				
Surplus (%)	2029	0 %	3 %	9 %	15 %			
Surplus (%)	FG			5 %		11 %	16 %	21 %
Curtailment (%)	2027	1 %	2 %	4 %				
Curtailment (%)	2029	0 %	1 %	3 %	5 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027	2 %	2 %	1 %				
Constraint (%)	2029	1 %	0 %	1 %	0 %			
Constraint (%)	FG			1 %		1 %	1 %	1 %
Total Dispatch Down (%)	2027	3 %	10 %	19 %				
Total Dispatch Down (%)	2029	2 %	5 %	12 %	20 %			
Total Dispatch Down (%)	FG			8 %		14 %	18 %	24 %

Table 2-27- Surplus, Curtailment and Constraint for Solar non-priority for Node Clahane

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	34	
Installed Capacity (MW)	2029 (pro-rata)	34	
Installed Capacity (MW)	FG (pro-rata)		34
Available Energy (GWh)	2027 (GF)	40	
Available Energy (GWh)	2029 (pro-rata)	40	
Available Energy (GWh)	FG (pro-rata)		40
Generation (GWh)	2027 (GF)	36	
Generation (GWh)	2029 (pro-rata)	38	
Generation (GWh)	FG (pro-rata)		34
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	3 %	
Surplus (%)	FG (pro-rata)		11 %
Curtailment (%)	2027 (GF)	2 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	2 %	
Constraint (%)	2029 (pro-rata)	0 %	
Constraint (%)	FG (pro-rata)		1 %
Total Dispatch Down (%)	2027 (GF)	10 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		14 %

Table 2-28 - Surplus, Curtailment and Constraint for Solar non-priority with sensitivity for Node Clahane

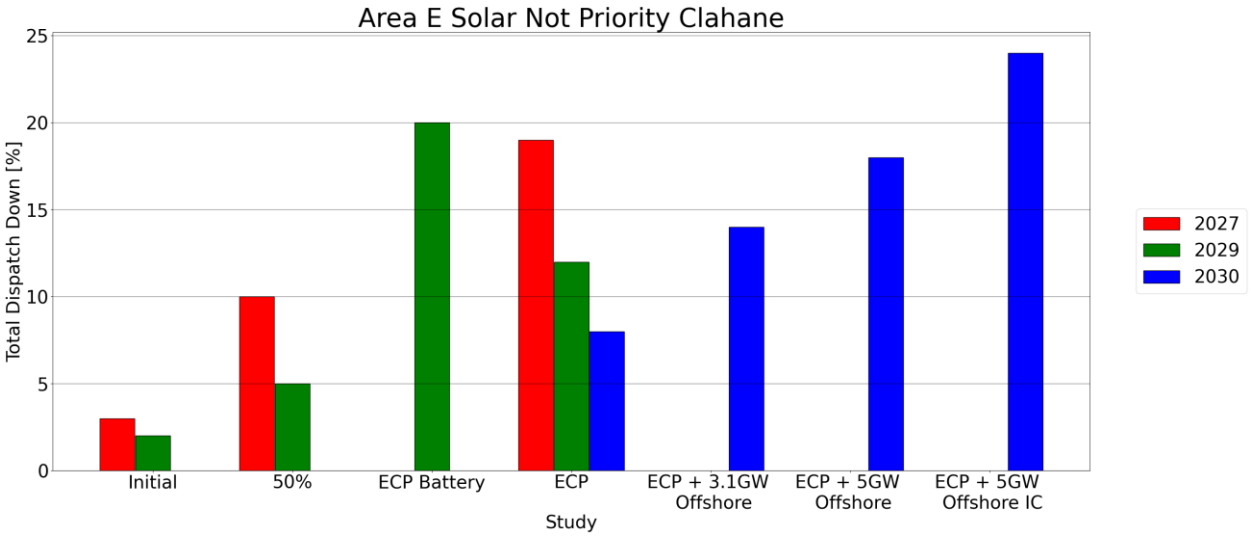

Figure 2-17 - Total Dispatch Down for Solar not priority for Node Clahane

The wind priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	52	52	52				
Installed Capacity (MW)	2029	52	52	52	52			
Installed Capacity (MW)	FG			52		52	52	52
Available Energy (GWh)	2027	167	167	167				
Available Energy (GWh)	2029	167	167	167	167			
Available Energy (GWh)	FG			167		167	167	167
Generation (GWh)	2027	160	156	153				
Generation (GWh)	2029	167	165	162	160			
Generation (GWh)	FG			166		162	161	159
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	6 %				
Curtailment (%)	2029	0 %	1 %	3 %	4 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	4 %	6 %	8 %				
Total Dispatch Down (%)	2029	0 %	1 %	3 %	4 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-29 - Surplus, Curtailment and Constraint for Wind priority for Node Clahane

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	52	
Installed Capacity (MW)	2029 (pro-rata)	52	
Installed Capacity (MW)	FG (pro-rata)		52
Available Energy (GWh)	2027 (GF)	167	
Available Energy (GWh)	2029 (pro-rata)	167	
Available Energy (GWh)	FG (pro-rata)		167
Generation (GWh)	2027 (GF)	160	
Generation (GWh)	2029 (pro-rata)	162	
Generation (GWh)	FG (pro-rata)		157
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		6 %

Table 2-30 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Clahane

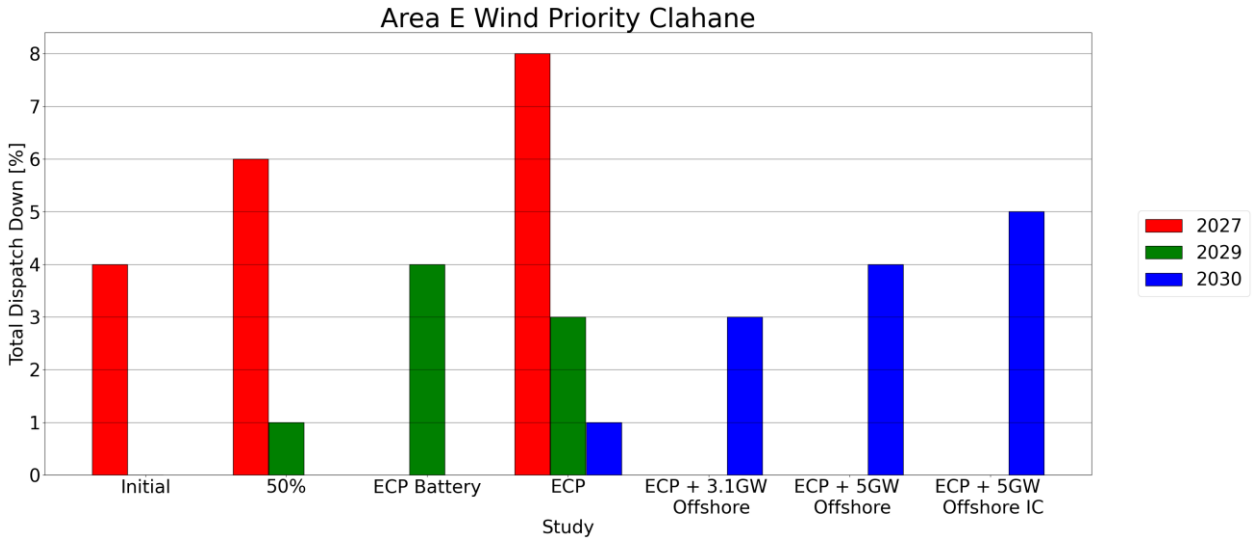

Figure 2-18 - Total Dispatch Down for Wind priority for Node Clahane

2.7 Cloghboola

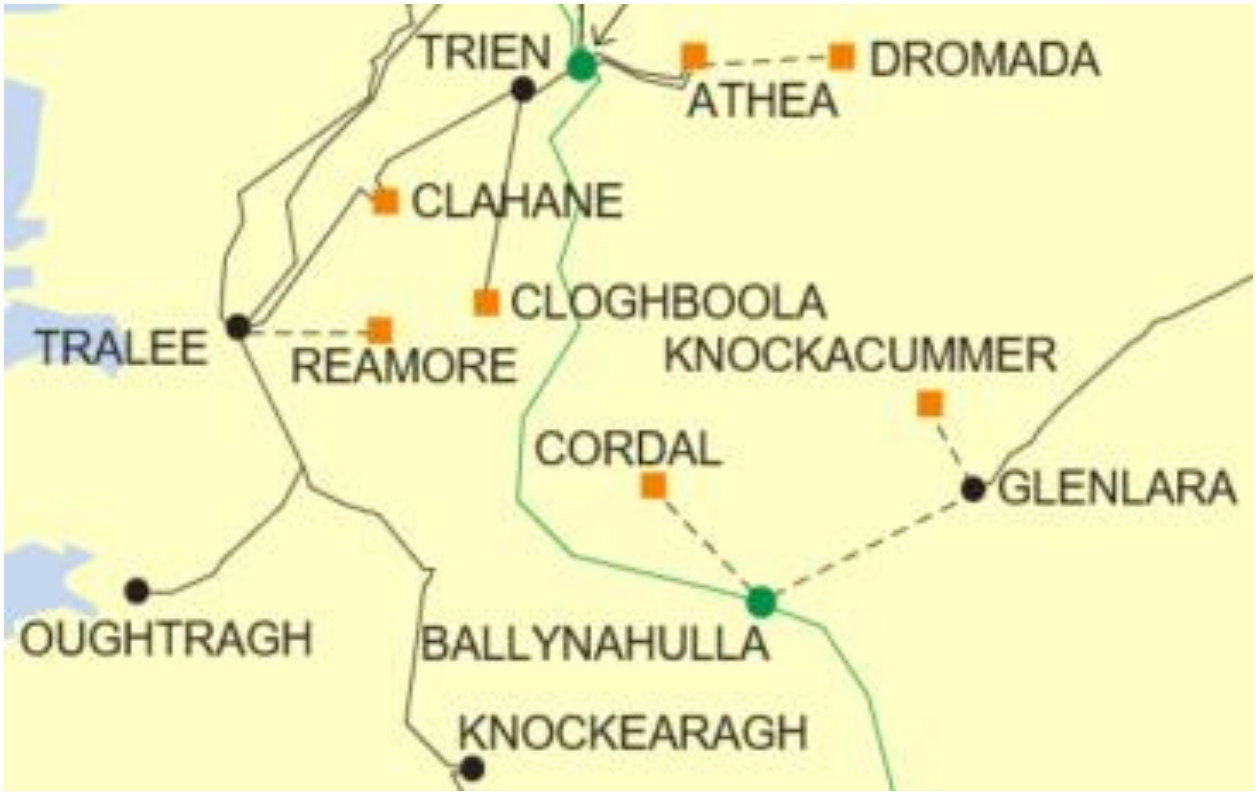

Figure 2-19 - Location of node Cloghboola

Generator	SO	Capacity	Type	Status
Knocknagashel Wind (Cloghboola (1))	TSO	46.0	wind priority	connected
Cloghanaleskirt (1)	DSO	12.55	wind priority	connected
Glanaruddery 1 (formerly Dromadda More Wind Farm)	DSO	20.0	wind priority	connected
Glantaunyalkeen Windfarm(Cloghboola (2) Ext)	DSO	9.999	wind priority	connected
Glanaruddery 2 (formerly Dromadda More 2)	DSO	12.0	wind priority	connected

Table 2-31 - Generation Included in Study for Node Cloghboola

The wind priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	101	101	101				
Installed Capacity (MW)	2029	101	101	101	101			
Installed Capacity (MW)	FG			101		101	101	101
Available Energy (GWh)	2027	326	326	326				
Available Energy (GWh)	2029	326	326	326	326			
Available Energy (GWh)	FG			326		326	326	326
Generation (GWh)	2027	312	305	298				
Generation (GWh)	2029	325	321	315	312			
Generation (GWh)	FG			323		317	313	310
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	6 %				
Curtailment (%)	2029	0 %	1 %	3 %	4 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	4 %	6 %	8 %				
Total Dispatch Down (%)	2029	0 %	1 %	3 %	4 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-32 - Surplus, Curtailment and Constraint for Wind priority for Node Cloghboola

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	101	
Installed Capacity (MW)	2029 (pro-rata)	101	
Installed Capacity (MW)	FG (pro-rata)		101
Available Energy (GWh)	2027 (GF)	326	
Available Energy (GWh)	2029 (pro-rata)	326	
Available Energy (GWh)	FG (pro-rata)		326
Generation (GWh)	2027 (GF)	313	
Generation (GWh)	2029 (pro-rata)	316	
Generation (GWh)	FG (pro-rata)		306
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		6 %

Table 2-33 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Cloghboola

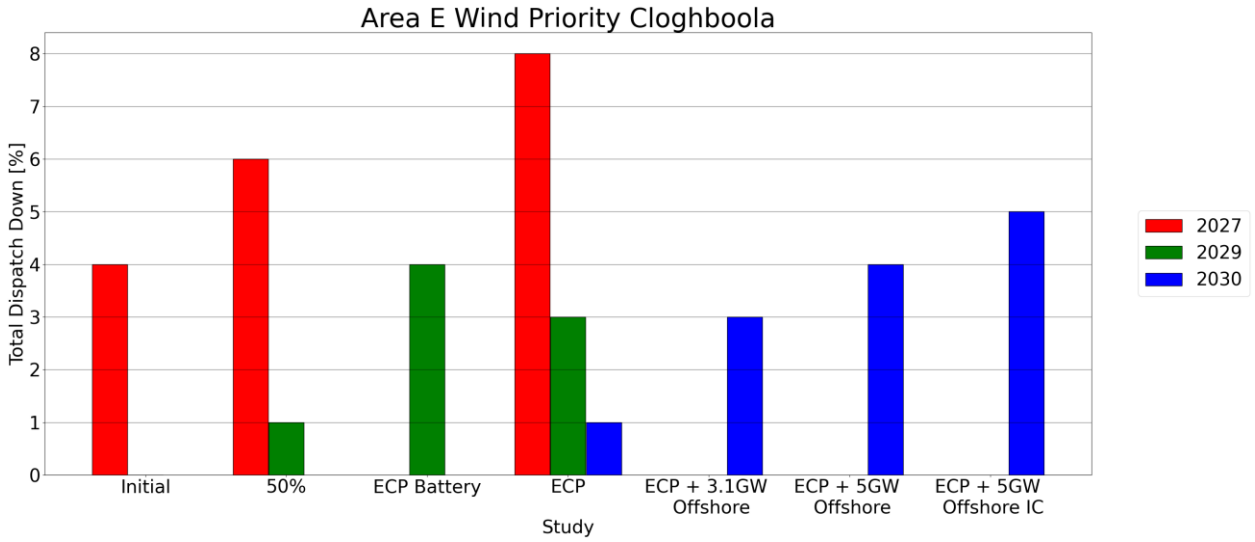

Figure 2-20 - Total Dispatch Down for Wind priority for Node Cloghboola

2.8 Coomagearlahy

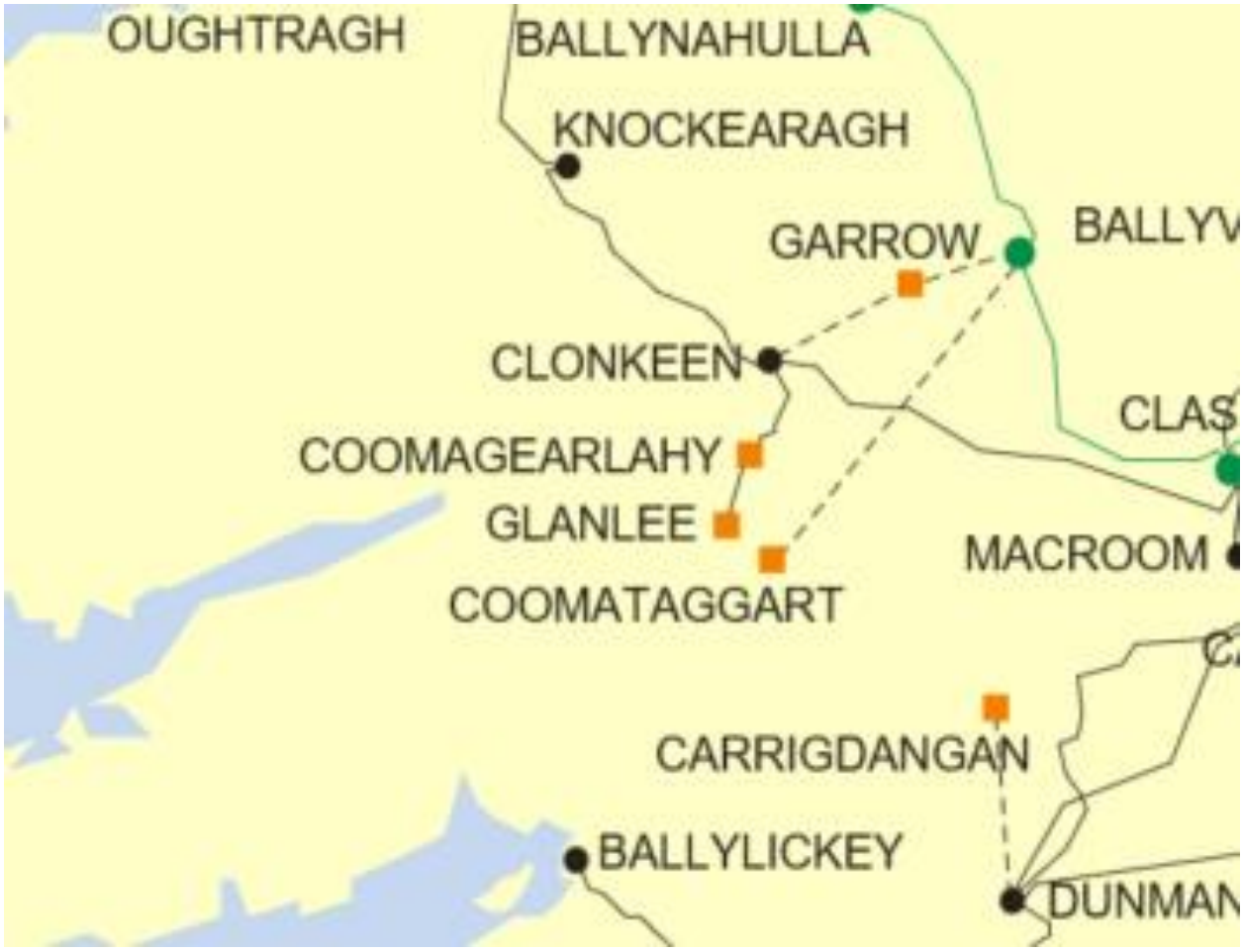

Figure 2-21 - Location of node Coomagearlahy

Generator	SO	Capacity	Type	Status
Coomagearlahy (1)	TSO	42.5	wind priority	connected
Coomagearlahy (3)	TSO	30.0	wind priority	connected
Coomagearlahy (2)	TSO	8.5	wind priority	connected
Coumaclovane Solar Extension	TSO	7.0	solar not priority	due to connect

Table 2-34 - Generation Included in Study for Node Coomagearlahy

The solar not priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027		4	7				
Installed Capacity (MW)	2029		4	7	7			
Installed Capacity (MW)	FG			7		7	7	7
Available Energy (GWh)	2027		4	8				
Available Energy (GWh)	2029		4	8	8			
Available Energy (GWh)	FG			8		8	8	8
Generation (GWh)	2027		4	7				
Generation (GWh)	2029		4	7	7			
Generation (GWh)	FG			8		7	7	6
Surplus (%)	2027		6 %	14 %				
Surplus (%)	2029		3 %	9 %	15 %			
Surplus (%)	FG			5 %		11 %	16 %	21 %
Curtailment (%)	2027		2 %	4 %				
Curtailment (%)	2029		1 %	3 %	5 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027		2 %	1 %				
Constraint (%)	2029		0 %	1 %	0 %			
Constraint (%)	FG			1 %		1 %	1 %	1 %
Total Dispatch Down (%)	2027		10 %	19 %				
Total Dispatch Down (%)	2029		5 %	12 %	20 %			
Total Dispatch Down (%)	FG			8 %		14 %	18 %	24 %

Table 2-35 - Surplus, Curtailment and Constraint for Solar non-priority for Node Coomagearlahy

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	4	
Installed Capacity (MW)	2029 (pro-rata)	4	
Installed Capacity (MW)	FG (pro-rata)		7
Available Energy (GWh)	2027 (GF)	4	
Available Energy (GWh)	2029 (pro-rata)	4	
Available Energy (GWh)	FG (pro-rata)		8
Generation (GWh)	2027 (GF)	4	
Generation (GWh)	2029 (pro-rata)	4	
Generation (GWh)	FG (pro-rata)		7
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	3 %	
Surplus (%)	FG (pro-rata)		11 %
Curtailment (%)	2027 (GF)	2 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	2 %	
Constraint (%)	2029 (pro-rata)	0 %	
Constraint (%)	FG (pro-rata)		1 %
Total Dispatch Down (%)	2027 (GF)	10 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		14 %

Table 2-36 - Surplus, Curtailment and Constraint for Solar non-priority with sensitivity for Node Coomagearlahy

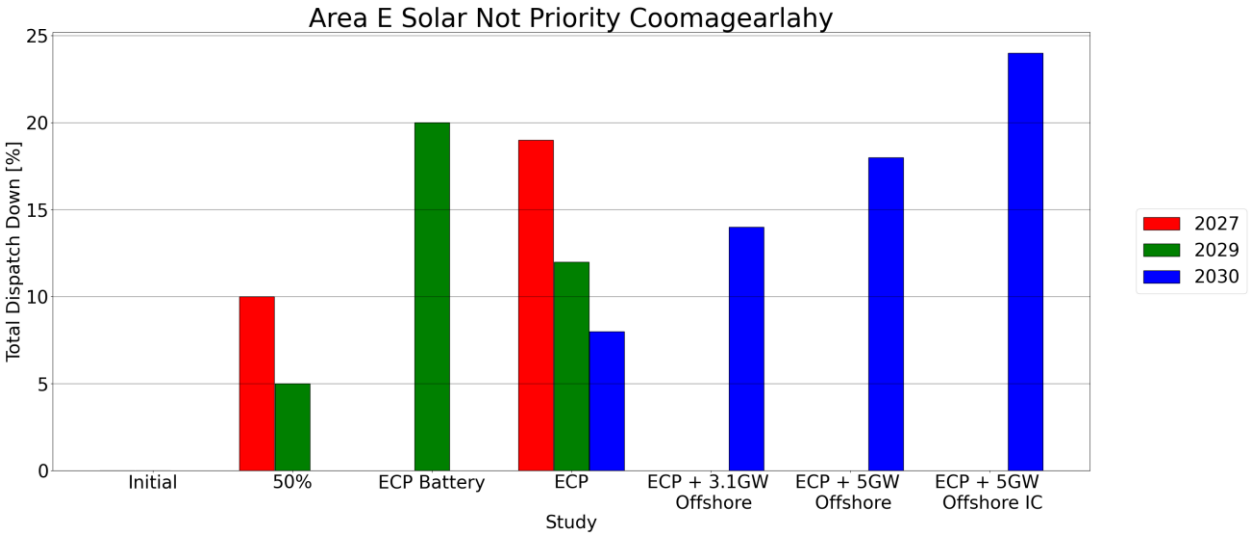

Figure 2-22 - Total Dispatch Down for Solar not priority for Node Coomagearlahy

The wind priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	81	81	81				
Installed Capacity (MW)	2029	81	81	81	81			
Installed Capacity (MW)	FG			81		81	81	81
Available Energy (GWh)	2027	262	262	262				
Available Energy (GWh)	2029	262	262	262	262			
Available Energy (GWh)	FG			262		262	262	262
Generation (GWh)	2027	251	246	240				
Generation (GWh)	2029	261	258	254	251			
Generation (GWh)	FG			260		255	252	250
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	6 %				
Curtailment (%)	2029	0 %	1 %	3 %	4 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	4 %	6 %	8 %				
Total Dispatch Down (%)	2029	0 %	1 %	3 %	4 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-37 - Surplus, Curtailment and Constraint for Wind priority for Node Coomagearlahy

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	81	
Installed Capacity (MW)	2029 (pro-rata)	81	
Installed Capacity (MW)	FG (pro-rata)		81
Available Energy (GWh)	2027 (GF)	262	
Available Energy (GWh)	2029 (pro-rata)	262	
Available Energy (GWh)	FG (pro-rata)		262
Generation (GWh)	2027 (GF)	252	
Generation (GWh)	2029 (pro-rata)	254	
Generation (GWh)	FG (pro-rata)		246
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		6 %

Table 2-38 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Coomagearlahy

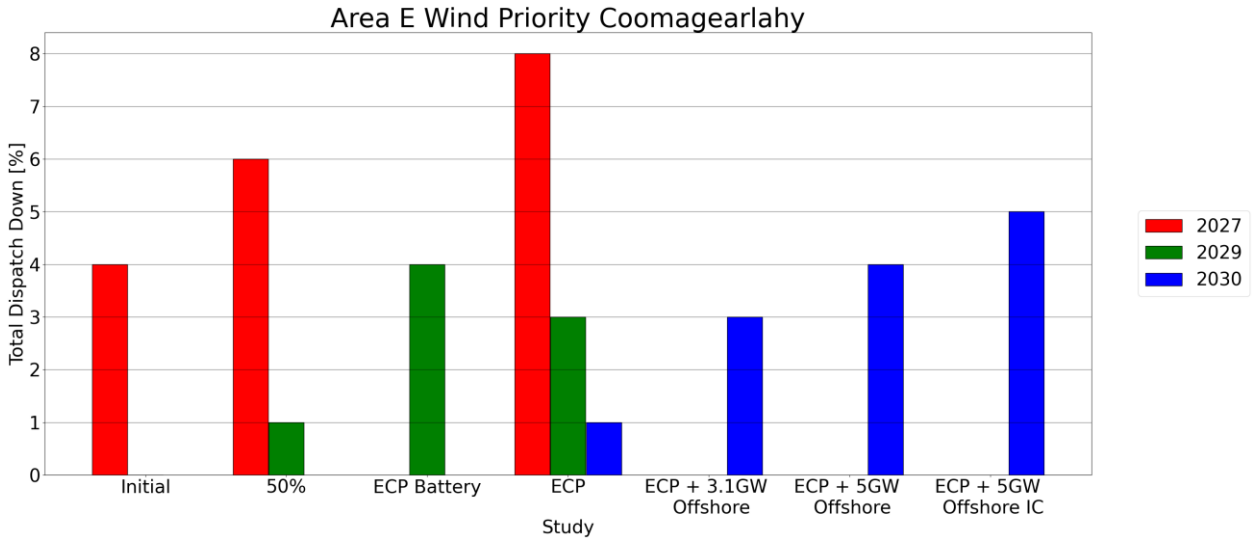

Figure 2-23 - Total Dispatch Down for Wind priority for Node Coomagearlahy

2.9 Coomataggart

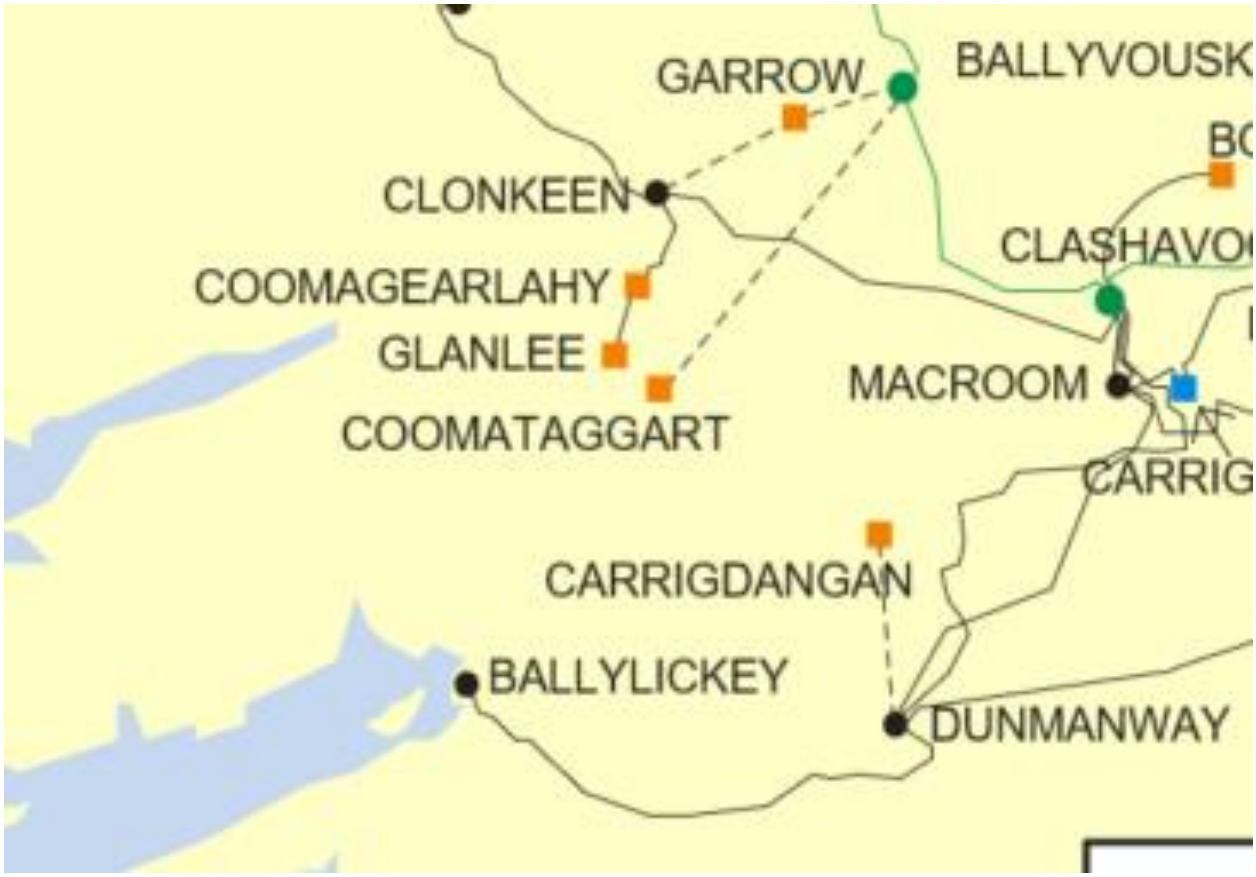

Figure 2-24 - Location of node Coomataggart

Generator	SO	Capacity	Type	Status
Grousemount WF	TSO	114.2	wind not priority	connected
Cleanrath (1)	DSO	42.64	wind not priority	connected

Table 2-39 - Generation Included in Study for Node Coomataggart

The wind not priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	157	157	157				
Installed Capacity (MW)	2029	157	157	157	157			
Installed Capacity (MW)	FG			157		157	157	157
Available Energy (GWh)	2027	508	508	508				
Available Energy (GWh)	2029	508	508	508	508			
Available Energy (GWh)	FG			508		508	508	508
Generation (GWh)	2027	482	450	410				
Generation (GWh)	2029	470	461	442	419			
Generation (GWh)	FG			460		374	366	319
Surplus (%)	2027	1 %	6 %	13 %				
Surplus (%)	2029	0 %	2 %	6 %	9 %			
Surplus (%)	FG			3 %		12 %	23 %	31 %
Curtailment (%)	2027	1 %	3 %	4 %				
Curtailment (%)	2029	0 %	1 %	2 %	3 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	7 %	6 %	5 %	6 %			
Constraint (%)	FG			6 %		12 %	3 %	3 %
Total Dispatch Down (%)	2027	5 %	11 %	19 %				
Total Dispatch Down (%)	2029	7 %	9 %	13 %	17 %			
Total Dispatch Down (%)	FG			9 %		26 %	28 %	37 %

Table 2-40 - Surplus, Curtailment and Constraint for Wind non-priority for Node Coomataggart

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	157	
Installed Capacity (MW)	2029 (pro-rata)	157	
Installed Capacity (MW)	FG (pro-rata)		157
Available Energy (GWh)	2027 (GF)	508	
Available Energy (GWh)	2029 (pro-rata)	508	
Available Energy (GWh)	FG (pro-rata)		508
Generation (GWh)	2027 (GF)	413	
Generation (GWh)	2029 (pro-rata)	484	
Generation (GWh)	FG (pro-rata)		418
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	2 %	
Surplus (%)	FG (pro-rata)		12 %
Curtailment (%)	2027 (GF)	3 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	10 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	19 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		18 %

Table 2-41 - Surplus, Curtailment and Constraint for Wind non-priority with sensitivity for Node Coomataggart

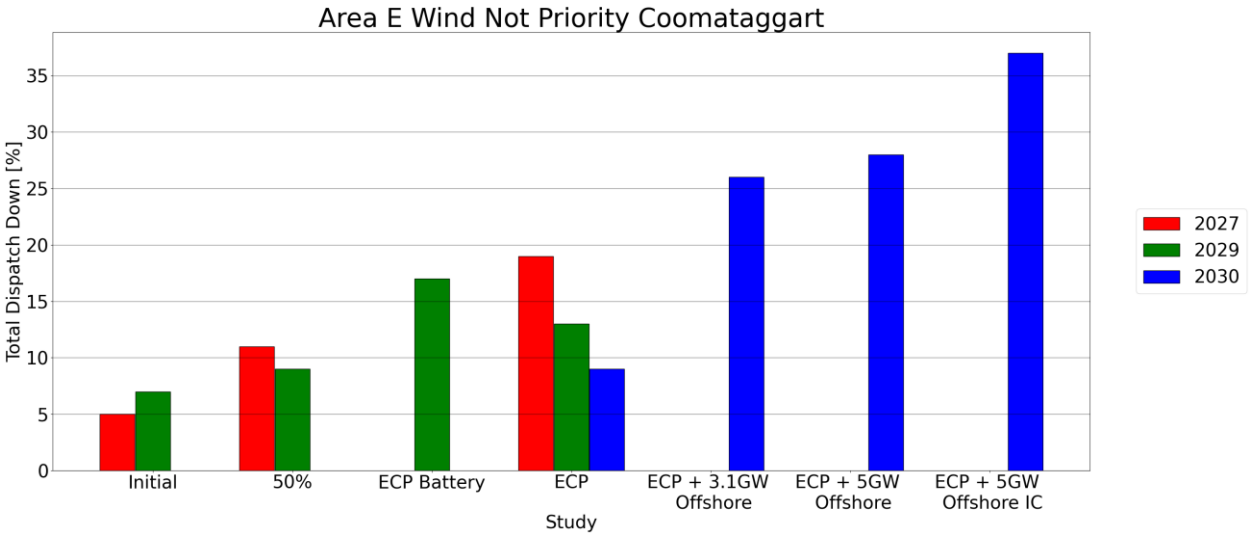

Figure 2-25 - Total Dispatch Down for Wind not priority for Node Coomataggart

2.10 Cordal

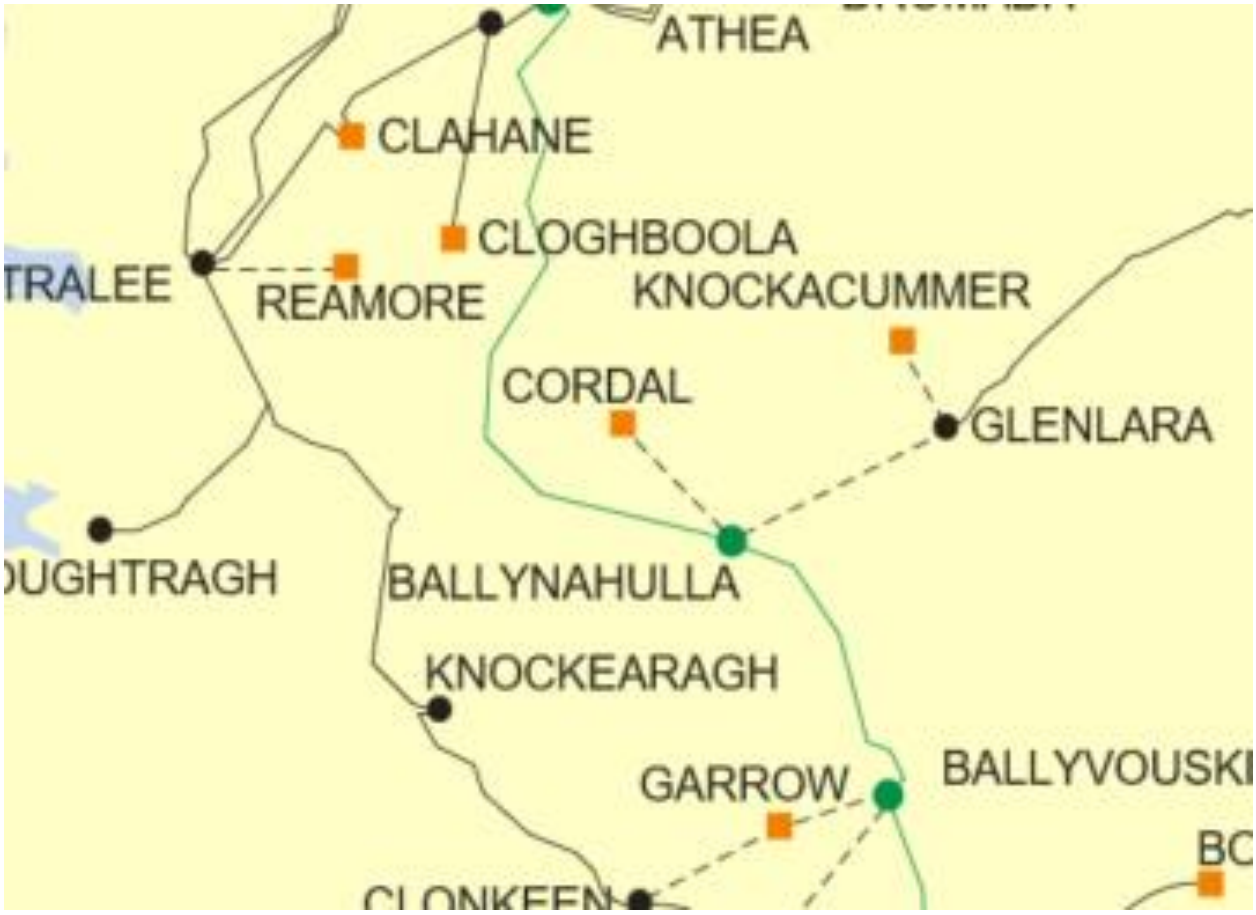

Figure 2-26 - Location of node Cordal

Generator	SO	Capacity	Type	Status
Coollegrean (1)	DSO	18.5	wind priority	connected
Scartaglen (1)	DSO	35.45	wind priority	connected
Cordal (1)	TSO	35.85	wind priority	connected
Scartaglen (2)	DSO	3.8	wind priority	connected
Cordal (2)	TSO	54.0	wind priority	connected

Table 2-42 - Generation Included in Study for Node Cordal

The wind priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	148	148	148				
Installed Capacity (MW)	2029	148	148	148	148			
Installed Capacity (MW)	FG			148		148	148	148
Available Energy (GWh)	2027	478	478	478				
Available Energy (GWh)	2029	478	478	478	478			
Available Energy (GWh)	FG			478		478	478	478
Generation (GWh)	2027	458	447	437				
Generation (GWh)	2029	476	471	463	458			
Generation (GWh)	FG			474		465	460	456
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	6 %				
Curtailment (%)	2029	0 %	1 %	3 %	4 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	4 %	6 %	8 %				
Total Dispatch Down (%)	2029	0 %	1 %	3 %	4 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-43 - Surplus, Curtailment and Constraint for Wind priority for Node Cordal

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	148	
Installed Capacity (MW)	2029 (pro-rata)	148	
Installed Capacity (MW)	FG (pro-rata)		148
Available Energy (GWh)	2027 (GF)	478	
Available Energy (GWh)	2029 (pro-rata)	478	
Available Energy (GWh)	FG (pro-rata)		478
Generation (GWh)	2027 (GF)	459	
Generation (GWh)	2029 (pro-rata)	464	
Generation (GWh)	FG (pro-rata)		449
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		6 %

Table 2-44 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Cordal

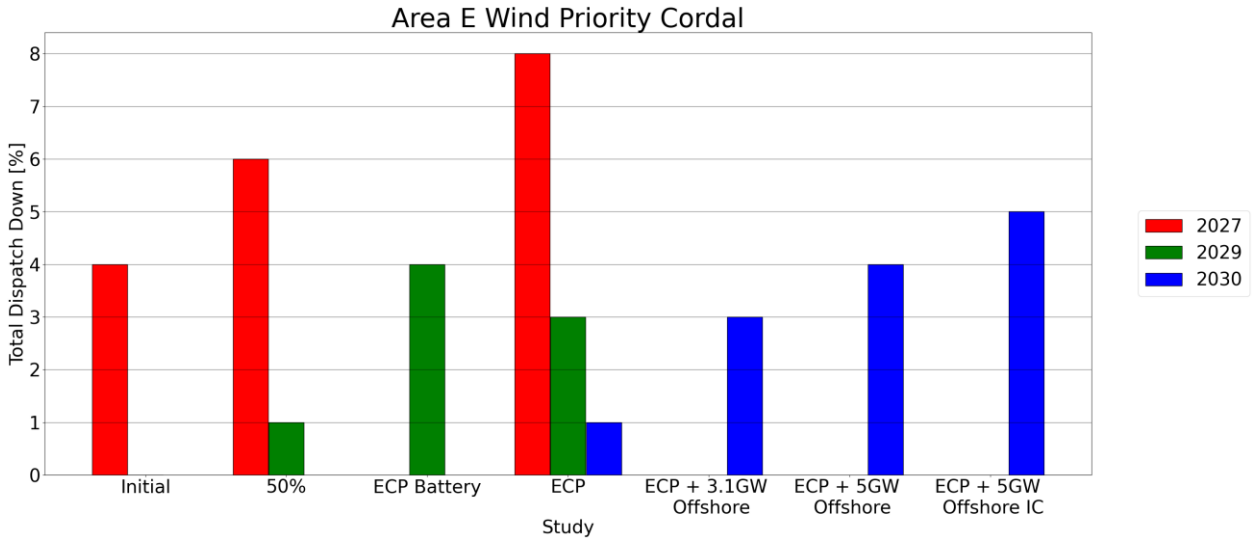

Figure 2-27 - Total Dispatch Down for Wind priority for Node Cordal

2.11 Dromada

Figure 2-28 - Location of node Dromada

Generator	SO	Capacity	Type	Status
Dromada (1)	TSO	28.5	wind priority	connected

Table 2-45 - Generation Included in Study for Node Dromada

The wind priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	28	28	28				
Installed Capacity (MW)	2029	28	28	28	28			
Installed Capacity (MW)	FG			28		28	28	28
Available Energy (GWh)	2027	92	92	92				
Available Energy (GWh)	2029	92	92	92	92			
Available Energy (GWh)	FG			92		92	92	92
Generation (GWh)	2027	88	86	84				
Generation (GWh)	2029	92	91	89	88			
Generation (GWh)	FG			92		90	89	88
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	6 %				
Curtailment (%)	2029	0 %	1 %	3 %	4 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	4 %	6 %	8 %				
Total Dispatch Down (%)	2029	0 %	1 %	3 %	4 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-46 - Surplus, Curtailment and Constraint for Wind priority for Node Dromada

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	28	
Installed Capacity (MW)	2029 (pro-rata)	28	
Installed Capacity (MW)	FG (pro-rata)		28
Available Energy (GWh)	2027 (GF)	92	
Available Energy (GWh)	2029 (pro-rata)	92	
Available Energy (GWh)	FG (pro-rata)		92
Generation (GWh)	2027 (GF)	89	
Generation (GWh)	2029 (pro-rata)	90	
Generation (GWh)	FG (pro-rata)		87
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		6 %

Table 2-47 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Dromada

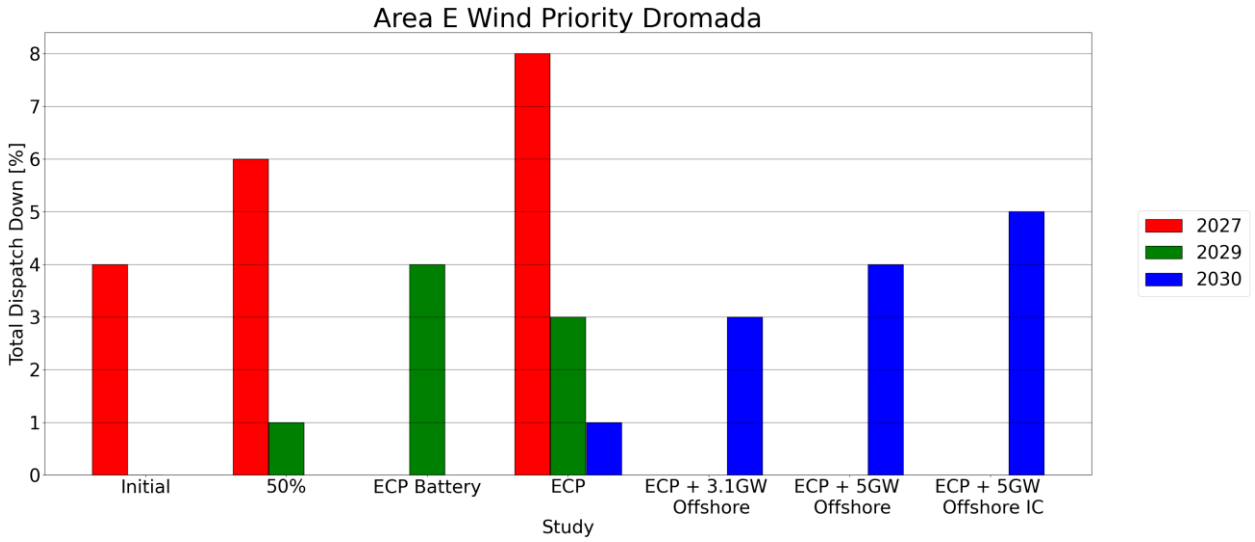

Figure 2-29 - Total Dispatch Down for Wind priority for Node Dromada

2.12 Drombeg

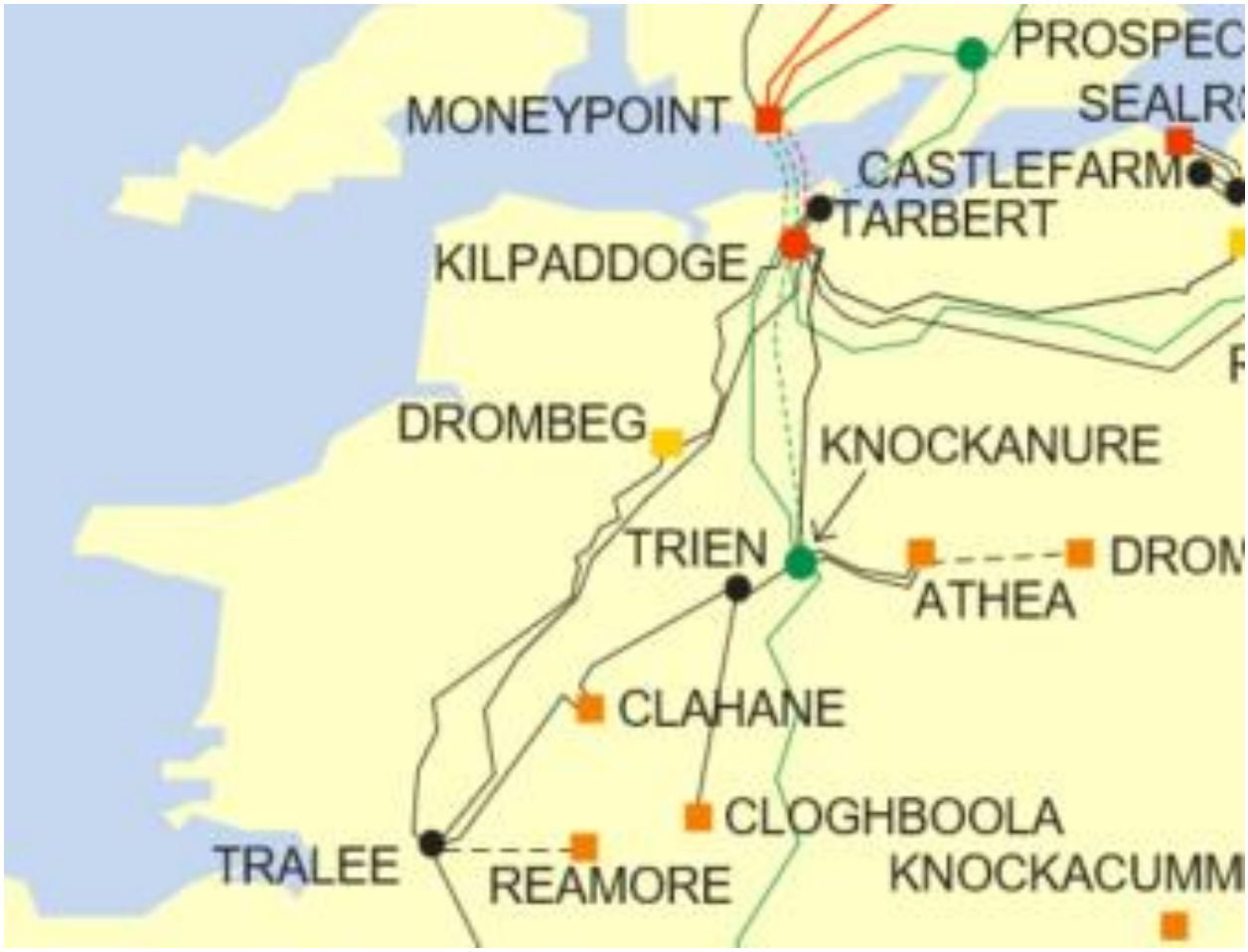

Figure 2-30 - Location of node Drombeg

Generator	SO	Capacity	Type	Status
Drombeg Solar Park	TSO	50.0	solar not priority	due to connect
Ballylongford Windfarm	DSO	25.2	wind not priority	due to connect
Drombeg Solar Park Phase II (Ballydonohoe)	TSO	44.0	solar not priority	due to connect

Table 2-48 - Generation Included in Study for Node Drombeg

The solar not priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	50	72	94				
Installed Capacity (MW)	2029	50	72	94	94			
Installed Capacity (MW)	FG			94		94	94	94
Available Energy (GWh)	2027	59	84	110				
Available Energy (GWh)	2029	59	84	110	110			
Available Energy (GWh)	FG			110		110	110	110
Generation (GWh)	2027	57	76	89				
Generation (GWh)	2029	58	80	96	88			
Generation (GWh)	FG			102		95	90	83
Surplus (%)	2027	1 %	6 %	14 %				
Surplus (%)	2029	0 %	3 %	9 %	15 %			
Surplus (%)	FG			5 %		11 %	16 %	21 %
Curtailment (%)	2027	1 %	2 %	4 %				
Curtailment (%)	2029	0 %	1 %	3 %	5 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027	2 %	2 %	1 %				
Constraint (%)	2029	1 %	0 %	1 %	0 %			
Constraint (%)	FG			1 %		1 %	1 %	1 %
Total Dispatch Down (%)	2027	3 %	10 %	19 %				
Total Dispatch Down (%)	2029	2 %	5 %	12 %	20 %			
Total Dispatch Down (%)	FG			8 %		14 %	18 %	24 %

Table 2-49 - Surplus, Curtailment and Constraint for Solar non-priority for Node Drombeg

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	72	
Installed Capacity (MW)	2029 (pro-rata)	72	
Installed Capacity (MW)	FG (pro-rata)		94
Available Energy (GWh)	2027 (GF)	84	
Available Energy (GWh)	2029 (pro-rata)	84	
Available Energy (GWh)	FG (pro-rata)		110
Generation (GWh)	2027 (GF)	76	
Generation (GWh)	2029 (pro-rata)	80	
Generation (GWh)	FG (pro-rata)		95
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	3 %	
Surplus (%)	FG (pro-rata)		11 %
Curtailment (%)	2027 (GF)	2 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	2 %	
Constraint (%)	2029 (pro-rata)	0 %	
Constraint (%)	FG (pro-rata)		1 %
Total Dispatch Down (%)	2027 (GF)	10 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		14 %

Table 2-50 - Surplus, Curtailment and Constraint for Solar non-priority with sensitivity for Node Drombeg

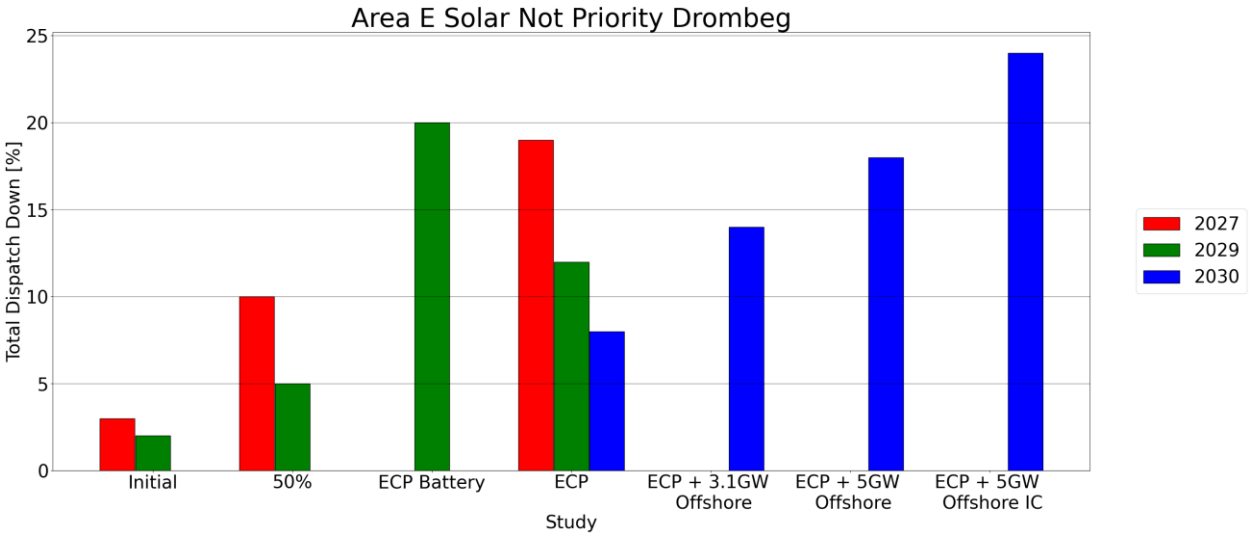

Figure 2-31 - Total Dispatch Down for Solar not priority for Node Drombeg

The wind not priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	25	25	25				
Installed Capacity (MW)	2029	25	25	25	25			
Installed Capacity (MW)	FG			25		25	25	25
Available Energy (GWh)	2027	82	82	82				
Available Energy (GWh)	2029	82	82	82	82			
Available Energy (GWh)	FG			82		82	82	82
Generation (GWh)	2027	77	72	66				
Generation (GWh)	2029	76	74	71	67			
Generation (GWh)	FG			74		60	59	51
Surplus (%)	2027	1 %	6 %	13 %				
Surplus (%)	2029	0 %	2 %	6 %	9 %			
Surplus (%)	FG			3 %		12 %	23 %	31 %
Curtailment (%)	2027	1 %	3 %	4 %				
Curtailment (%)	2029	0 %	1 %	2 %	3 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	7 %	6 %	5 %	6 %			
Constraint (%)	FG			6 %		12 %	3 %	3 %
Total Dispatch Down (%)	2027	5 %	11 %	19 %				
Total Dispatch Down (%)	2029	7 %	9 %	13 %	17 %			
Total Dispatch Down (%)	FG			9 %		26 %	28 %	37 %

Table 2-51 - Surplus, Curtailment and Constraint for Wind non-priority for Node Drombeg

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	25	
Installed Capacity (MW)	2029 (pro-rata)	25	
Installed Capacity (MW)	FG (pro-rata)		25
Available Energy (GWh)	2027 (GF)	82	
Available Energy (GWh)	2029 (pro-rata)	82	
Available Energy (GWh)	FG (pro-rata)		82
Generation (GWh)	2027 (GF)	66	
Generation (GWh)	2029 (pro-rata)	78	
Generation (GWh)	FG (pro-rata)		67
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	2 %	
Surplus (%)	FG (pro-rata)		12 %
Curtailment (%)	2027 (GF)	3 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	10 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	19 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		18 %

Table 2-52 - Surplus, Curtailment and Constraint for Wind non-priority with sensitivity for Node Drombeg

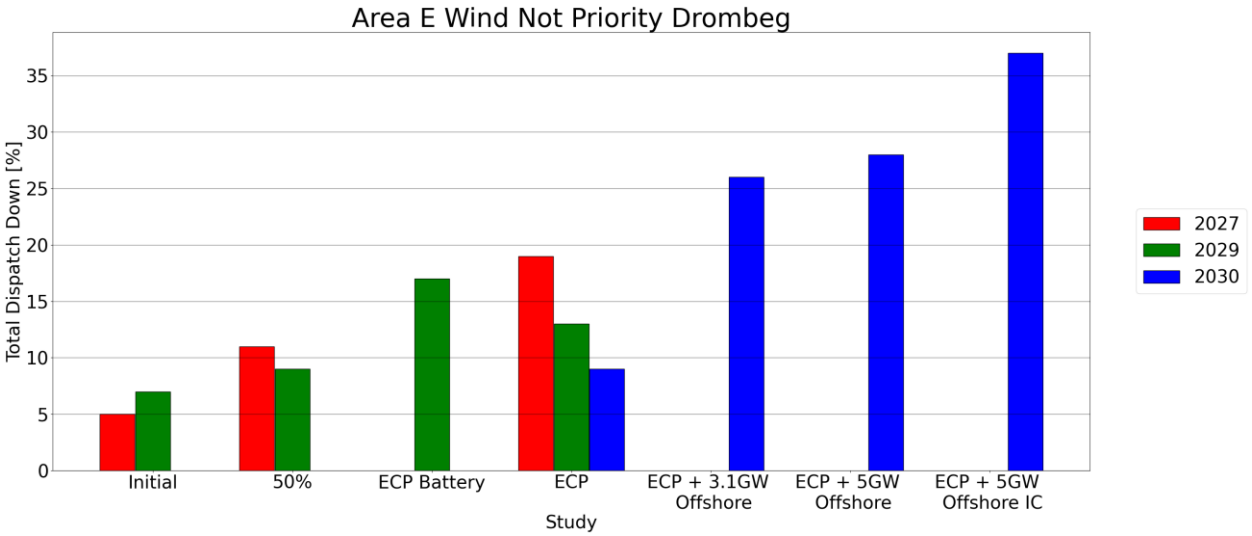

Figure 2-32 - Total Dispatch Down for Wind not priority for Node Drombeg

2.13 Garrow

Figure 2-33 - Location of node Garrow

Generator	SO	Capacity	Type	Status
Coomacheo (1)	TSO	41.225	wind priority	connected
Coomacheo (2)	TSO	18.0	wind priority	connected
Clydaghroe (1)	DSO	4.99	wind uncontrolled	connected
Caherdowney (1)	DSO	10.0	wind priority	connected

Table 2-53 - Generation Included in Study for Node Garrow

The wind priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	69	69	69				
Installed Capacity (MW)	2029	69	69	69	69			
Installed Capacity (MW)	FG			69		69	69	69
Available Energy (GWh)	2027	224	224	224				
Available Energy (GWh)	2029	224	224	224	224			
Available Energy (GWh)	FG			224		224	224	224
Generation (GWh)	2027	215	210	205				
Generation (GWh)	2029	223	221	217	215			
Generation (GWh)	FG			222		218	216	214
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	6 %				
Curtailment (%)	2029	0 %	1 %	3 %	4 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	4 %	6 %	8 %				
Total Dispatch Down (%)	2029	0 %	1 %	3 %	4 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-54 - Surplus, Curtailment and Constraint for Wind priority for Node Garrow

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	69	
Installed Capacity (MW)	2029 (pro-rata)	69	
Installed Capacity (MW)	FG (pro-rata)		69
Available Energy (GWh)	2027 (GF)	224	
Available Energy (GWh)	2029 (pro-rata)	224	
Available Energy (GWh)	FG (pro-rata)		224
Generation (GWh)	2027 (GF)	215	
Generation (GWh)	2029 (pro-rata)	217	
Generation (GWh)	FG (pro-rata)		211
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		6 %

Table 2-55 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Garrow

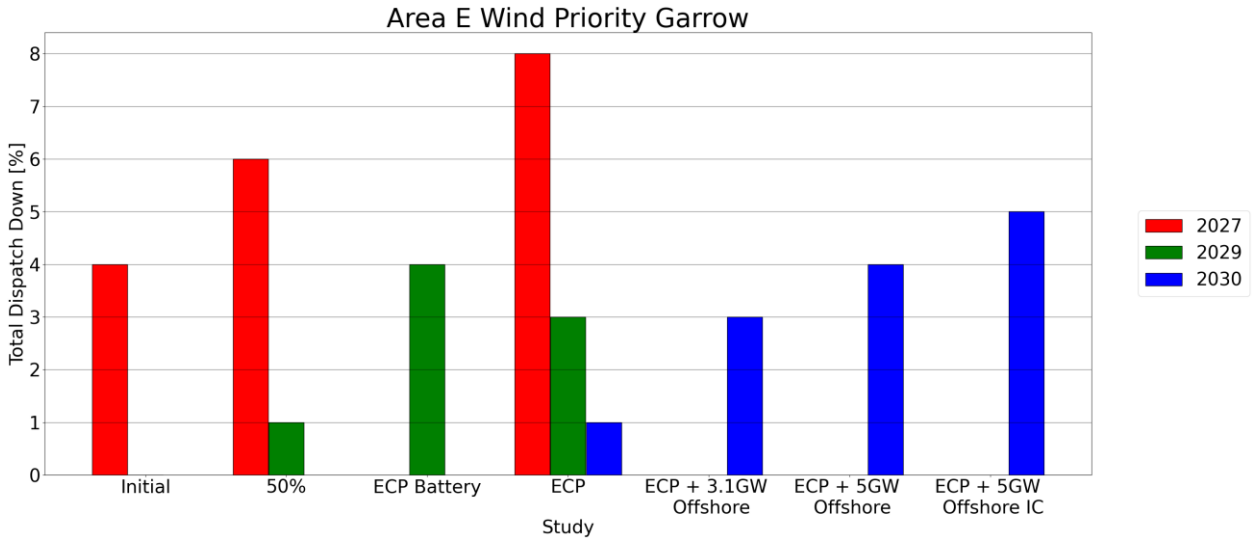

Figure 2-34 - Total Dispatch Down for Wind priority for Node Garrow

2.14 Glanlee

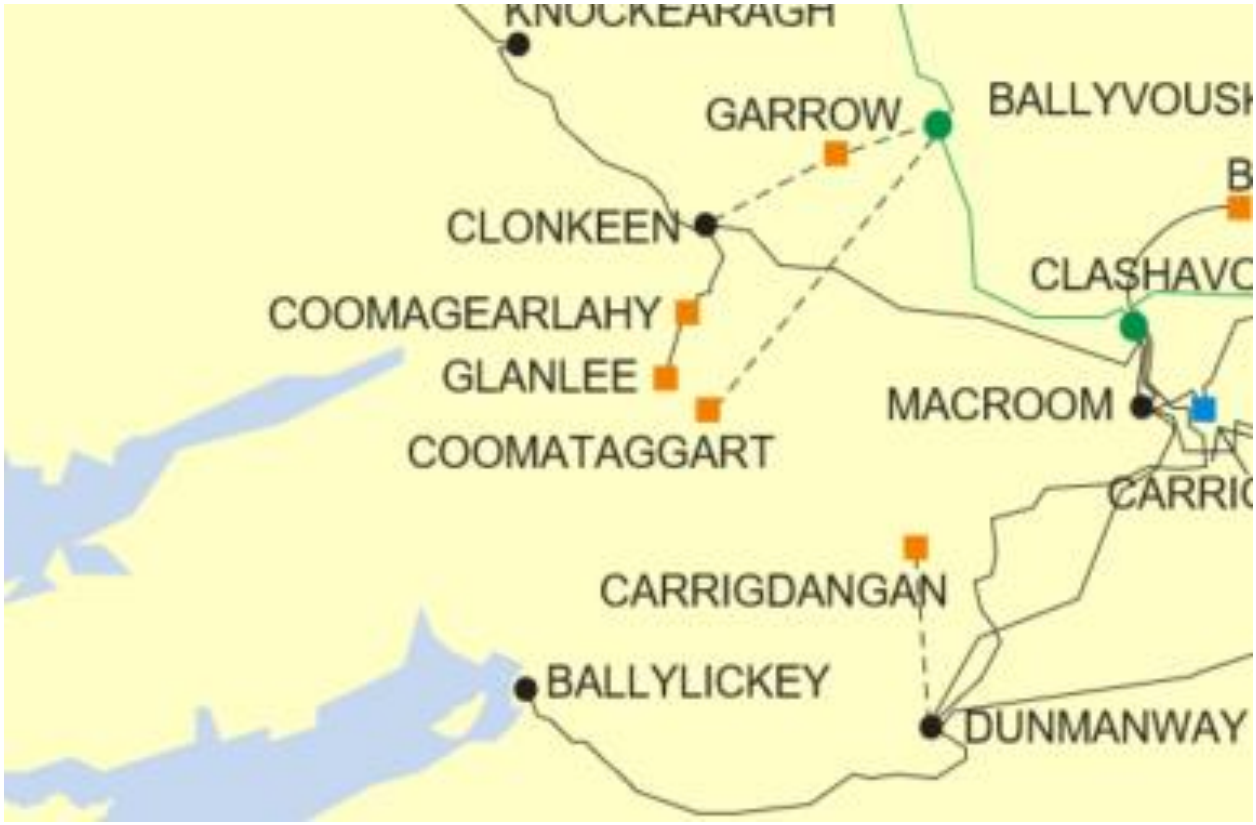

Figure 2-35 - Location of node Glanlee

Generator	SO	Capacity	Type	Status
Glanlee (1)	TSO	29.8	wind priority	connected

Table 2-56 - Generation Included in Study for Node Glanlee

The wind priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	30	30	30				
Installed Capacity (MW)	2029	30	30	30	30			
Installed Capacity (MW)	FG			30		30	30	30
Available Energy (GWh)	2027	96	96	96				
Available Energy (GWh)	2029	96	96	96	96			
Available Energy (GWh)	FG			96		96	96	96
Generation (GWh)	2027	92	90	88				
Generation (GWh)	2029	96	95	93	92			
Generation (GWh)	FG			96		94	93	92
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	6 %				
Curtailment (%)	2029	0 %	1 %	3 %	4 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	4 %	6 %	8 %				
Total Dispatch Down (%)	2029	0 %	1 %	3 %	4 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-57 - Surplus, Curtailment and Constraint for Wind priority for Node Glanlee

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	30	
Installed Capacity (MW)	2029 (pro-rata)	30	
Installed Capacity (MW)	FG (pro-rata)		30
Available Energy (GWh)	2027 (GF)	96	
Available Energy (GWh)	2029 (pro-rata)	96	
Available Energy (GWh)	FG (pro-rata)		96
Generation (GWh)	2027 (GF)	93	
Generation (GWh)	2029 (pro-rata)	94	
Generation (GWh)	FG (pro-rata)		91
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		6 %

Table 2-58 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Glanlee

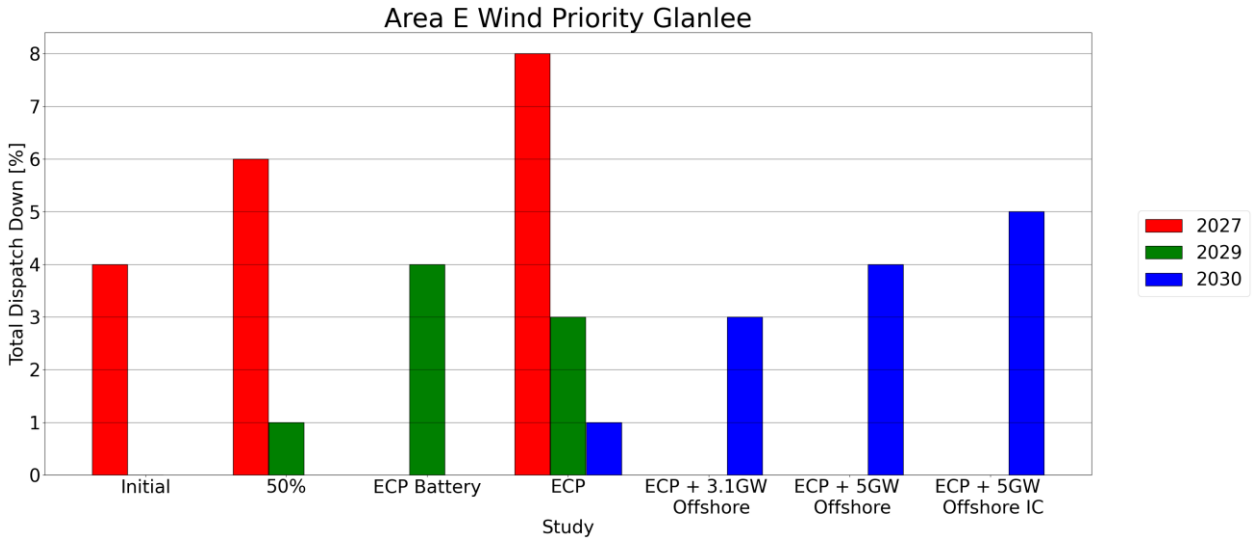

Figure 2-36 - Total Dispatch Down for Wind priority for Node Glanlee

2.15 Glenlara

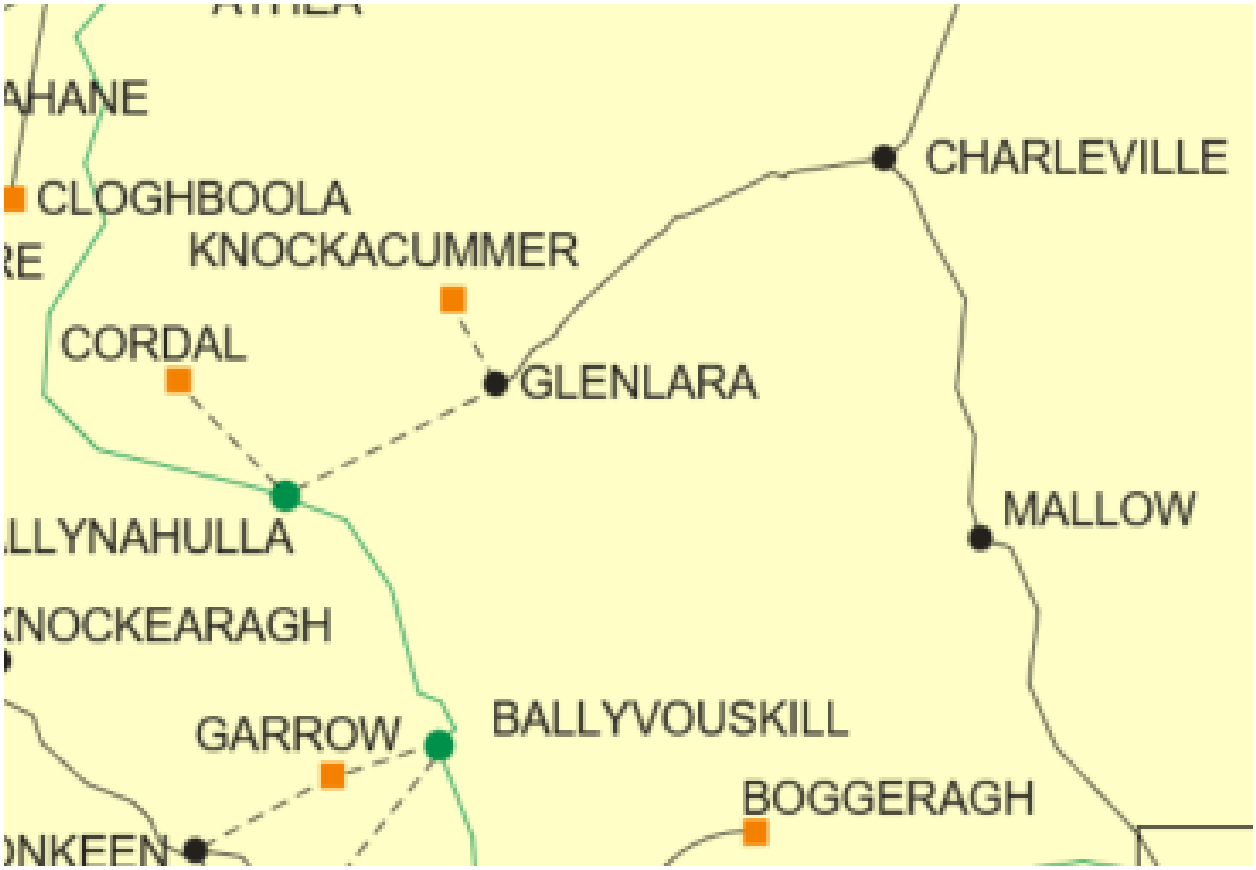

Figure 2-37 - Location of node Glenlara

Generator	SO	Capacity	Type	Status
Taurbeg (1)	DSO	26.0	wind priority	connected
Dromalour	DSO	4.95	solar not priority	connected

Table 2-59 - Generation Included in Study for Node Glenlara

The solar not priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	5	5	5				
Installed Capacity (MW)	2029	5	5	5	5			
Installed Capacity (MW)	FG			5		5	5	5
Available Energy (GWh)	2027	6	6	6				
Available Energy (GWh)	2029	6	6	6	6			
Available Energy (GWh)	FG			6		6	6	6
Generation (GWh)	2027	6	5	5				
Generation (GWh)	2029	6	5	5	5			
Generation (GWh)	FG			5		5	5	4
Surplus (%)	2027	1 %	6 %	14 %				
Surplus (%)	2029	0 %	3 %	9 %	15 %			
Surplus (%)	FG			5 %		11 %	16 %	21 %
Curtailment (%)	2027	1 %	2 %	4 %				
Curtailment (%)	2029	0 %	1 %	3 %	5 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027	2 %	2 %	1 %				
Constraint (%)	2029	1 %	0 %	1 %	0 %			
Constraint (%)	FG			1 %		1 %	1 %	1 %
Total Dispatch Down (%)	2027	3 %	10 %	19 %				
Total Dispatch Down (%)	2029	2 %	5 %	12 %	20 %			
Total Dispatch Down (%)	FG			8 %		14 %	18 %	24 %

Table 2-60 - Surplus, Curtailment and Constraint for Solar non-priority for Node Glenlara

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	5	
Installed Capacity (MW)	2029 (pro-rata)	5	
Installed Capacity (MW)	FG (pro-rata)		5
Available Energy (GWh)	2027 (GF)	6	
Available Energy (GWh)	2029 (pro-rata)	6	
Available Energy (GWh)	FG (pro-rata)		6
Generation (GWh)	2027 (GF)	5	
Generation (GWh)	2029 (pro-rata)	5	
Generation (GWh)	FG (pro-rata)		5
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	3 %	
Surplus (%)	FG (pro-rata)		11 %
Curtailment (%)	2027 (GF)	2 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	2 %	
Constraint (%)	2029 (pro-rata)	0 %	
Constraint (%)	FG (pro-rata)		1 %
Total Dispatch Down (%)	2027 (GF)	10 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		14 %

Table 2-61 - Surplus, Curtailment and Constraint for Solar non-priority with sensitivity for Node Glenlara

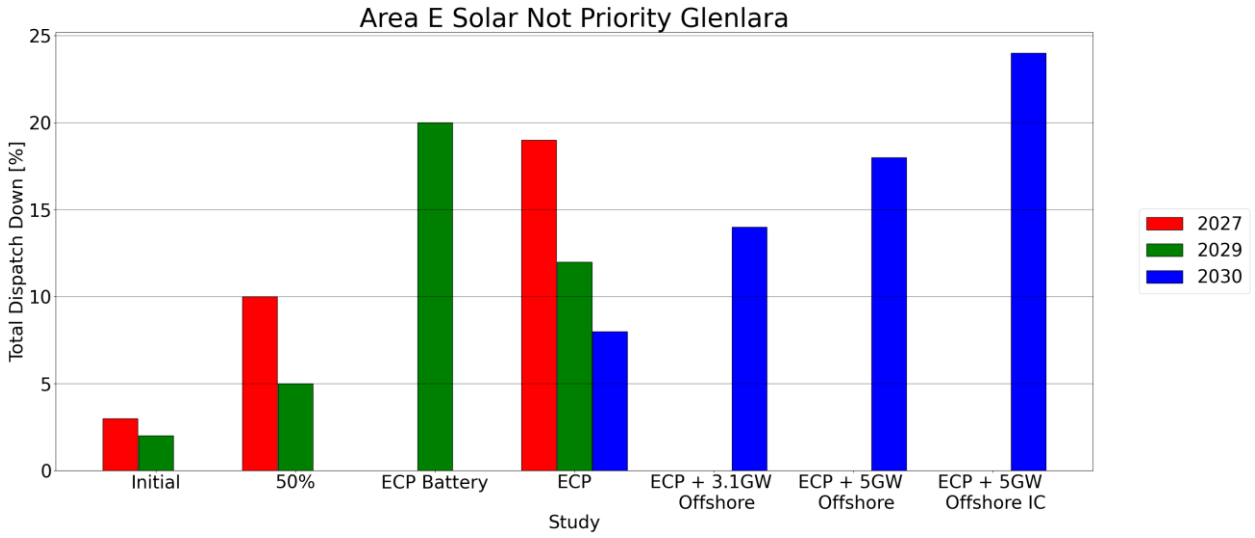

Figure 2-38 - Total Dispatch Down for Solar not priority for Node Glenlara

2.16 Glenlara 220kv side

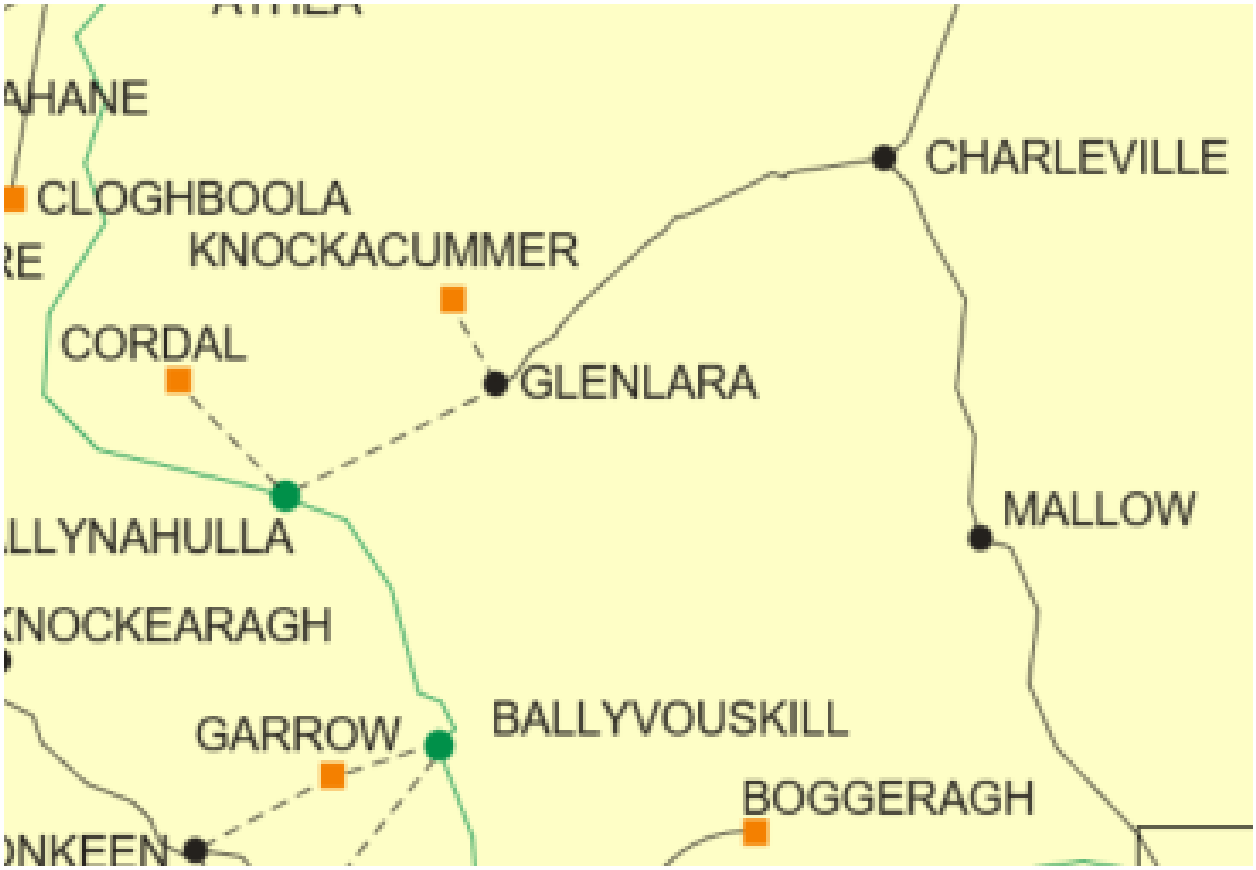

Figure 2-39 - Location of node Glenlara 220kv side

Generator	SO	Capacity	Type	Status
Dromdeeveen (1)	DSO	10.5	wind priority	connected
Mauricetown (Glenduff) Wind Farm	DSO	13.8	wind not priority	connected
Dromdeeveen (2)	DSO	16.5	wind priority	connected

Table 2-62 - Generation Included in Study for Node Glenlara 220kv side

The wind not priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	14	14	14				
Installed Capacity (MW)	2029	14	14	14	14			
Installed Capacity (MW)	FG			14		14	14	14
Available Energy (GWh)	2027	45	45	45				
Available Energy (GWh)	2029	45	45	45	45			
Available Energy (GWh)	FG			45		45	45	45
Generation (GWh)	2027	42	40	36				
Generation (GWh)	2029	41	41	39	37			
Generation (GWh)	FG			40		33	32	28
Surplus (%)	2027	1 %	6 %	13 %				
Surplus (%)	2029	0 %	2 %	6 %	9 %			
Surplus (%)	FG			3 %		12 %	23 %	31 %
Curtailment (%)	2027	1 %	3 %	4 %				
Curtailment (%)	2029	0 %	1 %	2 %	3 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	7 %	6 %	5 %	6 %			
Constraint (%)	FG			6 %		12 %	3 %	3 %
Total Dispatch Down (%)	2027	5 %	11 %	19 %				
Total Dispatch Down (%)	2029	7 %	9 %	13 %	17 %			
Total Dispatch Down (%)	FG			9 %		26 %	28 %	37 %

Table 2-63 - Surplus, Curtailment and Constraint for Wind non-priority for Node Glenlara 220kv side

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	14	
Installed Capacity (MW)	2029 (pro-rata)	14	
Installed Capacity (MW)	FG (pro-rata)		14
Available Energy (GWh)	2027 (GF)	45	
Available Energy (GWh)	2029 (pro-rata)	45	
Available Energy (GWh)	FG (pro-rata)		45
Generation (GWh)	2027 (GF)	36	
Generation (GWh)	2029 (pro-rata)	43	
Generation (GWh)	FG (pro-rata)		37
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	2 %	
Surplus (%)	FG (pro-rata)		12 %
Curtailment (%)	2027 (GF)	3 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	10 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	19 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		18 %

Table 2-64 - Surplus, Curtailment and Constraint for Wind non-priority with sensitivity for Node Glenlara 220kv side

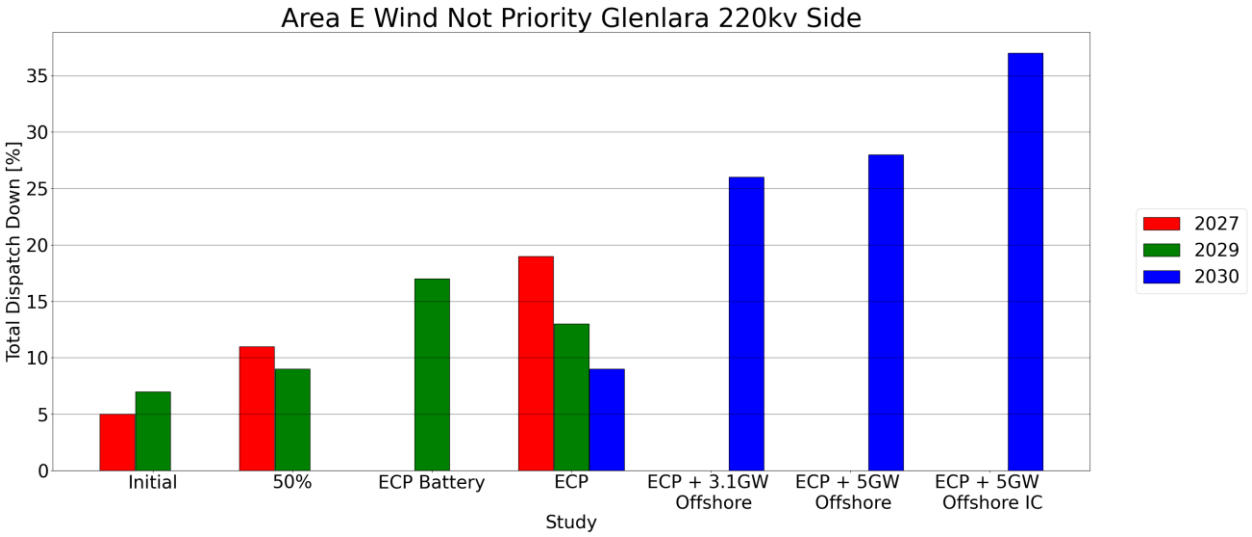

Figure 2-40 - Total Dispatch Down for Wind not priority for Node Glenlara 220kv side

The wind priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	53	53	53				
Installed Capacity (MW)	2029	53	53	53	53			
Installed Capacity (MW)	FG			53		53	53	53
Available Energy (GWh)	2027	172	172	172				
Available Energy (GWh)	2029	172	172	172	172			
Available Energy (GWh)	FG			172		172	172	172
Generation (GWh)	2027	164	161	157				
Generation (GWh)	2029	171	169	166	164			
Generation (GWh)	FG			170		167	165	164
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	6 %				
Curtailment (%)	2029	0 %	1 %	3 %	4 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	4 %	6 %	8 %				
Total Dispatch Down (%)	2029	0 %	1 %	3 %	4 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-65 - Surplus, Curtailment and Constraint for Wind priority for Node Glenlara 220kv side

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	53	
Installed Capacity (MW)	2029 (pro-rata)	53	
Installed Capacity (MW)	FG (pro-rata)		53
Available Energy (GWh)	2027 (GF)	172	
Available Energy (GWh)	2029 (pro-rata)	172	
Available Energy (GWh)	FG (pro-rata)		172
Generation (GWh)	2027 (GF)	165	
Generation (GWh)	2029 (pro-rata)	166	
Generation (GWh)	FG (pro-rata)		161
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		6 %

Table 2-66 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Glenlara 220kv side

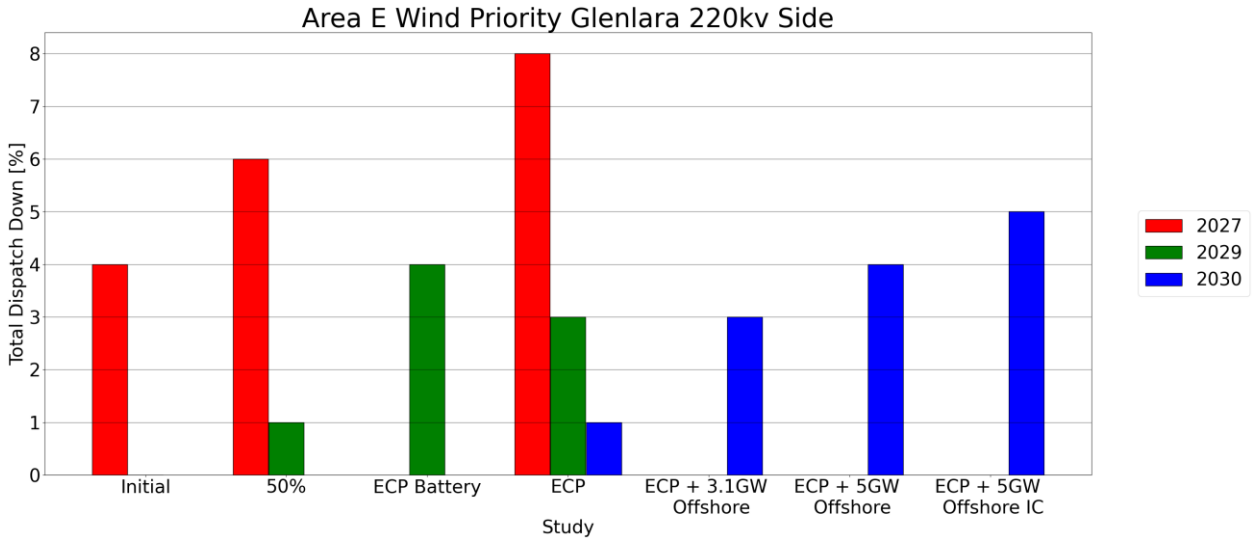

Figure 2-41 - Total Dispatch Down for Wind priority for Node Glenlara 220kv side

2.17 Kilpaddoge

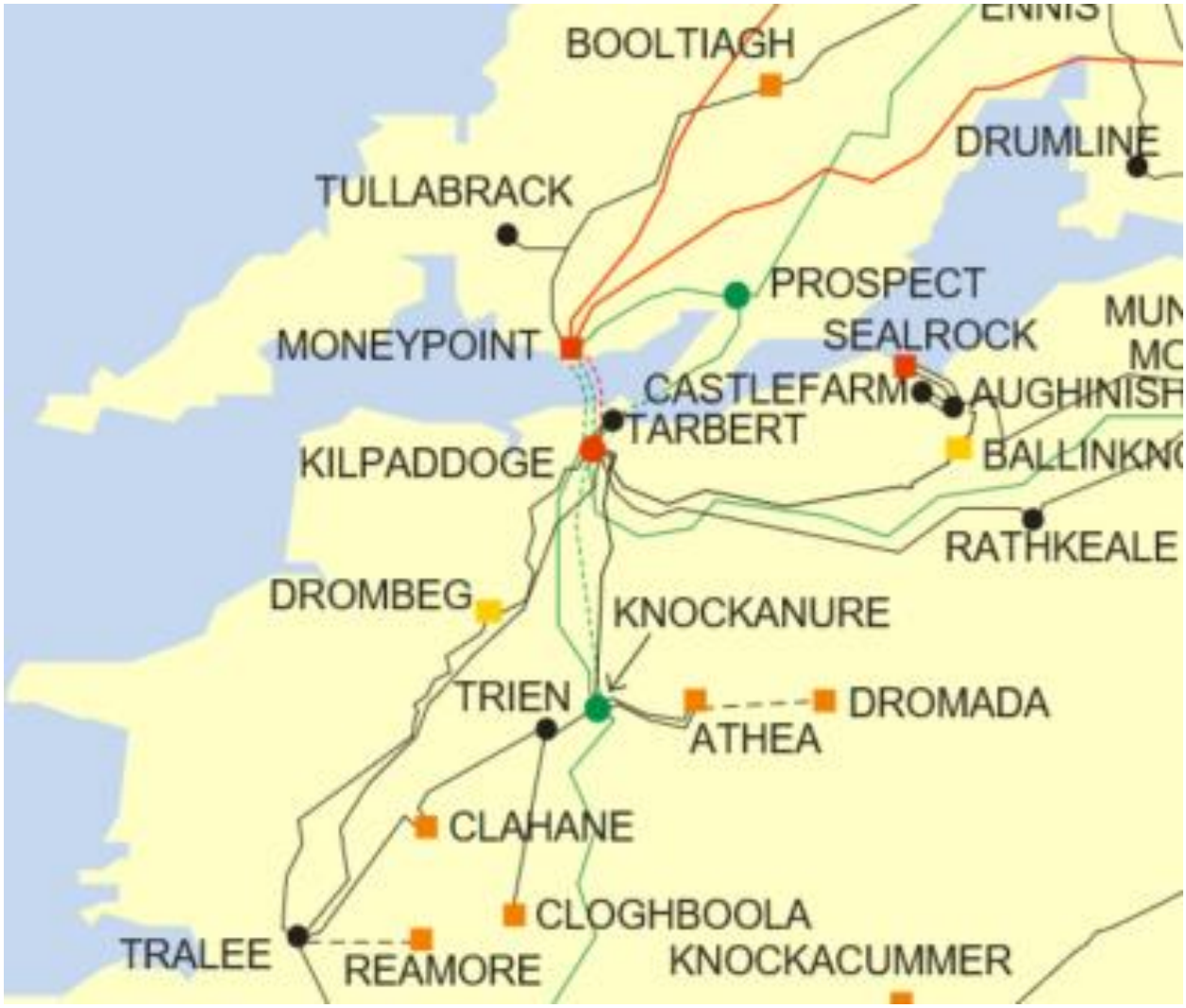

Figure 2-42 - Location of node Kilpaddoge

Generator	SO	Capacity	Type	Status
Leanamore (1) (formerly Tarbert (1))	DSO	18.0	wind priority	connected
Kelwin Power Plant	TSO	37.0	wind priority	connected

Table 2-67 - Generation Included in Study for Node Kilpaddoge

The wind priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	55	55	55				
Installed Capacity (MW)	2029	55	55	55	55			
Installed Capacity (MW)	FG			55		55	55	55
Available Energy (GWh)	2027	178	178	178				
Available Energy (GWh)	2029	178	178	178	178			
Available Energy (GWh)	FG			178		178	178	178
Generation (GWh)	2027	171	167	163				
Generation (GWh)	2029	178	175	172	170			
Generation (GWh)	FG			177		173	171	170
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	6 %				
Curtailment (%)	2029	0 %	1 %	3 %	4 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	4 %	6 %	8 %				
Total Dispatch Down (%)	2029	0 %	1 %	3 %	4 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-68 - Surplus, Curtailment and Constraint for Wind priority for Node Kilpaddoge

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	55	
Installed Capacity (MW)	2029 (pro-rata)	55	
Installed Capacity (MW)	FG (pro-rata)		55
Available Energy (GWh)	2027 (GF)	178	
Available Energy (GWh)	2029 (pro-rata)	178	
Available Energy (GWh)	FG (pro-rata)		178
Generation (GWh)	2027 (GF)	171	
Generation (GWh)	2029 (pro-rata)	173	
Generation (GWh)	FG (pro-rata)		167
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		6 %

Table 2-69 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Kilpaddoge

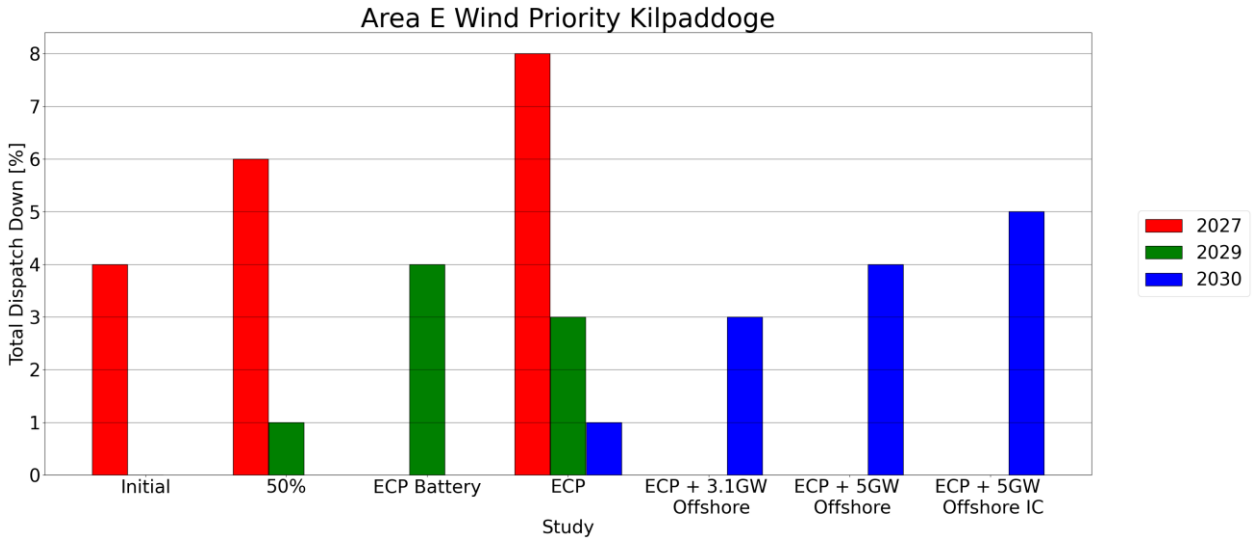

Figure 2-43 - Total Dispatch Down for Wind priority for Node Kilpaddoge

2.18 Knockacummer

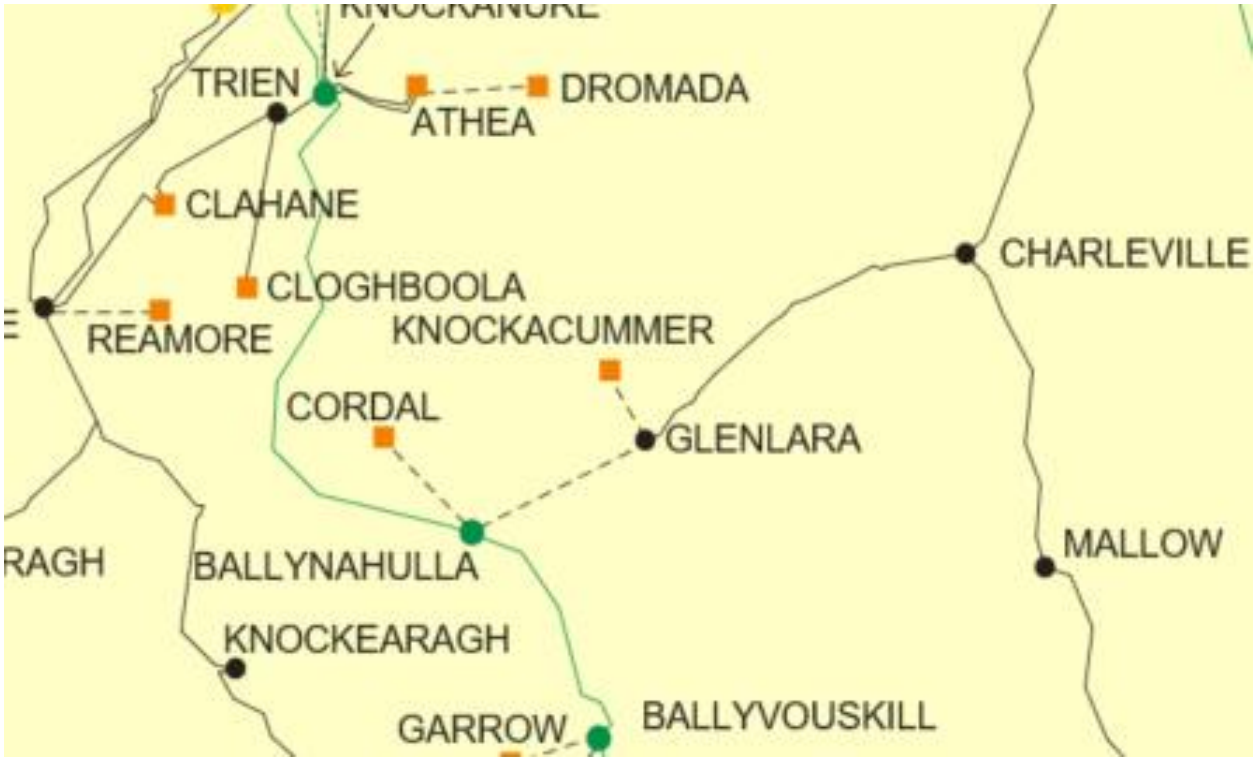

Figure 2-44 - Location of node Knockacummer

Generator	SO	Capacity	Type	Status
Knockacummer (1)	TSO	100.0	wind priority	connected

Table 2-70 - Generation Included in Study for Node Knockacummer

The wind priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	100	100	100				
Installed Capacity (MW)	2029	100	100	100	100			
Installed Capacity (MW)	FG			100		100	100	100
Available Energy (GWh)	2027	324	324	324				
Available Energy (GWh)	2029	324	324	324	324			
Available Energy (GWh)	FG			324		324	324	324
Generation (GWh)	2027	310	303	296				
Generation (GWh)	2029	323	319	313	310			
Generation (GWh)	FG			321		315	312	309
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	6 %				
Curtailment (%)	2029	0 %	1 %	3 %	4 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	4 %	6 %	8 %				
Total Dispatch Down (%)	2029	0 %	1 %	3 %	4 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-71 - Surplus, Curtailment and Constraint for Wind priority for Node Knockacummer

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	100	
Installed Capacity (MW)	2029 (pro-rata)	100	
Installed Capacity (MW)	FG (pro-rata)		100
Available Energy (GWh)	2027 (GF)	324	
Available Energy (GWh)	2029 (pro-rata)	324	
Available Energy (GWh)	FG (pro-rata)		324
Generation (GWh)	2027 (GF)	311	
Generation (GWh)	2029 (pro-rata)	314	
Generation (GWh)	FG (pro-rata)		304
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		6 %

Table 2-72 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Knockacummer

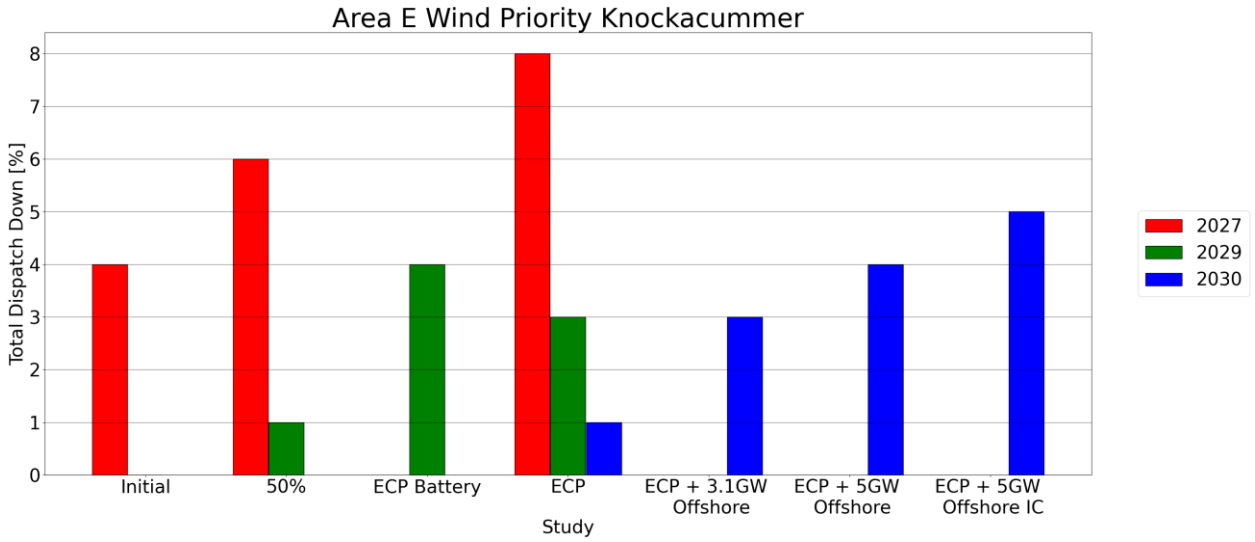

Figure 2-45 - Total Dispatch Down for Wind priority for Node Knockacummer

2.19 Knockearagh

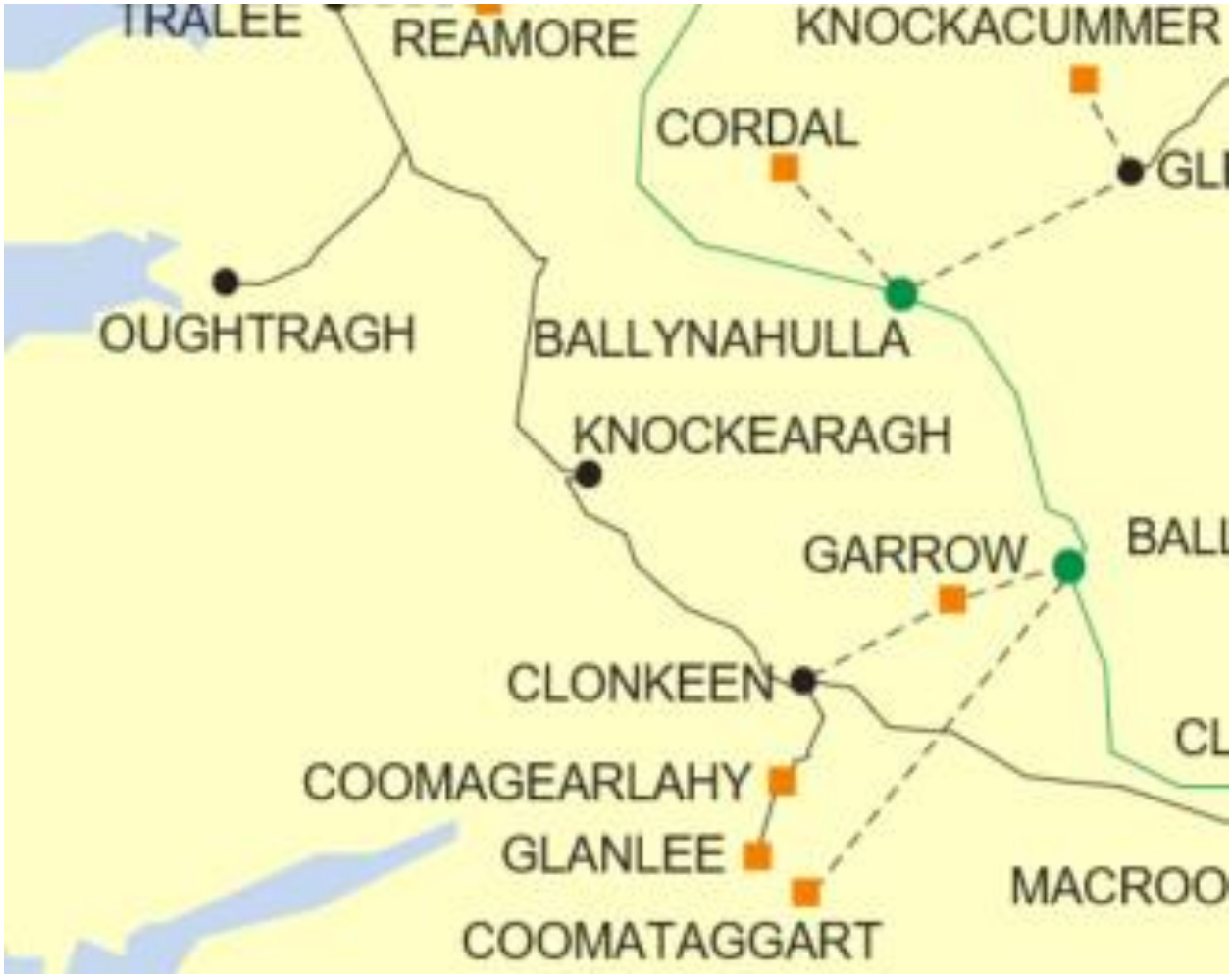

Figure 2-46 - Location of node Knockearagh

Generator	SO	Capacity	Type	Status
Gneeves (1)	DSO	9.35	wind priority	connected
WEDcross (1)	DSO	4.5	wind uncontrolled	connected
Brighter Community Solar Farm Kilcummin	DSO	4.99	solar not priority	due to connect

Table 2-73 - Generation Included in Study for Node Knockearagh

The solar not priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027		2	5				
Installed Capacity (MW)	2029		2	5	5			
Installed Capacity (MW)	FG			5		5	5	5
Available Energy (GWh)	2027		3	6				
Available Energy (GWh)	2029		3	6	6			
Available Energy (GWh)	FG			6		6	6	6
Generation (GWh)	2027		3	5				
Generation (GWh)	2029		3	5	5			
Generation (GWh)	FG			5		5	5	4
Surplus (%)	2027		6 %	14 %				
Surplus (%)	2029		3 %	9 %	15 %			
Surplus (%)	FG			5 %		11 %	16 %	21 %
Curtailment (%)	2027		2 %	4 %				
Curtailment (%)	2029		1 %	3 %	5 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027		2 %	1 %				
Constraint (%)	2029		0 %	1 %	0 %			
Constraint (%)	FG			1 %		1 %	1 %	1 %
Total Dispatch Down (%)	2027		10 %	19 %				
Total Dispatch Down (%)	2029		5 %	12 %	20 %			
Total Dispatch Down (%)	FG			8 %		14 %	18 %	24 %

Table 2-74 - Surplus, Curtailment and Constraint for Solar non-priority for Node Knockearagh

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	2	
Installed Capacity (MW)	2029 (pro-rata)	2	
Installed Capacity (MW)	FG (pro-rata)		5
Available Energy (GWh)	2027 (GF)	3	
Available Energy (GWh)	2029 (pro-rata)	3	
Available Energy (GWh)	FG (pro-rata)		6
Generation (GWh)	2027 (GF)	3	
Generation (GWh)	2029 (pro-rata)	3	
Generation (GWh)	FG (pro-rata)		5
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	3 %	
Surplus (%)	FG (pro-rata)		11 %
Curtailment (%)	2027 (GF)	2 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	2 %	
Constraint (%)	2029 (pro-rata)	0 %	
Constraint (%)	FG (pro-rata)		1 %
Total Dispatch Down (%)	2027 (GF)	10 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		14 %

Table 2-75 - Surplus, Curtailment and Constraint for Solar non-priority with sensitivity for Node Knockearagh

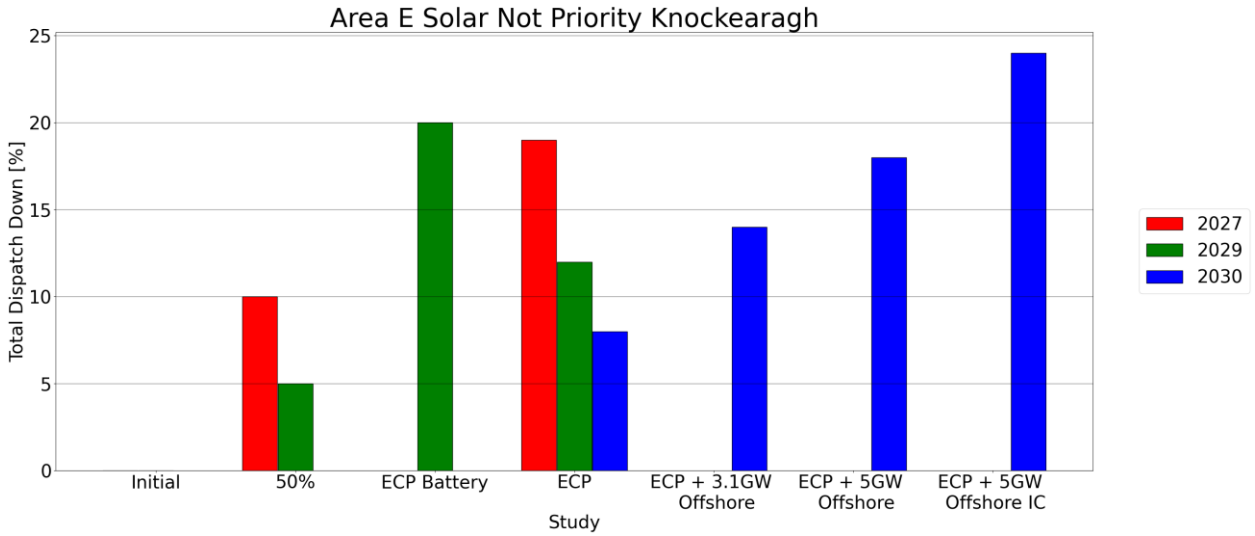

Figure 2-47 - Total Dispatch Down for Solar not priority for Node Knockearagh

The wind priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	9	9	9				
Installed Capacity (MW)	2029	9	9	9	9			
Installed Capacity (MW)	FG			9		9	9	9
Available Energy (GWh)	2027	30	30	30				
Available Energy (GWh)	2029	30	30	30	30			
Available Energy (GWh)	FG			30		30	30	30
Generation (GWh)	2027	29	28	28				
Generation (GWh)	2029	30	30	29	29			
Generation (GWh)	FG			30		29	29	29
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	6 %				
Curtailment (%)	2029	0 %	1 %	3 %	4 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	4 %	6 %	8 %				
Total Dispatch Down (%)	2029	0 %	1 %	3 %	4 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-76 - Surplus, Curtailment and Constraint for Wind priority for Node Knockearagh

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	9	
Installed Capacity (MW)	2029 (pro-rata)	9	
Installed Capacity (MW)	FG (pro-rata)		9
Available Energy (GWh)	2027 (GF)	30	
Available Energy (GWh)	2029 (pro-rata)	30	
Available Energy (GWh)	FG (pro-rata)		30
Generation (GWh)	2027 (GF)	29	
Generation (GWh)	2029 (pro-rata)	29	
Generation (GWh)	FG (pro-rata)		28
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		6 %

Table 2-77 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Knockearagh

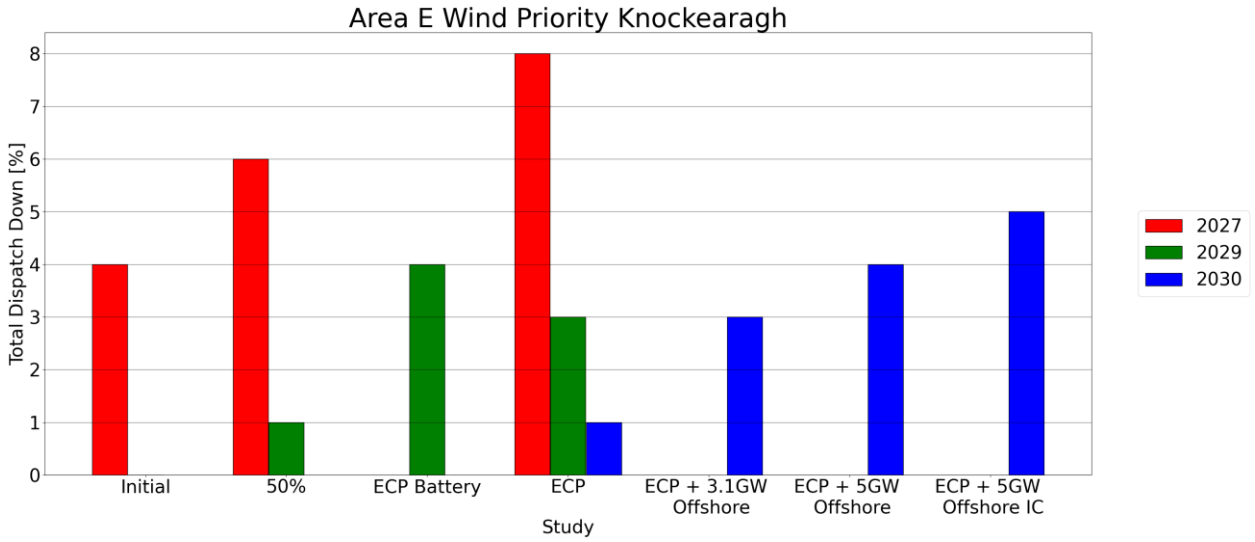

Figure 2-48 - Total Dispatch Down for Wind priority for Node Knockearagh

2.20 Limerick

Figure 2-49 - Location of node Limerick

Generator	SO	Capacity	Type	Status
Islanduane Solar Farm	DSO	4.95	solar not priority	due to connect

Table 2-78 - Generation Included in Study for Node Limerick

The solar not priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027		2	5				
Installed Capacity (MW)	2029		2	5	5			
Installed Capacity (MW)	FG			5		5	5	5
Available Energy (GWh)	2027		3	6				
Available Energy (GWh)	2029		3	6	6			
Available Energy (GWh)	FG			6		6	6	6
Generation (GWh)	2027		3	5				
Generation (GWh)	2029		3	5	5			
Generation (GWh)	FG			5		5	5	4
Surplus (%)	2027		6 %	14 %				
Surplus (%)	2029		3 %	9 %	15 %			
Surplus (%)	FG			5 %		11 %	16 %	21 %
Curtailment (%)	2027		2 %	4 %				
Curtailment (%)	2029		1 %	3 %	5 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027		0 %	0 %				
Constraint (%)	2029		0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027		8 %	18 %				
Total Dispatch Down (%)	2029		5 %	12 %	20 %			
Total Dispatch Down (%)	FG			6 %		13 %	17 %	24 %

Table 2-79 - Surplus, Curtailment and Constraint for Solar non-priority for Node Limerick

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	2	
Installed Capacity (MW)	2029 (pro-rata)	2	
Installed Capacity (MW)	FG (pro-rata)		5
Available Energy (GWh)	2027 (GF)	3	
Available Energy (GWh)	2029 (pro-rata)	3	
Available Energy (GWh)	FG (pro-rata)		6
Generation (GWh)	2027 (GF)	3	
Generation (GWh)	2029 (pro-rata)	3	
Generation (GWh)	FG (pro-rata)		5
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	3 %	
Surplus (%)	FG (pro-rata)		11 %
Curtailment (%)	2027 (GF)	2 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	0 %	
Constraint (%)	FG (pro-rata)		0 %
Total Dispatch Down (%)	2027 (GF)	8 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		13 %

Table 2-80 - Surplus, Curtailment and Constraint for Solar non-priority with sensitivity for Node Limerick

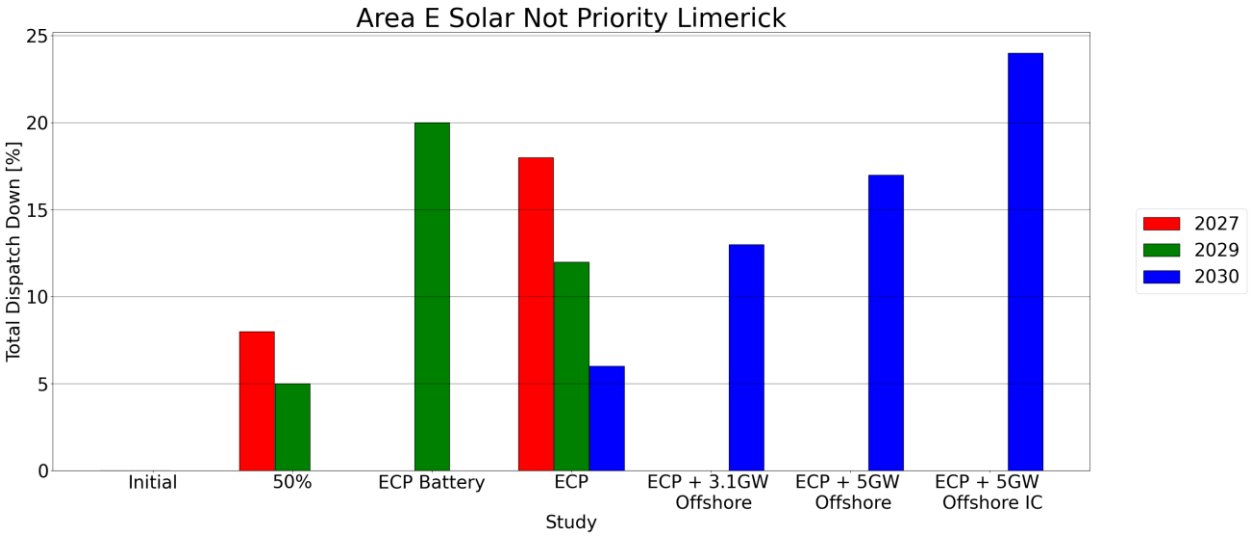

Figure 2-50 - Total Dispatch Down for Solar not priority for Node Limerick

2.21 Mallow

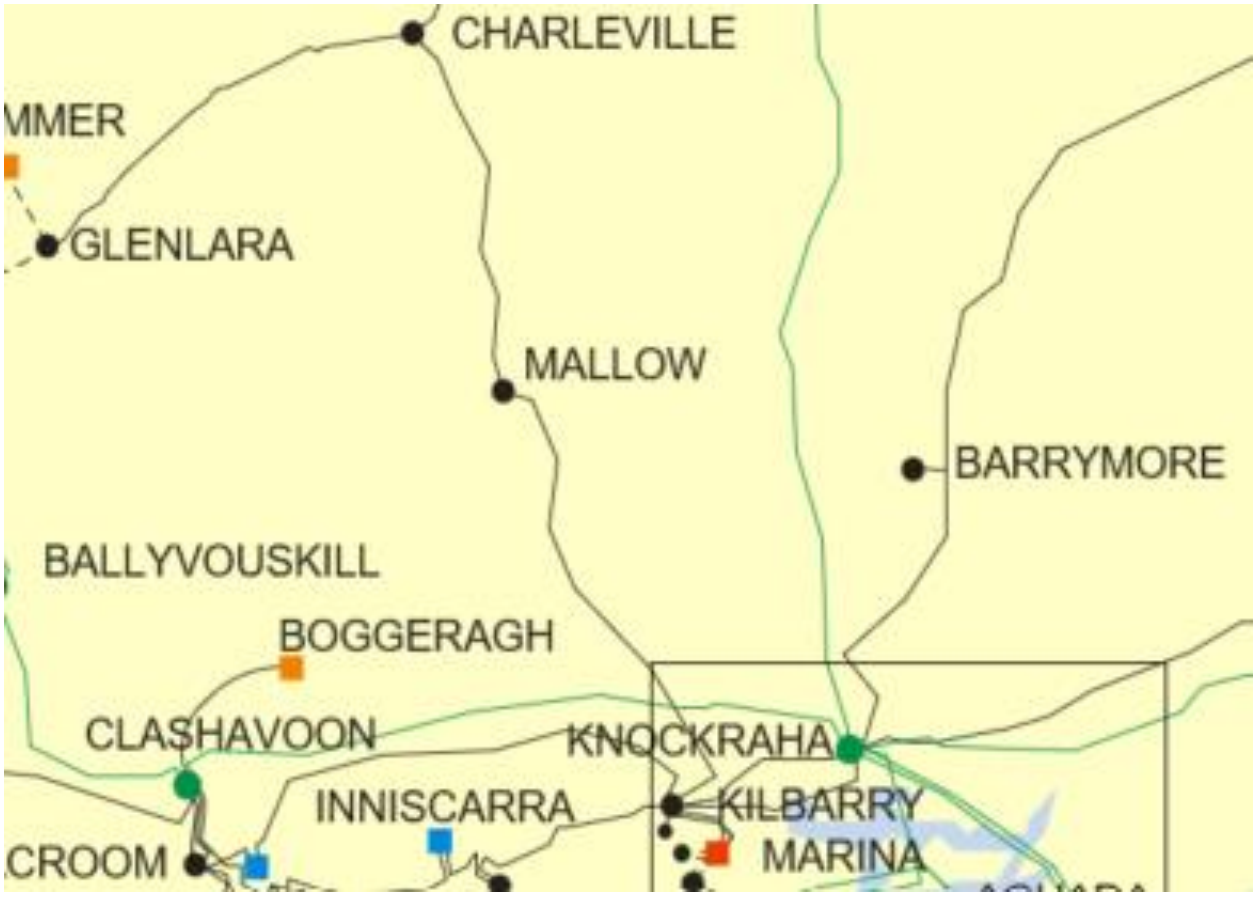

Figure 2-51 - Location of node Mallow

Generator	SO	Capacity	Type	Status
Crossfield	DSO	4.95	solar not priority	connected
Knockbarry Solar Farm (prev Buttevant)	DSO	4.99	solar not priority	due to connect

Table 2-81 - Generation Included in Study for Node Mallow

The solar not priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	5	7	10				
Installed Capacity (MW)	2029	5	7	10	10			
Installed Capacity (MW)	FG			10		10	10	10
Available Energy (GWh)	2027	6	9	12				
Available Energy (GWh)	2029	6	9	12	12			
Available Energy (GWh)	FG			12		12	12	12
Generation (GWh)	2027	6	8	9				
Generation (GWh)	2029	6	8	10	9			
Generation (GWh)	FG			11		10	10	9
Surplus (%)	2027	1 %	6 %	14 %				
Surplus (%)	2029	0 %	3 %	9 %	15 %			
Surplus (%)	FG			5 %		11 %	16 %	21 %
Curtailment (%)	2027	1 %	2 %	4 %				
Curtailment (%)	2029	0 %	1 %	3 %	5 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027	2 %	2 %	1 %				
Constraint (%)	2029	1 %	0 %	1 %	0 %			
Constraint (%)	FG			1 %		1 %	1 %	1 %
Total Dispatch Down (%)	2027	3 %	10 %	19 %				
Total Dispatch Down (%)	2029	2 %	5 %	12 %	20 %			
Total Dispatch Down (%)	FG			8 %		14 %	18 %	24 %

Table 2-82 - Surplus, Curtailment and Constraint for Solar non-priority for Node Mallow

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	7	
Installed Capacity (MW)	2029 (pro-rata)	7	
Installed Capacity (MW)	FG (pro-rata)		10
Available Energy (GWh)	2027 (GF)	9	
Available Energy (GWh)	2029 (pro-rata)	9	
Available Energy (GWh)	FG (pro-rata)		12
Generation (GWh)	2027 (GF)	8	
Generation (GWh)	2029 (pro-rata)	8	
Generation (GWh)	FG (pro-rata)		10
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	3 %	
Surplus (%)	FG (pro-rata)		11 %
Curtailment (%)	2027 (GF)	2 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	2 %	
Constraint (%)	2029 (pro-rata)	0 %	
Constraint (%)	FG (pro-rata)		1 %
Total Dispatch Down (%)	2027 (GF)	10 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		14 %

Table 2-83 - Surplus, Curtailment and Constraint for Solar non-priority with sensitivity for Node Mallow

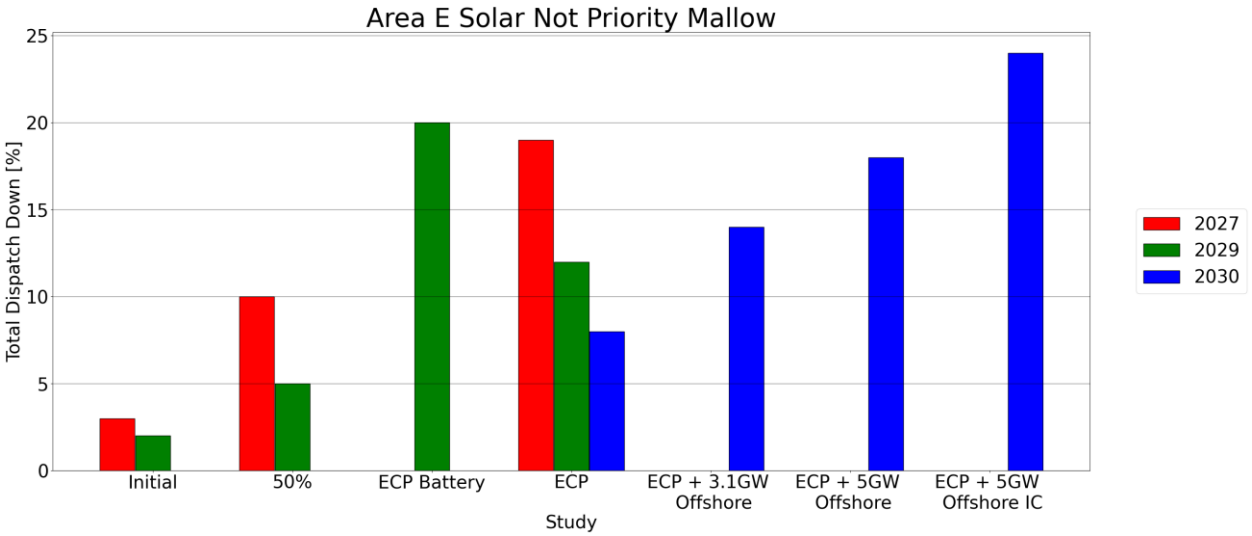

Figure 2-52 - Total Dispatch Down for Solar not priority for Node Mallow

2.22 Moneypoint

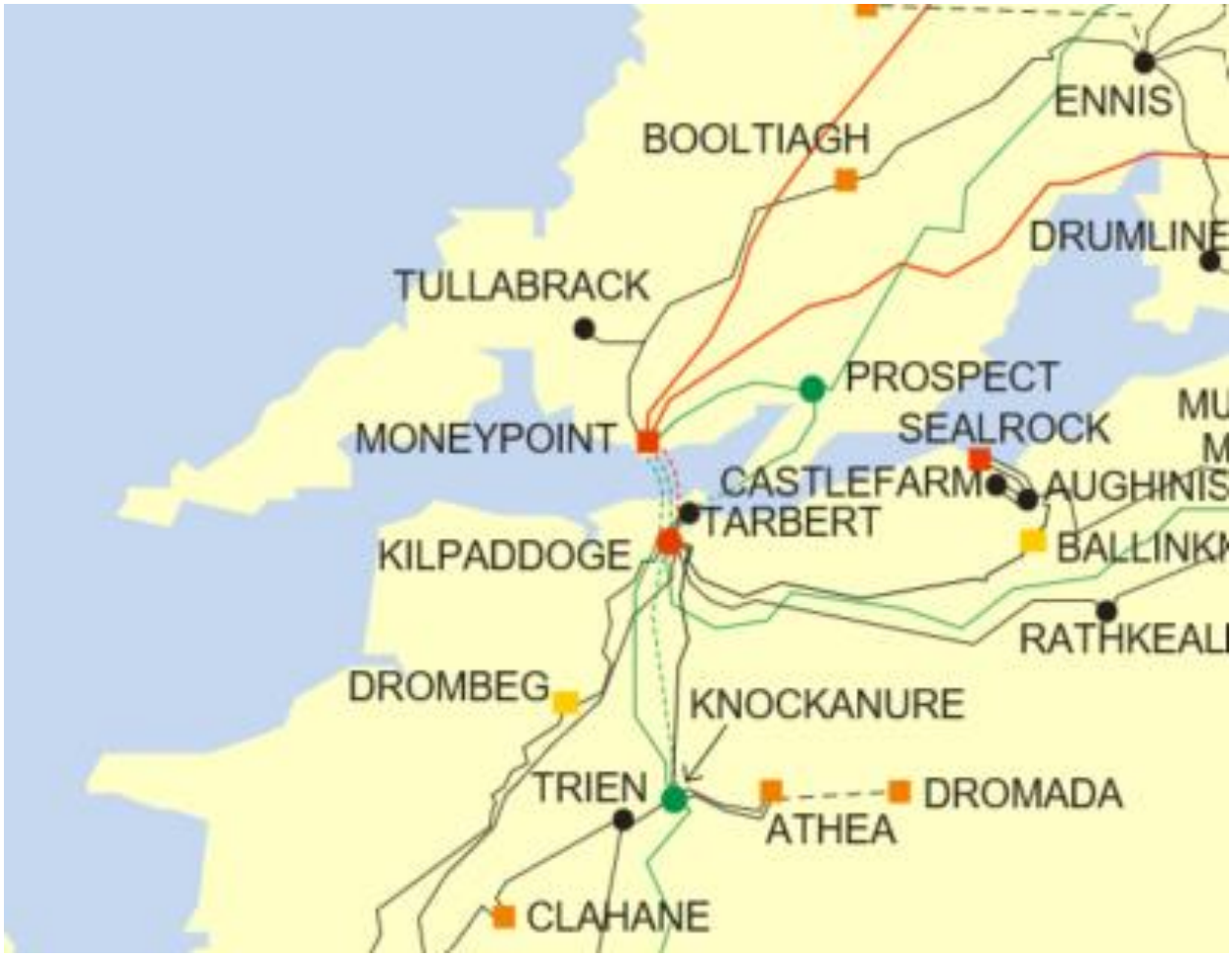

Figure 2-53 - Location of node Moneypoint

Generator	SO	Capacity	Type	Status
Moneypoint WF	TSO	17.25	wind priority	connected

Table 2-84 - Generation Included in Study for Node Moneypoint

The wind priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	17	17	17				
Installed Capacity (MW)	2029	17	17	17	17			
Installed Capacity (MW)	FG			17		17	17	17
Available Energy (GWh)	2027	56	56	56				
Available Energy (GWh)	2029	56	56	56	56			
Available Energy (GWh)	FG			56		56	56	56
Generation (GWh)	2027	55	53	52				
Generation (GWh)	2029	56	55	54	53			
Generation (GWh)	FG			55		54	54	53
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	6 %				
Curtailment (%)	2029	0 %	1 %	3 %	4 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	1 %	0 %	0 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	2 %	4 %	6 %				
Total Dispatch Down (%)	2029	0 %	1 %	3 %	4 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-85 - Surplus, Curtailment and Constraint for Wind priority for Node Moneypoint

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	17	
Installed Capacity (MW)	2029 (pro-rata)	17	
Installed Capacity (MW)	FG (pro-rata)		17
Available Energy (GWh)	2027 (GF)	56	
Available Energy (GWh)	2029 (pro-rata)	56	
Available Energy (GWh)	FG (pro-rata)		56
Generation (GWh)	2027 (GF)	54	
Generation (GWh)	2029 (pro-rata)	55	
Generation (GWh)	FG (pro-rata)		54
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	0 %	
Constraint (%)	FG (pro-rata)		1 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	2 %	
Total Dispatch Down (%)	FG (pro-rata)		4 %

Table 2-86 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Moneypoint

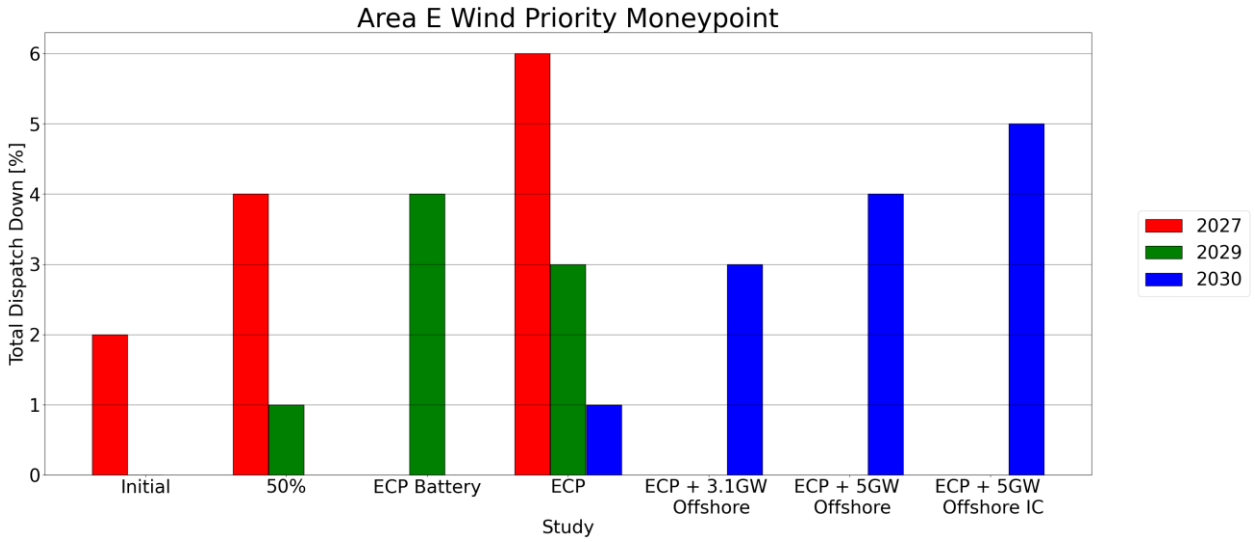

Figure 2-54 - Total Dispatch Down for Wind priority for Node Moneypoint

2.23 Moneypoint 220kv

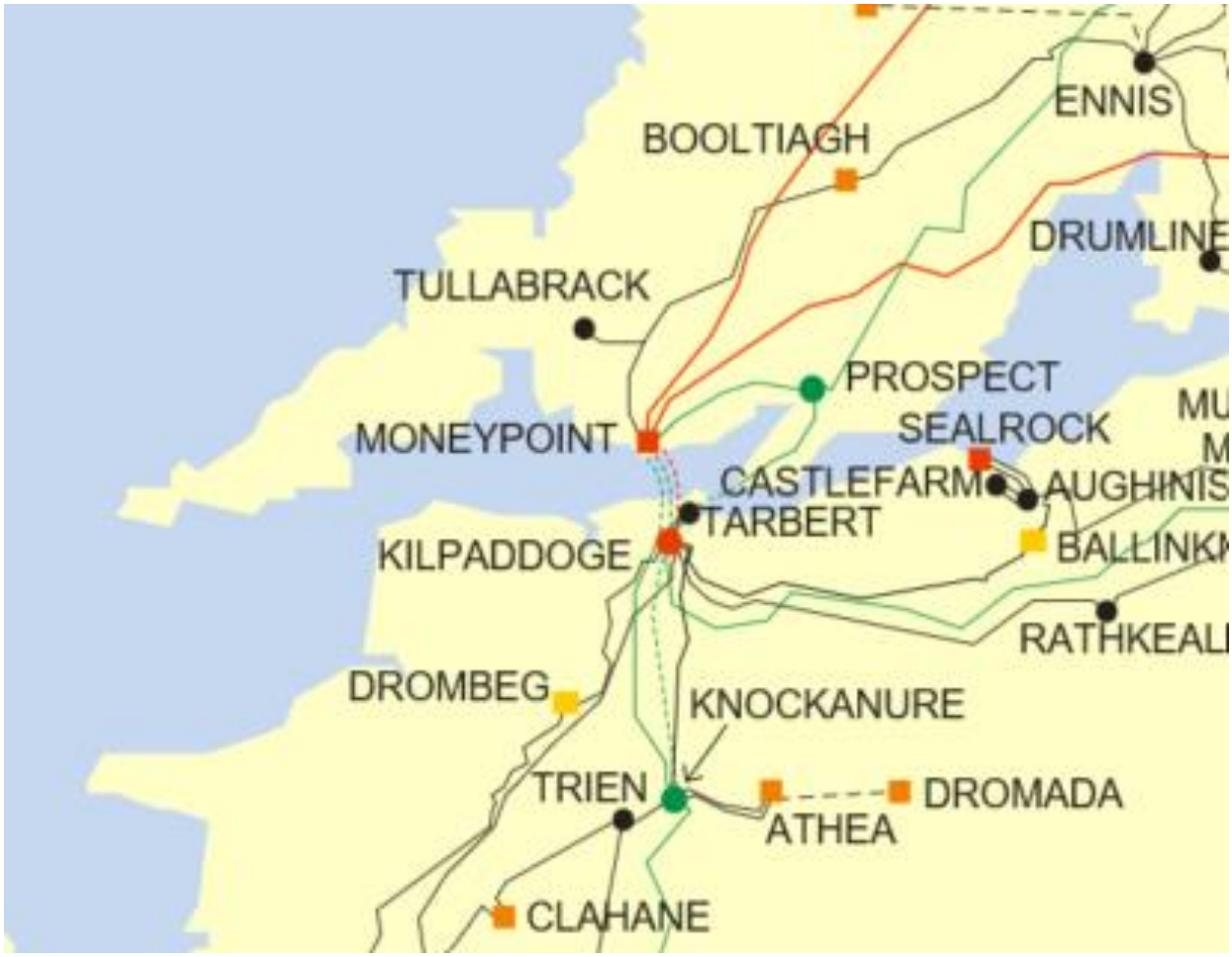

Figure 2-55 - Location of node Moneypoint 220kv

Generator	SO	Capacity	Type	Status
Sceirde Rocks	TSO	450.0	wind not priority	due to connect

Table 2-87 - Generation Included in Study for Node Moneypoint 220kv

The wind not priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027							
Installed Capacity (MW)	2029							
Installed Capacity (MW)	FG					450	450	450
Available Energy (GWh)	2027							
Available Energy (GWh)	2029							
Available Energy (GWh)	FG					1990	1990	1990
Generation (GWh)	2027							
Generation (GWh)	2029							
Generation (GWh)	FG					1728	1512	1367
Surplus (%)	2027							
Surplus (%)	2029							
Surplus (%)	FG					10 %	20 %	28 %
Curtailment (%)	2027							
Curtailment (%)	2029							
Curtailment (%)	FG					2 %	2 %	2 %
Constraint (%)	2027							
Constraint (%)	2029							
Constraint (%)	FG					1 %	2 %	1 %
Total Dispatch Down (%)	2027							
Total Dispatch Down (%)	2029							
Total Dispatch Down (%)	FG					13 %	24 %	31 %

Table 2-88 - Surplus, Curtailment and Constraint for Wind non-priority for Node Moneypoint 220kv

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)		
Installed Capacity (MW)	2029 (pro-rata)		
Installed Capacity (MW)	FG (pro-rata)		450
Available Energy (GWh)	2027 (GF)		
Available Energy (GWh)	2029 (pro-rata)		
Available Energy (GWh)	FG (pro-rata)		1990
Generation (GWh)	2027 (GF)		
Generation (GWh)	2029 (pro-rata)		
Generation (GWh)	FG (pro-rata)		1733
Surplus (%)	2027 (GF)		
Surplus (%)	2029 (pro-rata)		
Surplus (%)	FG (pro-rata)		10 %
Curtailment (%)	2027 (GF)		
Curtailment (%)	2029 (pro-rata)		
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)		
Constraint (%)	2029 (pro-rata)		
Constraint (%)	FG (pro-rata)		1 %
Total Dispatch Down (%)	2027 (GF)		
Total Dispatch Down (%)	2029 (pro-rata)		
Total Dispatch Down (%)	FG (pro-rata)		13 %

Table 2-89 - Surplus, Curtailment and Constraint for Wind non-priority with sensitivity for Node Moneypoint 220kv

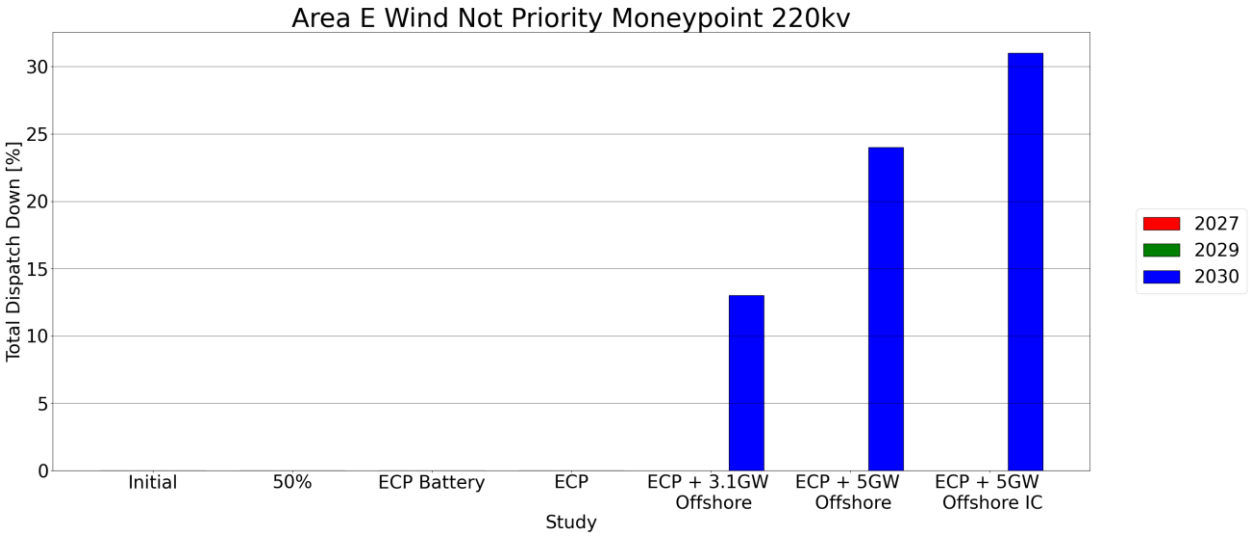

Figure 2-56 - Total Dispatch Down for Wind not priority for Node Moneypoint 220kv

2.24 Oughtragh

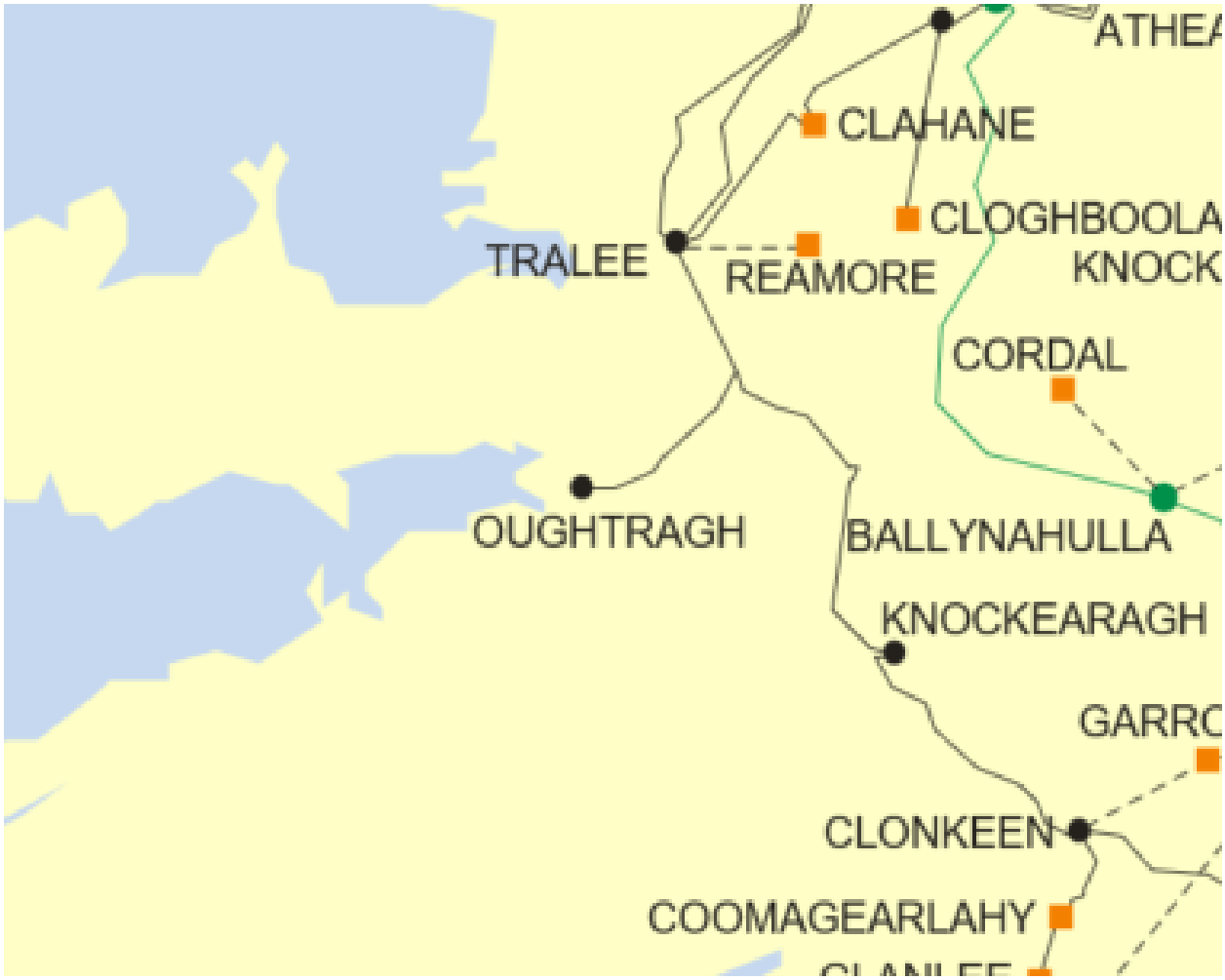

Figure 2-57 - Location of node Oughtragh

Generator	SO	Capacity	Type	Status
Knockaneden (1)	DSO	9.0	wind priority	connected
Maine Solar	DSO	4.0	solar not priority	due to connect
Knockreagh Community Solar	DSO	4.4	solar not priority	due to connect
Maine Solar Extension	DSO	1.0	solar not priority	due to connect

Table 2-90 - Generation Included in Study for Node Oughtragh

The solar not priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027		5	9				
Installed Capacity (MW)	2029		5	9	9			
Installed Capacity (MW)	FG			9		9	9	9
Available Energy (GWh)	2027		6	11				
Available Energy (GWh)	2029		6	11	11			
Available Energy (GWh)	FG			11		11	11	11
Generation (GWh)	2027		5	9				
Generation (GWh)	2029		5	10	9			
Generation (GWh)	FG			10		10	9	8
Surplus (%)	2027		6 %	14 %				
Surplus (%)	2029		3 %	9 %	15 %			
Surplus (%)	FG			5 %		11 %	16 %	21 %
Curtailment (%)	2027		2 %	4 %				
Curtailment (%)	2029		1 %	3 %	5 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027		2 %	1 %				
Constraint (%)	2029		0 %	1 %	0 %			
Constraint (%)	FG			1 %		1 %	1 %	1 %
Total Dispatch Down (%)	2027		10 %	19 %				
Total Dispatch Down (%)	2029		5 %	12 %	20 %			
Total Dispatch Down (%)	FG			8 %		14 %	18 %	24 %

Table 2-91 - Surplus, Curtailment and Constraint for Solar non-priority for Node Oughtragh

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	5	
Installed Capacity (MW)	2029 (pro-rata)	5	
Installed Capacity (MW)	FG (pro-rata)		9
Available Energy (GWh)	2027 (GF)	6	
Available Energy (GWh)	2029 (pro-rata)	6	
Available Energy (GWh)	FG (pro-rata)		11
Generation (GWh)	2027 (GF)	5	
Generation (GWh)	2029 (pro-rata)	5	
Generation (GWh)	FG (pro-rata)		10
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	3 %	
Surplus (%)	FG (pro-rata)		11 %
Curtailment (%)	2027 (GF)	2 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	2 %	
Constraint (%)	2029 (pro-rata)	0 %	
Constraint (%)	FG (pro-rata)		1 %
Total Dispatch Down (%)	2027 (GF)	10 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		14 %

Table 2-92 - Surplus, Curtailment and Constraint for Solar non-priority with sensitivity for Node Oughtragh

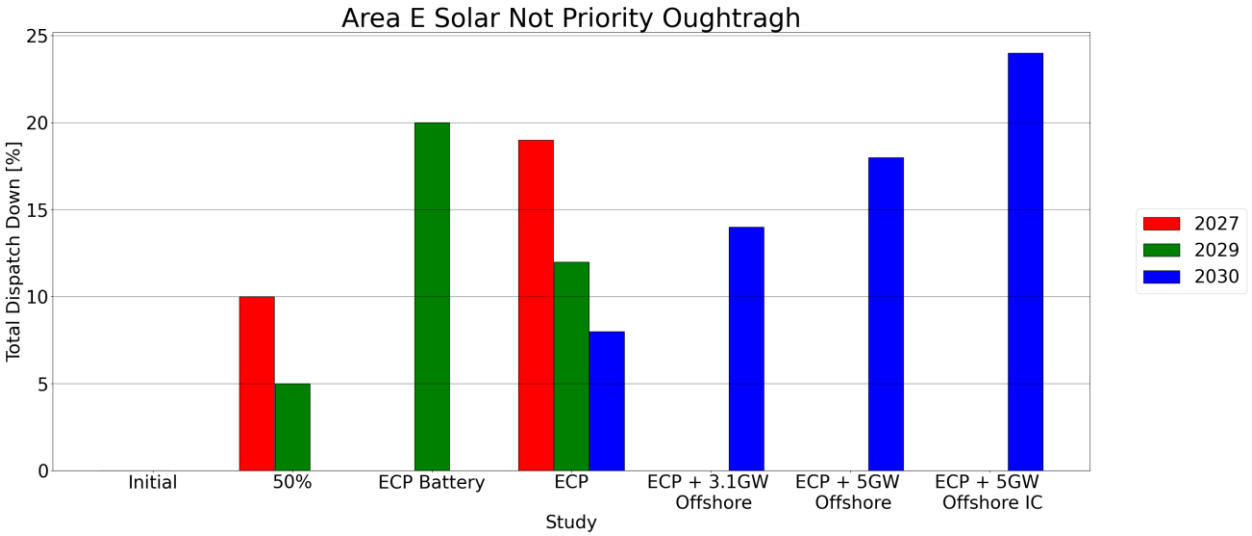

Figure 2-58 - Total Dispatch Down for Solar not priority for Node Oughtragh

The wind priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	9	9	9				
Installed Capacity (MW)	2029	9	9	9	9			
Installed Capacity (MW)	FG			9		9	9	9
Available Energy (GWh)	2027	29	29	29				
Available Energy (GWh)	2029	29	29	29	29			
Available Energy (GWh)	FG			29		29	29	29
Generation (GWh)	2027	28	27	27				
Generation (GWh)	2029	29	29	28	28			
Generation (GWh)	FG			29		28	28	28
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	6 %				
Curtailment (%)	2029	0 %	1 %	3 %	4 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	4 %	6 %	8 %				
Total Dispatch Down (%)	2029	0 %	1 %	3 %	4 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-93 - Surplus, Curtailment and Constraint for Wind priority for Node Oughtragh

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	9	
Installed Capacity (MW)	2029 (pro-rata)	9	
Installed Capacity (MW)	FG (pro-rata)		9
Available Energy (GWh)	2027 (GF)	29	
Available Energy (GWh)	2029 (pro-rata)	29	
Available Energy (GWh)	FG (pro-rata)		29
Generation (GWh)	2027 (GF)	28	
Generation (GWh)	2029 (pro-rata)	28	
Generation (GWh)	FG (pro-rata)		27
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		6 %

Table 2-94 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Oughtragh

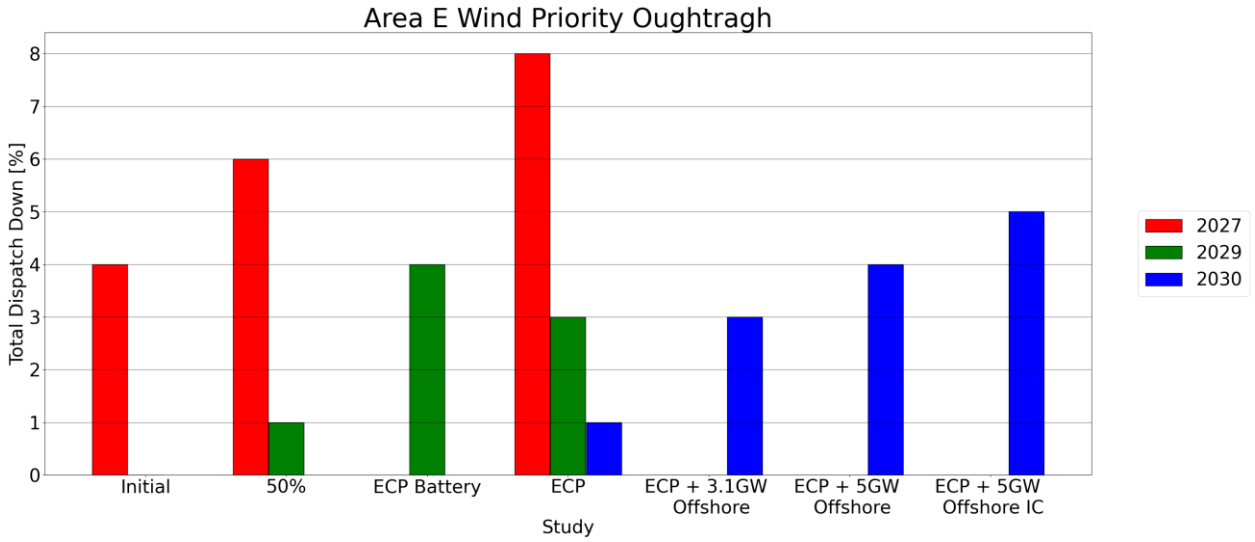

Figure 2-59 - Total Dispatch Down for Wind priority for Node Oughtragh

2.25 Pollagh

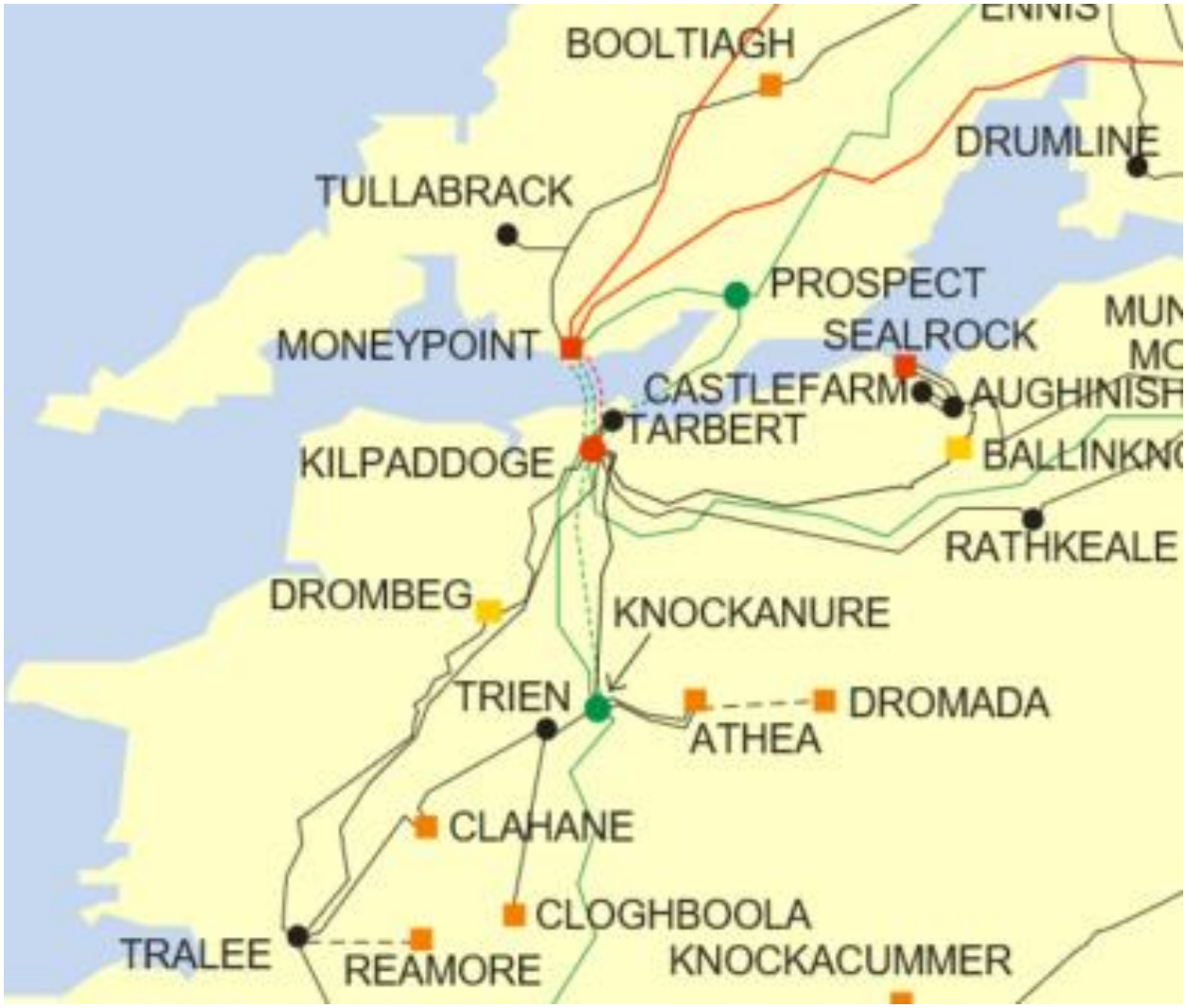

Figure 2-60 - Location of node Pollagh

Generator	SO	Capacity	Type	Status
Shrownowen Windfarm	TSO	50.0	wind not priority	due to connect
Ballylongford Solar	TSO	128.0	solar not priority	due to connect

Table 2-95 - Generation Included in Study for Node Pollagh

The solar not priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027		64	128				
Installed Capacity (MW)	2029		64	128	128			
Installed Capacity (MW)	FG			128		128	128	128
Available Energy (GWh)	2027		75	150				
Available Energy (GWh)	2029		75	150	150			
Available Energy (GWh)	FG			150		150	150	150
Generation (GWh)	2027		68	121				
Generation (GWh)	2029		71	131	119			
Generation (GWh)	FG			138		130	123	113
Surplus (%)	2027		6 %	14 %				
Surplus (%)	2029		3 %	9 %	15 %			
Surplus (%)	FG			5 %		11 %	16 %	21 %
Curtailment (%)	2027		2 %	4 %				
Curtailment (%)	2029		1 %	3 %	5 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027		2 %	1 %				
Constraint (%)	2029		0 %	1 %	0 %			
Constraint (%)	FG			1 %		1 %	1 %	1 %
Total Dispatch Down (%)	2027		10 %	19 %				
Total Dispatch Down (%)	2029		5 %	12 %	20 %			
Total Dispatch Down (%)	FG			8 %		14 %	18 %	24 %

Table 2-96 - Surplus, Curtailment and Constraint for Solar non-priority for Node Pollagh

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	64	
Installed Capacity (MW)	2029 (pro-rata)	64	
Installed Capacity (MW)	FG (pro-rata)		128
Available Energy (GWh)	2027 (GF)	75	
Available Energy (GWh)	2029 (pro-rata)	75	
Available Energy (GWh)	FG (pro-rata)		150
Generation (GWh)	2027 (GF)	68	
Generation (GWh)	2029 (pro-rata)	71	
Generation (GWh)	FG (pro-rata)		130
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	3 %	
Surplus (%)	FG (pro-rata)		11 %
Curtailment (%)	2027 (GF)	2 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	2 %	
Constraint (%)	2029 (pro-rata)	0 %	
Constraint (%)	FG (pro-rata)		1 %
Total Dispatch Down (%)	2027 (GF)	10 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		14 %

Table 2-97 - Surplus, Curtailment and Constraint for Solar non-priority with sensitivity for Node Pollagh

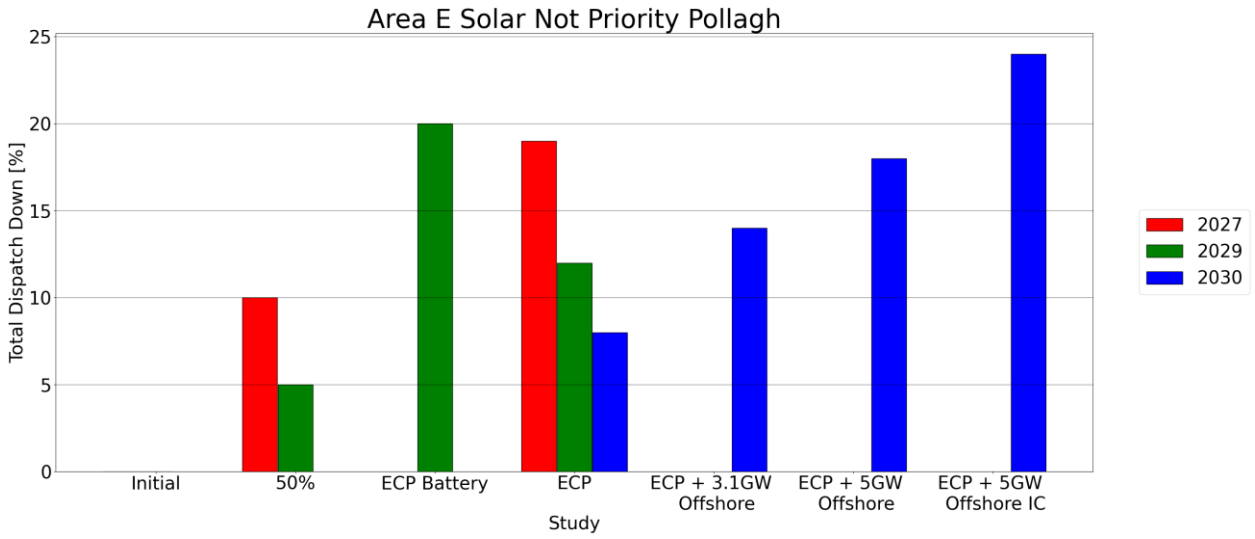

Figure 2-61 - Total Dispatch Down for Solar not priority for Node Pollagh

The wind not priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027		25	50				
Installed Capacity (MW)	2029		25	50	50			
Installed Capacity (MW)	FG			50		50	50	50
Available Energy (GWh)	2027		81	162				
Available Energy (GWh)	2029		81	162	162			
Available Energy (GWh)	FG			162		162	162	162
Generation (GWh)	2027		72	131				
Generation (GWh)	2029		73	141	134			
Generation (GWh)	FG			147		119	117	102
Surplus (%)	2027		6 %	13 %				
Surplus (%)	2029		2 %	6 %	9 %			
Surplus (%)	FG			3 %		12 %	23 %	31 %
Curtailment (%)	2027		3 %	4 %				
Curtailment (%)	2029		1 %	2 %	3 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027		2 %	2 %				
Constraint (%)	2029		6 %	5 %	6 %			
Constraint (%)	FG			6 %		12 %	3 %	3 %
Total Dispatch Down (%)	2027		11 %	19 %				
Total Dispatch Down (%)	2029		9 %	13 %	17 %			
Total Dispatch Down (%)	FG			9 %		26 %	28 %	37 %

Table 2-98 - Surplus, Curtailment and Constraint for Wind non-priority for Node Pollagh

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	25	
Installed Capacity (MW)	2029 (pro-rata)	25	
Installed Capacity (MW)	FG (pro-rata)		50
Available Energy (GWh)	2027 (GF)	81	
Available Energy (GWh)	2029 (pro-rata)	81	
Available Energy (GWh)	FG (pro-rata)		162
Generation (GWh)	2027 (GF)	66	
Generation (GWh)	2029 (pro-rata)	77	
Generation (GWh)	FG (pro-rata)		133
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	2 %	
Surplus (%)	FG (pro-rata)		12 %
Curtailment (%)	2027 (GF)	3 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	10 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	19 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		18 %

Table 2-99 - Surplus, Curtailment and Constraint for Wind non-priority with sensitivity for Node Pollagh

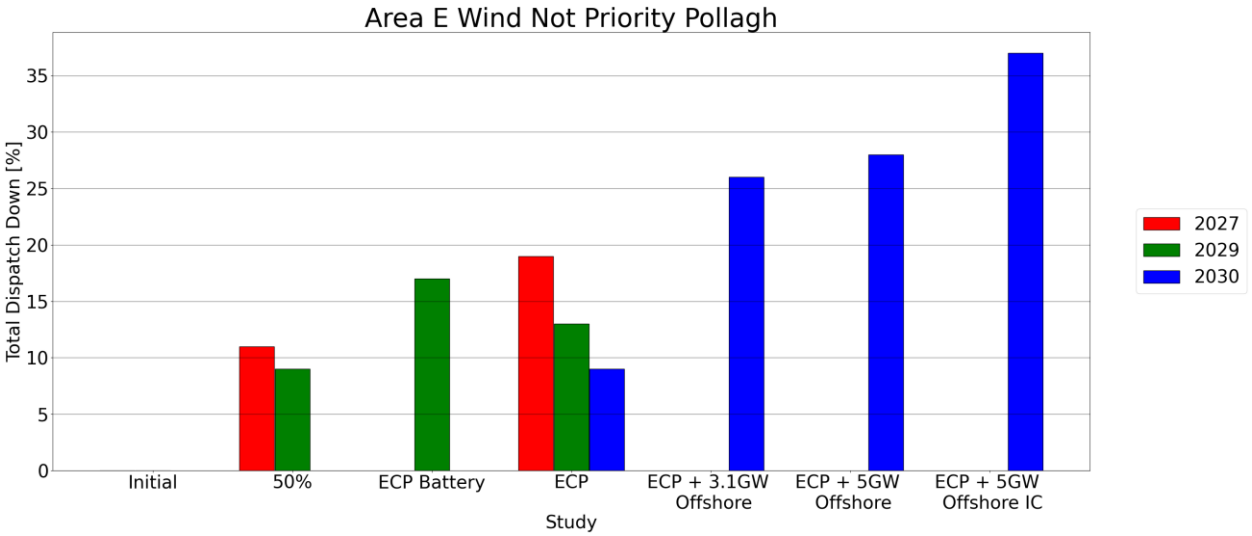

Figure 2-62 - Total Dispatch Down for Wind not priority for Node Pollagh

2.26 Rathkeale

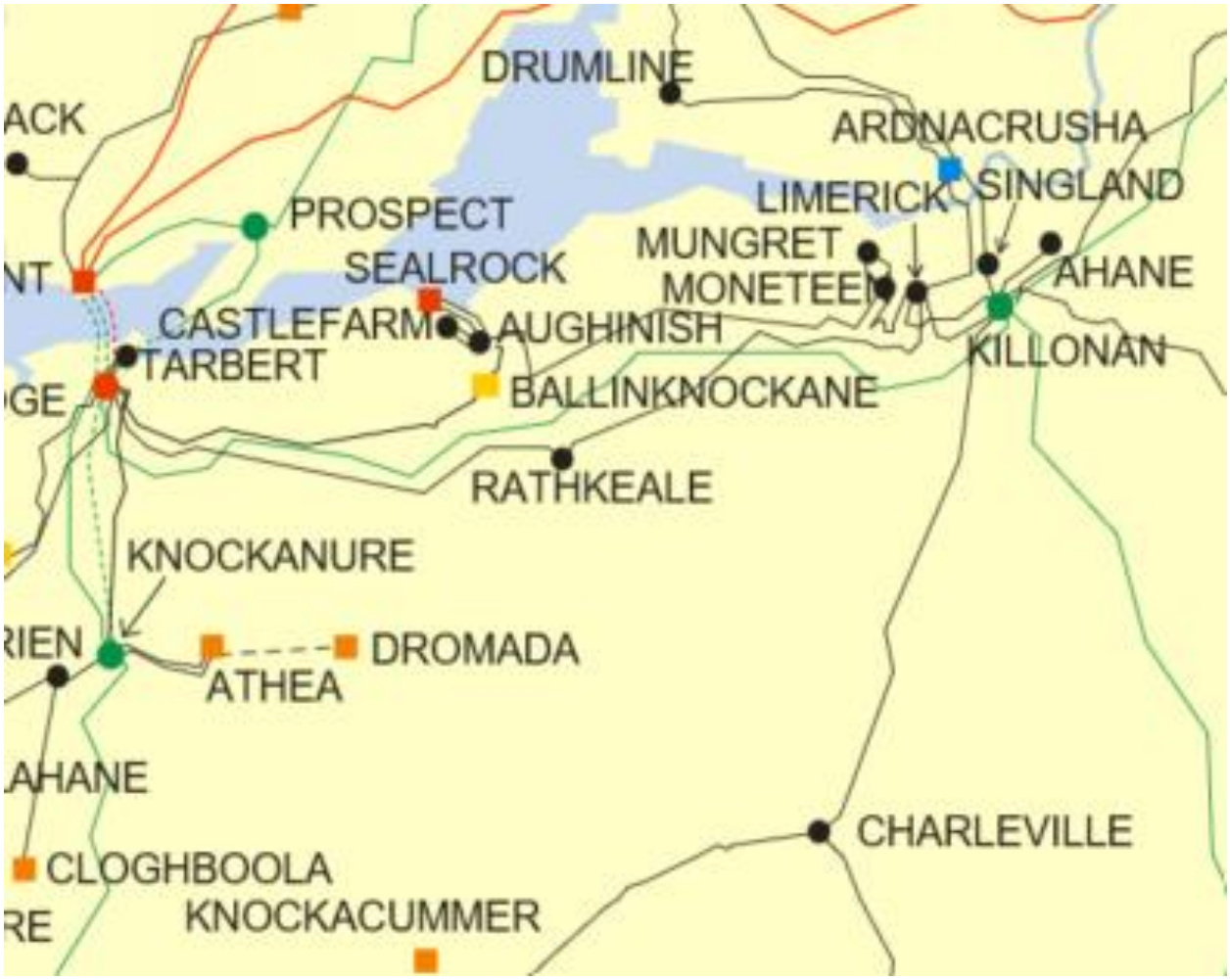

Figure 2-63 - Location of node Rathkeale

Generator	SO	Capacity	Type	Status
Rathcahill (1)	DSO	12.5	wind priority	connected
Grouse Lodge (1)	DSO	15.0	wind priority	connected
Carrons (1)	DSO	4.99	wind uncontrolled	connected

Table 2-100 - Generation Included in Study for Node Rathkeale

The wind priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	28	28	28				
Installed Capacity (MW)	2029	28	28	28	28			
Installed Capacity (MW)	FG			28		28	28	28
Available Energy (GWh)	2027	89	89	89				
Available Energy (GWh)	2029	89	89	89	89			
Available Energy (GWh)	FG			89		89	89	89
Generation (GWh)	2027	87	85	83				
Generation (GWh)	2029	89	88	86	85			
Generation (GWh)	FG			88		87	86	85
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	6 %				
Curtailment (%)	2029	0 %	1 %	3 %	4 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	1 %	0 %	0 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	2 %	4 %	6 %				
Total Dispatch Down (%)	2029	0 %	1 %	3 %	4 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-101 - Surplus, Curtailment and Constraint for Wind priority for Node Rathkeale

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	28	
Installed Capacity (MW)	2029 (pro-rata)	28	
Installed Capacity (MW)	FG (pro-rata)		28
Available Energy (GWh)	2027 (GF)	89	
Available Energy (GWh)	2029 (pro-rata)	89	
Available Energy (GWh)	FG (pro-rata)		89
Generation (GWh)	2027 (GF)	86	
Generation (GWh)	2029 (pro-rata)	88	
Generation (GWh)	FG (pro-rata)		86
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	0 %	
Constraint (%)	FG (pro-rata)		1 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	2 %	
Total Dispatch Down (%)	FG (pro-rata)		4 %

Table 2-102 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Rathkeale

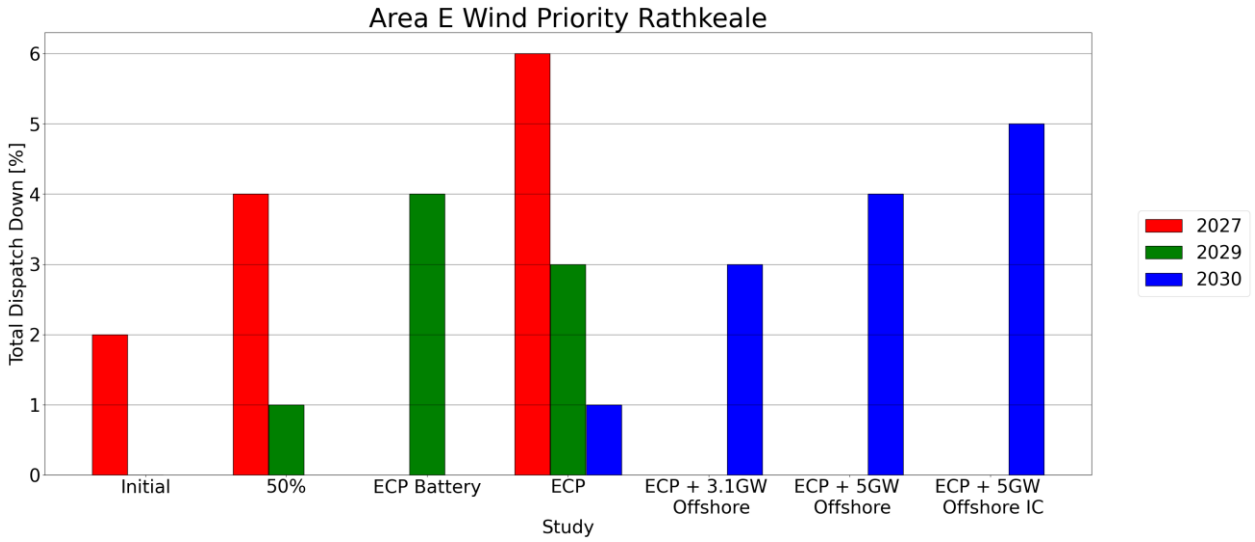

Figure 2-64 - Total Dispatch Down for Wind priority for Node Rathkeale

2.27 Reamore

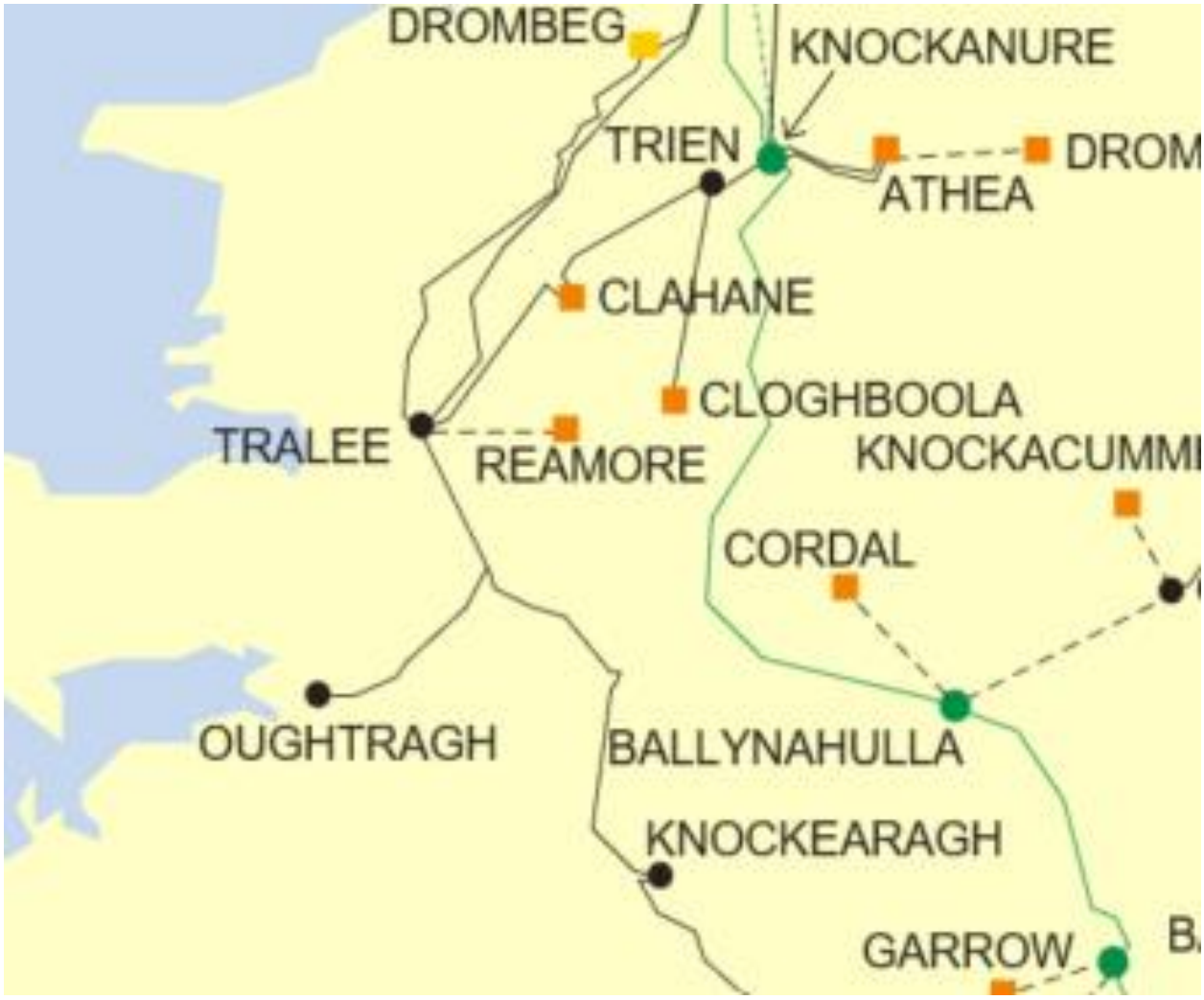

Figure 2-65 - Location of node Reamore

Generator	SO	Capacity	Type	Status
Muingnaminnane (1)	DSO	15.3	wind priority	connected
Knocknagoum (1)	DSO	42.55	wind priority	connected
Knocknagoum (2) formerly Muingnatee (3)	DSO	1.8	wind uncontrolled	connected
Stack's Mountain	DSO	25.3	wind not priority	due to connect
Stacks Mountain Wind Farm 2	DSO	4.5	wind not priority	due to connect

Table 2-103 - Generation Included in Study for Node Reamore

The wind not priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	25	28	30				
Installed Capacity (MW)	2029	25	28	30	30			
Installed Capacity (MW)	FG			30		30	30	30
Available Energy (GWh)	2027	82	89	96				
Available Energy (GWh)	2029	82	89	96	96			
Available Energy (GWh)	FG			96		96	96	96
Generation (GWh)	2027	78	79	78				
Generation (GWh)	2029	76	81	84	80			
Generation (GWh)	FG			87		71	70	61
Surplus (%)	2027	1 %	6 %	13 %				
Surplus (%)	2029	0 %	2 %	6 %	9 %			
Surplus (%)	FG			3 %		12 %	23 %	31 %
Curtailment (%)	2027	1 %	3 %	4 %				
Curtailment (%)	2029	0 %	1 %	2 %	3 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	7 %	6 %	5 %	6 %			
Constraint (%)	FG			6 %		12 %	3 %	3 %
Total Dispatch Down (%)	2027	5 %	11 %	19 %				
Total Dispatch Down (%)	2029	7 %	9 %	13 %	17 %			
Total Dispatch Down (%)	FG			9 %		26 %	28 %	37 %

Table 2-104 - Surplus, Curtailment and Constraint for Wind non-priority for Node Reamore

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	28	
Installed Capacity (MW)	2029 (pro-rata)	28	
Installed Capacity (MW)	FG (pro-rata)		30
Available Energy (GWh)	2027 (GF)	89	
Available Energy (GWh)	2029 (pro-rata)	89	
Available Energy (GWh)	FG (pro-rata)		96
Generation (GWh)	2027 (GF)	73	
Generation (GWh)	2029 (pro-rata)	85	
Generation (GWh)	FG (pro-rata)		79
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	2 %	
Surplus (%)	FG (pro-rata)		12 %
Curtailment (%)	2027 (GF)	3 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	10 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	19 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		18 %

Table 2-105 - Surplus, Curtailment and Constraint for Wind non-priority with sensitivity for Node Reamore

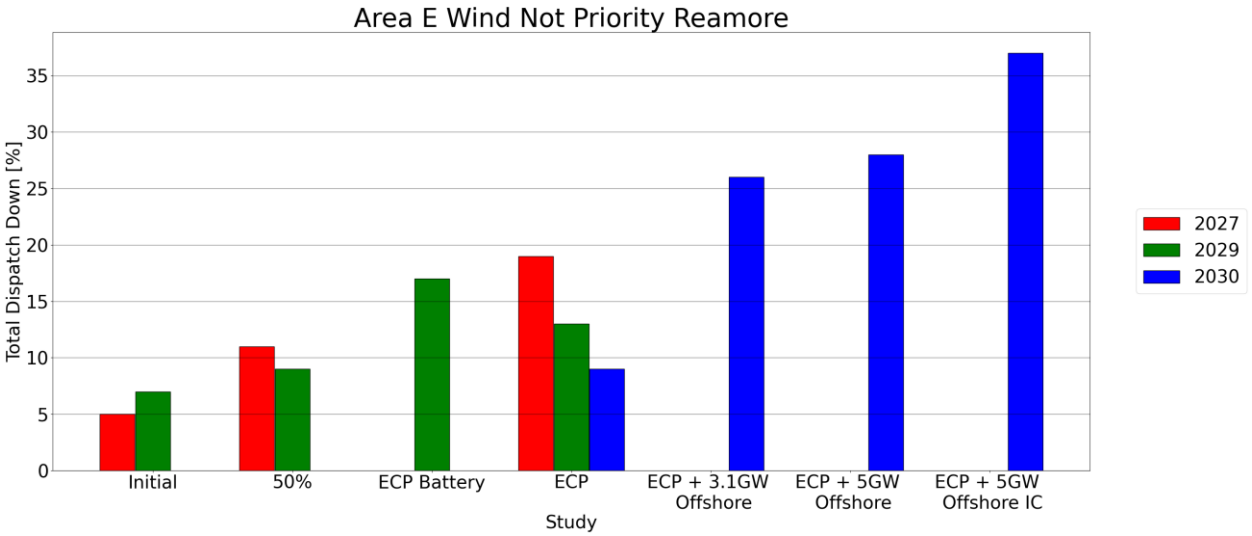

Figure 2-66 - Total Dispatch Down for Wind not priority for Node Reamore

The wind priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	58	58	58				
Installed Capacity (MW)	2029	58	58	58	58			
Installed Capacity (MW)	FG			58		58	58	58
Available Energy (GWh)	2027	187	187	187				
Available Energy (GWh)	2029	187	187	187	187			
Available Energy (GWh)	FG			187		187	187	187
Generation (GWh)	2027	179	175	171				
Generation (GWh)	2029	187	185	181	179			
Generation (GWh)	FG			186		182	180	179
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	6 %				
Curtailment (%)	2029	0 %	1 %	3 %	4 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	4 %	6 %	8 %				
Total Dispatch Down (%)	2029	0 %	1 %	3 %	4 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-106 - Surplus, Curtailment and Constraint for Wind priority for Node Reamore

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	58	
Installed Capacity (MW)	2029 (pro-rata)	58	
Installed Capacity (MW)	FG (pro-rata)		58
Available Energy (GWh)	2027 (GF)	187	
Available Energy (GWh)	2029 (pro-rata)	187	
Available Energy (GWh)	FG (pro-rata)		187
Generation (GWh)	2027 (GF)	180	
Generation (GWh)	2029 (pro-rata)	182	
Generation (GWh)	FG (pro-rata)		176
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		6 %

Table 2-107 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Reamore

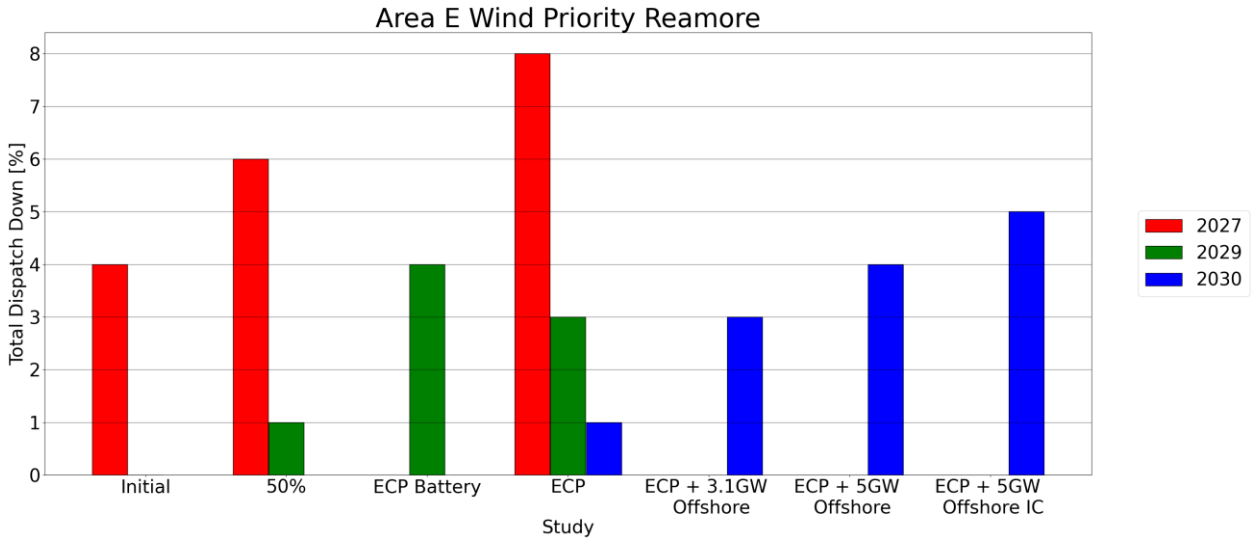

Figure 2-67 - Total Dispatch Down for Wind priority for Node Reamore

2.28 Tralee

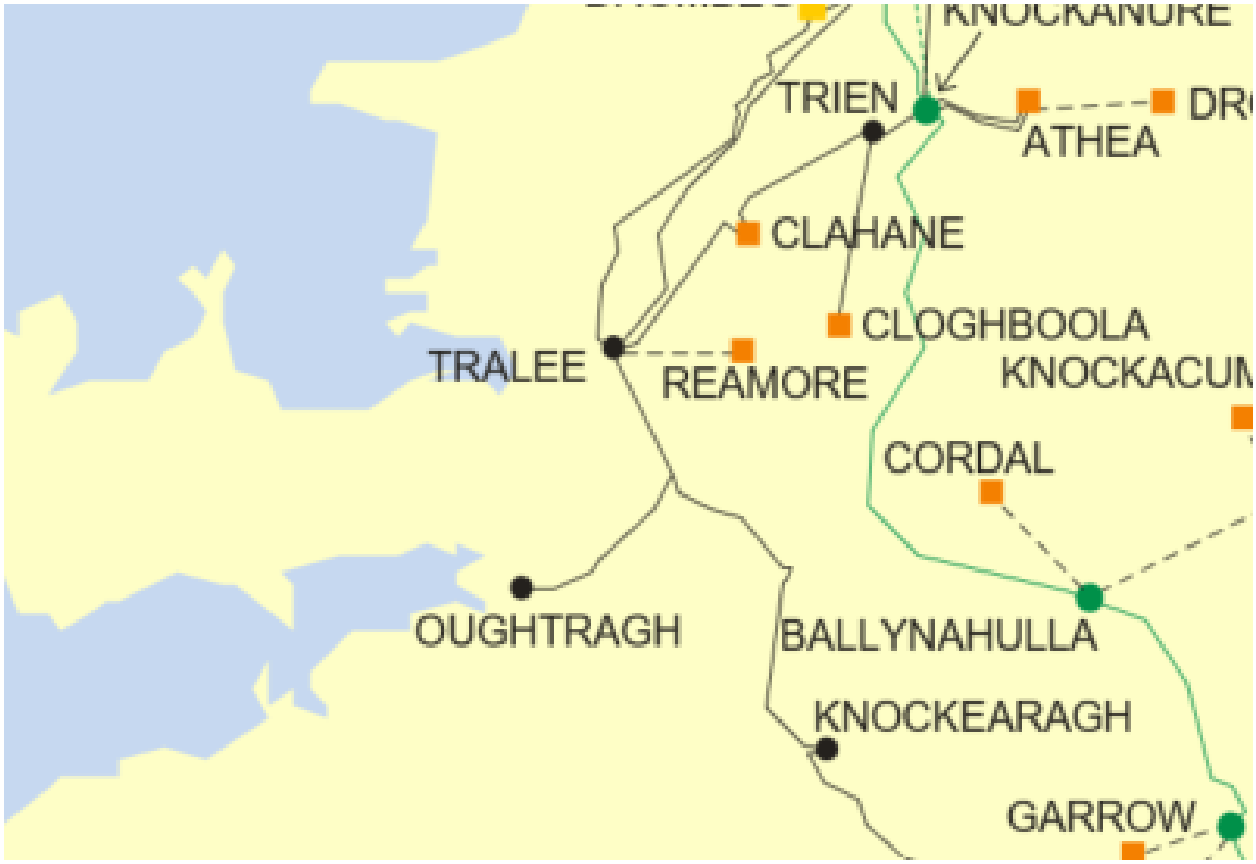

Figure 2-68 - Location of node Tralee

Generator	SO	Capacity	Type	Status
Ballincollig Hill (1)	DSO	15.0	wind priority	connected
Mount Eagle (1)	DSO	5.1	wind uncontrolled	connected
Tursillagh (2)	DSO	6.8	wind uncontrolled	connected
Tursillagh (1)	DSO	15.0	wind uncontrolled	connected
Beenageeha (1)	DSO	3.96	wind uncontrolled	connected
Mount Eagle (2)	DSO	1.7	wind uncontrolled	connected
Dromroe Solar	DSO	4.0	solar not priority	due to connect
Ballyenaghty Solar Park	DSO	9.9	solar not priority	due to connect
Sandford Energy Solar Farm Ext.	DSO	1.5	solar not priority	due to connect

Table 2-108 - Generation Included in Study for Node Tralee

The solar not priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	4	10	15				
Installed Capacity (MW)	2029	4	10	15	15			
Installed Capacity (MW)	FG			15		15	15	15
Available Energy (GWh)	2027	5	11	18				
Available Energy (GWh)	2029	5	11	18	18			
Available Energy (GWh)	FG			18		18	18	18
Generation (GWh)	2027	5	10	15				
Generation (GWh)	2029	5	11	16	14			
Generation (GWh)	FG			17		16	15	14
Surplus (%)	2027	1 %	6 %	14 %				
Surplus (%)	2029	0 %	3 %	9 %	15 %			
Surplus (%)	FG			5 %		11 %	16 %	21 %
Curtailment (%)	2027	1 %	2 %	4 %				
Curtailment (%)	2029	0 %	1 %	3 %	5 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027	2 %	2 %	1 %				
Constraint (%)	2029	1 %	0 %	1 %	0 %			
Constraint (%)	FG			1 %		1 %	1 %	1 %
Total Dispatch Down (%)	2027	3 %	10 %	19 %				
Total Dispatch Down (%)	2029	2 %	5 %	12 %	20 %			
Total Dispatch Down (%)	FG			8 %		14 %	18 %	24 %

Table 2-109 - Surplus, Curtailment and Constraint for Solar non-priority for Node Tralee

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	10	
Installed Capacity (MW)	2029 (pro-rata)	10	
Installed Capacity (MW)	FG (pro-rata)		15
Available Energy (GWh)	2027 (GF)	11	
Available Energy (GWh)	2029 (pro-rata)	11	
Available Energy (GWh)	FG (pro-rata)		18
Generation (GWh)	2027 (GF)	10	
Generation (GWh)	2029 (pro-rata)	11	
Generation (GWh)	FG (pro-rata)		16
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	3 %	
Surplus (%)	FG (pro-rata)		11 %
Curtailment (%)	2027 (GF)	2 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	2 %	
Constraint (%)	2029 (pro-rata)	0 %	
Constraint (%)	FG (pro-rata)		1 %
Total Dispatch Down (%)	2027 (GF)	10 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		14 %

Table 2-110 - Surplus, Curtailment and Constraint for Solar non-priority with sensitivity for Node Tralee

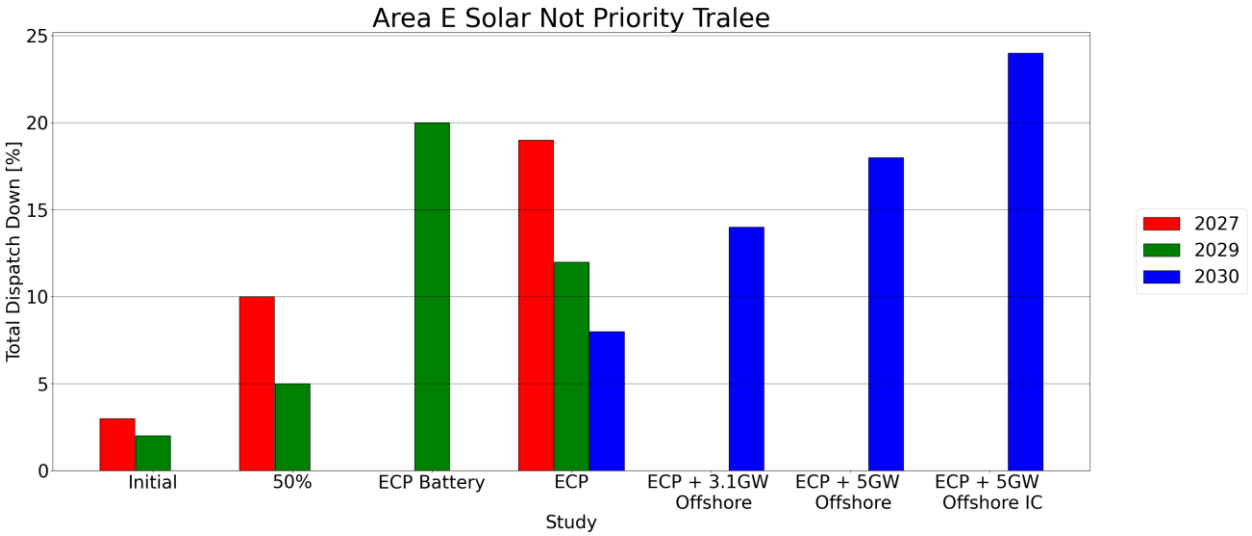

Figure 2-69 - Total Dispatch Down for Solar not priority for Node Tralee

The wind priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	15	15	15				
Installed Capacity (MW)	2029	15	15	15	15			
Installed Capacity (MW)	FG			15		15	15	15
Available Energy (GWh)	2027	49	49	49				
Available Energy (GWh)	2029	49	49	49	49			
Available Energy (GWh)	FG			49		49	49	49
Generation (GWh)	2027	47	45	44				
Generation (GWh)	2029	48	48	47	46			
Generation (GWh)	FG			48		47	47	46
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	6 %				
Curtailment (%)	2029	0 %	1 %	3 %	4 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	4 %	6 %	8 %				
Total Dispatch Down (%)	2029	0 %	1 %	3 %	4 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-111 - Surplus, Curtailment and Constraint for Wind priority for Node Tralee

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	15	
Installed Capacity (MW)	2029 (pro-rata)	15	
Installed Capacity (MW)	FG (pro-rata)		15
Available Energy (GWh)	2027 (GF)	49	
Available Energy (GWh)	2029 (pro-rata)	49	
Available Energy (GWh)	FG (pro-rata)		49
Generation (GWh)	2027 (GF)	47	
Generation (GWh)	2029 (pro-rata)	47	
Generation (GWh)	FG (pro-rata)		46
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		6 %

Table 2-112 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Tralee

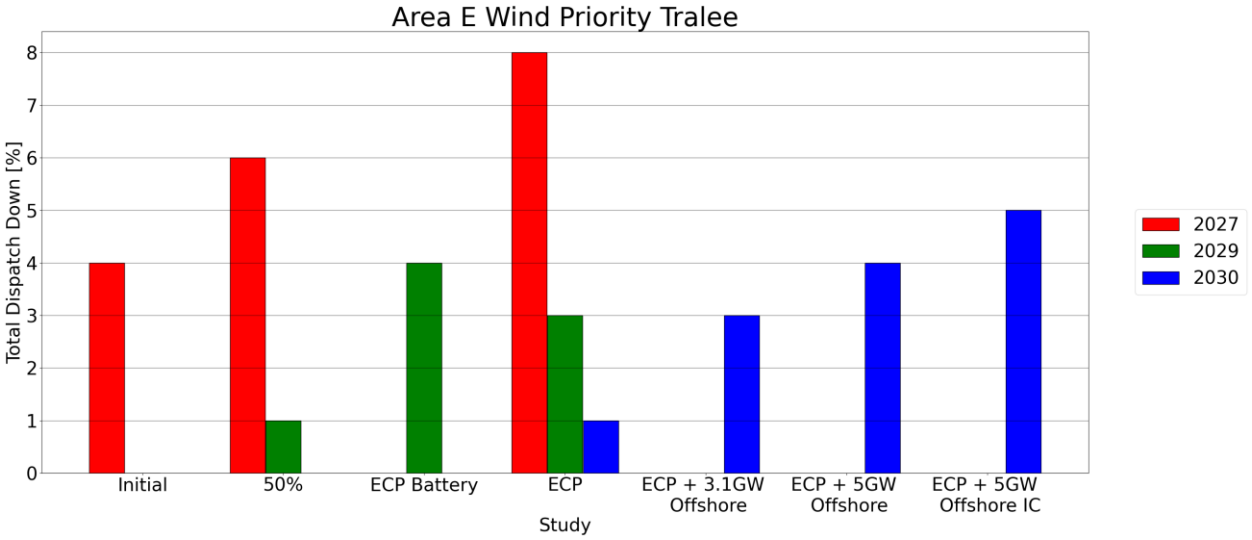

Figure 2-70 - Total Dispatch Down for Wind priority for Node Tralee

2.29 Trien

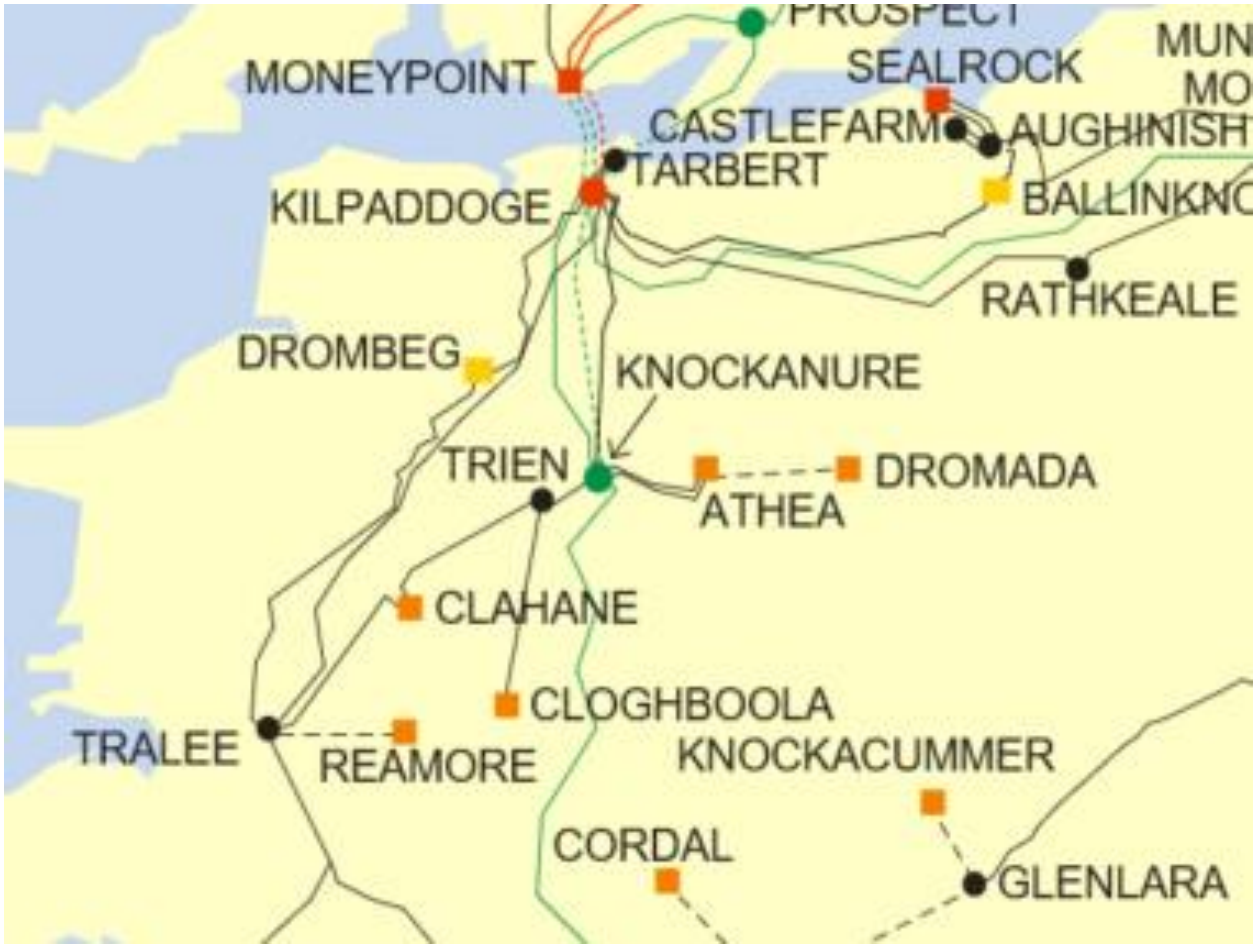

Figure 2-71 - Location of node Trien

Generator	SO	Capacity	Type	Status
Tournafulla (1)	DSO	7.5	wind priority	connected
Beale Hill (2)	DSO	2.55	wind uncontrolled	connected
Beale Hill (1)	DSO	1.65	wind uncontrolled	connected
Beale Hill (3)	DSO	1.3	wind uncontrolled	connected
Ballagh (1)	DSO	4.6	wind uncontrolled	connected
Gortnacloghy Wind Farm	DSO	4.4	wind uncontrolled	connected
Curraghderrig (1)	DSO	4.5	wind uncontrolled	connected
Shanacool (Trienearagh) Solar Park	DSO	4.0	solar not priority	due to connect

Table 2-113 - Generation Included in Study for Node Trien

The solar not priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027		2	4				
Installed Capacity (MW)	2029		2	4	4			
Installed Capacity (MW)	FG			4		4	4	4
Available Energy (GWh)	2027		2	5				
Available Energy (GWh)	2029		2	5	5			
Available Energy (GWh)	FG			5		5	5	5
Generation (GWh)	2027		2	4				
Generation (GWh)	2029		2	4	4			
Generation (GWh)	FG			4		4	4	4
Surplus (%)	2027		6 %	14 %				
Surplus (%)	2029		3 %	9 %	15 %			
Surplus (%)	FG			5 %		11 %	16 %	21 %
Curtailment (%)	2027		2 %	4 %				
Curtailment (%)	2029		1 %	3 %	5 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027		2 %	1 %				
Constraint (%)	2029		0 %	1 %	0 %			
Constraint (%)	FG			1 %		1 %	1 %	1 %
Total Dispatch Down (%)	2027		10 %	19 %				
Total Dispatch Down (%)	2029		5 %	12 %	20 %			
Total Dispatch Down (%)	FG			8 %		14 %	18 %	24 %

Table 2-114 - Surplus, Curtailment and Constraint for Solar non-priority for Node Trien

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	2	
Installed Capacity (MW)	2029 (pro-rata)	2	
Installed Capacity (MW)	FG (pro-rata)		4
Available Energy (GWh)	2027 (GF)	2	
Available Energy (GWh)	2029 (pro-rata)	2	
Available Energy (GWh)	FG (pro-rata)		5
Generation (GWh)	2027 (GF)	2	
Generation (GWh)	2029 (pro-rata)	2	
Generation (GWh)	FG (pro-rata)		4
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	3 %	
Surplus (%)	FG (pro-rata)		11 %
Curtailment (%)	2027 (GF)	2 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	2 %	
Constraint (%)	2029 (pro-rata)	0 %	
Constraint (%)	FG (pro-rata)		1 %
Total Dispatch Down (%)	2027 (GF)	10 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		14 %

Table 2-115 - Surplus, Curtailment and Constraint for Solar non-priority with sensitivity for Node Trien

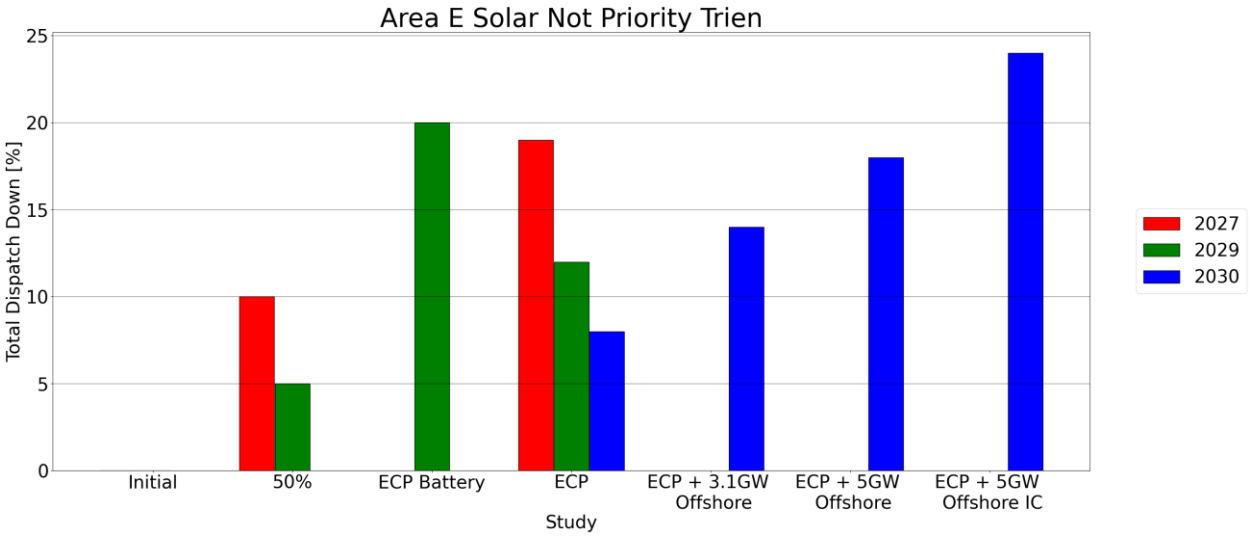

Figure 2-72 - Total Dispatch Down for Solar not priority for Node Trien

The wind priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	47	47	47				
Installed Capacity (MW)	2029	47	47	47	47			
Installed Capacity (MW)	FG			47		47	47	47
Available Energy (GWh)	2027	153	153	153				
Available Energy (GWh)	2029	153	153	153	153			
Available Energy (GWh)	FG			153		153	153	153
Generation (GWh)	2027	146	143	140				
Generation (GWh)	2029	152	151	148	146			
Generation (GWh)	FG			152		149	147	146
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	6 %				
Curtailment (%)	2029	0 %	1 %	3 %	4 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	4 %	6 %	8 %				
Total Dispatch Down (%)	2029	0 %	1 %	3 %	4 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-116 - Surplus, Curtailment and Constraint for Wind priority for Node Trien

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	47	
Installed Capacity (MW)	2029 (pro-rata)	47	
Installed Capacity (MW)	FG (pro-rata)		47
Available Energy (GWh)	2027 (GF)	153	
Available Energy (GWh)	2029 (pro-rata)	153	
Available Energy (GWh)	FG (pro-rata)		153
Generation (GWh)	2027 (GF)	147	
Generation (GWh)	2029 (pro-rata)	148	
Generation (GWh)	FG (pro-rata)		144
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		6 %

Table 2-117 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Trien

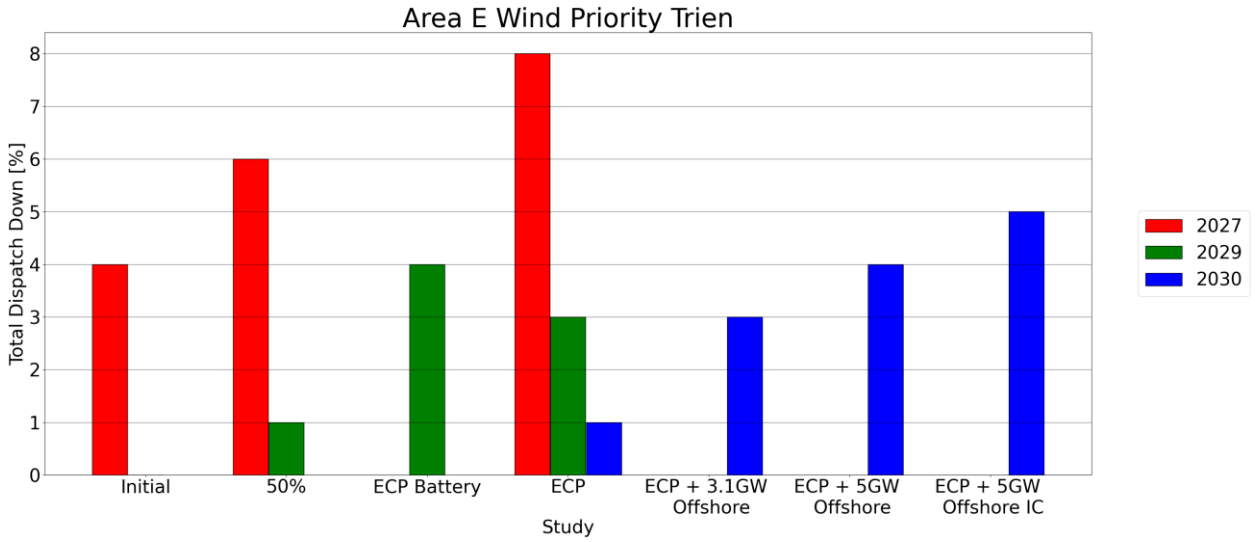

Figure 2-73 - Total Dispatch Down for Wind priority for Node Trien

2.30 Trien 220kv side

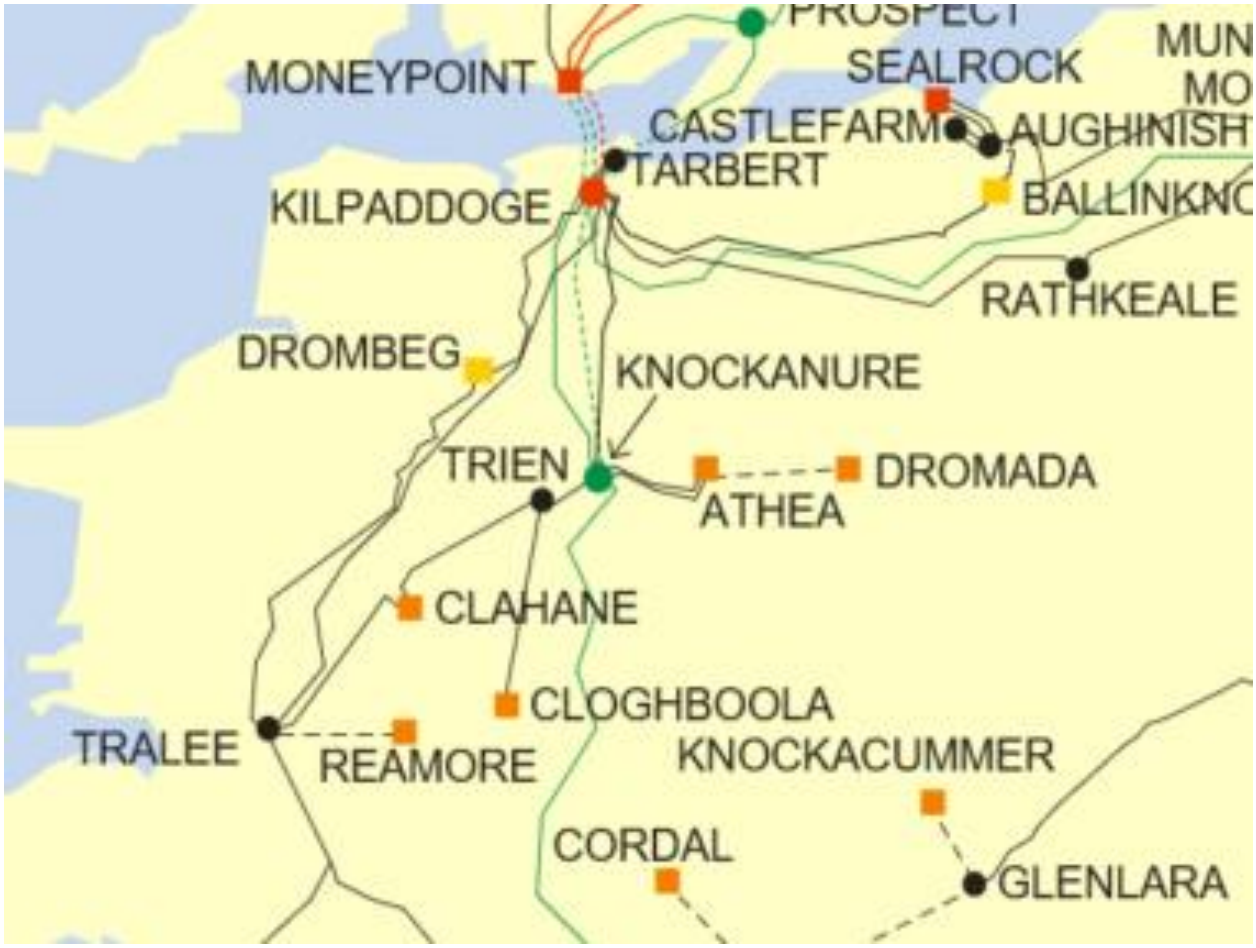

Figure 2-74 - Location of node Trien 220kv side

Generator	SO	Capacity	Type	Status
Knockawarriga (1)	DSO	22.5	wind priority	connected
Tournafulla (2)	DSO	17.2	wind priority	connected
Knockawarriga Extension (Glenduff & Caherlevoy)	DSO	6.6	wind not priority	connected

Table 2-118 - Generation Included in Study for Node Trien 220kv side

The wind not priority data is given in the following table.

Area E	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	7	7	7				
Installed Capacity (MW)	2029	7	7	7	7			
Installed Capacity (MW)	FG			7		7	7	7
Available Energy (GWh)	2027	21	21	21				
Available Energy (GWh)	2029	21	21	21	21			
Available Energy (GWh)	FG			21		21	21	21
Generation (GWh)	2027	20	19	17				
Generation (GWh)	2029	20	19	19	18			
Generation (GWh)	FG			19		16	15	13
Surplus (%)	2027	1 %	6 %	13 %				
Surplus (%)	2029	0 %	2 %	6 %	9 %			
Surplus (%)	FG			3 %		12 %	23 %	31 %
Curtailment (%)	2027	1 %	3 %	4 %				
Curtailment (%)	2029	0 %	1 %	2 %	3 %			
Curtailment (%)	FG			1 %		2 %	2 %	2 %
Constraint (%)	2027	3 %	2 %	2 %				
Constraint (%)	2029	7 %	6 %	5 %	6 %			
Constraint (%)	FG			6 %		12 %	3 %	3 %
Total Dispatch Down (%)	2027	5 %	11 %	19 %				
Total Dispatch Down (%)	2029	7 %	9 %	13 %	17 %			
Total Dispatch Down (%)	FG			9 %		26 %	28 %	37 %

Table 2-119 - Surplus, Curtailment and Constraint for Wind non-priority for Node Trien 220kv side

Area E	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	7	
Installed Capacity (MW)	2029 (pro-rata)	7	
Installed Capacity (MW)	FG (pro-rata)		7
Available Energy (GWh)	2027 (GF)	21	
Available Energy (GWh)	2029 (pro-rata)	21	
Available Energy (GWh)	FG (pro-rata)		21
Generation (GWh)	2027 (GF)	17	
Generation (GWh)	2029 (pro-rata)	20	
Generation (GWh)	FG (pro-rata)		18
Surplus (%)	2027 (GF)	6 %	
Surplus (%)	2029 (pro-rata)	2 %	
Surplus (%)	FG (pro-rata)		12 %
Curtailment (%)	2027 (GF)	3 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	10 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		3 %
Total Dispatch Down (%)	2027 (GF)	19 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		18 %

Table 2-120 - Surplus, Curtailment and Constraint for Wind non-priority with sensitivity for Node Trien 220kv side

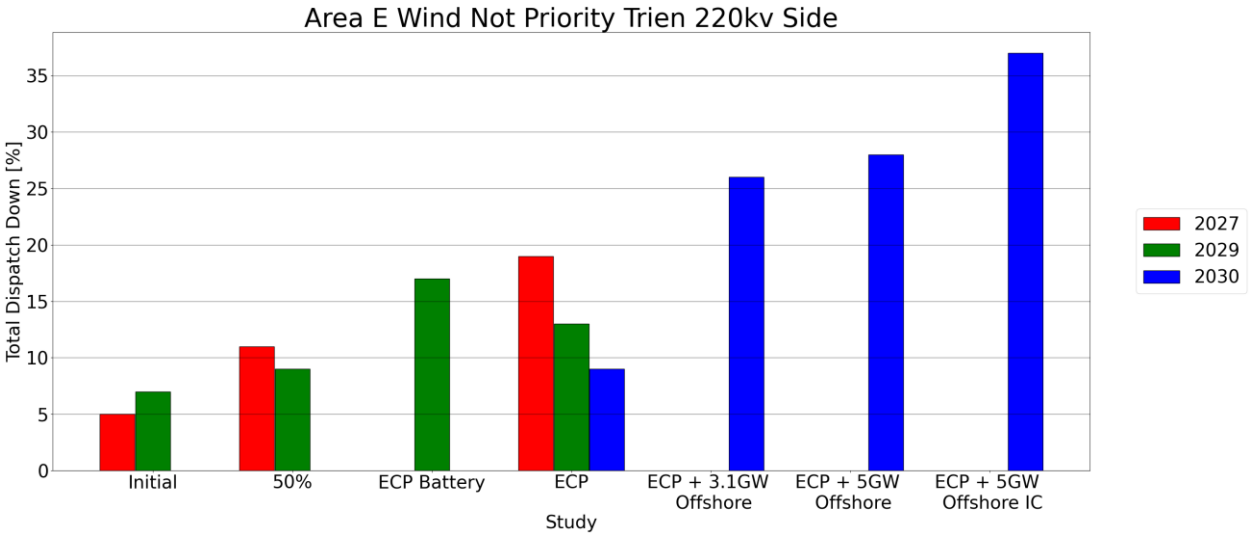

Figure 2-75 - Total Dispatch Down for Wind not priority for Node Trien 220kv side