Enduring Connection Policy 2.4

Solar and Wind Constraints Report: Results for Area H1

Version 1.0

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Document Structure

This document is for customers wishing to see the estimated Total Dispatch Down for Area H1. 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 H1: outlines the area covered by this report. This section provides a network diagram of Area H1 and an overview of the results for Area H1.

Section 2: Area H1 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 H1.

[1] https://www.eirgrid.ie/industry/customer-information/ecp-constraint-forecast-reports#ecp-2.4-constraint-reports-for-solar-and-wind

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 H1

1.1 Introduction

This section provides the surplus, curtailment and constraint results for Area H1 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 H1 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 H1, 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 H1 in the "ECP" scenario is given in Table 1-1.

Node	SO	Status	Solar	Wind
Ahane	DSO	due to connect	4	
Ballydine	DSO	due to connect	18	
Barrymore	DSO	due to connect	20	
Barrymore	TSO	due to connect		121
Barrymore	DSO	connected		32
Cahir	DSO	due to connect	36	
Cauteen	DSO	due to connect	48	
Cauteen	TSO	due to connect	203	
Cauteen	DSO	connected		178
Doon	DSO	due to connect	13	
Doon	DSO	due to connect		34
Ikerrin	DSO	connected		36
Kill Hill	TSO	connected		36
Killonan	DSO	due to connect		84
Lisheen	TSO	due to connect	76	
Lisheen	TSO	connected		29
Lisheen	DSO	connected		40
Lisheen	TSO	connected		59
Mothel	TSO	due to connect	25	
Nenagh	DSO	due to connect	4	
Nenagh	DSO	connected		14
Thurles	DSO	connected		35
Thurles	DSO	connected		7
Timoney	TSO	due to connect	157	
Tipperary	DSO	due to connect	4	
Tipperary	DSO	connected		5
Total			608	710

Table 1-1 Wind and Solar Generation Summary (MW) in Area H1 for Generation Scenario "ECP"

Table 1-2 and Table 1-3 show installed solar and wind generation for Ireland and Area H1, and the available solar and wind generation for Area H1 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 H1 (MW)	608	608	608	608
Installed Controllable Area H1 (MW)	608	608	608	608
Available Controllable Area H1 (GWh)	712	712	712	712

Table 1-2- Installed MW and Available GWh for Area H1 - Solar

Wind	ECP	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Ireland (MW)	7358	10432	12358	12358
Installed Area H1 (MW)	709	709	709	709
Installed Controllable Area H1 (MW)	683	683	683	683
Available Controllable Area H1 (GWh)	2148	2148	2148	2148

Table 1-3 - Installed MW and Available GWh for Area H1 - Wind

1.4 Network Overview

Area H1, in the south 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 H1 and the surrounding areas is shown in Figure 1-1. The 400 kV circuits are shown in red, the 220 kV circuits 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 H1

In most study years, there is a tendency for renewable power to flow toward the load centres on the east coast and the interconnectors. These flow patterns are relevant when seeking to understand constraint apportionment in the simulation.

There is a tendency within Area H1 for some 110 kV nodes to see higher constraints than others. The model is demonstrating that it is more efficient to constrain generation at some locations in Area H1 than at others. Additionally, when any one section in the meshed 110 kV circuit in the area is lost, it creates overloading in other sections in the area.

For this report, constraints in the model are optimised on a system basis. This means that the constraints in Area H1 are caused both by local and by wider system considerations. So, in theory, an increase in the installed generation in another area could increase constraints in Area H1.

In addition to the power flows out of Area H1, there are also power flows across Area H1. Renewable power from Cork and Kerry will flow east across the transmission network - some of this power will flow through H1.

Also, the power flowing out of Area H1 will meet and join with power flowing from other areas, as they flow towards the demand centres and interconnectors. The transmission bottleneck between Area H1 and the east is shared with power coming from other areas.

Generators in Area H1 have been grouped into a single subgroup in this report. Further detail on Area H1 subgroup can be found in Section 1.6.5 .

The constraints are reduced in the Future Grid scenario as a result of network reinforcements which are assumed in place by 2030. These reinforcements alleviate some of the bottlenecks and reduce the overall network constraints in the area.

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 H1 – Average Results

The Total Dispatch Down results for Area H1 are provided below in Table 1-5 to Table 1-10 and Figure 1-3 to Figure 1-5. These include the breakdown between surplus, curtailment, and constraint. The Table 1-6, Table 1-8, and Table 1-12 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 H1 (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 1-10. 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 H1 under the Future Grid scenarios and associated sensitivity case is given in Table 1-5 to Table 1-10. 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 a number of 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 our 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.

Area H1 is a meshed 110 kV network connecting to four different 220 kV stations and is negatively affected by the loss of any section of 110 kV circuit. The area is also sensitive to the loss of neighbouring 110 kV and 220kV circuits in adjacent areas. Overloading of Knockhara Cahir is the most significant issue in this area and with reinforcement in 2029 it improves the contingency binding for this line. The contingencies and overloaded lines associated with the area are included in Appendix C of the ECP-2.4 Assumptions and Methodology report. Additionally, increased levels of congestion on the circuits in neighbouring areas causes greater levels of congestion in Area H1.

Analysis of Area H1 identified one constraint subgroup for solar and wind generation. The subgroup nodes are given in Table 1-4. The individual node level dispatch down is given in Section 2.

Subgroup	Nodes
H1	Ahane
	Ballydine
	Barrymore
	Cahir
	Cauteen
	Doon
	Ikerrin
	Kill Hill
	Killonan
	Lisheen
	Mothel
	Nenagh
	Thurles
	Timoney
	Tipperary

Table 1-4 Area H1 generator nodes and their subgroups

Figure 1-2 Subgroup H1 (subgroups outlined by blue dashed line)

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

Area H1 (H1)	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	70	339	608				
Installed Capacity (MW)	2029	70	339	608	608			
Installed Capacity (MW)	FG			608		608	608	608
Available Energy (GWh)	2027	82	397	712				
Available Energy (GWh)	2029	82	397	712	712			
Available Energy (GWh)	FG			712		712	712	712
Generation (GWh)	2027	75	347	550				
Generation (GWh)	2029	80	369	599	552			
Generation (GWh)	FG			621		590	564	526
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	7 %	5 %	5 %				
Constraint (%)	2029	1 %	2 %	4 %	3 %			
Constraint (%)	FG			6 %		4 %	3 %	2 %
Total Dispatch Down (%)	2027	8 %	13 %	23 %				
Total Dispatch Down (%)	2029	2 %	7 %	16 %	22 %			
Total Dispatch Down (%)	FG			13 %		17 %	21 %	26 %

Table 1-5 - Surplus, Curtailment and Constraint for Solar Non-priority in Area H1 (H1)

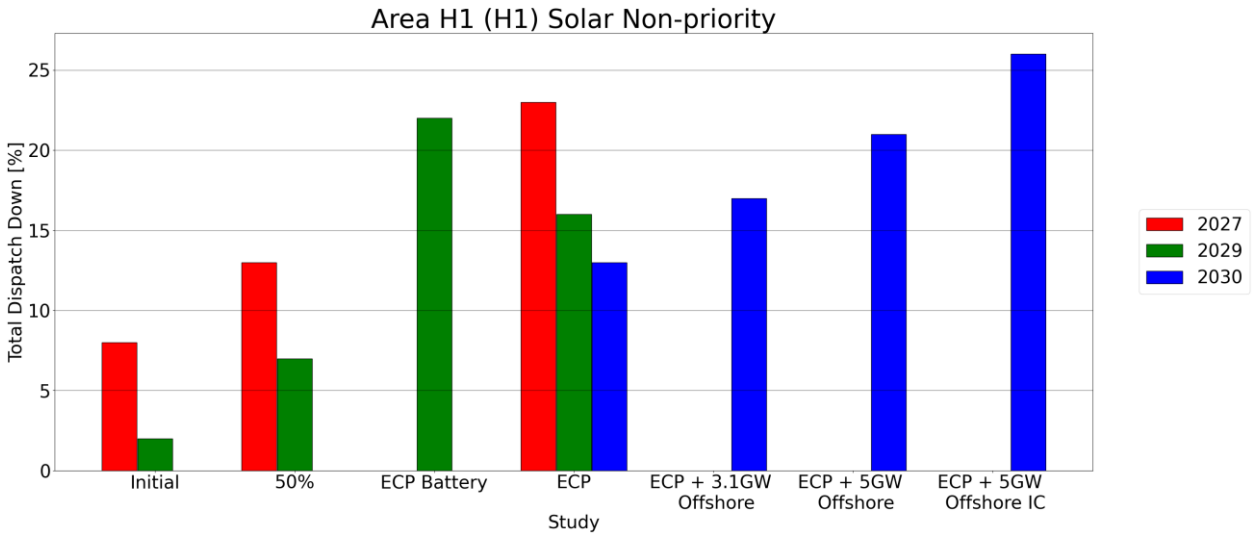

Figure 1-3 - Results Solar Non-priority Area H1 (H1)

Area H1 (H1)	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	339	
Installed Capacity (MW)	2029 (pro-rata)	339	
Installed Capacity (MW)	FG (pro-rata)		608
Available Energy (GWh)	2027 (GF)	397	
Available Energy (GWh)	2029 (pro-rata)	397	
Available Energy (GWh)	FG (pro-rata)		712
Generation (GWh)	2027 (GF)	347	
Generation (GWh)	2029 (pro-rata)	369	
Generation (GWh)	FG (pro-rata)		590
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)	5 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		4 %
Total Dispatch Down (%)	2027 (GF)	13 %	
Total Dispatch Down (%)	2029 (pro-rata)	7 %	
Total Dispatch Down (%)	FG (pro-rata)		17 %

Table 1-6 - Surplus, Curtailment and Constraint for Solar Non-priority with Sensitivity in Area H1 (H1)

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

Area H1 (H1)	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	113	190	267				
Installed Capacity (MW)	2029	113	190	267	267			
Installed Capacity (MW)	FG			267		267	267	267
Available Energy (GWh)	2027	355	598	840				
Available Energy (GWh)	2029	355	598	840	840			
Available Energy (GWh)	FG			840		840	840	840
Generation (GWh)	2027	334	500	614				
Generation (GWh)	2029	341	553	714	675			
Generation (GWh)	FG			726		611	579	506
Surplus (%)	2027	1 %	7 %	14 %				
Surplus (%)	2029	0 %	2 %	6 %	10 %			
Surplus (%)	FG			3 %		14 %	25 %	35 %
Curtailment (%)	2027	2 %	3 %	5 %				
Curtailment (%)	2029	0 %	1 %	3 %	3 %			
Curtailment (%)	FG			1 %		2 %	3 %	3 %
Constraint (%)	2027	3 %	6 %	8 %				
Constraint (%)	2029	4 %	4 %	6 %	7 %			
Constraint (%)	FG			10 %		11 %	3 %	2 %
Total Dispatch Down (%)	2027	6 %	16 %	27 %				
Total Dispatch Down (%)	2029	4 %	7 %	15 %	20 %			
Total Dispatch Down (%)	FG			14 %		27 %	31 %	40 %

Table 1-7 - Surplus, Curtailment and Constraint for Wind Non-priority in Area H1 (H1)

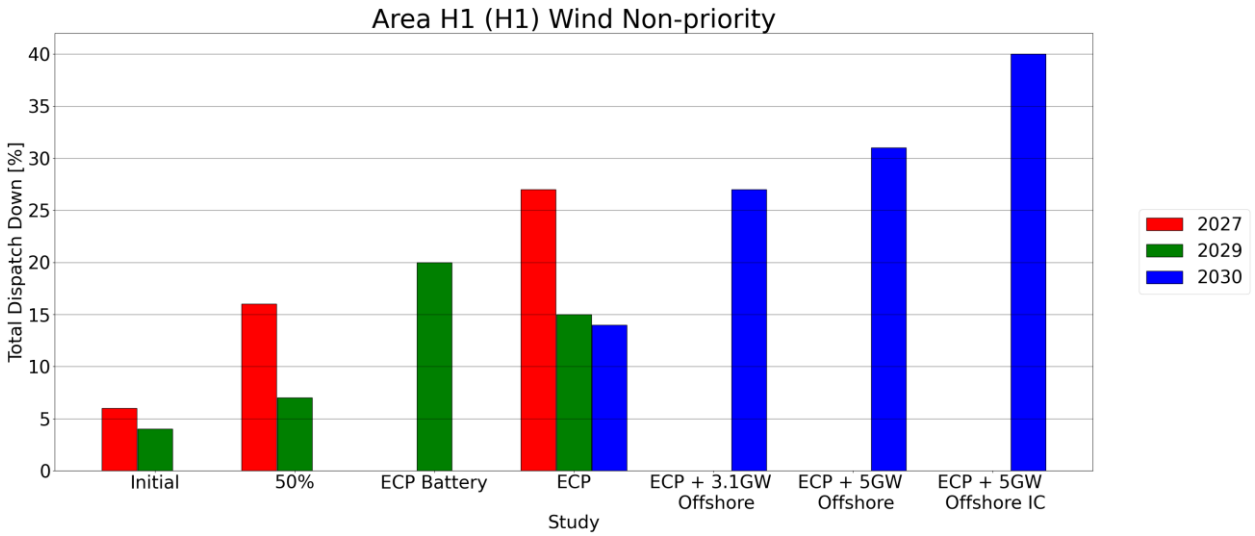

Figure 1-4 - Results Wind Non-priority Area H1 (H1)

Area H1 (H1)	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	190	
Installed Capacity (MW)	2029 (pro-rata)	190	
Installed Capacity (MW)	FG (pro-rata)		267
Available Energy (GWh)	2027 (GF)	598	
Available Energy (GWh)	2029 (pro-rata)	598	
Available Energy (GWh)	FG (pro-rata)		840
Generation (GWh)	2027 (GF)	418	
Generation (GWh)	2029 (pro-rata)	569	
Generation (GWh)	FG (pro-rata)		668
Surplus (%)	2027 (GF)	7 %	
Surplus (%)	2029 (pro-rata)	2 %	
Surplus (%)	FG (pro-rata)		14 %
Curtailment (%)	2027 (GF)	3 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	20 %	
Constraint (%)	2029 (pro-rata)	1 %	
Constraint (%)	FG (pro-rata)		4 %
Total Dispatch Down (%)	2027 (GF)	30 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		20 %

Table 1-8 -Surplus, Curtailment and Constraint for Wind Non-priority with Sensitivity in Area H1 (H1)

The wind priority data is given in the following table.

Area H1 (H1)	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	416	416	416				
Installed Capacity (MW)	2029	416	416	416	416			
Installed Capacity (MW)	FG			416		416	416	416
Available Energy (GWh)	2027	1307	1307	1307				
Available Energy (GWh)	2029	1307	1307	1307	1307			
Available Energy (GWh)	FG			1307		1307	1307	1307
Generation (GWh)	2027	1244	1167	1111				
Generation (GWh)	2029	1303	1285	1261	1246			
Generation (GWh)	FG			1296		1267	1254	1241
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	7 %				
Curtailment (%)	2029	0 %	2 %	4 %	5 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	6 %	8 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	5 %	11 %	15 %				
Total Dispatch Down (%)	2029	0 %	2 %	4 %	5 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 1-9 - Surplus, Curtailment and Constraint for Wind Priority in Area H1 (H1)

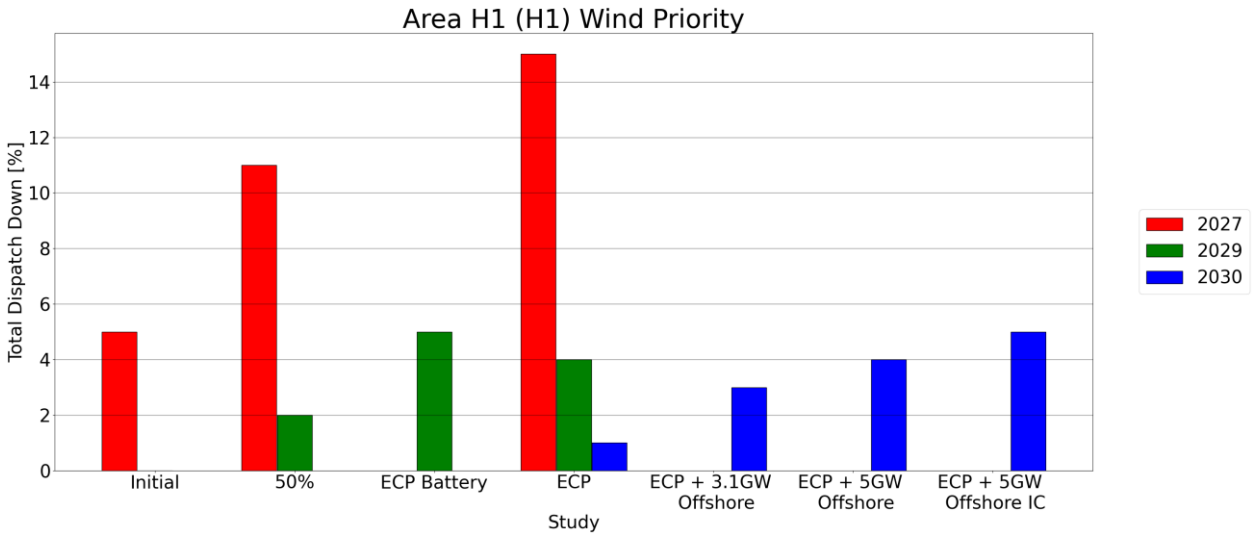

Figure 1-5 - Results Wind Priority Area H1 (H1)

Area H1 (H1)	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	416	
Installed Capacity (MW)	2029 (pro-rata)	416	
Installed Capacity (MW)	FG (pro-rata)		416
Available Energy (GWh)	2027 (GF)	1307	
Available Energy (GWh)	2029 (pro-rata)	1307	
Available Energy (GWh)	FG (pro-rata)		1307
Generation (GWh)	2027 (GF)	1250	
Generation (GWh)	2029 (pro-rata)	1269	
Generation (GWh)	FG (pro-rata)		1210
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	2 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	1 %	
Constraint (%)	FG (pro-rata)		4 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		7 %

Table 1-10 - Surplus, Curtailment and Constraint for Wind Priority with Sensitivity in Area H1 (H1)

1.7 Conclusion – Results for Area H1

This section provides an overview of the estimated surplus, curtailment and constraint values for Area H1 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 H1.

2 Area H1 Node Results

This section presents the results of the modelling analysis for Area H1. The levels of surplus, curtailment and constraint that controllable solar and wind generators in Area H1 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 2-1 Area H1

2.1 Ahane

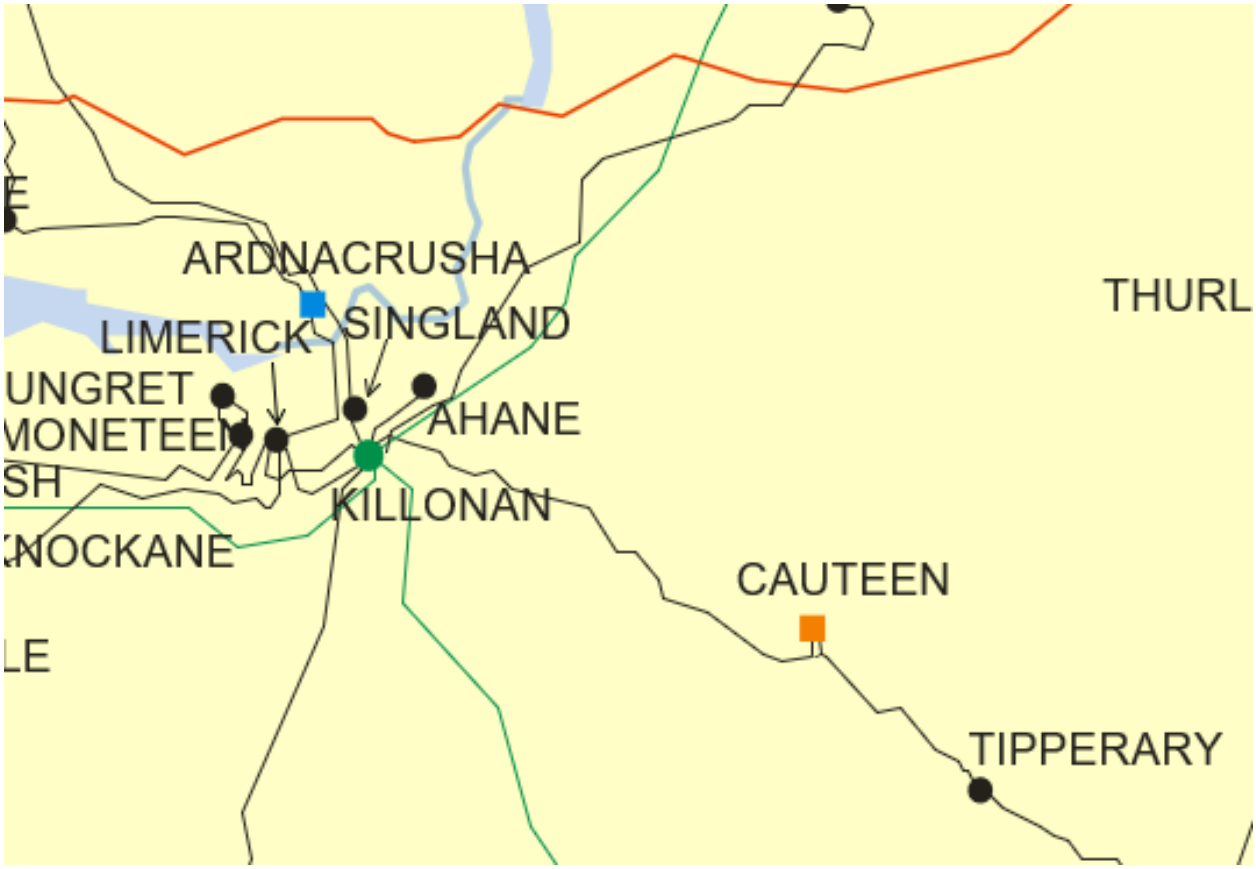

Figure 2-2 - Location of node Ahane

Generator	SO	Capacity	Type	Status
Laghtane Solar Farm	DSO	4.0	solar not priority	due to connect

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

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

Area H1	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	3
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		5 %	5 %				
Constraint (%)	2029		2 %	4 %	3 %			
Constraint (%)	FG			6 %		4 %	3 %	2 %
Total Dispatch Down (%)	2027		13 %	23 %				
Total Dispatch Down (%)	2029		7 %	16 %	22 %			
Total Dispatch Down (%)	FG			13 %		17 %	21 %	26 %

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

Area H1	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)	5 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		4 %
Total Dispatch Down (%)	2027 (GF)	13 %	
Total Dispatch Down (%)	2029 (pro-rata)	7 %	
Total Dispatch Down (%)	FG (pro-rata)		17 %

Table 2-3 - Surplus, Curtailment and Constraint for Solar non-priority with sensitivity for Node Ahane

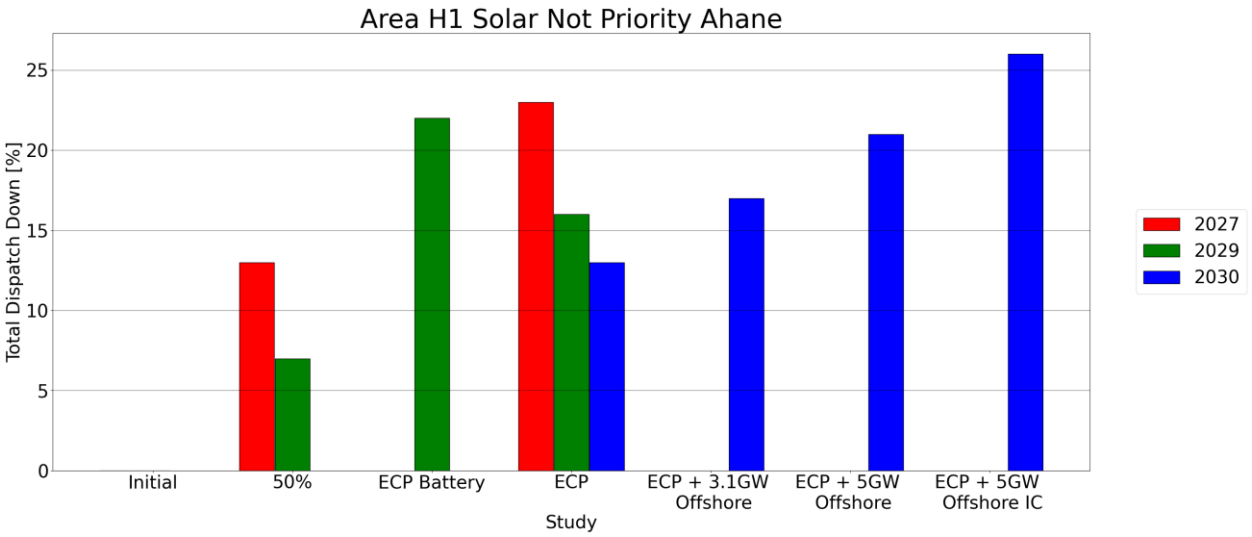

Figure 2-3 - Total Dispatch Down for Solar not priority for Node Ahane

2.2 Ballydine

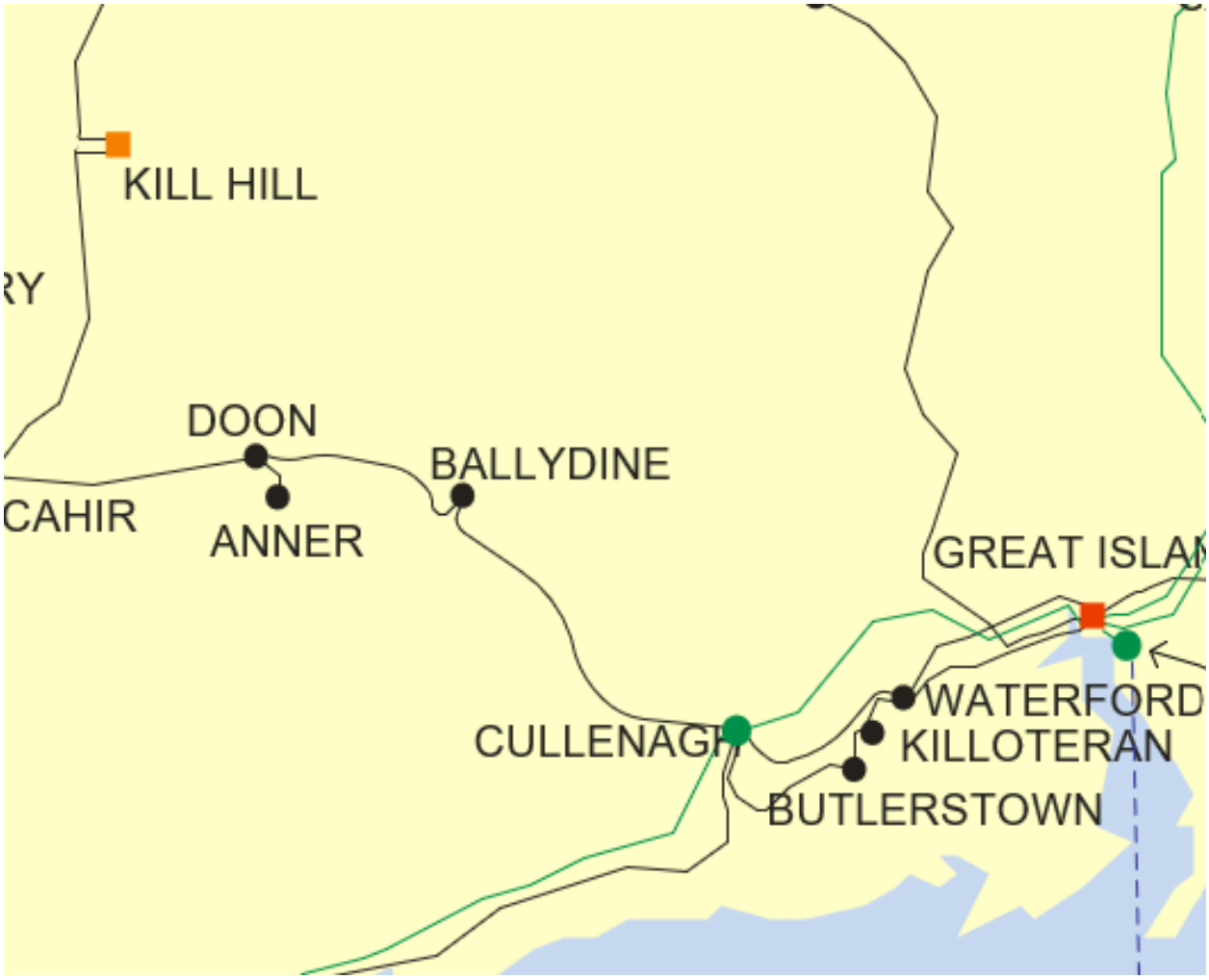

Figure 2-4 - Location of node Ballydine

Generator	SO	Capacity	Type	Status
Carrick Solar	DSO	5.8	solar not priority	due to connect
Grian PV Ballyboe	DSO	12.0	solar not priority	due to connect

Table 2-4 - Generation Included in Study for Node Ballydine

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

Area H1	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	6	12	18				
Installed Capacity (MW)	2029	6	12	18	18			
Installed Capacity (MW)	FG			18		18	18	18
Available Energy (GWh)	2027	7	14	21				
Available Energy (GWh)	2029	7	14	21	21			
Available Energy (GWh)	FG			21		21	21	21
Generation (GWh)	2027	6	12	16				
Generation (GWh)	2029	7	13	18	16			
Generation (GWh)	FG			18		17	17	15
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	7 %	5 %	5 %				
Constraint (%)	2029	1 %	2 %	4 %	3 %			
Constraint (%)	FG			6 %		4 %	3 %	2 %
Total Dispatch Down (%)	2027	8 %	13 %	23 %				
Total Dispatch Down (%)	2029	2 %	7 %	16 %	22 %			
Total Dispatch Down (%)	FG			13 %		17 %	21 %	26 %

Table 2-5 - Surplus, Curtailment and Constraint for Solar non-priority for Node Ballydine

Area H1	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	12	
Installed Capacity (MW)	2029 (pro-rata)	12	
Installed Capacity (MW)	FG (pro-rata)		18
Available Energy (GWh)	2027 (GF)	14	
Available Energy (GWh)	2029 (pro-rata)	14	
Available Energy (GWh)	FG (pro-rata)		21
Generation (GWh)	2027 (GF)	12	
Generation (GWh)	2029 (pro-rata)	13	
Generation (GWh)	FG (pro-rata)		17
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)	5 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		4 %
Total Dispatch Down (%)	2027 (GF)	13 %	
Total Dispatch Down (%)	2029 (pro-rata)	7 %	
Total Dispatch Down (%)	FG (pro-rata)		17 %

Table 2-6 - Surplus, Curtailment and Constraint for Solar non-priority with sensitivity Node Ballydine

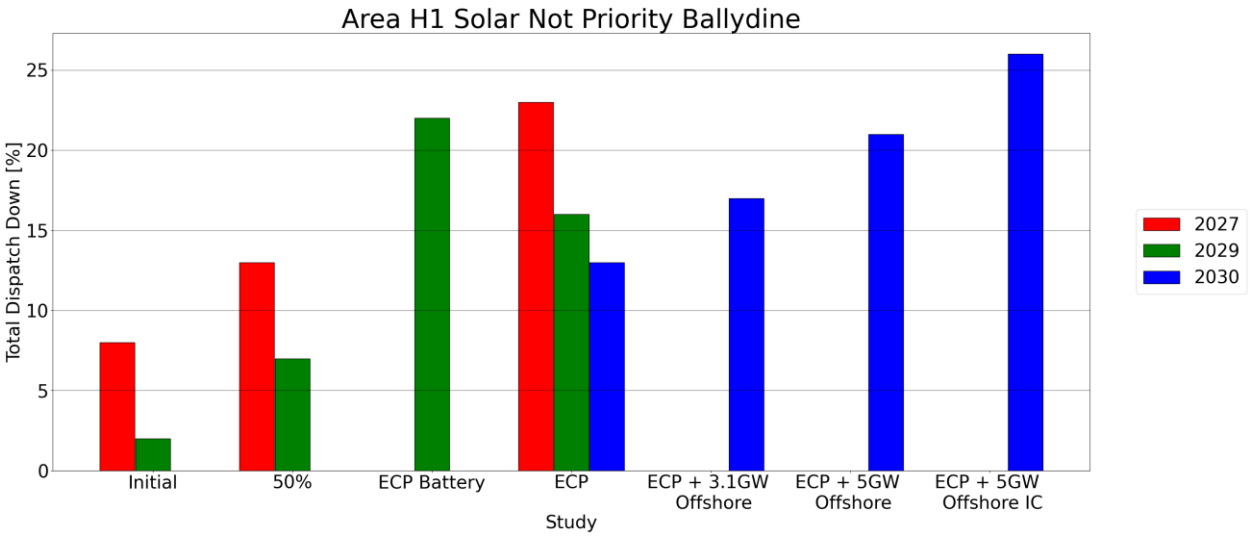

Figure 2-5 - Total Dispatch Down for Solar not priority for Node Ballydine

2.3 Barrymore

Figure 2-6 - Location of node Barrymore

Generator	SO	Capacity	Type	Status
Barranafaddock (1)	DSO	32.4	wind priority	connected
Farran South	DSO	15.0	solar not priority	due to connect
Farran South Solar Phase 2	DSO	5.49	solar not priority	due to connect
Coom Green Energy Park	TSO	121.0	wind not priority	due to connect

Table 2-7 - Generation Included in Study for Node Barrymore

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

Area H1	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	15	18	20				
Installed Capacity (MW)	2029	15	18	20	20			
Installed Capacity (MW)	FG			20		20	20	20
Available Energy (GWh)	2027	18	21	24				
Available Energy (GWh)	2029	18	21	24	24			
Available Energy (GWh)	FG			24		24	24	24
Generation (GWh)	2027	16	18	19				
Generation (GWh)	2029	17	19	20	19			
Generation (GWh)	FG			21		20	19	18
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	7 %	5 %	5 %				
Constraint (%)	2029	1 %	2 %	4 %	3 %			
Constraint (%)	FG			6 %		4 %	3 %	2 %
Total Dispatch Down (%)	2027	8 %	13 %	23 %				
Total Dispatch Down (%)	2029	2 %	7 %	16 %	22 %			
Total Dispatch Down (%)	FG			13 %		17 %	21 %	26 %

Table 2-8 - Surplus, Curtailment and Constraint for Solar non-priority for Node Barrymore

Area H1	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	18	
Installed Capacity (MW)	2029 (pro-rata)	18	
Installed Capacity (MW)	FG (pro-rata)		20
Available Energy (GWh)	2027 (GF)	21	
Available Energy (GWh)	2029 (pro-rata)	21	
Available Energy (GWh)	FG (pro-rata)		24
Generation (GWh)	2027 (GF)	18	
Generation (GWh)	2029 (pro-rata)	19	
Generation (GWh)	FG (pro-rata)		20
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)	5 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		4 %
Total Dispatch Down (%)	2027 (GF)	13 %	
Total Dispatch Down (%)	2029 (pro-rata)	7 %	
Total Dispatch Down (%)	FG (pro-rata)		17 %

Table 2-9 - Surplus, Curtailment and Constraint for Solar non-priority with sensitivity for Node Barrymore

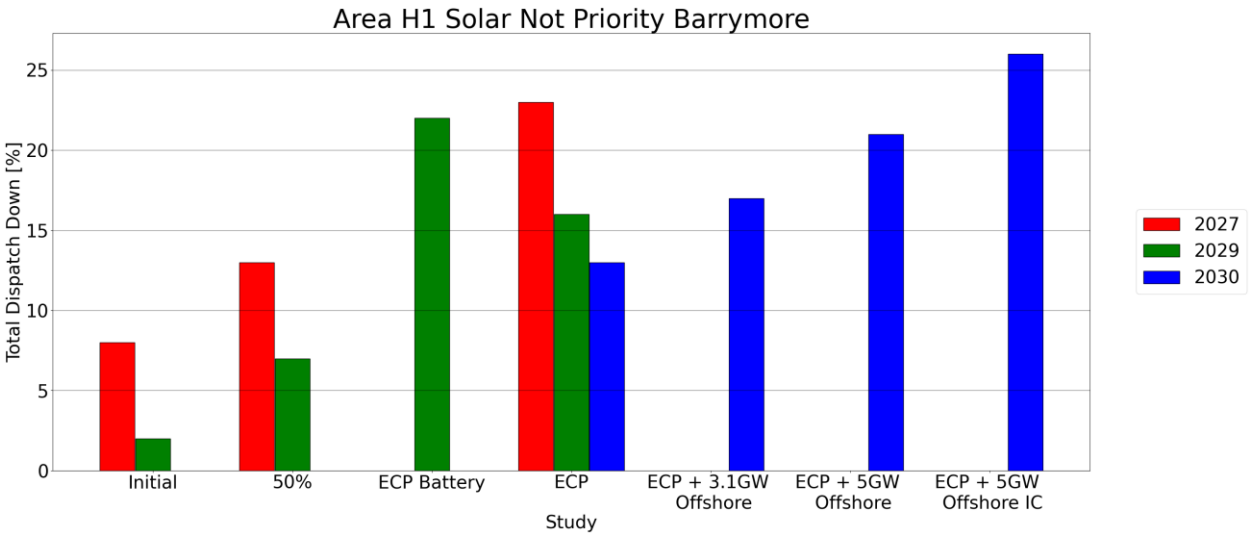

Figure 2-7 - Total Dispatch Down for Solar not priority for Node Barrymore

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

Area H1	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027		60	121				
Installed Capacity (MW)	2029		60	121	121			
Installed Capacity (MW)	FG			121		121	121	121
Available Energy (GWh)	2027		190	380				
Available Energy (GWh)	2029		190	380	380			
Available Energy (GWh)	FG			380		380	380	380
Generation (GWh)	2027		159	278				
Generation (GWh)	2029		176	323	305			
Generation (GWh)	FG			329		277	262	229
Surplus (%)	2027		7 %	14 %				
Surplus (%)	2029		2 %	6 %	10 %			
Surplus (%)	FG			3 %		14 %	25 %	35 %
Curtailment (%)	2027		3 %	5 %				
Curtailment (%)	2029		1 %	3 %	3 %			
Curtailment (%)	FG			1 %		2 %	3 %	3 %
Constraint (%)	2027		6 %	8 %				
Constraint (%)	2029		4 %	6 %	7 %			
Constraint (%)	FG			10 %		11 %	3 %	2 %
Total Dispatch Down (%)	2027		16 %	27 %				
Total Dispatch Down (%)	2029		7 %	15 %	20 %			
Total Dispatch Down (%)	FG			14 %		27 %	31 %	40 %

Table 2-10 - Surplus, Curtailment and Constraint for Wind non-priority for Node Barrymore

Area H1	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	60	
Installed Capacity (MW)	2029 (pro-rata)	60	
Installed Capacity (MW)	FG (pro-rata)		121
Available Energy (GWh)	2027 (GF)	190	
Available Energy (GWh)	2029 (pro-rata)	190	
Available Energy (GWh)	FG (pro-rata)		380
Generation (GWh)	2027 (GF)	133	
Generation (GWh)	2029 (pro-rata)	181	
Generation (GWh)	FG (pro-rata)		302
Surplus (%)	2027 (GF)	7 %	
Surplus (%)	2029 (pro-rata)	2 %	
Surplus (%)	FG (pro-rata)		14 %
Curtailment (%)	2027 (GF)	3 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	20 %	
Constraint (%)	2029 (pro-rata)	1 %	
Constraint (%)	FG (pro-rata)		4 %
Total Dispatch Down (%)	2027 (GF)	30 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		20 %

Table 2-11 - Surplus, Curtailment and Constraint for Wind non-priority with sensitivity for Node Barrymore

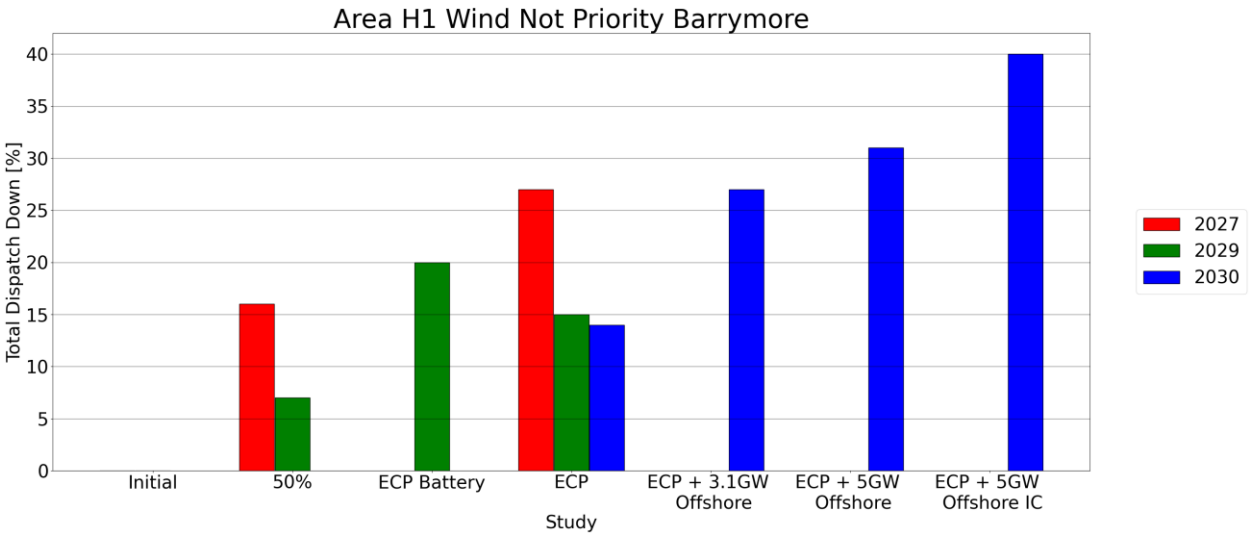

Figure 2-8 - Total Dispatch Down for Wind not priority for Node Barrymore

The wind priority data is given in the following table.

Area H1	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	32	32	32				
Installed Capacity (MW)	2029	32	32	32	32			
Installed Capacity (MW)	FG			32		32	32	32
Available Energy (GWh)	2027	102	102	102				
Available Energy (GWh)	2029	102	102	102	102			
Available Energy (GWh)	FG			102		102	102	102
Generation (GWh)	2027	97	91	87				
Generation (GWh)	2029	101	100	98	97			
Generation (GWh)	FG			101		99	98	97
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	7 %				
Curtailment (%)	2029	0 %	2 %	4 %	5 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	6 %	8 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	5 %	11 %	15 %				
Total Dispatch Down (%)	2029	0 %	2 %	4 %	5 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-12 - Surplus, Curtailment and Constraint for Wind priority for Node Barrymore

Area H1	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	32	
Installed Capacity (MW)	2029 (pro-rata)	32	
Installed Capacity (MW)	FG (pro-rata)		32
Available Energy (GWh)	2027 (GF)	102	
Available Energy (GWh)	2029 (pro-rata)	102	
Available Energy (GWh)	FG (pro-rata)		102
Generation (GWh)	2027 (GF)	97	
Generation (GWh)	2029 (pro-rata)	99	
Generation (GWh)	FG (pro-rata)		94
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	2 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	1 %	
Constraint (%)	FG (pro-rata)		4 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		7 %

Table 2-13 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Barrymore

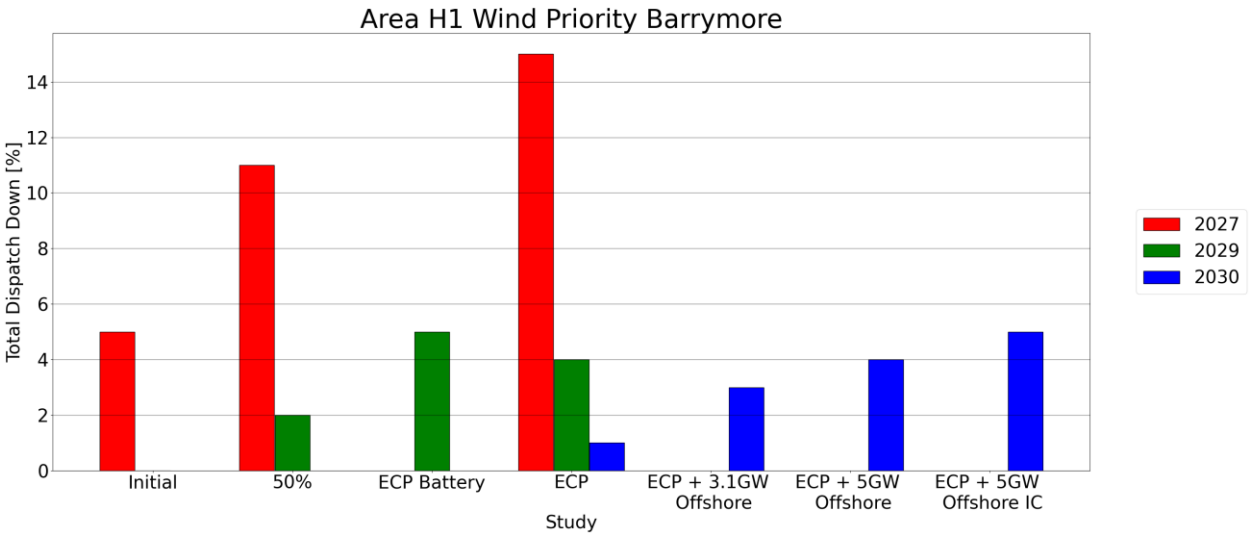

Figure 2-9 - Total Dispatch Down for Wind priority for Node Barrymore

2.4 Cahir

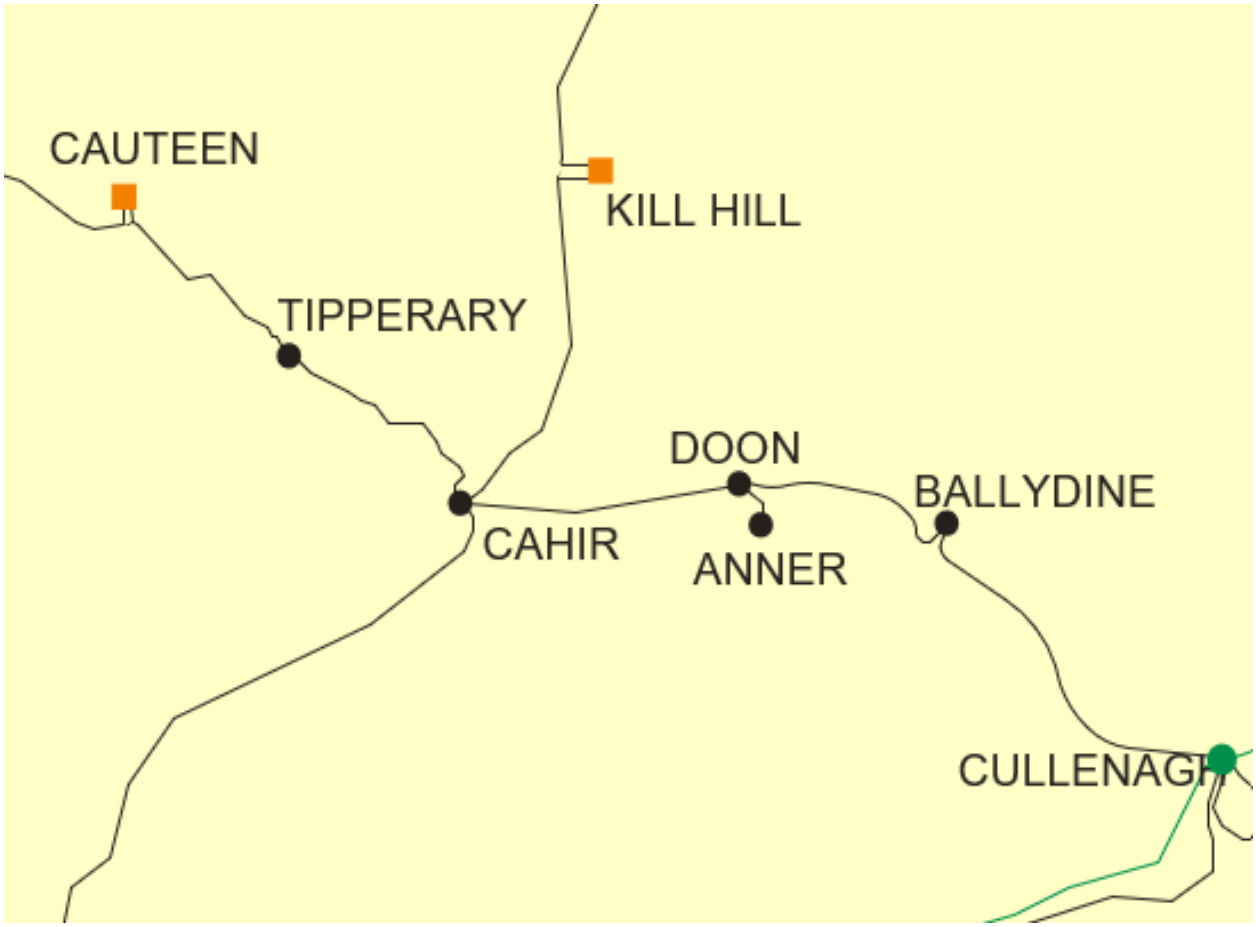

Figure 2-10 - Location of node Cahir

Generator	SO	Capacity	Type	Status
Farranlahassery Solar	DSO	4.0	solar not priority	due to connect
Ballymacadam (Monraha) Solar PV Farm	DSO	21.0	solar not priority	due to connect
Monroe East solar from merge Ballyfowloo Lawclon	DSO	8.0	solar not priority	due to connect
Magherareagh Solar PV Farm	DSO	3.3	solar not priority	due to connect

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

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

Area H1	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	33	35	36				
Installed Capacity (MW)	2029	33	35	36	36			
Installed Capacity (MW)	FG			36		36	36	36
Available Energy (GWh)	2027	39	41	43				
Available Energy (GWh)	2029	39	41	43	43			
Available Energy (GWh)	FG			43		43	43	43
Generation (GWh)	2027	35	35	33				
Generation (GWh)	2029	38	38	36	33			
Generation (GWh)	FG			37		35	34	31
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	7 %	5 %	5 %				
Constraint (%)	2029	1 %	2 %	4 %	3 %			
Constraint (%)	FG			6 %		4 %	3 %	2 %
Total Dispatch Down (%)	2027	8 %	13 %	23 %				
Total Dispatch Down (%)	2029	2 %	7 %	16 %	22 %			
Total Dispatch Down (%)	FG			13 %		17 %	21 %	26 %

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

Area H1	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	35	
Installed Capacity (MW)	2029 (pro-rata)	35	
Installed Capacity (MW)	FG (pro-rata)		36
Available Energy (GWh)	2027 (GF)	41	
Available Energy (GWh)	2029 (pro-rata)	41	
Available Energy (GWh)	FG (pro-rata)		43
Generation (GWh)	2027 (GF)	35	
Generation (GWh)	2029 (pro-rata)	38	
Generation (GWh)	FG (pro-rata)		35
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)	5 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		4 %
Total Dispatch Down (%)	2027 (GF)	13 %	
Total Dispatch Down (%)	2029 (pro-rata)	7 %	
Total Dispatch Down (%)	FG (pro-rata)		17 %

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

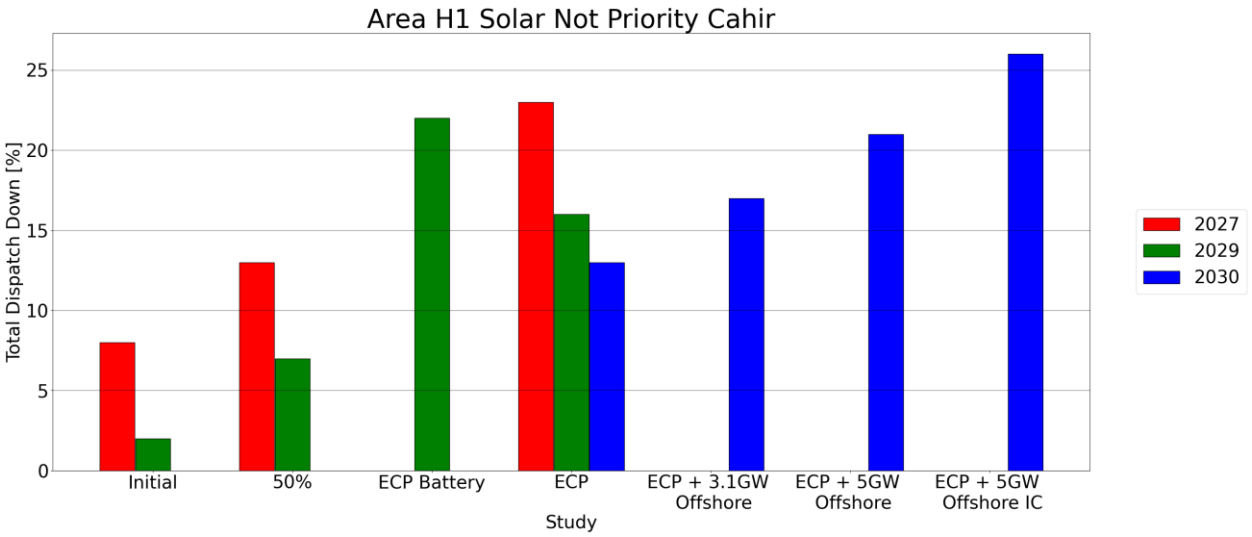

Figure 2-11 - Total Dispatch Down for Solar not priority for Node Cahir

2.5 Cauteen

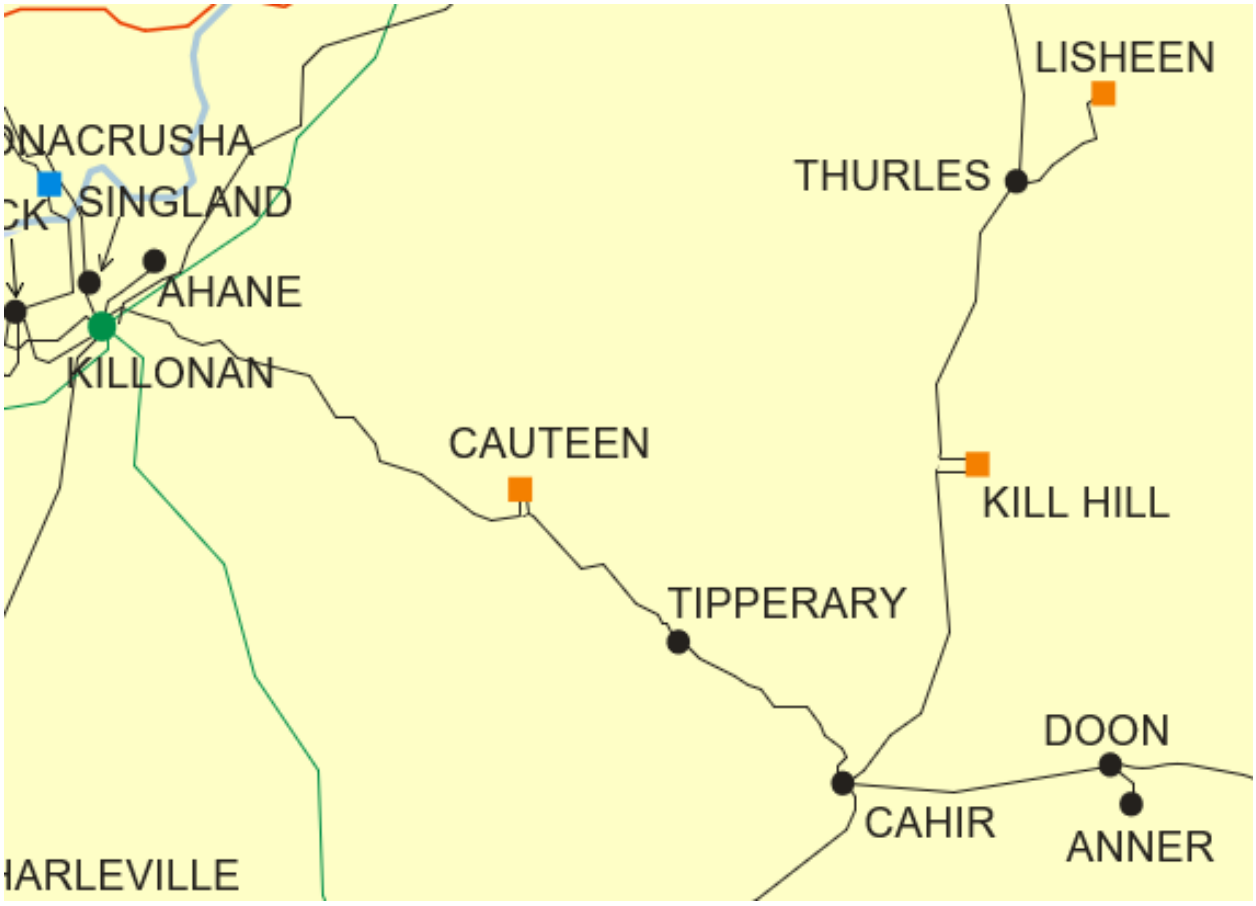

Figure 2-12 - Location of node Cauteen

Generator	SO	Capacity	Type	Status
Cappawhite B	DSO	13.18	wind priority	connected
Cappawhite A Wind Farm (Gate 2)	DSO	2.92	wind priority	connected
Holyford (1)	DSO	9.0	wind priority	connected
Garracummer (1)	DSO	36.9	wind priority	connected
Glenough (1)	DSO	33.0	wind priority	connected
Cappawhite A	DSO	49.08	wind priority	connected
Glencarbry (1)	DSO	33.0	wind priority	connected
Garracummer (2)	DSO	1.0	wind priority	connected
Barnaleen Solar Farm	TSO	55.0	solar not priority	due to connect
Gortdrum Solar PV	DSO	48.0	solar not priority	due to connect
Ballyvalode Solar	TSO	113.0	solar not priority	due to connect
Barnaleen Solar Phase 2	TSO	35.0	solar not priority	due to connect

Table 2-17 - Generation Included in Study for Node Cauteen

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

Area H1	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027		126	251				
Installed Capacity (MW)	2029		126	251	251			
Installed Capacity (MW)	FG			251		251	251	251
Available Energy (GWh)	2027		147	294				
Available Energy (GWh)	2029		147	294	294			
Available Energy (GWh)	FG			294		294	294	294
Generation (GWh)	2027		128	227				
Generation (GWh)	2029		137	247	228			
Generation (GWh)	FG			256		244	233	217
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		5 %	5 %				
Constraint (%)	2029		2 %	4 %	3 %			
Constraint (%)	FG			6 %		4 %	3 %	2 %
Total Dispatch Down (%)	2027		13 %	23 %				
Total Dispatch Down (%)	2029		7 %	16 %	22 %			
Total Dispatch Down (%)	FG			13 %		17 %	21 %	26 %

Table 2-18 - Surplus, Curtailment and Constraint for Solar non-priority for Node Cauteen

Area H1	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	126	
Installed Capacity (MW)	2029 (pro-rata)	126	
Installed Capacity (MW)	FG (pro-rata)		251
Available Energy (GWh)	2027 (GF)	147	
Available Energy (GWh)	2029 (pro-rata)	147	
Available Energy (GWh)	FG (pro-rata)		294
Generation (GWh)	2027 (GF)	128	
Generation (GWh)	2029 (pro-rata)	137	
Generation (GWh)	FG (pro-rata)		244
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)	5 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		4 %
Total Dispatch Down (%)	2027 (GF)	13 %	
Total Dispatch Down (%)	2029 (pro-rata)	7 %	
Total Dispatch Down (%)	FG (pro-rata)		17 %

Table 2-19 - Surplus, Curtailment and Constraint for Solar non-priority with sensitivity for Node Cauteen

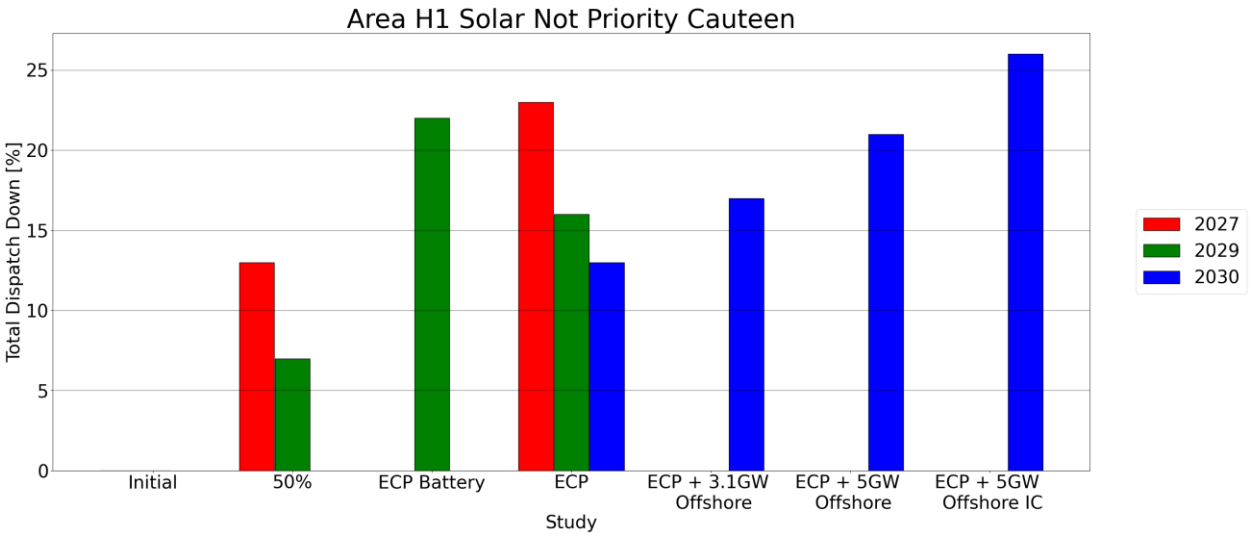

Figure 2-13 - Total Dispatch Down for Solar not priority for Node Cauteen

The wind priority data is given in the following table.

Area H1	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	178	178	178				
Installed Capacity (MW)	2029	178	178	178	178			
Installed Capacity (MW)	FG			178		178	178	178
Available Energy (GWh)	2027	560	560	560				
Available Energy (GWh)	2029	560	560	560	560			
Available Energy (GWh)	FG			560		560	560	560
Generation (GWh)	2027	533	500	476				
Generation (GWh)	2029	558	550	540	533			
Generation (GWh)	FG			555		543	537	531
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	7 %				
Curtailment (%)	2029	0 %	2 %	4 %	5 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	6 %	8 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	5 %	11 %	15 %				
Total Dispatch Down (%)	2029	0 %	2 %	4 %	5 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-20 - Surplus, Curtailment and Constraint for Wind priority for Node Cauteen

Area H1	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	178	
Installed Capacity (MW)	2029 (pro-rata)	178	
Installed Capacity (MW)	FG (pro-rata)		178
Available Energy (GWh)	2027 (GF)	560	
Available Energy (GWh)	2029 (pro-rata)	560	
Available Energy (GWh)	FG (pro-rata)		560
Generation (GWh)	2027 (GF)	535	
Generation (GWh)	2029 (pro-rata)	544	
Generation (GWh)	FG (pro-rata)		518
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	2 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	1 %	
Constraint (%)	FG (pro-rata)		4 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		7 %

Table 2-21 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Cauteen

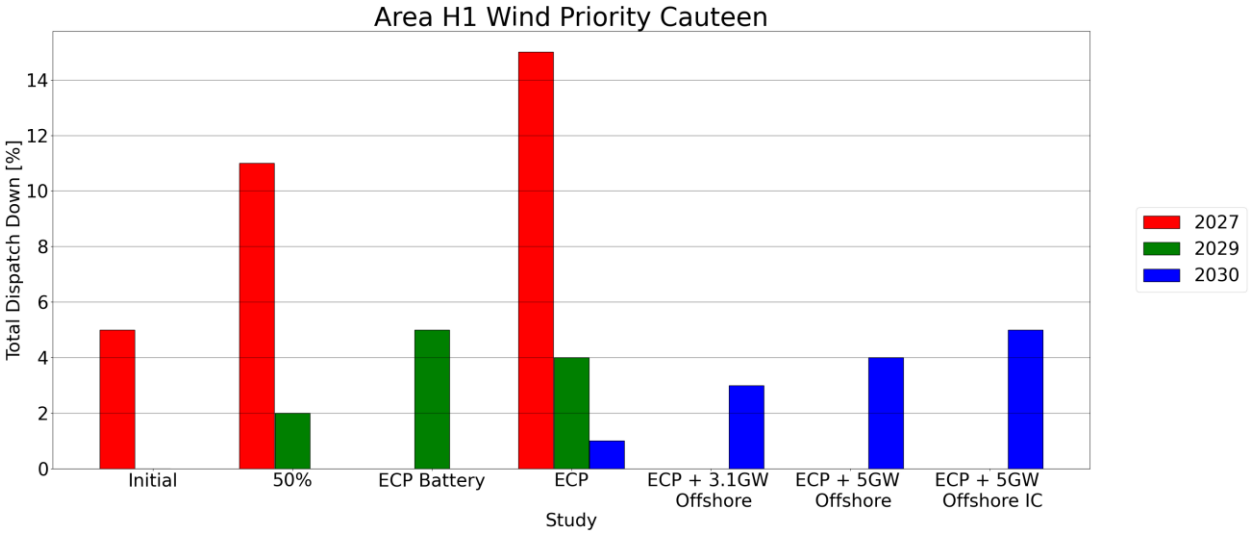

Figure 2-14 - Total Dispatch Down for Wind priority for Node Cauteen

2.6 Doon

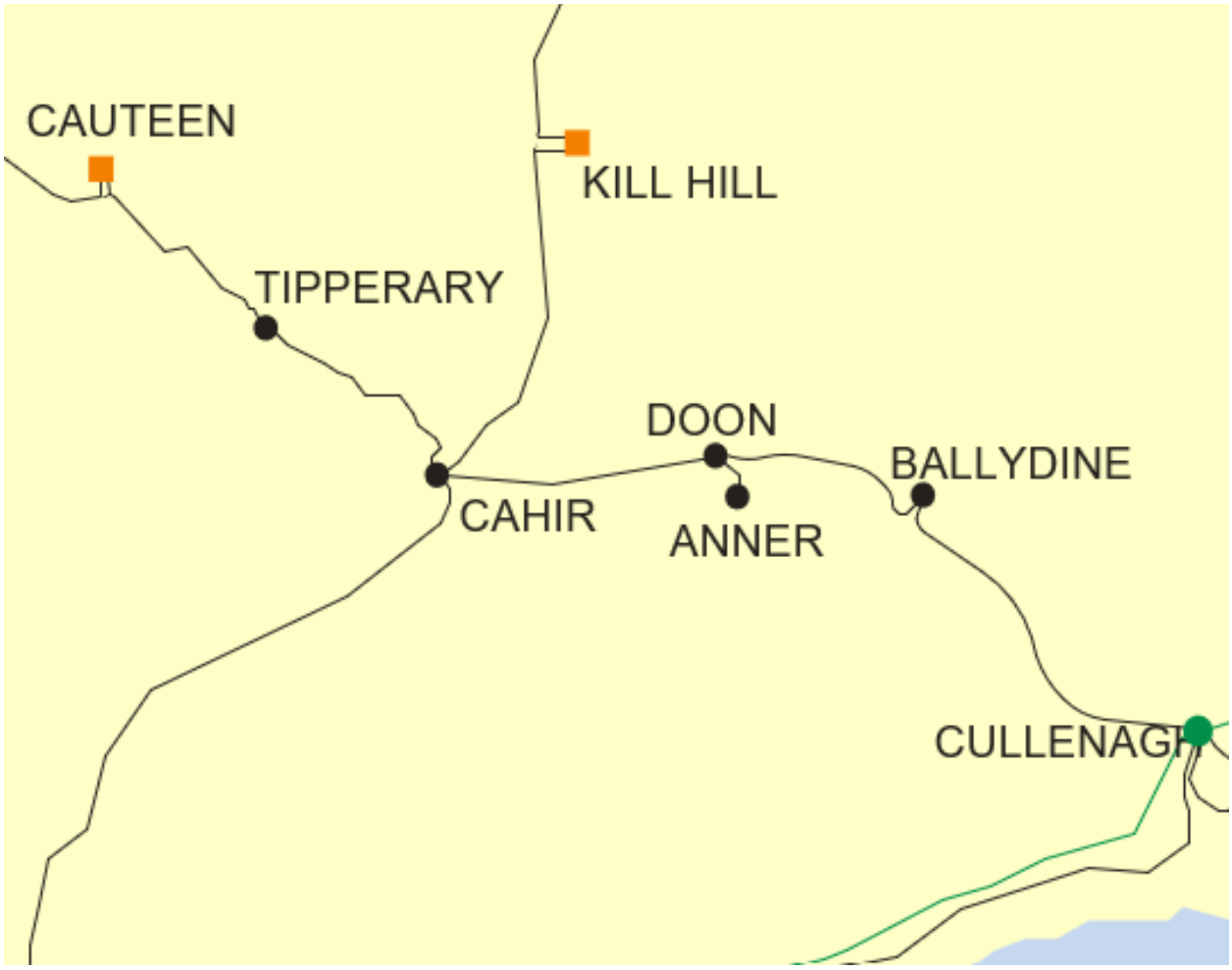

Figure 2-15 - Location of node Doon

Generator	SO	Capacity	Type	Status
Horsepasture Solar Farm (Grian PV)	DSO	8.0	solar not priority	due to connect
Clonmel Renewable Energy Community A	DSO	4.99	solar not priority	due to connect
Knockroe Wind Farm	DSO	33.6	wind not priority	due to connect

Table 2-22 - Generation Included in Study for Node Doon

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

Area H1	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	8	10	13				
Installed Capacity (MW)	2029	8	10	13	13			
Installed Capacity (MW)	FG			13		13	13	13
Available Energy (GWh)	2027	9	12	15				
Available Energy (GWh)	2029	9	12	15	15			
Available Energy (GWh)	FG			15		15	15	15
Generation (GWh)	2027	9	11	12				
Generation (GWh)	2029	9	11	13	12			
Generation (GWh)	FG			13		13	12	11
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	7 %	5 %	5 %				
Constraint (%)	2029	1 %	2 %	4 %	3 %			
Constraint (%)	FG			6 %		4 %	3 %	2 %
Total Dispatch Down (%)	2027	8 %	13 %	23 %				
Total Dispatch Down (%)	2029	2 %	7 %	16 %	22 %			
Total Dispatch Down (%)	FG			13 %		17 %	21 %	26 %

Table 2-23 - Surplus, Curtailment and Constraint for Solar non-priority for Node Doon

Area H1	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)		13
Available Energy (GWh)	2027 (GF)	12	
Available Energy (GWh)	2029 (pro-rata)	12	
Available Energy (GWh)	FG (pro-rata)		15
Generation (GWh)	2027 (GF)	11	
Generation (GWh)	2029 (pro-rata)	11	
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)	5 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		4 %
Total Dispatch Down (%)	2027 (GF)	13 %	
Total Dispatch Down (%)	2029 (pro-rata)	7 %	
Total Dispatch Down (%)	FG (pro-rata)		17 %

Table 2-24 - Surplus, Curtailment and Constraint for Solar non-priority with sensitivity for Node Doon

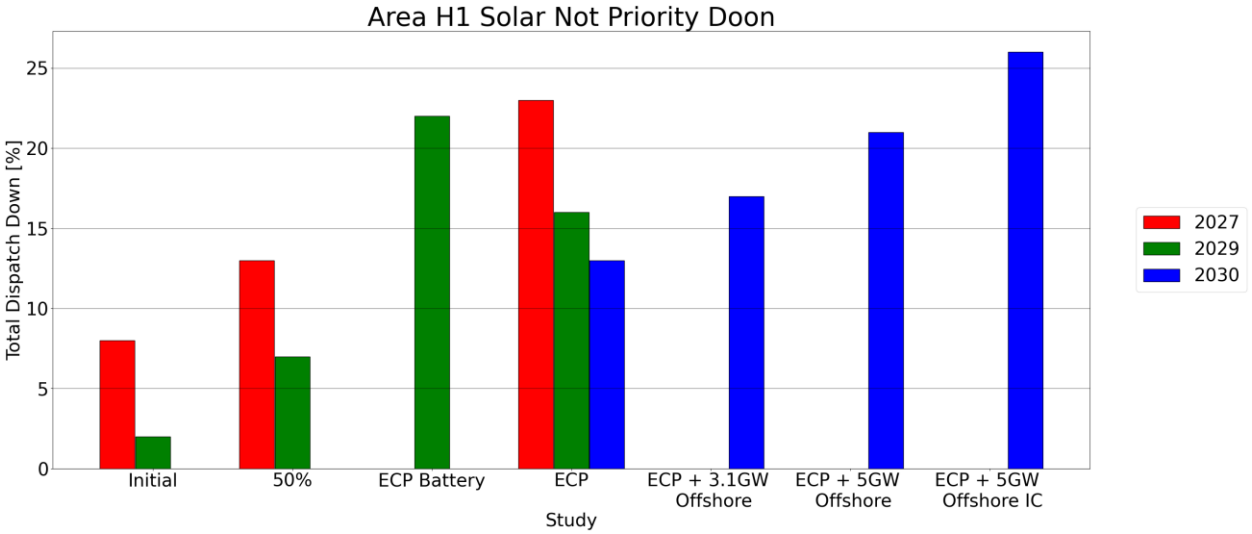

Figure 2-16 - Total Dispatch Down for Solar not priority for Node Doon

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

Area H1	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027		17	34				
Installed Capacity (MW)	2029		17	34	34			
Installed Capacity (MW)	FG			34		34	34	34
Available Energy (GWh)	2027		53	106				
Available Energy (GWh)	2029		53	106	106			
Available Energy (GWh)	FG			106		106	106	106
Generation (GWh)	2027		44	77				
Generation (GWh)	2029		49	90	85			
Generation (GWh)	FG			91		77	73	64
Surplus (%)	2027		7 %	14 %				
Surplus (%)	2029		2 %	6 %	10 %			
Surplus (%)	FG			3 %		14 %	25 %	35 %
Curtailment (%)	2027		3 %	5 %				
Curtailment (%)	2029		1 %	3 %	3 %			
Curtailment (%)	FG			1 %		2 %	3 %	3 %
Constraint (%)	2027		6 %	8 %				
Constraint (%)	2029		4 %	6 %	7 %			
Constraint (%)	FG			10 %		11 %	3 %	2 %
Total Dispatch Down (%)	2027		16 %	27 %				
Total Dispatch Down (%)	2029		7 %	15 %	20 %			
Total Dispatch Down (%)	FG			14 %		27 %	31 %	40 %

Table 2-25 - Surplus, Curtailment and Constraint for Wind non-priority for Node Doon

Area H1	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)		34
Available Energy (GWh)	2027 (GF)	53	
Available Energy (GWh)	2029 (pro-rata)	53	
Available Energy (GWh)	FG (pro-rata)		106
Generation (GWh)	2027 (GF)	37	
Generation (GWh)	2029 (pro-rata)	50	
Generation (GWh)	FG (pro-rata)		84
Surplus (%)	2027 (GF)	7 %	
Surplus (%)	2029 (pro-rata)	2 %	
Surplus (%)	FG (pro-rata)		14 %
Curtailment (%)	2027 (GF)	3 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	20 %	
Constraint (%)	2029 (pro-rata)	1 %	
Constraint (%)	FG (pro-rata)		4 %
Total Dispatch Down (%)	2027 (GF)	30 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		20 %

Table 2-26 - Surplus, Curtailment and Constraint for Wind non-priority with sensitivity for Node Doon

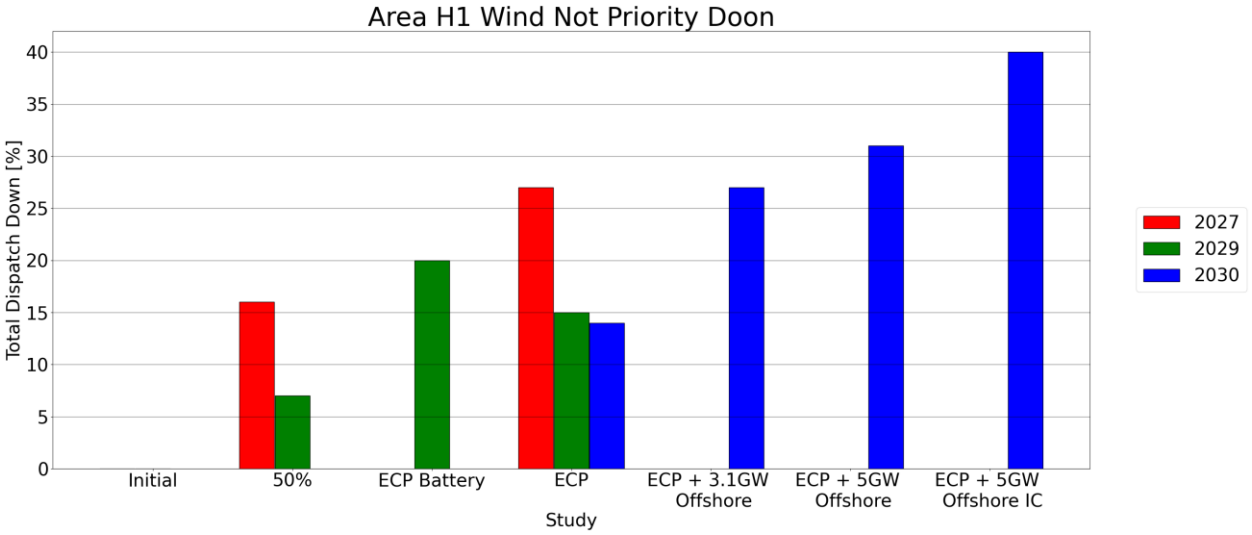

Figure 2-17 - Total Dispatch Down for Wind not priority for Node Doon

2.7 Ikerrin

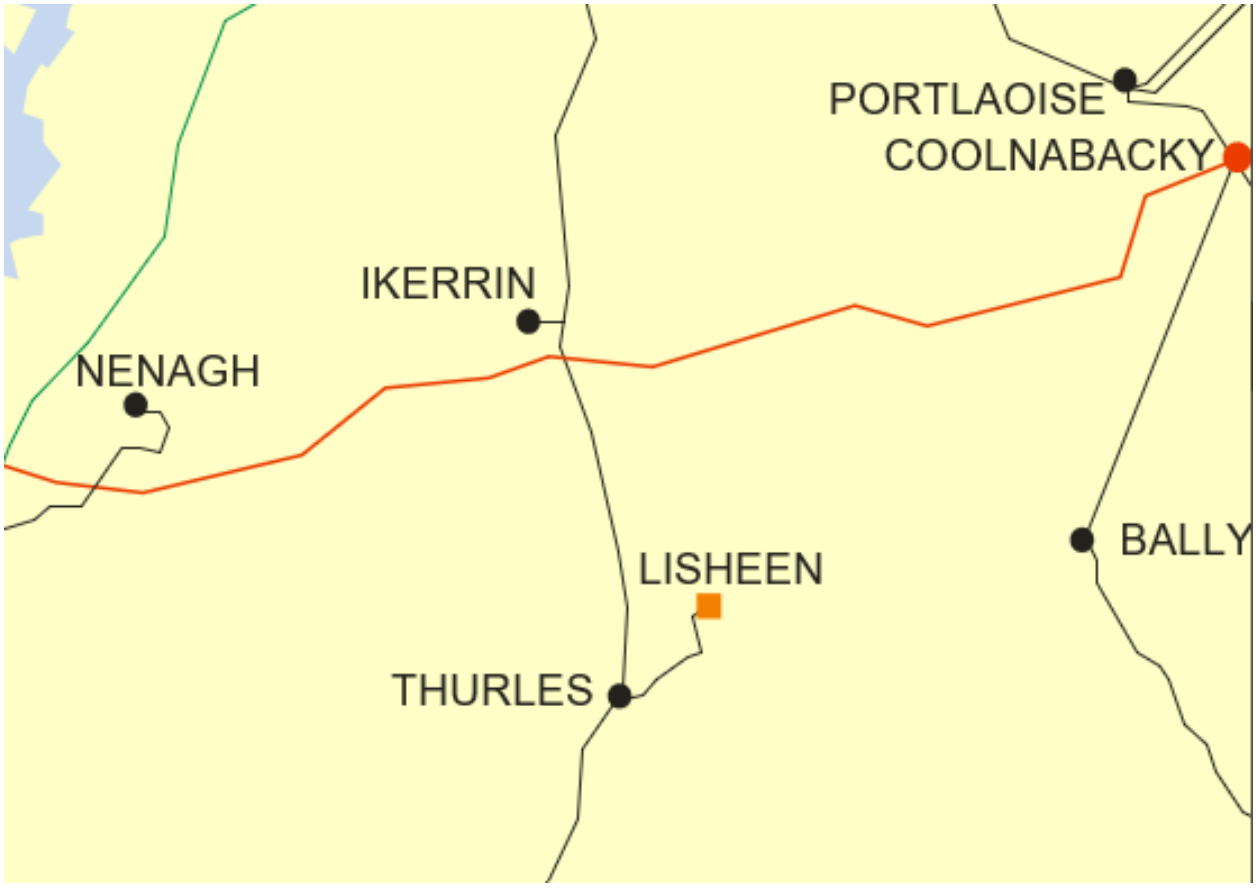

Figure 2-18 - Location of node Ikerrin

Generator	SO	Capacity	Type	Status
Monaincha Bog Wind Farm (Gate 2)	DSO	3.4	wind priority	connected
Monaincha Bog Wind Farm (Gate 3)	DSO	32.55	wind priority	connected

Table 2-27 - Generation Included in Study for Node Ikerrin

The wind priority data is given in the following table.

Area H1	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	36	36	36				
Installed Capacity (MW)	2029	36	36	36	36			
Installed Capacity (MW)	FG			36		36	36	36
Available Energy (GWh)	2027	113	113	113				
Available Energy (GWh)	2029	113	113	113	113			
Available Energy (GWh)	FG			113		113	113	113
Generation (GWh)	2027	108	101	96				
Generation (GWh)	2029	113	111	109	108			
Generation (GWh)	FG			112		110	108	107
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	7 %				
Curtailment (%)	2029	0 %	2 %	4 %	5 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	6 %	8 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	5 %	11 %	15 %				
Total Dispatch Down (%)	2029	0 %	2 %	4 %	5 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-28 - Surplus, Curtailment and Constraint for Wind priority for Node Ikerrin

Area H1	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	36	
Installed Capacity (MW)	2029 (pro-rata)	36	
Installed Capacity (MW)	FG (pro-rata)		36
Available Energy (GWh)	2027 (GF)	113	
Available Energy (GWh)	2029 (pro-rata)	113	
Available Energy (GWh)	FG (pro-rata)		113
Generation (GWh)	2027 (GF)	108	
Generation (GWh)	2029 (pro-rata)	110	
Generation (GWh)	FG (pro-rata)		105
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	2 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	1 %	
Constraint (%)	FG (pro-rata)		4 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		7 %

Table 2-29 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Ikerrin

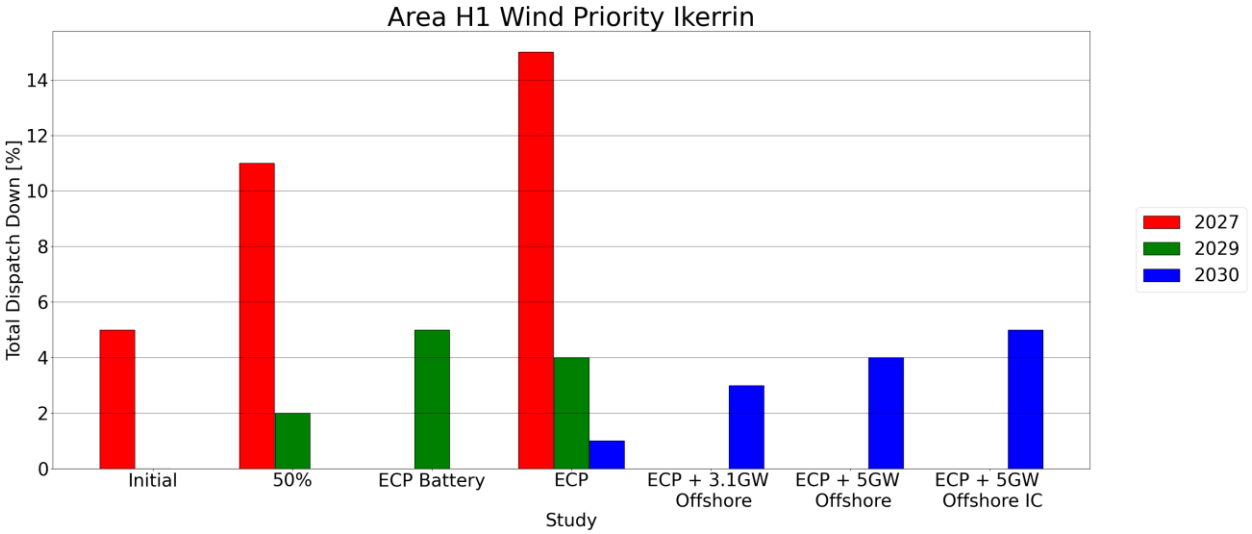

Figure 2-19 - Total Dispatch Down for Wind priority for Node Ikerrin

2.8 Kill hill

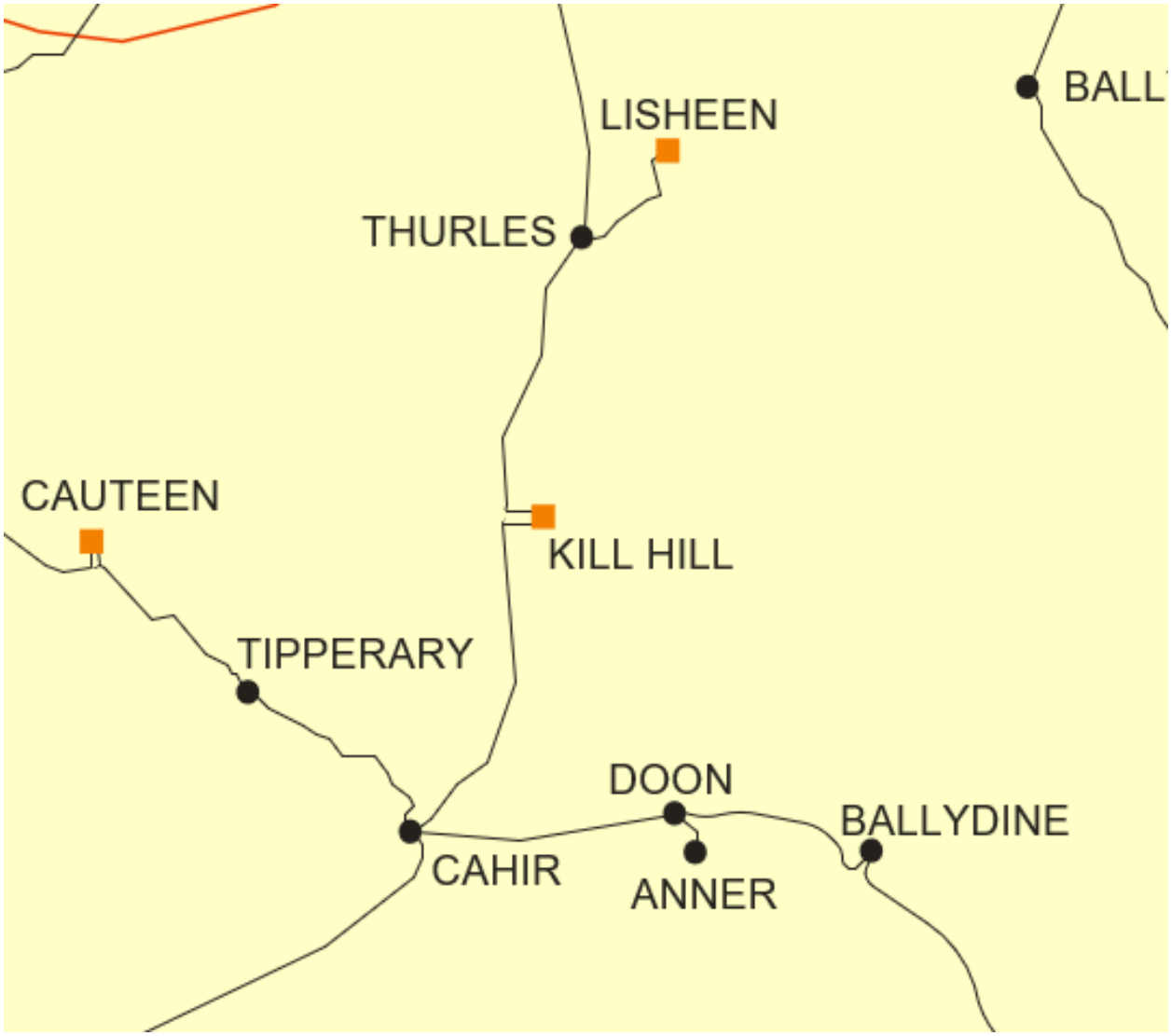

Figure 2-20 - Location of node Kill hill

Generator	SO	Capacity	Type	Status
Kill Hill (1) - phase 1	TSO	36.0	wind priority	connected

Table 2-30 - Generation Included in Study for Node Kill hill

The wind priority data is given in the following table.

Area H1	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	36	36	36				
Installed Capacity (MW)	2029	36	36	36	36			
Installed Capacity (MW)	FG			36		36	36	36
Available Energy (GWh)	2027	113	113	113				
Available Energy (GWh)	2029	113	113	113	113			
Available Energy (GWh)	FG			113		113	113	113
Generation (GWh)	2027	108	101	96				
Generation (GWh)	2029	113	111	109	108			
Generation (GWh)	FG			112		110	109	107
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	7 %				
Curtailment (%)	2029	0 %	2 %	4 %	5 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	6 %	8 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	5 %	11 %	15 %				
Total Dispatch Down (%)	2029	0 %	2 %	4 %	5 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-31 - Surplus, Curtailment and Constraint for Wind priority for Node Kill hill

Area H1	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	36	
Installed Capacity (MW)	2029 (pro-rata)	36	
Installed Capacity (MW)	FG (pro-rata)		36
Available Energy (GWh)	2027 (GF)	113	
Available Energy (GWh)	2029 (pro-rata)	113	
Available Energy (GWh)	FG (pro-rata)		113
Generation (GWh)	2027 (GF)	108	
Generation (GWh)	2029 (pro-rata)	110	
Generation (GWh)	FG (pro-rata)		105
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	2 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	1 %	
Constraint (%)	FG (pro-rata)		4 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		7 %

Table 2-32 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Kill hill

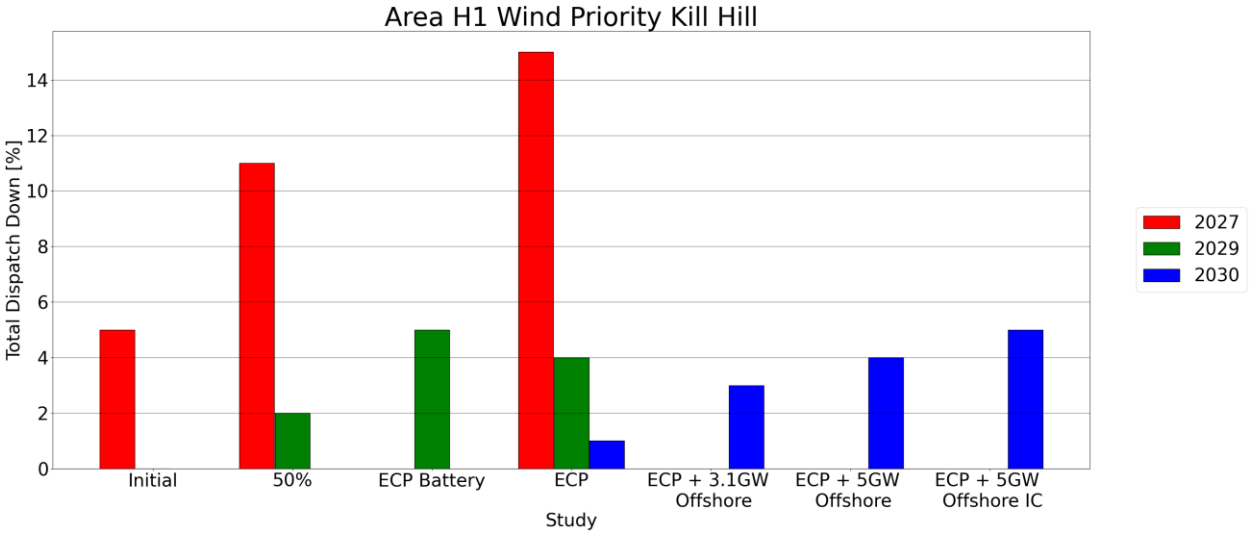

Figure 2-21 - Total Dispatch Down for Wind priority for Node Kill hill

2.9 Killonan

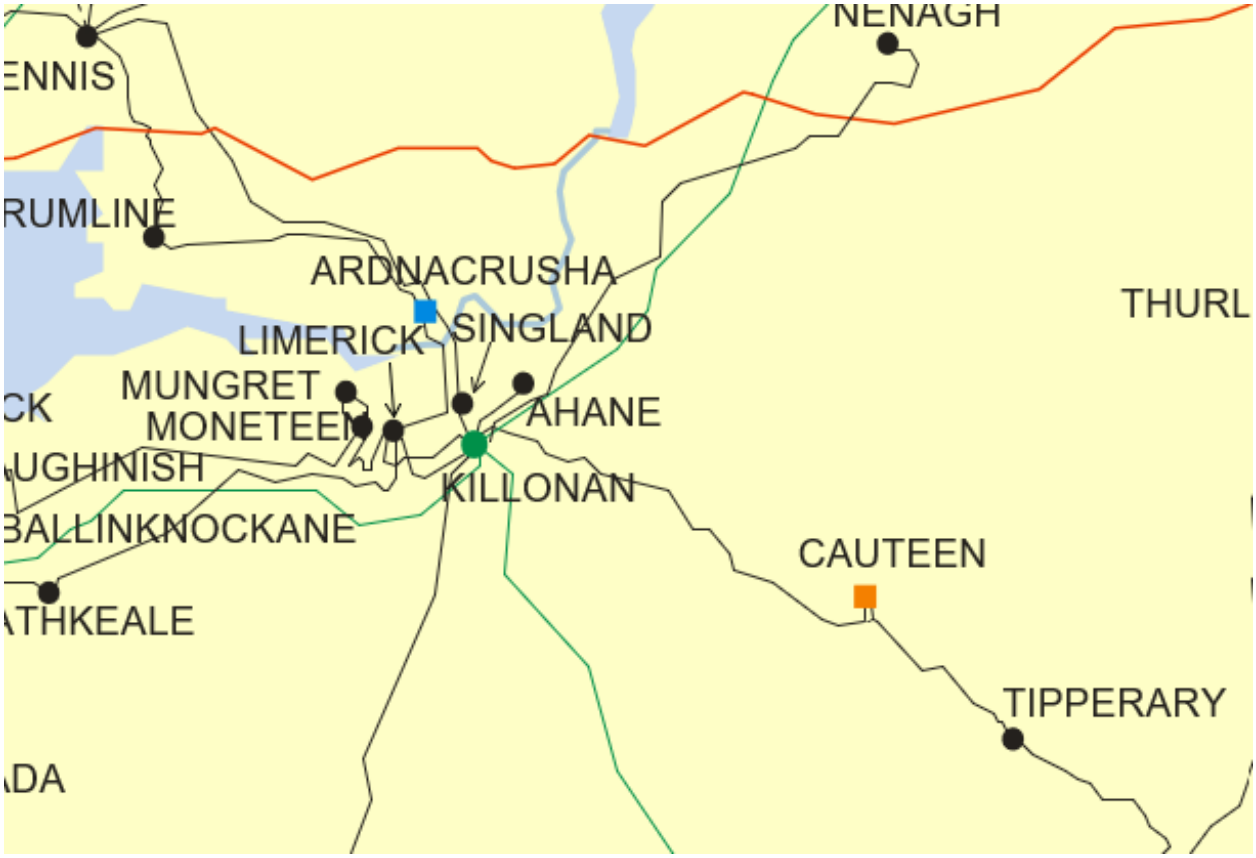

Figure 2-22 - Location of node Killonan

Generator	SO	Capacity	Type	Status
Cureeny (1)	DSO	84.0	wind not priority	due to connect

Table 2-33 - Generation Included in Study for Node Killonan

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

Area H1	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	84	84	84				
Installed Capacity (MW)	2029	84	84	84	84			
Installed Capacity (MW)	FG			84		84	84	84
Available Energy (GWh)	2027	264	264	264				
Available Energy (GWh)	2029	264	264	264	264			
Available Energy (GWh)	FG			264		264	264	264
Generation (GWh)	2027	249	221	193				
Generation (GWh)	2029	254	244	224	212			
Generation (GWh)	FG			228		192	182	159
Surplus (%)	2027	1 %	7 %	14 %				
Surplus (%)	2029	0 %	2 %	6 %	10 %			
Surplus (%)	FG			3 %		14 %	25 %	35 %
Curtailment (%)	2027	2 %	3 %	5 %				
Curtailment (%)	2029	0 %	1 %	3 %	3 %			
Curtailment (%)	FG			1 %		2 %	3 %	3 %
Constraint (%)	2027	3 %	6 %	8 %				
Constraint (%)	2029	4 %	4 %	6 %	7 %			
Constraint (%)	FG			10 %		11 %	3 %	2 %
Total Dispatch Down (%)	2027	6 %	16 %	27 %				
Total Dispatch Down (%)	2029	4 %	7 %	15 %	20 %			
Total Dispatch Down (%)	FG			14 %		27 %	31 %	40 %

Table 2-34 - Surplus, Curtailment and Constraint for Wind non-priority for Node Killonan

Area H1	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	84	
Installed Capacity (MW)	2029 (pro-rata)	84	
Installed Capacity (MW)	FG (pro-rata)		84
Available Energy (GWh)	2027 (GF)	264	
Available Energy (GWh)	2029 (pro-rata)	264	
Available Energy (GWh)	FG (pro-rata)		264
Generation (GWh)	2027 (GF)	185	
Generation (GWh)	2029 (pro-rata)	251	
Generation (GWh)	FG (pro-rata)		210
Surplus (%)	2027 (GF)	7 %	
Surplus (%)	2029 (pro-rata)	2 %	
Surplus (%)	FG (pro-rata)		14 %
Curtailment (%)	2027 (GF)	3 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	20 %	
Constraint (%)	2029 (pro-rata)	1 %	
Constraint (%)	FG (pro-rata)		4 %
Total Dispatch Down (%)	2027 (GF)	30 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		20 %

Table 2-35 - Surplus, Curtailment and Constraint for Wind non-priority with sensitivity for Node Killonan

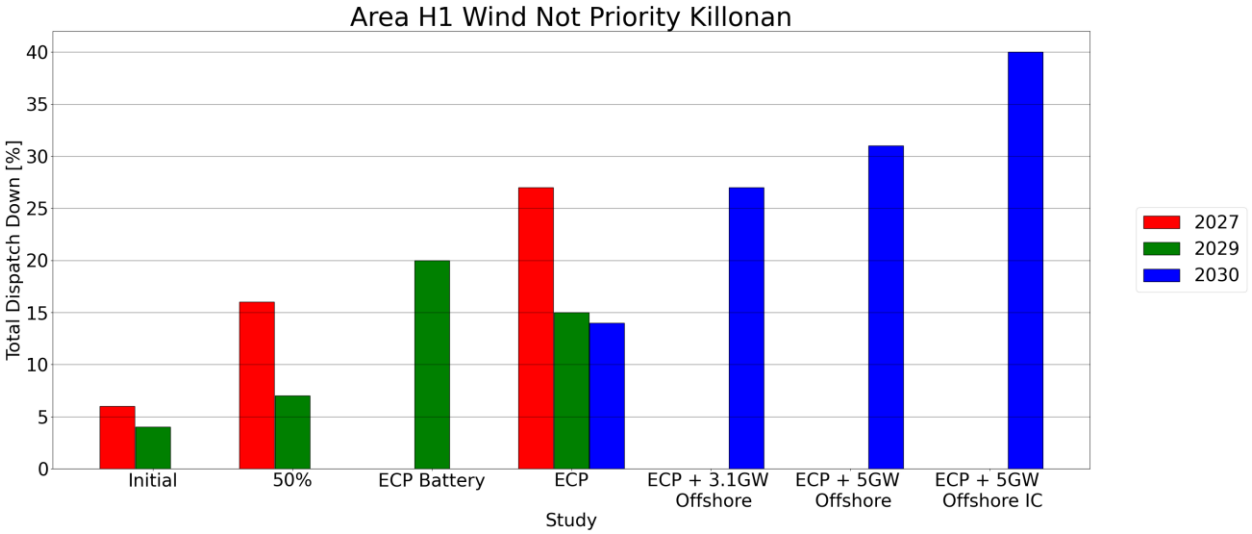

Figure 2-23 - Total Dispatch Down for Wind not priority for Node Killonan

2.10 Lisheen

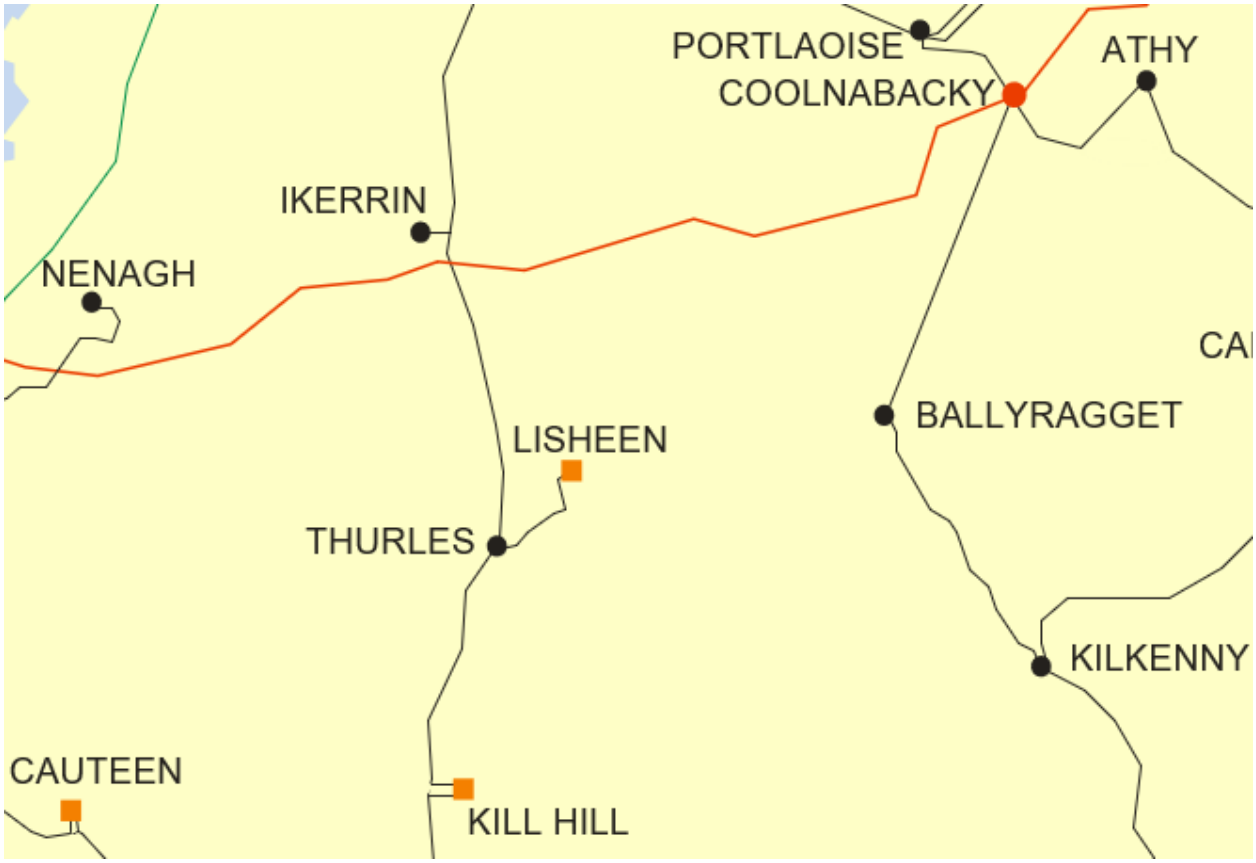

Figure 2-24 - Location of node Lisheen

Generator	SO	Capacity	Type	Status
Lisheen (1a)	TSO	23.0	wind priority	connected
Lisheen (1)	TSO	36.0	wind priority	connected
Bruckana (1)	DSO	39.6	wind priority	connected
Lisheen 3	TSO	28.8	wind not priority	connected
Kiloran Solar PV Farm	TSO	76.0	solar not priority	due to connect

Table 2-36 - Generation Included in Study for Node Lisheen

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

Area H1	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027		38	76				
Installed Capacity (MW)	2029		38	76	76			
Installed Capacity (MW)	FG			76		76	76	76
Available Energy (GWh)	2027		44	89				
Available Energy (GWh)	2029		44	89	89			
Available Energy (GWh)	FG			89		89	89	89
Generation (GWh)	2027		39	69				
Generation (GWh)	2029		41	75	69			
Generation (GWh)	FG			78		74	70	66
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		5 %	5 %				
Constraint (%)	2029		2 %	4 %	3 %			
Constraint (%)	FG			6 %		4 %	3 %	2 %
Total Dispatch Down (%)	2027		13 %	23 %				
Total Dispatch Down (%)	2029		7 %	16 %	22 %			
Total Dispatch Down (%)	FG			13 %		17 %	21 %	26 %

Table 2-37 - Surplus, Curtailment and Constraint for Solar non-priority for Node Lisheen

Area H1	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	38	
Installed Capacity (MW)	2029 (pro-rata)	38	
Installed Capacity (MW)	FG (pro-rata)		76
Available Energy (GWh)	2027 (GF)	44	
Available Energy (GWh)	2029 (pro-rata)	44	
Available Energy (GWh)	FG (pro-rata)		89
Generation (GWh)	2027 (GF)	39	
Generation (GWh)	2029 (pro-rata)	41	
Generation (GWh)	FG (pro-rata)		74
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)	5 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		4 %
Total Dispatch Down (%)	2027 (GF)	13 %	
Total Dispatch Down (%)	2029 (pro-rata)	7 %	
Total Dispatch Down (%)	FG (pro-rata)		17 %

Table 2-38 - Surplus, Curtailment and Constraint for Solar non-priority with sensitivity for Node Lisheen

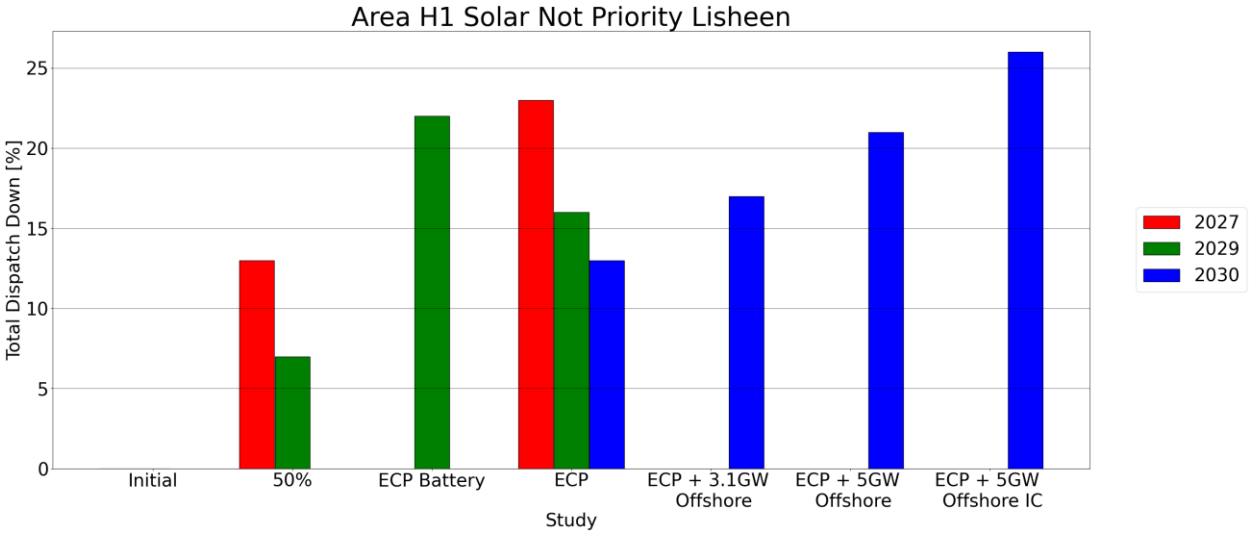

Figure 2-25 - Total Dispatch Down for Solar not priority for Node Lisheen

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

Area H1	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	29	29	29				
Installed Capacity (MW)	2029	29	29	29	29			
Installed Capacity (MW)	FG			29		29	29	29
Available Energy (GWh)	2027	91	91	91				
Available Energy (GWh)	2029	91	91	91	91			
Available Energy (GWh)	FG			91		91	91	91
Generation (GWh)	2027	85	76	66				
Generation (GWh)	2029	87	84	77	73			
Generation (GWh)	FG			78		66	62	55
Surplus (%)	2027	1 %	7 %	14 %				
Surplus (%)	2029	0 %	2 %	6 %	10 %			
Surplus (%)	FG			3 %		14 %	25 %	35 %
Curtailment (%)	2027	2 %	3 %	5 %				
Curtailment (%)	2029	0 %	1 %	3 %	3 %			
Curtailment (%)	FG			1 %		2 %	3 %	3 %
Constraint (%)	2027	3 %	6 %	8 %				
Constraint (%)	2029	4 %	4 %	6 %	7 %			
Constraint (%)	FG			10 %		11 %	3 %	2 %
Total Dispatch Down (%)	2027	6 %	16 %	27 %				
Total Dispatch Down (%)	2029	4 %	7 %	15 %	20 %			
Total Dispatch Down (%)	FG			14 %		27 %	31 %	40 %

Table 2-39 - Surplus, Curtailment and Constraint for Wind non-priority for Node Lisheen

Area H1	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	29	
Installed Capacity (MW)	2029 (pro-rata)	29	
Installed Capacity (MW)	FG (pro-rata)		29
Available Energy (GWh)	2027 (GF)	91	
Available Energy (GWh)	2029 (pro-rata)	91	
Available Energy (GWh)	FG (pro-rata)		91
Generation (GWh)	2027 (GF)	63	
Generation (GWh)	2029 (pro-rata)	86	
Generation (GWh)	FG (pro-rata)		72
Surplus (%)	2027 (GF)	7 %	
Surplus (%)	2029 (pro-rata)	2 %	
Surplus (%)	FG (pro-rata)		14 %
Curtailment (%)	2027 (GF)	3 %	
Curtailment (%)	2029 (pro-rata)	1 %	
Curtailment (%)	FG (pro-rata)		2 %
Constraint (%)	2027 (GF)	20 %	
Constraint (%)	2029 (pro-rata)	1 %	
Constraint (%)	FG (pro-rata)		4 %
Total Dispatch Down (%)	2027 (GF)	30 %	
Total Dispatch Down (%)	2029 (pro-rata)	5 %	
Total Dispatch Down (%)	FG (pro-rata)		20 %

Table 2-40 - Surplus, Curtailment and Constraint for Wind non-priority with sensitivity for Node Lisheen

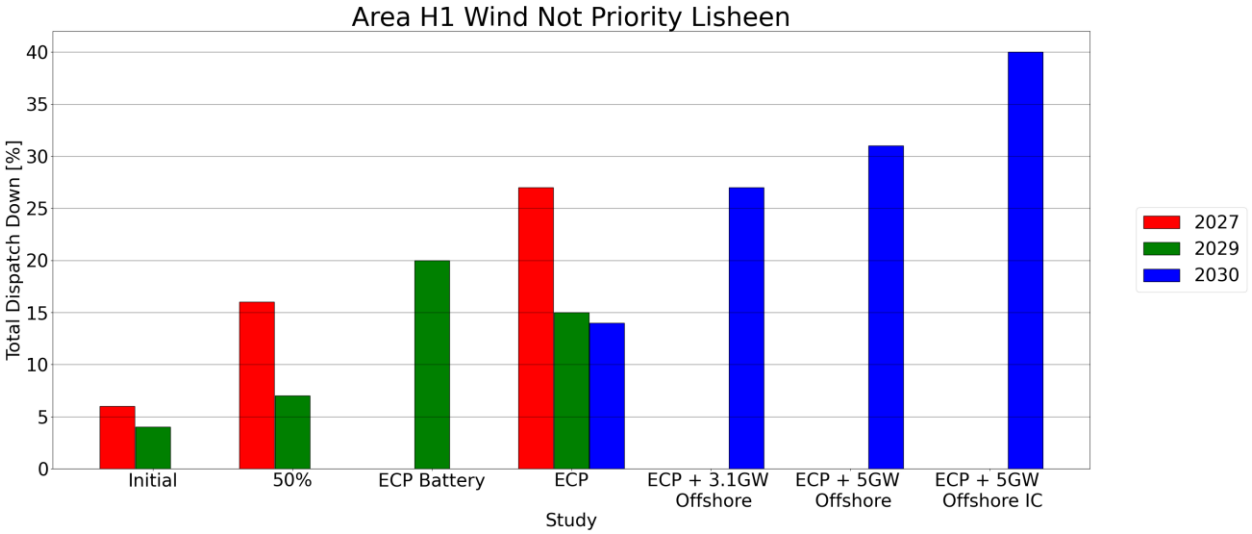

Figure 2-26 - Total Dispatch Down for Wind not priority for Node Lisheen

The wind priority data is given in the following table.

Area H1	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	99	99	99				
Installed Capacity (MW)	2029	99	99	99	99			
Installed Capacity (MW)	FG			99		99	99	99
Available Energy (GWh)	2027	310	310	310				
Available Energy (GWh)	2029	310	310	310	310			
Available Energy (GWh)	FG			310		310	310	310
Generation (GWh)	2027	295	277	263				
Generation (GWh)	2029	309	305	299	295			
Generation (GWh)	FG			307		300	297	294
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	7 %				
Curtailment (%)	2029	0 %	2 %	4 %	5 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	6 %	8 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	5 %	11 %	15 %				
Total Dispatch Down (%)	2029	0 %	2 %	4 %	5 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-41 - Surplus, Curtailment and Constraint for Wind priority for Node Lisheen

Area H1	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	99	
Installed Capacity (MW)	2029 (pro-rata)	99	
Installed Capacity (MW)	FG (pro-rata)		99
Available Energy (GWh)	2027 (GF)	310	
Available Energy (GWh)	2029 (pro-rata)	310	
Available Energy (GWh)	FG (pro-rata)		310
Generation (GWh)	2027 (GF)	296	
Generation (GWh)	2029 (pro-rata)	301	
Generation (GWh)	FG (pro-rata)		287
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	2 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	1 %	
Constraint (%)	FG (pro-rata)		4 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		7 %

Table 2-42 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Lisheen

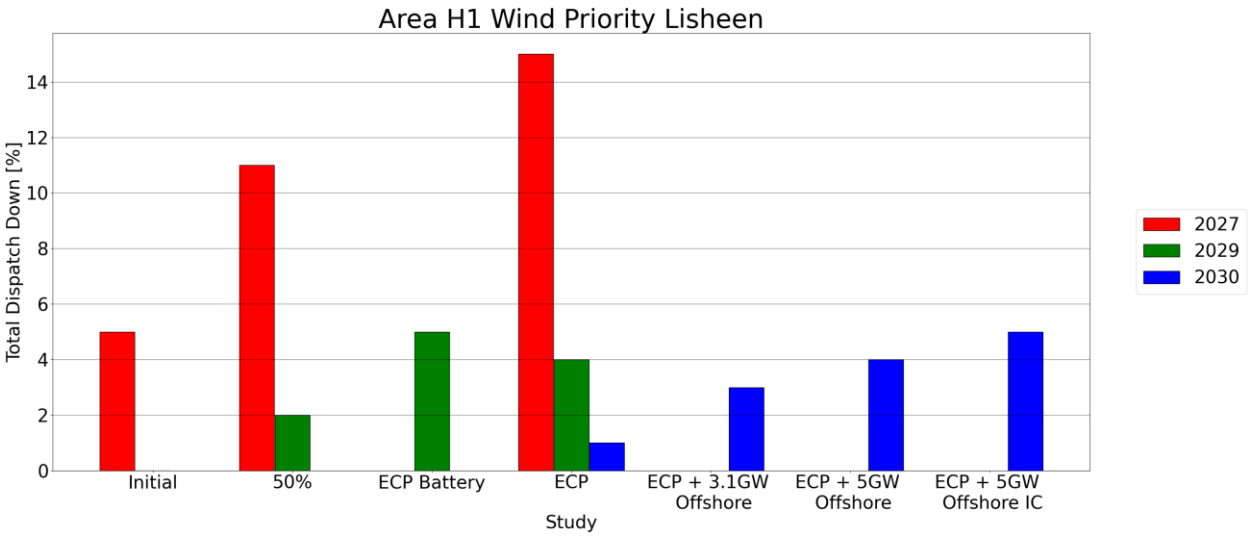

Figure 2-27 - Total Dispatch Down for Wind priority for Node Lisheen

2.11 Mothel

Figure 2-28 - Location of node Mothel

Generator	SO	Capacity	Type	Status
Mothel PV and BESS	TSO	25.0	solar not priority	due to connect

Table 2-43 - Generation Included in Study for Node Mothel

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

Area H1	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027		12	25				
Installed Capacity (MW)	2029		12	25	25			
Installed Capacity (MW)	FG			25		25	25	25
Available Energy (GWh)	2027		15	29				
Available Energy (GWh)	2029		15	29	29			
Available Energy (GWh)	FG			29		29	29	29
Generation (GWh)	2027		13	23				
Generation (GWh)	2029		14	25	23			
Generation (GWh)	FG			26		24	23	22
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		5 %	5 %				
Constraint (%)	2029		2 %	4 %	3 %			
Constraint (%)	FG			6 %		4 %	3 %	2 %
Total Dispatch Down (%)	2027		13 %	23 %				
Total Dispatch Down (%)	2029		7 %	16 %	22 %			
Total Dispatch Down (%)	FG			13 %		17 %	21 %	26 %

Table 2-44 - Surplus, Curtailment and Constraint for Solar non-priority for Node Mothel

Area H1	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	12	
Installed Capacity (MW)	2029 (pro-rata)	12	
Installed Capacity (MW)	FG (pro-rata)		25
Available Energy (GWh)	2027 (GF)	15	
Available Energy (GWh)	2029 (pro-rata)	15	
Available Energy (GWh)	FG (pro-rata)		29
Generation (GWh)	2027 (GF)	13	
Generation (GWh)	2029 (pro-rata)	14	
Generation (GWh)	FG (pro-rata)		24
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)	5 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		4 %
Total Dispatch Down (%)	2027 (GF)	13 %	
Total Dispatch Down (%)	2029 (pro-rata)	7 %	
Total Dispatch Down (%)	FG (pro-rata)		17 %

Table 2-45 - Surplus, Curtailment and Constraint for Solar non-priority with sensitivity for Node Mothel

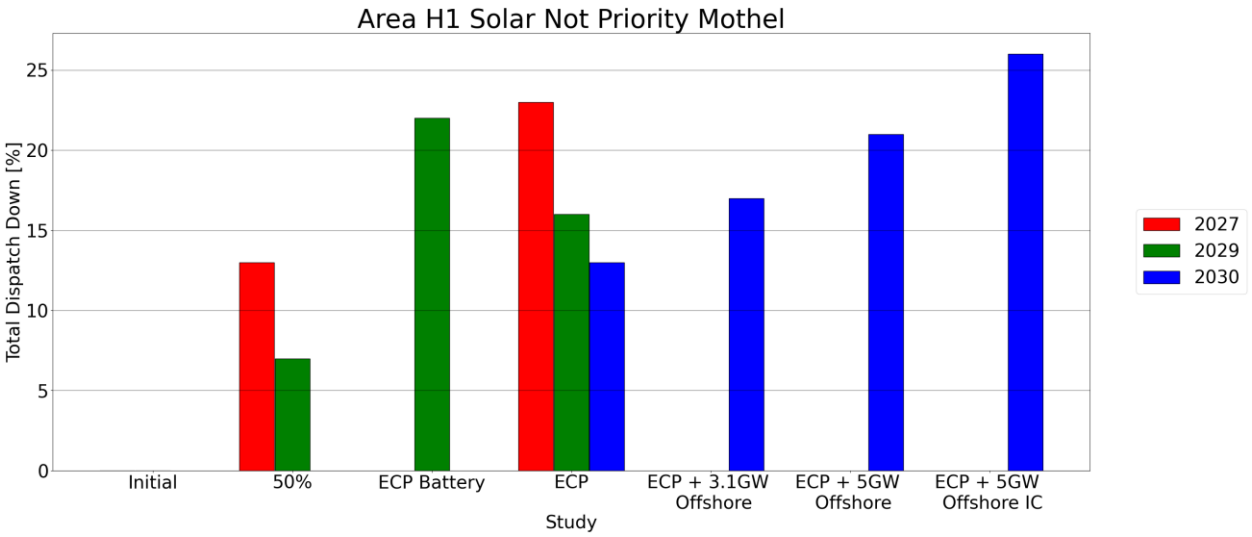

Figure 2-29 - Total Dispatch Down for Solar not priority for Node Mothel

2.12 Nenagh

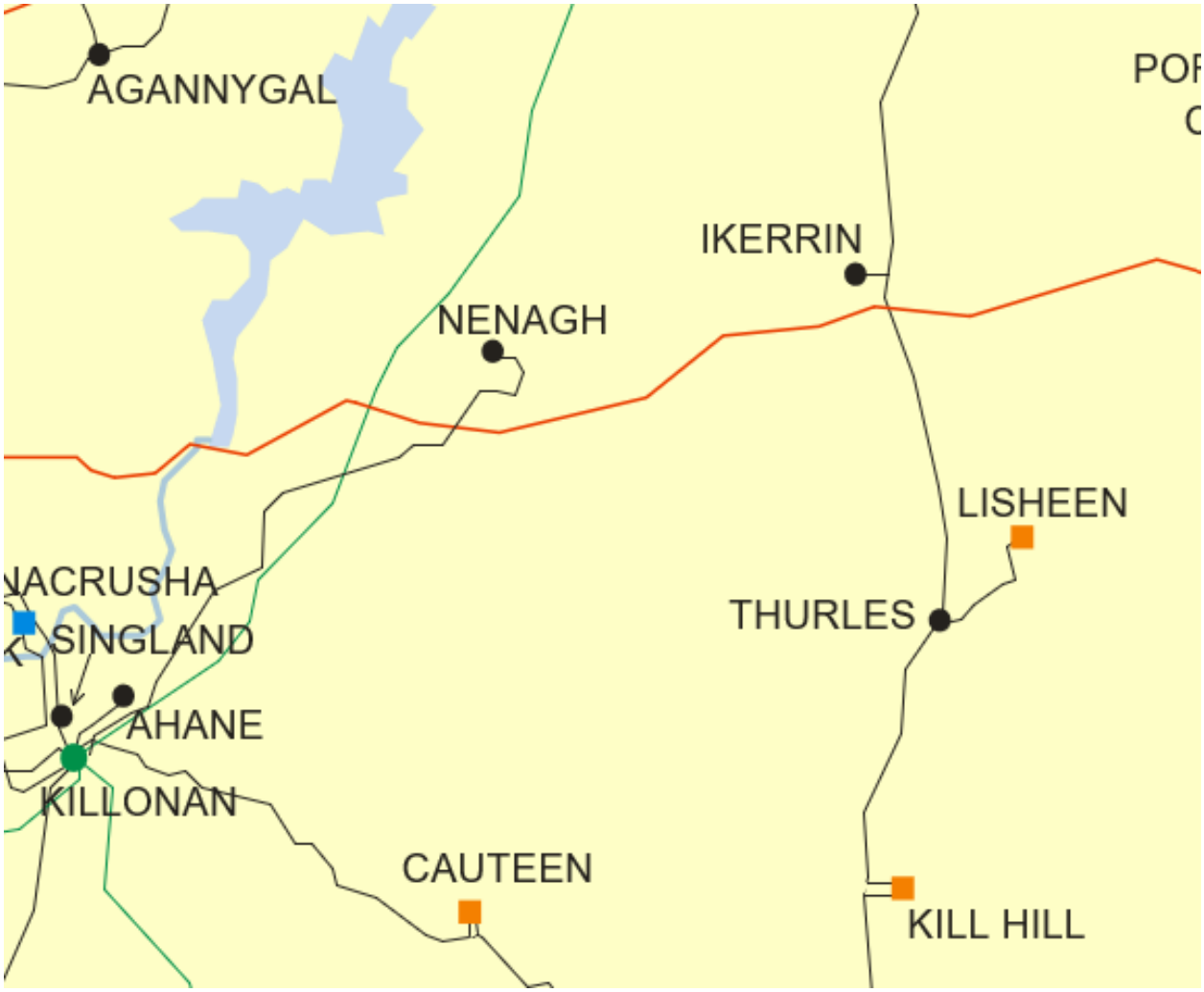

Figure 2-30 - Location of node Nenagh

Generator	SO	Capacity	Type	Status
Ballinlough (1)	DSO	2.55	wind uncontrolled	connected
Ballinveny (1)	DSO	2.55	wind uncontrolled	connected
Curraghgraigue (1)	DSO	2.55	wind uncontrolled	connected
Templederry (1)	DSO	3.9	wind uncontrolled	connected
Curraghgraigue (2)	DSO	2.44	wind uncontrolled	connected
Lisbrien Solar Farm	DSO	4.0	solar not priority	due to connect

Table 2-46 - Generation Included in Study for Node Nenagh

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

Area H1	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	4	4	4				
Installed Capacity (MW)	2029	4	4	4	4			
Installed Capacity (MW)	FG			4		4	4	4
Available Energy (GWh)	2027	5	5	5				
Available Energy (GWh)	2029	5	5	5	5			
Available Energy (GWh)	FG			5		5	5	5
Generation (GWh)	2027	4	4	4				
Generation (GWh)	2029	5	4	4	4			
Generation (GWh)	FG			4		4	4	3
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	7 %	5 %	5 %				
Constraint (%)	2029	1 %	2 %	4 %	3 %			
Constraint (%)	FG			6 %		4 %	3 %	2 %
Total Dispatch Down (%)	2027	8 %	13 %	23 %				
Total Dispatch Down (%)	2029	2 %	7 %	16 %	22 %			
Total Dispatch Down (%)	FG			13 %		17 %	21 %	26 %

Table 2-47 - Surplus, Curtailment and Constraint for Solar non-priority for Node Nenagh

Area H1	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)		4
Available Energy (GWh)	2027 (GF)	5	
Available Energy (GWh)	2029 (pro-rata)	5	
Available Energy (GWh)	FG (pro-rata)		5
Generation (GWh)	2027 (GF)	4	
Generation (GWh)	2029 (pro-rata)	4	
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)	5 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		4 %
Total Dispatch Down (%)	2027 (GF)	13 %	
Total Dispatch Down (%)	2029 (pro-rata)	7 %	
Total Dispatch Down (%)	FG (pro-rata)		17 %

Table 2-48 - Surplus, Curtailment and Constraint for Solar non-priority with sensitivity for Node Nenagh

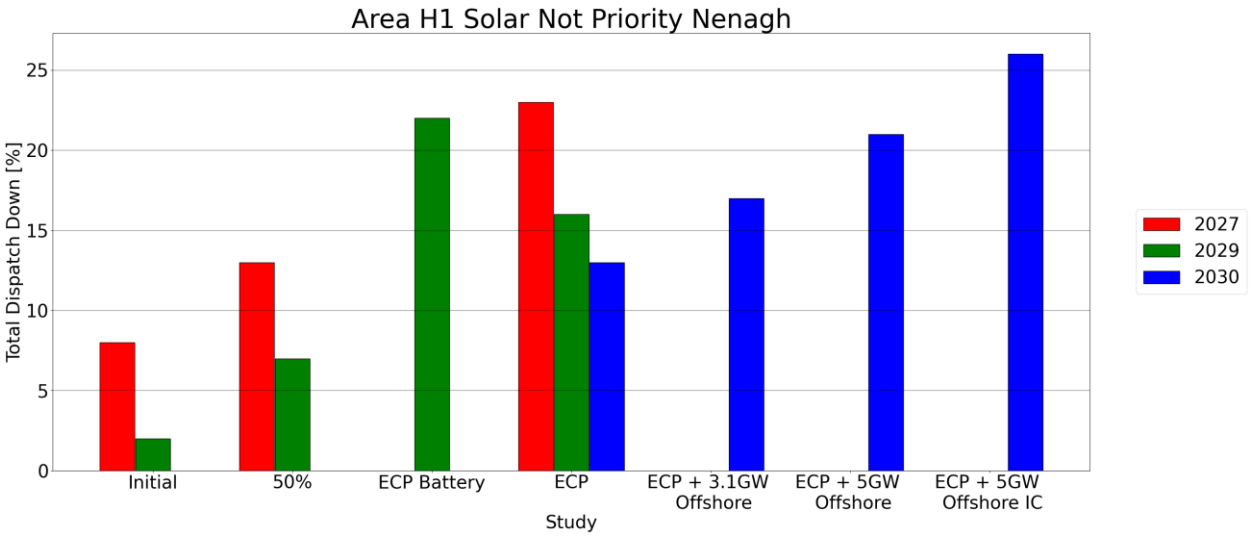

Figure 2-31 - Total Dispatch Down for Solar not priority for Node Nenagh

2.13 Thurles

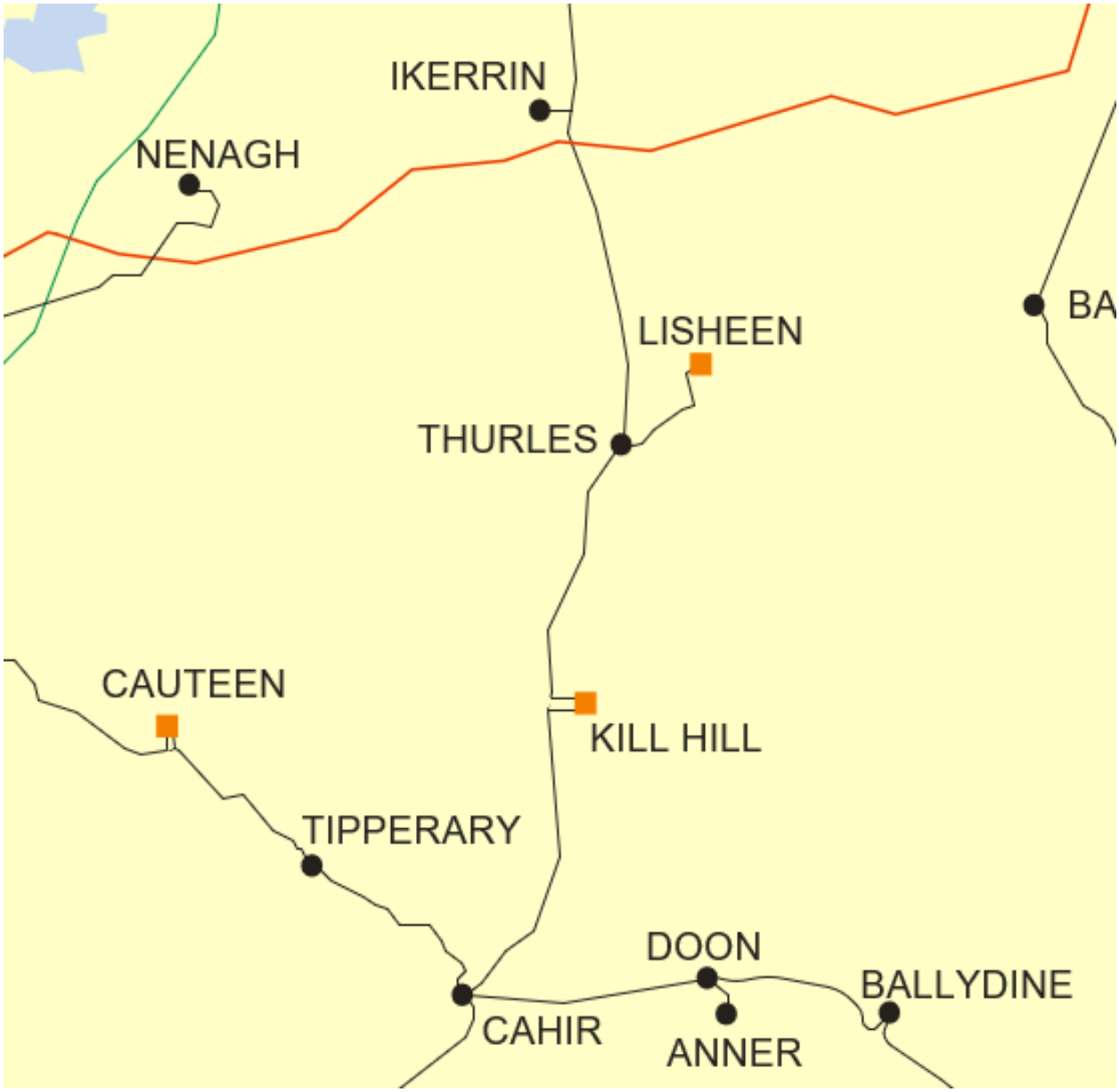

Figure 2-32 - Location of node Thurles

Generator	SO	Capacity	Type	Status
Ballinacurry WF	DSO	4.6	wind uncontrolled	connected
An Cnoc	DSO	11.5	wind priority	connected
Gurteen (1)	DSO	2.3	wind uncontrolled	connected
Foyle Windfarm	DSO	9.6	wind priority	connected
Ballybay Wind Farm (Tullaroan)	DSO	13.8	wind priority	connected

Table 2-49 - Generation Included in Study for Node Thurles

The wind priority data is given in the following table.

Area H1	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	35	35	35				
Installed Capacity (MW)	2029	35	35	35	35			
Installed Capacity (MW)	FG			35		35	35	35
Available Energy (GWh)	2027	110	110	110				
Available Energy (GWh)	2029	110	110	110	110			
Available Energy (GWh)	FG			110		110	110	110
Generation (GWh)	2027	104	98	93				
Generation (GWh)	2029	109	108	106	105			
Generation (GWh)	FG			109		106	105	104
Surplus (%)	2027	0 %	0 %	0 %				
Surplus (%)	2029	0 %	0 %	0 %	0 %			
Surplus (%)	FG			0 %		0 %	0 %	0 %
Curtailment (%)	2027	2 %	4 %	7 %				
Curtailment (%)	2029	0 %	2 %	4 %	5 %			
Curtailment (%)	FG			1 %		3 %	4 %	5 %
Constraint (%)	2027	3 %	6 %	8 %				
Constraint (%)	2029	0 %	0 %	0 %	0 %			
Constraint (%)	FG			0 %		0 %	0 %	0 %
Total Dispatch Down (%)	2027	5 %	11 %	15 %				
Total Dispatch Down (%)	2029	0 %	2 %	4 %	5 %			
Total Dispatch Down (%)	FG			1 %		3 %	4 %	5 %

Table 2-50 - Surplus, Curtailment and Constraint for Wind priority for Node Thurles

Area H1	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	35	
Installed Capacity (MW)	2029 (pro-rata)	35	
Installed Capacity (MW)	FG (pro-rata)		35
Available Energy (GWh)	2027 (GF)	110	
Available Energy (GWh)	2029 (pro-rata)	110	
Available Energy (GWh)	FG (pro-rata)		110
Generation (GWh)	2027 (GF)	105	
Generation (GWh)	2029 (pro-rata)	107	
Generation (GWh)	FG (pro-rata)		102
Surplus (%)	2027 (GF)	0 %	
Surplus (%)	2029 (pro-rata)	0 %	
Surplus (%)	FG (pro-rata)		0 %
Curtailment (%)	2027 (GF)	4 %	
Curtailment (%)	2029 (pro-rata)	2 %	
Curtailment (%)	FG (pro-rata)		3 %
Constraint (%)	2027 (GF)	0 %	
Constraint (%)	2029 (pro-rata)	1 %	
Constraint (%)	FG (pro-rata)		4 %
Total Dispatch Down (%)	2027 (GF)	4 %	
Total Dispatch Down (%)	2029 (pro-rata)	3 %	
Total Dispatch Down (%)	FG (pro-rata)		7 %

Table 2-51 - Surplus, Curtailment and Constraint for Wind priority with sensitivity for Node Thurles

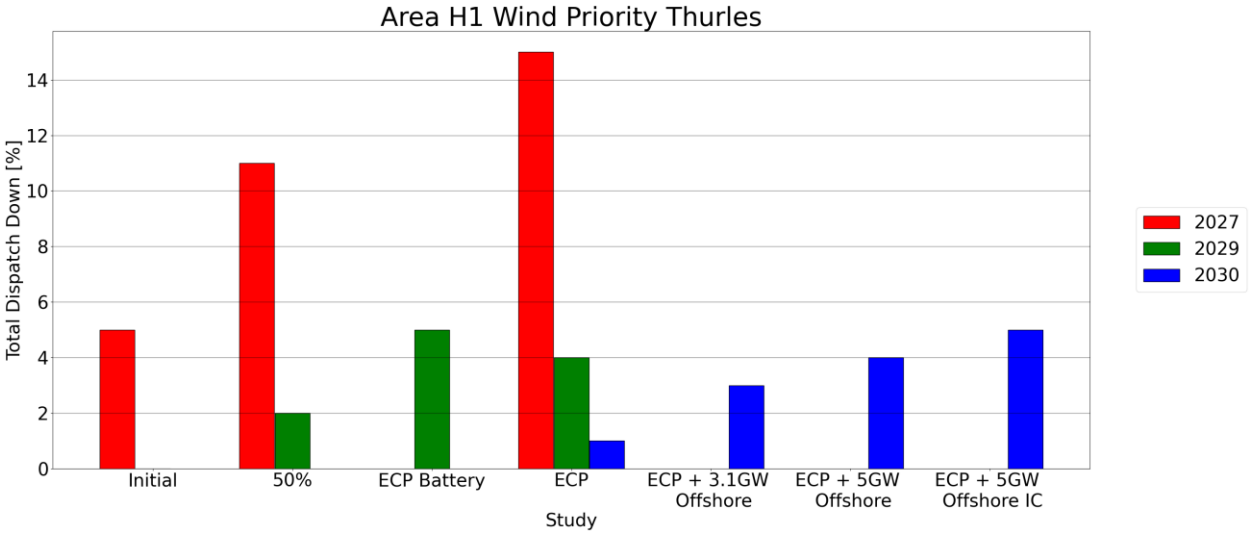

Figure 2-33 - Total Dispatch Down for Wind priority for Node Thurles

2.14 Timoney

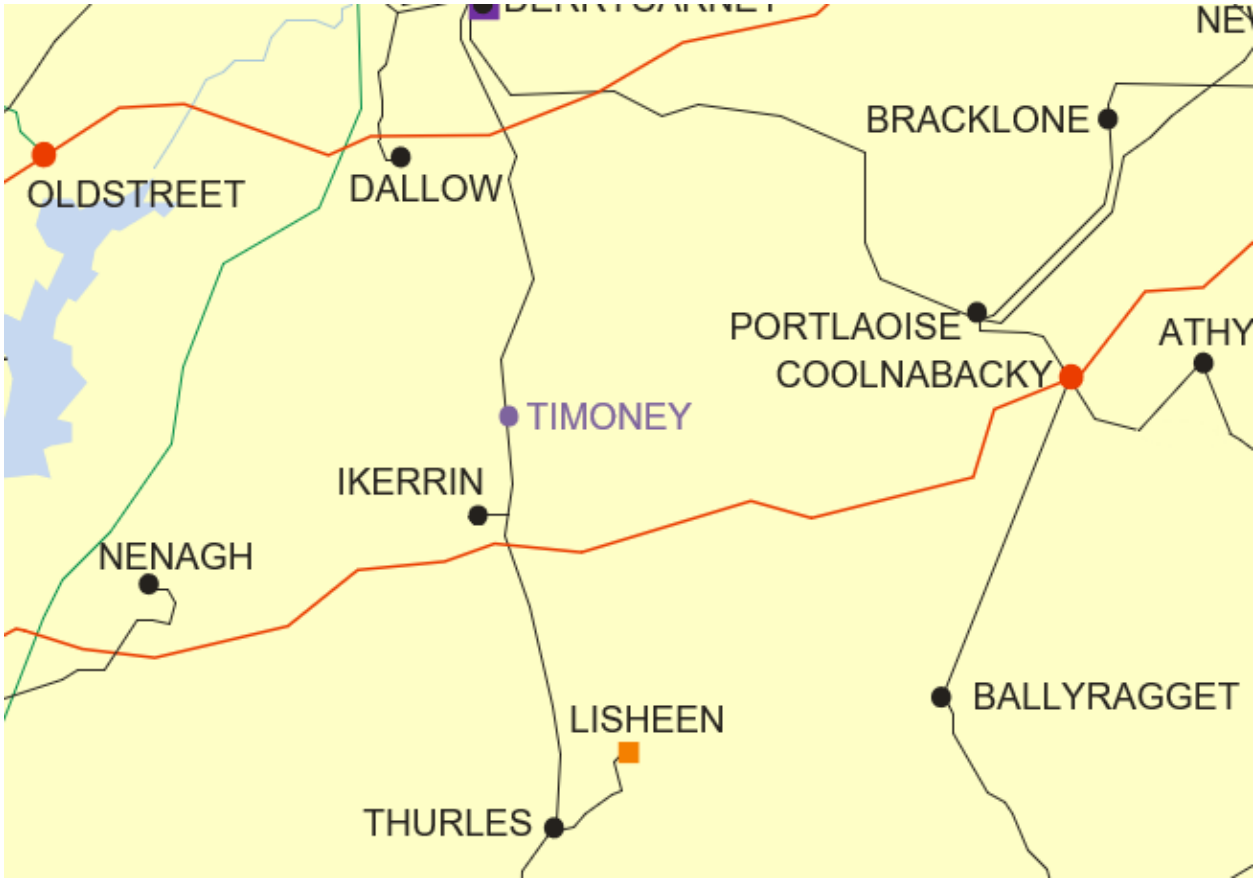

Figure 2-34 - Location of node Timoney

Generator	SO	Capacity	Type	Status
Erkina solar	TSO	66.56	solar not priority	due to connect
Erkina Solar Park Extension	TSO	90.0	solar not priority	due to connect

Table 2-52 - Generation Included in Study for Node Timoney

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

Area H1	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027		78	157				
Installed Capacity (MW)	2029		78	157	157			
Installed Capacity (MW)	FG			157		157	157	157
Available Energy (GWh)	2027		92	183				
Available Energy (GWh)	2029		92	183	183			
Available Energy (GWh)	FG			183		183	183	183
Generation (GWh)	2027		80	142				
Generation (GWh)	2029		85	154	142			
Generation (GWh)	FG			160		152	145	135
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		5 %	5 %				
Constraint (%)	2029		2 %	4 %	3 %			
Constraint (%)	FG			6 %		4 %	3 %	2 %
Total Dispatch Down (%)	2027		13 %	23 %				
Total Dispatch Down (%)	2029		7 %	16 %	22 %			
Total Dispatch Down (%)	FG			13 %		17 %	21 %	26 %

Table 2-53 - Surplus, Curtailment and Constraint for Solar non-priority for Node Timoney

Area H1	Year	50%	ECP + 3.1GW Offshore
Installed Capacity (MW)	2027 (GF)	78	
Installed Capacity (MW)	2029 (pro-rata)	78	
Installed Capacity (MW)	FG (pro-rata)		157
Available Energy (GWh)	2027 (GF)	92	
Available Energy (GWh)	2029 (pro-rata)	92	
Available Energy (GWh)	FG (pro-rata)		183
Generation (GWh)	2027 (GF)	80	
Generation (GWh)	2029 (pro-rata)	85	
Generation (GWh)	FG (pro-rata)		152
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)	5 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		4 %
Total Dispatch Down (%)	2027 (GF)	13 %	
Total Dispatch Down (%)	2029 (pro-rata)	7 %	
Total Dispatch Down (%)	FG (pro-rata)		17 %

Table 2-54 - Surplus, Curtailment and Constraint for Solar non-priority with sensitivity for Node Timoney

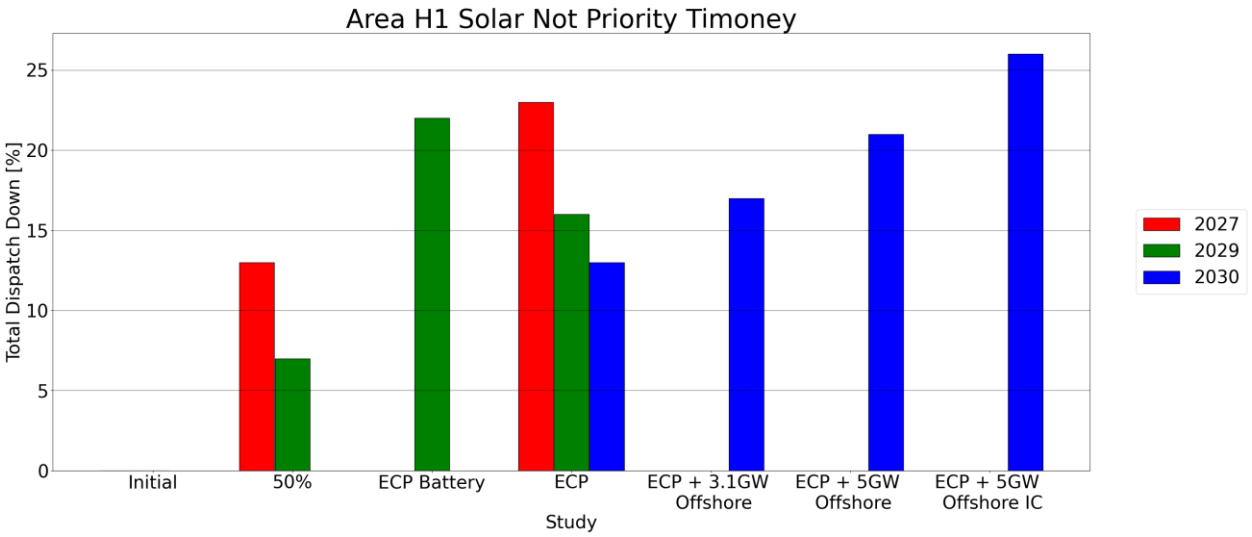

Figure 2-35 - Total Dispatch Down for Solar not priority for Node Timoney

2.15 Tipperary

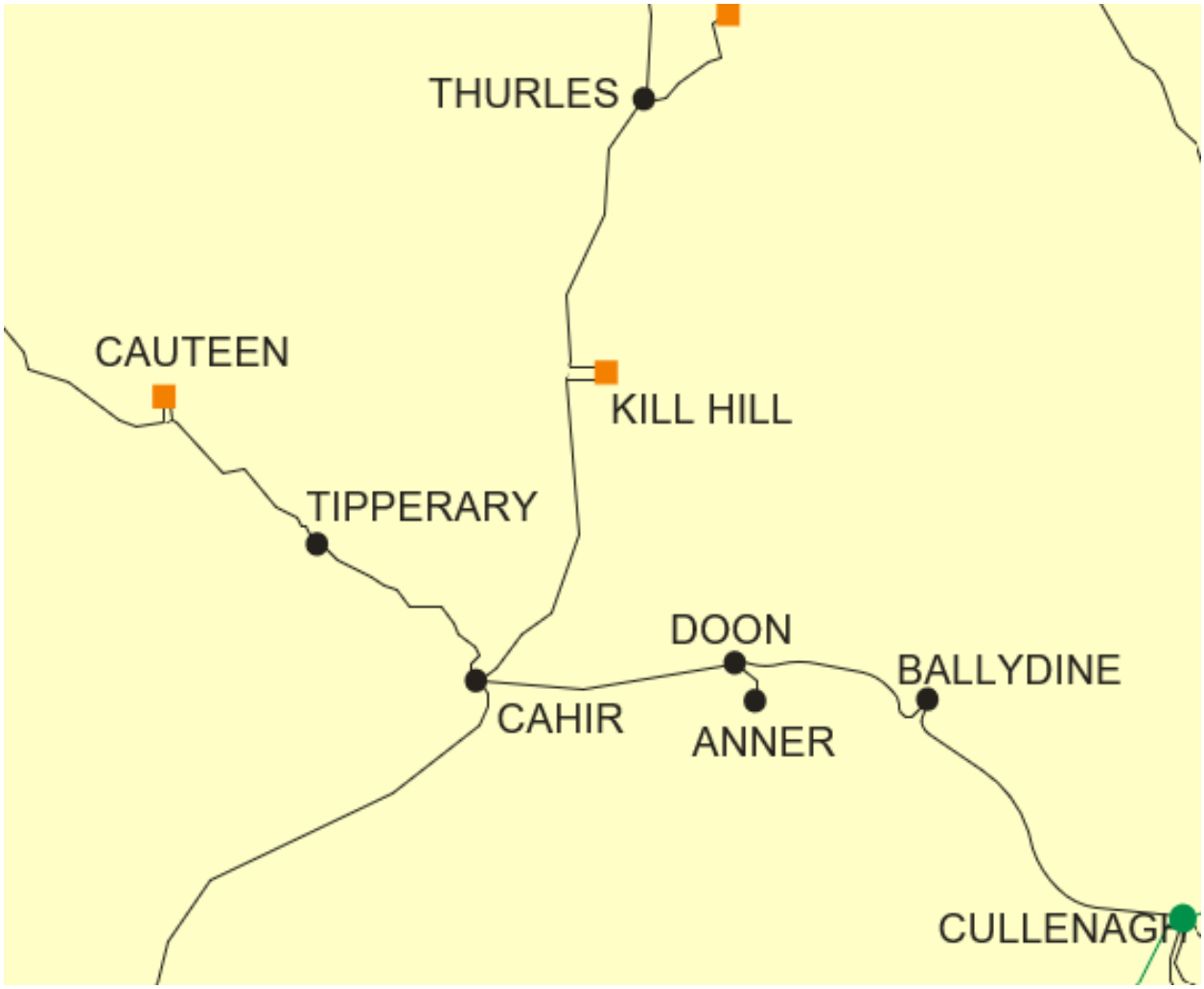

Figure 2-36 - Location of node Tipperary

Generator	SO	Capacity	Type	Status
Slievereagh (1)	DSO	3.0	wind uncontrolled	connected
Slievereagh Wind Farm (2)	DSO	1.6	wind uncontrolled	connected
Ballinalard Solar Farm	DSO	4.0	solar not priority	due to connect

Table 2-55 - Generation Included in Study for Node Tipperary

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

Area H1	Year	Initial	50%	ECP	ECP Battery	ECP + 3.1GW Offshore	ECP + 5GW Offshore	ECP + 5GW Offshore IC
Installed Capacity (MW)	2027	4	4	4				
Installed Capacity (MW)	2029	4	4	4	4			
Installed Capacity (MW)	FG			4		4	4	4
Available Energy (GWh)	2027	5	5	5				
Available Energy (GWh)	2029	5	5	5	5			
Available Energy (GWh)	FG			5		5	5	5
Generation (GWh)	2027	4	4	4				
Generation (GWh)	2029	5	4	4	4			
Generation (GWh)	FG			4		4	4	3
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	7 %	5 %	5 %				
Constraint (%)	2029	1 %	2 %	4 %	3 %			
Constraint (%)	FG			6 %		4 %	3 %	2 %
Total Dispatch Down (%)	2027	8 %	13 %	23 %				
Total Dispatch Down (%)	2029	2 %	7 %	16 %	22 %			
Total Dispatch Down (%)	FG			13 %		17 %	21 %	26 %

Table 2-56 - Surplus, Curtailment and Constraint for Solar non-priority for Node Tipperary

Area H1	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)		4
Available Energy (GWh)	2027 (GF)	5	
Available Energy (GWh)	2029 (pro-rata)	5	
Available Energy (GWh)	FG (pro-rata)		5
Generation (GWh)	2027 (GF)	4	
Generation (GWh)	2029 (pro-rata)	4	
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)	5 %	
Constraint (%)	2029 (pro-rata)	2 %	
Constraint (%)	FG (pro-rata)		4 %
Total Dispatch Down (%)	2027 (GF)	13 %	
Total Dispatch Down (%)	2029 (pro-rata)	7 %	
Total Dispatch Down (%)	FG (pro-rata)		17 %

Table 2-57 - Surplus, Curtailment and Constraint for Solar non-priority with sensitivity for Node Tipperary

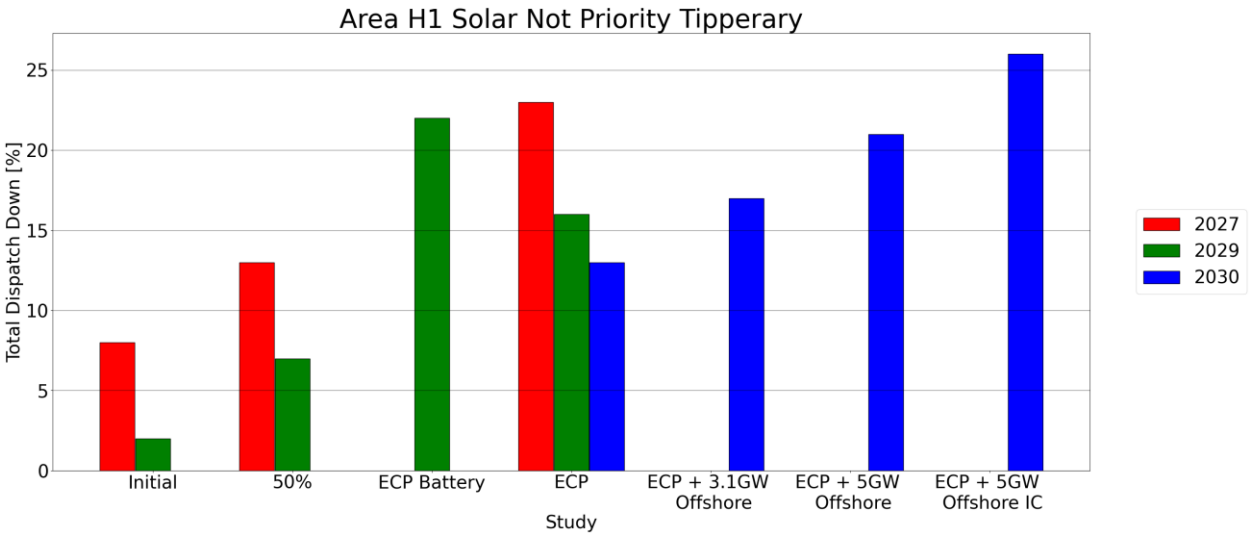

Figure 2-37 - Total Dispatch Down for Solar not priority for Node Tipperary