

Controllability Status Update

September 2018



1. INTRODUCTION

The SEM-11-062 decision paper¹ identified a three-level hierarchy classification for Wind Farm Power Stations (WFPS) in Ireland and Northern Ireland; level (i), (ii) or (iii).

On 24th of March 2017, the SEM Committee confirmed that on an interim basis solar and tidal generation is entered onto the priority hierarchy in the same position as wind generation. This is without prejudice to the outcome of any future consultation arising from a wider review of the original decision.

Power Park Modules (PPMs) is a new generic term used in this document to represent specific technology types of Wind Farms, Solar and Tidal units. During this interim time period, all process notes referencing WFPS are applied to PPMs.

This document outlines the list of all Controllable PPMs, 5MW or more on the EirGrid and SONI systems. Each unit is categorised as level (i), (ii) or (iii). The technology types are listed and identified as appropriate within the tables. This list will continue to be updated on a monthly basis.

¹ <https://www.semcommittee.com/sites/semcommittee.com/files/media-files/SEM-11-062%20Principles%20of%20Dispatch%20and%20the%20Design%20of%20the%20Market%20Schedule%20in%20the%20Trading%20and%20Settlement%20Code%20%20SEM%20Committee%20Decision%20Paper%20.pdf>

1.1. Ireland

| PPMs connected in Ireland (MW) | October 2017 | November 2017 | December 2017 | January 2018 | February 2018 | March 2018 |
|--------------------------------|--------------|---------------|---------------|--------------|---------------|------------|
| (i) | 10 | 10 | 10 | 10 | 10 | 10 |
| (ii) | 2588.32 | 2588.32 | 2645.17 | 2676.17 | 2741.37 | 2821.47 |
| (iii) | 88.15 | 117.65 | 282.15 | 269.65 | 240.75 | 160.65 |
| Total | 2686.47 | 2715.97 | 2937.32 | 2955.82 | 2992.12 | 2992.12 |

| PPMs connected in Ireland (MW) | April 2018 | May 2018 | June 2018 | July 2018 | August 2018 | September 2018 |
|--------------------------------|------------|----------|-----------|-----------|-------------|----------------|
| (i) | 20.25 | 10 | 10 | 10 | 10 | 10 |
| (ii) | 2857.77 | 2982.12 | 2982.12 | 2982.12 | 2982.12 | 2293.62 |
| (iii) | 114.1 | 11.5 | 38.5 | 77.5 | 148 | 146.4 |
| Total | 2992.12 | 3003.62 | 3030.62 | 3069.62 | 3140.12 | 3150.02 |

- Glantaunyalkeen WFPS was included as a unit in Category 3
- Cloghaneleskirt WFPS was moved to Category 2

1.2. Northern Ireland

| PPMs connected in Northern Ireland (MW) | October 2017 | November 2017 | December 2017 | January 2018 | February 2018 | March 2018 |
|---|--------------|---------------|---------------|--------------|---------------|------------|
| (i) | 26.9 | 26.9 | 26.9 | 26.9 | 26.9 | 26.9 |
| (ii) | 624.1 | 887.75 | 887.75 | 887.75 | 961.61 | 1005.04 |
| (iii) | 311.15 | 47.5 | 73.86 | 73.86 | 51.93 | 14.5 |
| Total | 962.15 | 962.15 | 988.51 | 988.51 | 1040.44 | 1046.44 |

| PPMs connected in Northern Ireland (MW) | April 2018 | May 2018 | June 2018 | July 2018 | August 2018 | September 2018 |
|---|------------|----------|-----------|-----------|-------------|----------------|
| (i) | 26.9 | 26.9 | 26.9 | 26.9 | 26.9 | 26.9 |
| (ii) | 1013.54 | 1013.54 | 1019.54 | 1019.54 | 1098.44 | 1098.44 |
| (iii) | 6 | 6 | 36 | 78.9 | 0 | 0 |
| Total | 1046.44 | 1046.44 | 1082.44 | 1125.34 | 1125.34 | 1125.34 |

1.3. Process Notes

1. Categorisation Policy Document - 5th March 2012.²³
2. Performance monitoring of controllability requirements - 1st February 2013.⁴
3. PPMs are obliged to achieve Compliance Certificate within 12 months of energisation. (Operational Certificate, Operational Certificate Justification or Final Compliance Certificate). The Notification list process applied to PPM's without Certificate is published⁵. In line with the CER decision⁶, an additional timeline (one month per 10MW or part of) for PPM's with a Registered Capacity of >50MW is applied.
4. Notification list for testing is published⁷.
5. Category (i) PPM may involve the use of circuit breaker for dispatch purposes. These PPM's shall consider the appropriate procedures to bring the PPM back online (either remotely or by personnel on site) when the curtailment or constraint has been removed by the TSO.

² <http://www.eirgridgroup.com/site-files/library/EirGrid/Wind%20Farm%20Controllability%20Categorisation%20Policy.pdf>

³

<http://www.soni.ltd.uk/media/documents/Operations/Renewables/Wind%20Farm%20Controllability%20Categorisation%20Policy.pdf>

⁴ <http://www.eirgridgroup.com/site-files/library/EirGrid/Windfarm-Performance-monitoring-process-October-2015.pdf>

⁵ http://www.eirgridgroup.com/site-files/library/EirGrid/2017-03-22-Notification-List-for-Testing_Final.pdf

⁶ <http://www.cer.ie/docs/001088/CER16165%20CER%20Decision%20Paper%20MEC%20Security.pdf>

⁷ http://www.eirgridgroup.com/site-files/library/EirGrid/2017-03-22-Notification-List-for-Testing_Final.pdf

2. PPM Category

| Ireland | | | | |
|--------------------------------|--------------------------|--------------------------|----------|------|
| PPM Name | Associated 110kV Station | Installed Capacity MW[1] | Category | Type |
| Corkermore | Binbane | 10 | (i) | WFPS |
| Total Hierarchy (i) | | 10 | | |
| Altagowlan | Corderry | 7.65 | (ii) | WFPS |
| Athea | Athea | 34.35 | (ii) | WFPS |
| Ballincollig Hill | Tralee | 13.3 | (ii) | WFPS |
| Ballybane 1 & 2 | Ballylickey | 29.9 | (ii) | WFPS |
| Ballybane Phase 2a | Ballylickey | 13.8 | (ii) | WFPS |
| Ballybane 3 | Ballylickey | 4.6 | (ii) | WFPS |
| Ballycadden Phase 1 | Croy | 15 | (ii) | WFPS |
| Ballycadden Phase 2 | Croy | 11.5 | (ii) | WFPS |
| Ballymartin Phase 1 | Waterford | 7 | (ii) | WFPS |
| Ballymartin Phase 2 | Waterford | 8 | (ii) | WFPS |
| Ballywater | Crane | 42 | (ii) | WFPS |
| Barranafaddock | Barrymore | 34.2 | (ii) | WFPS |
| Bawnmore | Macroom | 25.3 | (ii) | WFPS |
| Beam Hill | Trillick | 14 | (ii) | WFPS |
| Bindoo | Ratrussan | 48 | (ii) | WFPS |
| Black Banks 2 | Corderry | 6.8 | (ii) | WFPS |
| Boggeragh 1 | Boggeragh | 57 | (ii) | WFPS |
| Boggeragh 2 | Boggeragh | 65 | (ii) | WFPS |
| Booltiagh Phase 1 | Booltiagh | 19.5 | (ii) | WFPS |
| Booltiagh Phase 2 | Booltiagh | 13.8 | (ii) | WFPS |
| Bruckana | Lisheen | 42 | (ii) | WFPS |
| Caherdowney | Garrow | 9.2 | (ii) | WFPS |
| Carraigcannon | Boggeragh | 23 | (ii) | WFPS |
| Carrickeeny | Sligo | 8 | (ii) | WFPS |
| Carrowleagh | Glenree | 36.8 | (ii) | WFPS |
| Castledockrell | Castledockrell | 41.4 | (ii) | WFPS |
| Clahane | Clahane | 40 | (ii) | WFPS |
| Cloghboola | Cloghboola | 48 | (ii) | WFPS |
| Coomacheo | Garrow | 59.8 | (ii) | WFPS |
| Coomatallin | Dunmanway | 6 | (ii) | WFPS |
| Coomagearlahy 1 (Kilgarvan) | Coomagearlahy | 45 | (ii) | WFPS |
| Coomagearlahy 2 (Sillahertane) | Coomagearlahy | 8.5 | (ii) | WFPS |
| Coomagearlahy 3 (Inchincoosh) | Coomagearlahy | 32.5 | (ii) | WFPS |
| Cronelea 1 | Carlow | 4.6 | (ii) | WFPS |

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|---------------------------|--------------|-------|------|------|
| Cronelea 2 | Carlow | 4.6 | (ii) | WFPS |
| Derrybrien | Agannygal | 59.5 | (ii) | WFPS |
| Dromada | Dromada | 28.5 | (ii) | WFPS |
| Dromdeeven | Glenlara | 28 | (ii) | WFPS |
| Drumlough Hill 2 | Trillick | 10.2 | (ii) | WFPS |
| Faughary | Sligo | 6 | (ii) | WFPS |
| Flughland | Sorne Hill | 9.2 | (ii) | WFPS |
| Garracummer | Cauteen | 42.5 | (ii) | WFPS |
| Garraneragh | Macroom | 9.2 | (ii) | WFPS |
| Garvagh 1 (Glebe) | Garvagh | 26 | (ii) | WFPS |
| Garvagh 2 (Tullynahaw) | Garvagh | 22 | (ii) | WFPS |
| Gibbet Hill | Croy | 15 | (ii) | WFPS |
| Glanlee (Midas Gen unit) | Galilee | 32.45 | (ii) | WFPS |
| Glenough | Cauteen | 32.5 | (ii) | WFPS |
| Gortahile | Carlow | 20 | (ii) | WFPS |
| Gneevies | Knockearagh | 9.35 | (ii) | WFPS |
| Grove Hill | Dundalk | 17.1 | (ii) | WFPS |
| Grouse Lodge | Rathkeale | 15.42 | (ii) | WFPS |
| Hollyford | Cauteen | 9.3 | (ii) | WFPS |
| Kealkil | Ballylickey | 8.5 | (ii) | WFPS |
| Killaveenoge | Dunmanway | 25 | (ii) | WFPS |
| Kill Hill | Kill Hill | 36 | (ii) | WFPS |
| Kingsmountain 2 (Dunneil) | Cunghill | 11.05 | (ii) | WFPS |
| Knockacummer | Knockacummer | 100 | (ii) | WFPS |
| Knockaneden | Oughtrah | 9.2 | (ii) | WFPS |
| Knockastanna | Ardnacrusha | 6 | (ii) | WFPS |
| Knockawarriga | Trien | 22.5 | (ii) | WFPS |
| Knocknagoum | Reamore | 44.35 | (ii) | WFPS |
| Knocknalour | Croy | 9.2 | (ii) | WFPS |
| Lacken | Moy | 6.9 | (ii) | WFPS |
| Leitir Guingaid | Salthill | 42.8 | (ii) | WFPS |
| Lisdowney | Portlaoise | 9.2 | (ii) | WFPS |
| Lisheen Phase 1 | Lisheen | 36 | (ii) | WFPS |
| Lisheen Phase 2 | Lisheen | 24 | (ii) | WFPS |
| Loughderryduff | Binbane | 7.65 | (ii) | WFPS |
| Meenachullalan | Binbane | 13.8 | (ii) | WFPS |
| Meentycat | Drumkeen | 88.5 | (ii) | WFPS |
| Monaincha | Ikerrin | 36 | (ii) | WFPS |
| Mountain Lodge | Ratrussan | 31.5 | (ii) | WFPS |
| Mountlucas | Mountlucas | 84 | (ii) | WFPS |
| Muingnaminnan | Reamore | 14.8 | (ii) | WFPS |
| Mullananalt | Meath Hill | 7.5 | (ii) | WFPS |

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|-----------------------------|------------------|----------------|-------|------|
| Mulreavy 1 | Mulreavy | 90 | (ii) | WFPS |
| Mulreavy 2 | Mulreavy | 5 | (ii) | WFPS |
| Raheen Bar 2 (Derrynadivva) | Castlebar | 8 | (ii) | WFPS |
| Raheenleagh | Arklow | 35.2 | (ii) | WFPS |
| Rathcahill | Rathkeale | 12.5 | (ii) | WFPS |
| Richfield | Wexford | 27 | (ii) | WFPS |
| Sliabh Bawn | Sliabh Bawn | 64 | (ii) | WFPS |
| Sorne Hill 1 & 2 | Sorne Hill | 38.9 | (ii) | WFPS |
| Spaddan | Cathaleen's Fall | 17.1 | (ii) | WFPS |
| Taurbeg | Glenlara | 25.3 | (ii) | WFPS |
| Tournafulla 1 | Trien | 7.5 | (ii) | WFPS |
| Tournafulla 2 | Trien | 19.5 | (ii) | WFPS |
| Tullynamoyle | Corderry | 9.2 | (ii) | WFPS |
| Uggool | Uggool | 64 | (ii) | WFPS |
| Woodhouse | Woodhouse | 20 | (ii) | WFPS |
| Glencarbry | Cauteen | 35.6 | (ii) | WFPS |
| Moneypoint | Moneypoint | 17.25 | (ii) | WFPS |
| Seecon | Uggool | 108 | (ii) | WFPS |
| Ballybay | Thurles | 13.8 | (ii) | WFPS |
| Foyle | Thurles | 9.6 | (ii) | WFPS |
| Tullabrack | Tullabrack | 14.1 | (ii) | WFPS |
| Cappawhite A | Cauteen | 56.85 | (ii) | WFPS |
| An Cnoc | Thurles | 11.5 | (ii) | WFPS |
| Killin Hill | Binbane | 6 | (ii) | WFPS |
| Tullynamoyle 3 | Corderry | 13.5 | (ii) | WFPS |
| Knocknatallig | Charleville | 19.2 | (ii) | WFPS |
| Castlepook | Charleville | 35 | (ii) | WFPS |
| Meenwaun | Dallow | 11 | (ii) | WFPS |
| Meenaward | Trillick | 6.9 | (ii) | WFPS |
| Leanamore | Kilpadogge | 20.7 | (ii) | WFPS |
| Scartaglen 1 | Cordal | 41 | (ii) | WFPS |
| Tullynamoyle 2 | Corderry | 11.5 | (ii) | WFPS |
| Glanaruddery 1 | Cloghboola | 23.1 | (ii) | WFPS |
| Glanaruddery 2 | Cloghboola | 13.2 | (ii) | WFPS |
| Teevurcher | Meath Hill | 10.25 | (ii) | WFPS |
| Cordal 1 | Cordal | 35.2 | (ii) | WFPS |
| Cordal 2 | Cordal | 54.4 | (ii) | WFPS |
| Coollegrean | Cordal | 18.5 | (ii) | WFPS |
| Scartaglen 2 | Cordal | 6 | (ii) | WFPS |
| Cloghaneleskirt | Cloghboola | 11.5 | (iii) | WFPS |
| Total Hierarchy (ii) | | 2993.62 | | |

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|------------------------------|--------------|--------------|-------|------|
| Clahane 2 | Clahane | 13.8 | (iii) | WFPS |
| Cappawhite B | Cauteen | 13.2 | (iii) | WFPS |
| Kelwin WFPS | Kilpaddockue | 37 | (iii) | WFPS |
| Boolinrudda | Slievecallan | 45 | (iii) | WFPS |
| Knockalassa | Slievecallan | 27.5 | (iii) | WFPS |
| Glantaunyalkeen | Cloghboola | 9.9 | (iii) | WFPS |
| Total Hierarchy (iii) | | 146.4 | | |

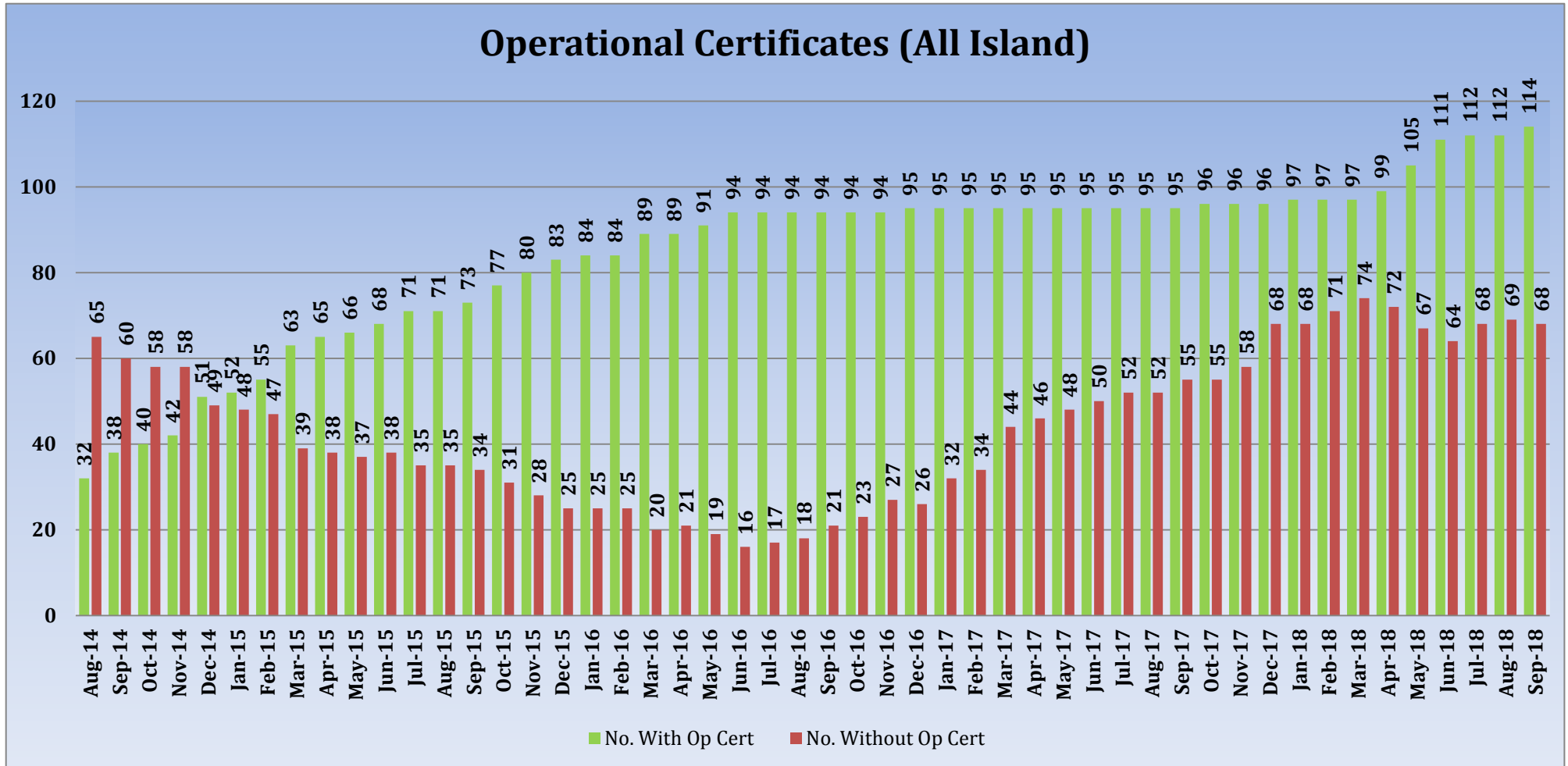
| Northern Ireland | | | | |
|----------------------------|--------------------------|------------------------------------|---|------|
| PPM Name | Associated 110kV Station | Installed Capacity MW ⁸ | Category | Type |
| Callagheen | Enniskillen | 16.9 | (i) Compliance certificate not achieved through process | WFPS |
| Wolf Bog | Larne | 10 | (i) Compliance certificate not achieved through process | WFPS |
| Total Hierarchy (i) | | 26.9 | | |
| Owenreagh 2 | Strabane | 5.1 | (ii) | WFPS |
| Curryfree | Lisamore | 15 | (ii) | WFPS |
| Altahullion 2 | Limavady | 11.7 | (ii) | WFPS |
| Bessy Bell 2 | Omagh | 9 | (ii) | WFPS |
| Bin Mountain | Strabane | 9 | (ii) | WFPS |
| Church Hill | Magherakeel | 18.4 | (ii) | WFPS |
| Crighshane | Magherakeel | 32.2 | (ii) | WFPS |
| Crockagarran | Dungannon | 17.5 | (ii) | WFPS |
| Garves | Coleraine | 15 | (ii) | WFPS |
| Gruig | Coleraine | 25 | (ii) | WFPS |
| Hunters Hill | Omagh | 20 | (ii) | WFPS |
| Lough Hill | Strabane | 7.8 | (ii) | WFPS |
| Screggagh | Omagh | 20 | (ii) | WFPS |
| Slieve Divena | Omagh | 30 | (ii) | WFPS |
| Slieve Kirk | Killymallaght | 73.6 | (ii) | WFPS |
| Slieve Rushen 2 | Aghyoule | 54 | (ii) | WFPS |
| Tappaghan | Omagh | 28.5 | (ii) | WFPS |
| Carrickatane | Killymallaght | 20.7 | (ii) | WFPS |
| Carn Hill | Carnmoney | 13.8 | (ii) | WFPS |
| Dunmore | Coleraine | 21 | (ii) | WFPS |
| Dunbeg | Coleraine | 42 | (ii) | WFPS |
| Molly Mountain | Aghyoule | 15 | (ii) | WFPS |
| Thornog | Magherakeel | 20 | (ii) | WFPS |
| Monnaboy | Coolkeeragh | 12 | (ii) | WFPS |
| Tievenameenta | Magherakeel | 34.5 | (ii) | WFPS |
| Oramore | Enniskillen | 15 | (ii) | WFPS |
| Gortfinbar | Tremoge | 15 | (ii) | WFPS |
| Seegronan | Magherakeel | 14.1 | (ii) | WFPS |
| Cloonty | Loguestown | 9.2 | (ii) | WFPS |
| Eglish | Killymallaght | 15 | (ii) | WFPS |
| Glenbuck | Rasharkin | 9.2 | (ii) | WFPS |
| Eshmore | Tremoge | 7.05 | (ii) | WFPS |

⁸For the purposes of this report, it is assumed that category 3 units are fully installed.

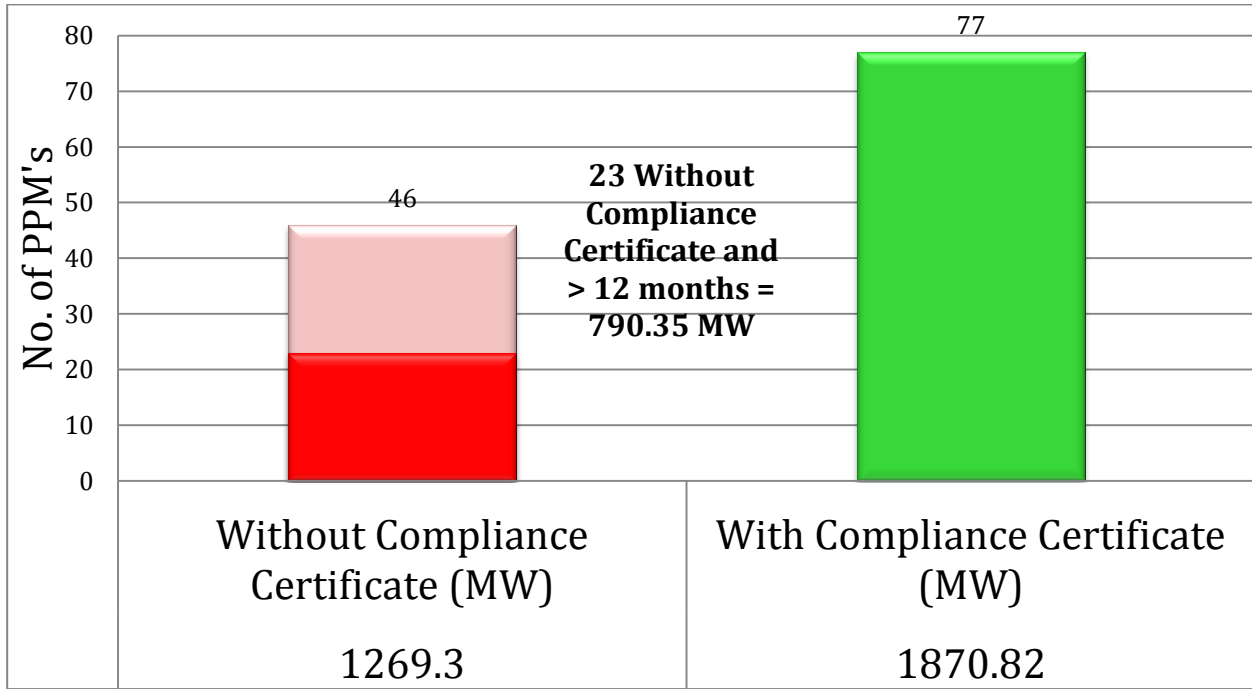
| | | | | |
|---|---------------|----------------|------|------|
| Slieve Divena 2 | Gort | 20 | (ii) | WFPS |
| Crockbaravally | Gort | 7.5 | (ii) | WFPS |
| Crockandun | Tremoge | 15 | (ii) | WFPS |
| Shantavny Scotch | Gort | 16.1 | (ii) | WFPS |
| Inishative | Tremoge | 13.8 | (ii) | WFPS |
| Altaveedan | Rasharkin | 18 | (ii) | WFPS |
| Altamuskin | Gort | 14.1 | (ii) | WFPS |
| Cregganconroe | Tremoge | 13.8 | (ii) | WFPS |
| Long Mountain | Rasharkin | 27.6 | (ii) | WFPS |
| Crockdun | Tremoge | 12.5 | (ii) | WFPS |
| Bann Road PV | Rasharkin | 29.81 | (ii) | PV |
| Lisburn Solar Park | Lisburn | 16.92 | (ii) | PV |
| Lough Road | Lisburn | 21.00 | (ii) | PV |
| Millar Farm | Antrim Main | 6.27 | (ii) | PV |
| Brockaghboy | Rasharkin | 47.5 | (ii) | WFPS |
| Finvoy Road PV | Lisburn | 5.21 | (ii) | PV |
| Rathsherry | Ballymena | 21.15 | (ii) | WFPS |
| Elginny Hill | Ballymena | 23 | (ii) | WFPS |
| Maghaberry PV | Lisburn | 20.43 | (ii) | PV |
| Laurel Hill | Waringstown | 8.5 | (ii) | PV |
| Ballygarvey Solar | Ballymena | 6 | (ii) | PV |
| Cornavarrow | Curraghmulkin | 36 | (ii) | WFPS |
| Tieges | Gort | 11 | (ii) | WFPS |
| Castlecraig | Curraghmulkin | 25 | (ii) | WFPS |
| Slieveglass | Curraghmulkin | 6.9 | (ii) | WFPS |
| Total Hierarchy (ii) | | 1098.44 | | |
| Total Hierarchy (iii) | | 0 | | |
| NB This does not include Pre Grid Code, exempt PPMs or Units <5MW | | | | |

3. Compliance Certificate status

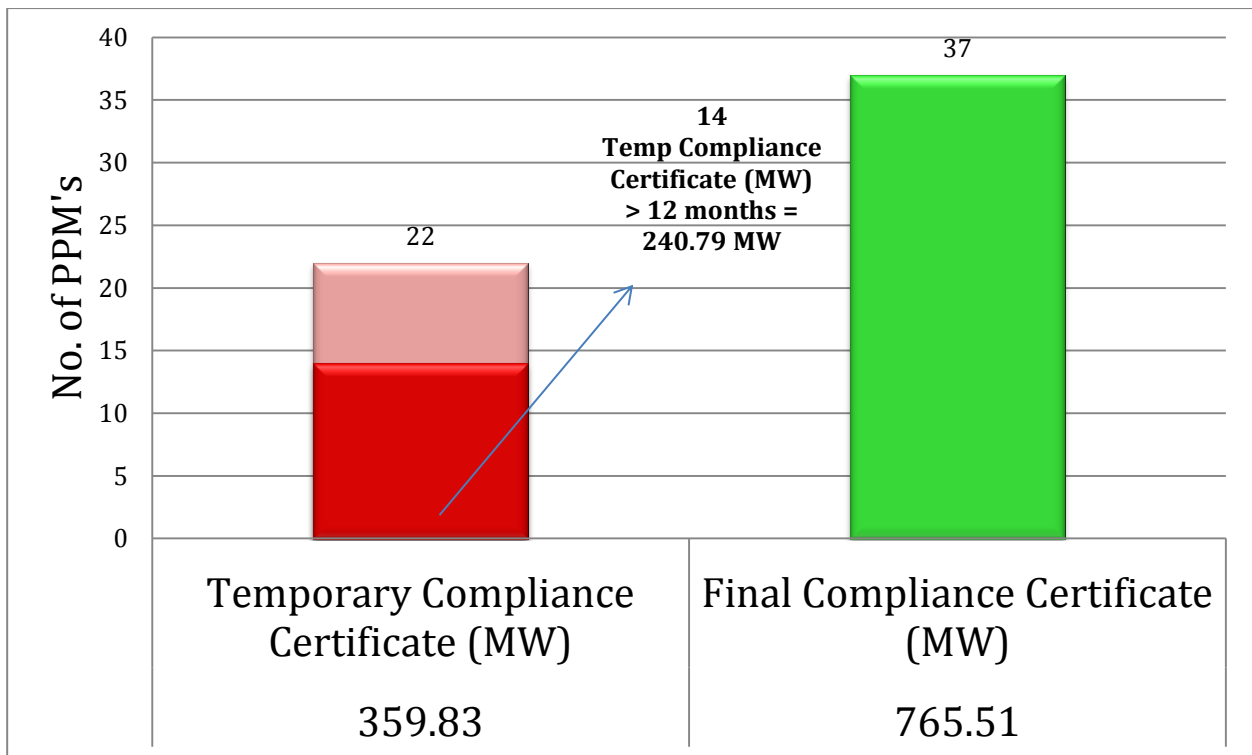
3.1. Overall



3.2. Ireland



3.3. Northern Ireland



4. CONTACTS

If you have any specific queries please contact info@eirgrid.com or neartime@soni.ltd.uk.