
27th July 2009

Ms. Sara White
Dept. Communications Energy and Natural Resources
29 – 31 Adelaide Road
Dublin 2

**CC:** Martin Finucane, Eugene Dillon

**Ref: EC Template for National Renewable Energy Action Plans**

Dear Ms. White,

As discussed at the recent Renewable Energy Development Group meeting held on the 22nd of June 2009 Now Ireland have examined the obligatory template for the National Renewable Energy Action Plan that is required to be submitted to the European Commission by 30th June 2010, under Article 4 of the EC Renewable Energy Directive 2009/28/EC (The Directive). The main points relevant to the development of the Offshore Wind Industry in Ireland are detailed (1-5) as follows:

## 1. Measures for Achieving Targets

In section 4.1 of the template member states are required to explain in detail the current rules concerning the authorisation, certification and licensing procedures that are applied to plants and associated transmission and distribution network infrastructure for the production of electricity. Where further steps are needed for ensuring that procedures are proportionate and necessary, Member States should also describe planned revisions, expected results and the responsible authority that will carry out such revisions. Now Ireland would make the following comments in relation to these items.

### *1.1 Current Permitting System*

Ireland has to date made little effort to promote offshore wind as a renewable source of electricity generation. This contrasts with other European Governments who have actively supported the consenting and development of projects in their offshore jurisdictions.

The licensing procedure for offshore projects in Ireland to date is cumbersome with three stages to be completed prior to submission. This makes application, difficult, ambiguous and needlessly

expensive. While we fully recognise the importance of community consultation, we feel that the process should be simplified as it will lead to a greater incentive for investment in this market.

*1.2 Responsible Ministries*

The hiatus on moving the Foreshore Administration from the Department of Agriculture to the Department of Environment is adding to permitting delays, and needs to be resolved without any further delay.

*1.3 Permitting System Reforms*

The members of Now Ireland suggest that a transparent and robust system of licensing is required to enable the development of Ireland's offshore wind industry. This regime must protect the natural environment while delivering the necessary permits to enable development to proceed. The system should proceed in an orderly and transparent timeframe as required by Article 13.1 (a) of the Directive.

Now Ireland recognise that the 2009 Planning Act, published in May, will see responsibility for foreshore licensing move from the Department of Agriculture Forestry and Fisheries to the Department of Environment. Furthermore the Joint Committee on Climate Change and Energy Security have published draft legislation which proposes a significant change to the consenting process for offshore wind farms. Despite this it remains unclear how this will translate into enacted legislation.

The Strategic Infrastructure Act has proven to be an effective process to deliver key infrastructural projects in Ireland to date. The merits of this act should be examined and considered and to how it may be applied most effectively to offshore wind projects. Through a transparent and predictable process with clearly defined timelines to assess projects this process could deliver the necessary consents that would facilitate the future development of Ireland's offshore renewable energy resources. The 5 projects currently in or through the existing consenting process should have the option to see their applications through (and deal with any amendments) in that process, or switch to the new system.

Article 16 of the Directive requires member states to take appropriate steps to accelerate authorisation procedures for grid infrastructure and to coordinate approval of grid infrastructure with administrative and planning procedures. There is no such coordination in place at present in Ireland and this is causing projects with full planning permission to be delayed as they cannot gain access to the grid.

*1.4 Spatial Planning and the Identification of Renewable Energy Zones*

NOW Ireland considers that a Strategic Environmental Assessment (SEA) would facilitate future development of marine energy technologies around our coasts, and is an essential part of any new permitting process. It will play a key role in resolving issues raised by objectors and help reduce project risk for future developments. It also provides an excellent opportunity for the government to establish a renewable energy zone outside Irish territorial waters in Irelands Exclusive Economic Zone between 12 and 200 nautical miles from the coast.

*1.5 Projects Underway in the Current System*

It is NOW Ireland's view that any new developments in the licensing system on completion of the SEA, and indeed the SEA itself, should not impact the processing of projects that are currently in the

system. Under the existing processing regime site specific Environmental Impact Assessments (EIA) are prepared for projects that are considerably more detailed than the SEA itself. Consequently there is no necessity to halt projects that have invested considerable time and resources into the process whilst awaiting the completion of the SEA process.

## 2. Electricity Infrastructure Development

Section 4.1 of the renewable energy template calls for a description of national legislation concerning requirements related to energy grids and details of any planned revisions. NOW Ireland has the following comments to make in relation to some of the points raised in this section.

### *2.1 Interconnection Plans*

Recital 59 of the Directive states that, "Interconnection among countries facilitates the integration of electricity from renewable energy sources. Besides smoothing out variability, interconnection can reduce balancing costs, encourage true competition bringing about lower prices, and support the development of networks. Also, the sharing and optimal use of transmission capacity could help avoid excessive need for newly built capacity".

NOW Ireland welcomes the development of Eirgrid's East West interconnector and look forward to the publication of the offshore "Celtic Grid" Study. NOW Ireland would encourage that there would be increased joined up thinking between Eirgrid, Merchant interconnectors and Ofgem (the U.K grid regulator) towards planning and delivering the necessary grid capacities on both sides of the Irish Sea. Article 7 of the Directive states that two or more Member States may cooperate on all types of joint projects relating to the production of electricity and that cooperation may involve private operators.

In that regard, a spinal North South link from the Scottish West coast down the Irish Sea to the South East of England and onwards to France with laterals from Ireland to Wales would be a suitable way to develop an interconnected Celtic Grid which would allow the export model come into fruition.

### *2.2 Acceleration of Grid Connection authorisation procedures*

Article 16 of the directive requires Member States to develop transmission and distribution grid infrastructure to facilitate electricity production from renewable sources. It also requires Member States to take appropriate steps to accelerate authorisation procedures for grid infrastructure and to coordinate the approval of grid infrastructure with administrative and planning procedures.

NOW Ireland recommends that Ireland should take a more Strategic approach to the development of the grid networks, beyond Grid25, including offshore and the Distribution System (in cooperation with the DSO), with a view to developing a grid that will be suitable to a post 2020 electricity system.

The current group connection process has created an incentive for generators to apply early for connection to the network. This has resulted in a significant queue of applications for on-shore and off-shore wind as well as conventional generation. These are currently processed through a series of formally defined "gates". The lack of certainty around the timing of these gates has added significant uncertainty to the industry thus making it extremely challenging to undertake detailed planning for those projects that are outside the current gates process. This structure is creating a significant barrier towards the development of the offshore wind industry. A significant change in this process will be required to release the potential that offshore wind can deliver.

It is essential that parties receiving a Gate 3 offer are in a position to make an informed decision based on those offers as expediently as possible. This will thus allow projects that are not ready to proceed to move back in the queue thus freeing up capacity for other parties.

A subsequent round of offers should be administered upon completion of the Gate 3 offer schedule. The Celtic Grid is the necessary infrastructure that will deliver valuable grid capacity to Ireland and stimulate an export business. Plans for this must be advanced and included in the ITC model for Gate 4.

While group processing has facilitated some renewable generators in connecting ('Gates' 1 & 2), it has in fact held back this sector's development viz a Vis other energy forms. Ireland could be said to have a 'priority access' system for fossil energy, which has been justified by security of supply concerns. In this sense the current system neither provides 'priority' or 'guaranteed' access for renewable grid connections. Government and CER will need to provide one or the other under Article 16.2(b) of the Directive, which will require substantial changes to the current process. One useful feature of such a system would be time limits, such as one year for offer and two years for actual connection from date of application.

The current policy for operation of the Single Electricity Market (SEM) with Northern Ireland is being reviewed. This includes dispatch and constraint rules, which affect the viability of projects. The concept of 'qualified dispatch' is also being considered, which would appear to contradict with the requirements of Article 16.2(c) of the Directive, since cost is to be considered as a basis for non-dispatch of renewables. Similarly, constraint rules are being developed to allow for the non-payment of compensation (for so-called 'curtailment'), despite the transmission guarantee in the Directive.

A related matter is charging policy. A 'shallow' connection charging policy applies in the SEM. This leads to the situation whereby projects pay for grid development that on delivery ownership is then demanded by the network for operation of the system. This leads to perverse incentives, huge costs and delays caused by mounting complications. Ireland needs to seek simplification of this process, and a key policy change would be to move towards a 'who owns pays' connection charging policy that is provided for in Article 16.4 of the Directive.

*2.3 The current state and average timeline for approval*

Since no offshore wind projects that are in development in Ireland at present have received a grid offer NOW Ireland cannot comment on the timelines for connection of offshore wind farms to the Irish grid system. We are awaiting the outcome of the Gate 3 ITC programme, (which has recently been delayed by period of 6 months) for an indication of the timelines that will be involved.

*2.4 Coordination of Grid approval and planning approvals*

Article 16 of the Directive requires member states to take appropriate steps to accelerate authorisation procedures for grid infrastructure and to coordinate the approval of grid infrastructure with administrative and planning procedures. NOW Ireland recommends that a coordinated approach to planning grid infrastructure of strategic importance and individual renewable projects be implemented.

*2.5 Details of renewable installations ready to go but not connected to the grid*

In considering projects that remain outside of the Gate 3 processing regime it is estimated that it could be 2020 before grid connections are secured.

The Arklow Bank Wind Farm has planning consents to construct a further 193 wind turbines with a capacity of up to 1 GW but is unable to secure a grid connection under the current Gate 3 group processing approach.

The Codling Wind Park also has planning consent to construct 220 Turbines with a capacity of up to 1.1 GW but is unable to secure a grid connection under the current Gate 3 group processing approach.

## 3. Support schemes for RES-e

Section 4.3 of the National Renewable Energy Action Plan template relates to the details of the financial support schemes for renewable electricity generation and the terms and conditions relating to feed in tariffs. NOW Ireland has recommended to DCENR that the following conditions for access be applied to the offshore REFIT scheme.

i. Evidence that the applicant has submitted a foreshore lease application for the project to the relevant authority having also previously held a foreshore licence to examine the feasibility of the project and that it satisfied the provisions of this licence.

ii. Evidence that the applicant has been made a connection offer for the project by the transmission or distribution system operator or that it has paid an application processing fee for the project to the transmission or distribution system operator.

iii. The generation must commence between 2014 and 2020.

iv. The REFIT scheme to be adequate to ensure project viability €140/MWh indexed from 2005.

v. The REFIT scheme should apply for 15 years commencing at the beginning of the commercial operational date of a particular phase of a project.

vi. The REFIT scheme should be adjusted in line with the consumer price index (CPI); however, this should be reviewed every two years throughout the operation of the scheme, since the industry price movements are not related to the CPI.

vii. No cap should be placed on the volume of energy that is produced by a particular project that is entitled to the REFIT price.

## 4. Potential for export and trade with other member states

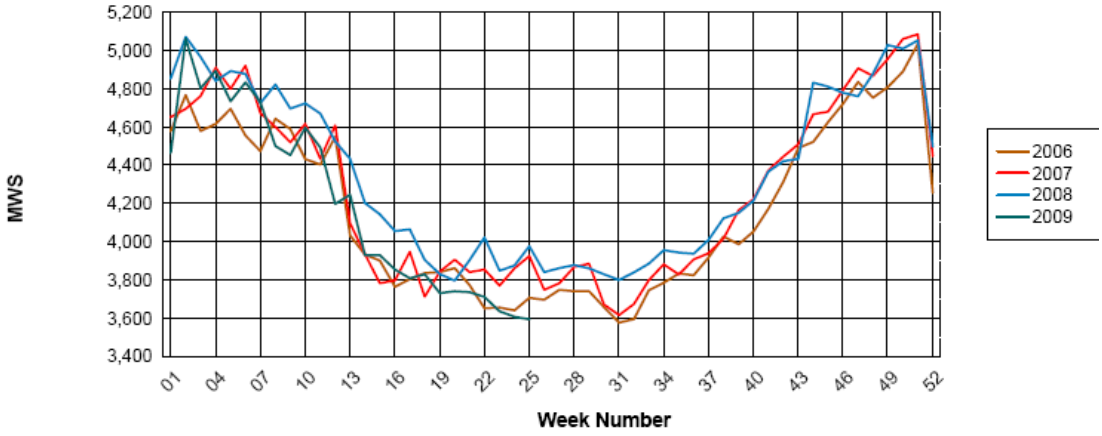
Article 11 of the Directive states that; "…Two or more Member States may decide, on a voluntary basis, to join or partly coordinate their national support schemes. In such cases, a certain amount of energy from renewable sources produced in the territory of one participating Member State may

count towards the national overall target of another participating Member State…". This provides countries such as Ireland, which have extensive renewable energy resources, an incentive to export energy into countries which have fewer resources at their disposal. This would effectively create a new export sector for our economy based on the utilisation of renewable resources such as offshore wind energy.

Ireland should seek to take any steps are necessary to become an exporter of energy to the European Union. This can take place and Ireland can become a net energy exporter if the required change in mindset occurs. The current view remains that Ireland is a small market at the end of a long gas line as opposed to being a large electricity supplier within an integrated European market. Having a stronger interconnected Ireland into Europe benefits not just offshore wind, but all Irish energy generators and in particular companies supplying renewable energy.

Ireland has the potential to be the 'Green Power Centre for Europe' by utilising renewable technologies, but our full potential cannot be achieved without greater European grid interconnection. Interconnection between electricity supply systems has a number of positive effects that include the smoothing of demand curves due to differences in peak demand. For systems with a significant penetration of wind power, interconnectors also reduce the overall variability of output from wind farms by increasing the geographical dispersion of connected wind generators.

Over the period between 2006 and 2009 the typical weekly peak demand on the Irish electricity system has varied considerably as indicated below in Table 1. Furthermore this varies considerably depending on the time of year. Based on figures published to date it is an undeniable fact that the demand profile in 2009 has been reduced considerably as a direct effect of the economic recession.




[1]**Table 1:** Weekly peak demand (2006 – 2009)

Between now and 2020 through the Gate 3 process 3,900 MW of renewable plant will be connected to the system. Further grid applications in excess of 8000 MW of renewables wait processing after the set of Gate 3 projects. Even if half these applications fail to deliver viable projects it still remains evident that the proposed new generation of renewable plant will vastly exceed the current and expected future all island energy demand. Consequently having the suitable infrastructure and

[1]Weekly Peak Demand: http://www.eirgrid.com/operations/systemperformancedata/weeklypeakdemand/

trading systems in place to allow Ireland export this energy surplus will allow the country to capitalise on our natural resource. Such export capability is the most important policy to avoid dispatch and constraint issues for renewables in Ireland, which would only lead to potential green energy being constrained off and wasted, while Europe is prepared to buy it and needs it for targets and climate change policy.

Over the next 10 years there is expected to be an increased use of electricity in the transport sector. With the advent of the electric car and further upgrades of the railways as they move from diesel fuels to electricity there will be increased demands for power sources to come from renewable energy source.

In considering the potential for energy exports it has to be ascertained if there will be a demand for energy in other jurisdictions. Looking at our most immediate neighbour, the United Kingdom this is a country that is likely to face substantial power constraints in the coming years. Ireland has an opportunity to work in partnership with the UK authorities to meet their energy needs whilst providing a much-needed boost to our economy.

The UK electricity market like Ireland's is expected to undergo significant changes up to and beyond 2020. A significant number of their existing nuclear power stations are due to be decommissioned and replaced with newer plants. However considering the timeframe that is necessary to construct new nuclear facilities there will be an inevitable energy supply gap in the UK system which can be filled with Ireland's excess renewable energy sources. The UK market though is not the only export market. It remains feasible with current high voltage direct current (HVDC) technology to interconnect to France. Although France is largely self-sufficient with its nuclear portfolio a considerable number of these generators are aging and will require summer shut downs for operations and maintenance. In combination with increasingly hot summer in French cities the situation is occurring where local river and lake water sources are too warm to be used for reactor cooling purposes. This is reaching the point where their electricity system can become stressed leading to supply constraints. The UK to date has been meeting any French shortfalls. In the coming years Ireland should not miss the early opportunity that exists to export our surplus renewable energy.

The recently published EC Renewable Energy Directive encourages countries to work together to maximise the use of renewable energy throughout the EU. Countries, such as Ireland, which have significant renewable energy resources, will be given an incentive to export energy into countries which have fewer renewable resources at their disposal. This would effectively create a new export sector for our economy based on the utilisation of renewable resources such as offshore and onshore wind energy.

In order for large scale energy exports to commence a trading mechanism needs to be put in place to allow excess renewables to be connected and power sold via interconnectors and the proposed Celtic Grid that is being investigated. Projects such as the Codling Bank Wind Farm and Arklow Bank Wind Farms (both of which are fully consented but outside the Gate 3 list of projects) that are in excess of 2.1 GW of power are examples of projects which could act as the first tranche of shovel ready projects for an export market.

## 5. Contributions to targets by energy source

Section 5 of the renewable energy action plan template requires a yearly break down of how the 2020 targets are going to be reached by sector, and that onshore and offshore wind energy targets

should be treated as a separate sector for the purposes of this breakdown. Now Ireland expect the following estimated roll out dates for offshore wind farm projects can be achieved if no further delays in the consenting and grid connection process are encountered.

| Company | Project | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Oriel Windfarm** | NW Irish Sea | | 330 | | | | | | | |
| **Airtricity** | Arklow Phase 2 | | 135 | | | | | | | |
| **Saorgus Energy** | Kish 1 | | 70 | | | | | | | |
| **Codling Windpark** | Codling 1 | | 120 | | | | | | | |
| **Fuinneamh Sceirde Teo** | Doolick | | | 100 | | | | | | |
| **Saorgus Energy** | Kish 2 | | | 120 | | | | | | |
| **Codling Windpark** | Codling 2 | | | 120 | | | | | | |
| **Airtricity** | Arklow Phase 3 | | | | 140 | | | | | |
| **Saorgus Energy** | Kish 3 | | | | | 120 | | | | |
| **Codling Windpark** | Codling 3 | | | | | 120 | | | | |
| **Saorgus Energy** | Kish 4 | | | | | | 120 | | | |
| **Codling Windpark** | Codling 4 | | | | | | 120 | | | |
| **Airtricity** | Arklow Phase 4 | | | | | | 135 | | | |
| **Saorgus Energy** | Kish 5 | | | | | | | 120 | | |
| **Codling Windpark** | Codling 5 | | | | | | | | 180 | |
| **Airtricity** | Arklow Phase 5 | | | | | | | | | 110 |
| | | | | | | | | | | |
| **Annual Installation** | | 0 | 655 | 340 | 140 | 240 | 375 | 120 | 180 | 110 |
| **Cumulative MW** | | **0** | **655** | **995** | **1135** | **1375** | **1750** | **1870** | **2050** | **2160** |

***Table 2: Estimated project roll out dates***

I trust that this information will be of assistance to you in drafting Ireland's National Renewable Energy Action Plan, if you require any further information from NOW Ireland on please don't hesitate to contact members of the committee for this.

Yours Sincerely,

Now Ireland