



SEM Committee
Chair of the SEM Committee

c.c. Kenneth Matthews (IWEA)

25th May 2012

Dear Mr. Garrett Blaney

Re: SEM-12-028 consultation "Treatment of curtailment in Tie-Break situations"

HgCapital is one of the largest investors in EU renewable energy projects, including Irish wind projects. We are experienced investors, with a strong understanding of renewable energy regulation across Europe. Our investors include European, UK and United States pension funds, insurance companies and family offices, the very investors that the Republic of Ireland and other EU countries seek to attract to their energy and infrastructure sectors. We have invested and continue to invest in the Republic's wind energy sector, and it is with that view that we offer our views on the proposed change to the windpower "curtailment" rules under the above-referenced consultation (the "Consultation").

EXECUTIVE SUMMARY

We strongly support the pro-rata treatment of curtailment, in particular IWEA's proposed "Option 3b" because it:

1. Reduces costs to consumers by limiting compensation for curtailment to firm generators, capping the amount of generation eligible for pro-rata curtailment and therefore capping the level of DBC payable, and decreasing the level of SMP by facilitating the build-out of wind projects and reducing the risk of significant under-build.
2. Is consistent with current regulation and practices and SEM prior consultations and therefore does not create any retroactive change disincentivising future investment. It strikes the correct balance between preserving the regulations under which existing investments were made and allowing continued growth in the sector.

2 More London Riverside
London SE1 2AP
United Kingdom

T +44 (0)20 7089 7888
F +44 (0)20 7089 7999
www.hgcapital.com



3. Is the only option which will allow the Republic of Ireland to achieve its RES-E 2020 targets.
4. Allows more new wind farms to proceed in the coming years, providing Ireland with much needed capital investment and jobs, and
5. Maintains a level playing field by not conferring new economic advantages on existing wind farms.

Further details of HgCapital's current investments in the Irish wind sector and evidence to support our comments are set out in the confidential appendix to this letter.

ABOUT HgCAPITAL AND ITS INVESTMENTS IN IRELAND

HgCapital is Europe's largest institutional investment fund solely dedicated to investing in EU renewable energy projects. We are one of the three largest financial investors in EU renewable energy projects. Since 2004 we have raised over €900 million in equity capital from over 30 leading global institutional investors, including European, UK and US pension funds, insurance companies and family offices. In a world of scarce long-term capital, EU governments are increasingly looking to investors such as those that back us to bring patient, long-term capital to their renewable energy and other infrastructure projects. We are a bridge to that capital.

We have invested and continue to invest in onshore wind in the Republic of Ireland. We made our first investment in 2005 in a 32MW wind farm in Donegal. Today we are partnered with an Irish wind development and construction company to develop, build and operate 300MW of new onshore wind projects over the next 36 months. Most of these projects are located on the West Coast of the Republic of Ireland. Information about our investments and the potential impact on them of the Options considered in the consultation are set out in the appendix to this letter.

These projects, if not affected by an adverse determination in the Consultation, are expected to bring the following benefits to the Republic of Ireland:

- Approximately €500 million in total capital investment, of which approximately €225 million will be spent with local Irish companies (construction, concrete, equipment rentals) and the balance for imported wind turbines.
- An average of 100 full time construction jobs during the 36 months whilst we are building.



- At least 30 new full time permanent jobs in rural areas in wind farm operations, maintenance, management, accounting and reporting.
- An average of €2.4 million per year payable in rent to local landowners.
- An average of €120,000 per year in benefits paid to local community funds.
- An average of €3.0 million per year payable in income taxes and local business rates.

CONSULTATION RESPONSE

Strong preference for Option 3b, Pro-rata Curtailment to Government Targets

We strongly support "Option 3b", "Pro-rata Curtailment to Government Targets" because it:

1. Reduces costs to consumers by limiting compensation for curtailment to firm generators, capping the amount of generation eligible for pro-rata curtailment and therefore capping the level of DBC payable, and decreasing the level of SMP by facilitating the build-out of wind projects and reducing the risk of significant under-build.
2. Is consistent with current regulation and practices and SEM prior consultations and therefore does not create any retroactive change disincentivising future investment. It strikes the correct balance between preserving the regulations under which existing investments were made and allowing continued growth in the sector.
3. Is the only option which will allow the Republic of Ireland to achieve its RES-E 2020 targets.
4. Allows more new wind farms to proceed in the coming years, providing Ireland with much needed capital investment and jobs.

1. *Option 3b reduces costs for the all-island consumer*

We believe that Option 3 / 3b is the only option that is likely to reduce costs to the all island consumers. This is because it would:

- Limit curtailment compensation to firm generators and cap the amount of generation eligible for pro-rata curtailment based on the 2020 targets effectively capping the total

compensation payment to firm curtailed generators (this also prevents the "overbuild risk" of Option 2);

- Decrease the level of system marginal prices (SMP) by allowing the construction of more new wind projects than under Option 1 to displace more expensive generation while simultaneously reducing the risk of significant under-build; and
- Provide a stable historic and forward-looking regulatory framework that supports a steady build rate and avoids "start and stop" regulatory action that is likely to increase costs from (a) increased costs of capital owing to regulatory uncertainty and (b) the additional costs associated with missed targets and sudden catch-up.

2. Option 3b is consistent with existing regulation and is not retroactive

Pro-rata curtailment is consistent with the current policy and Option 3b is not a retroactive change. Option 3b strikes the correct balance between preserving the regulations under which existing investments were made and allowing continued growth in the sector, which will bring much needed jobs and investment to the Republic of Ireland.

"Grandfathering" supporters are using scare tactics to argue that Options 2 and 3 constitute a retroactive regulatory change that will harm existing investments and will disincentivise future investments in Ireland in general due to increased regulatory risk. This is a flawed argument and one which we completely reject.

In fact and in practice pro-rata curtailment is the current policy, and has been the proposed policy in consultations over the last five years. Thus it cannot be seen as retroactive. The facts are:

- Current regulation is silent on curtailment, thus existing investors cannot argue that there has been a change in law;
- Pro rata curtailment was the de facto situation until this Consultation, with infra-marginal rent compensation for firm generators and no compensation for non-firm generators;
- Curtailment has been widely discussed for almost five years, and pro-rata has been both the default regulatory position and the proposed approach since 2009. The first curtailment consultation was held in 2009 (SEM-09-0730, based on position papers published in 2008). Pro-rata curtailment was the proposed policy throughout the entire 2011 consultation.

- Regular changes in grid rules and grid charging are normal and expected by investors in the energy sector in all countries. For example, in the past Irish wind farms were routinely subjected to varying transmission charges based on location under the "Transmission Loss Adjustment Factor" (TLAF) which had the same economic impact as curtailment. The TLAF was not even pro-rata. The TLAF could and did change from year to year. Investors were aware that the TLAF could change and were comfortable with long term forecasts over the amounts of the TLAF which reduce revenues.
- About 10 years ago ESB imposed on the wind industry, because of grid issues, higher standards for wind turbine electronics, voltage fluctuations and other technical requirements so as to not disturb the grid and minimize potential curtailments. This was known and publicized.
- For years there have been open discussions about grid limits, delays to grid connection and the potential need for curtailment as wind penetration increased.

On the contrary, we believe we have legitimate expectation for curtailment to be treated on a pro-rata basis as publicly proposed by the SEMO Committee for the three year period from 2009-2011. We were extremely surprised by the sudden reversal in SEMO Committee Decision SEM/11/063 particularly in the absence of any prior discussion that such an option was under consideration and without meaningful evaluation as to the impacts of such a decision. We now highlight the critical impact of any change from the proposed pro-rata treatment of curtailment on our projects, and detailed project information with an impact assessment is set out in the appendix to this letter. This appendix contains commercially sensitive information which should not be made public and is provided for the exclusive use of the SEMO Committee in order to demonstrate the potential consequences of changing from the original proposed pro-rata position.

Those supporting grandfathering claim that they did not consider curtailment in their investment decisions and the banks that lent to those projects did not consider curtailment in determining the amount and terms of the loans that they made to build those projects. Perhaps they did not, but the facts were clear for all to see, and they should have taken the possibility into account. Coupled with the fundamental legal position that curtailment was not and is not barred under current legislation, their arguments must fail. In essence, grandfathering advocates seek to both (i) avoid the negative impacts of the operation of the SEM which they failed to identify and consider when they made their investments and (ii) improve their position by barring all curtailment to the disadvantage of new investments.



In contrast, HgCapital made its first investment in Irish wind projects in 2005. Even at that time, the inability of the Irish electric grid to accept large amounts of onshore wind without substantial upgrades, cost adjustments and increased wind turbine specifications was well known. We identified all the facts noted above from the substantial body of publicly-available information as well as specialist advice and took them into account in making our investments, and continued to do so to this day. A banker or investor that today argues otherwise simply did not do their homework and now seeks to be rewarded for not having done so.

Finally, we also note that contrary to the position of many existing wind farm owners favouring grandfathering, all of the studies and reports that we have seen indicate that curtailment will be minimal on a system-wide basis and should not materially affect any investment, especially given compensation for firm generators. In fact, the inherent inter-annual variability of wind is far greater than the impact of curtailment and so the added risk of curtailment on top of the existing variability of wind resources is immaterial.

We believe it is inappropriate to alter regulations in accordance with the wishes of a minority of the industry which either was or should have been aware of the proposed regulations at the time of their investments. Furthermore, it is wholly unacceptable that this should take place to the detriment of the majority of the industry, particularly when the majority of the industry has expressed a clear preference for the original proposed pro-rata treatment to be maintained.

3. *Option 3b is the only option that allows Ireland to reach its 2020 targets*

We have been investing in renewable power projects in Europe for 10 years and agree that over-build of renewables and start/stop or boom/bust cycles are damaging to consumers, investors and governments. We strongly believe that the risk of over-build in the onshore wind sector in Ireland is extremely low and a far greater concern is under-build, certainly vis-à-vis the 2020 RES-E target and when compared to average historic build rates.

Wind farms have always had to overcome considerable obstacles - planning, grid access and securing finance for both development and construction. Those obstacles have only become higher and more numerous with the financial crisis and ensuing recession, with the result that despite bravado statements from developers, overbuild is not a likely scenario. Since 2008:

- Finance has become more scarce and expensive, for both development and construction, but especially development. The number of banks willing to lend to the sector has



halved, those that remain are lending less, at higher rates, for shorter terms and are ever more selective about the sponsors they lend to and the countries to which they will lend;

- Development timelines have grown longer, due to planning and grid delays, and more planning has been refused. Time is money in development, and the money needs are increasing as are the risks; and
- Projects and turbines have become bigger, which means the capital needs have increased at a time when there is less experienced capital.

For these and other factors, it is widely understood that many projects that have firm Gate 3 connection offers prior to 2020 may not proceed at all - and certainly not in that timeframe. Relying on firm projects alone will ensure that the 2020 targets are missed, even at suppressed levels of electricity demand because of the economic crisis. Similarly, non-firm projects are not likely to be built with wild abandon.

The risks in non-firm connection are considerable. Typically non-firm projects face simultaneous constraint and curtailment (with no compensation) until they become firm and the combined figures can be substantial. The decision to invest in and build such a project is taken carefully by experienced investors and if debt finance is raised, gearing will be reduced and additional equity will be required.

There are few investors (utilities or financial institutions) capable of assessing this risk and making these investments. Only the best projects - the windiest sites - can support a period of generation with a discount for both constraint and curtailment. These are the very sites that consumers and the government should wish to see built as they represent an excellent use of the country's natural resource and a long-term source of low cost power generation.

4. *Option 3b promotes new investment*

Option 3b promotes new investment because it distributes curtailment among new and existing wind farms on what we believe to be a fair and predictable basis. The grandfathering option, by placing the entire burden of curtailment risk on new wind farms until they are firm, creates a much greater risk of uncertainty and in our opinion will render most, if not all, wind farms unaffordable at REFIT II support levels and delay their construction until they have firm grid connections.

As noted above, HgCapital seeks to bring approximately €500 million of investment to Ireland in the next three years which will create an average of 100 construction jobs for the next three years plus 30 permanent jobs. If the grandfathering option were adopted, we



would be unable to proceed with most of this investment and therefore not deliver the economic benefits to Ireland described above.

Those opposing temporary pro rata curtailment will argue that any curtailment will negatively affect their existing wind farms, harm investment confidence and reduce investment in Ireland. We disagree.

- First, as noted above, pro rata curtailment is not retroactive and therefore is not a basis for harming investor confidence.
- Second, as noted above, grandfathering instead of harming existing investments would actually retroactively enhance them by eliminating a risk to which they are already subject.
- Third, prudent structuring of wind farm financing and operations routinely allows for changes in output (e.g. wind variability, equipment failures and maintenance) and it is entirely normal for there to be changes in the external environment, particularly grid rules and charges, within reasonable bounds.
- Finally, setting aside the point of principle, in practical terms the amount of curtailment that we believe will occur - and the consequent and far smaller impact on the income of firm generators (given compensation) - is low and certainly well within the normal range of operating and financial performance of wind projects and will not materially affect any existing wind financing.

Option 2

We do not believe that Option 2 would lead to increased costs to the all island consumer because it would lead to overbuilding of wind projects and hence increasing curtailment levels of firm generators leading to a higher level of Dispatch Balancing Costs (DBC). We see overbuilding as highly unlikely as (i) the headwinds facing wind project construction in general have increased since the financial crisis and (ii) overbuilding would require an Irish wind build rate in excess of the historical average, which we find most unlikely given the current economic conditions. Further, if the build rates are the same in Option 2 and Option 3b (or, in our opinion the more likely scenario of a steady build rate of 200-300MW per year (higher than the historical average)), the impact on DBC would be muted and more than offset by (a) non-firm generators who are not compensated for curtailment in the case of an equal build rate and (b) a decrease in the level of SMP in the case of a higher but reasonable build rate.



CONCLUSION

HgCapital (as Europe's leading institutional investor in wind projects) does not see option 3b as in any way creating a retroactive change or harmful to investor confidence in the Republic of Ireland or in its energy regulatory environment. Adopting grandfathering would deliver a windfall benefit to existing generation whilst curtailing new investment. Option 3b would have a minor impact on existing generation and allow much needed investment, a far more equitable solution.

We strongly urge SEM adopt Option 3b, as it is not retroactive and it allows new investment to proceed. Option 1 would confer a new benefit on existing wind farms and would deter if not halt new investment.

We would be pleased to discuss any part of our comments should you wish to do so.

Respectfully yours,

A handwritten signature in blue ink, appearing to read "Tom Murley", written in a cursive style.

Thomas S. Murley
Director, Head of Renewable Energy, HgCapital

Direct Tel: 020 7089 7962

Mobile: 07989 387482

E-mail: tom.murley@hgcapital.com