

**IWEA Response to SEM-11-019**

**Capacity Payment Mechanism Mid Term Review Packages 6, 8, 9, 10**

**July 4, 2011**

**Introduction**

IWEA welcomes the opportunity to respond to this well intended consultation on possible changes to the capacity payment mechanism (CPM). IWEA would note that the CPM review began two years ago when the context was very different - Poyry identify the 'new wind environment' referring to 40% renewable targets, as the relevant context. There is a significantly different new context now that should be taken into account, notably, the emerging European Target Model, the significantly delayed penetration of renewables (compared with predictions), and adverse economic conditions. Any change to current CPM design must be justified in the context of: (1) need; (2) cost-benefit; (3) future change that may be necessary in the context of European requirements; and (4) cumulative impact of all market changes.

- 1) There is no compelling need to change the current mechanism, which has been operational since 2007. As stated by Professor John Fitzgerald of ESRI, the CPM has 'basically met its design requirements'<sup>1</sup>. The market is designed to send both short term signals (allowing changing fuel prices to change dispatch schedules) and long term signals for investment in new plant. It certainly appears that with 800MW of new CCGT plant in Cork and a 100MW peaker in Edenderry, the capacity signal has proven robust. Given recent falls in demand, there exists for the next 5 years a very comfortable capacity margin on the system. Poyry's analysis also shows that 'the overall performance of the current CPM design appears satisfactory when considered in the context of the competing objectives of the CPM'<sup>2</sup>
  
- 2) All of the proposed changes discussed in this paper would reduce revenues to wind, and reallocate these revenues to more traditional forms of generation. While there are certainly arguments around economic efficiency for the various scenarios, IWEA's view is that the cost benefit case for any of the proposed changes is very weak. On the cost side, most are complicated and will require further consultation and implementation costs, putting a burden on system operators, generators and ultimately the customer. In theory there are two possible benefits. Firstly the generation fleet will be incentivised to be more available during times of tight system margin (a short term signal). It is hard to see much benefit

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<sup>1</sup> Fitzgerald, A Review of Irish Energy Policy, <http://www.esri.ie/UserFiles/publications/RS21.pdf>

<sup>2</sup> Poyry, *Capacity Payment Mechanism, A Medium Term Review*, page 23

accruing from this given that the overall margin is so comfortable at the moment. However, no evidence has been presented to quantify the extent to which generators are not already making themselves available at key times (if this is indeed the case) nor would generators be able to respond to an ex-post pricing signal, and if the measures proposed, including an increase in the ex post allocation of capacity payments, will improve generators' availability when needed most. A second benefit is that a more economically efficient long term signal may be sent to traditional generators. Again it is hard to see that any tweaking of the long term signal in the CPM is not going to be swamped by the signal from Europe that there is a market integration planned in the medium term (c.3-5 years). This is particularly true if the proposed changes take 2-3 years to fully implement.

From a wind perspective, the capacity payments are a key revenue source for a technology which is planned to provide 40% of Ireland's electricity by 2020. A reduction of nearly €5/MWh as mooted in the capacity credit scenario will significantly impair windfarm investment cases to uneconomic levels and either add significantly to the PSO or reduce revenues for wind investors (depending on the relative point of the average SMP and the REFIT floor), with inevitable consequences for meeting targets.

- 3) The RAs must also consider the uncertainty over changes that may be required to the SEM in order to comply with the European Target Model. The likelihood that potentially significant change will be required in future should be a key consideration mitigating the case for change to CPM at this point in time. The considerable expense of interim change that may have to be reversed, especially without a clear benefit, is one important consideration. Another is the need to be cognisant of the direction of change. For example it would be clearly contrary to the emerging European Target Model to increase the ex post weighting of capacity payments as this would make firm day ahead market coupling even more difficult. The impact of unnecessary and short-lived change to CPM on regulatory risk to investments must also be a key consideration.
- 4) As we note in most of our responses to regulatory consultations of late, it is vital that one change is not made in a particular area such as capacity payments without consideration of the cumulative impact on particular generator types. Concurrently with this consultation there are the TLAf and TUoS consultations, as well as the Dispatch and Scheduling consultation, which in aggregate have the potential to impact up to 15% of wind farm revenues directly. Moreover, all proposed changes introduce volatility in the business case which causes debt and equity providers to require higher margins. In contrast, there is a fundamental simplicity and fairness in treating all generators in the same manner under the CPM, as currently designed.

On the above basis, and for reasons further explained below in our detailed comments, IWEA would strongly encourage no change to CPM for the foreseeable future.

We will proceed to give some feedback on the detailed questions in line with the high level position outlined above.

## Questions

**1. Should the RAs look more closely at a Capacity Credit scenario for the payment of different generation types? Is a Capacity credit methodology appropriate for the CPM?**

IWEA firmly believes this mechanism is not desirable as it is complicated to implement. This is not in keeping with the high-level design of the SEM. IWEA considers that given the future changes that will be required to move to a regional market, significant changes to the SEM design should only be implemented where there is an immediate need. As stated above, there is no justification for such a change at this point in time and if implemented it would undermine windfarm investment cases with inevitable negative consequences for meeting targets.

**2. Does the current mechanism fairly reward wind or does it need to be revised? Should there be a separate stream of capacity payments for wind? The RAs welcome alternative suggestions for allocating capacity payments between generator types.**

IWEA believes that the current mechanism pays all generators on an equal footing. Arguably the ex-ante element already accounts for wind's inability to always meet a declared output precisely. As per our introduction, we see no reason to revise this in the coming years if there is an imminent European market integration process. This is particularly the case given that wind's build out rate has been significantly slowed by the Irish recession and other factors, reducing the impact of wind diluting the CPM pot.

**3. Should interconnector users' payments and charges be treated differently than under the current methodology in the CPM? The RAs welcome alternative suggestions for allocating capacity payments between ICs / IC users**

IWEA believes that exporting interconnector trades should not be paying the full capacity charge. Certainly while exporting excess wind, the system operator could for system security reasons (e.g. the trip of a large generator) instruct the interconnector to cease to export, perhaps only for a short period until another plant was brought online. This is much more flexible demand than usual, and it as such is not imposing a hard capacity limit, and so should not have to pay for that capacity. Removing the exporting capacity charge would minimise the trading dead-band (the minimum price differential required to make a trade economic), and thus maximise the usage of the interconnector. While it is difficult to predict what the price arbitrage signals are likely to be a number of years in the future, it does seem inevitable that at high wind periods, it will be appropriate to export excess to the UK (and perhaps on to Europe). As to where the benefits of this accrue, this is certainly important and will require more detailed analysis, but it seems at a high level that sufficient benefit can be captured by the Irish consumer or generators to make this worthwhile.

It should also be recognised that increasing the ex post weighting of capacity payments will increase the trading dead-band.

**4. Should energy limited and pumped hydro storage units be treated differently to the current methodology in the CPM?**

IWEA does not have a view on this.

**5. The CPM and the AS revenue payment streams have two separate objectives and it is the RAs view that these should remain separate. Should the CPM offer payments for Flexibility?**

IWEA believes strongly that payments for flexibility are vital if we are to end up with a fit for purpose generation mix to complement the committed high level of wind penetration. We agree with the RA's that the objectives are separate, but we ask that the RA's do ensure that sufficient focus is placed on the development of new appropriate AS revenue mechanisms to reward flexible plant. It is likely that an AS mechanism specified, designed and operated by the system operators is going to be most appropriate in procuring the right services, particularly new services required for increased wind penetration. These new services will require additional money to be included in the AS pot to pay for these services. This mechanism would ideally give some revenue certainty to new entrants to allow investment in the most appropriate plant, for example by allocating 5-15 year AS contracts. There is a precedent in the UK, where some reserve services are tendered over 15 years. It is also more likely that this mechanism is more likely to survive integration with the European target model for energy markets.

**6. Do respondents agree with the SEM Committee, that an appropriate mechanism for penalising generators for not providing capacity when they have declared that they would, would increase the incentive to encourage the availability of generators when actually needed? Do respondents believe the CDP arrangement as described would fit the SEM CPM design? What should an appeals process involve / include? How should the proceeds from penalties be distributed?**

IWEA supports the concept of applying penalties in principle. Recycling these into the capacity pot would seem to be most appropriate, since it ensures the total capacity signal is correct. For example if there were a lot of ageing plant incurring penalties, this would create a signal for new entrants that anticipate not incurring penalties, but only so long as penalties were allocated back to the capacity pot.

It should be recognised that this provision is most onerous on peakers. Mid merit and baseload plant that fails to start when instructed will already incur a penalty through not being then considered available, particularly so under some of the scenarios with a strong ex-ante weighting. Whether or not it is worth introducing such complexity possibly only for one class of generator is worth considering further.

The existing penalties provide sufficient incentive to ensure availability. Any additional penalties would be excessively penal. The paper incorrectly states that generators only lose capacity payments for the trading period in which they were unable to provide capacity. This is not true. A generator loses capacity payments until it is able to resynchronise to the Grid, which can be up to 12 hours if the generator is considered cold. In addition, a generator is subject to penalties for tripping, short notice declaration and imbalance charges. All of these add up to a significant penalty for failure to be available. Generators have sufficient incentive to be available; further penalties would not result in increased availability.

IWEA assumes that wind would not be subject to penalties, since it has not made an availability declaration against which it can fail to deliver.

**7. Should New Entrants be treated differently to incumbents in the CPM? The RAs welcome comments on the feasibility of introducing a new entrant guarantee.**

IWEA believes that it is generally agreed that the SEM has failed to incentivise new flexible generation. This is not surprising since the market currently does not pay for these services. IWEA believes that flexibility should be encouraged and that this should not just be in favour of new entrants per se, but generators with characteristics that are going to reduce the running cost of a system with high wind penetration. It may be more appropriate to do this through Ancillary Services than through the CPM. Such steps are particularly important given the wider difficulties in attracting finance for capital projects in Ireland at the moment.

**8. The RAs welcome comment on: Should the design of the distribution allocations be changed?**

- **The weighting of the 3 components.**
- **Should the current values be maintained?**
- **New ideas on the distribution allocation.**

IWEA would tend towards reducing volatility at the expense of sending a clearer signal. This is because we believe that if any capacity is needed, it is the flexible and mid-merit rather than more base-load variety. The investment case for low capacity factor plant is 90% capacity payments, and if this is too volatile, it will deter investment.

It may appear a simple change to simply increase the weighting on the ex-post payment, but IWEA would strongly resist this. We believe that there is insufficiently clear forecasting of periods of tight system margin to allow generators to change their maintenance schedules, no matter how strong the ex-post payment and signal, and so for the cost of greatly increased volatility, there would be no benefit. This is true for all generators types.

**9. Should a FPF be applied within the CPM? Should the current value be maintained or changed? If the mechanism moves to a heavier weighed ex-post payment will the FPF be as effective?**

As for 8.

**10. The RAs welcome comments on the feasibility of introducing a SOCAP Model. The RAs also welcome comment on:**

- (a) The concept that the SO's would 'push money around' and signal need for capacity within-year.**
- (b) The value to the system of more explicitly incentivising capacity providers to make sure they will be available when the system will genuinely need them most.**
- (c) Whether a Floor; set high enough; is a sound tool for delivering revenue stability and lowering the cost of capital, and if not why not.**
- (d) The implications for Cash Flow and Credit for participants and operators. The RAs welcome alternative suggestions for allocating an effective distribution and timing payments system**

For the reasons outlined in the introduction, IWEA feels that the cost benefit case is very poor, and leaving the scheme as its status quo is the most appropriate.

IWEA does have a particular concern that its success will be very much down to the quality of forecasts of LOLP available; a point not addressed in the consultation. To the best of our knowledge, the system operators cannot accurately predict the loss of load probability even day ahead (much less week ahead), and so it is difficult for operators to respond by rescheduling downtime or short term maintenance activities. The shorter and less accurate the forecast, the less responsive generators can be, and the less benefit will be seen from the SOCAP model.

**11. The RAs welcome comments from respondents / suppliers on options for shaping supplier Capacity Charges, in the context of the existing design and in the context of the other Capacity Payment proposals in this document.**

Unless it is expected that suppliers or their customers could respond in some way to the capacity signal, we see no benefit in matching the payment profiles, and the annual capacity pot should simply be collected in a way that minimises administration costs and any unnecessary cashflow imbalances.