**Endesa Ireland response to SEM/09/035**
**Scope of CPM**
**Medium-Term Review**

Endesa Ireland Ltd. welcomes the consultation paper on the review of the scope of the capacity payment mechanism (CPM). The current capacity payment mechanism has been quite successful in attracting investment in new capacity within the SEM. In undertaking a review of the CPM, the Regulatory Authorities should ensure that the benefits delivered by the CPM are maintained, both for generators and for end customers.

In the medium-term, Endesa Ireland considers that it is important to view any proposed changes to the CPM in relation to the long-term strategy for the SEM and the steps that must be taken to integrate the SEM into the regional market, firstly with BETTA and then with France. In the longer-term, the regional market will be integrated into the single European market, for which a regional strategy will need to be developed.

Endesa Ireland considers that the capacity payments for existing units should continue for the medium-term. However, these payments should be limited to existing units. For new build, capacity auctions should be introduced. These capacity auctions will help the SEM move toward a more competitive market.

As part of the medium-term review, the Regulatory Authorities should look into the incentivisation of System Operators to minimise network constraints. The current level of constrains on the island limits the potential for a fully competitive market, as market participants behind those constraints would be in a position to exercise market power. The Grid**25** programme should relieve the majority of constraints in Ireland, however, the System Operators should be incentivised to ensure constraints are minimised.

Given the 2020 targets on the island, incentives should be designed to encourage capacity investment in specific locations, utilising the appropriate fuel mix. Such incentives can be introduced in the medium-term, resulting in a more efficient, less costly network to the benefit of the final customer. These incentives should be aligned to government targets for renewable energy as set out in the National Renewable Energy Action Plan[1] and the National Energy Efficiency Plan[2] for Ireland and in the Review of the 2004 Strategic Energy Framework for Northern Ireland (2008)[3].

[1] 40% energy generated by renewable sources
[2] 800MWe of CHP by 2020
[3] 12% energy generated by renewable sources, 15% of this 12% to be generated using technologies other than wind

In the long-term, Endesa Ireland wishes to see the SEM develop into a fully competitive market, in which market participants that are not receiving capacity payments are not restricted to bidding in at their short-run marginal cost (SRMC). It is Endesa's view that in the longer-term, once current market participants have recovered their capital costs, capacity payments should cease, and these participants should be able to offer into the market without restriction on their offers.

Endesa Ireland recognises that a strong regulatory framework will be required to ensure that there is sufficient capacity on the island to meet capacity adequacy requirements and to regulate participants such that they are unable to exert market power, which will result in competitive prices. Guaranteed capacity payments will still be required to incentivise new build. This is a capital intensive industry and investment will continue to require the certainty that capital costs can be recovered. However, this should be a more competitive process. Auctions to secure sufficient capacity on the island will help to provide capacity at the lowest cost to the end customer, while providing sufficient incentives to investors.

It is our view that capacity auctions should guarantee an annual capacity payment over 10-15 years, sufficient to enable investors to recover their capital costs. Units that are supported by capacity payments would continue to offer into the market at their SRMC. Units that are not receiving capacity payments, either because their explicit capacity payments have ceased or because they chose to invest without an explicit capacity payment, should be able to offer competitive prices to the market, without limitation by the regulatory authorities. (Analysis will need to be undertaken to determine the impact of different offer structures within a single market). Given the expected level of interconnection in the longer term and the investments in the transmission network to minimise congestion, it is expected that there will be a sufficient level of competition on the island to ensure that end customers face competitive prices.

The long-term strategy should include a move towards a competitive ancillary services market. Auctions for the provision of ancillary services should be developed, allowing new entrants to offer for long-term ancillary service contracts and existing market participants to offer for annual contracts. These auctions will increase market transparency, promote competition and will ensure the services are procured at the lowest cost to the end customer.

Endesa Ireland strongly encourages the Regulatory Authorities to develop a long-term strategy for the SEM, in conjunction with market participants, so that a medium-term review can be undertaken in the context of the long-term goals. Any changes to the CPM in the medium-term should be justified by the way these changes will facilitate the implementation of the long-term strategy, which must include how these changes will facilitate greater competition and SEM integration into the regional market.

Following are Endesa Ireland's responses to the specific consultation points raised in the document:

1. *Historical analysis of CPM and its effect on:*
    - *availability*
    - *incentives to enter/exit market*
    - *choice of technology*
    - *diversity of generation*
    - *Moyle interconnector usage*

The latest generation adequacy report shows that the CPM has not had a significant effect on short-term plant availability. In addition, the SEM Committee has stated in its Annual Report that it is too early to determine whether the CPM has provided significant incentives to enter/exit the market. Endesa, when looking at the investment possibilities for new plant in Ireland, took into account that the CPM does not differentiate based on the choice of technology and does not reward flexibility.

The current CPM is not designed to incentivise plant flexibility or a specific plant mix, although these were stated objectives in the high-level design[7]. Rather, the RAs have stated that the CPM is based upon principles of fairness, maintaining reasonable proportionality between the payments made to achieve capacity adequacy and the benefits received from attaining capacity adequacy and simplicity. Given the principles of the CPM, one would not expect that the CPM would have a significant effect on choice of technology, plant location and plant flexibility.

Endesa Ireland considers that changing the CPM to reward flexibility or incentivise a certain fuel mix is not appropriate for existing plant, as changing the fuel or flexibility of existing units is not economically viable. In addition, clear signals are required for the reward of flexibility. Incentivising flexibility via the CMP would diminish the strength of this signal.

The CPM design does not provide sufficient long-term surety for investors in new build. Since SEM market-start, the capacity payments have increased, reflecting the increased investment costs for new peaking units and the growth in demand. In 2010, investment costs will continue to increase, however demand is expected to reduce by approximately 6% and additional capacity will be commissioned. This is likely to result in a reduced capacity pot.

While the CPM was intentionally designed to reduce payments when additional capacity is not required and to encourage the exit of inefficient, older plant, this variability is difficult for investors to manage, particularly in relation to relatively-new units, as

[7] SEM Proposed High-level Design (AIP/SEM/06/05)

shareholders expect year-on-year growth. Endesa Ireland considers that greater stability is required in capacity payments and year-on-year variability should be minimised.

2. *Impact of the CPM on consumers and the methodology for payments by suppliers*

Endesa Ireland does not see any reason for amending the existing methodology for payments by suppliers. The CPM was designed to reduce volatility in the energy market, which in turn reduces costs for consumers, provided it is set at an appropriate rate. The capacity payments are recovered from suppliers, based on predetermined rates. Suppliers have sufficient notice in which to set appropriate tariffs to recover these costs.

3. *Incentives that could be introduced within the CPM or covered under the Ancillary Services mechanism.*

The CPM and Ancillary Service revenue streams are seeking to achieve two separate objectives. Ancillary Services are meant to ensure the secure operation of the transmission system. The CPM has been designed to incentivise investment in new capacity, when required and to incentivise availability of that capacity. The objectives of these revenue streams should be kept distinct.

The RAs have proposed to expand the criteria that could be used to determine how the capacity pot is paid out, including fast start, reliable start, short ramp-up and run-down times and high ramp rates. Endesa Ireland strongly supports the reward of such flexibility, but considers that this should be rewarded via ancillary service payments, not via the CPM. Plant flexibility is necessary for the secure operation of the transmission system, not to ensure sufficient capacity on the island. Within the CPM, values are variable year-on-year. The incentivisation of plant flexibility requires greater surety, as this requires an additional capital investment, which investors must be certain to recover. In addition, this signal should stand alone and not be diminished by inclusion in the capacity payment.

It is important that the TSOs are able to signal their requirements for flexibility and the payments they are offering for this flexibility, for the short, medium and long-term. This is particularly important for new market entrants, as it is much more efficient to invest in flexibility in new build. However, this investment decision will not be taken unless investors have a sufficient level of certainty that the investment will earn a sufficient rate of return. At present, there is no such certainty. The TSOs should be required to publish system flexibility / ancillary service requirements on a year-ahead and longer-term basis and the statement of payments for the provision of these services.

In addition Endesa Ireland agrees with the proposals in the TSOs consultation on all-island ancillary services[8] to offer warming contracts and to reward multi-mode operation of CCGTs. These additional services will help to ensure the TSOs have access to the flexibility necessary for secure system operation.

*4. Timing and distribution of Capacity Payments*

The ex-post publication of the scaling factors for capacity payments makes it difficult for market participants to forecast earnings. It would be useful if SEMO published forecast scaling factors that were updated on a daily / weekly basis.

*5. Capacity requirement calculation / parameters*

Endesa Ireland considers that the calculation of and the parameters utilised in the capacity requirement calculation are appropriate, save for the availability figures. The expected availability of units should more accurately reflect the actual availability of units in the SEM, not idealised projections of availability. As indicated in the consultation paper, the FOP should also be revisited, to ensure it is consistent with the FOP expectations as determined by the TSOs.

*6. Calculation of WACC / WACC parameters*

Endesa Ireland welcomes the RAs proposal to present the WACC parameters in a more transparent manner. In addition to greater transparency, Endesa considers that RAs should review the utilisation of the risk-free rate in the calculation of the WACC.

The CPM is calculated on an annual basis. Given the potential volatility in the CPM, there is no guarantee that an investor will recover their fixed costs. In addition, the excess capacity in the current market, the volatility of the CPM and the current economic climate increase the risk profile of the investment. Endesa Ireland does not consider that it is appropriate to utilise a risk-free rate.

*7. Impact of infra-marginal rent on the BNE Peaker*

As stated in our response to the consultation on BNEFC, Endesa Ireland considers that the inclusion of infra-marginal rent within the calculation of BNE Peaker costs to be inappropriate.

[8] AIP-SEM-08-128

The current market is experiencing record levels of available capacity, resulting in peaking plant being the marginal plant in the SEM or, more often, the peaking plant remains out of merit and is dispatched, when needed, by the System Operator. As such, the units are pay-as-bid, which ensures recovery of variable costs but does not generate additional profit or contributions to the fixed costs.

Peaking plant will receive infra-marginal rent when they are not the marginal plant on the system. This will mean that capacity is tight, such that older, more expensive plant is being run. At such a time, incentives for new investment are needed and it is inappropriate to decrease the capacity payment by deducting infra-marginal rents.

*8. Impact of exchange rate fluctuations on CPM*

Endesa Ireland does not consider the impact of exchange rate fluctuations on the CPM is sufficient to require a revision of the methodology.

*9. Treatment of Wind within CPM*

Wind turbines should be fairly compensated for the capacity that they provide. As with other plant, when wind turbines are available, they should receive capacity payments.

In the 2009-2014 Generation Adequacy Report, EirGrid has indicated that an additional 2000MW of wind will be required by 2015 to meet the government targets. However, EirGrid expects that these generators will only provide a capacity credit of 147MW. EirGrid has indicated that there is not a linear relationship between the volume of wind generation on the system and the capacity credit they contribute. Capacity credit should be taken into account when determining capacity payments.

In addition, at the last Grid Code meeting (29 April), EirGrid presented information showing that the availability indicators for wind turbines are often inaccurately reporting availability, in some cases stating they were not available when available and vice versa. In order to ensure accurate compensation, the availability indicators for all wind turbines should be tested. In order to be eligible for capacity payments, wind generators should be required to demonstrate that their availability indicators are accurate.

*10. Interconnector Treatment within CPM*

In 2007, the RAs determined that electricity imports over the interconnector were eligible for capacity payments. This was at a time when these imports were limited by the ATC on the Moyle interconnector (80MW export; 450MW import).

An authorisation to construct the East-West interconnector (450MW – 650MW) has been granted and Imera has received an exemption to 3rd Party Access for two 350MW interconnectors linking Ireland and Wales. The potential outcome is that the capacity for cross-border trades will increase by 1350MW. In addition, the RAs are looking at the current impediments to cross-border trades (SEM/09/042) and will be consulting on means to remove these barriers. The outcome of this consultation is likely to result in a decrease in these impediments, increasing opportunities for arbitrage between the SEM and BETTA.

In this event, the capacity pot will be distributed among a wider group of market participants, which may result in some parties being unable to recover their capital costs. The RAs must ensure that capacity investments made to meet capacity adequacy requirements on the island are able to recover their capital costs, while at the same time encouraging interdependence with BETTA.

Endesa Ireland would propose that the CPM mechanism as currently designed is limited as payment for existing units. A separate capacity mechanism should be defined for new market entrants, including new interconnectors (described under point 11, below).

Furthermore, it is possible that the outcome of the consultation on interconnector trades will allow cross-border trades to be scheduled after SEM gate close. This would give the entities involved in these trades the opportunity to take advantage of any situations which may influence the ex-post capacity payment. If this situation arises, the methodology for calculating capacity payments for interconnector trades should be reviewed to ensure these entities are not given an advantage over those parties trading in the SEM that are not trading over the interconnector.

*11. Relationship between ancillary services and the CPM*

The CPM is meant to ensure sufficient capacity and availability of that capacity on the island of Ireland. "Ancillary services" is defined by the Grid Code as "*a service, other than the production of electricity, which is used to operate a stable and secure Power System...*" These payment streams have two very distinct purposes and should be kept separate.

Endesa Ireland considers that there should be a transparent, competitive market for ancillary services. The TSOs proposals in AIP-SEM-08-128 are for bilateral contracts for ancillary services, based on harmonised annual rates approved by the RAs. Endesa Ireland considers that other options should be explored, to provide increased

transparency and to ensure the most competitive rates for the provision of ancillary services.

TSOs should determine what services will be needed in the coming year and should engage in a more transparent procurement process with generators / demand-side customers to provide these services, such as co-optimised energy and ancillary service markets or annual auctions for the provision of ancillary services.

Given the current market systems, it is unlikely a co-optimised market will be implemented in the medium-term. In terms of auctions, Endesa Ireland suggests that there are separate ancillary service auctions for new and existing plant, with long-term contracts awarded to the new entrants and annual contracts to existing plant.
In the long-term, it would be most efficient to hold a single auction for new entrants, designed to secure the necessary capacity, as determined by the all-island GAR, with the optimal plant mix, in the correct locations (one of the objectives of the CPM in the high-level design) and the needed ancillary services at the lowest cost to the end customer. In some years, it is likely that no additional capacity will be required. These auctions would be the most economic solution, providing the necessary certainty to investors, ensuring sufficient capacity on the island and ensuring that the end-customer is paying competitive prices.

Annual auctions for ancillary services should also be held for the provision of these services by existing units, with the winners able to enter into an annual contract to provide the needed services at the lowest cost. Currently, the payments for ancillary services in Ireland do not sufficiently compensate for the investment required to provide these services. These auctions could ensure that the SOs are able to operate the system securely while providing surety for investors.

Such auctions have been successful in a number of other markets; Endesa has had significant experience with these auctions in Columbia, where a similar requirement for backup capacity exists.

In the Columbian market, a significant portion of the electricity is generated by hydro (77%). However, during times of drought, these generators are not available. To ensure sufficient backup capacity, Columbia introduced an auction, where investors willing to provide the needed capacity at the lowest cost were awarded contracts for the provision of energy in times of scarcity for durations up to 20 years. These auctions have been in place since 2006 and have proven to be very successful.

The implementation of capacity and ancillary service auctions for new market entrants would replace a hypothetical BNE with a physical BNE, resulting in a greater level of transparency in the market and creating greater stability for investors. This would also be a step towards the long-term goals of greater transparency and competition in the SEM.

The SEM Committee has stated that they recognise that stability in the CPM is needed to provide investors with sufficient certainty of income. These auctions could provide the necessary long-term signals to incentivise the appropriate energy mix on the island of Ireland, which will facilitate the objectives of the RAs in ensuring security of supply and will facilitate the achievement of renewable energy targets at the lowest cost to final customers.

In terms of capacity payments, Endesa Ireland considers that capacity payments for existing plant should be eliminated in the longer-term, once these units have recovered their capital costs and the Regulatory Authorities are in a position to implement a fully competitive market in which market participants that are not benefitting from capacity payments are not restricted to bidding in at SRMC.

12. *Other aspects of the CPM that should be included in the scope of the medium-term review.*

The criteria used to determine the technology selected for the BNE should be expanded to include environmental considerations and legal obligations in the selection criteria.

Ireland and Northern Ireland's 2020 targets for reduced emissions and energy efficiency should be taken into account. The chosen technology for a BNE peaking plant should be consistent with government targets.

In addition, under SI 309 of 1999, CER may only issue authorisations to construct to dual-fuelled plant. The distillate plant chosen as the BNE in 2009 was not a dual-fuelled unit. When choosing a particular technology and calculating the associated costs, the costs of a dual-fuelled unit must be taken into account, along with the costs of storage of the secondary fuel when that plant will be located in Ireland.