



**Response by Energia to Commission for
Energy Regulation Proposed Decision
Paper CER/12/080**

Public Service Obligation Levy 2012/13

02 July 2012

1. Introduction

Energia welcomes the opportunity to respond to the Commission for Energy Regulation's (CER's) annual consultation on the Public Service Obligation (PSO) Levy. Specifically this consultation deals with the amount to be paid by customers in respect of generation activities covered in the relevant PSO legislation¹.

While we do not wish to comment on the well established methodologies around the calculation of the benchmark price or levy calculation, including R-factor adjustment, this paper highlights a number of important issues around the PSO and energy policy more generally. In the context of the Department of Communications, Energy and Natural Resources (DCENR) publication of a new Energy White Paper for Ireland later this year, it is considered appropriate that the CER would look to update their thinking on such market issues which have direct implications for customers. A number of points raised in this response shall similarly be made to DCENR as part of an expected consultation on the development of the White Paper.

2. PSO Items – cost comparison

Since the introduction of the PSO levy in 2008/09, successive decisions, including the current proposed decision, have sought to recover the following subsidies from customers with respect the primary cost items²;

- Peat Stations - €225.8m;
- Renewables (AER & REFIT) - €164.1m;
- Capacity (Tynagh & Aughinish Alumina) - €115.0m.

Accounting for adjustments, the Total PSO costs to date, (including the proposed decision) is €391.9m, with a proposed recovery of €146.8m in the forthcoming levy. The proposed total levy cost includes a relatively small adjustment in respect of an over-recovery in 2010/11 of €1.7m and is therefore considered to be an accurate reflection of the total expected PSO supports payable in respect of 2012/13.

The total cost of the PSO is therefore substantial, with the cost of supporting the peat stations found to be the most costly. Before drawing any conclusions to this effect, it is instructive to consider the cost of the supports alongside the capacity they are supporting. It may be considered to be potentially misleading to focus simply on the cost item totals as amounts go to support different levels of capacity. The following figures present the cost per MW of the PSO as proposed for 2012/13;

- Peat Stations (370MW) - €140,505 (€/MW);
- Renewables (1,695MW) - €32,052 (€/MW);
 - Assuming a capacity factor of 33% - €97,128 (€/MW);
- Capacity (560MW) - €75,341 (€/MW).

¹ S.I. 217 of 2002 [Electricity Regulation Act 1999 (Public Service Obligations) Order 2002] and subsequent amendments for REFIT; S.I. 284 of 2008; S.I. 444 of 2009; S.I. 532 of 2010; and S.I. 513 of 2011.

² Figures are un-indexed and unadjusted for R-factor.

On the basis of this simple comparison it would appear as though peat stations represent not only the greatest cost to the PSO but also the worst value for money (per MW) across the different supports funded by this levy.

One should note an important feature of the current PSO regime is the duty placed on the Transmission System Operator (TSO) to give priority of dispatch to the PSO generation stations. While this is in accordance with European rules relating to renewables, the designation of priority dispatch for peat stations is likely to be driving costs in the PSO where the use of peat stations is not economic and would otherwise contravene the Single Electricity Market principle of least-cost dispatch. In fact, the PSO can be seen to distort the original design principle of the SEM which is, “designed to provide for the least cost source of electricity generation to meet customer demand at any one time across the island, while also maximising long-term sustainability and reliability”³.

3. Peat, Energy Policy and the PSO

The Electricity Regulation Act, 1999 made provision for the introduction of a PSO in order to address any of four specified objectives for Irish energy policy, namely;

- Security of supply;
- Regularity, quality and price of supplies;
- Environmental protection; and
- Use of indigenous energy sources.

Following the introduction of S.I. 217 of 2002, the PSO was formally introduced in respect of peat and renewable energy projects. This S.I. also provided for priority dispatch of the generation units covered therein. As already stated, this requirement preceded a European Directive requirement with respect to renewable technologies but continues to be anomalous with respect to peat.

The use of peat in electricity generation has been primarily justified on the basis of the PSO objectives of security of supply and, in this instance, the related objective of utilising indigenous resources. However, in the context of the current Irish energy market, it is useful to reconsider the justification of a special position for peat in the electricity system and as supported through the PSO.

Firstly, as evidenced as part of this consultation, over 1,200MW of onshore wind capacity has been added to the Irish system since 2006. This new capacity, along with thermal capacity additions, have led to a situation whereby Ireland is now considered to have a sufficient supply margin, albeit in part due to adverse demand conditions caused by the ongoing economic difficulties faced by the country. The new renewable generation capacity added to the system also utilises indigenous energy sources and has been found to reduce wholesale electricity prices⁴. The impending introduction of the East-West Interconnector (EWIC) further represents a fillip to the security of supply situation on the island.

³ CER Factsheet on the Single Electricity Market, CER/11/075, April 2011.

⁴ Devitt, C. & Malaguzzi Valeri, L., 2011, "The Effect of REFIT on Irish Wholesale Electricity Prices", *The Economic and Social Review*, Vol 42, No 3, 2011, pp.343–369.

Notwithstanding the current supply margin, peat is recognised as providing a security of supply benefit. However, it is important that benefit is not overstated such that its treatment in the market does not become disproportionate or counterproductive. Ireland does not have the relevant capacity to be self-reliant on peat.⁵ There is only 370MW of peat fired generation on the island, approximately equal to 8% of peak demand in 2011⁶. In addition, even if security of supply delivered through the use of indigenous resources was considered to be a laudable objective, it would appear to be counterintuitive that peat would similarly be afforded priority dispatch. In effect, this approach recognises the benefit of indigenous resources and provides supports for it, while also ensuring that this resource is depleted as quickly as possible and at times when there is no genuine threat to security of supply. The introduction of co-firing serves to weaken the argument in support of peat further as biofuels are not produced domestically and instead are imported.

With respect to the remaining PSO objectives, peat may be able to satisfy the regularity, quality and price of supplies objective but ongoing industrial disputes and the volatile cost of carbon may have significant implications for the satisfaction of this objective in the context of power generation. The relative size of peat and of the Irish market will mean that peat will be unable to affect the regularity, quality or price of other fuels.

The burning of peat in electricity generation is the most carbon intensive of all the fuels currently consumed in Ireland for this purpose. Peat, therefore, cannot be supported on the basis of environmental protection. The financial supports and priority dispatch status conferred on peat generation stations creates an inherent conflict in the PSO. In supporting renewable technologies the PSO facilitates the achievement of carbon reduction targets but negates these benefits through directly supporting the use of the most carbon intensive of fuels available to generators on the system.

The economic dispatch of peat, coupled with the transformation of peat purchasing obligations into options, would remove inconsistencies in the treatment of peat in the PSO and subsequently better achieve its objectives. The overall effect would be to improve the consistency of overall energy policy and minimise the costs of electricity generation in these straitened times. Such an approach would also seek to ensure the political concerns around the support for the peat industry and the Midlands would be allayed. Even in addressing such political concerns, it should be acknowledged that the treatment of peat in an inefficient and relatively costly means of providing economic and employment support to the Midlands.

⁵ Furthermore, the Electricity Regulation Act (1999) limits the amount of peat fired generation under a PSO to 15 per cent of the overall primary energy necessary to produce the electricity consumed in the State that year.

⁶ Eirgrid Weekly Peak Demand, available at;
<http://www.eirgrid.com/operations/systemperformance/weeklypeakdemand/>

3.1 Review of Research

A market based treatment of peat generators is supported by a number of academic studies. Recent research into the use of peat in electricity generation in Ireland has found;⁷

- The priority dispatch of peat plants would appear to be sub-optimal and they should be dispatched, akin to the other thermal generating plant on the system, on an economic basis;
- Under the central modelling scenario, the following results were observed arising from the suggested change;
 - Significant societal benefits, approximately €21m per annum;
 - An average reduction of €1.51/MWh in the wholesale price;
 - This is equivalent to €60m being added to the total energy bill to be paid by customers through the PSO, (assuming the marginal price is paid);
 - A 5% reduction in system emissions (1 million tonnes of CO₂);
 - A removal of the apparent contradiction of subsidising both renewables for their clean energy and peat, with its high carbon intensity;
 - Security of supply benefits are retained.

Importantly, this research was not the first to highlight deficiencies with the current policy with FitzGerald *et al* (2005) concluding; “[W]hile there is an undoubted argument that peat-fired generating stations provide security through diversifying fuel supplies, it seems most unlikely that this is the most appropriate means of meeting the security of supply objective in a world where greenhouse gas emissions will carry an increasing penalty.”⁸

Finally, recent research has sought to address the policy movement with respect to peat and the requirement on co-firing of peat plants with biofuels. In summary the research has found;⁹

- 30% target unlikely to be met due to;
 - Technical problems with the ESB Stations,
 - The insufficient quantity of indigenous biomass;
 - The approach is too expensive and Carbon prices are too low;
- The approach not appear to be a cost effective use of scarce biomass resources;
- Policy mechanisms are needed to help achieve the targets or else target reduction.

⁷ Tuohy, A., Bazilian, M., Doherty, R., Ó Gallachóir, B. & O'Malley, M., 2009, “Burning peat in Ireland: an electricity market dispatch perspective”, *Energy Policy*, 37(8), pp.3035-3042.

⁸ Fitzgerald, J., Keeney M., McCarthy N., O'Malley, E. & Scott, S., 2005, *Aspects of Irish Energy Policy*. ESRI Policy Research Series, No. 57.

⁹ O'Mahony, A. & Denny, E., 2010, *Generating Electricity from Peat and Biomass: A Case Study of Ireland*, a presentation to the AESI Annual Conference 2010.

4. Conclusions

Although neither the current consultation nor the CER can alter the status of peat in the PSO, it is important that the debate on the treatment of peat in the SEM, and as part of any subsequent market design, is commenced. The current treatment of peat is distortionary, costly to both customers and society, and contradictory in relation to energy policy. As part of its remit, the CER should play an active consultative role in the formulation of the forthcoming Energy White Paper wherein the current policies should be revised to address their apparent and significant shortcomings.