



Commission for Energy Regulation

An Coimisiún um Rialáil Fuinnimh

**Proposed High-Level Methodology
for calculating the
Public Service Obligation (PSO) Levy
for 2007**

**CER/06/026
10 March 2006**

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1. Introduction

The Commission for Energy Regulation (CER) is required to calculate and notify all relevant parties of the level of the Public Service Obligation (PSO) levy each year in accordance with section 39 of the Electricity Regulation Act 1999 (the Act), (Public Service Obligations) Order 2002 (SI 217 of 2002) as amended.

A key element in the calculation of the PSO levy has historically been the Commission's decision on the Best New Entrant (BNE) price. The BNE price is essentially a substitute for the market price, representing the all-in cost (per MWh) of a BNE Combined Cycle Gas Turbine (CCGT) operating at baseload, and at efficiencies, availabilities and cost parameters determined by the Commission. The use of the BNE price as the basis for calculating the PSO levy was approved by the European Commission for a transitional period until such a time as a market price is available.

The introduction of the Single Electricity Market (SEM) in July 2007 – and with it a market price – raises some important issues in relation to the calculation of the PSO levy. In particular, given that a market price will be available for half of the 2007 calendar year the Commission must address the question of what benchmark price is to be used for the *ex ante* calculation of the PSO levy for 2007.

Possible options were outlined in the Commission's earlier consultation paper, “*ESB PES Tariffs and the Transition to the SEM*” (CER/06/002), published on 16th January 2006. However, there was no evidence of consensus on the preferred methodology for calculating the levy in the responses submitted to the consultation.

Given the importance of PSO levy in terms of electricity volume¹ and the final electricity price², the Commission believes that this matter merits a separate consultation.

The Commission invites comments on the issues and proposals in this paper to be submitted by 17:00 Friday 24th March 2006. Submissions should preferably be in electronic format, and addressed to:

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¹ The estimated PSO volume of electricity for the purposes of calculating the 2005 levy was almost 4 TWhs, representing approximately 17% of total electricity sales.

² The amounts to be recovered through the levy in 2005 and 2006 were €103 million and €44 million, respectively.

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Comments may be published on the Commission's website (www.cer.ie) unless otherwise marked as confidential.

2. Background

The PSO was first imposed by the Minister for Communications, Marine and Natural Resources on the Electricity Supply Board (ESB) on 1st January 2003 and has been amended from time to time since. It requires ESB to purchase power from specified sources, including, but not limited to, peat, renewable and other sustainable sources. The Act specifies four areas which the PSO can cover:

- (a) *security of supply,*
- (b) *regularity, quality and price of supplies,*
- (c) *environmental protection, and*
- (d) *use of indigenous energy sources.*

The Commission is required under Section 9(2) and (3) of Statutory Instrument (SI) 217 of 2002 to approve ESB's estimated additional costs incurred by complying with the PSO, inclusive of the administration costs incurred by the Transmission System Operator (TSO), suppliers and the Distribution System Operator (DSO) in collecting payment of the PSO levy, within the relevant levy period. The SI sets out the timetable to be followed by all relevant parties in this approval process. This timetable is illustrated in **Appendix A**.

The additional costs incurred by the ESB are calculated annually in accordance with parameters specified in the relevant PSO Notification and the corresponding European Commission State Aid decision. The relevant Notifications, decisions and regulations are listed in **Appendix B** of this paper.

The European Commission's State Aid decision N826/01, in relation to the Alternative Energy Requirements (AERs), defines the additional costs as the difference between:

"(...) the price of electricity as acquired by ESB from the green electricity producers under the AER long term contracts.

[and]

(...) the price at which ESB could have sold this electricity on the market, as estimated yearly by the CER on the basis of a time weighted average of the electricity market price as sold by electricity producers in a fully liberalised Irish market. Until the full liberalisation of the Irish electricity market, in year 2005, it is likely that such market price will not exist. In the absence of market price, the CER will compute the benchmark value on the basis of the assumption that such price would be driven by the costs of a best new entrant".

3. PSO Methodology and the Single Electricity Market (SEM)

The current electricity market in Ireland is a bilateral wholesale market and the appropriate benchmark price for the purposes of calculating the PSO, in the absence of a price which can be derived from a centralised market, is currently the BNE.

The BNE price comprises *“the all-in cost per MWh of a BNE Combined Gas Turbine (CCGT) operating at baseload, and at efficiencies, availabilities and cost parameters determined by the CER”*.

To date this has been the methodology utilised and applied to the annual PSO levy in line with paragraph 5.10 of the November 2000 PSO Notification.

The new wholesale electricity market, the SEM, will be in place by July 2007. The SEM will be a pool market and will introduce a single market price, which is absent in the current market structure. Therefore, a market price will be available for half of the 2007 calendar year.

The existence of a market price for only half of a levy period³ gives rise to the most immediate issue in relation to the PSO levy as a result of the SEM. The Commission must address the question of what benchmark price – BNE or SEM market price (or both) - is to be used for the *ex ante* calculation of the PSO levy for 2007. As discussed below there are a number of legislative and practical issues which may inhibit the Commission’s options of resolving this issue.

4. Legal Considerations

In considering the relevant PSO legal provisions the Commission notes that the Notification is not a statute. Having said that, the Notification does form the basis of the European Commission’s approval. It also forms the basis for the calculation of the PSO levy and has been relied upon by the Commission in relation to the current use of the BNE and the requirement for the use of a time-weighted average market price for the periods when this is available.

The Commission has identified three legal issues to be considered in carrying out its obligations with respect to the PSO levy; the requirement to consult, the levy period and the methodology underpinning the calculation of the levy.

4.1 Consultation

Paragraph 5.11 of the Notification states that once a market price is available *“(...) a time-weighted market price will be determined by the CER in an open consultative process and posted by the CER in its annual review”*.

³ The levy period is 12 months.

SI 217 of 2002 requires the Commission, before 1st July, to notify all parties of the estimated PSO levy and the components which led to that calculation. The notification is to be consulted upon for a period of 15 days.

On this basis the Commission is now consulting on the high-level methodology for the calculation of the PSO levy for 2007. In order for the Commission to be in a position to determine and consult on the PSO levy as required under the SI at the end of June, the methodology must be known before this time. The Commission also believes it is sensible to indicate to the market at this time how it proposes to introduce the market price in calculating the levy.

In carrying out this consultation process the Commission feels that it is necessary to have regard to section 39(12) of the Electricity Regulation Act. Although it places an obligation on the Minister, it is still relevant to the Commission and the implementation of the levy. It provides that in the making of an order under section 39, the Minister shall have regard for the need for public service obligations to be imposed in “*a non-discriminatory and transparent way*”.

4.2 Annual PSO Levy

SI 217 of 2002 clearly defines a levy period to which the PSO applies as:

“(...) a period of 12 calendar months commencing on 1 January in each period”.

4.3 Methodology

The high-level methodology for the calculation of the PSO is outlined in paragraphs 5.10 and 5.11 of the PSO Notification. As discussed above, the excess costs to be recovered via the levy are broadly explained by the price of electricity acquired by ESB under the PSO contracts and the price at which ESB could have sold this electricity on the market.

The notification anticipated that there would be a transition period in the liberalisation of the Irish electricity market and that during this period a market price based on a fully competitive market would not exist. In the absence of a market price the use of BNE was approved by the European Commission for the purposes of calculating the *ex ante* levy.

5. Options for calculating the 2007 PSO Levy

In light of the high-level methodology for setting a market value for the calculation of the PSO levy and the mid-year availability of a market price, there are four broad options for setting a benchmark price for the calculation of the PSO levy for 2007. These options are primarily derived and discussed in greater detail from the perspective of setting PES tariffs in the

Commission's earlier consultation paper "*ESB PES Tariffs and the Transition to the SEM*", CER/06/002.

5.1 Option 1: Two six-month PSO levies, the first based on BNE and the second based on the SEM market price

This option involves utilising a BNE benchmark price for the first half of the year and thereafter a time-weighted average SEM market price.

Evaluation

The option of using a BNE price for the period January to June 2007 and thereafter a time-weighted market price would involve having two separate levy periods within a calendar year. This is at odds with the 12-month levy period specified in SI 217 of 2002. The SI also provides that one proposed decision and one final decision will be published by the Commission with respect to a levy period. Therefore, in order to implement this option the SI would need to be amended by the Department of Communications, Marine and Natural Resources (DCMNR) to provide for two levy periods for the year 2007, i.e. one pre- and one post- the establishment of the SEM.

This option is consistent with the high-level methodology outlined in the PSO Notification and the corresponding European Commission decision.

Under this option, the first six-month levy would be approved according to the normal process as set out in Appendix A, while it is envisaged that the second levy would be determined over Quarters 3 and 4 of 2006. At this time a modelled SEM market price will be available to be used as the basis of the PSO.

5.2 Option 2: Single-year levy based on the mean of BNE and SEM market price

This option involves utilising a mean of the BNE price and the time-weighted SEM market price.

Evaluation

This option may be at odds with paragraph 5.10 of the Notification due to the fact that during the period January to July 2007, when a market price is not available, the BNE is not utilised as the benchmark price. Similarly for the second half of the year, when a market price is available, a time-weighted market price is not utilised as the benchmark price.

This option is consistent with the calendar-year levy period specified in SI 217.

On a practical level a modelled SEM market price will not be available within the statutory timescale to form the basis of the PSO.

5.3 Option 3: Single-year levy based on BNE

This option involves utilising a BNE price for the entire year 2007.

Evaluation

Utilising the BNE as an equivalent to a market price for the entire 2007 calendar year is at odds with paragraph 5.11 of the Notification as for periods when a market price is available, i.e. from July 1st 2007, a time-weighted market price is not utilised as the benchmark price.

This option is consistent with the calendar-year levy period specified in SI 217.

The option is the most straightforward to implement.

5.4 Option 4: Single-year levy based on SEM market price

This option involves utilising an ex-ante estimate of the time-weighted average of the SEM market price for the entire year 2007.

Evaluation

The utilisation of a time-weighted market price for the entirety of 2007 may also be at odds with paragraph 5.11 of the Notification, due to the fact that during the first half of the year, when no market price is available, the BNE is not utilised as an equivalent to a market price.

This option is consistent with the calendar-year levy period specified in SI 217.

On a practical level a modelled SEM market price will not be available within the statutory timescale to form the basis of the 2007 PSO levy.

5.5 Variation on Options

An option, which is also being examined with respect to the 2007 PES tariffs, is a mechanism to deal with fluctuations in market conditions throughout the tariff or levy period.

This mechanism could take the form of a fuel variation clause to be included in the PSO levy to take account of prevailing fuel prices. The main advantage of the fuel variation clause is that it ensures that the price of PSO electricity tracks market prices close to real time. It also reduces the need for substantial and distortionary correction factors to be used in subsequent years. This option would be dependent on a corresponding mechanism in the PES tariff.

6. Commission's Proposed Methodology

In making a decision with regard to which option to adopt, the present legal basis and timelines for the PSO levy calculation must be considered. The

requirement for legislative changes and the timelines to implement them must also be borne in mind.

The Commission proposes to follow the high-level methodology as envisaged in the PSO Notification – Option 1 above. The Commission believes that this proposal, on balance, represents the most practical and equitable option. However, as noted above amendments to exiting legislation will be required.

Under this proposal:

- the first levy will be based on the BNE and will apply for the period 1st January to 31st June 2007 – the levy will be determined in line with existing timescales; and
- the second levy will be based on the modelled SEM market price and will apply from 1st July to 31st December 2007 – the levy would be determined over Quarter 3 and 4 of 2007.

Taking into account the legal considerations in section 5 above, the Commission has written to the DCMNR in relation to this proposal. The proposal will be subject to the necessary legislative amendments which will be required in advance of the Commission's draft levy notification on the 30th June 2006.

Should the amendments not be made, the Commission proposes to revert to Option 3 above – a single-year levy calculated on the basis of the 2007 BNE price. This is on the basis that the Option 2 and 4 are not viable given that the SEM market price will not be available within the required timescale for setting the PSO levy.

Appendix B: Relevant PSO Documents

- 1) Notification of Public Service Obligation to be imposed on ESB, November 2000.

<http://www.dcmnr.gov.ie/NR/ronlyres/7DFE9454-5D02-4DFA-92FF-AA8C279BEBE2/0/PSONotificationtoBxl201100publishedonwebMarch2002.doc>

- 2) European Commission State aid n° N 6/A/2001 – Ireland. Public Service Obligations imposed on the Electricity Supply Board with respect to the generation of electricity out of peat. Brussels, 30.10.2001, C(2001)3265 fin.

http://europa.eu.int/comm/secretariat_general/sgb/state_aids/comp-2001/n006a-01.pdf

- 3) European Commission State aid n° N 826/01 – Ireland. Alternative Energy Requirements I to IV. Brussels, 15.01.2002, C(2002) 5 fin.

http://europa.eu.int/comm/secretariat_general/sgb/state_aids/comp-2001/n826-01.pdf

- 4) Statutory Instrument No. 217 of 2002 entitled Electricity Regulation Act 1999 (Public Service Obligations) Order 2002.

<http://www.dcmnr.gov.ie/NR/ronlyres/8363E23D-96B0-431D-B521-786375128768/0/si2172002.pdf>