Calculation of ESB Power Generation Allowable Revenue for 2005 under the Annual Bulk Power Agreement

A Decision by the Commission for Energy Regulation

6th October 2004
CER/04/333

DECISION

Under Regulation 31 of Statutory Instrument No 445 of 2000, the Commission is required to examine the charges and underlying costs of the sale of electricity supplied by ESB Power Generation (ESBPG) to ESB Public Electricity Supply (ESBPES) under an agreement known as the Bulk Power Agreement (BPA). For 2005, the Commission hereby approves an allowable revenue to ESBPG under the BPA of **€ 785.945 million.**

INTRODUCTION

In December 2002, the Commission published a Decision[1] paper that set out details of the transfer pricing mechanism for the sale of output by ESBPG to ESBPES for the period from 1st January 2002 to 18th February 2005 inclusive, known as the Bulk Power Agreement (BPA). The paper explained the methodology for calculating ESBPG's allowable revenue in each year and included details of the estimated allowable revenues for 2003 and 2004.

In a Decision Paper (04/243[2]) the Commission further determined that it was appropriate to use the existing BPA methodology for the purpose of determining ESBPG and ESB PES allowed revenue for 2005 in the absence of new market arrangements being in place. The introduction through forthcoming legislation of an economic purchase obligation on ESBPES may require a review of the BPA by the Commission.

This paper therefore sets out the Commission's Decision on ESBPG's actual revenue for 2003, its revised forecast revenue for 2004, and estimated allowable revenue for 2005 based on the existing BPA methodology.

OVERVIEW OF BPA

The BPA revenue that ESBPG can derive from sales to ESBPES is based on ESBPG's estimated allowed costs, regulated market revenues (i.e. revenues not related to the sale of electricity from ESBPG to ESBPES) and VIPP and Top Up sales discounts. The estimated allowed costs are made up of Controllable Costs, Market-driven Costs and Fuel Costs. The regulated market revenues consist of payments for constraints, Top Up and Secondary Top Up, VIPP, system support, ancillary services and capacity margin.

ESBPG's allowable revenue has been set out on a €/MWh basis and comprises both a controllable and a market driven component. This price is profiled by time of day and season.

The fuel component makes up the largest part of the market driven costs. The initial fuel component is compared to indexed outturn figures for each month. Each month a revised fuel component is calculated. In the event of a

[1] CER/02/240

[2] CER Decision to extend the term of the BPA to allow for the regulation of ESBPG and ESB PES revenues until the commencement of MAE.

future significant increase or decrease in the end user tariff arising from escalating or falling fuel prices CER may under such circumstances decide to revise the prevailing tariff rates.

This fuel indexation process takes account of changes in a basket of specific fuel indices for ESBPG. For the purposes of the BPA, the weighting for each fuel type included in the basket is calculated as: expected output by fuel type expressed as a percentage of ESBPG's total output. ESBPES and ESBPG review and agree these weightings annually prior to submitting them to the Commission for approval.

Changes in the fuel prices for a particular month are forwarded by ESBPG to both ESBPES and CER. An annual reconciliation process is used by ESBPG and ESBPES to determine and agree the overall financial under/over recovery to be factored into the following years' ESBPG charges to ESBPES for use in tariff determinations.

Due to the interaction between the gas and electricity markets ESBPG may, on occasion, incur additional gas costs as a result of following dispatch instructions. The Commission reviews these costs ex-post and makes corrections as appropriate. Other reasonably incurred market driven costs including additional peak capacity as approved by the Commission and rates / insurance are passed though to ESBPES. Costs such as transmission use of system charges are passed through in full to ESBPES. Where the market driven costs and revenues are greater or less than the forecast values the difference passed through to the BPA is the net value.

Controllable costs are indexed to CPI and or the relevant national wage agreement (Sustaining Progress) - with in built efficiency factors.

The BPA price is adjusted, if appropriate, for the volume of all ESBPG sales, e.g. if sales to ESBPES, VIPP and top up, differ substantially from the forecast levels.

ESBPG REVENUE SUMBISSION FOR 2005

In May 2004, ESBPG submitted its revenue submission (covering 2005 estimates and allowable adjustments for the outturn costs and revenues for 2003 and the revised forecast for 2004) to the Commission for approval.

As a result of the Commission's review of this submission, a proportion of ESB's submitted 2005 revenue was reduced. Reductions in costs occurred in the following areas; payroll, rates, spill, transmission use of system charges, penalties and an adjustment was made to the amount for expected non recurring costs greater than €2.5m.

ESB provided an estimate of €55m for overhauls for 2005. In the context of the overall price review, €35m is being provided for now in the 2005 tariff. The normal process for approval of non recurring projects > €2.5m will continue to apply as set out in the BPA which states that "the CER will allow costs of all projects that a reasonable and prudent operator would undertake or be expected to undertake for the secure operation of the system". The full cost of projects approved for 2005 will be recoverable in that context. If those costs are in excess of €35m then the balance will be provided for in the revised forecast for 2005 which will form part of next years price review process and be reflected in the tariff for 2006.

ESBs higher than expected fuel costs for 2004 and 2005 have been the main driver of increases in ESBPG costs. The Commissions recently published paper (04/284) approved an average 9% increase in ESBPES tariffs to apply from October 1st 2004. The sole driver of this increase was escalating fuel prices on world markets.

Given the ongoing shortages in generating capacity, as publicised in ESB National Grid's Generation Adequacy Report[3], the Commission has asked ESB to contract for additional peaking capacity for Winter 2003 and beyond. ESBPG are allowed to recover a proportion of the costs associated with these contracts until February 2005, thereafter these extra costs are recovered through the Public Service Obligation (PSO).

A provisional estimate for ESBPG 2005 carbon abatement costs of €24m is included for the first time in ESBPG allowable costs. This is due to the introduction of the European wide carbon trading scheme in which ESBPG will participate from January 2005. Only the costs of those carbon allowances, which have to be purchased by ESBPG, have been included in advance of a formal Commission Decision on the treatment of emissions trading costs.

Downward adjustments were also made to expected ESBPG market income including VIPP and capacity margin.

UNDER RECOVERY (K-FACTOR)

In any year, the difference between ESBPGs actual or revised and previously estimated market incomes and costs is referred to as a k factor. K factors can be under or over recovery's of income due to ESBPG and their treatment is as detailed in the Bulk Power Arrangement (BPA). ESBPG recover under recoveries of income with interest (CPI) in the following year.

[3] 2003, ESB National Grid Generation Adequacy report 2004-2010

In their submission to the Commission in March 2004 for the 2005 tariff review ESB detailed an under recovery of revenue of €199.5m. This included the under recovered costs in the following areas: fuel, overhauls and peaking capacity costs attributable to 2003/4, shortages in market income and BPA income. Almost 80 per cent of the under recovery is due to fuel costs.

As the tariffs for the coming year are set on the basis of estimated rather than actual market incomes and costs K factors are unavoidable. Minimising under recovery's is in the customers long term interest as its avoids expensive interest payments which accrue over time to unrecovered amounts. Within the 2005 ESBPG revenue review the Commission has endeavoured to minimise the under recovery to be carried over into subsequent years. This also helps to ensure that ESBPG costs are more reflective of the actual costs of generating this power.

The Commission has successfully reduced the ESBPG under recovery to be carried over to the 2006 tariff review from €199.5m to €47.2m. This has been achieved in a number of ways.

As the majority of the under recovery is due to large increases in fuel prices that ESBPG has faced since the 2004 tariff determination and increases in fuel prices expected during 2005 the Commission has decided to grant a 9% increase in ESB tariffs from October 1st. This earlier than normal increase in PES tariffs will reduce the fuel under recovery for next year by an estimated €38m.

ESB has purchased fuel efficiently against the allowed fuel market indices (contained in the BPA). As a result, ESB customers have shared this benefit which is worth €12.5m in this years tariff. In order to incentivise ESBPG to keep these attractive fuel hedge contracts in place the Commission has deemed it appropriate, for now, for ESB to be allowed to keep a proportion of this fuel gain.

While capping the proposed January tariff increase at 3.5% the Commission has allowed recovery in 2005 tariffs of a proportion of the other ESBPG under recoveries, which include overhauls and peaking capacity costs 2003/4.

The remainder of this paper sets out ESBPG's actual outturn costs and revenues for 2003, its revised forecasted figures for 2004, and its estimated revenues and costs for 2005.

CONTROLLABLE COSTS

In line with the Commission decision (04/243) the estimated controllable costs as set out in the original BPA document have been rolled over into 2005 and adjusted for CPI. Controllable costs are those costs over which ESBPG can influence the outturn value. In its December 2002 paper, the Commission determined ESBPG's controllable costs on the basis of estimates and information available at that time. In any year the allowed amount will only be adjusted for actual inflation versus the inflation assumed in the original estimates (made in 2002). In relation to ESBPG's controllable costs, Table 1 below sets out the Commission's decision on the actual outturn for 2003, the revised forecast for 2004, and estimated controllable costs for 2005.

The allowed values for controllable costs have been capped to incentivise ESBPG to operate efficiently and make cost savings. Any additional expenses incurred will not be passed through to the final customer. Conversely, ESBPG may retain any savings against these values throughout the duration of the price control.

Table 1: Controllable Costs

Nominal Prices	**2003**	**2004**	**2005**
Payroll	*	*	*
Operations and maintenance	*	*	*
Non-recurring (minor)	*	*	*
Business services	12,150	13,309	13,642
Corporate centre	8,651	8,231	8,437
Depreciation	78,334	80,057	82,559
Employee and public liability	944	964	984
Environmental	6,105	11,166	11,389
Return on investment	76,557	72,637	77,835
Industry restructuring	4,325	4,421	4,509
ESBPG Overheads	(5,350)	(3,269)	0
Closure	1,300	0	0
Total € million	*	*	*

Notes to Table 1:

* these values are not provided individually as ESBPG considers this information to be commercially sensitive.

All values are inflated by CPI with the exception of Payroll, Business Services and Corporate Centre Costs. Payroll is inflated by relevant National Wage Agreement.

Business Services and Corporate Centre Costs are inflated by 50% PPF and 50% CPI. The CER has approved an annual fixed sum for minor non-recurring projects (< €2.5 M). The cost recovery for larger projects is approved on an individual case basis by CER.

ESBPG's share of Business Services and Corporate Centre costs allocated to peat-fired plant have been included in 2002 and excluded thereafter.

Increase in depreciation reflects the transfer of network assets from ESB TAO asset base to ESBPG asset base.

MARKET DRIVEN COSTS AND REVENUES

Market driven costs and revenues are those that are subject to market forces and are, to varying degrees, outside ESBPG's control. The 2003 actual outturn, the 2004 revised forecast, and the 2005 estimates are detailed in Table 2.

Except for non-recurring costs, any variance between the estimates, revised forecast and actual out turn for the costs and revenues in Table 2 will be recovered via the annual correction (k) factor. The treatment of non-recurring costs was outlined in Appendix 5 of the December 2002 paper (CER/02/240).

Table 2. Market Driven Costs and Revenues

Market Driven Revenue[4]	**2003**	**2004**	**2005**
Top up and secondary top up	62,023	20,932	47,007
VIPP	8,866	60,638	113,646
System support	0	0	0
Ancillary services	28,373	24,656	25,149
Constraint payments	24,908	15,950	17,726
Emergency generation	0	0	0
Capacity margin	32,128	14,960	15,259
Total € m – nominal prices	152,897	137,136	218,787
Market Driven Costs	**2003**	**2004**	**2005**
Rates	25,800	29,849	29,418
Insurance	11,687	15,085	12,563
Emergency generation	12,711	51,610	3,123
System support	0	0	0
Powersave scheme	936	1,000	1,000
Purchased electricity (Spill)	21,901	13,760	12,593
Transmission use of system charges	33,933	40,871	43,236
Non-recurring	*	*	*
Constraint costs	24,908	15,950	17,726
Environmental	0	2000	1000
Carbon allowances	0	0	24,970
Total € m – nominal prices	*	*	*

[4] Revised per ESBPG's Allowed Revenue Submission 2002 and 2003 Actual Outturn, 2004 Revised Forecast, and 2005 Estimate.

Notes to Table 2:

*these values are not provided individually as ESBPG considers this information to be commercially sensitive.

In the area of environmental expenditure, during the period of this Agreement ESBPG may face additional legal obligations. Subject to the Commission's approval, ESBPG will be allowed to pass through all reasonable costs for compliance with all future environmental requirements, including work that has to be carried out as a result of station IPC licence requirements, compliance with emission bubble limits, landfill levy and associated compliance/ mitigation costs, etc.

The Commission requires ESBPG to demonstrate to the Commission's satisfaction that, whilst acting as a Reasonable and Prudent Operator, it maximises the level of revenue or minimises the level of costs included in Table 2.

ESBPG will absorb the discount offered on VIPP and Top Up compared to the price it would have recived if these products had been sold at the ESBPES price (as determined in the BPA). The income differential amount, known as the "VIPP and Top Up discount", will be calculated using actually half hour data.

As in other years the methodology as set out in the 2002 BPA determination with its associated incentivisation principles apply to amongst other things fuel and volume variances.