CER/04/249

# ESB 2005 Price Proposal

**16th July 2004**

# 1. Overview

## 1.1 Background:

Recent discussions with the Commission in relation to cost trends in the electricity industry and their potential implications for ESB tariffs refer. It had been hoped that the 50% increase in ESB's fuel costs in 2001/2, which was the primary driver of tariff increases in 2002/3, would abate and bring downward pressure on future prices. However, developments over the past two years in the coal, gas and oil commodity markets have resulted in further increases of the same magnitude which show little signs of declining in the near future.

## 1.2 Cost Driver:

Against this background, the main driver in ESB's cost base has been the continued pressure on our fuel bill, which represents 50% of the cost of generating electricity. ESB Power Generation’s total expenditure on fuel in 2003 and the forecast outcome for 2004 is significantly higher than was anticipated when the 2003 and 2004 price determinations were made. The total ESB shortfall incurred for 2003 and projected for 2004 amounts to €195.8m. This includes a projected over-recovery of €27m by PES (which reduces the net amount) and a shortfall of €24m. by Distribution, the latter incurred against a backdrop of unprecedented expenditure on the networks, most of which is driven by increased customer demand and new connections running at 90,000 pa. A breakdown of these costs is set out in the following sections.

Fuel price increase trends have also had a significant impact on 2005 cost projections. If current projections materialise, a revenue increase of 14% would be required to cover the projected 2005 cost increase on top of the 12.7% increase, which would be required, if the 2003/4 tariff shortfall were to be recovered in one year. ESB believes that an increase of the magnitude of 26.7% is unsustainable.

As the Commission will appreciate, these costs, incurred and projected, are a significant issue going forward for ESB, the industry generally and, most importantly, electricity customers. While customers will understandably be very unhappy with a high price increase following the increases of recent years, security of supply is dependent on the viability of the existing generators combined with the entry of new capacity into the market and this is undermined if prices are not cost-reflective. Equally from an ESB perspective, where ESB incurs costs, it needs to recover them to enable it to continue the much needed investment in the upgrade and maintenance of its networks and power plants.

### 1.3 Principles

Against the background of these conflicting objectives and in light of recent discussions with the Commission, ESB proposes that the Commission apply the following principles when making its determination on ESB's 2005 tariffs:

- Smooth the impact on customers in a manner which will mitigate the level of increase resulting from the escalation in fuel costs over the past two years.

- Underpin the viability of suppliers and generators to ensure that they can recover increased fuel costs in their 2005 prices.

### 1.4 2005 Price Mitigation Proposal:

Applying these principles in the context of the future volatility of fuel prices, ESB proposes that the Commission approve the following measures:

- Defer the recovery of the shortfall of €195.8m in ESB tariffs for 2003 and 2004 which is primarily comprised of fuel cost escalation. ESB proposes that the recovery of this shortfall be implemented by delaying the reflection of any future fall in fuel prices. In this way, the shortfall can be recovered without customers facing further associated price increases. In the event that fuel prices do not fall over the coming years, ESB proposes that the Commission smoothes the recovery of the shortfall over a number of years, taking account of the impact on electricity customers. The Commission may also wish to consider the capitalisation of the overhaul element of the shortfall.

- Apply an increase of 8% to tariffs from September 2004 (Sept./Oct. billing period) to reflect the increase in ESB's fuel costs of which 2%-3% is attributable to the introduction of $CO_2$ emissions costs. Independent generators may well have experienced higher fuel cost increases.

- Apply an increase of 4.5% to tariffs from January 2005 to reflect ESB’s Distribution, Transmission and PES (Public Electricity Supplier) cost increases and the increase of 1.3% in the Public Service Obligation (PSO) levy. The PSO levy recovers the cost of contracts awarded to green energy producers, peat generation by Edenderry Power Ltd. and ESB's own peat stations and short term peaking capacity contracted to meet the projected capacity deficit in the market. If, as indicated in the Commission's recent draft PSO determination, the proposed Peaking Capacity and Bellacorick PSO will not be approved in time for the Commission to incorporate the associated costs in the 2005 PSO levy, this will result in a reduction of the 2005 PSO levy increase from 2.83% to 1.3% with the cost of approximately €22m being deferred for inclusion in the 2006 PSO Levy adjustment. This latter adjustment to the PSO Levy reduces the underlying increase required in 2005 from 14% to 12.5%.

The Commission also indicated in its draft PSO determination that the BNE (Best New Entrant) price is likely to increase due to higher gas and $CO_2$ costs. In the event that the Commission is in a position to introduce the Peaking Capacity and Bellacorick PSO, the reduction in the PSO levy arising from an increase in the BNE would also reduce the levy below the 2.83% originally forecast.

Given the unprecedented circumstances, this proposal will achieve a realistic balance between industry and customer needs, as seen by an increase of 8% to reflect fuel price increases, and the impact on customers who would see a total increase of 12.5% between September 2004 and January 2005 as opposed to the 26.7% increase required to reflect the industry costs which ESB is incurring.

## 2. Generation Cost Drivers

### 2.1 Commodity Price Volatility:

As outlined above, fuel prices have increased dramatically above those originally forecast when the Commission determined the tariff increases for 2003 and 2004. Current fuel cost variances reflect the nature of the sharp increases that ESB has experienced and expects to continue into 2005.

While ESB submits its fuel price projections to the Commission in March and May of the year preceding the tariff year in question, the actual cost it is allowed to recover by the Commission is based on a basket of international fuel prices. While we have consistently beaten this index, resulting in lower fuel costs passed through to customers, the scale of escalation in prices has dwarfed this saving.

Using publicly available indices such as the Morgan Stanley Oil Commentary, Platt's LSFO index (CIF NEW ARA High), the Argus/McCloskey's API2 Coal Price Index Report, the TFS International Coal Price Report & the ESGM Gas Report published by Heren Energy (taken on 2nd July 2004), the volatility in the forwards market prices for fuel can be readily demonstrated when compared to the prices on which the 2004 tariffs were based:

| | Tariff values for 2004* | July 2004 | Oct 2004 | July 2005 | Dec 2005 |
|---|---|---|---|---|---|
| Oil ($/t) | 139 | 160.27 | 172.97 | 181.82 | 179.8 |
| Gas (Stgp/therm) | 20.7 | 21.04 | 20.60 | 28.55 | 25.72 |
| Coal ($/t) | 35.65 | 65.2 | 67.32 | 84.92 | 82.96 |

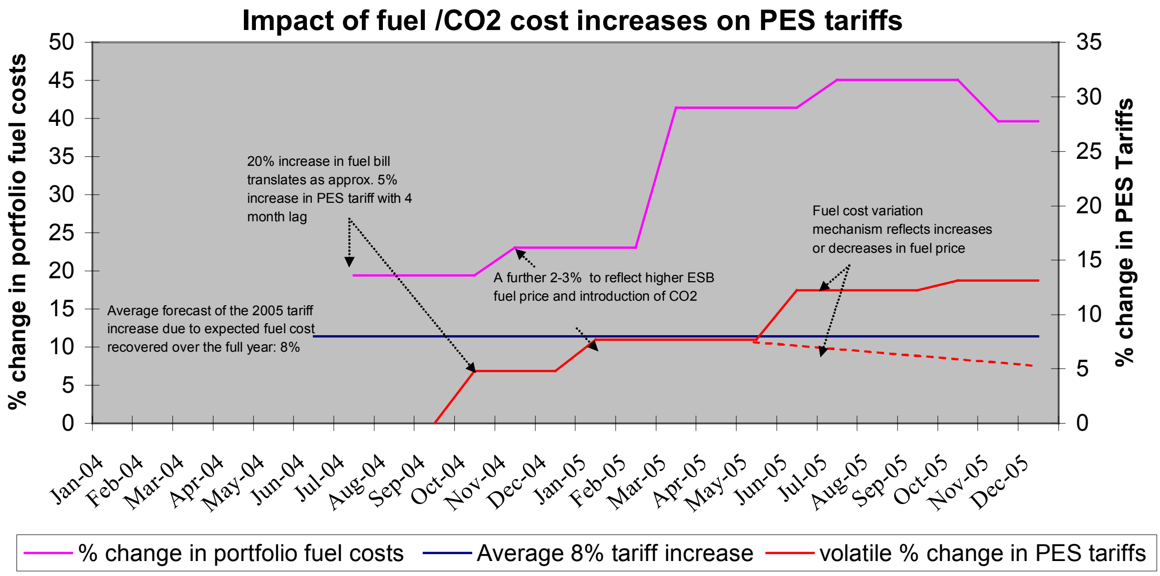
(note: values calculated from publicly available indices have been averaged over the previous four months
* : estimated in 2003 and included in the 2004 tariffs.)

These commodity values are all greater than those forecast in the original 2004 tariff calculations and include the increased transportation costs which have also had a significant impact on our fuel bill e.g. the cost of coal transportation has increased from €3/ton up to €20/ton, due primarily to the impact of the growing Chinese economy on shipping freight costs.

The percentage differences show increases in the different fuel prices, ranging from 30% to 138%, over the fuel prices estimated when the Commission made its 2004 tariff determination:

- 30.8% change in oil prices by July 2005
- 2% increase in gas prices by July 2004 but rising to 37.9% by July 2005.
- 138.2% increase in coal costs by July 2005

As can be seen, over the course of the year there will be increases and decreases in prices. ESB's price proposal is based on the smoothing of these variances. The graph below illustrates this by superimposing ESB's proposed September fuel-driven tariff increase on the actual volatile increases which would apply if the monthly forwards prices, currently quoted for ESB's basket of fuels, were applied.




Given the significant scope for swings in fuel prices, ESB proposes that the fuel element of the tariff increase is applied in September 2004 with the normal cost increases for Distribution, Transmission, PES, PSO Levy, AER Producers and Peat Stations applied in January 2005 (4.5%) in line with the normal regulatory methodology. Based on current smoothed estimates of the increase over and above the fuel prices included in the Commission's 2004 tariff determination, an increase of 8% in September will address current and projected fuel cost increases.

## 3. Analysis of 2003 Tariff Shortfall

ESB has incurred a tariff revenue shortfall of €86.8m. in 2003. This resulted primarily from an increase of €83m. in Power Generation's fuel bill over and above that allowed in the 2003 tariffs which were determined by the Commission in 2002. Distribution incurred a shortfall of €14.2m due mainly to the higher than anticipated number of line diversions and the achievement of supply quality/continuity targets. These shortfalls were reduced by an over-recovery of €10.4m. in ESB Customer Supply's (PES') revenue leaving a net shortfall of €86.8m.

The Power Generation shortfall above was after the achievement of fuel purchasing efficiencies of €27m. in 2002 which reduced the level of the price increase reflected in 2004 tariffs. However, as outlined earlier, these efficiencies have been overshadowed by the continued escalation in fuel costs.

## 4. Analysis of 2004 Tariff Shortfall

The following is a summary of the 2004 tariff shortfall of €109m.:

| | | €m | €m |
|---|---|---|---|
| **PES Over-recovery** | | | **(16.5)** |
| **Distribution under-recovery** | | | **9.5** |
| **PowerGen :** | | | |
| | **Fuel** | **83** | |
| | **Overhauls** | **23** | |
| | **Peaking Capacity** | **13** | |
| | **Market income** | **28** | |
| | **BPA income** | **(32)** | |
| | **Misc.** | **1** | **116** |
| **Total Tariff Revenue Shortfall:** | | | **109** |

While fuel price inflation was also a key driver of costs in 2004, a number of other factors are impacting on ESB's cost base, including:

- The continued high growth in demand for energy which is running at twice the European average
- The refurbishment of 20,000km of the medium voltage network to increase security of supply, safety and capacity for residential, business and industrial developments throughout the country
- A total of over €800m. is being invested in the Distribution and Transmission networks in 2004 and a similar level of capital investment is projected for 2005

- An additional €1bn. was borrowed to fund capital investment programmes
- €108m. was invested in metering and billing systems to facilitate future efficiency improvements and the final phase of market opening in February 2005
- New customer connections continue to run at an unprecedented level of 90,000 pa
- A major programme of power station overhauls is underway to improve availability

## 5. Analysis of 2005 Cost Increases

The table below sets out an analysis of the proposed 2005 tariff increase submitted for approval by the Commission. It is proposed that the increase be implemented in two stages i.e. 8% from September 2004 and 4.5% from January 2005.

| Regulated Cost | Elements of Proposed 2005 Tariff Increase |
|---|---|
| Power Generation | 8.71% |
| PSO | 1.30% |
| TAO | 0.22% |
| DUoS | 1.75% |
| Supply | 0.52% |
| **Total** | **12.50%** |

In line with the principles outlined earlier, the following is the rationale for each of the elements in the recommended increase:

### 5.1 Power Generation:

- An 8% end-user price increase, applied in September 2004, to reflect the increase in ESB's Generation's fuel costs plus the Commission's proposed introduction of a fuel cost variation mechanism will meet the Commission's objective of ensuring that the competitive element of ESB's tariffs is cost-reflective. As fuel represents approximately 25% of the end-user tariff, the 8% proposed represents a c.32% increase in wholesale fuel costs.

**5.2 PSO Levy:**

- The deferral of 1.5% (€22m) of the 2005 PSO levy increase arises from the possibility that the addition to the 2005 PSO will not be approved by the end of July deadline for the Commission's determination of the 2005 levy. In this event, the outstanding balance will be incorporated in the 2006 levy in line with the PSO Levy methodology. Should the increase in the levy be approved, the annual amendment by the Commission to the PSO calculation methodology, to reflect gas price increases, is likely to mitigate the net increase in the levy.

**5.3 TAO:**

- The TAO (Transmission Asset Owner) increase of 0.22% is in line with the 2001-2005 Regulated Price Control for the TAO business which is engaged in a major upgrade of the Transmission network. This proposal does not deal with the TSO (Transmission System Operator) 2005 tariff requirements which is independent and regulated by the Commission separately from ESB.

**5.4 DUoS:**

- The Distribution use-of system end-user price increase of 1.75% reflects inter alia, the growth in customer numbers (90,000 pa), market opening support costs (metering/systems) and the acceleration of the network renewal programme.The average distribution use-of-system charge is lower in real terms in 2005 than at the outset of the Distribution Price Control in 2001. Against this background, ESB Networks will have completely refurbished the 70,000km medium voltage network by the end of 2005, in line with ESB's Network Renewal commitment under the National Development Plan.

**5.5 Supply:**

- Customer Supply's (PES’s) own costs are in line with the prescribed price control for 2004, reflecting the built-in efficiency factor of 2% in cost reductions that was imposed by the Commission. The 0.52% required increase is driven by inflation e.g. the national wage agreement.

## Conclusion

The proposed deferral of the €195.8m shortfall in 2003 and 2004 tariffs plus the €22m PSO levy deferral will place considerable pressure on ESB finances as we continue to manage the major work programmes which lie ahead while seeking to retain a credit rating standard which will enable the company to maintain prudent debt levels and finance its borrowings. Against this background, an increase of 12.5%, staggered between September and January, is the minimum which ESB requires to manage the business in a way which will allow it to keep pace with the rapid economic development in the country.

ESB believes that this price proposal is the optimum approach to address the concerns of customers and the requirements of the industry which must be kept viable to ensure that Ireland does not suffer the security of supply problems experienced around the world in recent years. The approach proposed has a number of advantages i.e.

- It will shield customers from the imposition of the full impact of the fuel cost hikes in 2003 and 2004
- It will not adversely affect the viability of suppliers and generators
- Future increases/decreases in fuel prices will be reflected on customers' bills more quickly, reducing the impact of accumulated fuel cost variations
- It recognises the fact that the electricity industry is a long term cyclical business