

**ENEL comments  
on the ERGEG Position Paper for public consultation**

15/7/2008

**TREATMENT OF LOSSES BY NETWORK OPERATORS**

**INTRODUCTION AND GENERAL COMMENTS**

Enel considers the power losses as an important issue to face in order to achieve environmental goals, to improve efficiency and reduce the energy price. We therefore welcome the opportunity to contribute to this ERGEG public consultation. However we would like to point out, as better explained later in the document, that the reduction of losses is an objective that can be successfully valued and achieved only in the long run.

**QUESTIONS AND SPECIFIC ANSWERS**

**Regulatory definition of losses**

*1 What is considered an acceptable definition of losses?*

Generally speaking, losses can be defined as the difference between volume of electricity entering the system and the volume of electricity leaving the system. In percentage terms, losses could be measured as a percentage of the system input.

*2 Should power losses refer only to technical losses or is it acceptable to include also nontechnical losses?*

We think that both technical and non-technical losses should be accounted, as the separate measurement of losses is very difficult to attain.

*3 Which are the key components for defining losses?*

Technical losses should include both TSO and DSO losses. Non-technical losses should include theft, measuring errors, and unregistered supplies. In-house consumption and public lighting should be considered as non technical losses only when they cannot be metered.

## **Valuation procedures**

### *4 What ways exist to improve the evaluation of losses in distribution networks?*

In our opinion, the most effective way to improve evaluation of losses in distribution networks is to improve metering systems. We think that the implementation of smart and digital metering will enhance the opportunities to assess losses.

### *5 What should be a reasonable and acceptable level of power losses at the distribution level and the transmission level?*

Reasonable and acceptable levels of losses should be defined individually on a network to network basis. It would be very hard and possibly misleading to set a common level of losses for TSO and DSO throughout Member States. These issues are best addressed individually on a Member State level as both kinds of losses depend on specific national network structure and other non technical aspects.

### *6 Which types of losses could be most easily reduced?*

As stated in the general comments, the reduction of both technical and non-technical losses is difficult to achieve in the short term. The long life of infrastructure makes technical losses hard and expensive to reduce. Non-technical power loss is not entirely under the responsibility of the grid operators, and should be faced on a multilateral basis involving all concerned subjects, namely operators, regulators and other institutions.

## **Procurement of losses**

### *7 Who should be responsible for procuring electric energy to cover losses?*

We think that the subject responsible for procuring electric energy to cover losses could be the distributor as well as the supplier. In the latter case, it would be possible to set up a mechanism

that makes losses neutral to suppliers but that can, at the same time, provide incentive to reduce losses to the distributor<sup>1</sup>.

*8 How should electric energy to cover losses be procured in a market-oriented way?  
Which solution is the most efficient?*

Enel thinks that the procurement of losses should be done through a market based mechanism. The best way to ensure efficiency is to let the supplier be responsible for the procurement, as suppliers can exploit economies of scale and their skills in buying energy.

*9 Should the costs of losses be covered by a special tariff?*

There is no need to have a special tariff to cover losses, provided the related cost is somehow covered.

## **Regulatory incentives**

*10 What are the advantages and disadvantages of the aforementioned incentive mechanisms?*

We think that it's hard to evaluate particular mechanisms without a detailed knowledge on specific countries' regulatory framework. Each Member State could have its own incentive scheme, provided all mechanisms are based on the same essential criteria. To ensure a certain level of homogeneity, general goals and criteria can be defined under ERGEG guidelines.

*11 Which key elements should be considered when assessing different regulatory incentive mechanisms?*

The incentive must be measurable, simple and transparent and should be conceived so that the actor responsible for achieving the reduction is actually able to influence the related outcome. The mechanism should also set symmetrically designed incentive for underperforming and outperforming the target. A balanced and fairly simple mechanism to adopt is to cover the cost of

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<sup>1</sup> The Italian electricity market recently went through the separation between distribution and supply.

Until 31 December 2007 distribution operators were responsible for both the distribution and supply activities. Under the law n. 125/07, the distribution operators that used to serve more than 100.000 customers were obliged to separate from the supply side of the business, by creating new companies, unbundled from the DSO, dedicated to the supply activity.

This change had some implication on losses procurement. Before 31 December 2007 the whole mechanism was implicit and "bundled" into the distribution company. The modification of the market structure raised the problem on who had to be considered responsible for the purchase of the electric energy needed to cover losses.

The Italian regulator simply and effectively broke the former mechanism in two, making the supplier responsible for procurement and preserving the incentive to reduce losses for the distributor.

The supplier now purchases the energy needed to cover losses; the supplier receives a tariff to cover the cost of a standard level of losses and provides the distributor with the savings resulting from an effective level of losses that's lower than the standard set by the Authority, or charges it otherwise so that the level of losses is in any case neutral to the supplier.

The result is a simple yet effective mechanism that explicitly merges the two needs of procuring losses efficiently and providing the distribution operator with incentives for losses reduction.

losses with reference to a standard percentage level, leaving the effects of lower or higher losses to the distributor as an incentive.

*12 Are there advantages in setting separate mechanisms for technical and non-technical losses?*

Enel thinks there's no real advantage in setting separate mechanisms, for it would be almost impossible to separate the two in an effective way. The incentive mechanism should therefore be set for total losses.

*13 Are there advantages in setting separate mechanisms for transmission and distribution losses?*

As stated above, power losses can hardly be influenced in the short term. Having said that, we do think it is appropriate to set different goals and incentive mechanisms for distribution and transmission system operators.