

## **E.ON proposals to amend**

### **ERGEG position paper on “Treatment of Losses by Network Operators”**

The E.ON Group considers the minimization of networks’ losses as an important contribution to achieve environmental goals as well as to improve efficiency in transmission and distribution grids and reduce consumer prices. Therefore, we welcome the opportunity to contribute to ERGEG’s position paper (Ref.: E08-ENM-04-03).

#### **Questions to market participants**

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

The absolute difference between the volume of units entering the system (metered or estimated at the point of entry) and the customer related volume of units exiting the system (metered or estimated at the point of exit), expressed as a percentage value of the volume entering the system.

Justification: We favour a joint definition for transmission and distribution networks and consider the proposed one as applicable accordingly. This seems necessary to us as many system operators operate several voltage levels with combined transmission and distribution functions. Furthermore, system operators may decide according to the technical feasibility if losses are metered or estimated.

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

E.ON prefers to consider both technical and non-technical losses.

Justification: For the society as a whole it does not matter where and how energy is lost between the generating plant and the point of consumption. For that reason, E.ON proposes to consider both kinds of losses and to implement an incentive for sustainable reduction. Hereby, network operators may decide if a reduction of technical or non-technical losses is economically optimal.

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

The relevant key components are for

- i) technical losses
  - a. physical losses
    - i. fixed losses (not load related)
    - ii. variable losses (load related)
- ii) non-technical losses
  - a. in-house consumption
  - b. measuring errors
  - c. theft

Justification: We suggest to focus on a small number of elements and to exclude public lightning. Public lighting is a specific service to public entities and should be adequately contracted from an energy supplier. Network operators may decide against the

background to an incentive to reduce losses where it is economically optimal (see question 2).

**4) What way exist to improve the evaluation of losses in distribution networks?**

The evaluation of losses in distribution grids will effectively improve by using long-run data which overcome the limitations caused by 'register' metering. Long-run data give network operators large opportunities to investigate specific impacts on losses by statistical evaluation methods. We are also of the opinion that with the implementation of smart metering the opportunities to meter power flows and calculate losses will be enhanced.

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

The 'reasonable' level of losses in transmission and distribution grid will vary from network to network and country to country. Losses significantly depend on the distance between generation and consumption, network structure and technical planning standards, environmental and construction restrictions etc. Therefore it will make no sense to 'harmonize' the level of losses. It is even unrealistic to expect all networks to attain the levels of losses achieved by the very best.

What is really necessary and desirable is that losses are reducing over time by individual reasonable reduction goals. Hereby it needs to be considered that the level of losses is only influence able by network operators to some extent.

**6) What types of losses could be most easily reduced?**

E.ON believes that a generally applicable answer is not possible at all. Each network operator has to decide on their own where and how a reduction of losses is achievable with the lowest financial efforts. Such an analysis and the respective implementation of a technical solution would prove the effectiveness of an incentive mechanism.

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

E.ON thinks under the consideration of Directive 2003/54/EC and the large variety of existing procurement methods that, for the time being, it should be left to national regulatory regimes how energy to compensate losses should be procured. Where the procurement is left to the transmission and distribution system operators they shall exclusively procure energy at market price.

Nonetheless, we are of the opinion that a careful debate among the European regulators would be sensible aiming at a single procurement method in the future. If regulators could agree on a single method it would promote cross-border competition among energy suppliers and keep the procurement costs for grid losses as low as possible.

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

In general, there is no need to have a special tariff for losses as losses are an inherent part of electricity transmission and distribution. However, it needs to be considered that special targets and incentives are set to reduce losses over time and that losses can only be influenced to some extent and mostly a longer time frame by investments.

**9) What are the advantages and disadvantages of the aforementioned incentive mechanism?**

It is not possible for us to evaluate the aforementioned mechanisms without proper knowledge of the specific circumstances in the four countries.

**10) Which key elements should be considered when assessing different regulatory incentive mechanism?**

- Existence of symmetrically designed incentive for underperforming and outperforming the target
- Regulatory acceptance that limitation for network operators to influence losses exist
- Integral approach that considers simultaneously technical and non-technical losses
- Immediate recovery of planned costs for losses (to avoid a contradictory effect against the incentive)

Justification: We think that a symmetric incentive for the reduction of losses, as far as a network operator can influence them, should be set in order to motivate grid operators to outperform the target. Nonetheless, it has to be noted that the potential impact of grid operators' decision on the level of losses is low in the short run and just with some investments a decrease can be achieved long-term. So it might be more sensible to set the targets lower and give network operators time to restructure grid equipment design and implement investments. Hereby, we favour to leave it to the individual companies what kind of losses they will reduce. Only in case of a significant level of theft as reported from South East Europe additional legal or regulatory actions may make sense. Public lightning should be excluded from the losses. Finally, regulatory systems must make sure that any costs for the procurement of losses are recovered immediately. Otherwise a potential profit from outperforming of the target is sapped.

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

No. See question 10.

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

The mechanism could be in principle the same but parameters have to be set separately according to the specific condition within the distribution and transmission sector.