

The background is a satellite-style image of the Earth at night, showing city lights. Overlaid on this is a complex network of glowing blue lines that represent energy transmission routes, connecting various points across the globe.

Regulatory treatment of distribution network losses in the Energy Community

ECRB Gas Working Group analysis-draft results

1. Methodology and scope
2. Method of distribution use of system regulation
3. Distribution losses
4. Procurement of gas for losses
5. Recovery of losses via distribution charges
6. Benchmarking
7. Some other issues: quality of supply and taxation

ECRB Gas Working Group Work Program 2016: Task Force 2 to review the practice in the Energy Community with regard to the regulatory treatment of losses that exist on natural gas infrastructure

TF 2:

- Created a questionnaire to collect information on existing regulatory practices with regard to losses on distribution networks;
- Performed survey on regulatory practices in relation to determination and treatment of losses;
- Evaluated the results of the survey.

Data and analyses provided in the report are exclusively based on information provided by the regulatory authorities.

The report covers Bosnia and Herzegovina, Moldova, FYR of Macedonia, Serbia and Ukraine as Energy Community Contracting Parties, Georgia as Observer and Austria, Croatia and Poland as EU countries neighboring the Energy Community Contracting Parties.

Method of distribution use of system regulation

	capacity	commodity	standing charge
BIH	x	x	
FYROM		x	
GEO		x	
MDA		x	
SRB	x	x	
UKR		x	
AUT	x	x	x
CRO		x	x
POL	x	x	x

- Cost plus: Bosnia and Herzegovina, Georgia, Serbia and Ukraine
- Revenue cap: Croatia and Moldova
- Price cap: FYR of Macedonia
- Poland reported that their model of distribution use of system regulation can be considered as cost of service with elements of revenue cap
- Units: EnC CPs and GEO- m³, EU- kWh

Structure of distribution charges



Distribution losses

- The reasons for losses on distribution networks: pipe leaks, equipment damage, measurement error and illegal consumption
- Is illegal consumption defined by legislation and is illegal consumption included in the network losses?
 - It is defined in 6 out of 9 analyzed markets
 - It is included in network losses in 7 out of 9 markets (not in Moldova and Macedonia)
- Is the structure of losses known? No!
 - In Moldova and Ukraine there are methodologies for calculation of “technological” losses, where precise structure exists, however this is an estimation

Procurement of gas for losses

- DSOs are responsible for procurement of the gas for losses
- Quantities for losses procurement are most usually provided for along with other gas quantities, i.e. there are no separate contracts for losses procurement (Poland, Bosnia and Herzegovina, Croatia, Georgia, and Serbia).
 - In Austria and Ukraine the DSOs and supply companies are unbundled, so there are no reasons to elaborate issue of separate contracts for losses procurement.
- Is the procurement of losses market based? (*market based*: along with quantities procured on a free market for the purpose of supply on a free market or *provided for via regulated tariff*: along with the quantities procured for supply on a regulated market, most commonly yearly, such as in Moldova, Poland and Croatia).
- Price for losses:
 - competitive or regulated
 - determined monthly or yearly

Recovery of losses via distribution charges

- In the process of distribution charges' determination, NRAs use both expected and calculated losses.
- In all countries distribution system operators are reimbursed for losses via tariff. However, not all the costs related to losses are reimbursed, but only up to a certain level.
- In Moldova and Ukraine just normative losses are reimbursed

Responsibility for the approval of losses to be recovered

- The decision on the amount of losses to be recovered in most of the countries is responsibility of the NRA.
- The only exception is Ukraine: The ministry of energy and coal industry determines the methodology of natural gas losses calculation. DSO calculates the quantity of losses and the Ministry approves it . The quantity of losses is multiplied by the natural gas price and then the value of losses is included into the tariff.

Benchmarking techniques are used in the process of determination of allowed levels of losses.

- in Bosnia and Herzegovina and Macedonia based on international data,
- in Serbia based on both international and national data
- in Georgia- based on national data
- Benchmarking is not used in Poland, Croatia, Ukraine, Moldova.
- Some countries do not use benchmarking but data from previous years (Poland, Bosnia and Herzegovina, Croatia, Ukraine, Georgia).
- Moldova uses neither benchmarking techniques nor historical data.

Some other issues

- **Quality of supply regulation:**
 - Most of the countries have not introduced quality of service regulation
 - Croatia has introduced the quality of supply regulation but there are no limits for common standards determined yet. In Moldova there is also quality of supply regulation introduced, but concerns about the leakages are within the other regulation i.e. technical regulation.
 - No incentives in distribution tariffs related to level of losses
- **Taxation principles** for losses are different :
 - Allowed losses excluded from VAT in: Bosnia and Herzegovina, Georgia and Serbia
 - Not excluded from paying the VAT in: Poland, Croatia, Ukraine, Moldova and Macedonia.

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*Thank you
for your attention!*

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