



National Agency for Energy Regulation (ANRE)

Activity Performance Indicators of Electricity Distribution Operators

Chişinău, April 2011

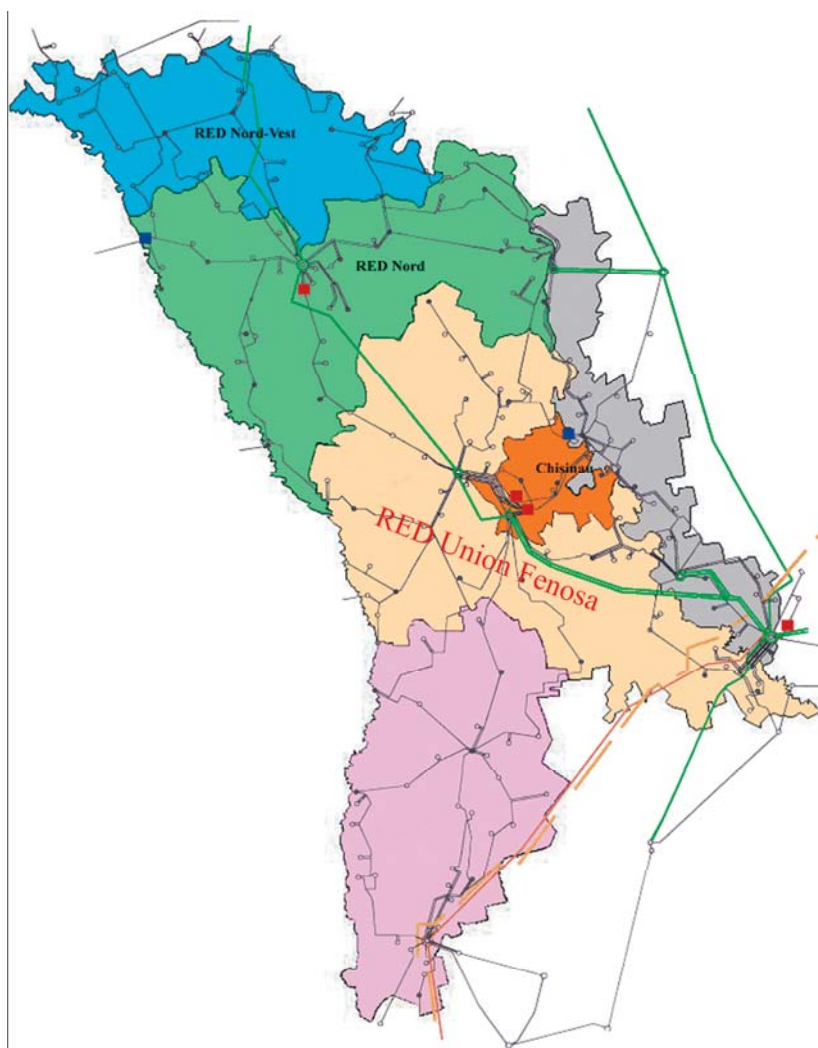
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Electricity Distribution Operators

Three companies in the power system of the Republic of Moldova – electricity distribution operators:

- RED Union Fenosa;
- RED Nord;
- RED Nord-Vest;

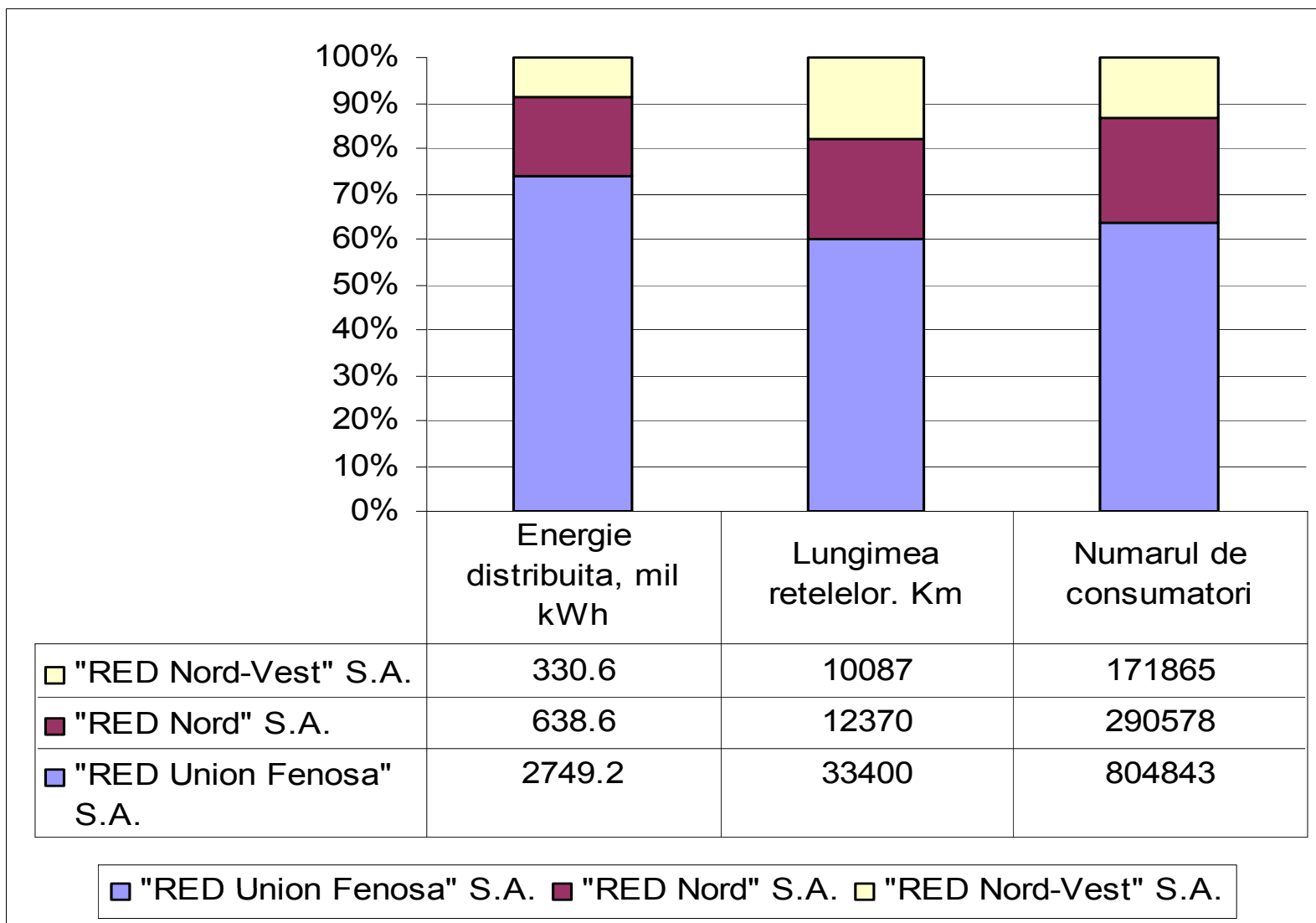
Electricity Distribution Operators



Electricity Distribution Network Operators

- RED Union Fenosa – private company serving 63,51% of the total number of consumers from Moldova, supplying 73,94% of the total electricity volume;
- RED Nord – state company, serving 22,93% of the total number of consumers from Moldova, supplying 17,17% of the total electricity volume;
- RED Nord-Vest – state company, serving 13,56% of the total number of consumers from Moldova, supplying 8,89% of the total electricity volume;

Electricity Distribution Operators



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Performance Indicators

Electricity Distribution Operators, performing in the Republic of Moldova, are regulated companies – the Agency approves the tariff for electricity supply to the end consumer and is liable to include in the tariff all justified costs incurred by operators. Also, the services offered by those companies must meet a minimum quality level, required by consumers.

So, ANRE permanently monitors the following indicators:

- Level of electricity loss within distribution networks;
- Quality indicators of supplied services;

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Electricity Loss

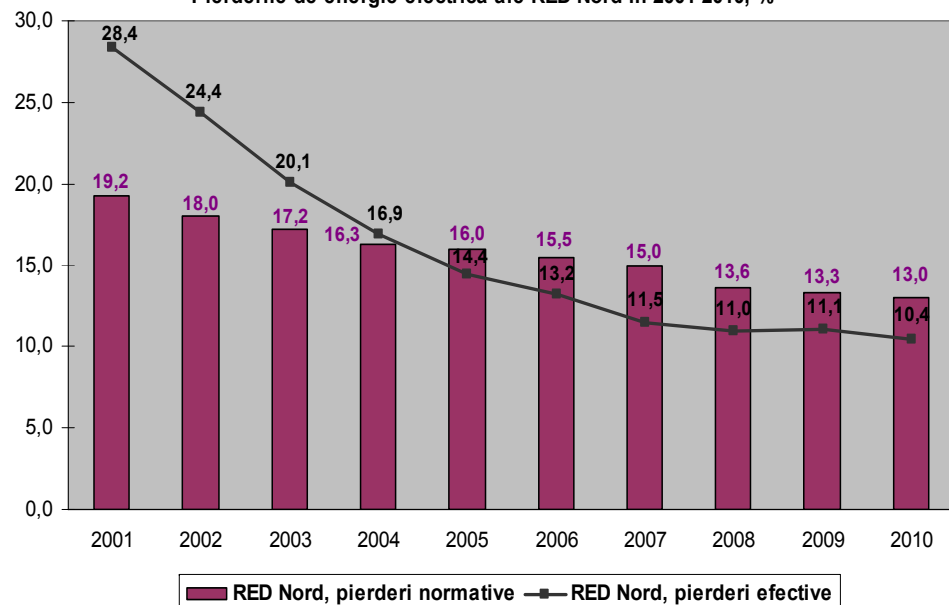
In 2000-2001, electricity loss recorded in distribution networks used to be very significant:

- RED Union Fenosa – 34%;
- RED Nord – 29%;
- RED Nord-Vest – 40%;

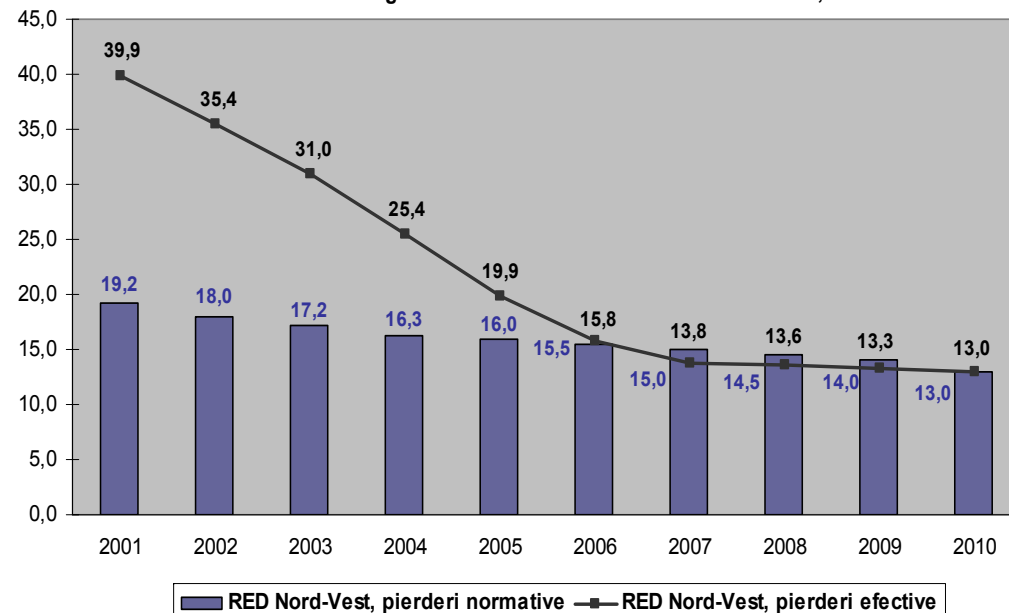
In order to reduce loss, and consequently – costs included in the tariff, the Agency imposed a gradual reduction of the level of loss included in the tariff, during the period 2001 - 2010, from 19,2% to 13%;

Level of Electricity Loss

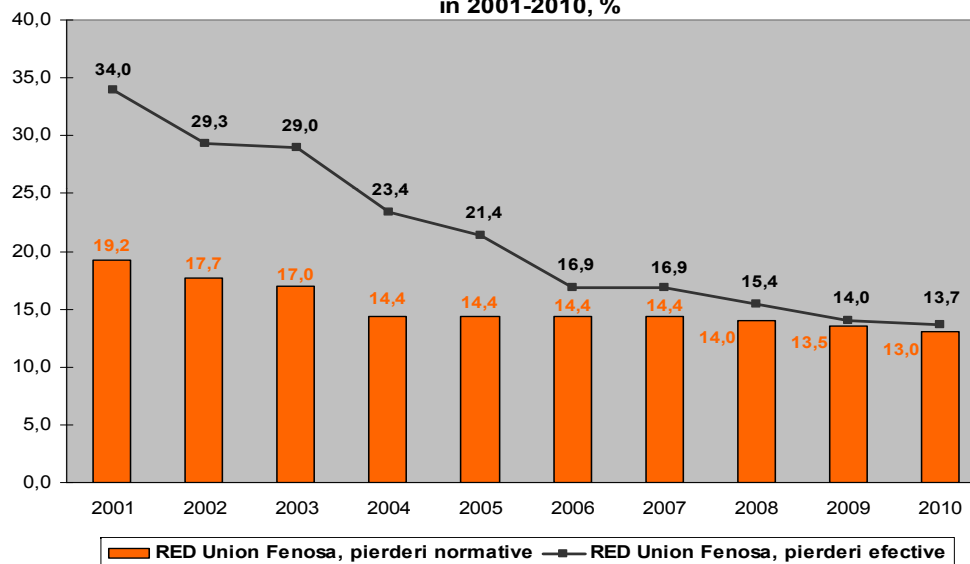
Pierderile de energie electrică ale RED Nord în 2001-2010, %



Pierderile de energie electrică ale RED Nord-Vest în 2001-2010, %



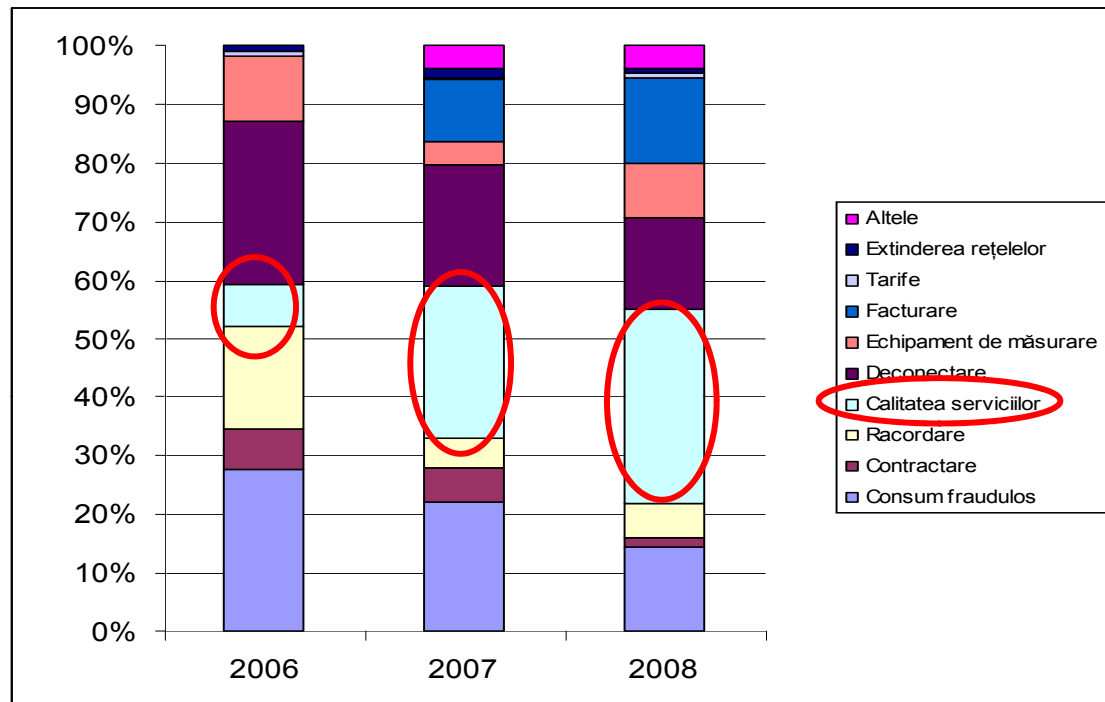
Pierderile de energie electrică ale RED Union Fenosa în 2001-2010, %



Service Quality

The quality of services provided by distribution operators has been an issue with ANRE since 2003.

However, starting 2008, the service quality issue became particularly important, which fact is proved by the increasing number of complaints from electricity consumers, discontent with service quality.



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Service Quality

According to ANRE regulations, the quality of electricity distribution services is appreciated by the following categories of indicators:

- Indicators for continuity of electricity supply
- Indicators for quality of supplied electricity
- Indicators for quality of relations between operators and consumers (commercial quality).

Continuity of Electricity Supply

General continuity indicators, regularly monitored by ANRE are:

- **SAIDI** - System Average Interruption Duration Index;
- **SAIFI** - System Average Interruption Frequency Index;
- **CAIDI** - Customer Average Interruption Duration Index;

These indicators are calculated for emergency interruptions, lasting longer than 3 minutes, occurring in average-tension distribution networks (10 kV).

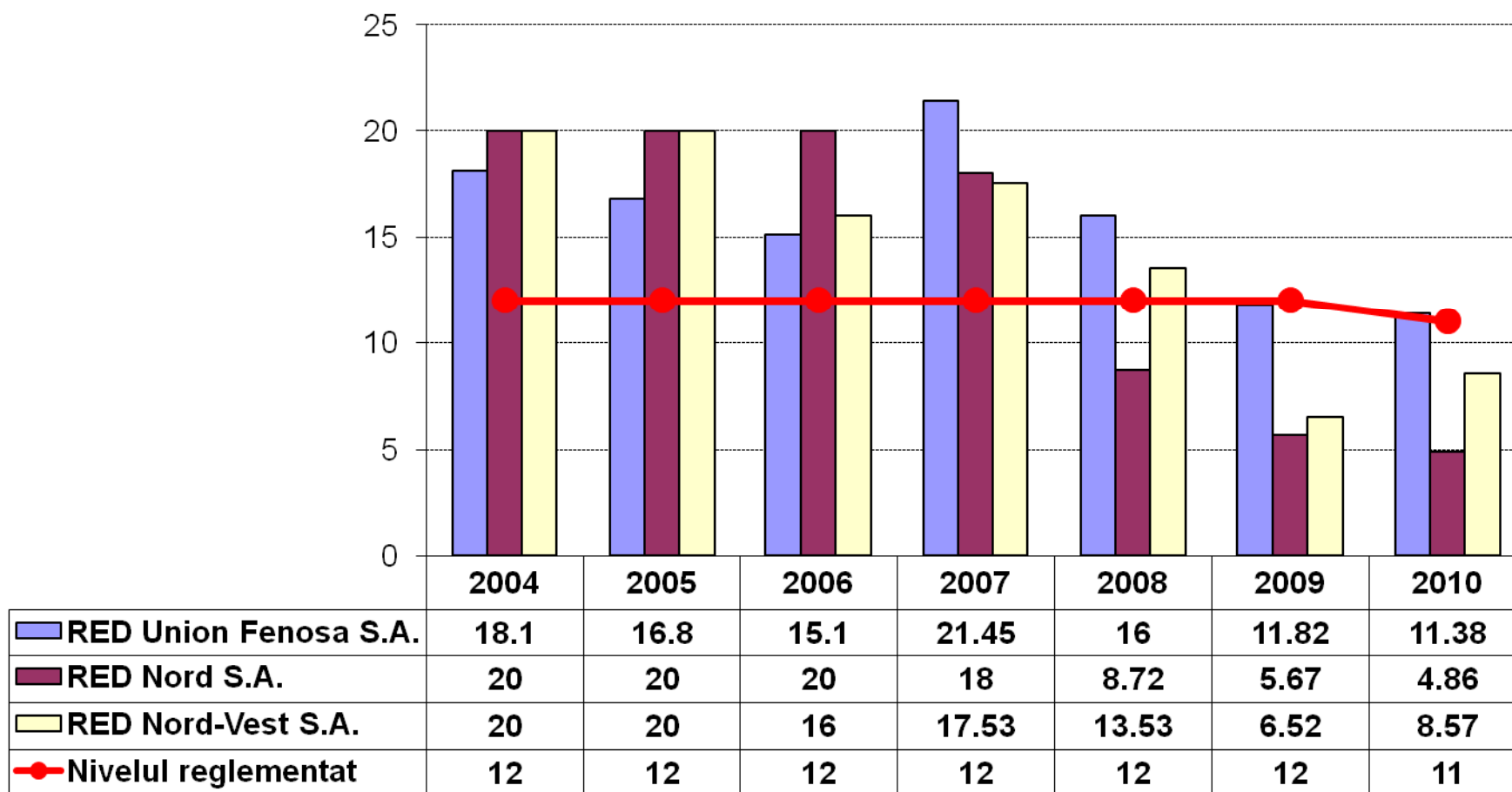
Similarly with electricity loss, the Agency establishes the values of SAIDI indicator, which are reduced gradually:

- 2009 – 12 hours,
- 2010 – 11 hours,
- 2011 – 10 hours,
- 2012 – 9 hours,
- 2013 – 8 hours.

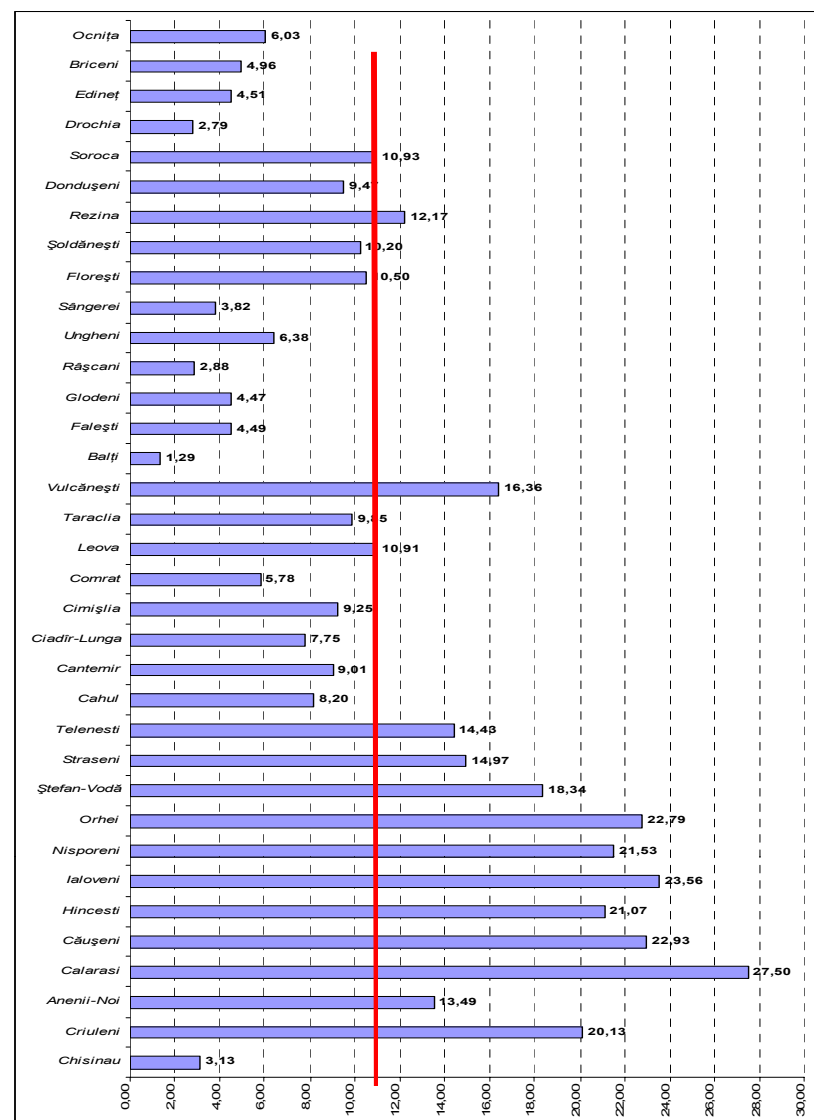
Where the electricity distribution operator fails to reach the SAIDI level as established, ANRE has the right to penalize by tariff reduction.

Continuity of Electricity Supply

Evolution of SAIDI Value (hours) during 2004-2010

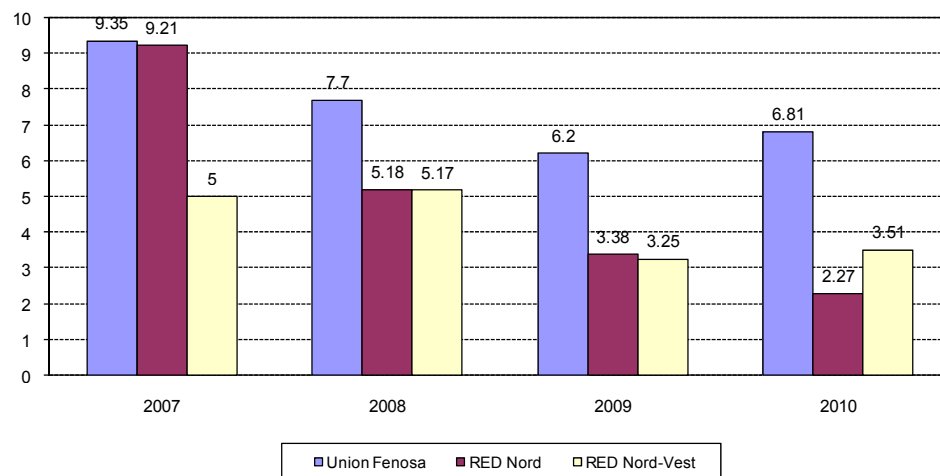


Continuity of Electricity Supply

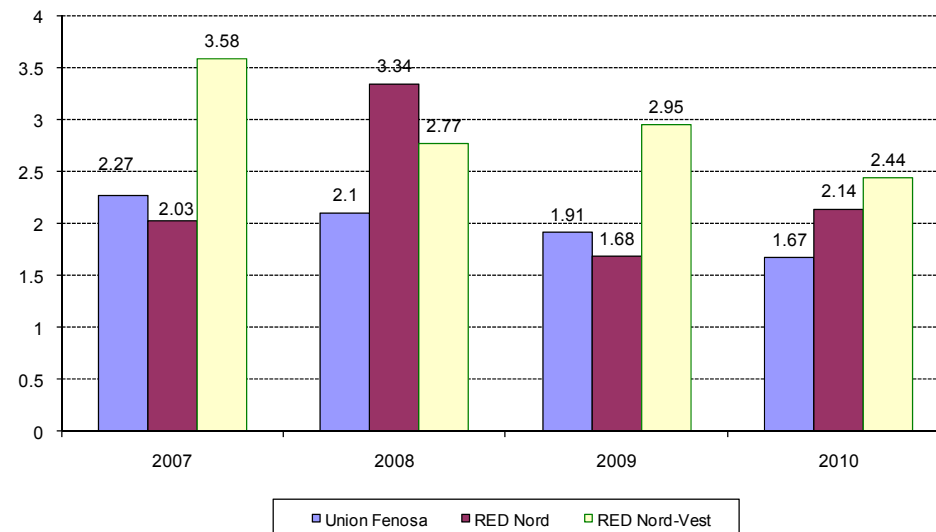


Continuity of Electricity Supply

Level of SAIFI Indicator during 2007-2010



Values of CAIDI indicator (hours) during 2007 - 2010



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Electricity Quality

- In Moldova, the Standard GOST-13109 “Electricity Quality. Electromagnetic compatibility of electrical equipment. Electricity quality parameters of in public electricity systems” is used to appreciate electricity quality parameters. It is an inter-state standard, used in ex-USSR, which provides for electricity quality parameters.
- The Agency does not directly monitor electricity quality, however, the regulations provide for terms of addressing consumers complaints on breaches of electricity quality parameters.

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Electricity Quality

Terms of Addressing Breaches of Electricity Quality Parameters:

- **Telephone calls from consumers:**
 - 24 hours after the calls, in case of electrical surges or voltage drops;
- **Written complaints:**
 - 5 days from receipt of complaints – where for the restoration of the quality parameters it is necessary to perform simple preventive work, such as redistribution of electrical charges on the phase, change of voltage taps in power transformers, etc.;
 - 30 days – where it is required to increase network capacity or replace power transformer etc;
 - 60 days – where it is necessary to design projects and deploy electric lines or line sectors;

Commercial Quality

ANRE monitors the following situations, related to commercial quality of services:

- Announcement of scheduled interruptions (3 days before the interruption for small consumers and 7 days for consumers using power more than 100 kW).
- Issuance of connection notifications (15 calendar days)
- Conclusion of electricity supply contracts (2 working days for household consumers and 5 working days for other consumers);
- Connection to the electricity distribution network (3 calendar days). Where the distribution operator fails to comply with this term, the consumer or potential consumer has the right to damages (25% of the connection fee for every day of delay).
- Re-connection of consumer's installation to the electricity distribution network (2 working days). Where the supplier (DSO) fails to comply with the term, the consumer may require compensation (25% of the re-connection fee for every day of delay).

Reporting and Report Publication

- Distribution network operators are liable to present annual reports, according to pre-established form, on level of quality indicators.
- Monthly, Lunar, distribution network operators are liable to present reports on interruptions occurring within their networks.
- Annual reports on service quality are to be made publicly available on the Agency's Web page, as part of ANRE's report on activity.
- Where distribution operators fail to comply with certain indicators, ANRE is entitled to apply reduction of distribution tariff. Thus, after considering the reports of the distribution network operators for 2009, ANRE applied 0.5% tariff reduction to one of the operators. The reduction was applied for non-compliance with the terms for solving consumer complaints regarding breach of electricity quality parameters.

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Unsolved Problems

- Currently, the quality of services provided by the transportation network operator is not monitored;
- Limited possibility to automatically record interruptions at average voltage level (10 kV);
- No possibility to monitor interruptions in low voltage networks (0,4 kV) – manual recording of interruptions;
- Complicated mechanism of damages to consumers in case of operators' non-compliance with the established level of guaranteed quality indicators;
- End consumers, affected by low-quality electricity supply, do not feel the effect of tariff reduction. The Agency proposed modifications to this mechanism, so that in these situations affected consumers be compensated.

Thank you for attention!

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