

Methodologies for Monitoring, Reporting and Publication of Energy Prices in Serbia

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The Energy Agency of the Republic of Serbia

**II Statistics Workshop
Energy Community
Vienna, 15. June 2010**

Legislation – role of AERS

Agency has no clearly defined role in relation to the collection and reporting of energy prices.

Energy law defines that among other things, Agency monitors the implementation of the tariff systems.

Agency collects data for this purpose, and for benchmarking of energy prices.

Methodologies

The general idea is to apply at least two different methodologies and to do mutual comparison of prices

1. EUROSTAT methodologies

- Old methodology (until 2007)
- New methodology (from 2007 onwards)

2. Quarterly and annually realized prices for industry and households

- OECD/IEA - International Energy Agency, Energy Prices and Taxes
- Energy Regulators Regional Association, Average Electricity Prices in ERRA Countries

EUROSTAT methodologies

Comparing the new with old methodology prices is possible

Old methodology (until 2007)

- **typical standard consumers are defined for industrial and household consumers**
- **data collection is performed on tariff price data**

New methodology (from 2007 onwards)

- **reference consumers are characterised by annual consumption bands for industrial and household consumers**
- **data collection is done on real price data**

EUROSTAT methodologies

AERS practice - comparing the old methodology prices for medium standard consumers with new methodology prices.

Statistical unit	Type of energy	Old EUROSTAT	New EUROSTAT
Industry	Electricity	Ie	Ic
Households	Electricity	Dc	Dc
Industry	Natural gas	I3	I3
Households	Natural gas	D3	D2

Old EUROSTAT methodology – industry (electricity)

Category of consumption	Standard consumer		Characteristics	Refer. consumer	Characteristics
	Old EUROSTAT	AERS		New EUROSTAT	
Commercial	lc	A	100 kW, 160 (DT 147+ NT 13) MWh annually, 1600h annually	la,lb	annual consumption < 500 MWh
Industry medium voltage 10 kV	ld	B1	500 kW, 1250 (DT 1025+ NT 225) MWh annually, 2500h annually		
	le	B2	500 kW, 2000 (DT 1500+ NT 500) MWh annually, 4000h annually	lc	500 MWh < annual consumption < 2000 MWh
		B3	500 kW, 4380 (DT 2920+ NT 1460) MWh annually, 8760h annually		
		C1	1000 kW, 2500 (DT 2050+ NT 450) MWh annually, 2500h annually		
		C2	1000 kW, 4000 (DT 3000+ NT 1000) MWh annually, 4000h annually		
Industry medium voltage 35 kV	lf	D1	2500 kW, 10000 (DT 7500+ NT 2500) MWh annually, 4000h annually	ld	2000 MWh < annual consumption < 20000 MWh
		D2	2500 kW, 15000 (DT 9900+ NT 5100) MWh annually, 6000h annually		
		D3	2500 kW, 21900 (DT 14600+ NT 7300) MWh annually, 8760h annually		
	lg	E1	4000 kW, 16000 (DT 12000+ NT 4000) MWh annually, 4000h annually		
		E2	4000 kW, 24000 (DT 15840+ NT 8160) MWh annually, 6000h annually		
		E3	4000 kW, 35040 (DT 23360+ NT 11680) MWh annually, 8760h annually		
Industry high voltage 110 kV	lh	F1	10000 kW, 50000 (DT 35000+ NT 15000) MWh annually, 5000h annually	le	20000 MWh < annual consumption < 70000 MWh
	li	F2	10000 kW, 70000 (DT 43400+ NT 26600) MWh annually, 7000h annually	lf,lg	70000 MWh < annual consumption
		F3	10000 kW, 87600 (DT 58400+ NT 29200) MWh annually, 8760h annually		
Remark:	DT - day tariff NT - night tariff				

Old and new EUROSTAT methodologies – household (electricity)

Category of consumption	Standard consumer		Characteristics	Refer. consumer New EUROSTAT	Characteristics
	Old EUROSTAT	AERS			
Households (D)	Da very small	A	2,3 kW, 600 kWh annually	Da very small	annual consumption < 1000 kWh
		A - summer	2,3 kW, 280 kWh semi-annually		
		A - winter	2,3 kW, 320 kWh semi-annually		
	Db small	B1	4,6 kW, 1200 kWh annually	Db small	1000 kWh < annual consumption < 2500 kWh
		B1 - summer	4,6 kW, 540 kWh semi-annually		
		B1 - winter	4,6 kW, 660 kWh semi-annually		
		B2	5,75 kW, 1700 kWh annually		
		B2 - summer	5,75 kW, 800 kWh semi-annually		
		B2 - winter	5,75 kW, 900 kWh semi-annually		
		C1	7,36 kW, 3500 kWh annually		
		C1 - summer	7,36 kW, 1650 kWh semi-annually		
		C1 - winter	7,36 kW, 1850 kWh semi-annually		
	Dc medium	C2	7,36 kW, 3500 (DT 2200+ NT 1300) kWh annually	Dc medium	2500 kWh < annual consumption < 5000 kWh
		C2 - summer	7,36 kW, 1650 (DT 1050+ NT 600) kWh semi-annually		
		C2 - winter	7,36 kW, 1850 (DT 1150+ NT 700) kWh semi-annually		
	Dd large	D	11,04 kW, 7500 (DT 5000+ NT 2500) kWh annually	Dd large	5000 kWh < annual consumption < 15000 kWh
		D - summer	11,04 kW, 3600 (DT 2400+ NT 1200) kWh semi-annually		
		D - winter	11,04 kW, 3900 (DT 2600+ NT 1300) kWh semi-annually		
		E1	11,04 kW, 13000 (DT 8000+ NT 5000) kWh annually		
		E1 - summer	11,04 kW, 3600 (DT 2400+ NT 1200) kWh semi-annually		
		E1 - winter	11,04 kW, 9400 (DT 5600+ NT 3800) kWh semi-annually		
		E2	17,25 kW, 13000 (DT 3500+ NT 9500) kWh annually		
		E2 - summer	17,25 kW, 3600 (DT 2400+ NT 1200) kWh semi-annually		
		E2 - winter	17,25 kW, 9400 (DT 1100+ NT 8300) kWh semi-annually		
	F1	22,08 kW, 20000 (DT 12000+ NT 8000) kWh annually			
	F1 - summer	22,08 kW, 3600 (DT 2400+ NT 1200) kWh semi-annually			
	F1 - winter	22,08 kW, 16400 (DT 9600+ NT 6800) kWh semi-annually			
De very large	F2	22,08 kW, 20000 (DT 5000+ NT 15000) kWh annually	De very large	15000 kWh < annual consumption	
	F2 - summer	22,08 kW, 3600 (DT 2400+ NT 1200) kWh semi-annually			
	F2 - winter	22,08 kW, 16400 (DT 2600+ NT 13800) kWh semi-annually			
Remark:	DT - day tariff	NT - night tariff			

EUROSTAT methodologies – **problems**

- Which consumption period is considered as the relevant in determining affiliation of customers to the particular category?
- Consideration of the possibility for gathering data for at least three end users for all consumption bands
- Lack of data for neighboring countries (Albania, Bosnia, FYROM, Montenegro)
- There are no possibility for comparison of transmission and distribution prices
- Incomparable names of reference industrial consumers in the old and new methodology

OECD/IEA and ERRA methodologies – **problems**

OECD/IEA

- There is no single definition of industrial consumers
- Quarterly and annual data is available, N/A semi-annual data

ERRA

- Lack of data for industrial consumers
- Only quarterly data is available, N/A semi-annual and annual data

General problems

- **Lack of data for transmission and distribution prices**
- **Apart to the realized prices, it would be useful to compare data on actual technical and economical performances, or at least show the data in the following format:**

**revenues, sold / transmitted / distributed quantities
and prices**

- **Exchange rate - actual prices may vary considerably due to variation of exchange rate**

Thank you for your attention!

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