



Regulatory role and approaches to Market Monitoring in Serbia

Jasmina Trhulj
Senior Expert for Electricity

**Energy Regulatory Partnership Program
The Energy Agency of the Republic of Serbia &
The Pennsylvania Public Utility Commission**

Harrisburg, 2. April 2008.

Content proposed by PA PUC

- Legal framework and AERS authority
- Performing the monitoring function: components, processes and outcomes
- Standard monitoring vs. mitigation
- Reporting requirements (internal vs. external, software, data flow, contingency plans)
- Governance process among the regulatory agency and market participants
- Practical approaches and constraints facing AERS in conducting transparent market monitoring

Supranational Legislation

- Energy Community Treaty (ECT)
- Directive 2003/54/EC
- Regulation 1228/2003/EC
- Guidelines on the management and allocation of available transfer capacity of interconnections (CM guidelines)
- Directive 2005/89/EC – Security of supply
- Directive 2001/77 - RES

Supranational Legislation

Energy Community Treaty

- Contracting parties (including Serbia) committed to implement *acquis communautaire* for energy, environment, renewables and competition within certain timeframes
- Implementation of *acquis* supported by the Road maps - structured framework for showing the commitments countries have made and for assessing their progress
- Road maps reporting responsibility of the Government/Ministry of mining and energy
- AERS has **indirect** role – answering the questions for the issues that are in the Regulator's jurisdiction
 - ⇒ AERS has to monitor the areas on which the Ministry may ask AERS to report

Supranational Legislation

Directive 2003/54/EC

- According to the Article 23 (1) **explicit** responsibility to the AERS for ensuring:
 - Non-discrimination
 - Effective competition
 - Efficient functioning of the market
 - Monitoring
 - Publishing annual report on monitoring activities

Supranational Legislation

Directive 2003/54/EC

- **Monitoring of the:**

- Rules on the management and allocation of interconnection capacity
- Mechanisms to deal with congested capacity within national electricity system
- Time taken by transmission and distribution system to make connections and repairs
- Publication of appropriate information by TSO/DSO concerning interconnectors, grid usage and capacity allocation
- Effective unbundling of accounts
- Terms, conditions and tariffs for connecting new producers
- Extent to which TSO/DSO fulfil their tasks
- Level of transparency and competition

⇒ **Monitoring mainly regulated parts of the sector**

Supranational Legislation

Regulation 1228/2003/EC

- **Regulatory Authorities** have **explicit** obligation of ensuring compliance with the rules contained in the Regulation and the guidelines adopted on the basis of this Regulation

⇒ AERS has **indirect** obligation to monitor access to the network for cross-border exchanges in electricity including:

- Implementation of ITC mechanisms
- Charges for access to networks
- Management and allocation of interconnection capacity
- Congestion management
- Transparency of TSO's activities and data

Supranational Legislation

CM Guidelines

- More precisely defined role of Regulatory Authorities with respect to the access to the network for cross-border exchanges in electricity.

⇒ AERS has **direct** obligation to:

- Evaluate the congestion management methods
- Review structure for the allocation of capacity
- Review concepts and methods for the determination of liabilities of TSO to compensate the market participant for the loss of capacity rights
- Review scheme for the calculation of the interconnection capacity
- Review way in which information is published by the TSO
- Review procedure for the congestion income distribution and use
- Review operational and planning security standards published by the TSO

National Legislation

- Energy Law
- Competition Law
- Customer protection Law



National Legislation

Energy Law

- AERS is founded as a regulatory body for performing, among others, tasks of
 - Improving and directing the energy market development on the principles of non-discrimination and effective competition
 - Monitoring the implementation of regulations and rules for energy systems operation
 - Harmonizing activities of energy entities on providing regular supply of energy and services to customers and their protection and equal position

National Legislation

Energy Law

- AERS activities that are **explicitly** related to Market Monitoring are:
 - Approving of transmission and distribution system Operation Rules and electricity market operation Rules
 - Collecting and processing data on energy entities with reference to performing energy related activities
 - Monitoring the behavior of energy entities regarding separation of accounts and protection of customers
- The AERS is authorized to request from energy entities data and documents necessary for conducting its activities and energy entities are obliged to deliver these data to the AERS within 8 days from the date of request

National Legislation Energy Law

- ⇒ Energy Law provides a **strong but indirect** mandate for AERS to monitor:
- **whole electricity sector** (wide scope of MM)
 - **competition** (narrow scope of MM)



National Legislation

Energy Law

- Entities **explicitly** obliged for monitoring activities:
 - **The Government of the Republic of Serbia** – monitors the implementation of the Energy Sector Development Strategy
 - **The Ministry, i.e. pertinent authority of the Autonomous Province** – monitors implementation of the Energy Balance and, if necessary, proposes measures to the Government of the Republic of Serbia
- Entities **indirectly** obliged for monitoring through performing their operational activities:
 - **TSO/DSO**
 - **Market Operator**

National Legislation

Competition Law

- Competition Law gives **no mandate** to **AERS** to monitor competition in the energy sector.
- **Competition Commission** is **explicitly** given the authority to monitor competition.

National Legislation

Customer Protection Law

- Ministry
- Customer Protection Law does not allocate any responsibility to AERS

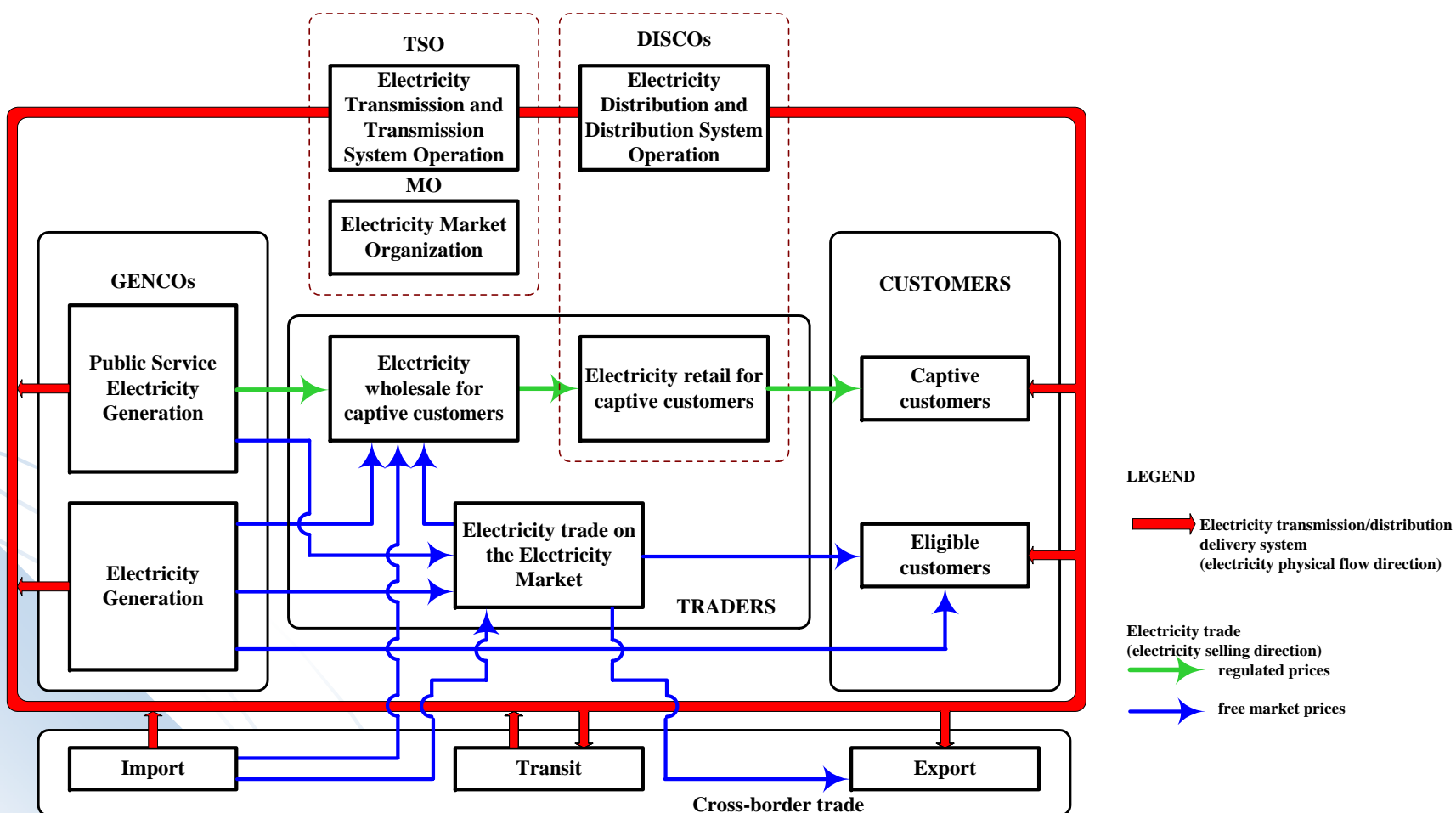
BUT...

- Energy Law does allocate customer protection responsibilities to AERS!

Serbian Power Sector

- Number of customers: 3.37 mil.
- 1 TSO
- 5 DSO/Supply of captive customers
- 5 generation companies
- 25 Trading/Supply companies
- Net Consumption: 27.2 TWh/year
- 47% Market opening

Serbian Electricity Market



Market Monitoring Process

Market Monitoring activities:

- Problem definition
- Data collection
- Data analysis
- Formulation of conclusions
- Reporting (regular or ad hoc)

⇒ Market monitoring does not include mitigating actions

Market Monitoring Process in Serbia

- Market Monitoring framework is



⇒ Careful definition of

- What
- How
- By Whom
- Why

is going to be monitored, is needed.

BUT...

AERS aims for...

Market Monitoring – WHAT? (I)

Scope of market monitoring depends on the current status of the electricity market



- **Electricity Market in the establishment phase**



Liberalization monitoring –

- compliance monitoring and
- competition monitoring
of **overall** electricity market.

Market Monitoring – WHAT? (II)

Overall electricity market:

- **Segments**
 - **Regulated**
 - Networks
 - System operation
 - Generation for captive customers
 - Wholesale for captive customers
 - Retail for captive customers
 - **Competitive**
 - Wholesale market
 - Retail market/Supply
- **Aspects**
 - **Overall framework** (Legal/Regulatory/Mechanisms)
 - **Structure** (Physical/Ownership)
 - **Behavior** (Compliance, Results)

Market Monitoring – HOW?

- **Methods:**

- Quantitative monitoring
- Qualitative monitoring
- Informal monitoring

- **Principles:**

- Output orientation
- Customer orientation
- Proportionality and cost efficiency
- Transparency
- Consistency over time
- Market players' participation encouragement
- Avoiding regulatory intervention on the market

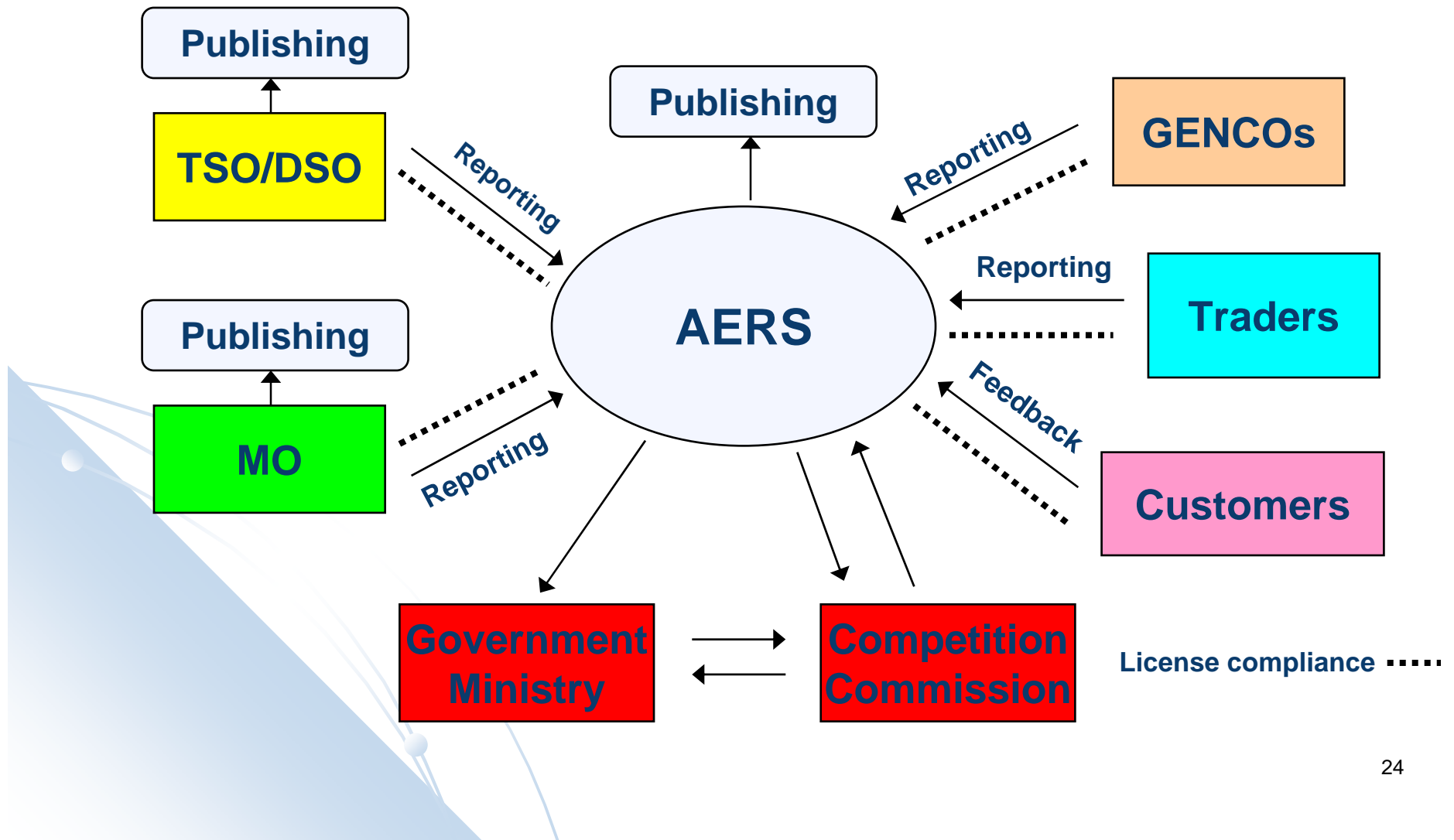
Market Monitoring – WHO?

Bodies:

- Government/Ministry
- Competition Commission
- AERS
- TSO/DOS
- MO
- Market players



Market Monitoring – Scheme



Market Monitoring – WHY?

Objectives:

- Encourage and improve the compliance towards existing legislation and license obligation
- Improve existing legislation in order to make it more clear, understandable and functional
- Improve operations of the power system and/or electricity market
- Price development
- Internal and international reporting and publishing obligations

Market Monitoring progress – 2006

- AERS operational from January 2006

Market monitoring conducted through:

- **Licensing process** – checking whether market players' performances are in compliance with legislation
- **Dispute resolution process** – checking whether market players' behavior in the process of connection and access to the network is in compliance with legislation
- **Informal monitoring** - based on informal discussions with stakeholders, ad hoc data request, rumors/allegations related to the functioning of the electricity market
- Database has been developed in-house in order to support licensing activities (License Register)

Market monitoring progress – 2007 (I)

- Data collection process formalized with the introduction of the Information Code
- **Information Code** – developed by AERS in order to clearly define request for licensees' data
 - Structured by the licensed activities
 - Focused on the regulated licensed activities
 - Defines what data, in which format, how often and for which purposes should be submitted
 - **Requested licensee data** grouped into:
 - Technical
 - Financial
 - Legal
 - Other non-systematic data

Market monitoring progress – 2007 (II)

- **Information Code**

- **Timing** – yearly, quarterly and monthly
- **Purpose**
 - setting tariff systems
 - giving opinion on prices
 - monitoring of unbundling
 - comparing/benchmarking regulated entities
 - national and international reporting
- **Format**
 - Excel tables
 - in line with a standard reporting procedure within companies
- Published on the AERS website

Market monitoring progress - 2008

- Market monitoring of competitive activities in the wholesale market



- **Grid Code** – obligation of TSO to publish all relevant data concerning cross-border trade and congestion management procedures
- **Information Code** - extended to the trading licensees and their activities. Requested data are aggregated monthly volumes traded in:
 - Serbia (purchase/sale)
 - Cross-border trade on Serbian interconnections (import/export/transit)

Market monitoring – in progress

AERS is in the process of establishment of the:

- **Quality of Supply Monitoring** (questionnaires and tables on interruptions and continuity indicators)
- **Market Monitoring Guidelines** (what, how, by whom and how is going to be monitored),
- **Centralized AERS Information System**,
in order to support and improve
Regulatory Market Monitoring function.

Market monitoring – The future

Regulated activities

Competitive activities

Compliance Monitoring

Competition Monitoring

Market Monitoring

Market Mitigation

Data Comparison

Benchmarking analysis

Market Power Detection (I)

Market power potential at the Serbian Electricity market level:

HHI for Serbian generation market – Installed capacity in 2007

	Installed capacity, MW	Market share
HP Djerdap	1,537	21.57
HP Drinsko-Limske	1,298	18.22
TP TENT	3,015	42.32
TP Kostolac	921	12.93
CHP Panonske	353	4.96
Total	7,123	100
HHI	2,780.3	
Concentration level	High	

HHI for Serbian generation market – Production in 2007

	Pro MWh	Market share
HP Djerdap	7,015	20.38
HP Drinsko-Limske	2,924	8.50
TP TENT	18,931	55.00
TP Kostolac	5,067	14.72
CHP Panonske	483	1.40
Total	34,420	100
HHI	3,731.4	
Concentration level	High	



Serbian generation market is highly concentrated

Market Power Detection (II)

Market power potential at the generation company level:

Serbian Power System – 31.12.2007

	MW
Total capacity	7005
Peak Load	6408
Import (NTC)	1940
Export (NTC)	1800
Ancillary services	600



Structural Indices of generation companies

	RSI	PSI
HP Djerdap	82	yes
HP Drinsko-Limske	85	yes
TP TENT	61	yes
TP Kostolac	91	yes
CHP Panonske	99	yes

⇒ **All generators are necessary in serving peak demand**

⇒ **High potential for companies to exercise market power**

Market Power Mitigation Powers

AERS powers in Mitigating Market Power:

- Approving Grid/Distribution/Market Code
- Proposing Code amendments
- Suspending and Revoking Licences
- Price regulation
- Deciding upon appeals on the connection and access to the network refusal
- Publishing Market Monitoring reports
- Activities within Energy Community on the facilitating Regional Electricity Market Opening

Market Power Mitigation - The future

- Close co-operation between AERS and Competition Commission is needed.
- **AERS** mandate for improving and directing the market in the direction of effective competition could be used to create an effective “screening” function, while the actual work directed at protection of competition would be carried out by the **Competition Commission** using its extensive authority and powers.



Market Monitoring - Obstacles

- Existing Regulatory framework
 - Lack of Market rules
 - Availability of information
 - Access to information (data confidentiality)
 - Lack of consistent, comparable and reliable data
 - Lack of measurement systems, IT systems and data bases
 - Lack of unified rules for data recording and collecting
 - Reluctance of energy entities
- ! Time and experience needed in order to improve**
- **Market monitoring process**

Thank you for your attention!

Contact details:

Jasmina Trhulj,

Energy Agency of the Republic of Serbia, Terazije 5/V , 11000 Belgrade

Tel: + 381 11 3226004; Fax: + 381 11 3225780

e-mail: jasmina.trhulj@aers.org.yu ,

URL: www.aers.org.yu