



## SYLLABUS TO THE NARUC TRAINING ON TARIFF DEVELOPMENT AND UTILITY REGULATION

May 7-11, 2007 Baku, Azerbaijan

Venue: Radisson SAS Plaza Hotel

What follows is a brief explanation on the objectives and content of the proposed curriculum for the Baku training on Tariff Development and Utility Regulation.

## **Background**

The draft course outline is based on the following assumptions:

- the emphasis of the course is on tariff and price regulation (3.5 days).
- the electricity market model of Azerbaijan is supposed to remain a vertically integrated monopoly. Thus, classic monopoly price regulation should be in the focus.
- Energy policy issues are not relevant for the course (except for an introductory lecture)
- Gas sector pricing has a specific relevance for the country.

Beyond mainstream tariff and price regulatory topics, discussions on the regulatory process and institutions as well as on the affordability of cost covering rates are discussed.

<u>Day 1.</u> is devoted to an overview of the rationales for and theories on economic regulation. It also covers substantial institutional issues: authority, autonomy, accountability, transparency.

- 1.A.: Introductory session. Provides an overview of the week's program and includes an introduction by the participants
- 1.B. Mr Ramanazov's presentation will give the participants a substantive overview of the regulatory challenges Azerbaijan is facing. A nice guide for subsequent discussions during the week.
- 1.C. A lecture on the welfare foundations of economic regulation of monopolies. Major areas of economic regulation: price, quality, exit /entry regulation and the monitoring function.
- 1.D. Substantial elements of regulatory institutions. An overview of international experiences.
- 1.E. This section puts the Azeri situation into the international context covered formerly.
- 1.F. Provides case studies on the procedures applied in Lithuania and Turkey to make regulatory decisions, to involve stakeholders into the process, to provide transparency for information and on the decisions. A reflection on the transparency *versus* confidentiality issues is expected.

<u>Day 2.</u> is sending the message that regulated prices are tightly linked to the costs of regulated activities. The concepts of revenue, costs, profit are discussed. Special attention is given to discuss specific cost categories (total cost, fixed-, variable- marginal cost). Financial statements: balance, income statement and cash flow analysis. Indicators of the financial health status of electric utilities. Unbundling of accounts for regulatory purposes. Uniform system of accounts. Additional data need for regulatory purposes.

- 2.A is the general introductory lecture that covers basic concepts.
- 2.B. is a case study from Lithuania, while 2.C is for the gas industry. 2.B and 2.C. lecturers reflect on concepts in 2.A and illustrate how costs are defined, collected and monitored by the regulator and then linked to regulated prices. Major cost categories, problematic areas, use of unbundling accounts and/or uniform system of accounts.
- 2.D. session is on the highly relevant affordability issue. 4 lecturers share their experiences with the participants.

## <u>Day 3</u> goes deeper into electricity costing.

- 3.A discusses the economics of electricity generation. Demand characteristics. Variable costs: fuel markets and generating efficiency. Supply function. Understanding the fixed (capital) costs of generation. Screening functions. Explaining electricity prices. Major potentials for efficiency improvement.
- 3.B. discusses the other major segment of the industry: networks and systems operation services. The importance on investments and fixed costs. Rate of return to be introduced here. Network losses: technical, commercial, non-payment to discuss here. Major potentials for efficiency improvement. Cross border trading.
- 3.C. will sum up those cost elements in the value chain and will derive the revenue requirement, the basic stage for tariff setting.
- 3.D is proposed to illustrate the importance of utility (asset) valuation methods (book value, replacement value,...) and their potential impact on implied rate of return and depreciation costs.

<u>Day 4</u> is to sum up the most important things on what is mastered in the US: cost of service regulation (the kind of regulation that seems to be the relevant one for Azerbaijan given its industrial structure).

- 4.A is an overview of the rate case process based on the Pennsylvania experience. Analysis needs from the side of the Commission to be illustrated and emphasized.
- 4.B. is about how to define tariffs for different customer groups in order to recover the costs (revenue requirement) of the regulated utility. Uniform vs. multi-part tariffs. Distribution of costs across customer groups. Cost covering rates vs. cross-subsidisation.
- Session 4.C. is a discussion session to analyse recent sharp increases of electricity rates in Azerbaijan. An introductory presentation is needed from a TC member!
- 4.E. is a summing up exercise on the steps of cost of service regulation. Here the participants should get an easy guide from the beginning to the end of the process.

<u>Day 5</u> morning covers incentive regulation + some "lessons learned" experience from Hungary. A final test is inserted into the morning program. The closing lecture is on the monitoring activities of energy regulatory commissions.