ERRA TARIFF AND PRICING COMMITTEE

ISSUE PAPER

PROCEDURES AND RULES FOR THE EXAMINATION OF DOCUMENTS ON TARIFF APPROVALS. BENCHMARK REGULATORY REPORTING REQUIREMENTS IN THE ERRA COUNTRIES. SYSTEM OF AUDITING

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Table of Contents

List of Figures

List of Tables

1 Introduction

The Energy Regulatory Regional Association (ERRA) integrates 22 regulatory authorities as full (and 5 as associate and partly extra-regional) members in the region of Eastern Europe / Asia. KEMA is assisting ERRA's Tariff/Pricing Committee in drafting and completing an issue paper on the procedures and rules for the examination of documents on tariff approvals and benchmark regulatory reporting requirements and a system of auditing.

The objective of this paper is to provide ERRA members with best practices on the procedures aimed at obtaining regulatory accounting information for tariff setting purposes. This paper includes guidelines on how to examine and prepare documentation related to regulatory reporting and the type of data to be collected. Furthermore, a standard template is developed showing the essential minimum information that should be reported and collected for the purpose of regulatory accounting.

In the course of the project work KEMA prepared and sent a questionnaire to all ERRA members in order to investigate the status quo regarding the current situation in these countries. The regulatory responses to the questionnaire provide a valuable source of information that is considered in the formulation of our conclusions and recommendations.

The remainder of this issue paper is set out as follows:

Chapter 2: Procedures and rules for the examination of documents on tariff approvals.

In this chapter we explain:

- how to define the data requirements for regulatory purposes
- submission timings
- checking and verification process
- cost definition (OPEX and CAPEX)
- criteria for determining the allowed cost level
- defining the cost level

Chapter 3: Setting a right level for energy prices

This chapter provides the theory behind setting energy prices and discuss how to balance this requirement in practice by taking into consideration economic and non-economic criteria, and other factors which may affect the setting of energy prices.

This chapter is structured as follows:

- main pricing objectives
- how these objectives are used and employed in practice
- examples of typical applications in ERRA member countries
- how to tackle the trade-off between different objectives, with examples from our previous work in ERRA member (or other) countries
- conclusions and possible practical solutions

Chapter 4: Benchmark regulatory reporting requirements

This chapter explains how ERRA members currently conduct the regulatory accounting process. The information collected from ERRA members is a result of the questionnaire that was distributed to all members. Contents include:

- role of regulatory data submission and application of regulatory accounting guidelines (RAGs)
- what are the reporting formats used to submit the data
- where these formats are defined (price ordinances, normative acts issued by regulators, licences, other legal documents)
- differences between financial and regulatory accounting data
- interdependences between RAGs and IFRS, IAS
- reconciliation between data for regulatory and financial accounting purposes
- benchmarking of current regulatory practices in ERRA countries

Chapter 5: System of auditing

In this chapter, we explain the role and importance of regulatory accounting audits, who is responsible for them, and how to conduct such audits.

Chapter 6: Questionnaire results

In this chapter, the results of the KEMA questionnaire are summarised by country, based on the feedback received.

Chapter 7: Conclusions and recommendations

An explanation of the outcomes with conclusions is provided in this chapter, together with recommendations on how to improve on the current regulatory accounting process.

Chapter 8: A separate Excel file that contains selected regulatory accounting templates. A general explanation of these templates is also given.

Appendices as follows:

Appendix 1: Country case studies – The Netherlands, the UK, Italy, and Slovenia

Appendix 2: Example of how to calculate basic building-block revenue requirements

Appendix 3: Template for data collection for regulatory purposes

Appendix 4: Example for cost allocation process

Appendix 5: Responses from the questionnaire

Appendix 6: Description of the variables/glossary

2 Normative Role of Regulatory Accounting Requirements

This chapter presents the normative role of regulatory accounting. Firstly, an explanation of the objectives of regulatory accounting and the purpose and use of the data required is given. This is followed by the role of data collection and the procedures and rules to enable a smooth transaction of relevant information between the regulator and the regulated utilities.

2.1.1 Objectives of Regulatory Accounting

In addition to national statutory accounts, regulated companies are normally required to submit what is known as 'regulatory' accounts. Regulatory accounts provide the regulator with financial information on a particular utility. They are normally more detailed than national statutory accounts as far as regulated activities are concerned, and help the regulator set allowed revenues and tariffs. The level of detail required for regulatory accounting depends on the scope and purpose at which the data collection process is aimed. Regulatory accounts are designed to provide information about regulated businesses for the use of the regulator, the overall industry, consumers and other stakeholders.

The experience of other countries indicates that regulatory accounts are laid out according to different principles from standard financial accounts. It might be the case that the information required to perform detailed cost allocations are not yet be fully available in some ERRA countries. ERRA and its members will have to consider the need for regulatory accounting in the setting of tariffs and in the cost allocation procedure.

In general, the core applications of regulatory accounts include:

- Accurate data for tariff setting
- Determining price controls
- Informing price control reviews
- Monitoring performance on investment
- Monitoring the financial health of regulated utilities
- Benchmarking exercises on the performance of regulated utilities
- Improve transparency in the regulatory process, and

- Assisting in the detection of unfair cross subsidy and/or discrimination between activities, market sectors or customer groups

Some of the above topics are discussed in more detail below.

2.2 Procedures and Rules for the examination of documents on tariff approvals

Regulators have the task, among other things, to set and approve tariffs. There are a number of steps which must be taken to ensure that the regulator has accurate technical and financial information on the regulated utility. In order for a regulator to have precise and accurate information from the regulated utility, data collection must take place.

Data collection is extremely important as the information received is the core input data used for determining price controls, and has to be applied in the regulatory formulas and tariff setting schemes. This means that the data process has further implications and might have a potentially big negative impact if the information it provides turned out to be incorrect.

2.2.1 Data Collection: What to collect – data requirements

The data to be collected should be defined clearly, not only to make sure that the data is unambiguously specified, but also to avoid over-collecting. Over collection of data occurs when more data is requested than actually required. It leads to inefficiencies on both sides, purely in terms of the cost attributed to data collection due to the additional effects to collect 'unnecessary' data and also the cost to the regulator to evaluate the data received.

Regulators should collect economic and technical information from utilities using data transfer templates. These templates are standard templates which are distributed to the companies and must be completed. In addition, guidelines/instruction booklets should accompany the templates. This provides clear instructions and definitions to the utilities on the data required from them. It serves as a supporting document to all concerned parties, and aids consistency and clarity of the data required.

Irrespective of how the information being collected is used, economic regulators should be empowered by means of legislation to ask regulated entities for information. A good regulator would never be able to effectively accomplish its task without being set free and empowered by legislation to ask for relevant information without any unnecessary restrictions. For example, this could be stated in the Energy Laws of the respective countries or in the License Conditions where applicable.

For all areas of the sectors they are required to control, economic regulators usually deal with the collection of the following, *de minimis* information:

- Cost and technical data from companies
- Macroeconomic information from competent institutions
- Demand and other general data from companies and their confederations;
- Business plans, both historical and future, from regulated companies (this usually include capital projections)[1]
- Regulatory accounts, according to regulatory criteria and templates (generally different from standard published annual reports and accounts) to be provided in standard format by the regulator itself
- International benchmarks from sister institutions and super-national coordination entities such as, for instance, CEER and ERRA
- Quality feedback and data from companies and their confederations for the purpose of quality regulation, and
- Customer information on the rate of satisfaction with the service received and on the willingness to pay for the desired quality of service, including general feedback from institutions and individual worst-served customers.

Other non-systematic data can be received by the regulator on a sporadic basis and will be part of its interaction with stakeholders such as the government, industry and consumer associations, the antimonopoly authority, the European Commission as applicable, the financial sector (investors in the energy industry), and so on.

[1] The degree of details of the required information depends on the regulatory form applied in the relevant countries. E.g. in UK, but also in other countries from CEE, information about capital investments of regulated networl companies is required for the purpose of ex-ante regulatory efficiency check. Differently in other countries, like in Norway and Austria, the regulators don't aim to approve investments ex-ante but rather benchmark the total cost efficiency.

2.2.2 How to collect: procedures and rules

Once the regulator has set up its regulatory data requests based on what was discussed in the subsection above, it should formalise its requests in a number of templates to be sent to the regulated industry players.

In general terms, regulators in other European countries collect information in the following steps:

- They first define the rules of data collection in the form or regulatory accounting guidelines and other guidelines, and publish these guidelines on their websites for public consultation. After the consultation process is over (this may take 6-9 months or longer), regulators formalise the accounting guidelines and declare them 'secondary legislation' (subject to final legal approval);
- Secondly, regulators build up actual templates following regulatory accounting and other guidelines (for instance, in MS Word or Excel format, or in PDF if the documents have to be read- or print-only) with the required information;
- Finally, regulatory accounting and similar templates (quality of service, business plan questionnaires, customer feedback and satisfaction) are sent to companies and to their federations for completion and feedback. A regulatory consultation section generally follows before the data collection process is finalized and made official for actual regulatory calculations.

2.2.3 Timing and Submission

The time span and duration of the data collection process should be realistic so that the utilities have sufficient time to collect the data and not be under time pressure, resulting in submitting either no data or inaccurate information. When the data is used for determining price controls, this must also be considered. For example, if the price control commences in 2008, normally the regulator would have issued templates at the beginning of 2007 with a period of 4-6 months minimum for the templates to be completed[2]. The regulator should also bear in mind that they should allow sufficient time for the evaluation and verification of data.

[2] Ofgem, the UK's (GB) energy regulator, specifies in the licence conditions that the data for the following year must be submitted by 31st July at the latest.

2.2.4 Checking and Verification Process

Once the regulated utilities have completed the information required from the templates and the information has been audited, (please see Section 5 on Audits), the regulator will normally check the data by conducting comparisons and benchmarking drills to see if there are any outliers or if some of the data points seem inconsistent. If this occurs and the regulated company did not provide an explanation together with the data, the regulator would normally contact the respective company for an explanation. This would be the most practical way to interact with industry. The next section elaborates on this.

2.2.5 Feedback and consultation: how to interact

Regulators and companies must interact. Interaction needs a precise structure and timeline. This goes generally under the name of 'consultation process'. The consultation process entails the collection of qualitative-quantitative information, feedback, discussion and justification of data provided, industry acceptance of the collection methodology, and finalisation of the data transfer for further analysis. The interaction process therefore takes place in all stages of the data collection process. This happens as follows:

- The regulator issues regulatory accounting guidelines and other general pieces of guidance on data collection. These are published on the Website and are individually sent to companies, both electronically and in hard copy.
- The companies have a fixed period, for instance 6 weeks, to verify the information being sent by the regulator and provide feedback on how they see it and propose modifications (if any).
- The regulator collects feedback from companies and incorporates it into the final version of regulatory guidelines and other templates for data collection (accounting-wise etc.). The new guidelines and templates are then final and, as such, are sent back to all companies to be filled in.
- The companies receive the final documents from the regulator both in hard copy and in electronic format, and are assigned a fixed term to fill in the information requests being forwarded to them. This period is generally long (for instance, 4 to 6 months) in order to give the companies sufficient time to verify the information, after which it will be impossible to appeal for modifications unless a structural break-

through takes place (e.g. a big merger or change in the institutional responsibilities and activities of the company).

- The regulator receives the completed data from the companies, puts the information in its Library unless marked confidential (this is a crucial point, whose importance should be made clear), and allows public access to the documents. These data will be used for subsequent regulatory calculations, including price control reviews. The confidentiality issue is generally tackled by the regulator's legal team in partnership with lawyers from the company. As a rule, crucial business plan topics such as strategic future investment may be 'blanked out' in the library version of the data sheet so that they remain confined to the regulator, whereas standard data about historic cost and technical information will not be censored and will be kept available to public scrutiny. The IT Library is generally a strong point of every regulator who professes openness and availability of information to the public. The most open regulators we have dealt with in terms of data disclosure to the public are Ofgem in the UK and the South-Eastern Australian statewide regulators IPART (New South Wales) and ESC (Victoria). FERC in the US has a lot of information available, but this is not always readily and freely available to the ordinary public. In the UK, the distribution companies also publish their regulatory accounts on their individual websites.

2.2.6 Reverse communication: how to publish decisions

'Reverse' communication is also crucial. This means mainly feedback from the regulator to the utilities with comments, results, counter-feedback and analysis. From other countries, we have observed that regulators provide counter-communication to regulated entities in one or more of the following ways:

- By systematically meeting utilities during the consultation processes, both at their own headquarters and on the regulator's premises
- By organising seminars and workshops (open to the public) to discuss data collection and preliminary analysis
- By providing iterated versions of consultation documents and procedures, to be discussed with the utilities (for instance, the consultation process in the UK starts, for each price review, more than 18 months in advance of the new regulatory period and features three to five rounds of consultation with different versions of consultation documents being published)

- By providing companies with preliminary analysis (confidential) of the data provided by them and discussing with them (again, confidentially) the results before proceeding with the finalisation of data and new analysis. This is an information-extracting exercise to agree with the companies on how to arrive at more robust and defensible analysis for (i.e.) price control and other regulatory purposes
- In some cases, certain information may be regarded as commercially sensitive and any disclosure of information should be considered.[3]

The aspects touched upon in this Section will be clarified in our country cases in the Appendix.

2.3 Differences between National Statutory accounts and regulatory accounts

Most companies have to prepare national statutory accounts which adhere to international financial reporting standards (IFRS), formally known as international accounting standards (IAS). Since 2005, all publicly listed EU companies have been required to prepare their consolidated accounts using IFRS. These sets of accounting principles are designed to ensure that accounts are prepared to a similar standard and use the same accounting conventions across differing jurisdictions.

Regulated utilities that also have to prepare and submit separate regulated accounts to the regulator carry an extra burden. The Office of Electricity and Gas Markets (Ofgem) in the UK conducted a consultation process on the issue of regulatory accounts. Ofgem issues regulatory accounting templates to the utilities. (Please see Appendix 1 for the UK case study). The format of Ofgem's regulatory accounting templates is identical to the national statutory accounting format so that the utility does not have an additional burden to prepare the same information twice. The main difference is the extra detail and additional information which is required for regulatory accounting. Regulatory accounts are therefore required to present financial information in a suitable and usable format that allows the costs, revenues, assets and liabilities of a utility's regulated activities to be distinguished from non-regulated activities. In order to move from the statutory accounting data to that required for regulatory accounting, it will be necessary to adjust for the differences arising between the Regulatory Asset Base and the total fixed assets as reflected in

[3] For example, Ofgem is bound by the requirements of the UK Utilities Act 2000, section 105, relating to the disclosure of information.

the statutory accounts, and the corresponding differences in depreciation between the two approaches.

2.3.1 Regulated and Non-regulated Activities

When a utility carries out other activities which are not regulated, namely generation and/or supply or other excluded activities, this has to be separated for regulatory accounting purposes. Normally, companies which operate more than one activity present their national statutory accounting information in a consolidated format. This means that the financial data is grouped together for the company as a whole, sometimes even at an international level. Therefore, a regulator requires the consolidated data to be separated or disaggregated.

2.3.2 Disaggregation of Activities

Revenues, costs and assets reported in regulatory accounts must be disaggregated between regulated activities and non-regulated activities. Regulated activities are activities which operate under monopolistic conditions, namely transmission and distribution[4]. Regulation may be applied for activities where there is potential to introduce competition, but where it is considered that competition is not sufficiently developed to protect the consumer (and where the incumbent firms would also likely have sufficient market power to charge excessive prices). One example would be retail sales, say to households, in an electricity market where the retail sector is being gradually opened to competition. Another example would be price control over generation prices if the market design does not require competitive generation or regulator has opted for gradual introduction of wholesale competition.

Operating costs are costs which are directly associated with the regulated activity, and those which represent a share of joint or common costs of related parties should only be considered. Cost allocation is not within the scope of this issue paper, but there are some general principles regarding allocation that should be kept in mind:

- Causality: the allocation base should be the share or use made by the regulated utility of the activities which cause the revenues to be earned, the costs to be incurred, the assets to be acquired and liabilities incurred
- Objectivity: the basis for the allocation should not unduly favour the regulated utility or any other company

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[4] In those cases the market can most cheaply be supplied by a single firm (which would then have sufficient market power to charge excessive prices, that is those that are well above average prices), rather than by a multiplicity of competing firms.

- Consistency: the basis of allocation, where practicable, should be consistent from year to year
- Transparency: the basis of allocation should be clear and understandable

2.4 Criteria for determining the allowed cost level

Once the data collection process is completed and the utilities have submitted their regulatory accounting information, the regulator will then use this information to determine the allowed revenues. The allowed revenues are established from the revenue requirements of the regulated utility.

This section explains the importance of revenue requirements and the building blocks approach, which can be adopted by regulators to determine revenue requirements for price control purposes.

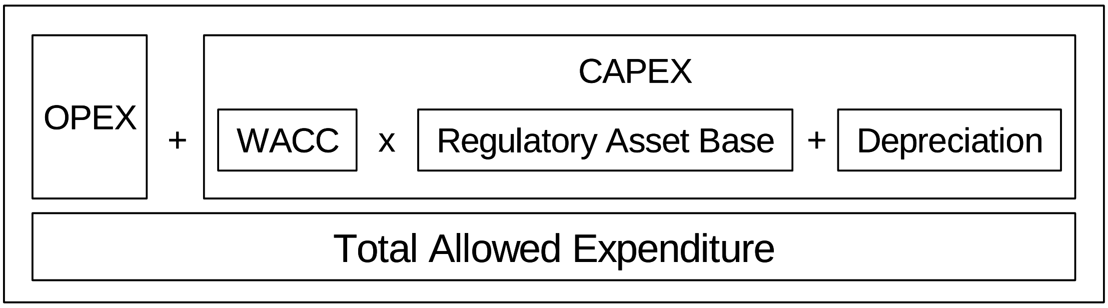
2.4.1 Revenue Requirements

The determination of revenue requirements is of fundamental importance in the process of tariff determination. Revenue requirements are equivalent to the justified costs that should be allowed to be recovered from the regulated service. The terms "economically justified" and "eligible costs" are widely used by regulatory authorities. Eligible cost should include reasonably efficient operation and maintenance cost (O&M cost) and capital cost (including depreciation and return on assets). O&M costs are often considered the 'cash outlay' costs of an infrastructure business. Recovering these costs does not provide any return to the business owner, as they are paid out in the form of salaries, ongoing operating and maintenance costs, emergency service costs, etc. These costs allow the business to provide and maintain service. On the other hand, the inclusion of capital costs in the revenue requirement formula recognises the owner's investment in the regulated utility and the capital-intensive nature of the business.

The regulator should recognise the importance of recovering a sufficient level of O&M and capital cost. However, it is important that the regulated service providers do not incur either excessive or unnecessary costs in providing their services. It is in the interests of all concerned parties that the regulated utility and its stakeholders are able to examine the level of current and forecast costs, and to compare those costs with other similar entities (generally abroad). Benchmarking is the right tool for the establishment of efficient costs during the regulatory period. The output of the benchmarking process is the relative degree of inefficiency of a particular regulated service provider as opposed to best industry practice.[5]

In tariff setting, the regulator needs information which is taken to determine the revenue requirements that a regulated utility needs to cover its costs. Typically, the building blocks approach can be applied by adopting a step by step process which considers a regulated utility's costs. **Figure 1** below depicts this.

Figure 1: Building Blocks Approach.



The building blocks approach aims to provide an assessment of the regulated utility's current and prospective costs. The items that make up the building blocks are discussed as follows.

2.4.2 Operation and Maintenance Cost (OPEX)

Operation and maintenance costs are the costs incurred by the regulated utility in maintaining and operating their assets. Operation and maintenance costs will cover those cost elements that are expensed for accounting purposes. Operation and maintenance costs that are not directly attributable to the regulated activities should be allocated to them using appropriate keys.

[5] Benchmarking is widely used in regulation of electricity networks and less popular in generation and retail activities. Electricity networks use a wide range of inputs (capital, labour) to provide services to customers. While all network service providers use broadly the same inputs, some providers may use proportionately more of some inputs and fewer others. The mix of inputs used depends upon, among other things, management practices and the operating environment. Similarly, the nature of services provided by networks varies according to the nature of customer demands. For example, some network service providers may need to maintain significant network capacity to transport power to a small number of customers while others may serve a large number of customers with limited and highly variable demand. The benchmarking technique must be able to accommodate these different supply and demand conditions. Further, the technique must recognise that it is possible to operate at equal efficiency while substituting between different inputs, and sometimes even outputs.

2.4.3 Capital Expenditure (CAPEX)

CAPEX is defined as any expenditure for the purpose of regulatory accounts has been included in the value of the fixed assets of the regulated business. CAPEX is involved when any of the following is verified:

- The expenditure relates to the purchase, development or construction of a new asset
- The expenditure will increase and improve the capacity or functionality of the regulated asset over time
- The expenditure will reduce the ongoing maintenance of the assets, and/or
- The expenditure will extend the useful service life of regulated assets beyond what had been expected when the assets were originally installed

This means that if the expenditures such as new investment in technology and equipment will enhance the economic benefits of the regulated company in the future, i.e. improvement in security of supply and the above listed points.

The inclusion of capital cost (CAPEX) in the revenue requirement formula recognises the owner's investment in the regulated utility and the capital-intensive nature of regulated businesses (e.g. network infrastructure of generation). Failure to include adequate capital related costs as part of the revenue requirement of the regulated business may result in a reduction in efficient investment. This could ultimately lead to reductions in cost coverage and quality of service levels, hence endangering security of supply over the medium to long term. Fundamental to the measurement of capital costs in the revenue requirement computations is the assessment of the regulated business's capital investment and the establishment of the regulatory asset base (i.e. the asset value that is used for the calculation of the return on assets).

2.4.3.1 Regulated Asset Base (RAB)

The regulated asset base comprises the physical assets that are used to provide the regulated services and is a key ingredient of the building blocks approach. The regulatory values of the regulated companies' assets represent the value of the investment upon which the owners of the business earn a return, and the value that is returned over the economic life of the assets (regulatory depreciation).

2.4.3.2 The Return on Assets

Regulated service providers normally compete for finance with companies operating in competitive markets and thus have to accept competitive financial market conditions. Equity and debt finance will only be available to utilities that agree to credit conditions posed to firms that operate in competitive industries and have a comparable credit ranking. Equity finance will only be available if profitability (consisting of a dividend component and a market value growth component) can be expected that covers the risk-free rate of interest (i.e. the yield of long-term, credible government bonds) and a risk premium (where both risks and the risk premium can be expected to lie below corresponding values in competitive industries, provided that the political and regulatory environment is predictable and stable). Investors will be interested in engaging in the regulated industry if and only if projects allow them to meet financial requirements. These financial requirements are measured against the benchmark of earnings to be made in other product markets, in industries in other countries and/or in the international capital (commodity) markets.

Given the capital-intensive nature of regulated energy businesses, the return on capital component of the regulated revenue could account for significant share of annual aggregate revenue. As relatively small changes to the rate of return can have a significant impact on the total revenue requirements and ultimately on end-user prices, it is important that the regulator sets the rate of return at a level that reflects a viable, yet fair, commercial return for the regulated businesses. Setting a rate of return below the cost of funds in the market could make continued investment in developing the regulating activities difficult or even unattractive for the owner. This would create pressure on the regulated service providers to reduce maintenance and capital expenditure below optimum levels, and thus to undermine the quality of service offered to users. Conversely, if the rate of return were set too high by the regulator, the regulated businesses would earn a return in excess of their cost of capital. This would distort price signals to consumers and investors, resulting in a misallocation of resources and in sub-optimal economic outcomes.

2.4.3.3 Weighted Average Cost of Capital (WACC)

The Weighted Average Cost of Capital (WACC) is a commonly used method for determining a return on the asset base. The WACC is determined in the regulatory regime as the weighted average of the cost of each individual component of the capital structure, i.e. debt and equity weighted by its share. The traditional industry use of the WACC is aimed to determine the value of the cash flows resulting from an investment to assess its profitability. It is common practice in the industry to determine the after-tax cash flow and to apply a nominal post-tax WACC discount factor to those cash flows in order to develop a net present value base.

A number of regulatory authorities have determined that a pre-tax, real WACC should be applied to an inflated value of the asset base in order to determine ongoing returns. Some other regulatory offices use post-tax WACC and consider taxes explicitly in a separate position, similarly to operation and maintenance cost.

A pre-tax WACC can be defined as the average rate of return needed to provide an appropriate return to investors (both debt and equity) in the company concerned, and pay the company's business (corporate) tax. It can be calculated via the following formula:

WACC = (Equity portion of capital) (Cost of capital, post tax, nominal) / (1 - tax rate) + (Debt portion of capital) (Cost of debt, nominal)

Post-tax WACC can be defined as the average rate of return needed to provide an appropriate return to investors in the company concerned; it assumes that the company's business tax has already been paid. It can be calculated via the following formula:

WACC = (Equity portion of capital) (Cost of capital, post tax, nominal) + (Debt portion of capital) (Cost of debt, nominal) (1 –tax rate)

The reason for the difference (the use of the tax rate) between the two formulae is that the cost of capital is normally estimated from empirical observations of rates/data that are generally after tax. Hence, in order to calculate a post-tax WACC, no adjustment is needed to the estimate of the cost of capital. However, in order to calculate a pre-tax WACC, the estimate of the post-tax cost of capital needs to be increased, by dividing by "(1-tax rate)", so that corporate tax payments can be met from the pre-tax WACC.

The cost of debt is also normally estimated from empirical observations of, for example, the interest rates on loans, which generally do not take into account the effect of interest payments on the business's tax liabilities. Under most tax jurisdictions, the business's tax liability is reduced by an amount equal to the tax rate multiplied by interest payments on loan (tax relief). The loan rates seen in the market place do not take this tax effect into account. In order to calculate a pre-tax WACC, no adjustment is hence needed to the estimate of the cost of debt. However, the post-tax WACC needs only pay the after-tax interest on debt. Hence, the estimate of the post-tax cost of debt needs to be decreased to allow for this amount [multiplying by (1-tax rate) does this]. Alternatively, for the post-tax WACC, the effect of the interest payments on tax liability can be reflected not through a lower WACC, but directly in the estimate of the taxation liability in the revenue requirements.

If the regulatory asset base and components of the revenue requirements are already compensated for inflation, then a real-terms WACC will be used. If these elements are not adjusted for inflation, then the WACC needs to accommodate inflation and so a nominal/inflation-adjusted WACC is needed.[6]

2.4.3.4 Asset Valuation

There are arguments about asset valuation vary from insisting ownership rights to be recognised, to the questioning of whether any value should be attributed to 'sunk' investment. Regulators usually endorse a particular asset valuation methodology. Asset valuation issues must be considered with regard to the functional adequacy of regulated assets, market assets value, overall profitability of the regulated business, and to the sustainability of cash flows as well as any equity considerations.

The 'historic cost' (actual cost) valuation methodology values assets at their original purchase price. This approach has the advantage that it is administratively efficient and can be easily audited because the data should be available from financial statements. Further, it is relatively inexpensive since it does not require the explicit computation of regulatory asset values and it is objective because it relies on actual data rather than judgements. However, the method exhibits some disadvantages. Historic costs may understate asset prices in times of inflation and overstate asset prices in times of technological change. Secondly, it may lead to unstable prices (e.g. prices may rise when new, more expensive assets replace existing assets). Thirdly, data may be inadequate (especially for assets that have been acquired a long time ago).

Based on the presumption that some compensation for asset or capital devaluation through inflation must be conveyed to the investors in order to allow for long-run operations (new investments have to be paid for in current values, and must be partly financed through revenues occurred in the past), inflation compensation can in principle be achieved through the inclusion of asset replacement costs in the regulatory scheme. The replacement cost methodology calculates the cost of replacing an asset with another asset (not necessarily the same) that will provide the same services and capacity as the existing asset.

One interpretation of depreciated replacement costs is that such costs are consistent with the price charged by an efficient new entrant into an industry, which is in turn

[6] In addition, there is a third choice; whether to use a "statutory" tax rate, that is the rate of business tax set out in the national tax legislation, or an "effective" tax rate. In the context of calculating WACC for regulatory purposes, the "effective" tax rate generally is set equal to the company's tax as a percentage of the estimated regulatory profit. The effective rate will tend to vary between companies and to differ from the statutory rate. Theoretically, the issue of a pre- versus post-tax rate can be separated from that of the choice of tax rate; either the statutory or effective tax rate can be used with the pre-tax and the post-tax approaches.

consistent with the price that would prevail in the industry in a long-run equilibrium. A second interpretation is that replacement costs reflect the price that a firm with a certain service requirement would pay for existing assets in preference to replicating those assets.[7]

The main economic principle for assessing the economic value of any assets is that their value to investors be equal to the net present value of the expected future cash flows generated by those assets. The practical difficulty in making this assessment for regulated monopoly businesses is that the future revenue derived from the assets is itself determined by the regulator – hence the issue of circularity associated with the use of discounted future cash streams as a methodology to value sunk assets. This potential circularity could be eliminated by the use of a replacement cost approach. The value of a network in this case would be the sum of the depreciated replacement cost of the assets that would be used if the system were notionally reconfigured so as to minimise the forward-looking costs of service delivery[8].

Moreover, the application of final consumer prices as a starting point for discounted cash flow calculations could lead to low asset values if these prices were initially not cost-reflective. Further, even if there were a political will to correct the starting point of such calculations, a "circularity" problem as stated above would probably still remain. The "circularity" problem results from the fact that, on the one hand, the regulatory asset value depends on the revenues (prices) because they determine the cash in-flow in the discounted cash flow calculation. On the other hand, the common logic of the regulatory process requires the regulatory asset value as an input in order to determine both revenues and prices.

The application of replacement costs deserves special attention. As already mentioned, the replacement cost methodology calculates the cost of replacing an asset with another asset (not necessarily the same) that will provide the same services and capacity as the existing asset at the time point of valuation. The application of replacement costs should be checked with respect to the following major issues:

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[7] In the UK practice, the valuation of assets is based on replacement costs using the Modern Equivalent Assets concept, i.e. the cost of replacing the existing assets with assets that serve the same function, and which a new entrant might be expected to employ as of today. Such assets are likely to incorporate the latest available (proven) technology.

[8] In the Australian regulatory practice, this approach is called "optimised depreciated replacement cost". Additional emphasis is put on the regulatory option to eliminate redundant network assets. See IPART, Independent Pricing and Regulatory Tribunal of New South Wales (1999), Draft Statement of Principles for the Regulation of Transmission Revenues.

- Is the regulator competent to impose revaluation of assets for regulatory purposes, and/or does this contradict any relevant national statutory accounting rules?
- Is it feasible to revalue such assets in the first place?
- If prices had to be raised after asset revaluation, would this be politically and socially acceptable?

2.4.3.5 Depreciation Costs

To an accountant, the term 'depreciation' means a systematic allocation of the cost of an asset to the accounting periods in which the asset provides benefits to the entity. This allocation is designed to mirror the consumption of the service potential and/or the economic benefits associated with an asset over its useful life, resulting from both use and obsolescence. The purpose of such provisions in accounting is to ensure that the cost of the flow of services provided by capital assets is met in the price of these services, and is additionally used to build up funds for the replacement of these assets.[9]

In the companies' accounts, a number of approaches are used for constructing the depreciation schedule. These include:

- Methods using historic (nominal) cost accounting – usually straight-line or diminishing balance reductions[10] vs. the original cost level over time;
- Methods using current cost accounting based on replacement cost estimates – again either straight line or diminishing balance depreciation based on the age of the asset; and
- More flexible arrangements, whereby depreciation is adjusted to complement other components of returns so that the revenue stream mirrors the behaviour of an annuity.

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[9] See IPART, Independent Pricing and Regulatory Tribunal of New South Wales (1999), Rolling Forward the Regulatory Asset Base in the Electricity and Gas Industry, Discussion Paper, January.

[10] Often, companies use accelerated depreciation methods. The mostly used method is the method of declining balances. According to this method, a fixed percentage of the written value of the asset is charged as depreciation each year. The effect of this is that decreasing amounts are charged each year in contrast with the straight-line method that produces an equal charge each year. The fixed percentage to be used is the percentage, which should be deducted from the written down value each year so that, over the lifespan of the asset, total installation cost is gradually reduced to net scrap value. Accelerated depreciation is sometimes used with the main objective in mind of reducing the company's corporate tax burden in the short run and is therefore usually not favoured for regulatory purposes.

In more traditional regulatory frameworks, straight-line depreciation is the norm and any use of straight-line depreciation would be consistent with those frameworks.[11] In common with the traditional approach used in valuation, this approach calculates the write-down of the gross asset value to obtain the depreciated asset value, by assuming a linear relationship between accumulated depreciation and the age of the asset relative to its expected economic life. This approach amounts to assuming that the economic depreciation of an asset is equivalent to its straight-line depreciation. It makes sense that the approach to depreciation taken within the cost valuation methodology matches the one utilised within the regulatory framework.

2.4.4 Defining the Cost level

The regulator relies on the assurance that the data submitted by the utility is as accurate as possible to be able to determine the allowed cost level of each utility. Economic benchmarking techniques can be applied to distinguish the utilities which are operating more efficiently than others, and to define the allowed cost level of each regulated company.

Networks are monopoly activities and regulators usually tend to benchmark this sector subset to establish annual efficiency increase targets. However, the high diversity and specifics of the transmission (but also system operation) in many countries have proven the limitations of classical (econometric and non-parametric benchmarking) methods in this area. Therefore, regulators use detailed individual reviews and uni-dimensional ratios to assess efficiency of transmission businesses.

Differently from the transmission activities, distribution lends itself to economic benchmarking more clearly because of the existence of a greater number of comparators, both nationally and internationally. For this reason, regulators tend to apply more articulate, economic (statistical and non-parametric) benchmarking with a great number of variables in distribution, including quality of supply.

In the environment of ‘regulated’ generation, benchmarking generating plants may be important for regulators as a supporting measure to estimate the comparative performance of the generating companies. Although econometric techniques have been used in the past, especially in the North America, to estimate cost and production efficiency for generating plants, these studies were more oriented towards the academic debate of minimum efficient scales for power production,

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[11] One should be aware of the fact, however, that straight-line depreciation itself is not immune to criticism. One of the major issues regarding the determination of regulatory depreciation is the need to achieve a time profile of revenues that is economically efficient. It could be argued that straight-line depreciation fails to capture the important features of economic depreciation that are evident from the sale value of assets or the pricing of products over the actual life-cycle of productive assets.

rather than towards a regulatory perspective. Benchmarking of generating plants can be performed at different levels of detail, depending on whether the regulator is interested in simply 'steering' the output of generating units, or alternatively be designed broader referring also to fuel mix, location, technology, emissions, and so on. The typical efficiency indicators include a set of uni-dimensional ratios such as: reliability, production unit cost, environmental impact, etc.

Benchmarking can only be useful if the sample size is reasonable, the companies being measured are relatively homogenous and the data quality is reasonable. Economic benchmarking is a separate topic in itself, and will not be discussed any further in this paper.[12]

[12] See for more information the KEMA paper prepared for ERRA in 2006 "Setting X Factor"

3 Setting an optimal level to energy prices

In this chapter, a discussion of **pricing methodologies** will be undertaken, taking into consideration possible provisions in legislation, rules and methodologies that have an effect on energy prices.

In addition to typical economic pricing factors, the role of **macroeconomic objectives** (economic growth, inflation) will also be considered, as well as their influence on energy prices.

In addition, **social affordability** and **political acceptance** issues will also have to be considered when setting up the general pricing policy.

In determining optimal levels of energy prices there are several core factors that should be considered. These are as follows:

- economic efficiency;
- cost recovery;
- efficient regulation;
- simplicity and transparency;
- non-discrimination;
- social acceptability and political acceptance; and
- macroeconomic constraints

A discussion of energy pricing issues follows.

3.1.1 Economic Efficiency

An effective charging structure will signal to users the costs that they impose on the regulated business and encourage the operator to utilise its assets optimally (both day-to-day and in the longer term with respect to maintenance scheduling and network expansion).

While economic efficiency has several dimensions, the most important factor with regards to tariff structures is referred to as allocative efficiency, i.e. the optimised use of the system by individual users. This implies that prices should reflect economic costs by signalling the marginal cost of operation and future investments while also reflecting the sunk cost associated with the already existing infrastructure.

Marginal costs can be defined as the full economic costs incurred in supplying a small increase in demand of the relevant commodity (or the costs saved by reducing supply to meet a small decrease in demand) given the demands placed on the system by all over users. The approach of using marginal cost-based prices as signals for efficient utilisation of regulated service attempts to replicate the outcome on the competitive market whereby producers sell at the competitive market price whenever it is equal to or greater than their marginal cost. Depending on whether capital stock is kept constant or investments can be added, marginal cost can be divided into: short and long-run marginal cost. Short run marginal costs of are defined as the additional costs arising when one additional kWh is demanded and the installed capacity remains constant. Differently, long run marginal costs take into consideration also the capital investment incurred by the regulated company when one additional kWh is demanded.

By providing appropriate signals to individual users of the marginal cost from their use of the system, profit-maximizing users will behave in a manner that maximizes the net benefits and minimizes the cost of the system as a whole.

3.1.2 Cost Recovery

Investments in energy systems are characterised by economies of scale and scope and is lumpy, so that 'overbuilding' is often the least cost option. In the case of network businesses, these characteristics of network infrastructure seriously limit the extent to which 'market forces' can be introduced in the provision of those services, and in particular investment. Decentralised investment would result in network investment that is insufficient or non-optimal from a wider public policy perspective. Economies of scale, which are endemic for the technology, imply that marginal cost pricing will usually not be sufficient for the utility to fully cover its cost due to a large fraction of fixed cost. Therefore the pricing regime should be structured in such a way that the utility can earn sufficient revenue to cover their efficient operation and maintenance and capital costs, including a reasonable rate of return.

3.1.3 Efficient Regulation

The pricing methodology should encourage efficient operation by the operator while keeping a light regulatory burden. ERRA members should recognise the importance of recovering sufficient levels of O&M and capital cost. However, it is important that the operator do not incur excessive or unnecessary costs in providing services.

3.1.4 Simplicity and Transparency

It is important that pricing rules are clearly understood. Regulated charges should be understandable and transparent so that a user can readily determine the charges it will face. Excessively sophisticated approaches may on first sight appear to promote efficiency, but they may appear as a "black box" to users. Under such circumstances, users may not respond to the corresponding economic signals at all. While the regulated company can (and should) make its tariff model and methodology available to all users, they will generally best respond to signals if the effects of a user's decisions on its charges are reasonably intuitive. In other words, charges should be predictable.

The primary aim of simplicity and transparency is also related to a number of secondary objectives. First, long-term investment decisions will only be based on any economic signals if the pricing regime is stable over a sufficient period of time. Secondly, a simpler tariff structure will reduce the administrative burden, and thus ease implementation. Furthermore, to avoid disputes the tariff regime needs to be clear and should be based on explicit rules as far as possible. Finally, transparency can be seen as a prerequisite for general acceptance by users and the general public.

3.1.5 Non- Discrimination

A key element of the pricing regime is the requirement to ensure that a level playing field is created for all service users. This requires the notion of treating all users equally irrespective of size, ownership or other factors, i.e. non-discrimination between users unless they generate different underlying cost patterns.

In practice, this means that all users should face the same methodology for calculating charges – not necessarily the same charges. It does not mean that all users will face the same payments, e.g. a large power plant requiring a large and complex connection will not pay the same absolute network charge as a smaller plant or small customer. They should both, however, have their charges calculated in the same manner.

3.1.6 Social affordability and political acceptance

A final point should be made about the effective economic, social, and political affordability of new-style pricing schemes made according to the sheer principles of microeconomics.

It is well known that microeconomic efficiency principles are not always in accordance with social equity and fairness. Economic efficiency principles might for instance prescribe that pricing should ensure allocative efficiency (e.g. by using Ramsey pricing). Unfortunately this means sometimes that social inequality may eventually arise. Finally, economic efficiency means that cost reflectivity should be achieved, thus spelling in fact the end of subsidies and other benefits to poorer customers. Traditionally, in many countries (including also ERRA members[13]) industrial customers have long subsidised households. It is fair to say that political and social affordability of reformed tariff schemes is perhaps one the main challenges being faced by many of the ERRA countries in the course of their regulatory development.

This is less and less feasible in a modern pricing environment. As a result, some poorer people might be left in a condition of fuel poverty. Countries are tackling this issue by means of social tariffs (e.g. inclining block tariffs) and other benefits aimed at poorer customers. Such benefits must be ‘means tested’, i.e. tested for income, as otherwise they might end up with the wrong recipients (for instance, wealthy individuals with low consumption, second home owners, and the like), and they should not distort the economically efficient nature of prices. This means that, instead of scaling prices down for poorer households and then distorting the whole economics of energy pricing, it would make more sense to keep prices where they should be (i.e. at cost reflective levels) and provide indirect (outside of the regulated tariffs), separate subsidies (handouts) to poorer individuals. Such schemes have been used all over the world. However, it is notorious that the unfocussed nature of the indirect subsidy might trigger irresponsible behaviour such as ‘binge spending’ of the subsidy on other amenities that have nothing to do with electricity or gas.

3.1.7 Macroeconomic constraints

On some occasions, constraints of a macroeconomic nature might play their role in limiting regulators and companies from pursuing pricing strategies that are in line with the recommendations provided elsewhere in this document. For instance, in some EU accession countries such as Slovenia, it was observed that electricity and other utility prices could not rise by more than a given amount in order to be consistent with the macroeconomic plan of the central bank, which in the run-up to 2004 had to make sure that Slovenia met the Maastricht criteria to enter the European Union and to pave the way for joining the Euro, which it did (the first among the 2004 joiners) on 1st January 2007.

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[13] Distorted tariff structures have been rather common before political changes in the former socialistic countries.

On other occasions, other constraints (inflation, GDP growth, unemployment minimisation) also prevent regulators and companies from pursuing full price readjustment/realignment. This is the case, for instance, of Hungary and other countries where energy policies, hereby including prices, had to become subsumed under the general economic policy of the country, both before and after joining the EU.

Finally, on other occasions macroeconomic and microeconomic policies interact to keep price rises moderate, and to make it possible for investors to enter the market without causing widespread malcontent or even fuel poverty throughout the population. This has been the case, for instance, of Romania (EU joiner, 2007) whereby the national energy regulator was *de facto* overruled by the Government in 2003-2004 when price caps were established by primary public authority for electricity distribution tariffs, at the time when regional electricity distribution networks were privatised.

3.1.8 The tariff policy trade-off

The application of all pricing principles should be considered in the light of their interdependencies and not with mechanistic prioritising of one of them. There is no universal answer as to how these principles should be prioritised. Efficiency and cost recovery are key objectives in pricing but must be balanced against other objectives, including non-discrimination against certain market participants, simplicity in implementation and transparency to users, stability to support long-term investment decisions and flexibility to support changing market environments. These objectives represent key criteria for judging the appropriateness of various charges for achieving efficiency and cost recovery objectives.

It is helpful to consider the policy-making trade-offs encountered when designing electricity tariffs, especially downstream. This trade-off is between socialised costs that may be used for electoral but also for purely social reasons, and cost-reflective tariffs that are economically efficient but, sometimes, politically unacceptable and socially not affordable. The trade-off is relatively steep depending on the social and political perceptions about who should pay for cost reflectiveness (in terms of tariff level and tariff structure) and cost transparency, and who should remain sheltered.

While the attempts to incorporate social thoughts are entirely understandable, social objectives that are “built” into the regulatory formula, or into the price structure itself, might have a negative impact for the medium-term development of the industry. Ideally social objectives should not be pursued at a rate-making level but outside of the price-making schemes.

While this objective cannot be changed in short-run in some of the ERRA countries, the long-run policy of all ERRA member states would have to be, that of gradually removing these subsidies and to go for transparent and subsidy-free prices as soon as feasible. Forcing the companies to expose any non-transparencies well in advance of free price implementation would obviously make it easier for ERRA members to move on towards fully transparent and cost-reflective prices in the longer run, i.e. when political and social conditions will eventually permit.

4 System of Auditing

Auditing is an independent and expert examination on how an organisation handles its resources and may suggest changes in the organisational practices to meet the established standards and obligations. Operationally, it is an inferential (sampling) practice and auditors must collect and analyse evidential material in order to form their conclusions. The auditor must obtain relevant and reliable audit evidence which is not necessarily total, but must be sufficient to enable a professional opinion to be formed on financial statements and other accounts.

Regulatory initiatives try to use the cognitive and economic resources of regulated entities to guarantee compliance. In particular, internal and external audits have begun to assume an essential role to put these intentions into practice.

4.1 Background of regulatory accounts audit

In setting the background for the auditing of regulatory accounts, the first questions to be asked are: who the players are, what they do, and how they fit together. Figure 2 illustrates the key elements of the auditing environment, the main players and their interrelations.

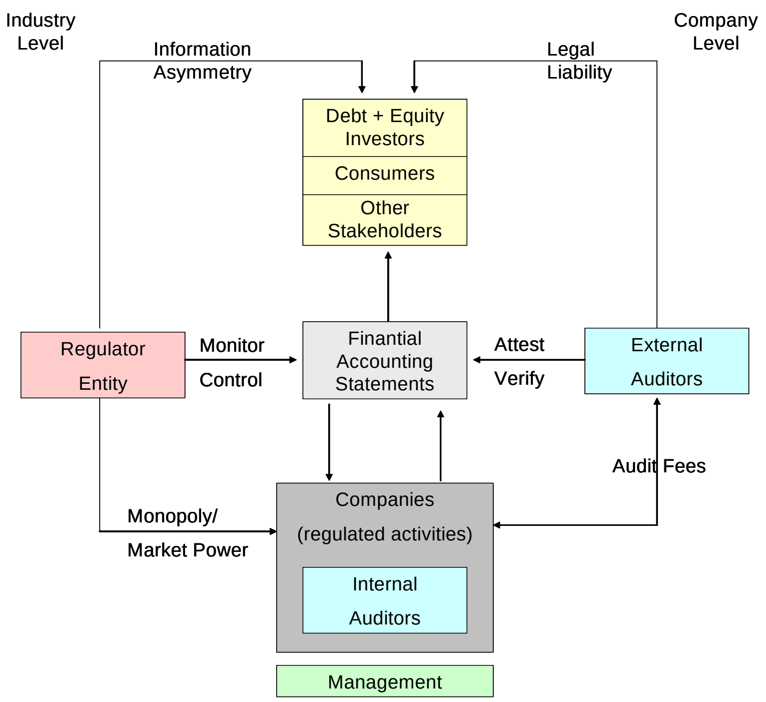


Figure 2: Overview of the auditing system.

Financial statements provide measures of company performance that support decisions by a wide variety of individuals.

Equity and debt investors are interested in financial information because it helps them to know if management is making profitable business decisions, to assess the probability of default and to establish the terms of the debt contract, respectively.

Auditors attest whether financial statements were prepared in conformity with financial reporting standards and whether they fairly present the company's financial performance and position.

In general, regulators collect company accounting and operating statistics on a regular basis to assess the company's ability to operate efficiently, the financial condition of the company, and market demand. Regulatory entities seek to provide citizens and stakeholders with an acceptable degree of access to information about regulated companies, promote transparency in the regulatory process, and at the same time protect private information on consumers and companies.

Management is responsible for the preparation of the financial statements based upon the accounting records of the company. Each regulated company that is required to prepare regulatory accounts also has to arrange for those accounts to be audited.

The provision of an audit report is an important part of the requirements for regulatory accounts as it should enhance the quality, objectivity and credibility of the regulatory accounts, both to the regulator and to other users. Indeed, the development of efficient industrial structures in the presence of monopoly/market power is enhanced by reducing the information asymmetry that exists between the monopoly and the consumer. Where necessary, the regulator will be involved in the process of appointing the auditor and of agreeing the approach to materiality (i.e., when an information omission or misstatement can influence the economic decisions of users taken on the basis of the financial statements). The auditor will have a duty of care to the regulator and the audit report will be also addressed to him.

4.2 External and internal auditing

When auditing, it is useful to distinguish two classes: external and internal audits. External auditing is the process whereby an independent auditor examines an organisation's financial statements. Internal auditing is an examination that usually certifies the efficiency and effectiveness of processes, departments, projects and/or internal controls.

There are many types of external audit, with different goals attached to them. The most common is the financial statement's audit, which judges the reliability of financial reports in view of financial reporting principles. 'Compliance' audits check if legal or contract obligations have been fulfilled. Audits may test particular accounts or departments, or evaluate information systems or the internal control environment.

In a standard audit, most of the time and effort go into testing the consistency of the accounting practices. For instance, auditors test if the company registers transactions to the correct accounts all of the time, and whether the balances of these accounts can be trusted. It is typically performed by companies of practicing accountants to lend credibility to financial statements and other management reports, ensure accountability for debt investors, and identify weaknesses in internal controls and systems. The result of this process is the audit report or audit opinion. A standard audit report is normally divided into three paragraphs: the first states that the financial statements were audited, but that the responsibility for preparing the reports rests with management; the second describes that the auditor conducted the audit in accordance with a defined set of standards or procedures; and the final statement comments on the company's financial position and performance.

Many organisations employ or hire internal auditors, who do not attest to financial reports but focus on the internal controls of the organisation. Sometimes such controls will focus not just on normal operations but will also be based quite formally in an internal audit department being set up to purpose. This department would support and test the internal control environment, and would also be expected to participate in reviewing the financial statements prepared by the accounting department. Normally, an internal audit department will report directly to the Board of Directors in order to preserve its autonomy from the institution's management and operations.

Obligations to prepare regulatory accounts are usually only placed on companies with monopoly or market power in these industries. Regulatory accounts will be prepared and audited using the common regulatory accounting framework.

4.3 Reliability of auditors

One of the major issues faced by private auditing companies is the need to provide independent auditing services while maintaining a business relationship with the audited company. Management has incentives to act and report in its own interest at the expense of the stockholders, and auditors face conflicting goals: they are responsible to capital providers to perform independent and objective audits, but their fees are paid by management, who can choose to replace them. Such influence can threaten the auditor's independence.

However, three factors stimulate managers and auditors to act professionally: professional reputation, legal liability, and ethics. Management is legally responsible to the stockholders to act in their interest and to report in “good faith”. Auditors are legally responsible to the stockholders to conduct an independent audit. These responsibilities create a legal liability to those who rely on financial statements. Companies with reputation for quality, service and ethical business practices are highly valued by debt and equity investors, partially because their financial statements can be trusted. Auditors also benefit from ethical behaviour and strong reputation, as independent and respectable auditors face fewer liability suits and can generally charge client companies higher fees because their audit reports are perceived as reliable and their quality is trusted by the stakeholders and public, thus allowing more reputable auditors to charge higher fees for the perceived quality differential. Finally, legal constraints also limit the recurrence of unethical if not outright dishonest behaviour. Following the well-known Enron-Andersen scandal in the early 2000s, legislation in the US and then worldwide has been tightened to make sure that both companies and auditors would face much stiffer penalties, including immediate imprisonment for managers and accountants, if they were found out to behave dishonestly towards shareholders, consumers, and/or any other relevant stakeholder.

At present, the auditors of a regulated company’s statutory accounts typically audit its regulatory accounts. This, combined with problems relating to the consistency and quality of information contained in regulatory accounts, raises a number of issues regarding the effectiveness of the existing audit arrangements. Given the increased emphasis on regulatory accounts, it is important to ensure that any arrangements for the auditing of the regulatory accounts are robust and consistent. The objectivity and credibility of regulatory accounts could be improved if the auditor of the regulatory accounts were always different from the auditor of the statutory accounts (which is not always the case). However, appointing separate auditors might of course increase the overall costs of the audit if the auditors of the regulatory accounts needed to duplicate some of the work associated with the statutory audit. For this reason, and also because there might be implications on the timeliness of the overall reporting process, regulated companies tend, when they can, to appoint the same auditors for both their statutory and regulatory accounts, although this practice might of course be thwarted by sector regulators if they wanted to. Separate auditing obligations might possibly come at the expense of having to tolerate some extra audit costs being passed through on to final consumers. Nonetheless, this could well be a fair price to pay in the end if separate auditing processes managed to bring down overall regulatory utility costs by ensuring that the company behaves more ethically and efficiently in its endeavours.

5 Results from the Questionnaire

The questionnaire which was developed by KEMA and sent to all ERRA members consists of questions related to the respective countries' current regulatory accounting practice. In the following text, received feedbacks are described by country. The description is purely based on the regulatory responses and information provided by the respective regulators. The next section we will evaluate the questionnaires and provide a summary

A summary of the results/recommendations and derived conclusions is given in Chapter 7.

5.1 Albania

The Albanian Regulatory Authority (ERE) request accounting information on a periodic basis, monthly quarterly and yearly. Additional detailed information is requested for tariff review. In regards to timing companies have within March of each year to complete the information.

The Board of Commissioners has approved a set of statements that licences should submit. The Tariff and Pricing Department is responsible for checking the data when information is required for the purpose of tariff review. ERE sends out templates to the licensees for them to complete. The methodologies serve as guidelines on how to complete the appropriate information. Generation, distribution and retail activities are integrated therefore the accounting information are consolidated and ERE has to ask for further information. Companies that conduct more than one activity are required to separate the information by activity. To separate these activities (apart from transmission) is proving a difficult task since these are bundled. Statutory accounts for these activities are also submitted to ERE and are consolidated. However the national statutory accounting rules do not currently comply with international accounting standards but will be adopted soon in the Law of Accounting. In additional to traditional accounting data, some technical data is also requested e.g. level of voltage.

Pricing objectives include:

- transparency,
- fair (cost reflective),
- consideration of licensee's needs for improvements of financial and technical indicators.

* Opportunity for licensees to recover reasonable costs of providing services.
* To encourage efficiency in internal operations and management.
* To consider the National Strategy of Energy and Document of Policies of the Power Sector.

ERE is responsible for conducting audits as this is specified in the energy law. Local independent accounting experts are hired for auditing purposes.

5.2 Armenia

The Pulblic Services Regulatory Commission (PSRC) request financial statements from regulated companies on a quarterly and yearly basis. In addition technical and economic reports are also requested on a monthly basis. For monthly and quarterly reports these must be submitted by the 25th day of the following month/quarter. For annual reports these should be submitted by 15 April of the following year.

Once financial information is submitted the commission will verify this through the relevant departments. If this is approved the information will be marked “preliminary verified” and is sent to the relevant department for registration. However if any inaccuracies or errors are identified the report is not accepted and sent back to the regulated company to re-submit within 5 working days. Financial information on generation, transmission, distribution and retail are required which are separated by activity. The commission provides reporting forms to companies to complete. The information required include: Income Statement, Information on Wages, Bonuses and other Fringe Benefits, Information on Acquired Fixed Assets, Information Consumption of Inventories, Information on Repairs of Fixed Assets, Information on Non-Current Tangible Assets in-Process, Information on Credits and Loans, Balance Sheet, Profit and Loss Statement, Statement on Changes in Owner’s Equity, Cash Flow Statement, Notes to Financial Statements, amount of generated, transmitted and distributed electricity. Only costs related to regulated activities are provided by the regulated companies and if a company has both regulated and non-regulated activities then these must be presented separately. Straight line depreciation method is used. The commission provides guidelines together with templates to companies, this is sent electronically. The national accounting standards were developed on the basis of International Accounting Standards. Tariffs in the energy sector are set by decisions of the Commission. According to the tariff calculation methodologies approved by the Commission they are calculated using the required revenue method.

The Commission uses the information to establish revenue requirements of the regulated companies using the tariff methodology. Pricing objectives includes: for the purpose of balancing interests of consumers and interests of regulated companies, and also in order to create equal conditions for their activities and fostering formation and development of the competitive market.

All regulated companies as specified in their license terms and conditions have to perform technical and/or financial audit with the help of independent experts. The Commission does not currently conduct any auditing but the energy law envisages this in the near future.

5.3 Azerbaijan

The Tariff (Price) Council of the Azerbaijan Republic is responsible for formation, application and optimization of tariffs, including electricity tariffs. In terms of data collection the Council request financial and functional accounts from the regulated companies periodically[14]. The data of financial accounts should be submitted by the regulated companies by 1st March of the following year.

It is not indicated from the response on whether the Council provides templates or guidelines for data collection purposes to the regulated companies.

The financial information required by the Council includes the balance Sheet, profit and loss statement, and wholesale price /tariff/ calculation, cash flow statement, statement of expenditures on materials and labour costs, and non-production expenses included in input costs. Additional information on detailed breakdown of cost allocation OPEX and CAPEX is also required. This is a requirement specified by law.

The Council requests this information for approving and setting the regulated companies' tariffs in the tariff setting process. The tariffs are differentiated according to the customer groups and approved for a certain time period.

Depending on companies' submitted information the Council communicates its decision within a month, starting from the date of receipt of the information. In case of incomplete information provided by the regulated company the Secretariat of the Council gives a written notice requesting the missing data. The companies are obliged to submit within 5 days the requested information. The regulated companies are also obliged to submit the above-mentioned accounts in accordance with the "Rules of ensuring of state control on determination and application of prices

[14] We can assume this financial and functional accounting information are requested on a yearly basis although more clarification would be required.

regulated by the state», approved by Resolution nr. 247 of the Cabinet of the Republic of Azerbaijan from December 30, 2005.

As necessary, in accordance with the above Rules and depending on the specifics of the goods and services with regulated prices the Council can make decisions on changing of cost structures, input costs and standards of prime production costs if they are in the opinion that it is economically justified.

After reviewing of materials submitted by the regulated company the Council can revise the tariffs upwards or downwards where they feel necessary: The regulated companies may increase/decrease the production costs for goods and/or services for price changes on the basis of specific situations being:

- Drastic price changes on the world market.
- The Council considers a necessity of price changes according to the social-economic situation.

The Tariff Council's objectives in the tariff setting process are based on the principle of keeping the balance between the interests of the regulated companies and consumer requirements.

Financial accounts of the regulated companies should be submitted together with an audit report. The Council has authority to conduct an independent monitoring periodically if it feels necessary. There is no indication of whether the accounting practices apply with the international accounting standards.

5.4 Bosnia and Herzegovina

With respect to the tariff approvals in Bosnia and Herzegovina (B&H) procedures and rules shall be carried out by the Tariff and Market department. Within this department there is an analyst-auditor expressly responsible for checking the regulatory accounting information which is accomplished once or twice per year in case of tariff procedure or license request, respectively. In B&H, all production subsets are fully regulated activities so each one is covered by regulatory accounting requirements and there is no specific submission timing.

In addition, companies provide their statutory accounting scheme which has to be based on the official national statutory accounting rules and conform to the International Accounting Standards. This is not yet implemented.

In spite of the fact that regulatory accounting scheme has not been implemented yet, it would be based on the official national statutory accounting rules too. The regulatory accounting information shall contain: balance sheet, income statement, cash flow statement, tax balance and data regarding salaries. Additionally, it is requested controllable OPEX and CAPEX (depreciation and financing costs). For utilities conducting more than one activity the information is spitted between regulated and non-regulated business and excluded services are subject to a separate regulatory accounting treatment. All the aforementioned data is submitted in hard copy and electronically via e-mail or data disks by the regulated company.

In B&H there are some common and distinguished points between regulatory and statutory accounting. Compared with the statutory accounting the cost reported in the regulatory one is more precise and relevant in terms of tariff setting. In terms of depreciation the method used is the so-called linear and it is equally used in the statutory accounts. "Independent international accounting specialist group re-evaluated assets and established asset base in the statutory accounts. Regulator jurisdiction is to consider and verify entire assets proposed to be the part of regulatory asset base and allow, disallow or adjust the value of any of such assets".

The Regulator is involved on establishment of revenue requirements as well as in the tariff setting process. The latter shall be conducted in order to achieve a certain number of objectives.

In B&H the regulatory accounts are not required to be audit but the Regulator provides an independent audit.

5.5 Bulgaria

SEWRC is responsible for setting allowed revenue and tariffs for the regulated companies. For these purposes SEWRC defines regulatory accounting requirements and data templates for regulatory submissions by the companies. In Bulgaria the regulated utilities submit to State Energy and Water Regulatory Commission (SEWRC) general accounting information once a year and interim accounting information if requested via official correspondence (mail, hard copy and digital copy). SEWRC approved rules for regulatory accounting reports for three groups of regulated utilities: electricity distribution, gas distribution and district heating utilities.

According to the responses obtained from the questionnaire the overall accounting consists of information for profits, losses and assets for each licensed activity and it does not differ substantially from the general forms recommended by the accounting standards. The accounting information for regulatory purposes is compatible with the provisions of the national accounting legislation. Companies must submit all attachments to the set of accounting documents i.e. cash flow statement and capital statement. The regulator requires physical data (networks length, types and number of facilities, etc.), investments, operational cost as well as financial data (equity finance, loan contracts, repayment schedules). In addition to setting revenue requirements, these data can be used to perform a comparative analysis between the regulated companies. SEWRC may disapprove cost which has been included by the companies in their regulatory submissions.

Accounting reports for regulatory purposes cover all utility costs, but some separated groups of accounts are foreseen for separate accounting of costs for regulated and non-regulated activities. SEWRC requires straight line depreciation for regulatory purposes. Any capital contributions provided by customers, public hand or third parties are deducted from the regulatory asset base.

In Bulgaria the regulatory accounts are not required to be audit neither the Regulator provides an independent audit.

5.6 Croatia

Croatian Energy Regulatory Agency (CERA) request on an annual basis regulatory accounting information from regulated companies. This is also specified in secondary legislation by the Regulation on data to be submitted by energy undertakings. This specifies that regulated companies are obligated to submit their balance sheet, profit and loss statements and notes to financial accounts. The information must be submitted and certified by the end of April of the following year at the latest. CERA has a technical and economic department working together to check the data for tariff purposes. According to the Croatian Energy Law all energy activities are separated, therefore financial information must also be provided for each activity. At present CERA do not provide regulatory accounting templates for electricity but has recently passed two methodologies for tariffs systems for gas (distribution & supply) accompanied with templates which contain detailed breakdown of costs and physical data. However no guidelines are provided to the companies for completing/submitting financial information. Accounting data is sent to CERA are hard copies, however in the near future CERA is planning to create templates to be sent and completed electronically. The national statutory accounts comply with IAS. The accounting information which is submitted to CERA for each activity are not different from national statutory accounts only the cost data is more detailed.

Tariffs are set by the Government but CERA is involved in this process by providing expert opinion. The objectives of the tariff systems is based on justified costs of operation, maintenance, replacement, construction or reconstruction of facilities and application of measures for environmental protection, taking into account a reasonable return period for investments in energy plants, facilities and network or system. Tariff systems are non-discriminatory and transparent are designed to encourage mechanisms for improvement in energy efficiency and demand side management, including increased use of renewable energy sources.

CERA do not conduct any auditing of accounts themselves as the companies are responsible that the information submitted to CERA have been certified by an authorised auditor.

5.7 Estonia

The Estonian Energy Inspectorate (ETI) do not regularly collect or request regulatory financial information. The request of data is only done when ETI thinks it is necessary and when this is associated with customer complaints about prices. In addition the companies only have one month to submit the requested information to ETI. The activities are separated and companies produce separate accounts for each regulated activity. There is currently no consultation process in place however companies can contact ETI if they need advice. Templates are provided with some guidelines on how to complete the data. All information between ETI and companies is done electronically. In addition physical data is required, however ETI says the information from national statutory accounts are more detailed than requested regulatory accounting information. Statutory accounts comply with IAS. Depreciation is calculated differently in regulatory accounts when compared with the method used in statutory accounts. The regulated asset base method is used to calculate depreciation. We think that ETI considers depreciation as this is used in the building blocks approach however RAB is not a method of calculating depreciation.

ETI are involved in the tariff setting of regulated areas i.e. network. Their objective of tariff setting is to approve the tariffs.

In regards to auditing there is no provision in the law that stipulate that accounts must be audited by an authorised independent auditor however this is being considered for the future.

5.8 Georgia

The Georgian National Electricity Regulatory Commission (GNERC) requests accounting information on a quarterly and yearly basis. For quarterly information these must be submitted by the end of the following month. For annual financial statements these must be submitted by the 1 April of the following year. Form and terms of submission of information are set by the Decree of the Commission. Regular consultations on how to fill in forms are held and the Department for economic analysis and pricing is responsible for verifying submitted data. Templates and instructions are provided. The data which is submitted by the companies must be audited and this is set out in the legislation, the Commission will also conduct an additional audit if they feel necessary. The Commission say that the data from statutory accounts are the same as the data request for regulatory accounts and comply with IAS. The data collected consist of general accounting information i.e. balance sheet, P&L account, Cash-flow statement and the Commission request OPEX, CAPEX data only in certain cases. However the companies do not produce or submit statutory accounts to the Commission. When companies conduct more than one activity, these must be separated by activity.

The Commission is also responsible for the tariff setting process. Their objectives include:

- Protection of consumers from monopolistic prices.
- Granting possibilities to regulated companies to have full recovery of reasonable and justified costs and to obtain the allowed rate of return.
- To ensure improvement of company development efficiency.
- Supporting the economic policy of the state in the energy field

5.9 Hungary

The Hungarian Energy Office (HEO) request Quarterly reports for monitoring purposes and yearly regular Annual reports as set by the Accounting Act. For tariff setting data is requested every 4 years. The regulatory period is 4 years therefore in the 4th year of regulation; data related to the 3rd year of regulation is requested. For tariff preparation regulated companies have between 2-3 months to complete the data forms. HEO provides templates and guidelines for completing the templates. Statutory accounts must be audited by authorised auditors, however regulatory account submitted to HEO are not. Therefore independent experts (outside of company) are responsible for checking the data and simultaneously employees within the company will also check the data. HEO requests separate data for all activities as the market is not fully open yet. For tariff setting purposes HEO provides templates and guidelines to the companies. Statutory accounts are submitted to HEO and additional information such as detailed breakdown of OPEX and CAPEX data is requested for the purpose of tariff setting. The difference between regulatory accounting costs may be aggregated, partly reduced (justified/non-justified costs, corrected or partly corrected by inflation factor), taken or not taken or partly taken into account etc. in comparison with statutory accounting data. Depreciation methods differ for tariff setting and the Accounting Act. For tariff setting straight line method is used whereas accelerated or useful lifetime methods can be used depending on the company as set out in the Accounting Act.): Pricing objectives are tariffs should cover costs caused by cost-bearers and the regulatory calculated cost of capital; in next years of regulation period or even through several periods of regulation: to reach the regulated average price level.

5.10 Kazakhstan

In Kazakhstan regulatory accounting information is requested when necessary. However on a yearly basis review is made on entity's execution of tariff budgets and on monitoring of implementation of investment programs. In regards to submission timing at least 5 days is given with respect to any information. As for preparation of materials for submission in connection with revision of tariffs upon the initiative of the Agency, the timing is 30 days. When the initiative to review tariffs belongs to an economic entity no deadline is set, as any tariff can be modified beginning with the 1st day of any month. Submission of the request is done at least 90 days in advance.

The procedure of data requests is made through official correspondence (paper and electronic forms) and members of Expert Councils of the Agency are invited to review materials. Information is required from transmission and distribution of electricity; generation, transmission, distribution and supply of heat.

Accounting reports are submitted in a consolidated form in accordance with financial statements standards and in 2007 all companies (except small businesses) should comply with the International Accounting Standards. OPEX and CAPEX data is also requested. In terms of depreciation, the method used is the straight-line one, but application of other methods is also possible. Depreciation rates are defined in the Accounting Policy and can differ from those for tax purposes.

The Agency is involved both in revenue requirements and in tariff setting. Their objective is to set an economically justified level of tariffs, maintaining the balance of interests of the regulated entity and of its consumers.

All financial reports must be audited and the regulated company is responsible for this. If necessary the Agency conducts inspections as well as financial and technical audits by independent experts.

5.11 Kosovo (UNMIK)

In Kosovo regulatory accounts shall run from 1st January to 31st December of each calendar year. Utilities shall submit regulatory accounting information (in electronic form and hard copy and using the appropriate templates) no later than three months after the completion of the calendar year.

The regulatory accounts submitted comprise: pro-forma regulatory accounting statements; statement of regulatory accounting principles and policies adopted in regulatory accounts; copy of the licensee's statutory accounts and auditor's regulatory report. The specific regulatory accounts items required are: income statement, balance sheet, cash flow statement, analysis of turnover, analysis of operating and maintenance costs, regulatory asset base (RAB), capital expenditure, depreciation, disposals, additions, major projects summary, provisions, related party transactions, allocation of joint and common costs and key financial indicators. Additionally, are requested reports of OPEX and CAPEX and these are usually split into controllable and non-controllable costs. OPEX data includes fuel, maintenance, other, lignite royalties, materials and services, personnel costs, security, other overheads. CAPEX includes operational assets, load-related operational assets, non-operational assets (IT, buildings & land, vehicles), non-load related operational assets, major capital expenditure projects. Inflation and depreciation is also included in the regulatory accounts.

The statutory accounts produced and submitted by companies must conform to International Accounting Standards and they are distinct from the regulatory accounts.

The cost reported in the regulatory accounting includes depreciation and inflation, in contrast with those in the statutory accounting. In terms of depreciation is applied the straight line method "which is the depreciation scale and is much smaller than the method used in the statutory accounting". According with questionnaire's results, in the regulatory asset base are taken into account only the assets that are invested in 2006, before that the assets were subsidized by the government and donors. The difference of asset valuation concept used in statutory and regulatory accounts can be found in the depreciation scale.

Regarding the pricing process, regulatory entities are involved in both revenue requirements and approval of tariffs. The general aims in the tariff setting process are eliminate cross-subsidization between customer categories and set tariffs that can be affordable, cost reflective and non-discriminatory.

The Kosovo Trust Agency (KTA) is liable for the system of auditing of regulatory accounts and this is complemented with the evaluation of utility assets conducted by an Independent Agency.

5.12 Kyrgyzstan

In Kyrgyzstan procedures and rules for the examination of documents on tariff approvals are requested on a monthly and quarterly basis and the submission timing is by the 20th day of the month following the reporting month or quarter, respectively. Companies should send reports in electronic form and by e-mail with mandatory signature of the manager. According with Decree of the Government of the Kyrgyz Republic no. 531 of August 19, 2003, energy companies submit mandatory reports on financial-economic indicators in order to be verified by the department of prices and tariffs. All energy companies (generation, transmission and four distribution companies) are covered by regulatory accounting requirements.

Energy companies must submit their statutory accounts but they do not differ from the regulatory accounting information. According with Article 26 “Accounting Standards” of the law of the Kyrgyz Republic, electricity companies should maintain their accounting documents conform to International Accounting Standards. In addition, holders of licenses of integrated companies should maintain separate accounting documents for each type of activities similarly to companies that have status of independent legal entity.

The regulatory body in Kyrgyzstan establishes the revenue requirements as well as conducts the tariff setting process. The main objectives identified in conducting the tariff setting are:

- establish economically justified and socially acceptable pricing;
- change prices in such a way that not cause any drastic economic difficulties for generators or consumers; and
- eliminate discrimination in the course of provision of services and tariffs.

Concerning the system of auditing in Kyrgyzstan, the regulatory body has the right to perform regulatory audit which includes inspection of cost and quality of services. Moreover, the regulatory body, if necessary may perform any independent sub-contracted audit.

5.13 Latvia

In Latvia the regulator has the right to request any information (either by post and e-mail) related to regulatory accounting information from regulated companies. Depending on the complexity of the issue, regulated utilities have a submission timing that can vary from two weeks to one or more months. The procedure in requesting the regulatory accounting information can be done in different ways: letter signed by the chair of the regulator, decision from the board of the regulator or adopted regulation on submission of information on a regular basis. There is a consultation process and the staff of the regulator is responsible to check the information. All sorts of production subset (i.e. generation, transmission, distribution, and retail) are covered by regulatory accounting requirements. At present no standards templates are adopted. The information collected takes into account tariff calculation methodology.

Companies also produce and submit statutory accounts and it is distinct from the regulatory accounting information. The cost structure, forecast of change of defined cost positions and respective justification is the regulatory accounting information that is usually requested in Latvia.

Initial regulatory asset base (RAB) is determined on historical data from company balance sheet. “Valuation is allowed, but regulator has the right to call for revaluation using any of valuation concepts”.

Moreover business activities are separated between regulated and non-regulated business.

5.14 Lithuania

Lithuanian National Control Commission for Prices and Energy (NCC) requests as pursuant to the tariff methodologies for calculating electricity price caps, the transmission system operator and distribution networks operators are required to deliver accounting information on a quarterly and annual basis.

Transmission and distribution companies have to submit on a quarterly basis:

- financial statements of the licensed economic - financial activities (cash-flow statement, profit and loss account, balance sheet, and explanatory writing);
- market operator’s report (free form);
- report on continuity of supply indicators.

On an annual basis the following is requested in addition:

- annual expenses audit report of the licensed activities;
- annual analysis of use of respective power network system;
- report on development prospects for respective power network system;
- annual complaint investigation report.

NCC provides templates short guidelines giving instructions to the regulated companies on how to complete the templates. However these guidelines are short and refer to the respective laws. Quarterly data must be submitted within 40 days of the expiring quarter and annual data must be submitted within 2 months after the ending year. Only when there are issues with the data will NCC contact the companies for additional information and clarifications. Accounting data is only required from regulated activities. There are provisions in the Law that states that financial accounting information for regulated activities submitted to NNC must be submitted with an auditor's report. NCC does not conduct additional auditing due to lack of resources.

For statutory and regulatory accounts, straight line depreciation is used and comply with IAS.

NCC is officially responsible for revenue requirement process but they are also involved in tariff setting. The objectives include least costs, cost reflection, cost coverage, simplicity, stability, flexibility and equality.

5.15 Macedonia

The Energy Regulatory Commission (ERC) of the Republic of Macedonia requests once per year regulatory accounting information from regulated companies, in hard and electronically form.

On request of the ERC this information can be sub-metered monthly, quarterly, semi annually and annually. Prior submission by regulated companies there is a consultation process with the regulated companies to facilitate the preparation of the reports and to discuss questions arisen. ERC usually organizes a workshop with regulated companies to explain the methodology for revenue and price calculation. The staff from ERC checks and analyzes the data and information submitted. According with legal energy provisions generation, transmission and retail are covered by regulatory accounting requirements.

ERC requests the following accounting information conform to the International Accounting Standards: balance sheet; income statement; cash flow statement; cost, revenue and working capital information; investment plans and costs; sources of capital for investments; regulated value of assets information and financial indicators. Furthermore, ERC requests information about investment programs and plans, costs by type, capacity or realisation in physical data, number of consumers and working days of the assets. The costs reported in the regulatory accounting refer only to the regulated activities; instead those reported in statutory accounting refer to the company. The depreciation of regulated assets is calculated according to minimum rates regulated by law, and is the same method as in the statutory accounts.

Regarding the pricing process, regulatory entities are involved in the tariff setting process pursuing the following objectives: determine a level of regulated return on capital that allows a continuous and successful operation of the companies; establish incentives for improving productivity and an efficient operation; apply the principles of objectivity, non-discrimination and transparency and guarantee a secure, continuous and safe electricity supply.

In Macedonia there are no specific provisions in the energy law that requires the regulatory accounts to be audited; however, regulated companies are obliged to hire an independent company only for statutory accounting.

5.16 Moldova

The regulatory accounting information from regulated companies is requested monthly, quarterly and annually (not later than the 15th, 25th day of the following month or not later than the 20th March, respectively) by mail, electronic mail, telephone and fax. ANRE´s Decree approved the System of Reports to be submitted to the Agency by holders of licenses in the power sector. The reports have to be filled in and presented in accordance with requested forms. Authorized employees of the regulated enterprise and employees of the tariff and other departments of ANRE are responsible for verification of data. Generation, transmission and distribution are the productions subsets covered by regulatory accounting requirements.

In addition, companies provide their statutory accounts which are prepared in accordance with the National and International Accounting Standards and include less detail than regulatory accounting information. The regulatory accounting information that is requested is as follows: balance sheet, income statement, statement of owner's equity, cash flow statement and additional documents (forms C, P, PH, TD, and DF). However, additional reports such as detailed breakdown of OPEX, CAPEX are not required. In Moldova there are no utilities that perform more than one type of regulated activities but for services that are not related to main regulated activity the information is subject to a separate regulatory accounting treatment.

ANRE also participates in the tariff setting process and the current methodologies are as follows:

- The composition of expenses and costs that are to be included in calculation of tariffs;
- The method for calculation of profitability of investments made by the company;
- The procedure for determining, approval and application of basic tariffs;

- The procedure for revision of basic tariffs.

Concerning the system of auditing the law does not require the regulatory accounts to be audited but audits can be conducted by an independent auditor and, if necessary, the regulatory body conducts audits itself.

5.17 Mongolia

Energy Regulatory Authority of Mongolia (ERA) request of a quarterly and yearly basis regulatory accounting information. For quarterly information regulated companies must submit by the 20 of the next month of the quarter. For annual financial reports this should be done by February of the following year. Templates are provided and are very extensive and detailed. Guidelines are also provided. Companies also produce and submit statutory accounts which comply with IAS to ERA. The regulatory accounting information is more detailed and separated by activity. ERA collects accounting information for generation, transmission, distribution and retail. The data requested include cash-flow statement, profit and loss account, balance sheet, assets, and additional documents such as technical and economical information according to formats approved by ERA. OPEX and CAPEX data is also requested. The straight line method of depreciation used is the same as the method used in statutory accounts. ERA is also involved in the tariff setting process and their objective is to allow licensees to earn adequate revenue in order to ensure normal operation.

5.18 Montenegro

The Energy Regulatory Agency of Montenegro (ERA) request accounting information once a year and usually allow up to one month for companies to submit their data. However this is not officially defined. Accounting information is required for generation, transmission, distribution and retail activities. ERA provide templates and guideline to the companies and in addition frequent meetings are held to discuss this matter. Cash-flow statement, profit and loss account, balance sheet and the information on equity/debt structure are statutory are requested and the information is separated by activity. ERA also requests OPEX and CAPEX data and are split into controllable and non-controllable costs. However there are no provisions in the law that state that the accounting information be audited and ERA also do not conduct auditing of the accounts. The linear depreciation method is used and is the same method used in statutory accounts.

ERA is involved in establishing the revenue requirements and approves the tariffs. The pricing objectives are to determine justified costs and the methodology for determination of tariff structure which application provide licensees covering costs of their services and achieving reasonable rate of return and prevent cross subsidization.

According to license terms and conditions, regulated companies have to perform technical and/or financial audits with the help of independent experts. If necessary, the Agency will also conduct inspections, as well as financial and technical audits, using independent expert organizations.

5.19 Poland

The procedure of tariff approval is specified by the Energy Regulatory Office (ERO), Tariff Department and requires checking (usually twice a year) data (generation, transmission, distribution, wholesale and retail) for regulatory purposes. A regulated utility has in general about 2-3 weeks to submit (by traditional and electronic mail) their regulatory accounting information (i.e. cash-flow statement, profit and loss account, balance sheet) and regulatory accounting templates provided by the Energy Regulatory Office. Additionally, the breakdown of OPEX (split into controllable and non-controllable costs) is requested to conduct a benchmarking analysis of utilities.

Tariff Department has some objectives in the tariff setting process such as:

- set the utility's revenue in such a way that cover justified costs of regulated activities;
- protect end-users from unjustified price levels; and
- eliminate cross-subsidisation.

Furthermore, utilities must submit their statutory accounting which is less detailed than regulatory accounting. In terms of depreciation the method used in regulatory accounting consists of "asset value before the re-evaluation". The statutory accounting rules do not comply with the International Accounting Standards.

For utilities conducting more than one activity the information is separated between regulated and non-regulated business and the excluded services are subject to a separate regulatory accounting treatment.

Concerning the system of auditing the Polish law does not require the regulatory accounts to be audited neither the regulator performs independent audits itself.

5.20 Romania

Electricity and Heat Regulatory Authority (ANRE)

In Romania the licensees should submit their financial reports (in accordance with the Financial Reporting Procedure") after 20 working days after the due date to submit the financial statements (including the statutory accounts) to the Ministry of Finance. After receiving the reports, the Annual Reports Analysis Department (ARAD) within the Electricity and Heat Regulatory Authority (ANRE) is responsible for checking the data in order to import them into the Authority Data Base. If the reports are not complete the ARAD's team will contact the economic entities asking for necessary corrections and then send them back to ANRE. The companies should complete the reporting forms separately for each regulated electricity (or heat) activity for which they have license issued by ANRE.

The companies produce and submit to ANRE the statutory accounts and they differ from the regulatory accounting information. The latter includes balance sheet, profit and loss account and cash-flow statement. The additional information is included in the financial reports as follows: OPEX; repairs and maintenance; systems/equipment/fuel purchases; staff cost and number analysis; metering; SCADA; customer records, billing and services; customers complains; new connections; marketing and advertising. The main differences between the costs reported in the regulatory accounting and those in the statutory accounting are the costs with depreciation. Linear depreciation for 25 years for existing assets at the beginning of the first regulatory period is applicable.

The first RAB was set according to the formula for 2005 RAB which is maximum of 2002 book asset value. This rule was set because in 2003 and 2004 a process of re-evaluation of asset was done by distribution companies. After 2005 the addition of new assets were allowed only according to the investment plan approved by ANRE. After 1st of January 2006 the rules for RAB is according to a specific formula established by ANRE. For utilities conducting more than one activity, the information is separated between regulated and non-regulated business but the excluded services are not subject to a separate treatment.

In terms of pricing ANRE establish the revenue requirements and approve the regulated cost/revenues for the selling/buying of electricity that are to be supplied to the captive customers. In addition ANRE is involved in tariff setting process for captive consumers taking into account the assurance for final consumer protection.

In the "Financial Reporting Procedure" it is specified that the annual Financial Report should be audited by an independent auditor.

National Regulatory Authority in Natural Gas Sector (ANRGN)

The regulatory accounting information from regulated companies is requested annually (in hard copy and electronic format using the templates provided) and the submission timing is six months for verification of regulated prices and three months for annual adjustments. After the regulatory accounting collection a specialised department of National Regulatory Authority in Natural Gas Sector (ANRGN) checks the information submitted. In Romania the regulatory accounting requirements cover transmission, distribution, underground storage and regulated retail. The requested regulatory information comprises of statement of expenses and revenues, report on non-current assets (regulated) and report on current assets put in use. It is also required reports regarding quantities of transmission, distribution, underground storage and regulated retail and capacities used in underground storage and transmission.

Besides, companies produce and submit statutory accounts according with national accounting law which do not totally comply with the International Accounting Standards.

The statutory accounts differ from the regulatory accounting information in the assets treatment. The differences between the costs reported in the regulatory accounting and those in statutory concern the depreciation time of assets and also not all the statutory costs are recognized in the regulatory activity. The depreciation method used in the regulatory accounts is the linear one and it is equally applicable in the statutory accounting. “The regulated asset base is established on the entry value at historical cost. The regulated asset valuation concept differ from the one used in the statutory accounts because it is annually adjusted with the inflation rate and it has another period of depreciation.”

In Romania regulatory entities are involved on establishment of revenue requirements as well as in the tariff setting process. The main objective identified in this process is avoidance of cross-subsidisation between customer categories.

“The criteria and methods for approving prices and establishing regulated tariffs in natural gas sector” approved by Decision no. 1078 of 18 December 2003 and amended by Decision no. 1250 of 13 November 2006 requires the regulatory accounts to be audited.

5.21 Russian Federation

Federal Tariff Service of the Russian Federation (FTS) request on a yearly basis regulatory accounting information. Companies have 1 year to complete and send their accounting data. There are procedures in how to conduct the data collection which is set out in the Decree of the Government of the RF of February 28, 2004, No. 109. Data is collected for all activities – generation, transmission, distribution and retail. FTS issue some templates which are set out in the tariff methodology for the companies to complete. Guidelines are provided on how to fill in the templates. Additional data e.g. OPEX and CAPEX is collected and are presented in the framework of tariff proposals. The method of depreciation was not given but is accounted for in the tax code. In accordance with legislation separate accounts have to be provided for each activity. The national statutory accounts do not comply with IAS. The FTS is involved in the tariff setting process and their objectives include ensuring a functioning and development of regulated enterprises in accordance with consumer needs. There are no provisions indicating that the accounts have to be audited, however FTS can invite the companies if they have questions.

5.22 Serbia

Energy Agency of the Republic of Serbia requests regulatory accounting information from regulated companies when there is a request for price adjustment. Besides is requested accounting information twice a year (each six months). International Accounting Standards are the base for statutory accounting rules.

Regulatory accounting requirements are covered for all regulated energy activities in accordance with the Energy law, such as: electricity generation, electricity transmission and distribution, oil and oil products transport, natural gas transport, storage and distribution, and electricity and natural gas wholesale and retail for tariff customers. For each of the regulatory activity the Agency requests: balance sheet, profit and loss account, detailed list of operational costs, list of regulatory assets with depreciation rates, information about assets, fair market value assessment, etc. Furthermore, regulatory agency requires physical data (volume, capacity, number of customers, etc.) CAPEX information, detailed breakdown of OPEX, etc. However, these are not split into controllable and non-controllable costs because tariff methodologies do not request that.

The regulatory accounting costs (operational costs and depreciation) do not include all costs from statutory accounting and they are related only to regulated activities. Tariff methodologies use straight-line depreciation, but statutory accounts allow different methods of depreciation (e.g. straight-line, functional and decreasing depreciation) but in practice, all energy entities use straight-line depreciation. “Regulatory asset base includes only fixed assets such as: intangible assets (without goodwill) and tangible assets (real estates, equipment and plants). Regulatory asset base does not include capital contributions and investments in assets which are not going to be activated in the regulatory period and which are not prudent and efficient. Asset valuation concept is the same in regulatory and statutory accounts”.

The Serbian Regulatory Agency focuses either on establishment of revenue requirements and in the tariff setting process. In conducting this process the main objectives are: establish tariffs in a transparent and objective manner and help regulated entities to calculate prices in accordance with tariff methodologies.

Regarding the system of auditing, energy entities are constrained to provide independent audit of unbundling accounts and publish them according with the Energy law.

5.23 Turkey

In Turkey, the Energy Market Regulatory Authority (EMRA) is responsible for energy regulation. EMRA requests two categories of regulatory accounting information. One consists of information and documents related to revenue setting process and are asked just before each implementation period. The other category relates with tariff setting procedure and is asked just before each tariff setting period. Both categories of information requirements shall be submitted in written format and there is no special procedure for requesting such information. All rules and procedures in requesting the regulatory accounting information (including templates) are established in the Electricity Market Law no. 4628 and related secondary legislation especially "Communiqué regarding Electricity Market Chart of Accounts, Regulated Items and Reporting". Regulatory accounting requirements covers transmission, distribution, retail sale and retail sale activities.

Companies have also obligation of producing and submitting statutory accounts to the Regulatory Authority and they differ from the regulatory accounting information as they are consolidated, prepared for different purposes, on company basis, unbundled and ex-post. The Turkish statutory accounting rules comply with the International Accounting Standards.

The legal entities subject to tariff regulation shall submit the following information/documents: financial statements; annual demand, cost and revenue estimates; current and estimates consumption levels; current and estimates investment plan. Further they shall present to the Authority at least sixty days prior to submitting their tariff proposals: pricing methodology, service cost analysis and sample price calculations. Following the submission of the tariff proposal shall be provided the calculations of revenue correction factor, loss-theft adjustment factor and investment correction factor. By the end of April entities must submit an annual activity report respecting the previous year.

For utilities conducting more than one activity regulatory account unbundling is compulsory but there is no separate regulatory accounting treatment for deregulated activities, except data and information for monitoring purposes.

With respect to pricing, in Turkey, the focus is mainly on establishment of revenue requirements since the duties and responsibilities in the tariff setting process are limited to examination, evaluation and approval of submitted tariff proposals. Tariffs must be established according with aims, procedures, rules, parameters and principles contained in the relevant law and secondary legislation.

In Turkey the Authority for Board approval is responsible to examine the audited financial statements of legal entities operating in the market or to have these reports examined by third parties.

5.24 Ukraine

According to the NERC Decree no. 1044 of November 2005, regulated companies file to the electricity sector pricing policy department (by mail, in paper and electronic format) the following reporting forms:

- monthly report and estimate data on productive supply of electricity by consumer groups and classes (must be submitted not later than the 20th day of the month following the reporting year);
- quarterly report on financial results and execution of the cost budgets of licensed types of activities (must be submitted by the 25th day of the month following the reporting period);
- semi-annual report on payments for electricity by the population and localities (must be submitted by the 10th day of the month following the reporting period).

Furthermore, reports on tariffs for transmission, storage, distribution of natural gas and its supply at regulated tariffs, and reports on the tariff for transportation of oil through main pipelines are quarterly reports (must be submitted by the 25th day of the month following the reporting period); reports on the situation with on consumers' payments for consumed natural gas are monthly reports (must be submitted not later than the 20th day of the month following the reporting year).

Regarding the procedure in requesting the above mentioned information, the licensee is responsible for authenticity of the information submitted and a relevant branch office of NERC (National Electricity Regulatory Commission) verifies it in terms of completeness and accuracy. When it is necessary to get additional information, NERC send a written request signed by the Chairman of the Commission or some Commissioner.

In addition financial statements are specified in the legislation and must be submitted to NERC. In Ukraine statutory accounting do not differ substantially from regulatory accounting information. National accounting standards of Ukraine are harmonized with International Accounting Standards, taking into account national specifics of accounting at enterprises. In terms of differences between the cost reported in regulatory/statutory accounting them “are related only to depreciation charges: under regulatory accounting- tax, legally- accounting”. The method used in financial accounting for depreciation is the linear one.

According with the law of Ukraine “On natural monopolies” and “On accounting and financial statements” each licensee should develop and approve the procedure for allocation of costs and indicate accounts that are used for allocation of costs by types of licensed activities.

In the field of pricing the focus is either on establishment of revenue requirements and in the tariff setting process. In Ukraine there are two tariff methodologies: one applied to privatized energy companies and the second one to all other companies. The first methodology considers the justified costs of economic entities and proper return on investments made to develop power networks, and also the reduction of network electricity losses. The second sets conditions for revision of tariffs for transmission and supply for energy supply companies in which the main condition is full payment of current bills for electricity purchased from the state-owned enterprise “Energorynok” in the course of the last three months. The tariff methodology is designed to ensure full recovery of costs of electricity generation, transmission and supply, creation of necessary conditions for profitable operation of all sector enterprises and further development of the sector, ensuring transparency and controllability of the process of use of funds envisioned in the approved tariffs.

In Ukraine the regulatory accounts are not required to be audit neither the Regulator provides an independent audit.

6 Benchmark Regulatory Reporting Requirements

This section provides a summary of the current regulatory reporting procedures which is currently in use by the ERRA members.

Based on the responses to our questionnaire, it can be seen that the countries in the ERRA regions request financial accounting information. For most regulators in the region, the purpose of this data is intended for tariff setting and for setting revenue requirements. The type of data varies between countries, and also the process to conduct the data collection differs greatly.

For the countries which did attach their accounting templates to our request, it can be seen for example that in some countries the amount of data requested is very detailed and extensive, but there is a fair amount of doubt as of whether all of these countries may manage in fact to effectively collect reliable data based on their templates, and to use the data once it has been collected for regulatory purposes. In some cases, our perception is that some ERRA countries are requiring high volume of information as opposed to what they would need to regulate. Even if they manage to get what they are asking for, they might not need or might not be able to process all the information which is delivered to them, thus entering a risk to create malcontent/lack of cooperation in the regulated industry. Finally, even if all the information were delivered to the regulator and used by it for regulatory purposes, there might be a quality-quantity trade-off being observed whereby the industry gets stretched in having to deliver too much information at one time and reacts by gaming the system and delivering hastily put-together information or even distorted data. We have observed in our previous project work cases, there were requests for data which were either misunderstood or rejected by the industry. In other cases, the regulator did not use the totality of required data for regulation. Finally, in some other cases regulatory and standard financial accounting failed to be separated at a regulatory stage, either deliberately or because of terminology problems, or by sheer misunderstanding.

After the analysis of the responses to our questionnaires on regulatory reporting practices in ERRA country members, it was possible to identify and split the countries into three categories according to their current stage of development on this issue. The above mentioned partition of countries by category can be found in the following table.

	Advanced	Semi- advanced	Improvements needed
Albania			X
Armenia			X
Azerbaijan			X
Bosnia and Herzegovina		X	
Bulgaria	X		
Croatia			X
Estonia		X	
Georgia			X
Hungary	X		
Kazakhstan		X	
Kosovo		X	
Kyrgyzstan			X
Latvia		X	
Lithuania	X		
Macedonia		X	
Moldova		X	
Mongolia			X
Montenegro		X	
Poland	X		
Romania	X		
Russia		X	
Serbia		X	
Turkey	X		

Ukraine		X	

We have considered three categories such as "advanced", "semi-advanced" and "Improvements needed" which indicates the progress that a particular country is at in terms of their procedures in regulatory reporting procedures. The classification is based on the information obtained from the responses to our questionnaires that we have received. In addition we used also our knowledge and experience from project work conducted in the respective countries.

It should be noted that this categorization has a general scope as it excludes some important specificities of each country and it shall be seen as indicative assessment that may be addressed by each country in the future. A detailed assessment would require a comprehensive review of the rules, procedures and practices in each of the countries.

In some cases, for instance, national legislation specifies the type of depreciation method to be used. In other cases, international accounting standards are not yet implemented in statutory accounting or statutory accounting is simply confused, both legally and in perception, with proper regulatory accounting. Finally in other cases, which we would like to define as "improvements needed", both regulatory accounts are not perceived as being different from legally statutory accounts and/or also IAS are not in place – not even for statutory accounts. Also, in less advanced cases tariff setting is not at all the responsibility of the regulator and tariffs are approved by the government whereby the regulatory authority only has a supporting/advisory role in the process.

In a general way, countries classified as "advanced" obtain regulatory accounting documentation in an effective way i.e. they provide regulatory accounting templates for regulated utilities to complete (requiring, and using, just the relevant information for strict price/revenue regulation) as well as instructions/guidelines on how to fill in the regulatory accounting information; utilities in this instance have fixed submission times, and the whole timing for submission and regulation is generally set out in advance. In some cases, there are also individual/general industry or stakeholder consultations on arising questions. Once again in advanced cases, all stakeholders - or at least the regulator and the regulatees - perceive the difference between regulatory and statutory accounts and this is reflected in the information that regulators request (e.g. on regulatory as opposed to statutory depreciation, the exclusion of certain cost or asset service categories not subject to regulation or being regulated differently, elsewhere, or by other regulators, the different split of OPEX and CAPEX for regulatory purposes, and so on). As a result, for utilities featuring more than one activity-based revenue streams, costs and assets in regulatory accounts are disaggregated between regulated and non-regulated activities as a *de minimis* requirement. In advanced cases, most companies provide national statutory accounting in conformity with International Accounting Standards anyhow. Moreover, regulatory authorities use regulatory accounting information submitted by utilities to regulate prices - in other words, to determine the allowed revenues of regulated utilities as far as their regulated activities are concerned.

The "semi-advanced" category includes the greatest number of countries and it is also the most heterogeneous one. Within this category, it is possible to find countries which do not really distinguish between regulatory and statutory accounts but are confronted with problems/difficulties when it is necessary to adjust for the differences between the Regulatory Asset Base and the total fixed assets and the differences in depreciation methods. They hence perceive that differences do exist, but sometimes they are not too well-equipped to face the resulting issues. Similarly to the "advanced" category, they provide templates for regulatory accounting purposes and in some cases also instructions and guidelines. Some of them, however, do not have a structured procedure in requesting the relevant information and this therefore leads to some inefficiency to get information back from the industry on time for regulation to be carried out. Most of them meet International Accounting Standards for statutory accounting purposes or are in the process of adopting these standards. Sometimes, regulatory entities do not focus on the establishment of revenue requirements in detriment of the tariff-setting process, but they usually have at least a set of well-defined objectives of that process in advance. However, implementation and other ex-post issues do normally arise in the 'semi-advanced' group, and normally there are no provisions in the law requiring the audit of regulatory accounts and/or the latter is not carried out by an independent entity.

Concerning the regulatory reporting requirements, the remaining category of "improvements needed" regulators contains a group of countries whereby improvements are needed. Companies there do produce statutory accounts (most, but not all, of them according with International Accounting Standards) but there is no substantial difference between statutory and regulatory accounts, and sometimes there does not seem to be any perception in the country that such a difference might ever exist. Subsequently, there is weak awareness of cost allocation and no practical differences in terms of fixed asset treatment. Further, regulated and non-regulated activities and excluded services may be not presented in a disaggregated way, which makes it difficult for energy regulators to properly enact the price/revenue regulation process. In some cases, the timing to submit regulatory accounting information and the overall procedure being observed is not the most appropriate one. For instance, no specific timing for submission is given or the time span from the request for information by the Regulator and the time of information delivery by the industry is too short. In terms of tariff setting, in the last group of countries there might be no clear objectives or these might have to be improved. Furthermore, relating to the system of data and accounts auditing, the observations being made for the “semi-advanced” group country category are also valid for the last category.

7 Recommendations and Conclusions

This chapter provides general guidelines/recommendations concerning the topics of role, data requirements and system of auditing for tariff setting purposes. It can be seen as a result of the answers from the questionnaires (empirical data) and at the same time a development of some theoretical topics aforementioned. Within this section we have also taken into consideration the feedback received from ERRA members after and during the presentation in Istanbul, Turkey which took place 24 May 2007. Moreover, in order to fulfil the request of the Tariff Committee we extended the scope of the recommendations towards some aspects of data verification and cost reviews.

The purpose of this section is not to make a set of recommendations for each ERRA country in particular, but instead to identify common aspects that must be taken into account in future by each country (with some necessary adjustments based on countries specificities).

In this chapter a problem-and-solution approach is used that can be divided into two stages:

- identification of a set of problems/difficulties that undermine the effective regulatory reporting in the countries mentioned
- establishment of suggestions and recommendations that may constitute a positive contribution in addressing those issues.

After an analysis of the results from the questionnaires, the conclusions drawn are related to the objective of the study therefore it is possible to categorise the following issues:

- capabilities of the regulated companies
- regulatory data availability
- regulatory accounts requirements
- data checking and verification
- cost shifts between the businesses
- cost reviews.

7.1 Capabilities of the regulated companies

The capabilities of the regulated companies to understand data requests and the general the regulatory framework is very important. This constitutes an underpinning aspect in tariff/pricing regulation and the information requests.

Usually regulators collect economic and technical information from utilities for regulatory purposes using standard templates. To guarantee that the data is collected and provided in an accurate way it is fundamental that utilities understand what data should be collected and for what purpose. Regulated companies must be aware of the objectives of regulatory accounting and the overall procedures from data collection to tariff setting.

The main areas where great understanding should be achieved include:

- the purpose of regulatory accounts
- the principles for attribution, allocation and inter-business shifting of costs
- the translation of statutory accounts into regulatory accounting format
- the role of auditors in regulatory accounts.

A deep understanding of the regulatory framework permits that companies realise the consequences of providing incorrect or incomplete information.

In some cases the guidelines/instruction booklets accompanying the templates are not sufficient to ensure that the right data is collected and provided. For that reason it could be also helpful to strengthen the interactions between regulator and stakeholders (meetings, workshops) to identify and discuss areas of inconsistency within regulatory accounts and other relevant matters such as audit and publication.

In any case, regulators must be sure that data requirements are clearly understood and the data collection process is conducted in an appropriate way. Regulators may enhance the capabilities of the regulated companies in providing information on how to analyse data, normalise, compare current performance, and develop best practices to improve quality information. It should be envisaged that all relevant parties should continue to meet throughout the process in order to discuss matters of common interest and to find a solution for any problems that they encounter. This reinforces the importance of close co-cooperation between regulators, regulated companies and other relevant parties.

In our view, a good degree of achievement will be reached when utilities look at regulatory accounts with the same emphasis as they currently do with statutory accounts.

7.2 Regulatory data availability

In essence, the main purpose of regulatory accounts should be to provide financial information about regulated businesses for use by the regulator, the industry, investors, consumers and other stakeholders. This would enhance the information available within the industry and aid in assessing the management and informing economic decisions as well as improve transparency in the regulatory process.

In this context it would be helpful to introduce the concept of a regional regulatory data pool. A direct result of the pool is that participants share detailed information on their regulatory accounts. Special attention should be given to the treatment and access to the data pool, confidentiality provisions, degree of companies' individualisation and anonymity, etc.

The pool serves different purposes:

- increase the amount of information available for use by all interested parties
- ensure that the main interested parties (regulated companies, regulators, etc.) are engaged effectively
- extensive monitoring to guarantee consistency and convergence between the different countries
- bridge the gap between high level policy objectives and 'action on the ground'
- facilitate the benchmarking process as each particular regulated company can at any time determine its relative degree of inefficiency as opposed to best industry practice
- stimulate a learning process through the information exchange between regulated companies and regulators.

7.3 Regulatory accounts requirements

As it was explained in Chapter 2 the data collection phase has an important impact in all the regulatory process steps. As a consequence, regulators should collect data taking into account the quality-quantity trade-offs.

Regulatory accounts are therefore required to present financial information in a suitable and usable format that allows the costs, revenues, assets and liabilities of a utility's regulated activities to be distinguished from non-regulated activities.

In tariff setting, the regulator needs information to determine the revenue requirements that a regulated utility needs to cover its costs. Typically, the building blocks approach can be applied by adopting a step by step process which considers a regulated utility's costs.

For the purpose of price-setting, the following categories of data are typically required at the minimum for the regulated businesses. These data are collected for the base year of the regulatory period as well as forecasted for the full regulatory period in the case of multi-period price control methods (price or revenue caps):

- annual accounts including profit & loss account, balance sheets and cash flow statements
- details on operational expenditures, classified by controllable and non-controllable costs
- structured information on net asset values of the existing assets per asset category
- structured information on depreciation (new and existing assets) costs per asset category
- structured information on new investments per asset category
- functional specification of cost (allocated per voltage level of connection) of regulator is actively involved in the tariff setting process, i.e. not only in the establishment of revenue requirements but also in the process of tariff calculations
- income based on the current tariffs for regulated services differentiated by customer groups
- structured information on physical parameters including number of customers, energy consumption and demand, all of them per customer groups
- structured information on other physical parameters that characterise the operating environment of the regulated companies including network length, installed capacity of the transformers, supply size areas, number of transformers, number of meters, etc.

7.4 Data checking and verification

7.4.1 Wrong and inconsistent data

The data reported back to the regulator should be reliable and audited. Data quality is extremely relevant for price setting process and in particular in the context of incentive regulation with efficiency assessments computed on the basis of a comparative analysis. In this case, the efficiency score of one company is assessed on the basis of its costs and performance relative to other companies. If data for one of these companies is wrong, this may potentially impact the efficiency scores of the other companies. Clearly, such a linked approach makes the regulatory process more sensitive to any data errors. This also creates an opportunity for companies to strategically influence the regulatory process (regulatory 'gaming'), as each subsequent correction in the regulatory decisions would have reduced the overall credibility of the whole comparative exercise.

Verification of the accuracy of the data can take place in different ways.

Simple Checks

- general consistency checks - these checks establish simple ratios (number of employees / network length, OPEX / delivered electricity, etc) for the companies in the sample and control whether these ratios behave in logical ranges.
- engineering checks – these checks are based on engineering control of the submitted data, i.e. regulators control whether the submitted data is realistic from the engineering point of view, e.g. installed capacity of transformers, network length etc.
- statistical checks – this approach is based on cross-checking the correlation between different types of data and checking for any unexpected or strange effects such as outliers or internal inconsistencies. Analysis of correlation between different data variables is a simple instrument that can be effective for spotting obvious data errors such as use of different indicators or units (e.g. GWh instead of MWh) and identifying outliers in the data sample.

Data Audits

A more elaborate instrument is the auditing of the company's submitted data. Sometimes, regulators require companies to have their data audited first by an independent auditor, before submitting these to the regulator. Data is then only accepted if this is accompanied by a signed declaration of the auditor, specifying that the data complies (or does not comply) with the requirements as set out by the regulator.

An alternative approach towards auditing is that the regulator conducts its own audit (with the assistance of external auditors) of the company's data. This is a somewhat more intrusive instrument and should in principle be avoided. However, if there are serious concerns that the data submitted by the company is not correct and the company does not recognise this, audits could be conducted by or on behalf of the regulator. Auditors should design the methodology to provide sufficient, competent, and relevant evidence to achieve the objectives of the audit.

7.4.2 Security of Data Transfer

On the whole most companies receive and submit data for regulatory accounts purposes electronically i.e. electronic mail. To increase the security of data transfer a short to medium goal would be to have a centralised web server whereby regulated companies can upload data templates and submit their completed templates using the web platform. The regulator would be responsible for the centralised database. Electronic signature and security coding could be introduced for authorisation purposes and to increase safety of data transfer. Access to this database should be limited and any highly confidential data could still be exchanged in the 'traditional' way such as hard copies and disks.

7.5 Cost shifts between regulated and non-regulated businesses

In the energy sector, regulatory accounting arrangements are designed to reflect the development of competition and the importance of monitoring and detecting anti-competitive behaviour such as unfair cross-subsidization and undue discrimination. In areas where there is little competition, as in the case of electricity and gas networks, the focus is on ensuring that regulatory accounting arrangements provide consistency and transparency in order to monitor performance and support the price controls.

The rates charged by a regulated company are intended to allow the company to recover its costs for providing regulated service plus the opportunity to earn a return on investment. Costs, other than those incurred in providing the regulated service should not be recovered in rates charged to customers for receiving regulated service. These other costs are those incurred by the company in providing other regulated or non-regulated services. In addition, sharing these other costs to company customers (cross-subsidisation) will result in the company gaining an advantage over its competitors in a competitive market.

The issues of cost attribution, cost allocation and inter-business recharging of costs are important to regulators. In order to avoid unfair cross-subsidy it is important that costs are allocated in an appropriate way, where possible on the basis of direct cost drivers, although there may be certain categories of costs where a greater degree of judgment is required. In many cases an appropriate approach to cost allocation will also facilitate comparative competition and comparisons with the assumptions made in setting price controls. The main principles are that allocations of cost should be based on cost causality, objectivity, consistency, and transparency.

7.6 Cost Reviews

Usually before each regulatory period regulated companies submit their cost plans to the regulator who is responsible for their revision. After this review, the allowed cost (revenue requirements) should be agreed and enter into the tariff calculations.

Following the request of ERRA we discuss briefly below, how regulators can approach the cost reviews.

Full-fledged OPEX benchmarking and ex-ante check for CAPEX efficiency

In our previous work for ERRA we stated that in contrast to some Western European countries (Norway, the Netherlands, Austria), where the cost input in the benchmarking model integrates OPEX and CAPEX in one TOTEX variable, the majority of ERRA regulators use a building blocks approach. Under this approach (controllable) OPEX is benchmarked and CAPEX is separately checked for efficiency outside of the benchmarking analysis. The results of the ex-ante OPEX benchmarking and CAPEX (investments) efficiency checks are used to establish the annual revenue requirements during the subsequent regulatory period.[15] While the methods how to carry out benchmarking checks have been developed in our previous project, we discuss here how to deal with the investments. The investments should be examined from two perspectives:

- Ex-ante: conduct an assessment of the accordance and efficiency of a company's proposed investment program for the forthcoming regulatory period considering future demand growth, asset configuration and any other relevant information. A good approach would be to combine: comparative analysis of investments planned by the different regulated companies, review by independent consultants and regulatory tests (conducted by the regulator and based on cost benefit analysis) to assess the investment projections.
- Ex-post: consider differences between the forecasted investments approved in the previous regulatory decision with the actual investments undertaken by the regulated companies.

[15] See for more arguments the report of KEMA for ERRA "Determination of the X factor", August 2006.

Any capital expenditure undertaken by the regulated companies that has not passed the regulatory test will be excluded from the rolled forward asset base that is used in determining maximum allowable revenue in the next regulatory period. At the start of the next regulatory period only actual capital expenditure in the previous regulatory period will be included in the asset base. At the time of the regulatory period prudent expenditures that were required and took place, but were not forecast, will also be rolled into the regulatory asset base. Capital efficiency gains from the last regulatory period may be allowed for carry-out into the next regulatory period.

To avoid any kind of regulatory discretion the regulator should make the CAPEX review as transparent as possible informing about the methods chosen to assess the investment projections and how the results will be reflected into the agreed level of CAPEX. In the same way, companies who voluntarily assess their capital expenditure against the before known regulatory test would not face risk of non-inclusion of their CAPEX later at the time of regulatory review.

Simple productivity ratios

The ratios that could be used to evaluate the cost efficiency for the regulated businesses are standard productivity ratios whereby cost is considered as a global input, and is divided by a number of outputs.

- OPEX / electricity distributed
- OPEX / number of customers
- OPEX / distribution system peak demand

Regulators can compare these ratios between the regulated companies in order to obtain information of the companies' performance using criteria which are usually defined as the average or best performance for the selected comparable companies in the sample.

Using inter-temporal comparisons

Comparing the ratios for a current period with a similar information prior years affords some basis for judging whether the performance of a certain company is improving or worsening. This implies how the company's parameters (cost and physical outputs) change over time. This comparison over time is called inter-temporal analysis, to express the idea of reviewing data for a number of consecutive periods.

7.7 Conclusions

As some countries still receive accounting information in the form of statutory accounts, the basic link must therefore be to match the companies' formal annual reporting procedures through the statutory accounts and translate these into the regulatory accounting format. To have this format would be more efficient for the regulated companies when conducting the data collection so as to not create additional administrative burden in compiling the data for the regulator. Most countries in their secondary legislation have a regulation/licence condition that all regulated companies are obligated to submit financial information to the regulator. However, not all regulators issue templates or instructions on how to complete and submit the data. When issued, sometimes these templates tend to be unnecessarily complex for the industry to factually respond on time and effectively. In some cases, templates follow standard accounting principles but not regulatory accounting ones, for instance when it comes to including/excluding specific items of accounting (cost etc.), depreciation, and so on. Nevertheless improvements in the interactions and data exchange with regulated companies can be observed as the national regulators collect experience and knowledge in the consultation processes and from exchanges with other regulators abroad.

The differentiation between regulatory and statutory accounting data does not always appear to be done across the board, and may create comparability and consistency problems across some of the ERRA member states. In some cases, the two approaches are not entirely and clearly differentiated as there still seems to be some form of lack of knowledge in regard to what the role of regulatory accounting actually is, and the points in which it differs from standard financial statutory accounting (annual reporting, depreciation, excluded services, RAB, OPEX/CAPEX etc.).

Along the same lines, it is also to be noted that some of the current formats do not readily translate to the conventional regulatory accounting presentation adopted in other countries, which should ideally reflect International Financial Reporting Standards (IFRS) Some of the ERRA countries do not formally follow such standards but it must be highlighted that within the ERRA members a mixture of progress can be seen. It is interesting to see that those countries which are now a member of the EU e.g. Bulgaria and Lithuania tend to follow the IFRS, whereas some of the other countries linked to other accounting systems may still need to adopt changes in this area. It is not to imply that all non-EU ERRA members do not follow these standards. This can be seen a positive trend, as the ERRA countries are at different stages and as progression develops they too should hopefully go in this direction. These countries are moving forward and are open to the changes that confront them and with the correct support and advice the right steps are being taken to implement these standards (IFRS) in their accounting system.

8 Appendix 1: International Practice

8.1 The Netherlands

In the Netherlands, DTE is the regulator for electricity and gas. DTE collects annually data from the regulated network companies. Its mandate to request data from the regulated industry is legally defined in article 7 of the Energy Act (1998). The Energy Act also obliges companies to keep a separate financial administration specific for regulatory purposes.

One of the primary duties of DTE is to set network tariffs and as part of their task, typically, a large quantity of data is requested from the regulated companies. These are so-called incidental data requests and serve a specific purpose, typically, to calculate the X-factor and set tariffs accordingly. Additionally, DTE also collects periodical (mostly annual) data from network companies. This is primarily for the purpose of monitoring or to crosscheck data received through the incidental data requests.

The fact that DTE requests both incidental and periodic data requests, and that these data tend to overlap each other, led to substantial critique by the industry. Companies claimed that multiple data requests led to additional yet unnecessary administrative burden. They would claim that often, data would be requested by DTE for one purpose, while the same data would already have been supplied previously and thus already would be in the possession of DTE.

The point of administrative burden is correct; however, from the regulatory point of view, there are some good reasons to request more than one time for the same data i.e. when it is already in the possession of the regulator. The data may be obsolete or, as is often the case, based on projections rather than actual outcomes. If the company already has possession of the data, it may only be a relative small effort to (re)send it to the regulator. Also, multiple data requests enable the regulator to cross-check and confirm that the data that is being used is indeed correct.

Multiple data requests however also increase the burden on the regulator: all the data has to be handled and stored for future use and one should keep track of all data inflows and relation to tariff or other regulatory decisions. To make this process manageable, DTE started up the CODATA project which aimed at developing standard data templates for companies and designing a data management system for DTE to continuously collect, store, and track the data. The general idea is that, in both the case of incidental or periodic data requests, definitions and templates should conform to those developed under the CODATA effort.

The CODATA project was later complemented by the project Regulatory Accounting Rules (RAR) which dealt specifically with financial accounts. The RAR prescribes specific rules for companies to in administrating costs and provides a clear set of definitions. Accounting rules include prescriptions for depreciation methods and asset lifetimes. Annual reports submitted to DTE need to be accompanied by a financial auditor's declaration. For this purpose, a separate auditing instruction has been developed and this is part of the RAR. If deemed necessary, DTE may request an independent financial auditor to review the financial accounts.

The CODATA and RAR projects reflect need to maintain standard and uniform data definitions and rules. The main idea of CODATA / RAR is to enable DTE to collect uniform data throughout the industry. Differences in definitions and errors in data has been the primary cause for the revision of X-factors for electricity. The September 2000 decisions on the X factors led to a wave of protest and formal appeals by the industry. Their main critique was aimed at the use of benchmarking as a way to set tariffs. The main problem of benchmarking was that results were considered not to be comparable as a result of large differences in definitions and possible also data errors in some of the companies' accounts. In particular, major data problems occurred in the standardisation of capital costs. The appeals led DTE to publish revised decisions in September 2001. The main difference with the initial decisions was an increase in the quality of data. However, the companies' main critique points were still not thoroughly met, and there still remained problems with the data. DTE responded to this by initiating a special project with the objective to remove any remaining data problems. As a result, a second revision of the benchmark analysis and X factors was published in August 2002. But this did not prevent the network companies from confirming their appeals, as they did not consider DTE's corrections to be sufficient.

Eventually, in October 2002, the Courts overruled the X factor decisions. However, this was just a legally-motivated decision. It was taken not (only) on the basis of the benchmark analysis, but mainly because according to the Dutch Electricity Act, DTE should have applied a uniform X factor (instead of an individual X factor for each company) in the first place.

DTE has generally acknowledged the problems of erroneous data in benchmarking analysis. However, this has not led DTE to abandon benchmarking. For the future, DTE will still make use of benchmarking but in doing so, has invested quite a lot in assuring data consistency. The development of the CODATA / RAR has been one of the (main) efforts in avoiding such problems in the future.

As part of the CODATA / RAR efforts, companies need to report information to DTE in the following areas:

- General company data
- Modifications in the Network
- Regulatory Accounts
- Quality of Supply
- Capacity Plans
- Tariff Proposals

A short description of each data area follows:

1. General Company Data

General information about the company such as name, address, contact information and contact persons. If applicable, DTE also requests for certain legal documents:

- Certificates and Statutes
- Names of Directors
- Names of the Members of the Board
- Names and address of shareholders
- Management agreement
- Outsourcing agreements
- Annual Reports
- Financial allocation between the network company and holding company.
- General conditions for Electricity Transportation

2. Network Information

Technical information about the electricity network, for each voltage level:

- General description of the network (e.g. part of the country, districts or cities being supplied, etc.)
- Network length, split between underground and overhead
- Route length
- Number of switches and breakers

- Connections to other networks (neighbouring distribution networks or the transmission network)
- Number of connected customers

3. Regulatory Accounts (according to RAR)

Financial results of the network company as follows:

Overview of all investments, depreciation, disposals, and book values of assets, for the following categories:

Intangible Assets

- Municipality taxes
- Research & Development
- Others

Tangible Assets

- High Voltage
- High/Medium Voltage
- Medium Voltage
- Low Voltage
- Meters
- Buildings
- Land
- IT equipment
- Others

Operational Expenditure for the following categories:

- Purchase of transmission
- Purchase of energy and power
- Other purchases
- Personnel costs
- Outsourced activities
- Other and exceptional cost

Tariffs and Revenues, for each tariff element:

- Tariffs
- Volumes
- Revenue

Extraordinary income and expenses.

4. Quality of Supply

Information about the level of quality supplied to customers by voltage level:

Reliability by voltage level:

- Interruption rate (SAIFI)
- Duration of interruptions (CAIDI)
- Annual interruption duration (SAIDI)

Power quality, whether the following types of power quality problems have occurred (yes/no):

- Frequency deviations
- Voltage swells
- Voltage dips
- Asymmetric phases
- Harmonics

5. Capacity Plans

Companies have to submit every two years so-called capacity plans to DTE. In these plans, companies describe for each major load point historical as well as expected demand growth for the next seven years. Also, they need to indicate whether existing network capacity is sufficient to meet this demand and if not, what measures are taken to deal with this.

6. Tariff Proposals

Finally, companies need to propose to DTE tariffs they plan to apply for the next year. These tariffs need to comply with the X-factor constraint. Also, the company has to submit demand projections. This part of the CODATA / RAR data request corresponds to the annual tariff baskets as a function of which companies make tariff proposals.

8.2 The UK

In the UK, Ofgem (the electricity and gas regulator) publishes Regulatory Accounting Guidelines (RAGs) for regulated entities to fill in. Discussion is attached to the publication of guidelines and a consultation process is part of the interaction. RAGs are different for electricity and gas.

In the utility field, the UK Government's Green Paper on utility regulation 'A Fair Deal for Consumers' (2000) suggested that there would be benefits if companies were to produce more standardised regulatory accounts. In particular, this would facilitate wider understanding of regulatory issues. Today, electricity companies in the UK follow a completely standardised procedure in regulatory accounting, as the templates they have to use are standard and are prepared for them by Ofgem.

Regulated companies normally want less information to be made publicly available than consumer or environmental organisations. This is an issue to be sorted out at a legal level between the legal teams of regulators and companies, and must follow primary or secondary legislation on the issue (for instance, a Data Protection Act issued by Parliament). Obligations to prepare regulatory accounts are usually only placed on utility companies with monopoly or substantial market power

The main elements applying to regulatory accounting practice in the UK for all utility regulators are as follows:

- Regulatory accounts will be prepared and audited using the common regulatory accounting framework. Where there are any conflicts between Regulatory Accounting Guidelines (RAGs) and UK Generally Accepted Accounting Practice (UK GAAP), *the RAGs will take precedence*;
- Where practicable, there will be consistency between the formats of the regulatory accounts used *in all the regulated industries, by production subset*

Regulatory accounts will have to be published no later than four months after the regulatory accounting year end (assumed to be into line with the tax year's end); and

Where appropriate, the regulatory accounts will include additional information (non-economic and non-financial) that will enhance the understanding of the regulated companies' performance.

In addition, the UK's utility regulators have jointly decided that:

- It is not considered appropriate to develop a Statement of Recommended Practice (SORP) for regulatory accounts; and
- There will be no requirement for interim regulatory accounts.

In the electricity industry and beyond, the main purpose of regulatory accounts should be to provide financial information about regulated businesses for use by the regulator, industry, investors, consumers and other stakeholders. This would enhance the information available within the industry and aid in the assessment of the stewardship of management, as well as informing economic and financial decisions.

Applications of UK regulatory accounts also include:

- Monitoring performance against the assumptions underlying current price Controls;
- Informing future price control reviews and other regulatory decisions that require financial information, such as setting determined prices;
- In the relevant markets, assisting in the detection of certain anti-competitive behaviour such as unfair cross-subsidisation and undue discrimination at the appropriate level within the business concerned (EU regulations);
- Assisting in comparative competition (efficiency analysis and benchmarking);
- Assisting in monitoring financial health; and
- Improving transparency in the regulatory process as regulatory accounts are the main source of regular, published and audited financial information about regulated companies.

With regard to the basis of preparation of regulatory accounts, the main UK options are Historical Cost Accounting (HCA), Modified Historical Cost Accounting (MHCA) and Current Cost Accounting (CCA) to determine the regulatory asset value (RAV). The main difference between these options lies in the area of asset valuation. The majority of companies in the United Kingdom use HCA as the basis of preparation for their statutory (standard published) accounts, a number of them revalue fixed assets using MHCA principles, but not all of them refer to their statutory accounts as being prepared on an MHCA basis.

The valuation of the capital base is usually central to the formulation of price controls. For price control purposes, most regulators have not relied upon reported asset valuations, whether based on HCA, MHCA or CCA principles, but instead have used their own estimates of an appropriate valuation for the capital base, which takes account of the circumstances of privatisation. This is commonly known as the regulatory asset base, regulatory capital value or regulatory asset value (RAV). Usually, the RAV is based on the rolling forward an initial privatisation or market valuation by adjusting for depreciation, capital investment, disposals and inflation. The RAV represents a current value basis of measurement which may be closely related to the 'value in use' of the businesses under a continuing regulatory regime. Ofgem requires the use of RAV in regulatory accounting statements.

In order to aid the understanding of the regulatory accounts, there should be full disclosure in the regulatory accounts or in supporting documentation as appropriate, of the basis of preparation, the determination of the value of the RAV, the return on the RAV, where appropriate the return on a price control basis, and other performance indicators. Whichever approach to the basis of preparation is taken, this disclosure should provide useful information for both the regulator and other stakeholders.

The attribution, allocation and inter-business recharging of costs should be based on a set of principles, the main ones being:

- Cost causality, with revenues, costs, assets and liabilities attributed in accordance with the activities which cause the revenues to be earned, or costs to be incurred, or the assets to be acquired, or the liabilities to be incurred;
- Objectivity, with attributions, allocations and inter-business recharging of costs performed on an objective basis and not unduly benefiting the regulated company or any other company or organisation;
- Consistency, where practicable all attributions, allocations and inter-business recharging of costs should be consistent from year to year;
- Where there are changes to the RAGs, *the regulated company should restate the previous year's regulatory accounts*; and
- Transparency: all the methods used in the attribution, allocation and inter-business recharging of costs should be transparent and the revenues, costs, assets, and liabilities separately distinguishable from each other.

- Regulated companies generally do not want to release information that they deem to be commercially sensitive. On the other hand, consumer and environmental organisations support disclosure as described above.

In the UK electricity industry, only one set of regulatory accounts is prepared and published (this may be different in other utilities), but other additional regulatory accounting information is provided to the regulator on a confidential basis, and is not published by Ofgem's library. A version of the regulatory accounts should be published in order to inform stakeholders about the performance of the regulated company. This will usually entail the publication of more information than would be the case for a normal market company under UK accounting disclosure regulations (GAAP). This is because the interests of stakeholders in monopoly activities are wider than the interests of shareholders in 'normal' (i.e. competitive) companies – monopoly companies that serve the general public normally attract a very wide set of public-domain interests including social, political, electoral, and loose 'macroeconomic' interest. Even after privatization, Government should never become uninterested in public-private monopolies. Where there is monopoly power, the development of efficient industrial structures is aided by reducing the information asymmetry that exists between the monopoly and the consumer. However, if there is commercially sensitive information in the regulatory accounts provided to Ofgem, then the regulator will have to consider whether this information should be excluded from the published version of the regulatory accounts.

The published version of the regulatory accounts should contain a note summarising the important features of the attribution, allocation and inter-business recharging of costs. Where appropriate, this note will also include details of how the users of the regulatory accounts can obtain copies of the RAGs and supporting documentation.

The publication options of UK regulatory accounts include the following:

- As a stand-alone document;
- As a part of the statutory accounts; and
- As part of another document.

The availability of the published regulatory accounts should also be properly publicised by the company, so that stakeholders and the wider public are made aware that they are available. It seems appropriate that all companies should be required to make them available on their Websites.

UK electricity supply (retail) has been separated from electricity distribution and retail businesses are now separate legal entities. As a result of this, they will produce separate statutory accounts. Given that the main purpose of regulatory accounts should be to inform the regulation of companies subject to price control, provided an appropriate balance could be maintained between the volume of information, its usefulness, and the cost of providing it. Incidentally, retail supply businesses in Slovenia are not separated yet, so they will have to submit regulatory accounts following regulatory (not necessarily statutory) accounting guidelines to be published by AERS. Nevertheless, commercially sensitive information should not be disclosed to the public.

The use of HCA is the basis of preparation but CCA information should also be included in the regulatory accounts. Electricity companies agreed that regulatory accounts should be prepared using a 31 March year-end (end of the financial UK year). Regulatory accounts should be audited by professional auditors who have a duty of care to Ofgem to produce audited regulatory accounts published on the Web within four months of the regulatory accounting year-end.

The UK industry supports the RAG requirements for additional information, particularly on capital structure, the reconciliation between statutory and regulatory accounts, and the publication of a detailed narrative. However, the publication of detailed information on cost allocations, cost attributions, and inter-business recharging of costs was not supported as this might expose commercially sensitive information to competitors. Forecast information is only included to a limited extent in the regulatory accounts, although it is available in the Business Plan Questionnaires also required by Ofgem in parallel with the RAs at each price review. All electricity companies said agreed they did not see any value in producing 'interim' regulatory accounts.

Generally, the tables in the Ofgem templates are consistent with UK GAAP accounting principles for a company listed on the London Stock Exchange, but certain tables will require the provision of additional information, which is typical of monopoly operators. In particular, it will be important to be able to compare the actual costs of running the company with the assumptions underlying the price control and gain a better understanding of any variances.

The information and tables asked for in standard transmission regulatory accounts by UK authorities are:

- Five Year Annual Summaries (business plans);
- Transmission Price Control revenues;
- System Operation Price Control revenues;
- Total Transmission Business Price Control revenues;
- Regulatory Asset Value (RAV) Statement and calculation criteria;

- Detailed analysis of turnover;
- Summary analysis of turnover compared to the price control allowed revenues;
- Analysis of repair and maintenance costs;
- Detailed analysis of capital expenditure;
- Five-year summary of cumulative capital expenditure;
- Five-year summary of major capital schemes;
- Analysis of provisions;
- Summary of activity-based analysis for cost allocation purposes;
- System Operations' cost of sales analysis;
- Source of costs summary;
- Summary of related-party transactions; and
- Licence condition compliance statement (pro-forma)

Moreover, some extra information on accounting policies than would be required by UK standard accounting policy requirements (GAAP), including a detailed statement of the basis of preparation, a detailed statement of the capitalisation policy, a detailed statement of the principles involved in cost attribution, cost allocation, inter-business recharging, and a detailed statement of the principles involved in the preparation of the activity analysis; and a

Reconciliation of the transmission-only (regulated) business to the total business of the licensee (which may include unregulated activities, or activities regulated by other institutions), which includes:

- Some of the Five Year Annual Summary of the licensee, reconciled;
- Profit and Loss Account;
- Statement of Total Recognised Gains and Losses;
- Balance Sheet; and
- Cash-Flow Statement.

In terms of wider publication requirements, it is envisaged that all of the tables included in the accounting template - with the exception of the tables disclosing the detailed analysis of turnover (transmission business), the five-year summary of major capital schemes (transmission business), some elements of the summary of related-party transactions (transmission business), and the detailed analysis of each material-related party transaction (transmission business) - will be subject to wider publication either on NGC/Ofgem's Websites or elsewhere in the public-domain general or specialised press, including the Web.

The UK transmission accounting tables should be read in conjunction with the following considerations.

The following tables are to be considered as primary financial statements, and are typically available to everyone who requires them (typically, via Ofgem's Library or NG's Website):

- Five Year Annual Summary;
- Reconciliation to the Price Control Basis;
- Summary of the Comparison to the Price Control;
- RAV Statement;
- Profit and Loss Account;
- Statement of Total Recognised Gains and Losses;
- Balance Sheet; and
- Cash Flow Statement.

Unless otherwise stated, the figures published by NG to the wider public are for the transmission business as a whole, and not for the separate Transmission Operation and System Operation elements.

The commentary required of NG in each of the tables should provide sufficient detail so that users of the regulatory accounts can use those tables to assess themselves the regulatory performance, financial position, financial performance, and cash flows of the business.

Moreover, Ofgem requires that:

- The RAV numbers in the regulatory accounts be NGC's estimate of its RAV;
- information that is not presently provided in the regulatory accounts is marked with a "hash" (#) sign;
- in the analysis of the source of costs, external costs mean those costs that are charged to the transmission business from companies that are not related parties of the company;

- staff numbers will be calculated using average full-time equivalents (AFTEs) for the year;
- the price control numbers are on a nominal basis and will be properly inflated according to the RPI over time;
- unless stated, prices are on a nominal basis;
- where possible, throughout the tables actual figures will have to be compared to the assumptions underlying the price control; and
- health and safety (regulated by the HSE in the UK), and environmental costs will only be separately identified if Ofgem and NG can agree upon a suitable definition for them.

Re-cap: Draft Template for the transmission business (UK electricity transmission)

Contents List

1. Five Year Annual Summary
2. Reconciliation to the TO Price Control Basis
3. Reconciliation to the SO Price Control Basis
4. Summary of the Comparison to the TO Price Control
5. Summary of the Comparison to the SO Price Control
6. Summary of the Comparison to the Total Transmission Business Price Control
7. Review of the year
8. RAV Statement
9. Profit and Loss Account
10. Statement of Total Recognised Gains and Losses
11. Balance Sheet
12. Cash Flow Statement
13. Detailed analysis of turnover
14. Summary analysis of turnover compared to the price control
15. Analysis of repair and maintenance costs
16. Detailed analysis of capital expenditure
17. Five year summary of cumulative capital expenditure

18. Five year summary of major capital schemes
19. Analysis of provisions
20. Summary activity analysis
21. SO cost of sales analysis
22. Source of costs summary
23. Summary of related party transactions
24. Detailed analysis of each material related party transaction
25. Auditors report
26. Directors responsibility statement (pro-forma)
27. Corporate governance
28. Director's report
29. Directors' remuneration
30. Accounting policies (including a detailed statement of the basis of preparation, a detailed statement of the capitalisation policy, a detailed statement of the principles involved in cost attribution, cost allocation, inter-business recharging and a detailed statement of the principles involved in the preparation of the activity analysis)
31. Other UK GAAP notes to the accounts, e.g. an analysis of exceptional items (force majeure etc.) and a five-year summary

Reconciliation of the transmission business to the *total* business (including unregulated items) of the licensee:

1. Five Year Annual Summary of the licensee
2. Review of the year
3. Profit and Loss Account
4. Statement of Total Recognised Gains and Losses
5. Balance Sheet
6. Cash Flow Statement

8.3 Italy

The Italian regulator (AEEG) has a statutory obligation to regulate networks and to monitor the wholesale market (the latter has started operating in 2004 under the name of IPEX). In the electricity as well as the gas field, AEEG also performs inspections and provides technical certification in a limited sample of cases. Although inspection is not AEEG's main or exclusive activity, it is somewhat linked to the core business of network regulation.

Data requests are sent by AEEG to transmission and distribution operators in the form of electronic files. Since AEEG sets 'default' tariffs for electricity transmission and distribution (for the latter, these take the name of 'tariff options' or 'opzioni tariffarie'), the Authority needs deep-down information from companies, which it collects via electronic questionnaires and formal data requests. These are followed by one-to-one meetings between regulator and companies, which tend to formalise the data collection process.

Data requirement procedures are contained in Determination Documents 4/2004 (quality is included) and 236/2000 (gas) as examples. All documents are available, in Italian only, on www.autorita.energia.it Technical instructions are forwarded to regulated companies by AEEG and published as questionnaires in reserved areas of AEEG's Website (public questionnaires, in empty format, can be individually requested to AEEG in hard copy, or retrieved from AEEG's Library, by any citizen). Data transmission takes place electronically and after meetings, via reserved FTP (accreditation of servers is given by the IT Department of AEEG).

Data collection takes place with respect to the following variables:

- Cost components: opex, depreciation, and capex;
- Replacement cost for new investments in networks;
- Published tariffs to captive customers;
- Metering data (metering is not a separate activity yet in Italy);
- Technical network variables such as network length, environmental cost drivers, connections' numbers and transformers to determine the topology and nature of networks to give rise to cost equalisation parameters to apply to the Distribution Cost Equalisation Fund (this is due to the existence of national price uniformity constraints on electricity, but not gas, tariffs in Italy).

Electricity networks in Italy are regulated by AEEG on the basis of standard costing. Utilities must submit their cost and technical data to AEEG in both electronic and hard copies for discussion and validation. At the end of the data validation process, AEEG determines the standard costs to be recognised to network utilities to the extent that transmission and distribution of electricity are concerned. The standard costs are only the basis for regulation, as otherwise transmission and distribution can be priced independently by companies within the limits of “default” (standard) tariffs. In other words, network operators may have their own menu prices to be tailored to different customer classes; however, they will still have to offer all customers the ‘default’ tariff being calculated by AEEG when nothing economically more convenient is made available.

The way in which data communication takes place between AEEG and network operators is via the so-called ‘tariff options’ or ‘opzioni tariffarie’, which are calculated starting from the data templates elaborated by the companies themselves upon AEEG’s demand. The data templates are reported below as an example, and refer to the data reporting requirements for the ‘tariff options’ of ENEL (holding in excess of 90% of electricity distribution in Italy) and AEM Milano, Milan’s multi-utility holding distribution concessions in Milan and other areas of Northern Italy.

The areas referred to as ‘codice opzione’ (option code) are to be filled in by the network operator upon request of AEEG. AEEG will then receive the spreadsheets with basic (default) tariff options and compare them with their own regulatory cost calculations based on company cost data (confidential). If the tariff options meet the code requirements (i.e. they meet the total standard cost constraints as imposed by AEEG as part of the revenue requirements’ calculations), then they will be approved and returned to the companies for enforcement. If, on the contrary, the tariff options are disallowed (because they do not meet the revenue requirement constraints), the companies will have to recalculate them before resubmission. The whole process is generally carried out via (a) electronic data transfers, and (b) hard copy transfers accompanied by face-to-face meetings between regulator and companies. Restricted-access sections of the Website (for both AEEG and companies) exist to guarantee privacy data transfers (generally, by means of password-protected files exchanged over FTP sites) between the regulator and the network operators.

The data transfer process takes place via standard data spreadsheets in Microsoft Excel, some of which are also published (in Italian) on AEEG’s Website www.autorita.energia.it unless deemed confidential (tariff options as approved by AEEG are non-confidential by definition).

Excerpts from the two tariff option spreadsheets (Excel) for ENEL and AEM (Milan) follow in Italian.

Enel Distribuzione Spa (Roma)

E000

Enel Distribuzione Spa
Via Ombrone, 2
CAP. 00198
Roma (RM)
TEL. 06 - 85098355
FAX. 06 - 85098038

Opzioni tariffarie base per il servizio di distribuzione

Utenze in bassa tensione di illuminazione pubblica

Denominazione opzione	Codice opzione
illuminazione pubblica in BT	B4

Altre utenze in bassa tensione

Denominazione opzione	Codice opzione
BT fino a 16,5 kW	B1
BT oltre 16.5 kW	B2
BT inferiori all'anno	B3

Utenze in media tensione di illuminazione pubblica

Denominazione opzione	Codice opzione
illuminazione pubblica MT	M4

Altre utenze in media tensione

Denominazione opzione	Codice opzione
MT fino a 500 kW	M1
MT oltre 500 kW	M2
MT inferiori all'anno	M3

Utenze in alta e altissima tensione

Denominazione opzione	Codice opzione
AT base	A1

Opzioni tariffarie speciali per il servizio di distribuzione

Utenze in bassa tensione di illuminazione pubblica

Denominazione opzione	Codice opzione
Straordinaria illuminazione pubblica BT	SB5

OPZIONI TARIFFARIE PER IL SECONDO SEMESTRE DELL'ANNO 2004 PROPOSTE DA

AEM Milano (Milano)

E084

AEM Milano
Corso di Porta Vittoria, 4
CAP. 20122
Milano (MI)
Numero verde : TEL. 800199955
FAX. 02 - 76016206
aemservice@aem.it

Opzioni tariffarie base per il servizio di distribuzione

Utenze in bassa tensione per illuminazione pubblica

Denominazione opzione	Codice opzione
ILLUMINAZIONE PUBBLICA BASSA TENSIONE	IP1

Altre utenze in bassa tensione

Denominazione opzione	Codice opzione
BASSA TENSIONE ALTRI USI	BT1
BASSA TENSIONE ALTRI USI PER FORNITURE STRAORDINARIE	BT2

Utenze in media tensione di illuminazione pubblica

Denominazione opzione	Codice opzione
ILLUMINAZIONE PUBBLICA MEDIA TENSIONE	IP2

Altre utenze in media tensione

Denominazione opzione	Codice opzione
MEDIA TENSIONE ALTRI USI	MT1
MEDIA TENSIONE MULTIORARIA ALTRI USI	MT3
MEDIA TENSIONE ALTRI USI PER FORNITURE STRAORDINARIE	MT2

Utenze in alta e altissima tensione

Denominazione opzione	Codice opzione
ALTA TENSIONE ALTRI USI	AT1

Opzioni tariffarie speciali per il servizio di distribuzione

Altre utenze in bassa tensione

Denominazione opzione	Codice opzione
BASSA TENSIONE MICRO-POTENZA	SP-AU1

8.4 Slovenia

Slovenia is a relatively new joiner to the EU (1st May 2004) and the only new joining country (E-27) that has already been admitted to the monetary union (as of 1st January 2007). It is arguably one of the most advanced new joiners economically, if not the most advanced of all according to some macroeconomic parameters.

To perform all the tasks prescribed to the Energy Agency of the Republic of Slovenia (AERS) by the country's Energy Act, article 89 of the Energy Act gives AERS wide authority for all necessary data collection:

> *Article 89*
>
> ***Providers of energy-related services shall be required to provide the Energy Agency with all the information required for the implementation of its tasks pursuant to Article 87 and the previous Article of this Act.***
>
> *The obligation stated in the previous paragraph also applies to the local-community authorities if required for the implementation of the competencies of the Energy Agency under this Act.*
>
> *The method of providing data on the part of the public-service providers specified in the first paragraph of this Article may be set out in a general act issued by the Energy Agency.*

During the early years of establishing the structure and operations of the AERS, the data collection process was also developed. As a functioning electricity market was the first priority at the beginning of the liberalisation in Slovenia, the collection process of electricity related data has been shaped well. A step-by-step evolution process is still to be done for the gas sector.

Current data requirements for regulatory purposes in Slovenia

The current AERS data collection template for regulation is shown in the following table. However, some templates should still be adapted to the new organisation (unbundling) of regulated activities as defined in 2004 amended Energy Act. The issuance of trading certificates (green - RECS, of origin) also requires new templates for necessary data collection.

Table 1: Overview of current AERS templates for data collection (Slovenia).

No.	Title of template	Collection period	Reporting unit
1.	**Electricity sector**		
1.01	Income Statement	Semi-annually (August) Annually (February)	Distribution companies Transmission company*
1.02	Financial results	Semi-annually (August) Annually (February)	Distribution companies Transmission company
1.03	Balance sheet	Semi-annually (August) Annually (February)	Distribution companies Transmission company
1.04	Redemption scheme	Semi-annually (August) Annually (February)	Distribution companies Transmission company
1.05	Income realisation	Semi-annually (August) Annually (February)	Distribution companies Transmission company
1.06	Expenses realisation	Semi-annually (August)	Distribution companies Transmission company

No.	Title of template	Collection period	Reporting unit
		Annually (February)	
1.07	Additional financial data	Semi-annually (August) Annually (February)	Distribution companies Transmission company
1.08	Investment monitoring	Semi-annually, ¾ and annually	Distribution companies Transmission company
1.09	Fixed assets value and lifetime	Annually (February)	Distribution companies Transmission company
1.10	Average connecting cost	Semi-annually Annually	TSO and DSOs
1.11	International benchmarking - opex	Annually	Distribution companies Transmission company.
1.12	TSO balance (el. flows)	Annually	TSO.
1.13	Imports and exports of electricity	Annually	TSO
1.14	Monthly monitoring of volume and financial realisation of electricity sales	Monthly (10. working day for previous month)	TSO and DSOs
1.15	Network access contracts data	Annually	Distribution companies Transmission company.
1.16	Distribution consumers characteristic data	Annually	Distribution companies
1.17	Households consumers overview	Annually	Distribution companies
1.18	Low voltage eligible customers overview	Annually	Distribution companies
1.19	Distribution network infrastructure data	Annually	Distribution companies
1.20	Preferential dispatch	Annually	Distribution companies Transmission company
1.21	Capital expenditure influence on quality of supply	Annually	Distribution companies Transmission company
1.22	Transmission network occupancy	By change, on request (concrete example)	TSO
1.23	Report on the energy sector	Annually	Generators
2.	**Licence holders data**		
2.01	Electricity production in thermal PP above 10 MW, except nuclear PP.	Annually	License holders of energy activity no. 2
2.02	Electricity production in power plants with single units above 1 MW and total capacity lower than 10 MW	Annually	License holders of energy activity no. 4
2.03	Electricity production in power plants with units not exceed 1 MW and wind power plants (regardless power)	Annually	License holders of energy activity no. 5
2.04	District heat production	Annually	License holders of energy activity no. 6
2.05	Refining of petroleum and petroleum products	Annually	License holders of energy activity no. 7
2.06	Distribution and activity of distribution network system operator	Annually	License holders of energy activity no. 9 and 13

No.	Title of template	Collection period	Reporting unit
2.07	Natural gas transmission, supply and activity of transmission network system operator	Annually	License holders of energy activity no. 10
2.08	Distribution and supply of natural gas and other gases, activity of natural gas distribution network system operator	Annually	License holders of energy activity no. 11
2.09	Storage of gaseous	Annually	License holders of energy activity no. 14
2.10	Storage of liquid fuels (capacity > 25 t)	Annually	License holders of energy activity no. 15
2.11	Non eligible customers electricity supply	Annually	License holders of energy activity no. 16
2.12	Trading and acting as agents and intermediaries on the electricity market	Annually	License holders of energy activity no. 18 and 19
3.	**Certificates (in preparation)**		
	Green certificates (RECS)		
	Certificates of origin		

Note prepared based on AERS official documentation.

Current practice to collect regulatory data in Slovenia

The data collection process is decentralised and carried out by several project groups of AERS. Electronic templates being dispatched or published on the AERS web server is the prevailing way of data exchange between licence holders and AERS. Hard copies or exchange of data on computer disks are used only for very confidential data exchange or for small reporting units who are without access to e-mail. Electronic signature and security coding is being introduced for authorisation purposes and to increase safety of data transfers.

As the central database has not yet been established at AERS, data storage and processing is done locally in several smaller databases (e.g. MS Excel applications). Due to limited numbers of personnel, current data layouts still require manual data exchange and control.

For the optimisation of data collection and the reporting process, AERS has established a fruitful co-operation with several institutions and agencies, these are:

- The Statistical Office of the Republic of Slovenia – carrying out monitoring of final consumer electricity and natural gas prices
- The Ministry of the Environment, Spatial Planning and Energy – collection of economic data for state-owned electricity companies is carried out using the same templates as AERS's (sent to the Ministry and AERS to avoid parallel reporting).

Further co-operation is planned with the Agency for efficient use of energy and renewable sources (qualified producers of data exchange) and the Agency of the

Republic of Slovenia for Public Legal Records and Related Services (AJPES) for access to published company accounting data (data cross-checking).

The industry response to regulatory accounting requirements in Slovenia as far as the electricity sector is concerned shows a high level of confidence and cooperation. The data collection process with AERS was well established during the early years with a high level of confidence. Except for the transitional period for regulatory data on quality of supply scheduled between now and the year 2008, there are no problems with data dispatching, many of which based upon harmonised templates agreed with both AERS and the Ministry (and sent to both addresses). A big interest in receiving educated feedback from the AERS already exists, especially where benchmarking information started to be communicated.

What might be improved in Slovenia

During a professional overview of the Slovenian situation, we observed the following main problems:

- lack of common understanding of regulation processes
- data confidentiality and authorisation
- security of data transfer and storage
- data publishing (return information from AERS)

To improve on the existing process, the following points should be considered:

- Issuing a general Act about methods for providing data (Energy Act, Art. 89)
- Recent Ministry experience with the act “Rules on data submitted by energy industry operators” could also be beneficial.

Automation of the data collecting process

As AERS’s staff is limited on data collection, the introduction of process automation and a powerful information system is crucial to simplify and optimise the collecting procedure:

Web application database server:

- Web application for direct data entering, automatic data storage, reminding procedure, simple data examination;

* Efficient database with pre-set applications (standard reports, links to others AERS models, etc) would simplify data exchange and processing;
* Establishing on-line connection and storage of TSO data (network data);

Web applications would enable efficient return information transfer and publishing of AERS data (limited data access for public and license holders).

Publishing and data access

The yearly AERS reports are a good practice of publishing regulatory data, although prompt publishing and access to the wider data set could be established in the future, for example via web database applications enabling an efficient and selective data access. There are two main groups interested in regulatory data access:

* providers of energy services (regulated and market activities);
* customers

Each of these groups are searching for different information, the first group about their competitiveness compared to other players – "benchmarking", whereas customers are more interested in information on the competitiveness of the market – prices and efficiency of regulated activities ('a fair deal for customers').

By the provisions of the '*Act on the Access to Public Information'*, all public information should be available on request. In article 10 of this act, public agencies should publish this information on their websites:

* all regulation related with agency operations.
* programs, strategies, statements, opinions, studies and similar documents

The distinction between public and sensitive (business, personal, etc.) data is not always easy to define, although AERS could make further steps in publishing wider excerpts of adequate documents.

The basic statistical standards for publishing collected or processed sensitive data should be met (data aggregation to avoid identification of individual, commercially sensitive data).

Some proposals for additional data publishing were made as follows:

* benchmarking data for regulated activities (distribution companies)

- a more precise overview of collected amounts from use of network charges (on different voltage levels, for ancillary services, preferential dispatch etc.)
- market indicators (international comparisons, links to other information sources, main commercial data from companies)
- Regular 'educational' activities with licence holders
- Organisation of regular 'educational' activities (seminars, workshops, conferences)[16] for all involved companies should be one of the AERS's priorities that could improve the data collecting procedure by:
- creating a better understanding of regulatory processes and purposes
- improving and understanding of the concept of why collected data is needed, and which results are to be eventually gleaned from them, and
- building actors' confidence towards the regulator by providing a clear explanation of the whole collection process, and the use of protection and security measures for data transfers and storage.

[16] There is a yearly conference organised by AERS (Maribor, SLO) on the issue of communication with all energy actors, especially directed at those eligible customers which have sometimes less of a direct daily contact with AERS.

9 Appendix 2: Worked example of a revenue requirements calculation

ALLOWED REVENUE FOR DISTRIBUTION COMPANY					
Calculation of Opex (excluding cost of losses)	Units	**2006**	**2007**	**2008**	**2009**
Fuel	000 Euro	500	550	650	750
Maintenance	000 Euro	4,000	4,500	4,000	4,250
Other	000 Euro	100	100	100	100
Materials/services	000 Euro	1,500	2,000	2,250	2,500
Personnel costs	000 Euro	5,000	4,800	4,700	4,600
Provision for bad debts	000 Euro	200	200	200	200
Total Opex (excluding cost of losses)	000 Euro	11,300	12,150	11,900	12,400
Allowed technical losses					
- Energy available to the distribution network	GWh	250	225	200	175
- Target allowed technical losses rate	%	4.0%	3.8%	3.5%	3.3%
- Cost of purchased losses - energy	Euro/MWh	50.00	55.00	60.00	65.00
- total cost	000 Euro	500	464	420	370
Allowed non-technical losses					
- Target non-technical losses rate	%	0.5%	0.5%	0.5%	0.5%
- Cost of purchased losses - energy	Euro/MWh	50.00	55.00	60.00	65.00
- Total cost	000 Euro	63	62	60	57
- % of non-technical losses funded through distribution charges	%	100.0%	100.0%	100.0%	100.0%
Allowed cost of non-technical losses funded from distribution charges	000 Euro	63	62	60	57
Total cost of losses recovered from distribution charges	000 Euro	563	526	480	427
Calculation of Depreciation and Return on Assets					
Capex	000 Euro	30,000	35,000	30,000	33,000
Cumulative Capex	000 Euro	15,000	47,500	80,000	111,500
Asset life	Years	40			
Yearly Depreciation	000 Euro	375	1,188	2,000	2,788
RAB					
Opening Value	000 Euro	0	29,625	63,438	91,438
Capex	000 Euro	30,000	35,000	30,000	33,000
Depreciation	000 Euro	375	1,188	2,000	2,788
Closing value	000 Euro	29,625	63,438	91,438	121,650
Midpoint (6-mth)	000 Euro	14,813	46,531	77,438	106,544
WACC	%	5.00%	5.00%	5.00%	5.00%
Return on Assets	000 Euro	741	2,327	3,872	5,327
Total - depreciation + return on assets					
Depreciation	000 Euro	375	1,188	2,000	2,788
Return on Assets	000 Euro	741	2,327	3,872	5,327
Total Depreciation and Return	000 Euro	1,116	3,514	5,872	8,115
Allowed Revenue for Distribution	Units	2007	2008	2009	2010
Total Opex	000 Euro	11,300	12,150	11,900	12,400
Depreciation relating to distribution assets	000 Euro	375	1,188	2,000	2,788
Return on distribution assets	000 Euro	741	2,327	3,872	5,327
Maximum allowed revenue (excluding losses)	000 Euro	12,416	15,664	17,772	20,515
Total cost of losses recovered from distribution charges	000 Euro	563	526	480	427
Total allowed revenue for regulatory purposes (ex ante)	**000 Euro**	**12,978**	**16,190**	**18,252**	**20,941**

Table 2: Revenue Requirements Calculation Example.

The above example of revenue requirements calculation is for a fictitious distribution company. For illustrative purposes only, we have kept this example relatively simple.

Revenue Requirements are calculated for each year of the regulatory period. The regulatory period can vary depending on the country from 2-5 years. In this example, the regulatory period is 4 years. It must be noted that the revenue requirements' calculation shown above is just one side of the regulatory formula when setting the path of regulated revenue to be in line with the X-factor. The flipside (other side) of the equation, which is not in our current remit and is not treated here, corresponds to the so-called 'smoothing effect' that would pair the ex-ante revenue calculations stream as shown in the building-blocks example above, against the expected revenue glide-path 'smooth' evolution that the regulator views as acceptable over the full span of the regulatory lag. Given the discount factor made equal to the WACC, the regulator would normally equate the smoothing effect to the actual revenue building blocks and solve the financial equivalence equation, starting from a given P(nought) and WACC, for the X-factor itself.

The example first shows the calculation of OPEX which consists of fuel cost, maintenance etc. The next part is the calculation of distribution losses broken down into technical and non-technical losses. This is followed by the calculation of depreciation and return on assets. CAPEX is given, then cumulative CAPEX is calculated. For the first regulatory year 2006, this CAPEX is multiplied by 0.5 to reflect a mid-year ('midpoint') assumption by stopping the CAPEX flow at an imaginary point of 6-months (for a standard calendar year, this would be June 30. In some countries the tax year might not coincide with the calendar one, such as for instance in the UK). For 2007, cumulated CAPEX is calculated by CAPEX for 2006 plus 0.5 multiplied by CAPEX 2007. For the year 2008 the CAPEX of the 2006, 2007 are added together plus 0.5 multiplied by CAPEX 2008 (midpoint assumption iterated), and so on iteratively.

The asset life is set at 40 years in this example, but can in fact vary depending on the asset. Depreciation is calculated by dividing the cumulative CAPEX per year by the asset lifetime.

To calculate the RAB, the return on assets needs to be determined. This is illustrated here by the opening RAB value plus the closing RAB value divided by 2 (the 6-month mid point) multiplied by the WACC (set at 5% in this example; it can vary depending on regulatory assumptions about the sector, market, opportunity costs, market risk, alternative risk free assets etc.; we are not discussing the CAPM or any other portofolio theory methods in this paper). The return on assets is then added to the depreciation to give the total depreciation and return amounts.

Once the OPEX, depreciation, return on assets and losses have been calculated, the building blocks for the revenue requirements are complete. These are added together to result in the total allowed revenue for regulatory purposes (ex ante revenue requirements) for each year of the regulatory period. The smoothing effect, as said, is not considered yet, so these building block values *per annum* are just ex ante and do not correspond necessarily to the ‘smoothed’ values that the regulator might impose at the end of the calculation process once the X factor has been worked out.

10 Appendix 3: Templates for regulatory accounting data collection

In a separate Excel document, we include ‘selected’ regulatory accounting templates which can be used. This file includes 6 worksheets and refers to a company that operates regulated network business and other non-regulated activities. Normally, regulators will provide all the templates and data entry sheets which in turn can automatically be used for revenue requirement calculations, price controls and tariff-setting.[17]

These templates include general data which is usually required from the regulated utility. However, depending on the country and their special situation if any, additional data may be requested; the templates can be designed and adjusted to suit the specific circumstances of the respective regulated utility.

The templates proposed are not prescriptive, and can be modified to reflect the specific requirements of each utility. What follows below are short instruction how to work with the template.

The purpose of instructions is to provide a framework for the collection and provision of accurate and consistent data from the regulated company. In some circumstances, a regulated utility may have other business or affiliates, or related undertakings that do not need to be regulated but that still, either directly or indirectly, provide goods and/or services that forms part of the distribution/transmission business, either separately or consolidated. Therefore, regulatory accounting instructions should be clear so as to enable the regulated utilities to distinguish these other businesses.

Regulatory accounting guidelines (RAGs) usually accompany the templates (normally, they precede them) and carry clear and thorough instructions on how to complete the data. In the Excel file we provide as a specimen, there are 6 worksheets:

- Balance Sheet
- Profit and Loss Account
- Cash Flow Statement

[17] We must stress that these templates do not include any formulas or links for calculations. The templates are for illustrative purposes only, to show the type of data that is requested. Moreover we did not include any physical data. Physical data are less relevant for establishment of revenue requirements but have a significant role in efficiency analysis and tariff setting process.

- CAPEX
- Depreciation
- RAB

The first three worksheets are general accounting information which is also required for statutory accounts. For simplicity and ease, the format of these worksheets could be broadly the same as for statutory accounts, reasonably extended at some places, so that the utility does not bear the burden of having to complete this information twice.

In the profit and loss worksheet, operating costs have been distinguished between controllable and non-controllable costs. Together these make up total operating costs. The purpose of distinguishing these costs is so the regulatory authority can use these for price control purposes and setting the allowed revenue. This also supplements setting the allowances for controllable and non-controllable costs.

The CAPEX worksheet is for investments that the utility will carry out for the respective year. Investments are categorised into:

- Load Related assets
- Non-load related assets
- Non-operating items

Load related assets refer to the installation of new assets stemming from load growth. Non-load related assets refer to the installation of new assets to replace existing assets. The items included in both categories are for example overhead lines and underground cables.

Non-operating items are expenditure items on new and replacement assets which are not system assets. These would include vehicles, IT, office equipment, land, and buildings used for administrative purposes.

We don't include explicit spit between regulated and non-regulated services as the template relates only to the regulated distribution activities. In general the activities must be separated as regulatory accounts have the purpose to disaggregate/isolate OPEX and CAPEX, but also revenues from activities that are directly associated with the regulated network business.

The depreciation worksheet has the same format as the CAPEX worksheet. Depending on the depreciation method, asset life may be required (it usually is) to calculate the yearly depreciation charge. The classification of assets is deliberately simplified for the illustration purposes. In practice the number of assets groups used may be more than thirty.

The last worksheet on RAB (the regulatory asset base) is required to calculate the return on assets. This sheet shows the opening RAB with the deduction of disposals and depreciation charges, net of capital contributions from third parties, plus any new investment during the relevant time period, which makes up the “closing” RAB. The closing RAB at (t-1) is then carried over as the “opening” RAB value at the start of the following financial (accounting) year.

11 Appendix 4: Overview of Cost Allocation for Tariff Setting

This appendix looks at the basics of cost allocation and describes the main steps for allocating costs that is commonly used in modelling. It is drafted upon the request of the Tariff Committee during the presentation of the draft paper in Istanbul in May 2007.

The example is based a fully cost distributed model and can be used for allocating a business' costs to one or more of the following:

- separate activities (possibly licensed separately – e.g. it could be used to allocate the costs of the transmission business to those of transmission (infrastructure), system operation, and market operation)
- customer categories
- tariff elements for each customer category.

It can also be used to calculate the revenue requirements for each activity.

Overview of Cost Allocation Procedures

The basic cost allocation procedure consists of first defining:

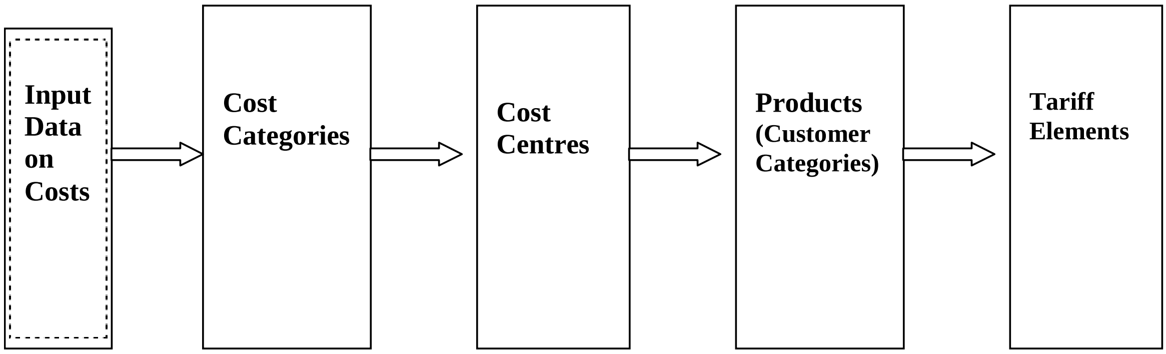
- Cost Categories
- Cost centers, and
- Products (or services) delivered by the business;

And second of allocating:

- Costs to cost categories
- Costs from cost categories to cost centres, and
- Costs from cost centres to products (or customer categories)

Costs can then be allocated from products to the individual tariff elements. The whole procedure is summarised in the figure immediately below.

Overview of the Steps in the Cost Allocation Process



Example for Distribution Business

This section explains through an example how the above process works. The example is a fictional distribution business.

Definition of Cost Categories

The choice of cost categories should reflect among other things, the company's cost accounting system. Examples of possible cost categories are:

1. Energy purchase for losses
    - Cost of capacity tariff element
    - Cost of energy tariff element
2. Transmission services (including payments for cost of system and market operations & connection services) purchased:
    - Cost of transmission capacity tariff element and connection fees paid to transmission
    - Cost of transmission energy tariff element
3. Materials
4. Labour
5. Services bought in
6. Other costs
7. Purchase of services from Head Office
8. Depreciation
9. Return on assets

Definition of Cost Centres

The cost centres are physical or virtual places where costs occur. The choice of cost centres is primarily determined by the nature of power distribution business and reflects:

- functional features of cost (demand dependent, energy dependent and customer dependent);
- different voltage level of connection of customers in the distribution network and different load patterns;
- cost accounting process used by the distribution companies;
- administrative organisation of distribution companies and cost accounting information.

The proper choice of cost centres is crucial for the successful cost allocation and pricing. Possible cost centres, as shown in the figure below, include:

1. Capacity;
2. Energy;
3. HV (e.g. 35kV) Network (lines/cables)
4. HV/ MV Transformation (optional)
5. MV (eg 10kV) Network
6. MV/ LV Transformation (optional);
7. LV (eg 0.4 kV) Network
8. Connection tariffs paid by distribution customers (this item may be excluded if capital contributions are excluded from input data)
9. Non-electricity products (e.g. other business carried out by the distribution company)

This stage of the allocation process gives the allowed revenues. E.g. the sum of the costs allocated to items 1 to 7 above are the allowed regulatory revenue for distribution that can be recovered from the distribution use of network tariffs. .

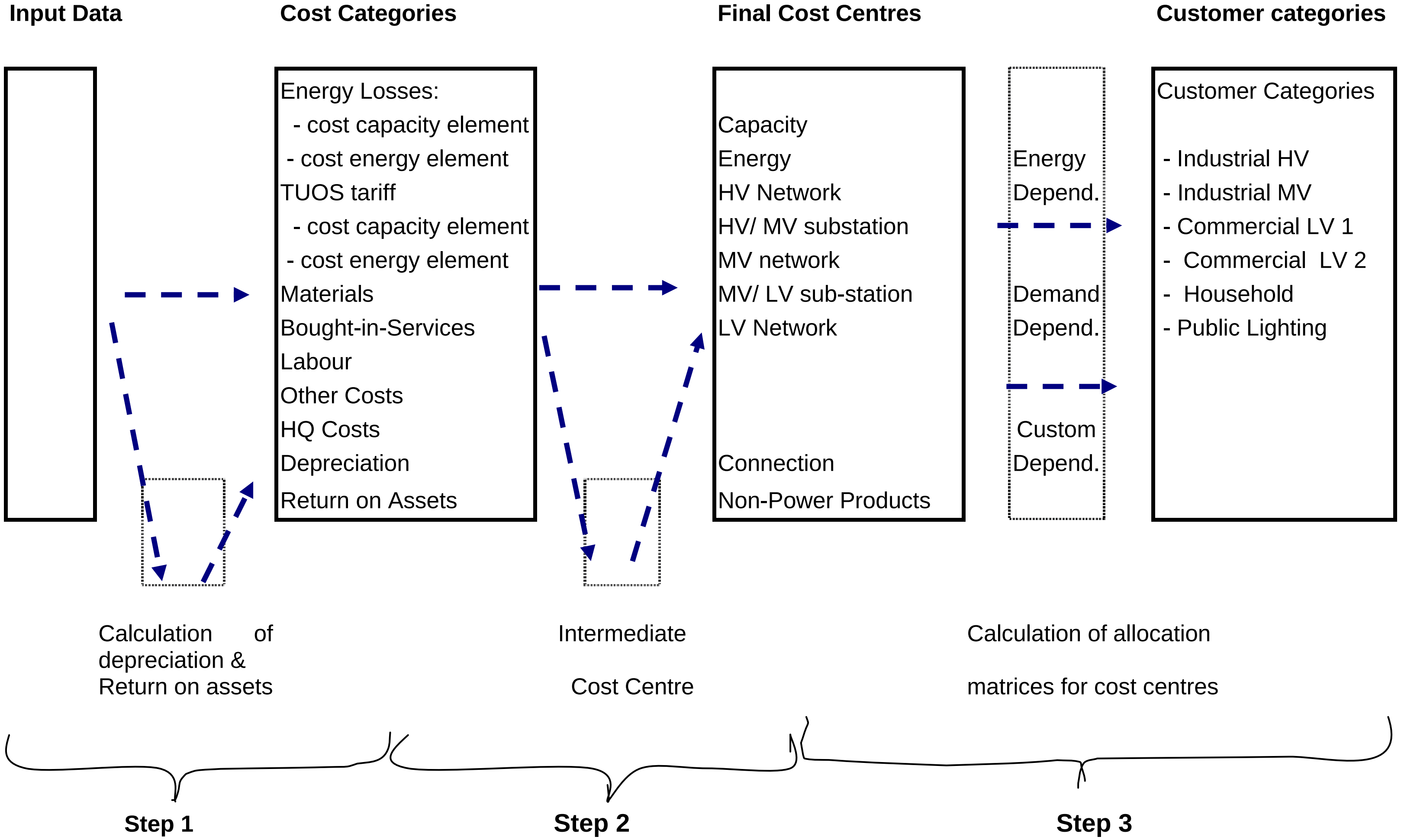
Definition of Products / Customer Categories

The choice of products should reflect the main services/products provided by the business concerned. For the distribution network, these are generally the services provided to each of the customer categories, so the list of products is generally that of the customer categories. In our example, we assume the following products/customer categories:

- Industrial HV – 35 kV
- Industrial MV – 10 kV
- Commercial LV 1 - – 0.4 kV
- Commercial LV 2 - – 0.4 kV
- Household LV
- Public lighting

Cost Allocation Rules

Figure 3 - Example of Cost Allocation: Distribution Business



12 Appendix 5: Complete Results of Questionnaires (included in a separate Document)

13 Appendix 6: Glossary/Explanation of Variables

Accelerated depreciation: A method of depreciation under which the allocation of the cost of the asset to accounting periods is higher in the earlier periods than in the later ones.

Accounts payable: In accounting terms represents an entity's obligation to pay off a short-term debt to its creditors. This item appears on the company's balance sheet as a current liability because the obligation is generally due within 12 months from the initial transaction date. When accounts payable are paid off it represents a negative cash flow for the company.

Accounts receivable: In accounting terms represents the money owed by customers to another entity in exchange for goods and services, therefore is a legal obligation for the customer to remit cash for its short-term debts (i.e. from a few days to a year).

Assets: In accounting terms, on the balance sheet of a company, everything that the company owns and which has a money value is classified as an asset, with total assets being equal to total liabilities. Assets can be divided into the following categories: tangible or fixed assets; intangible assets; current assets and trade investments (investment in subsidiary or associated companies).

Beta, levered/unlevered: Beta is the measure of a fund's or a stock's risk in relation to the market (benchmark). In the Capital Asset Pricing Model, the higher a company's beta, the greater the systematic risk of an investment in that company's shares (a beta coefficient of 1 implies that the company is of average risk). A beta of 1.5 means that a stock's excess return is expected to move 1.5 times the market excess returns. Levered beta reflects both the operating and financial risks of a company. Unlevered beta is the beta for the sector, unlevered by the market value debt to equity ratio for the sector: Unlevered Beta = Beta / (1 + (1- tax rate) (Debt/Equity Ratio)).

Building block approach/framework: An approach to setting the cap to prices or revenues over the regulatory period. It involves forecasting the revenue requirement for the regulated company for each year of the forthcoming regulatory period and translating this into a cap specified by the initial price or revenue and an "X factor".

Capex: Capital expenditure. The purchase of fixed assets, eg plant and equipment, and sometimes expenditure on current assets.

Capital: The stock of goods which are used in production and which themselves have been produced. The word capital in economics generally means real capital, ie physical goods.

However, in everyday language, it is often used to mean money capital, ie stocks of money that are the result of past savings. It is often used as shorthand for “capital employed”.

Capital Asset Pricing Model (CAPM): A model used to estimate the cost of equity, in which the risk premium for a capital investment depends on the correlation of the investment’s return with the return on the entire stock market. One of the cornerstones of modern finance theory.

Capital contributions: In the context of funding network assets, direct payments by network users to cover the purchase of specific assets. This arrangement is normally used for the finding of connection assets. The term capital contributions often also covers contributions to the company’s capital from other sources, e.g. grants from the government.

Capital employed: The capital in use by a business. There is no universally agreed definition of the term. It is sometimes taken to mean “net assets” (ie depreciated fixed assets plus net working capital). In the price regulation context, the regulatory asset base is generally the measure used of the capital employed.

Capital expenditure: Cash investments to acquire or improve an asset that will have a life of more that one year; as distinguished from cash outflows for expense items normally considered as part of the current operations. If an expense is a capital expenditure, it needs to be capitalized; this requires the company to expand the cost of the expenditure over the useful life of the asset. If the expense is one that maintains the asset at its current condition, the cost is deducted fully in the year of the expense.

Capital structure: The sources of long-term capital of a company. It is determined by the numbers and types of shares it issues and its reliance on debt. Another definition is the “mix of different securities (e.g. debt instruments, shares) issued by a firm”.

Cap regulation: Also referred to as price cap regulation (PCR). A form of price control regulation sometimes referred to as “RPI-X” or “CPI-X” regulation. Under this, a cap or upper limit is set in advance, usually for a period of three to five years, on prices or revenues allowing the company to benefit from any cost savings made during that period. The cap is usually recalculated at the end of each period in order to bring it back into line with underlying costs.

Claw-back: In the regulatory context, a retrospective adjustment by which the benefits of a company’s efforts to lower costs in one period are confiscated during the next regulatory period, perhaps through a downward adjustment to the revenue requirements in the following period.

Commercial quality: An aspect of the quality of electricity supply related to the individual agreements between the network company and their customers concerning such things as the conditions for (re) connection of new customers, regular transactions such as billing and meter readings and occasional transactions such as responding to problems and complaints.

Connection charge: This recovers the cost of facilities that are exclusively associated with connecting a generating unit or a customer.

Connection services: The service provided in order to provide consumers a connection to the electricity network such that they can be supplied with electricity.

Construction Work in Progress (CWIP): Money spent on an asset that has at the relevant time not been commissioned.

Cost function: A mathematical relationship (either linear or non linear) between cost, input prices (if available), and outputs.

Cost of capital: In the price regulation context, it generally means the cost, measured as a rate of interest, of the capital employed by a business, weighted according to the proportions of different sources of capital used. In the regulatory context, the term "rate of return (on assets)" is sometimes used synonymously with that of "cost of capital".

Cost of debt: In the price regulation context, it generally means the cost, measured as a rate of interest, of a company's debt, with reference to financial markets. In the regulatory context, the term, "(rate of) return on debt" is sometimes used synonymously with the term, cost of debt.

Cost of equity: In the price regulation context, it generally means the cost, measured as a rate of interest, of a company's equity, with reference to financial markets. In the regulatory context, the term, "(rate of) return on equity" is sometimes used synonymously with the term, cost of equity.

Controllable costs: these are costs that a manager can influence, such as personal costs

CRS = Constant Returns to Scale: When inputs and outputs vary in the same proportion.

Current assets: Assets that will normally be turned into cash within a year and can include material stock, accounts receivable and cash deposits.

Current liabilities: Liabilities that will normally be repaid within a year and include accounts payable.

Customer Categories: A group of customers with common specified characteristics of demand for the relevant Regulated Services.

Deep connection costs: Costs of connections that cannot be directly allocated to an individual consumer.

Depreciated optimised replacement cost: The replacement cost of an "optimised" system, less accumulated depreciation. It allows for the depreciated state of the asset, and also incorporates engineering optimisation of the utility's asset. An optimised system is a reconfigured system designed to serve the current load plus expected growth over a specified period using modern technology.

Depreciated replacement cost (DRC): An estimate of the value of an asset in use that is equivalent to the net current cost of replacing the asset in its current state with an asset that has similar service potential (i.e. output or service capacity).

Depreciation: A systematic allocation of the cost of an asset to the accounting periods in which the asset provides benefits to the entity. This allocation is often designed to mirror the consumption of the service potential or economic benefits associated with an asset over its useful life, resulting from both use and obsolescence.

Depreciation Cost of the relevant asset, or category of assets, means, for the purpose of this Methodology, the Gross Asset Value of the asset divided by the asset's economic life.

Direct debit bill: Averaged bill paid automatically by bank transfer either monthly or quarterly, and reconciled yearly against actual ex-post consumption.

Discount factor: In finance and economics, the discount factor is the number by which a future cash flow to be received at time t must be multiplied in order to obtain the current present value.

Distribution Company: An enterprise that holds a licence for conducting business in the field of electric power distribution in a definite territory.

Distribution UOS: This is separately set and normally includes a standing charge (fixed monthly, not capacity or energy-dependent), a system availability charge (per kW), and a unit charge (variable by the kWh, can vary by time period and by season).

DNO: Distribution Network Operator

Double Tariff (night/day): Tariff (usually per kWh), which differentiates between night and day. Night tariffs typically start at 11 pm and last until 6 am. During these hours, the price per kWh electricity is lower than during the normal day hours.

Economies of scale: These exist when expansion of the scale of productive capacity of a firm or industry causes total production costs to increase less than proportionately with output.

Economies of scope: These exist when it is cheaper for one firm to provide two or more related products together than for each of these products to be provided by a separate firm.

Economic versus technical lifetime: Economic lifetime is the optimum renewal period for an asset (it may appear preferable to renew the asset early to minimise operating costs and usage costs). Technical (accounting) lifetime is, for a given asset category, the lifetime chosen by the company to depreciate this asset category in its accounts.

Efficiency: An indication of how inputs are used to obtain outputs in the best possible way as opposed to existing best practice. Alternatively, an indication of cost minimisation for given produced outputs and input prices.

Efficiency carry-over: In the context of incorporating the capex into the RAB, a term used to explain how the gains resulting from efficiency increases (i.e. a saving in capex) are transferred between two regulatory periods and also to explain what time is allowed for retaining these gains. The term is also applied to opex.

Efficiency score: A zero-one indicator of the relative distance between a given decision-making unit and the best-practice unit (or units) in the sample.

Eligible Customers: Customers allowed by law to select their supplier of electricity / gas.

Equity: The residual value of a company's assets after all outside liabilities (other than to shareholders) have been allowed for. Often the term equity or equities is also used to refer solely to a company's shares.

Ex-ante assessment: In a price regulation context, assessment of the relevant aspect, usually capital expenditure, before the expenditure occurs, on the basis of forecasts. This usually happens when prices are set before the start of a regulatory period.

Ex-post assessment: In a price regulation context, assessment of the relevant aspect, usually capital expenditure, after the expenditure occurs, on the basis of actual data. This usually happens when prices are set before the start of a regulatory period and it refers to the assessment of the capex in the then current regulatory period, which is coming to its end.

Financial Reporting Standards (FRS): Authoritative statements of how particular types of transaction and other events should be reflected in financial statements (a UK body).

Fixed assets: Physical assets such as land, buildings, plant, machinery, vehicles and furniture.

Fixed rate: The part of electricity price that does not depend on the amount of consumption. Usually this is a fixed fee paid per year.

Flat-rate tariff: A tariff that does not vary with the level of consumption. Should ideally reflect fixed costs.

Gearing: A company's net debt expressed as a percentage of its total capital. UK regulators use net debt as a percentage of the regulatory capital value. Other common measures include the ratio of net debt to net debt plus equity expressed as a percentage.

Historic cost asset valuation (HC): A method of valuing assets that values them at their original purchase price.

Incentive regulation: Regulation by means of economic incentives. In the context of price regulation, it is sometimes used to mean solely cap regulation and/or performance-based regulation.

Indexation: The procedure for adjusting the value of the assets for the effect of inflation, where the value of the assets is adjusted (increased or decreased) to reflect changes in an underlying index.

Intangible assets: Nonmaterial assets such as technical expertise, trademarks, and patents.

Investment planning: Long-term planning of load growth related investment, reinforcements and replacement investments.

Load profile: A time sequence, which defines a capacity load value for each settlement period. Analytical load profiles are used for small customers at low voltage level where no load meters are installed for settlement of use of system charges.

Load-related expenditure (LRE): Expenditure, usually capex, which is related to the connection of new customers to the distribution system and reinforcements to the existing system to accommodate general load growth.

Long Run Marginal Cost (LRMC): In the context of energy markets, means the incremental cost of optimum adjustments in the system expansion plan and system operations attributable to an incremental demand increase that is sustained into the future.

Long-term system Entry Capacity (LTSEC): Capacity that is offered by Transco in annual auctions for years 3 to 15.

Market monitoring: Regular and systematic review of the development of the energy markets; also used in narrow sense as review of the functioning of wholesale markets.

Market opening rate: Share of consumers who can choose between different suppliers.

Modern Equivalent Asset Value (MEAV): The cost of replacing the existing assets with assets that serve the same function, and which a new entrant might be expected to employ as of today. Such assets are likely to incorporate the latest available (proven) technology.

Multi-part tariffs: Consist of fixed, block wise variable and variable parts. A multi-part tariff in contrast with a linear tariff is one in which the operator charges separate prices for different elements of the service. These tariffs can be flexibly adjusted to the cost and the demand characteristics.

Net Asset Value (NAV): The value of assets after an adjustment for the depreciation of the assets. Also referred to as the "depreciated asset value".

Net working capital: Current assets minus current liabilities.

Network exceptional investment: Investment resulting from exceptional situations, e.g. new legal obligations.

Network reliability: An aspect of the quality of electricity supply related to the ability of the network to continuously meet the demand from customers.

Network replacement investment: All investment related to replacement of aged (technically or economically) equipment.

Non-controllable cost: Cost not subject to influence at a given level of managerial responsibility, e.g. allocated overheads from another part of the organisation.

Non-load-related expenditure (NLRE): Expenditure, usually capex, which is related to such aspects as the replacement of life-expired assets, network control and information gathering facilities, performance standards, and new regulatory or legal requirements

nTPA: negotiated third-party access.

Opex: Operating expenditure. Fixed and variable operating and maintenance costs; in the regulatory context, depreciation is usually specified separately.

Optimal deprival value: A method for asset valuation that recognizes that as a result of being deprived of an asset, the economic value forgone may be less than the value based on the depreciated replacement costs. The optimal deprival value is also based upon the asset value that is consistent with the prices that would prevail in a competitive market, and is defined as the minimum between the replacement cost of an asset and the valuation of that asset (on a cash-flow basis) given market prices.

Portfolio theory (finance): A theory on how risk-averse investors can construct portfolios in order to optimize market risk for expected returns. According with this theory it is not enough to look at the expected risk and return of one particular stock. An investor can obtain the benefits of diversification investing in more than one stock. Therefore it is possible to obtain an efficient frontier of optimal portfolios offering the maximum possible expected return for a given level of risk.

Price and revenue caps: price-cap is a criterion for the regulation of tariffs whereby a ceiling on tariff variations for certain services is set in advance over a pre-determined and generally long-term period. In its simplest version the price cap is given by the formula: t=p-x, where p is the inflation rate and x is the rate of change of productivity. Revenue cap regulation attempts to do the same thing, but for revenue rather than prices.

Price control period: Another term for regulatory period.

Price discrimination: A seller price discriminates when it charges different prices to different buyers. Price discrimination means that consumer surplus can be appropriated, and as long as the cost of marketing is less than the extra revenue than it is advantageous to the company. In this case the marginal revenue curve becomes identical with the demand curve. Price discrimination can be of three types. First-degree, sometimes also known as 'perfect' price discrimination entails the complete appropriation of consumer surplus as the monopolist is supposed to be able and price individually by customer, so that customers ex post are in theory left indifferent to purchasing. First-price price discrimination assumes that the discriminating monopolist knows the demand curve point by point. Second-degree price discrimination, which is most commonly observed in practice, assumes that the monopolist in able to separate chunks of customers as a function of their demand levels, so that quantity discounts can be applied. This is perhaps the most common form of price discrimination applied to the utility and commodity realms. Finally, third-degree price discrimination assumes that the monopolist can differentiate prices by group of customers, for instance the young vs. the elderly, rich vs. poor and so on. An instance of such behaviour is observed, for instance, in the field of student discounts for travel, libraries, conferences and so on as opposed to inflated prices applied for the same identical services to higher-wage professionals, institutions, and corporations.

Provisions: A provision is a liability for which the outflow of economic resources is of an uncertain timing or amount.

Prudency test: In the regulatory context, an approach that provides a regulator with a set of criteria to assess, on an ex post basis and/or an ex ante basis, the prudence of an investment and whether it should be included in the regulatory asset base.

Ramsey pricing: Under Ramsey pricing the marks ups over incremental costs reflect the respective demands of users and consumers for the services and facilities concerned. It is a version of price discrimination in which if resale could be prevented, consumers in different markets with different elasticities could be charged different prices. However, the prices are set so as to yield only normal profits, so the prices are less than under unregulated price discrimination. Under Ramsey pricing distortions from pricing above marginal cost are minimised but not eliminated because consumers with relatively inelastic demands pay the highest prices. Ramsey pricing is sometimes observed in public choice situations whereby goods or services that are inelastically demanded bear the highest rate of tax. This is in order to minimise distortions from first-best marginal cost allocation and for the public sector, institution, or firm to at least break even. It is interesting to note that some taxes that are typically touted as 'environmental' or 'behaviour-inducing' are in fact nothing else than Ramsey taxes because they do not aim at correcting behaviour at all, but just at maximising revenue without distorting the economy (or sector) too badly. For instance, tobacco and alcohol duties, airport taxes that are not directly linked to the environment, and road/petrol taxes that are levied ex-ante and one-off but not marginally and not to reduce any bad behaviour at source but just to raise funds, are typical examples of 'Ramsey taxes in disguise'.

Rate of return: In the financial context, some measure of profit after depreciation as a percentage of capital employed in a company. One of a number of financial ratios used to measure the efficiency of the company as a whole or of a particular investment project.

Rate of return regulation (RORR): A form of price control regulation, sometimes referred to as "cost-plus" regulation. Under this, the regulator sets prices, usually on a year-ahead basis, for the company so that they cover the company's costs of production and include the allowed rate of return on capital. Hence it is referred to as rate of return regulation.

Rebalancing ratio: The relative price ratio comparing domestic to industrial tariffs; i.e. the price of domestic consumption as percentage of the industrial customers' price.

Regulated asset base (RAB): In the context of price regulation, measure of the net value of the company's regulated assets. The company's regulated assets are usually defined as the tangible assets involved in the provision of the regulated service. Sometimes they include a measure of the company's net current assets.

Regulatory accounts: A regulatory agency follows procedures that are periodically reviewed by another government organization to ensure that resources are being used effectively and that the agency is implementing public policy.

Regulatory asset value (RAV): The term used for the RAB in energy price regulation in Britain. RAV is sometimes used outside the British context as another term for RAB.

Regulatory period: In the context of price control regulation, the period (normally a number of years) for which some control on prices or revenues is set in advance. Also referred to as a "price control period".

Regulatory review (regulatory lag): Length of time between when a company incurs a cost or receives revenue and when the regulator responds to this by raising or lowering the company's prices. Under price cap regulation, the review period is generally specified in the three to five year range. Instead, under rate of return regulation the lag varies. Uncertainty about the length of the lag can be an incentive for cost containment.

Replacement cost asset valuation: A method of valuing assets that values an asset using the cost of replacing the asset with another asset (not necessarily the same) that will provide the same services and capacity as the existing asset.

Reserves: In accounting means the shareholder's equity except basic share capital. Equity reserves can be created from shareholder's contributions (e.g. legal reserve fund), from profit (e.g. remuneration reserve) and other reserves (e.g. revaluation reserve, translation reserve).

Retail Price Index (RPI): [Charges are controlled by the formula RPI ± X]. UK RPI is expressed as the percentage increase in the Retail Price Index in the year to the November before the price regulation year.

Return on assets: In the price regulation context, it generally means the amount of money derived from multiplying the allowed cost of capital by the value of the regulatory asset base. Also referred to in the regulatory context as the "return on capital (employed)".

Return on capital employed: See rate of return.

Revenue Cap means the limit to the revenue allowed to the TSO for provision of Transmission Network Service, in each year of the Regulatory Period, where the limit is revised each year by the change in a specified price index less (occasionally plus) an adjustment called X, or the final X factor.

Revenue requirement: In the context of price regulation, the annual revenue needed to cover a company's operating costs, depreciation and provide a normal return on its capital.

Roll forward: A method to adjust the value of some aspect on a year-to-year basis. In a price regulation context, it is often used to describe the procedure whereby the regulatory asset base is adjusted on a year-to-year basis by e.g. adding in allowed annual capital expenditure, subtracting annual depreciation and any disposals

RPI: The Retail Prices Index. The index of general consumer prices used in the UK.

RPI-X Regulation (**Incentive Regulation).** Means, in relation to the relevant regulated service provider, a form of price regulation whereby the limit on the average price, or the total revenue, allowed for the provision of the Regulated Service is fixed for a period (three or five years) and the price limit depends on the change in a specified price index (eg the RPI in Britain) less (occasionally plus) an adjustment called "X" or the "Final X factor".

rTPA = regulated third-party access.

Standard cost approach: A method used by regulators to ensure that investments are procured in an economic way and also to assess whether the capital expenditure should be included in a network operator's RAB. It is based on the prescription of maximum unit prices for investment group components.

Straight-line depreciation: A method of depreciation under which the allocation of the cost of the asset to accounting periods is constant.

Tangible assets: See fixed assets.

Tariff basket: the basket of charges to which the annual regulatory price limits apply.

Time-of-day pricing: Charges vary according to the time of day. The idea behind is simply to vary the price of electricity in accordance with fluctuations in production costs. When the cost of production is high, the price would also be high. Conversely, when the cost of production is low, price would also be low. If time of day pricing is linked to underlying production cost linearly and to that only, then it does not amount to price discrimination. However, if its motives go beyond cost reflectivity and into strategic behaviour, then time of day pricing might just be another form of price discrimination (see 'Price Discrimination'), for instance between business and students (or commuters and leisurely trippers) in travel and access to facilities at peak times (air, rail etc. – time of day pricing in this case does not really reflect the differential cost of running a train that is more or less full, but probably it just reacts to differential demand behaviour and therefore is strictly related to third-degree price discrimination).

Time-of-use pricing: Charges differing between time periods e.g. peak load and base load.

Transmission (Network) Assets: The assets or as the case may be, the appropriate portion thereof, required for the provision of the Transmission Network Service.

Transmission Asset Owner (TO): The body that owns the transportation system, and is responsible for its long-term maintenance and development.

Transmission Congestion: Congestion of the Transmission Network means that the thermal, voltage or stability limits of the Transmission Network are violated.

Transmission Losses: The energy lost in the process of transporting power via the Transmission Network.

Transmission Service: The following services provided by the TSO: the Transmission Network Service; the Transmission System Service; the Transmission Congestion Service; and the Transmission Connection Service.

Transmission Use of Network Charge: The charges that provide the allowed revenue to the TSO for the provision of the Transmission Network Services.

Use of system (UOS) charge: this is set to recover the cost incurred by network operators to make their facilities available to users. It can be calculated on either a short or a long run cost basis and, especially for transmission networks, may result from complex optimisation processes. In the UK, transmission UOS charges are locational and are paid by both generation and load, although in different proportions.

Variable (or marginal) tariff: a tariff that varies with the level of consumption. Should ideally reflect variable, if not marginal, cost.

VRS = Variable Returns to Scale: inputs and outputs vary in different proportions (increasing; decreasing).

Weighted-Average Cost of Capital (WACC) method: Commonly used method for determining a regulated company's cost of capital. It is generally set equal to the normal/expected cost of each individual component of the capital structure weighted by its share (either normal or actual) of the capital structure.

Working capital: Current assets and current liabilities. The term working capital is commonly used as synonymous with net working capital.

X factor: The expected productivity parameter used in RPI-X regulation, and in other similar schemes, originally inspired to UK-style local loop call charges (in telecoms) regulation from the mid-1980s.

Energy Regulators' Regional Association

Consultancy Services for:

Issue Paper: Procedures and rules for the examination of documents on tariff approvals. Benchmark regulatory reporting requirements in the ERRA countries. System of Auditing

Appendix 4: Complete Results of the Questionnaires

Submitted by

KEMA International B.V.

May 2007

Team:
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Questionnaire Responses from ERRA Country Members

Procedures and rules for the examination of documents on tariff approvals				
	1. How often do you request regulatory accounting information from regulated companies?	**2. How much time does a regulated utility have to submit their regulatory accounting information? Please indicate submission timing.**	**3. What is your procedure in requesting the regulatory accounting information? E.g. is there a consultation process, who is responsible for checking the data etc. Please describe/comment**	**4. Which sort of production subset (generation, transmission, distribution, and retail) is covered by regulatory accounting requirements?**
Albania	Yearly.	By March of the following year.	NA.	Financial statements for all activities.
Armenia	Quarterly and yearly.	Quarterly report by March of the following year.	After verified and approved the information will be marked as "preliminary verified". If there are inaccuracies or errors the report is not accepted and	Financial statements for all activities.

			sent back to the regulated company to re-submit within 5 working days.	
Azerbaijan	Periodically. (Assumptions can be made as to whether this is annually, quarterly or monthly) Therefore clarification is required.	March 1 of each year.	The regulated companies must submit financial and functional accounts data in line with “Rules for determination and application of regulated prices by the state” approved by Resolution n° 247. After the data has been submitted, the Tariff Council expresses its opinion within a month. In case of incomplete information a Secretariat of the Council gives a written notice and the regulated companies are obliged to submit within 5 days the requested information.	NA.
Bosnia and Herzegovina	• Tariff: once a year, • License: twice a year.	No specific timing.	Tariff and Market department: checks data.	• Generation, • Transmission, • Distribution,

				• Retail.
Bulgaria	• General accounting information: once a year, • Interim accounting information: if requested.	• Annual accounting information shall be submitted not before the end of March of the year after the reported year, • If summarized accounting information is required, the term for its submission is from 5 to 7 working days.	• SEWRC approved rules for regulatory accounting reports for three groups of regulated utilities – electro-distribution, gas-distribution and district heating utilities, • Accounting rules are drafted with the assistance of external consultants.	All companies which have licenses for production, transmission, distribution and supply with natural gas, as well as utilities which hold licenses for production and transmission of heat energy.
Croatia	Once a year.	End of April at the latest for accounts from preceding year.	Not answered fully.	• Generation, • Transmission, • Distribution, • Retail.
Estonia	When Regulatory Authority thinks necessary or for further investigation i.e. customer complains about price.	One month.	Only when approached by companies for advise/consultation.	• Generation, • Transmission, • Distribution, • Retail.
Georgia	Quarterly and yearly.	• Quarterly information –	• Form and terms of	Regulatory accounting

		by the end of the following month, • Yearly financial statements – by April of the following year.	submission of information are set by the Decree of the Commission, • The Department for economic analysis and pricing is responsible for verifying submitted data.	requirements cover all license holders (regulated entities) of both electricity and natural gas sectors.
Hungary	• Quarterly (for monitoring), • Yearly (annual reports).	• Quarterly – 15 days, • Annual reports – till 31 May of the next year, • For tariff preparation – 2 to 3 months.	Information is requested 2-3 months before deadline. The same period after submitting information is given for consultations by requests.	• Generation, • Transmission, • Distribution, • Retail.
Kazakhstan	Yearly and also when requested.	At least 5 days with respect to any information. Info for tariffs the timing is 30 days. When the initiative to review tariffs belongs to an economic entity no deadline is envisioned, as any tariff can be modified beginning with the 1st day of any month. Submission of the request is done at	Requests are sent through official correspondence, data from other sources are used, including counter requests from consumers. In addition, members of Expert Councils of the Agency are invited to review materials.	Transmission and distribution of electricity; generation, transmission, distribution and supply of heat.

		least 90 days in advance.		
Kosovo	Regulatory accounts shall run from 1 January to 31 December of each calendar year.	Regulatory accounts shall be submitted no later than [three] months after the completion of the calendar year.	• Completed pro-forma regulatory accounting statements, • Statement of significant regulatory accounting principles and policies used to prepare the regulatory accounts; • Copy of the licensee's most recent statutory accounts and accompanying auditor's report.	• Generation, • Transmission, • Distribution, • Retail.
Kyrgyzstan	Monthly.	Monthly, by the 20th day of the month following the reporting month, and quarterly, by the 20th day of the month following the quarter.	• Energy companies submit mandatory reports on indicators of financial-economic activities for the purpose of monitoring, • The department of prices and tariffs should verify the information, analyze electricity balance.	All energy companies (generation, transmission and 4 distribution companies) are covered with requirements of regulatory accounting.

Latvia	When it is required for a certain case.	Two weeks: simple issues. One or more months: complicated issues.	• Letter signed by chair of regulator, by decision of board of regulator or adopted regulation on submission of information on regular basis. • Consultation process, staff of regulator is responsible to check information.	All.
Lithuania	Quarterly and Annually.	Regarding price cap setting there is no direct timing.	Regulator may ask for additional information and clarifications. Additionally the Regulator may organise a meeting with the companies and other interested parties.	Transmission, distribution and public supplier (supplier of last resort).
Macedonia	Once per year (obligatory).	Monthly, quarterly, semiannually and annually.	When the ERC request information there is a consultation process with the regulated companies. The Energy Regulatory Commission organizes the workshop with the regulated companies about the methodology for	According to the legal provisions of the Energy law, generation, transmission, distribution, and retail are covered by regulatory accounting requirements.

			calculation of regulated revenue and price. The staff from the Energy Regulatory Commission shall check and analyze the data and information submitted from the regulated companies.	
Moldova	Monthly, quarterly, annually.	Monthly: not later than the 15th day of the following month; Quarterly: not later than the 25th day of the following month; Annual: not later than March 20.	ANRE's Decree approved the System of Reports to be submitted to the Agency. Holders of licenses in the power sector have to be filled in the requested forms. Authorized employees of the regulated enterprise and employees of the tariff and other departments of ANRE are responsible for verification of data.	• Generation, • Transmission, • Distribution.
Mongolia	Quarterly and yearly.	By the 20th of the following month for quarterly data. By 10th Feb for yearly data	According to terms and conditions of License issued by ERA, each licensee is obliged to submit their financial	• Generation, • Transmission, • Distribution, • Retail.

		of the following year.	reports to ERA. Auditing group of ERA is responsible for checking the data.	
Montenegro	Yearly.	It's not officially defined. Usually up to one month.	The Agency staff requests and checks the regulatory accounting information.	• Generation, • Transmission, • Distribution, • Retail.
Poland	Twice a year and always when there is any need.	About 2-3 weeks after the regulatory inquiry.	Tariff Department requires certain data for regulatory process. Data are analyzed and compared to other financial statements.	Generation, transmission, distribution, wholesale and retail.
Romania **(ANRE)**	Annually.	After 20 working days after the due date to submit the Financial Statements.	The regulated companies should fill in and submit the Financial Reports in accordance with the "Financial Reporting Procedure" issued by ANRE. After receiving the reports, the Annual Reports Analysis Department is responsible for checking the data in	The companies should complete the reporting forms separately for each regulated electricity (or heat) activity for which they have license issued by ANRE.

			order to import them in the Authority Data Base.	
Romania **(ANRGN)**	Annually.	Six months for substantiating the regulated prices and tariffs and three months for annual adjustment.	The regulated companies are obliged to submit annually their regulatory accounting information. The specialised department from ANRGN verifies this information.	The regulatory accounting requirements cover the transmission, distribution, underground storage and regulated retail.
Russia	Once a year.	A regulatory period (1 year).	Terms and procedures for submission of tariff proposals are specified in Decree of the Government of the RF of February 28, 2004, No. 109. Regulatory bodies can invite expert organizations to analyze activities of enterprises.	• Generation, • Transmission, • Distribution, • Retail.
Serbia	Each time it is sent a request for price adjustment. Accounting information: twice a year (each six months).	Regulated utility submits their regulatory accounting information to the Agency as well as its price proposal at the end of current year for the next year.	Regulated utility submits their regulatory accounting information to the Agency as well as its price proposal for each licensed activity. The Agency adjusts the data via consultation with	Electricity generation, electricity transmission and distribution, oil and oil products transport, natural gas transport, storage and distribution, and electricity and natural gas wholesale and retail for tariff

			regulatory utilities before the official submission of this information.	customers.
Turkey	• Information and documents related to revenue setting procedure: asked just before each implementation period. • Tariff setting procedure: asked just before of each tariff setting period.	• Parameter values for revenue control: minimum twelve and maximum eighteen months before October 31 of the last year of the current implementation period; • Tariff proposals (licensees): by the end of October each year, • Tariff regulation (legal entities): at least sixty days prior to submitting their tariff proposals.	There is no special procedure for requesting regulatory accounting information from regulated utilities.	Transmission, distribution, retail sale and retail sale activities.
Ukraine	Licensees must file to the electricity sector pricing policy department the following reporting forms: • 4-NERC "Reporting and	• The 4-NERC is filed to NERC by the licensee not later than the 20th day of the month following the reporting one,	•Licensees submit approved reporting forms within specified timeframe, •Reports are verified by	Generation of electricity, heat, transmission of electricity through local power networks and supply of electricity at the regulated tariff. Reports

	estimate data on productive supply of electricity by consumer groups and classes" (monthly report); • 6-NERC-energy supply "Report on financial results and execution of the cost budgets of licensed types of activities" (quarterly report); • 9-NERC "Report on payments for electricity by the population and localities" (semi-annual report).	• Reporting form 6-NERC is filed on a quarterly basis by the 25th day of the month following the reporting period, • Reporting form 9-NERC is filed to NERC by the 10th day of the month which follows the month following the reporting period.	relevant branch offices of NERC in terms of completeness and accuracy, •NERC Order assigns a person responsible for collection and analysis of information submitted by licensees. When it is necessary to get additional information, NERC sends a written request signed by the Chairman of the Commission or some Commissioner.	are submitted by types of licensed activities, namely, transmission and supply of natural gas at the regulated tariff.

Regulatory reporting requirements			
	1. For regulatory accounting requirements, do you provide templates to utilities to complete? **a. If yes, please attach your regulatory accounting**	**2. Do the companies also produce and submit to you statutory accounts?** **a. If yes, do they differ from the regulatory accounting information? E.g.**	**3. Please specify all the regulatory accounting information which is requested. For example cash-flow statement, profit and loss account, balance**

	templates	disaggregated and non-consolidated	sheet, additional documents
Albania	Yes.	Yes.	Cash flow, P&L, balance sheet, losses and technical information.
Armenia	Yes.	Yes and they differ from statutory accounts.	Income and cash flow statement; Wages and Bonuses; Acquired and repairs of Fixed Assets, Inventories, Non-Current Tangible Assets in-Process, Credits and Loans, Balance Sheet and Changes in Owner's Equity.
Azerbaijan	NA.	Yes.	• Balance sheet; • Profit and loss statement; • Wholesale price/tariff calculation; • Cash flow statement; • Statement of expenditures on materials and labor costs; • Non-production expenses included in input costs.
Bosnia and Herzegovina	Yes.	Yes. Regulatory accounting: more	• Balance sheet; • Income statement;

		consolidated and syntactic.	• Cash flow statement; • Tax balance and • Data regarding salaries.
Bulgaria	Accounting information used in tariff-setting is submitted in the form of references, which have mandatory nature (in terms of form and content) and they are approved by SEWRC.	The accounting information for regulatory purposes is compatible with the provisions of the national accounting legislation.	• Cash flow statement capital; • Statement and • All other forms accompanied by reports and additional information.
Croatia	Not at present but the CERA recently passed 2 methodologies for tariff systems for gas which contain templates.	Required by law to submit statutory accounts to CERA.	Balance sheet, profit & loss statement, notes related to financial statements.
Estonia	Yes.	Yes, accounts can be found from the business registry of Estonian companies.	Cash flow, profit & loss, balance sheet, detailed info about purchased & sold energy, investments
Georgia	Yes.	No.	Balance sheet, Profit and loss statement, cash flow statement & statement on owner's equity.
Hungary	Yes.	Yes.	Annual reports – standard financial accounts. Quarterly monitoring reports: data

			on revenues, costs, profits, volumes sold and purchased.
Kazakhstan	NA.	Reports are submitted according to approved forms, by types of regulated activities; but accounting reports are presented in a consolidated form.	NA.
Kosovo	Yes.	Yes, they produce and submit the statutory account, and they differ from the regulatory account.	• Income and cash flow statement; • Balance sheet; • Analysis of turnover; • Analysis of operating maintenance costs; • Regulatory asset base; • Capital expenditure; •Depreciation; • Disposals; • Additions; and • Provisions.
Kyrgyzstan	Yes.	No.	All enterprises involved in generation, transmission, distribution or sale of electricity or

			heat should maintain their accounting documents in accordance with normative acts of the Kyrgyz Republic.
Latvia	No unified templates are adopted.	Yes.	Cost structure and forecast of change of defined cost positions and justification for that.
Lithuania	Yes.	Yes, if they see a need to provide additional data or are asked for the clarifications.	Standard financial accounts.
Macedonia	The regulatory accounting requirements are in accordance with the accounting system in the Republic of Macedonia and the Energy Regulatory Commission uses the same form of statements.	Yes, according to the Energy law the regulated companies are obliged to produce and submit to the Energy Regulatory Commission the statutory accounts.	Balance sheet; income, working capital and cash flow statement; costs and revenues information; investments plan and costs; sources of capital for investments; regulated value of the assets and financial indicators.
Moldova	Yes.	Yes. Regulatory accounting information is prepared in accordance with the National Accounting Standards, but with more details.	Balance sheet, Income Statement, Statement of Owner's Equity, Cash Flow Statement, additional documents (forms C, P, PH, TD, DF).
Mongolia	Yes.	Yes.	Cash flow, profit and loss, balance sheet, assets.

Montenegro	Yes.	No.	Cash-flow statement, profit and loss account, balance sheet and the information on equity/debt structure are statutory.
Poland	Yes.	Yes.	• Cash-flow statement, • Profit and loss account, • Balance sheet, • Additional documents: DTA1, DTA1a, statistic statement G-10.4.
Romania **(ANRE)**	Yes.	The companies produce and submit to the Regulatory Authority the statutory accounts and they differ from the regulatory accounting information.	•Balance sheet, •Profit and loss account, and •Cash-flow statement.
Romania **(ANRGN)**	Yes.	Yes, the companies produce and submit statutory accounts, according to the accounting law. The statutory accounts differ from regulatory accounting.	• Statement of expenses; • Statement of revenues; • Report on regulated, non-current assets; • Report on current assets.
Russia	Forms for submission of materials are specified in relevant methodological instructions and templates elaborated on their	Yes.	Order by the FST of Russia of February 10, 2006, No. 19-e/4 (accounting and statistical reports, physical data on the volume of

	basis.		provided services).
Serbia	Yes.	Yes. Regulatory accounting information comes from unbundling accounts, while statutory accounts are not unbundled.	• Balance sheet; • Profit and loss account; • Operational costs; • List of regulatory assets with depreciation rates; • Accounting code and other information.
Turkey	Yes.	Yes, they have also obligation of producing and submitting statutory accounts to the Regulatory Authority. These accounts are different than regulatory accounts in terms of being consolidates, prepared for different purposes, on company basis, unbundled and ex-post.	For example cash-flow statement, profit and loss account, balance sheet, additional documents.
Ukraine	Yes.	Financial statements are specified in the legislation and are submitted to NERC.	Yes, companies file mandatory reports, such as the Balance Sheet, Income Statement, Cash Flow Statement, and Statement on Owner's Equity.

Regulatory reporting requirements (Cont.)					
4. Do you request additional reports such as detailed breakdown of OPEX, CAPEX information, physical data?					
	a. If yes, please list.	**b. Are these split into controllable and non-controllable costs?**	**c. What are the differences between the cost reported in the regulatory accounting and those in the statutory accounting?**	**d. In terms of depreciation, which method is applied and does this differ from the method used in the statutory accounts?**	**e. How is the regulatory asset based established? Does the asset valuation concept differ from this used in the statutory accounts?**
Albania	NA.	No.	Statutory accounts are consolidated & not separated according to activities.	Linear method.	Total assets + net working capital – accumulated depreciation.
Armenia	NA.	NA.	Only costs related to accounting for regulated activities are provided.	Linear method.	NA.
Azerbaijan	Detailed cost allocation OPEX and CAPEX.	NA.	NA.	NA.	NA.

Bosnia and Herzegovina	Controllable OPEX: working and maintenance, costs of the administration labor, other's services costs, working materials and spare parts, office supply material, regulatory fee, other costs. CAPEX: depreciation and financing costs.	Yes.	Regulatory accounting: cost more precise and relevant to the regulator. Statutory accounting: lot of information that is not relevant to the regulator.	Linear depreciation (used in both).	Independent international accounting specialist group re-evaluated assets and established asset base in the statutory accounts.
Bulgaria	Physical data is required additionally (networks length, types and number of facilities, etc.), investments, operational cost as well as financial data (equity finance, loan contracts, repayment schedules).	In tariff-setting, the incomes from activities which are not subject to regulation by SEWRC are not considered.	Accounting reports for regulatory purposes cover all utility costs, but some separate groups of accounts are foreseen for separate accounting of costs for regulated and non-regulated activities.	Linear depreciation (used in both).	The Regulatory Assets base includes all gratuitously acquired and equity assets brought to exploitation.
Croatia	Yes for gas distribution & retail: detailed breakdown of costs and	No answer.	Regulatory accounts are more detailed.	Linear method.	RAB=average value of the regulatory assets in beginning of

	some additional physical data.				reg. year + the reg. assets at the end of the year.
Estonia	Physical data.	Yes.	In this case statutory accounts are more detailed than regulatory accounts and separated by activities.	NA.	NA.
Georgia	Only in certain cases is this data requested.	NA.	They are the same.	NA.	NA.
Hungary	Yes. OPEX: materials, services used labor. CAPEX: gross and NBV, tangible & intangible assets, planned investments.	No.	Regulatory accounting costs may be aggregated, partly reduced (justified/non-justified costs, corrected or partly corrected by inflation factor).	"Technical lifetime" depreciation factor is used for tariff/price setting. Companies can use "useful lifetime" or "accelerated" depreciation depending on accounting policy.	Net value of revalued assets is used as depreciation base as well as capital cost base (WACC).
Kazakhstan	All.	No.	Inclusion of costs in the tariff estimates is restricted by the special procedure for	Straight-line method, but application of other methods is also	"Is used with the utilization ratio".

			formation of costs.	allowed.	
Kosovo	OPEX: Fuel, Maintenance, Lignite Royalties, Materials/ services, Personnel costs, Security, Other overheads, TAM success fee. CAPEX: operational assets, load-related operational assets, non-operational assets, major capital expenditure projects.	Yes.	Depreciation and inflation are included in the regulatory accounting.	Regulatory accounting we use the straight line method "which is the depreciation scale and is much smaller than the method used by the statutory accounting".	In the regulatory asset base are taken only the assets that are invested from the 2006, "because they were too old and for them there were the subsidies from the government and from the donors".
Kyrgyzstan	No.	NA.	NA.	NA.	NA.
Latvia	NA.	NA.	NA.	NA.	RAB was determined on historical data from company balance sheet. Valuation is allowed, but regulator has the right to call for revaluation using any of valuation concepts.

Lithuania	Yes, but depend on the situation.	No.	The regulatory accounting is related with the transparency of costs effectiveness	Straight-line method.	Value of the assets used in licensed activities. Also guarantees shall be provided for compensation of expenditures related to the accumulation and employment of capital borrowed for the activities under market conditions.
Macedonia	Investment program and plan (type of investment, realization period, costs and sources of capital for the planned investment), costs by type, fixed and variable costs, data about the capacity or realization in physical data, number of consumers, working hours of the assets, etc.	With the methodologies for calculation of regulated revenue and price of the regulated activities are determinate the principles for calculating of the normalized costs necessary to perform the regulated activity.	The cost reported in the regulatory accounting refer to the regulated activity those reported in statutory accounting refer to all company.	The depreciation of the regulated assets is calculated according to minimum rates regulated by law.	The asset valuation concept for the regulatory asset is the same concept used in the statutory accounts, and the value of the assets is the book value of assets.
Moldova	No.	No.	No.	No.	No.

Mongolia	Operational and maintenance cost breakdown, CAPEX	Yes.	No difference.	Linear.	RAB is established based on asset value stated in the balance sheets.
Montenegro	Cost of import of electricity, fuel for generators, labor, spare parts and materials, cost of third party's services, current costs of bank services, telecommunications, post, insurance, property tax, other operational costs, depreciation, financial expenses, environmental costs, return on investments, ad hoc expenses.	Yes.	All the costs which are not consequence of the regulated business are excluded.	Linear and is the same in statutory accounts.	All the assets which are not in function of the regulated business are out of RAB.
Poland	It is demanded data to benchmark OPEX of utility. Physical data: length of lines, capacity of transformers etc.	Yes.	Regulatory accounting is more detailed than statutory.	For regulatory purposes is used the asset value before the re-evaluation.	If the assets are re-evaluated then regulatory asset value is different than statutory.

Romania **(ANRE)**	Opex, repairs and maintenance, systems/equipments/fuel purchases, staff cost, metering, SCADA, customer records, customer complains, new connections and marketing and advertisement.	The reporting data from the annual reports were not split into controllable and non-controllable costs, until this year (2007).	The main differences between the costs reported in the regulatory and those in the statutory accounting are the costs with depreciation	Linear depreciation for 25 years for existing assets at the beginning of the first regulatory period. For the additional assets is also applicable linear depreciation.	The first RAB was set according to the formula for 2005 RAB which is maximum of 2002 book asset value. After 2005 the addition of new asset were allowed only according to the investment plan approved by ANRE. After 1st of January 2006 the rules for RAB is according to a specific formula.
Romania **(ANRGN)**	Are required reports regarding quantities of transmission, distribution, underground storage and regulated retail and for quantities of underground storage and transmission regarding capacities used.	Yes, these are split into the controllable costs – OPEX and non-controllable costs - pass-through costs.	The differences concern the depreciation of assets and also not all the statutory cost are recognized in the regulatory activity (for example financial costs).	The depreciation method applied for the regulated asset base is the linear one. The method is the same in statutory accounting but the difference concerns the depreciation time.	RAB is established on the entry value at historical cost. This differ from the one used in the statutory accounts because RAB is annually adjusted with the inflation rate and also it has another period of depreciation.

Russia	These reports are presented in the framework of tariff proposals.	No.		Depreciation is accounted for in accordance with the tax code.	Cost based method and method of indexation are used in regulation. At present, methodological instructions are being developed using "return on invested capital" method with respect to tariffs for electricity transmission.
Serbia	Yes, such as physical data (volume, capacity, number of customers, etc.), CAPEX information, detailed breakdown of OPEX, etc.	No, because current tariff methodologies do not request that.	The regulatory accounting costs (operational costs and depreciation) do not include all costs from statutory accounting. They are related only to regulated activities.	Tariff methodologies use straight-line depreciation, but statutory accounts allow different methods of depreciation (straight-line, functional and decreasing depreciation). In practice, all energy entities use straight-line depreciation.	Regulatory asset base includes only fixed assets such as: intangible assets (without goodwill) and tangible assets (real estates, equipment and plants). Asset valuation concept is the same in regulatory and statutory accounts.

Turkey	In generic terms, secondary legislation covers all the necessary data and information that can be requested by the Regulatory Authority.	No, there is no specific split into controllable and non-controllable costs.	The costs reported in the statutory accounting do generally reflect annual financial streams of companies and their financial viabilities on ex-post basis, unbundled and consolidated manner for financial and accounting purposes.	The revenue requirements shall be calculated to allow for amortization of the Board approved net regulatory capital expenditures – to the extent the efficiency parameter allows – through revenues arising from regulated tariffs, together with the cost of capital incurring.	The regulatory asset disposal revenues shall include the revenues from the disposal of the assets established before the start of the first implementation period and assets that have been financed through capital expenditures.
Ukraine	NA.	NA.	Differences are related only to depreciation charges: under regulatory accounting – tax, legally - accounting.	Tax method is used when tariffs are revised in terms of depreciation charges. The straight-line method is used in financial accounting; this method differs from the method used in mandatory accounting.	ROI is accrued only for five companies that were privatized in 2001. The following is used as a RAB: the purchase price of the block of shares during privatization plus new investments less depreciation.

Regulatory reporting requirements (cont.)				
	5. For utilities conducting more than one activity e.g. generation and distribution, is the information separated between regulated and non-regulated business? Are excluded (but still deregulated) services subject to a separate regulatory accounting treatment?	**6. Do you provide instructions/guidelines on how to fill in the regulatory accounting information?**	**7. How does regulatory accounting data exchange physically take place?**	**8. Does the national statutory accounting rules comply with the International Accounting Standards?**
Albania	Also involved in tariff setting.	Transparent, cost reflective.	NA.	Also involved in tariff setting.
Armenia	Also involved in tariff setting.	Balance the interests of consumers and regulated companies, create equal conditions for operating and encourage competition.	NA.	Also involved in tariff setting.

Azerbaijan	NA.	NA.	NA.	NA.
Bosnia and Herzegovina	The information is separated between regulated and non-regulated business and excluded services are subject to a separate treatment.	Yes.	Hard copy (paper) and electronically via e-mail or data disks (CD).	Yes.
Bulgaria	Assets, costs and returns related to non-licenses activities shall be kept separate from assets, costs and returns of licensed activities.	The Commission drafts mandatory guidelines on the way the regulatory accounting should be kept, as well as guidelines on the form and content of the information used for tariff calculation.	Official correspondence (mail, hard copy and digital copy).	Yes.
Croatia	Yes, separate accounts for all regulated activities	No.	Hard copies.	Yes.
Estonia	Yes.	Yes, guidelines are published on the website and companies can also ask for consultation	E-mail	Yes.
Georgia	The information is	If necessary.	Hard copies.	Yes.

	separated by activity			
Hungary	Information is separated between regulated and non-regulated business.	Yes.	Email and post.	No.
Kazakhstan	Separated per activity.	Interpretation of instructions is in the competence of the Agency.	Paper and electronic forms.	Yes but apart from small businesses.
Kosovo	Yes.	Yes.	Meetings with companies and, through emails and with the process of collecting data also at the company.	Yes.
Kyrgyzstan	Holders of licenses of integrated enterprises should maintain separate accounting documents for each type of activities: generation, transmission, distribution of electricity and heat.	Yes.	Companies send reports within set terms in the electronic form and by mail with mandatory signature of the manager.	Now all companies mostly converted to International Accounting Standards.
Latvia	Yes business activities are separated.	If we ask information we determine in which form it should be submitted.	By post and e-mail.	NA.

Lithuania	Yes.	Yes, but are relatively short and refer to the respective legislation.	Hard copies and if required by email.	Yes.
Macedonia	Yes.	Yes.	Hard and electronically form.	Yes.
Moldova	There are no utilities that perform more than one type of regulated activities. But for services that are not related to main regulated activity the information is subject to a separate accounting approach.	Yes.	Mail, electronic mail, telephone, fax.	Yes.
Mongolia	Yes.	Yes.	No answer.	Yes.
Montenegro	All the electricity activities are regulated (generation, transmission, distribution and supply).	Yes we do. Besides, we organize frequent meetings with relevant staff from of the electricity subject.	The electricity company is asked to fill up the prepared templates. Having them received, in course of analysis, we ask for further clarifications and/or organize meetings with referent staff of the electricity company.	Yes.

Poland	Yes for both questions.	Yes, Tariff Department provides basic guidelines.	By traditional and electronic mail.	No.
Romania **(ANRE)**	The information is separated between regulated and non-regulated business. The excluded services are not subject to a separate regulatory accounting treatment.	Yes, the instructions on how to fill in regulatory accounting information are included in the "Financial Reporting Procedure".	The forms should be completed electronically and the completed forms returned to ANRE on CD, diskettes or by e-mail. A printed copy of each of the completed reporting forms should be bound together with any supporting explanatory notes.	The national statutory accounting rules comply with the EEC Directive IV-th and EEC Directive VII-th.
Romania **(ANRGN)**	Yes.	The same rules as in statutory accounting apply.	Both in paper and electronic format.	The national statutory accounting rules do not totally comply with the International Accounting Standards.
Russia	In accordance with the legislation organizations have to maintain separate accounting by regulated types of activities	Yes.	Information exchange takes place through a uniform information-analytical system.	No.
Serbia	Yes.	Yes.	Regulated utilities submit regulatory accounting data	Yes.

			to the Agency, as well as their price suggestion, on all ready prepared table formats.	
Turkey	Account unbundling is compulsory in all activities regardless that are regulated or not. But, there is no separate regulatory accounting treatment for deregulated activities, except data and information asked for monitoring activities.	Yes.	In written form. Additionally, Regulatory Information System (RIS) project which enables regulated utilities to submit their regulatory accounts and information in electronic format is going on.	Yes.
Ukraine	Activities related to transmission of electricity through local power networks and supply of electricity at the regulated tariff the licensee should maintain accounting and prepare financial statements separately for each type of activities. Licensees in the sphere of transmission and supply of	Yes. Consultations on arising questions related to filling in reporting forms are arranged on a regular basis.	Reports are submitted by mail, in paper form and in electronic form to the relevant branch office of NERC.	Yes. It is taken into account national specifics of accounting at enterprises.

	natural gas at the regulated tariff have to maintain separate accounting by these types of activities and other types of activities not subject to be licensed.			

Pricing		
	1. Do you focus only on establishment of revenue requirements or you are also involved in the tariff setting process?	**2. What are your objectives in the tariff setting process?**
Albania	Also involved in tariff setting.	Transparent, cost reflective.
Armenia	Also involved in tariff setting.	Balance the interests of consumers and regulated companies, create equal conditions for operating and encourage competition.
Azerbaijan	In accordance with Resolution n° 247 of the Cabinet of the Republic of Azerbaijan from December 30, 2005 and depending on the goods/services with regulated prices the Council could change the cost structures/input costs and standards of prime production costs	After the revision of the data submitted, the Council could revise tariffs in the following situations: • Objective reasons for increasing or decreasing the production costs for

	if economically justified. The prices could be differentiated according to the customer groups and approved for certain time period. Unscheduled state control on price application is conducted upon complaints from individuals or legal entities.	goods/services; • Justified proposal of the regulated company for price changes on the basis of specific requirements; • Drastic price changes in the international markets; • Necessity of price changes for social-economic reasons.
Bosnia and Herzegovina	Regulator approves required revenue and tariff as well.	Prices shall be just, reasonable, non-discriminatory, based on objective criteria, and determined in a transparent manner; Cross-subsidies of different customer classes shall be eliminated; Connection fees that are cost justified may be included for connection to the transmission network or substantially increasing load; Regulated third party access principles shall be applied as to electricity transmission networks.
Bulgaria	Accept necessary annual income, the Commission also approves the utilities' tariffs subjected to regulation.	The Commission also approves the tariff structures upon utilities proposals.
Croatia	Involved in establishment of revenue	Justified costs of operation, maintenance,

	requirements and also tariff setting process, however the final tariff is set by the Government.	replacement, construction of facilities Tariff is non-discriminatory & transparent Tariff is designed to encourage energy efficiency and demand side management & increase use of renewable energy sources.
Estonia	Involved in tariff setting.	Objective is to approve the tariffs.
Georgia	Also involved in tariff setting.	Protection of customers from monopolistic prices, granting possibilities, to ensure improvement of company development efficiency, supporting the economic policy of the state in the energy field.
Hungary	Also involved in tariff setting.	Tariffs should cover costs caused by cost-bearers and the regulatory calculated cost of capital.
Kazakhstan	Regulation of the tariff level assumes considering both its level and the size of revenues.	To set an economically justified level of tariffs, maintaining the balance of interests of the regulated entity and interests of its consumers.
Kosovo	Establishment of revenue requirement and also approval of tariffs.	• Eliminate the cross-subsidy between the customer categories; • Tariff should be affordable and to be cost reflective; • Tariff should be non-discriminatory.

Kyrgyzstan	The regulatory process includes both aspects.	• To set economically justified and socially acceptable pricing and tariff-setting mechanisms; • Prices have to include full cost of generation, transmission and distribution of heat or electricity, including costs related to production and technical maintenance, recovery of capital costs, attraction of investments and rate of return; • Changes in prices should not cause any drastic economic difficulties for generators or consumers; • Discrimination in the course of provision of services and tariffs, including service quality, is prohibited.
Latvia	NA.	NA.
Lithuania	Officially only for revenue requirements but details are discussed.	Least costs, cost reflection, cost coverage, simplicity, flexibility and equity.
Macedonia	Energy Regulatory Commission has the responsibility to prescribe methodologies for the determination of the prices of certain types of energy and services and also adopts decisions for the prices of the specific types of energy in compliance with the price setting	• Determine a level of regulated return on capital that allows a continuous and successful operation of the companies; • establish incentives for improving productivity and an efficient operation;

	methodologies and tariff systems.	• apply the principles of objectivity, non-discrimination and transparency and • guarantee a secure, continuous and safe electricity supply.
Moldova	ANRE also participates in the tariff setting process.	ANRE determines: • The composition of expenses and costs that are to be included in calculation of tariffs; • The method for calculation of profitability of investments made by the enterprise; • The procedure for determining, approval and application of basic tariffs; • The procedure for revision of basic tariffs.
Mongolia	Also involved in the tariff setting.	To allow licensees to earn adequate revenue in order to ensure normal operation.
Montenegro	After the revenue requirements are established, the electricity company submits price lists and tariffs to the Regulatory Agency for approval.	To determine justified costs and the methodology for determination of tariff structure which application provide licensees covering costs of their services and achieving reasonable rate of return and prevent cross subsidization.
Poland	Tariff Department is involved in the tariff setting process.	• Set the utility's revenue on a level which cover justified costs of it's regulated activity; • Protect the end-users from unjustified price

		level; • Eliminate the cross-subsidies.
Romania **(ANRE)**	ANRE is involved in either tariff setting process and establishment of revenue requirements.	According with Energy Law the process of setting tariffs for captive consumers take in account the assurance for final consumer protection.
Romania **(ANRGN)**	Establishment of revenue requirements and also tariff setting process.	Avoiding cross subsidization between customer categories.
Russia	Tariffs are set.	Ensuring functioning and development of regulated enterprises in accordance with consumer needs.
Serbia	Both former and latter. In accordance with the Energy Law, the Agency is responsible for expressing an opinion of the price suggested by the regulated energy entities, i.e. the Agency decides whether the price suggestions are calculated or not in accordance with tariff methodologies and tariff systems.	• Establish transparent and objective tariff setting process, and • Help regulated energy entities to calculate prices in accordance with tariff methodologies and tariff systems.
Turkey	The focus is mainly on revenue setting process for regulated activities. For tariff setting procedure main duties and responsibilities are limited to examination, evaluation and approval of submitted tariff proposals and checking their compliance with the Law and secondary	• Tariffs must comply with aims, procedures, rules, parameters and principles that are revealed in the Law and related secondary legislations; and • Set free (within limits of Law and secondary

	legislation.	legislation) regulated utilities to set their tariffs reflecting their regional and company specific peculiarities.
Ukraine	The focus is either on establishment of revenue requirements and in the tariff setting process.	• Ensure full recovery of costs of electricity generation, transmission and supply; • Creation of necessary conditions for profitable operation of all sector enterprises and further development of the sector; • Ensuring transparency and controllability of the process of use of funds envisioned in the approved tariffs.

System of Auditing		
	1. Are there provisions in the law that requires the regulatory accounts to be audited?	
	a. If yes, who is responsible for conducting this?	**b. Does the regulator perform any independent (or independently sub-contracted) audits itself?**
Albania	Yes, the Regulator is responsible	Yes, by local independent accounting experts
Armenia	Yes, the regulated companies have to perform financial audits by independent auditors.	Yes, as set out in the license terms and conditions but no proper action has been

		developed yet.
Azerbaijan	Financial accounts of the regulated companies should be submitted along with the audit report.	The regulatory body has authority to conduct an independent monitoring periodically.
Bosnia and Herzegovina	No.	Yes.
Bulgaria	There is no any special statutory regulation for performance of regulatory accounting audit.	SEWRC does not hire independent experts to check the application of the regulatory accounting. The regulatory audit is strongly limited with the lack of the related specialists.
Croatia	Companies are obliged by law to submit financial accounts that have been audited by a certified authorised auditor.	No.
Estonia	No.	No but analyses the cost information for deviations.
Georgia	The regulated companies are responsible for conducting this.	If necessary yes.
Hungary	Statutory accounts are to be audited before submission to the Regulator.	Accounting data is not officially "audited" again but are supervised and controlled by independent experts on behalf of the regulator.
Kazakhstan	Regulated companies have to perform technical and/or financial audit with the help of	If necessary, the Agency conducts inspections, as well as financial and technical audits,

	independent experts.	inviting independent expert organizations.
Kosovo	KTA (Kosovo Trust Agency): responsible for the system of auditing of regulatory accounts.	No.
Kyrgyzstan	According to the Law on Energy, the regulatory body has the right to perform regulatory audit that includes inspection of cost of services and quality of services.	Yes.
Latvia	NA.	NA.
Lithuania	Yes as stated in the Law on Electricity generation, transmission, distribution and supply undertakings shall be subject to mandatory independent audit.	No due to lack of financial resource.
Macedonia	There are no specific provisions in the Energy law, but according to the Law on Trade companies all accounts have to be audited for joint stock companies and LIC's.	The Energy Regulatory Commission requests necessary data from the company for auditing and also can hire an independent auditing company for regulatory purposes.
Moldova	No.	Audits can be conducted by an independent auditor, and if necessary, the regulatory body conducts audits itself.
Mongolia	Yes, Independent auditing companies responsible for this.	Yes we perform internal auditing of licensees.

Montenegro	No.	No.
Poland	No.	No.
Romania (ANRE)	In the "Financial Reporting Procedure" it is specified that the annual Financial Report should be audited by an independent auditor.	Usually not.
Romania (ANRGN)	Yes. When providing regulated accounting records to ANRGN, the operators are obliged to present also an audit report, laid out by an external authorized auditor.	The regulator is entitled to request, on its own expenses, a separate independent (or independently sub-contracted) audit of regulated accounting records, when the specialized departments find major mistakes in the financial reports.
Russia	No	Regulatory bodies can invite organizations in the framework of research and development
Serbia	Yes, there are. Energy entities are obliged to provide independent audit of unbundling accounts and publish them in accordance with the Energy Law.	No.
Turkey	Yes, on the final stage the Board is responsible for conducting audit activities.	Yes. The Board has the power to require any public or private entity or person, to provide any information and document deemed necessary and/or to review the same at the premises of such persons.

Ukraine	No.	No.

Albania

<u>**Procedures and rules for the examination of documents on tariff approvals**</u>

1. **How often do you request regulatory accounting information from regulated companies?**

Regulated company has to send to us periodically information. This includes monthly, quarterly and yearly information. Detailed information is send to us in the cases of request of tariff review.

2. **How much time does a regulated utility have to submit their regulatory accounting information? Please indicate submission timing.**

Regularly yearly (all the licensees), in the timeframe within March of each year (after fulfillment of their financial statements).

3. **What is your procedure in requesting the regulatory accounting information? E.g. is there a consultation process, who is responsible for checking the data etc. Please describe/comment**

For the common information our Board of Commissioners has approved a set of statements that licensees should submit monthly/periodically. In the case of tariff review, the asked information is detailed and the Department of Tariff and Price is checking the data. There is a consultation process as well, for a purpose of clarifications.

4. **Which sort of production subset (generation, transmission, distribution, and retail) is covered by regulatory accounting requirements?**

All financial statements for these activities, since there are integrated activities (except transmission, which is separated).

<u>**Regulatory reporting requirements**</u>

1. **For regulatory accounting requirements, do you provide templates to utilities to complete?**
    a. **If yes, please attach your regulatory accounting templates**

Yes, the templates I will send to you at the beginning of new week, because I have to translate from Albanian language to English.

2. **Do the companies also produce and submit to you statutory accounts?**

    a. **If yes, do they differ from the regulatory accounting information? E.g. disaggregated and non-consolidated**

Yes. They tend to be consolidated, so we need to ask them for further details. Activities are not fully separated.

3. **Please specify all the regulatory accounting information which is requested. For example cash-flow statement, profit and loss account, balance sheet, additional documents.**

Cash-flow statement, profit and loss account, balance sheet, electricity balance, Sales structure, losses. We tend to ask for separated accounts, but it is difficult based on fact that they are not unbundled (except transmission).

4. **Do you request additional reports such as detailed breakdown of OPEX, CAPEX information, physical data?**

    a. **If yes, please list.**

Yes, including the reports mentioned above, we asked for reports according the level of voltage, according to activities (generation, distribution, supply).

    b. **Are these split into controllable and non-controllable costs?**

Generally no.

    c. **What are the differences between the cost reported in the regulatory accounting and those in the statutory accounting?**

They are consolidated and not separated according to activities and level of service.

    d. **In terms of depreciation, which method is applied and does this differ from the method used in the statutory accounts?**

The linear method is applied and does not differ from the method used in the statutory accounts.

    e. **How is the regulatory asset based established? Does the asset valuation concept differ from this used in the statutory accounts?**

The regulatory asset based is established by total of assets + net working capital – Accumulated Depreciation. It is the same as it is in the statutory accounts (Fair Market Value).

5. For utilities conducting more than one activity e.g. generation and distribution, is the information separated between regulated and non-regulated business? Are excluded (but still deregulated) services subject to a separate regulatory accounting treatment?

They are both regulated businesses but the information is asked to be separated.

6. Do you provide instructions/guidelines on how to fill in the regulatory accounting information?

We have a set of documents, which is approved by our Board of Commissioners. Also the methodologies are serving as guidelines how to fill the information for purpose of tariffs.

7. How does regulatory accounting data exchange physically take place?

Officially submission for the periodic information, officially requested in other cases.

8. Does the national statutory accounting rules comply with the International Accounting Standards?

No, but is to be adopted soon in our Law of Accounting.

Pricing

1. Do you focus only on establishment of revenue requirements or you are also involved in the tariff setting process?

Also involved in tariff setting process.

2. What are your objectives in the tariff setting process?

Some of main objectives are to be transparent with the public and the company, tariff to be fair (cost reflective). Protect consumers from monopolistic prices. To consider needs for improvements of financial and technical indicators of the licensees. To provide licensees with the opportunity to recover their reasonable costs of providing services. To encourage efficiency in internal operations and managements, by allowing the licensee's financial returns as results of its minimized cost for providing services. To consider the National Strategy of Energy and Document of Policies of Power Sector.

System of Auditing

1. **Are there provisions in the law that requires the regulatory accounts to be audited?** Yes.

   a. **If yes, who is responsible for conducting this?**

The regulatory itself. The Law is requiring this.

   b. **Does the regulator perform any independent (or independently sub-contracted) audits itself?**

Yes, local independent accounting Experts.

Armenia

Procedures and rules for the examination of documents on tariff approvals

1. **How often do you request regulatory accounting information from regulated companies?**

Regulated companies submit to the commission the following accounting information on regulated activities: Technical and economic reports – on a monthly basis, financial statements – quarterly and annual.

2. **How much time does a regulated utility have to submit their regulatory accounting information? Please indicate submission timing.**

Monthly reports are submitted by the 25th day of the month following the reporting month. Quarterly reports are submitted by the 25th day of the month following the reporting quarter. Annual reports are submitted by the 15th day of April of the year following the reporting year.

3. **What is your procedure in requesting the regulatory accounting information? E.g. is there a consultation process, who is responsible for checking the data etc. Please describe/comment.**

Reports submitted to the Commission have to be preliminary verified by relevant Commission departments. After verification a report is marked “preliminary verified” and is sent to the relevant department for registration. In case after preliminary verification any inaccuracies or errors are identified, the report is not accepted and is returned to the regulated enterprise. The Commission envisions 5 days to correct errors. After 5 days the regulated company has to re-submit reports to the Commission.

4. **Which sort of production subset (generation, transmission, distribution, and retail) is covered by regulatory accounting requirements?**

The following subset is covered by regulatory accounting requirements: generation, transmission, distribution and retail.

Regulatory reporting requirements

1. **For regulatory accounting requirements, do you provide templates to utilities to complete?**

    a. **If yes, please attach your regulatory accounting templates**

According to the law of the RA "On energy" for regulated companies the Commission sets the procedure for submission and reporting forms and other information on regulated activities. The forms are attached.

2. **Do the companies also produce and submit to you statutory accounts?**

    a. **If yes, do they differ from the regulatory accounting information? E.g. disaggregated and non-consolidated**

Yes, they submit. They differ from regulatory accounting information.

3. **Please specify all the regulatory accounting information which is requested. For example cash-flow statement, profit and loss account, balance sheet, additional documents.**

On a regular basis regulated companies present the following information: Income Statement, Information on Wages, Bonuses and other Fringe Benefits, Information on Acquired Fixed Assets, Information Consumption of Inventories, Information on Repairs of Fixed Assets, Information on Non-Current Tangible Assets in-Process, Information on Credits and Loans, Balance Sheet, Profit and Loss Statement, Statement on Changes in Owner's Equity, Cash Flow Statement, Notes to Financial Statements, On the amount of generated, transmitted and distributed electricity, On the amount of natural gas that was brought in, transmitted and distributed to consumers.

4. **Do you request additional reports such as detailed breakdown of OPEX, CAPEX information, physical data?**

   a. **If yes, please list**

It is not clear.

   b. **Are these split into controllable and non-controllable costs?**

It is not clear.

   c. **What are the differences between the cost reported in the regulatory accounting and those in the statutory accounting?**

Only costs related to accounting for regulated activities are presented to the Commission.

   d. **In terms of depreciation, which method is applied and does this differ from the method used in the statutory accounts?**

Yes, there can be differences in terms of the approaches to regulated and non-regulated accounting. For accounting of regulated activities, in accordance with tariff calculation methodologies approved by the Commission, the size of annual depreciation of fixed assets is calculated using a straight-line method based on the initial cost (acquisition cost) of those fixed assets that were recognized as useful and used for provision of relevant services.

   e. **How is the regulatory asset based established? Does the asset valuation concept differ from this used in the statutory accounts?**

Yes, there can be differences in approaches to regulated and non-regulated accounting. For accounting for regulated activities, in accordance with the same methods, the value of net assets of the company serves as the asset base.

5. **For utilities conducting more than one activity e.g. generation and distribution, is the information separated between regulated and non-regulated business? Are excluded (but still deregulated) services subject to a separate regulatory accounting treatment?**

A regulated company has to maintain separate accounting for each type of regulated activity, and also separate accounting for each type of non-regulated activities.

6. **Do you provide instructions/guidelines on how to fill in the regulatory accounting information?**

Yes, if necessary.

7. How does regulatory accounting data exchange physically take place?

Regulatory accounting information is presented by a relevant letter, to which a soft version is attached.

8. Does the national statutory accounting rules comply with the International Accounting Standards?

Accounting standards of the Republic of Armenia were developed on the basis of International Accounting Standards.

Pricing

1. Do you focus only on establishment of revenue requirements or you are also involved in the tariff setting process?

Tariffs in the energy sector are set by decisions of the Commission. According to the tariff calculation methodologies approved by the Commission they are calculated using the required revenue method.

2. What are your objectives in the tariff setting process?

By setting regulated tariffs and license terms and conditions (monitoring them), by setting rules for functioning of electricity and heat and natural gas markets, the Commission regulates the energy sector for the purpose of balancing interests of consumers and interests of regulated companies, and also in order to create equal conditions for their activities and fostering formation and development of the competitive market.

System of Auditing

1. Are there provisions in the law that requires the regulatory accounts to be audited?

a. If yes, who is responsible for conducting this?

Yes, according to license terms and conditions, regulated companies have to perform technical and/or financial audit with the help of independent experts.

b. Does the regulator perform any independent (or independently sub-contracted) audits itself?

Yes, for the purpose of control over compliance with license terms, the law envisions that the regulatory body should perform audit of financial and economic activities. At present, the necessary proper order has not been developed yet.

Azerbaijan

As central collegial body implementing regulation of tariffs/prices subject to state regulation, the Tariff Council is responsible for formation, application and optimization of tariffs, including electricity tariffs. The Council could request financial and functional accounts from the regulated companies periodically, but the data of financial accounts should be submitted by the regulated companies by March 1 of each year in mandatory order. Depending on companies' submitted projects the Council expresses its opinion within a month, starting from receipt of last information. In case of incomplete information provided by the regulated company a Secretariat of the Council gives a written notice about incompleteness of provided accounts within 5 days. In its turn the companies are obliged to submit within 5 days the requested information. The regulated companies are obliged to submit the above-mentioned accounts in accordance with the "Rules of ensuring of state control on determination and application of prices regulated by the state", approved by Resolution n° 247 of the Cabinet of the Republic of Azerbaijan from December 30, 2005.
As necessary, in accordance with the above Rules and depending on the specifics of the goods /services/ with regulated prices the Council could make decisions on changing of cost structures /input costs/, and standards of prime production costs if economically justified and with respect to technical production assets.

The prices could be differentiated according to the customer groups and approved for certain time period.

After reviewing of materials submitted by the regulated company the Council could revise the tariffs in below cases:

- In case of objective reasons for increasing or decreasing of production costs for goods /services/.
- In case of justified proposal of the regulated company for price changes /on the basis of specific requirements/.
- In case of drastic price changes on the world market.
- If the Council considers a necessity of price changes according to the social-economic situation.

* Unscheduled state control on price application is conducted upon complaints from individuals or legal entities.

The Council requests the following accounting information: Balance Sheet, Profit and Loss Statement, and wholesale price /tariff/ calculation, Cash flow Statement, Statement of expenditures on materials and labor costs, and non-production expenses included in input costs. Additional statement on detailed cost allocation OPEX and CAPEX is included in account set by law. Financial accounts of the regulated companies should be submitted along with the audit report. The regulatory body has authority to conduct an independent monitoring periodically. The Tariff Council in accordance with the effective laws of the Republic of Azerbaijan ensures tariff regulation on goods and services, set by the state in the list approved by decision of the Cabinet n°178 from September 28, 2005, based on the principle of keeping balance between interests of the regulated companies and consumer requirements.

Bosnia and Herzegovina

Procedures and rules for the examination of documents on tariff approvals:

1. How often do you request regulatory accounting information from regulated companies?

During tariff procedure which is performed once per year. Also, terms of license requests semiannual accounting information.

2. How much time does a regulated utility have to submit their regulatory accounting information? Please indicate submission timing.

There is no specific timing.

3. What is your procedure in requesting the regulatory accounting information? E.g. is there a consultation process, who is responsible for checking the data etc. Please describe/comment

Tariff and Market department is responsible for checking the data and within the department there is analyst-auditor whose particular responsibility is accounting information checking.

4. Which sort of production subset (generation, transmission, distribution, and retail) is covered by regulatory accounting requirements?

In Bosnia and Herzegovina, generation, transmission, distribution, and retail of electricity are fully regulated activities, so each one of them is covered by regulatory accounting requirements.

Regulatory reporting requirements

1. **For regulatory accounting requirements, do you provide templates to utilities to complete?**

    a. **If yes, please attach your regulatory accounting templates**

Yes.

2. **Do the companies also produce and submit to you statutory accounts?**

    a. **If yes, do they differ from the regulatory accounting information? E.g. disaggregated and non-consolidated**

Yes. The company statutory accounting scheme has to be based on the official national statutory accounting rules. The regulatory accounting scheme has not been adopted yet, but it would be based on the official national statutory accounting rules too and it could differ from the company's statutory (more consolidated and syntactic).

3. **Please specify all the regulatory accounting information which is requested. For example cash-flow statement, profit and loss account, balance sheet, additional documents.**

The regulatory accounting information which are requested:

- balance sheet
- income statement
- cash flow statement
- tax balance
- additional data regarding salaries
- all other relevant documents that could be useful during tariff procedure

4. **Do you request additional reports such as detailed breakdown of OPEX, CAPEX information, physical data?**

a. If yes, please list.

Yes.

Controllable OPEX:

- costs of the labor associated with working and maintenance
- costs of the administration labor
- other's services costs
- working materials and spare parts
- office supply material
- regulatory fee
- other controllable costs

CAPEX:

- depreciation
- financing costs (e.g. interests)

b. Are these split into controllable and non-controllable costs?

Yes.

c. What are the differences between the cost reported in the regulatory accounting and those in the statutory accounting?

The cost reported in the regulatory accounting is more precise and more relevant to the regulator from the tariff setting point of view. In the statutory accounting there are a lot of information that are not relevant to the regulator and vice-versa some information that should be more precise.

d. In terms of depreciation, which method is applied and does this differ from the method used in the statutory accounts?

The method of the linear depreciation is applied and it does not differ from the method used in the statutory accounts.

e. How is the regulatory asset based established? Does the asset valuation concept differ from this used in the statutory accounts?

Independent international accounting specialist group re-evaluated assets and established asset base in the statutory accounts. Regulator jurisdiction is to consider and verify entire assets proposed to be the part of regulatory asset base and allow, disallow or adjust the value of any of such assets.

5. For utilities conducting more than one activity e.g. generation and distribution, is the information separated between regulated and non-regulated business? Are excluded (but still deregulated) services subject to a separate regulatory accounting treatment?

Yes. The information is separated between regulated and non-regulated business and excluded services are subject to a separate regulatory accounting treatment.

6. Do you provide instructions/guidelines on how to fill in the regulatory accounting information?

Yes.

7. How does regulatory accounting data exchange physically take place?

Regulated company submits data on the hard copy (paper) and electronically via e-mail or data disks (CD).

8. Does the national statutory accounting rules comply with the International Accounting Standards?

Yes.

Pricing

1. Do you focus only on establishment of revenue requirements or you are also involved in the tariff setting process?

Regulator approves required revenue and tariff as well.

2. What are your objectives in the tariff setting process?

Objectives in the tariff setting process are:

- Prices shall be just, reasonable, non-discriminatory, based on objective criteria, and determined in a transparent manner;
- Prices shall be primarily dependent upon the justified costs of operation, maintenance, replacement, construction and reconstruction of facilities, including a reasonable return on investment, amortization and taxes, with consideration of environmental and consumer protection;
- Interruptible rates, load balancing rates, and other mechanisms to improve energy efficiency and demand side management shall be encouraged, including consideration of the development and dispatch of renewable sources of energy;
- Season and time-of-use rates are permitted, which prices may be adjustable according to the cost of peak and off-peak services;
- Cross-subsidies of different customer classes shall be eliminated;
- Connection fees that are cost justified may be included for connection to the transmission network or substantially increasing load;
- Regulated third party access principles shall be applied as to electricity transmission networks; and
- With respect to the tariffs, terms and conditions for the services of the ISO, such tariffs, terms and conditions shall reflect prevailing international practices.

System of Auditing

1. Are there provisions in the law that requires the regulatory accounts to be audited?

a. If yes, who is responsible for conducting this?

No.

b. Does the regulator perform any independent (or independently sub-contracted) audits itself?

Yes.

Bulgaria

Procedures and rules for the examination of documents on tariff approvals

1. **How often do you request regulatory accounting information from regulated companies?**

The regulated utilities submit to State Energy and Water Regulatory Commission (SEWRC) general accounting information once a year – after completion of the budget year. During the calendar year some interim accounting information is required in cases when it is necessary for revision and/or to evidence the financial status of the licensee.

2. **How much time does a regulated utility have to submit their regulatory accounting information? Please indicate submission timing.**

Usually the annual accounting information shall be submitted not before the end of March of the year after the reported year.

If summarized accounting information is required, the term for its submission is from 5 to 7 working days. In case that secondary revision needs to be done to the required information by the energy utility, then the term could be extended, but no more of 10 days extension.

3. **What is your procedure in requesting the regulatory accounting information? E.g. is there a consultation process, who is responsible for checking the data etc. Please describe/comment**

SEWRC approved rules for regulatory accounting reports for three groups of regulated utilities – electro-distribution, gas-distribution and district heating utilities.

The accounting rules are drafted with the assistance of external consultants. Their content is adjusted to the applicable accounting software of the regulated utilities.

4. **Which sort of production subset (generation, transmission, distribution, and retail) is covered by regulatory accounting requirements?**

The requirement for the application of the regulatory accounting is for all companies which have licenses for production, transmission, distribution and supply with natural gas, as well as utilities which hold licenses for production and transmission of heat energy.

Regulatory reporting requirements

1. **For regulatory accounting requirements, do you provide templates to utilities to complete?**

    a. **If yes, please attach your regulatory accounting templates**

In all cases, the required by the Commission revised accounting information used in tariff-setting is submitted in the form of references, which have mandatory nature (in terms of form and content) and they are approved by SEWRC.

The overall accounting shall be submitted in a form, which provides information for profits, loses and assets for each single licensed activity, but it does not differ substantially from the general forms recommended by the applicable accounting standards.

2. **Do the companies also produce and submit to you statutory accounts?**

    a. **If yes, do they differ from the regulatory accounting information? E.g. disaggregated and non-consolidated**

The accounting information for regulatory purposes is compatible with the provisions of the national accounting legislation.

In case that the company is obliged to keep consolidated or detailed financial reports, the latter shall also be submitted to SEWRC.

3. **Please specify all the regulatory accounting information which is requested. For example cash-flow statement, profit and loss account, balance sheet, additional documents.**

It is required from the companies to submit all attachments to the set of accounting documents – cash flow statement, capital statement and all other forms accompanied by reports and additional information.

4. **Do you request additional reports such as detailed breakdown of OPEX, CAPEX information, physical data?**

    a. **If yes, please list.**

For regulation of energy activities the Commission can at any time request additional information from the licensed utilitis. The Information could refer to both regulated and non-regulated activities, in cases when the utility has such. Physical data is required additionally (networks length, types and number of facilities, etc.), acquisition prices and funds used for acquisition – accumulated and equity capital, loan contracts, repayment schedules attached to those contracts. Investment, operational and depreciation costs of the companies are also observed. A comparative analysis for each single cost in the sector and between sectors is performed.

b. Are these split into controllable and non-controllable costs?

In tariff-setting, the incomes from activities which are not subject to regulation by SEWRC are not considered. The costs related to non-regulated activities are indicated in separate positions for information only.

c. What are the differences between the cost reported in the regulatory accounting and those in the statutory accounting?

Accounting reports for regulatory purposes cover all utility costs, but some separate groups of accounts are foreseen for separate accounting of costs for regulated and non-regulated activities.

d. In terms of depreciation, which method is applied and does this differ from the method used in the statutory accounts?

According to the regulatory requirements related to tariff regulation, the applied assets depreciation method is a linear one. The accounting policy of the regulated utilities does not determine a different depreciation method, other than the one enforced by the regulator.

e. How is the regulatory asset based established? Does the asset valuation concept differ from this used in the statutory accounts?

The Regulatory Assets base includes all gratuitously acquired and equity assets brought to exploitation. The regulatory practice shows that in Bulgaria for the purposes of regulation it is possible to accept different cost from the one, reported in the accounts.

5. For utilities conducting more than one activity e.g. generation and distribution, is the information separated between regulated and non-regulated business? Are excluded (but still deregulated) services subject to a separate regulatory accounting treatment?

In case that one company holds licenses for more than one activity, it should keep a regulatory accounting for each of the licenses activities. Assets, costs and returns related to non-licenses activities shall be kept separate from assets, costs and returns of licensed activities.

6. Do you provide instructions/guidelines on how to fill in the regulatory accounting information?

The Commission drafts guidelines on the way the regulatory accounting should be kept, as well as guidelines on the form and content of the information used for tariff calculation. All guidelines are mandatory for the regulated utilities.

These guidelines depend on the activity to which they refer and drafted together with the regulated utilities. In case that on behalf of the regulated utilities there are ambiguities concerning the regulated accounting, it is the Commission's practice to perform also individual consultations.

7. How does regulatory accounting data exchange physically take place?

Via official correspondence – mail, hard copy, together with digital copy. In case that the requested information shall be submitted quickly, it should be also send via e-mail or fax.

8. Does the national statutory accounting rule comply with the International Accounting Standards?

Yes, the national statutory accounting rules comply with the International Accounting Standards.

<u>Pricing</u>

1. Do you focus only on establishment of revenue requirements or you are also involved in the tariff setting process?

Accept necessary annual income, the Commission also approves the utilities' tariffs subjected to regulation.

2. What are your objectives in the tariff setting process?

The Commission also approves the tariff structures upon utilities proposals.

<u>System of Auditing</u>

1. Are there provisions in the law that requires the regulatory accounts to be audited?

a. If yes, who is responsible for conducting this?

There is no any special statutory regulation for performance of regulatory accounting audit.

b. Does the regulator perform any independent (or independently sub-contracted) audits itself?

SEWRC does not hire independent experts to check the application of the regulatory accounting. The regulatory audit is strongly limited with the lack of the related specialists.

Croatia

Procedures and rules for the examination of documents on tariff approvals

1. How often do you request regulatory accounting information from regulated companies?

According to the *Regulation on data to be submitted by energy undertakings to the Energy Regulatory Agency* the regulated companies have the obligation to submit, once a year, the following accounting information:

- Balance sheet,
- Profit and loss statement,
- Notes related to the financial statements.

2. How much time does a regulated utility have to submit their regulatory accounting information? Please indicate submission timing.

The final account for the preceding year, certified by an authorized auditor, has to be submitted by the regulated company to the regulator by the end of April of the current year at the latest.

3. What is your procedure in requesting the regulatory accounting information? E.g. is there a consultation process, who is responsible for checking the data etc. Please describe/comment

According to the *Regulation on data to be submitted by energy undertakings to the Energy Regulatory Agency, r*egulated companies have the obligation to submit their accounting information (balance sheet, profit and loss statement, notes related to the financial statements) once a year*.*

When a regulated company submits its request for price changing, it is the responsibility of the technical department covering a particular energy source, with assistance of the economic department, to check the data.

4. Which sort of production subset (generation, transmission, distribution, and retail) is covered by regulatory accounting requirements?

According to the Croatian Energy Law, generation, transmission, distribution and retail supply are separate energy activities and energy undertakings have the obligation to submit complete financial statements for each of those energy activities separately.

<u>Regulatory reporting requirements</u>

1. For regulatory accounting requirements, do you provide templates to utilities to complete?

a. If yes, please attach your regulatory accounting templates

Until now we have not had any regulatory accounting templates, but recently CERA has passed two methodologies for tariff systems concerning gas (distribution and retail supply) and within them CERA has provided templates (excel tables) to be fulfilled and sent to us once a year.

2. Do the companies also produce and submit to you statutory accounts?

a. If yes, do they differ from the regulatory accounting information? E.g. disaggregated and non-consolidated

Regulated companies have the obligation to submit to the CERA the financial statements required by the law (balance sheet, profit and loss statement, notes related to the financial statements).

3. Please specify all the regulatory accounting information which is requested. For example cash-flow statement, profit and loss account, balance sheet, additional documents.

- Balance sheet,
- Profit and loss statement,
- Notes related to the financial statements.

4. Do you request additional reports such as detailed breakdown of OPEX, CAPEX information, physical data?

a. If yes, please list.

Within two methodologies for tariff systems concerning gas (distribution and retail supply) CERA provides templates that should be fulfilled and sent to us once a year. Those templates contain detailed breakdown of costs and some additional physical data.

b. **Are these split into controllable and non-controllable costs?**

c. **What are the differences between the cost reported in the regulatory accounting and those in the statutory accounting?**

In general, there are no differences but the costs reported in the regulatory accounting are more detailed. Reported costs in the regulatory accounting should be the costs directly connected to the performance of a particular energy activity.

d. **In terms of depreciation, which method is applied and does this differ from the method used in the statutory accounts?**

The depreciation method is the same as the method used in the statutory accounting (strait line depreciation).

e. **How is the regulatory asset based established? Does the asset valuation concept differ from this used in the statutory accounts?**

The regulatory assets are the assets used for conducting a particular energy activity. In our methodologies the regulatory asset base is calculated as an average value of the regulatory assets in the beginning of the regulatory year and the regulatory assets at the end of the regulatory year.

The value of the regulatory assets in the beginning of the regulatory year is calculated as a sum of the book value of the long term tangible and non-tangible assets in service and the working capital stated in the accounting books of the regulated company at the end of the previous year, and doesn't include the assets given to regulated company without compensation (free of charge).

The value of the regulatory assets at the end of the regulatory year is calculated as a sum of the value of the regulatory assets in the beginning of the regulatory year and the new investments, minus the assets given to regulated company without compensation (free of charge), amortization and misappropriated and decommissioned assets.

5. **For utilities conducting more than one activity e.g. generation and distribution, is the information separated between regulated and non-regulated business? Are**

excluded (but still deregulated) services subject to a separate regulatory accounting treatment?

If a regulated company conducts more than one energy activity (regulated activity) it has the obligation to submit separate accounting information for each energy activity. If a regulated company conducts more then one activity among which are non-regulated activities, it has the obligation to submit separate accounting information for each regulated activity, as well as the financial statement on the company level.

6. **Do you provide instructions/guidelines on how to fill in the regulatory accounting information?**

No.

7. **How does regulatory accounting data exchange physically take place?**

For the time being, regulated companies send us hard copies of their financial statements but in the near future we are planning to create templates to be completed and sent to us electronically.

8. **Do the national statutory accounting rules comply with the International Accounting Standards?**

Yes.

Pricing

1. **Do you focus only on establishment of revenue requirements or you are also involved in the tariff setting process?**

We are focused on establishment of revenue requirements, but are also involved in the tariff setting process, in the way that CERA provides the expert opinion to the Ministry on tariffs proposed by energy undertakings. The final tariff is set by the Government.

2. **What are your objectives in the tariff setting process?**

- Tariff systems are based on justified costs of operation, maintenance, replacement, construction or reconstruction of facilities and application of measures for environmental protection, taking into account a reasonable return period for investments in energy plants, facilities and network or system;

- Tariff systems are non-discriminatory and transparent;
- Tariff systems are designed to encourage mechanisms for improvement in energy efficiency and demand side management, including increased use of renewable energy sources.

System of Auditing

1. **Are there provisions in the law that requires the regulatory accounts to be audited?**
    a. **If yes, who is responsible for conducting this?**
    b. **Does the regulator perform any independent (or independently sub-contracted) audits itself?** No

According to the *Regulation on data to be submitted by energy undertakings to the Energy Regulatory Agency* regulated companies have the obligation to submit, once a year, the final account for the preceding year, certified by an authorized auditor (balance sheet, profit and loss statement and notes related to the financial statements).

Estonia

Procedures and rules for the examination of documents on tariff approvals

1. **How often do you request regulatory accounting information from regulated companies?**

Only when they asking for a price and when regulatory authority thinks that the company must overlook the price according with some kind of customer complain.

2. **How much time does a regulated utility have to submit their regulatory accounting information? Please indicate submission timing.**

Commonly one month.

3. **What is your procedure in requesting the regulatory accounting information? E.g. is there a consultation process, who is responsible for checking the data etc. Please describe/comment.**

When company decides that they want consultation they can call and ask for consultation from all specialists of our authority. Who analyze price of the company must control the data too, what company represent.

4. **Which sort of production subset (generation, transmission, distribution, and retail) is covered by regulatory accounting requirements?**

Generation, transmission, distribution, and retail.

<u>Regulatory reporting requirements</u>

1. **For regulatory accounting requirements, do you provide templates to utilities to complete?**

    a. **If yes, please attach your regulatory accounting templates.**

Unfortunately they not available in English, but when you want to know how big those questionnaires are then see follow link (it questionnaire of TSO):

http://www.eti.gov.ee/uploads/files/suured_elektriettevtted_klarika_ettepanek_copy1.xls.

2. **Do the companies also produce and submit to you statutory accounts?**

Yes (we can see this information from business registry of Estonian companies.

    a. **If yes, do they differ from the regulatory accounting information? E.g. disaggregated and non-consolidated.**

There must be separate accounting for regulated activities.

3. **Please specify all the regulatory accounting information, which is requested. For example cash-flow statement, profit and loss account, balance sheet, additional documents.**

Cash-flow statement, profit and loss account, balance sheet, detail information about purchased and sold energy, detail information about investment. We may ask additional information when we need that during analyze of company prices

4. **Do you request additional reports such as detailed breakdown of OPEX, CAPEX information, physical data?** Yes

a. **If yes, please list.**

Physical data.

b. **Are these split into controllable and non-controllable costs?**

Yes.

c. **What are the differences between the cost reported in the regulatory accounting and those in the statutory accounting?**

Commonly the information in statutory accounting much more detail and separated more by activities.

d. **In terms of depreciation, which method is applied and does this differ from the method used in the statutory accounts?**

Yes its differ because we use method regulated asset base

e. **How is the regulatory asset based established?**

Commonly we close the value of assets in year 2003 and start to depreciate it accordingly to regulatory assets.

f. **Does the asset valuation concept differ from this used in the statutory accounts?**

Yes.

5. **For utilities conducting more than one activity e.g. generation and distribution, is the information separated between regulated and non-regulated business?**

Yes. Are excluded (but still deregulated) services subject to a separate regulatory accounting treatment? No. (the question is but very unclear)

6. **Do you provide instructions/guidelines on how to fill in the regulatory accounting information?**

Yes. There are little guidelines in our web page and all company can ask for a consultation

7. **How does regulatory accounting data exchange physically take place?**

By e-mail.

8. Does the national statutory accounting rules comply with the International Accounting Standards?

Yes.

Pricing

1. Do you focus only on establishment of revenue requirements or you are also involved in the tariff setting process?

By our law in network (electricity, gas) area we involve tariff setting process. In production, retail sale we involve only weighted average tariffs.

2. What are your objectives in the tariff setting process?

Approval tariffs.

System of Auditing

1. **Are there provisions in the law that requires the regulatory accounts to be audited?**

   a. If yes, who is responsible for conducting this?

   No.

   b. Does the regulator perform any independent (or independently sub-contracted) audits itself?

   No, but we are analyzing their cost deviation activities.

Georgia

Procedures and rules for the examination of documents on tariff approvals:

1. How often do you request regulatory accounting information from regulated companies?

Once a quarter (major data for the reporting quarter)

Once a year (annual financial statements – in full form)

2. How much time does a regulated utility have to submit their regulatory accounting information? Please indicate submission timing.

Timing for submission of information is set by the Decree.

Quarterly information – by the end of the following month.

Annual financial statements – by April 1 of the following year.

3. What is your procedure in requesting the regulatory accounting information? E.g. is there a consultation process, who is responsible for checking the data etc. Please describe/comment

1. Form and terms of submission of information are set by the Decree of the Commission.
2. Regular consultations on how to fill in forms are held.
3. The Department for economic analysis and pricing is responsible for verifying submitted data.

4. Which sort of production subset (generation, transmission, distribution, and retail) is covered by regulatory accounting requirements?

Regulatory accounting requirements cover all license holders (regulated entities) of both electricity and natural gas sectors.

<u>Regulatory reporting requirements</u>

1. For regulatory accounting requirements, do you provide templates to utilities to complete?

a. If yes, please attach your regulatory accounting templates

Yes. In English.

2. Do the companies also produce and submit to you statutory accounts?

b. If yes, do they differ from the regulatory accounting information? E.g. disaggregated and non-consolidated

No.

3. **Please specify all the regulatory accounting information which is requested. For example cash-flow statement, profit and loss account, balance sheet, additional documents.**

- Balance sheet.
- Profit and loss statement.
- Cash flow statement.
- Statement on changes in owner's equity.

Additional forms:

- On inventories.
- On receivables.
- On payables.
- On short-term and long-term credits.
- On direct costs of licensed activities.
- On indirect costs of licensed activities.
- On sales and revenues.
- On fixed assets.

4. **Do you request additional reports such as detailed breakdown of OPEX, CAPEX information, physical data?**

    a. **If yes, please, list.**

In certain cases we request necessary data.

    b. **Are these split into controllable and non-controllable costs?**

As a rule, we request only data of the regulated sector.

    c. **What are the differences between the cost reported in the regulatory accounting and those in the statutory accounting?**

They are the same.

d. **In terms of depreciation, which method is applied and does this differ from the method used in the statutory accounts?**

The reports related to depreciation are presented in accordance with the Tax Code.

e. **How is the regulatory asset based established? Does the asset valuation concept differ from this used in the statutory accounts?**

Assets are set on the basis of the legislation.

5. **For utilities conducting more than one activity e.g. generation and distribution, is the information separated between regulated and non-regulated business? Are excluded (but still deregulated) services subject to a separate regulatory accounting treatment?**

Based on the legislation reporting on regulated activities is done separately, and when a company is involved also in other (non-regulated) activities.

6. **Do you provide instructions/guidelines on how to fill in the regulatory accounting information?**

If necessary yes.

7. **How does regulatory accounting data exchange physically take place?**

License holders present reports in the form of official documents. If necessary the data is clarified in the course of routine work.

8. **Does the national statutory accounting rules comply with the International Accounting Standards?**

Yes.

Pricing

1. **Do you focus only on establishment of revenue requirements or you are also involved in the tariff setting process?**

Based on the legislation, the Commission sets tariffs both in the electricity and natural gas sectors.

2. What are your objectives in the tariff setting process?

- Protection of consumers from monopolistic prices.
- Granting possibilities to regulated companies to have full recovery of reasonable and justified costs and to obtain the allowed rate of return.
- To ensure improvement of company development efficiency.
- Supporting the economic policy of the state in the energy field.

<u>System of auditing</u>

1. Are there provisions in the law that requires the regulatory accounts to be audited?

There is such a requirement in the legislation.

a. If yes, who is responsible for conducting this?

The regulated company is responsible for conducting it.

b. Does the regulator perform any independent (or independently sub-contracted) audits itself?

If necessary yes.

Hungary

<u>Procedures and rules for the examination of documents on tariff approvals:</u>

1. How often do you request regulatory accounting information from regulated companies?

Quarterly (for monitoring) and yearly (regular "Annual reports" demanded by the Accounting Act), but directly for tariff approval (preparation): consequently to the price cap regulation period: 4 years (in the 4^{h} year of regulation, relating to data of the 3rd year of regulation).

2. How much time does a regulated utility have to submit their regulatory accounting information? Please indicate submission timing.

Quarterly report for monitoring: 15 days;

Annual reports: till 31st May of the next year

For tariff preparation: 2-3 months

3. **What is your procedure in requesting the regulatory accounting information? E.g. is there a consultation process, who is responsible for checking the data etc. Please describe/comment**

For tariff preparation: we ask information 2-3 months before our deadline and this period and app. The same period after submitting information is given for consultations by requests. Responsible for checking the data: outside (independent) experts on behalf of the Office; inside the office: appointed employees.

4. **Which sort of production subset (generation, transmission, distribution, and retail) is covered by regulatory accounting requirements?**

Generation, transmission, distribution, and retail- till the full opening of the market [after the full opening (probably): transmission, distribution; relating to providers of universal service: retail].

Regulatory reporting requirements

1. **For regulatory accounting requirements, do you provide templates to utilities to complete?**

For tariff preparation: Yes, but they are only in Hungarian and they mean only the starting point; after analyzing and supervising them – depending on tariff setting methodology – data in templates are used as input for other regulatory templates and special individual tables

   a. **If yes, please attach your regulatory accounting templates**

If necessary we can send Hungarian version of starting templates afterwards

2. **Do the companies also produce and submit to you statutory accounts?**

They produce only statutory account information for the regulator

   a. **If yes, do they differ from the regulatory accounting information? E.g. disaggregated and non-consolidated**

Yes, see Answer 1.

3. Please specify all the regulatory accounting information which is requested. For example cash-flow statement, profit and loss account, balance sheet, additional documents.

Annual reports contain yearly general economic report, cash-flow statement, profit and loss account, balance sheet.

Quarterly reports for monitoring contain data relating to revenues, costs, profits, product volumes produced or sold.

For tariff preparation: revenues, costs and assets, investment plans, product volumes produced or sold, network losses.

4. Do you request additional reports such as detailed breakdown of OPEX, CAPEX information, physical data?

Yes. For tariff preparation data normally have to be broken down and are very detailed.

a. If yes, please list.

OPEX: cost of

- materials (fuels, electricity for selling, other materials);
- services used;
- labour (wages, taxes, contributions).

CAPEX: gross and net book values of assets for calculating regulatory set depreciation and cost of capital

- tangible assets (buildings, equipments, other equipments and vehicles);
- intangible assets;
- planned capital investments.

b. Are these split into controllable and non-controllable costs?

These are not, but templates contain data which are not taken into account for cost base of tariff setting (e.g. extraordinary revenues and expenditures, results of financial actions).

c. What are the differences between the cost reported in the regulatory accounting and those in the statutory accounting?

Regulatory accounting costs may be aggregated, partly reduced (justified/non-justified costs, corrected or partly corrected by inflation factor), taken or not taken or partly taken into account etc. in comparison with statutory accounting data

d. In terms of depreciation, which method is applied and does this differ from the method used in the statutory accounts?

In case of most assets: “technical lifetime” depreciation factor is used for tariff/price setting. By the Accounting Act for setting the tax base companies can use “useful lifetime” or even more “accelerated” depreciation depending on their accounting policy

e. How is the regulatory asset based established? Does the asset valuation concept differ from this used in the statutory accounts?

While statutory accounts operates with book values, from the point of view of tariff/price setting “net value of revaluated assets” is used as depreciation base [also see point d)] as well as capital cost base (methodology: WACC);

5. For utilities conducting more than one activity e.g. generation and distribution, is the information separated between regulated and non-regulated business? Are excluded (but still deregulated) services subject to a separate regulatory accounting treatment?

The information is separated between regulated and non-regulated business. Separate businesses are subject to separate regulatory accounting treatment, taking into account necessary cost and asset separation

6. Do you provide instructions/guidelines on how to fill in the regulatory accounting information?

Yes, the Office develops instructions and directives for fulfilling templates.

7. How does regulatory accounting data exchange physically take place?

By email and by post.

8. **Does the national statutory accounting rules comply with the International Accounting Standards?**

National statutory accounting rules comply with EU directives, but a balance sheet using International Accounting Standards gives other data than a balance sheet using national statutory accounting rules.

Pricing

1. **Do you focus only on establishment of revenue requirements or you are also involved in the tariff setting process?**

We are also involved in the tariff setting process.

2. **What are your objectives in the tariff setting process?**

At the very beginning (when setting starting tariffs for the regulation period): tariffs should cover costs caused by cost-bearers and the regulatory calculated cost of capital; in next years of regulation period or even through several periods of regulation: to reach the regulated average price level.

System of Auditing

1. **Are there provisions in the law that requires the regulatory accounts to be audited?**

    a. **If yes, who is responsible for conducting this?**

    b. **Does the regulator perform any independent (or independently sub-contracted) audits itself?**

Statutory accounts are to be audited on the base of provisions of Accounting Act. Accounting data submitted for the regulator are not officially "audited" once again, but are supervised and controlled by independent experts on behalf of the Office.

Kazakhstan

Procedures and rules for the examination of documents on tariff approvals

1. **How often do you request regulatory accounting information from regulated companies?**

When necessary, the information is requested. Meanwhile, there is annual reporting on entity's execution of tariff budgets and on monitoring of implementation of investment programs.

2. **How much time does a regulated utility have to submit their regulatory accounting information? Please indicate submission timing.**

At least 5 days with respect to any information. As for preparation of materials for submission in connection with revision of tariffs upon the initiative of the Agency, the timing is 30 days. When the initiative to review tariffs belongs to an economic entity no deadline is envisioned, as any tariff can be modified beginning with the 1st day of any month. Submission of the request is done at least 90 days in advance.

3. **What is your procedure in requesting the regulatory accounting information? E.g. is there a consultation process, who is responsible for checking the data etc. Please describe/comment.**

Requests are sent through official correspondence, data from other sources are used, including counter requests from consumers. In addition, members of Expert Councils of the Agency are invited to review materials.

4. **Which sort of production subset (generation, transmission, distribution, and retail) is covered by regulatory accounting requirements?**

Transmission and distribution of electricity; generation, transmission, distribution and supply of heat.

Regulatory reporting requirements

1. **For regulatory accounting requirements, do you provide templates to utilities to complete?**

    a. **If yes, please attach your regulatory accounting templates**

2. **Do the companies also produce and submit to you statutory accounts?**

    a. **If yes, do they differ from the regulatory accounting information? E.g. disaggregated and non-consolidated**

Reports are submitted according to approved forms, by types of regulated activities; but accounting reports are presented in accordance with financial statements standards, i.e. in a consolidated form.

3. **Please specify all the regulatory accounting information which is requested. For example cash-flow statement, profit and loss account, balance sheet, additional documents.**
4. **Do you request additional reports such as detailed breakdown of OPEX, CAPEX information, physical data?**

   a. **If yes, please list.**

All.

   b. **Are these split into controllable and non-controllable costs?**

No.

   c. **What are the differences between the cost reported in the regulatory accounting and those in the statutory accounting?**

Inclusion of costs in the tariff estimates is restricted by the Special procedure for formation of costs, which limits both the types and amounts of costs.

   d. **In terms of depreciation, which method is applied and does this differ from the method used in the statutory accounts?**

Straight-line method, but application of other methods is also allowed, provided they are coordinated with the Agency. Depreciation rates are specified in the Accounting Policy and might differ from those used for tax purposes.

   e. **How is the regulatory asset based established? Does the asset valuation concept differ from this used in the statutory accounts?**

Is used with the utilization ratio.

5. **For utilities conducting more than one activity e.g. generation and distribution, is the information separated between regulated and non-regulated business? Are excluded (but still deregulated) services subject to a separate regulatory accounting treatment?**

Separate accounting is maintained for each type of non-regulated services, and separately – for non-regulated services [??].

6. Do you provide instructions/guidelines on how to fill in the regulatory accounting information?

Interpretation of instructions is in the competence of the Agency.

7. How does regulatory accounting data exchange physically take place?

Data are submitted in paper and electronic forms.

8. Do the national statutory accounting rules comply with the International Accounting Standards?

From 2005, all joint-stock companies maintain accounting in accordance with the International Accounting Standards. In 2007, all other companies convert to International Accounting Standards, except for small businesses.

<u>Pricing</u>

1. Do you focus only on establishment of revenue requirements or you are also involved in the tariff setting process?

Regulation of the tariff level assumes considering both its level and the size of revenues.

2. What are your objectives in the tariff setting process?

To set an economically justified level of tariffs, maintaining the balance of interests of the regulated entity and interests of its consumers.

<u>System of Auditing</u>

1. Are there provisions in the law that requires the regulatory accounts to be audited?

a. If yes, who is responsible for conducting this?

Yes, according to license terms and conditions, regulated companies have to perform technical and/or financial audit with the help of independent experts.

The entity is responsible for conducting financial audits.

b. Does the regulator perform any independent (or independently sub-contracted) audits itself?

If necessary, the Agency conducts inspections, as well as financial and technical audits, inviting independent expert organizations.

Kosovo

<u>Procedures and rules for the examination of documents on tariff approvals</u>

1. How often do you request regulatory accounting information from regulated companies?

Where a licensee commences operations or otherwise becomes obliged to prepare regulatory accounts at a date other than 1 January, then the initial regulatory accounts shall cover the period from the date of obligation to 31 December of the same calendar year. Subsequent regulatory accounts shall run from 1 January to 31 December of each calendar year.

2. How much time does a regulated utility have to submit their regulatory accounting information? Please indicate submission timing.

Regulatory accounts shall be submitted no later than [three] months after the completion of the calendar year to which they apply in electronic form and a hard copy signed by an authorized representative of the licensee and by the licensee's auditor.

3. What is your procedure in requesting the regulatory accounting information? E.g. is there a consultation process, who is responsible for checking the data etc. Please describe/comment

The regulatory accounts submitted shall include:

- completed pro-forma regulatory accounting statements,
- a statement of significant regulatory accounting principles and policies used to prepare the regulatory accounts that may be additional to or in place of the accounting principles and policies used to prepare the licensee's statutory accounts and the regulatory accounting principles and policies set out in these guidelines;

* a copy of the licensee's most recent statutory accounts and accompanying auditor's report; and
* an auditor's regulatory report on the regulatory accounts.

4. Which sort of production subset (generation, transmission, distribution, and retail) is covered by regulatory accounting requirements?

In the regulatory accounting requirements are covered all of the above:

* Generation
* Transmission
* Distribution
* Retail

Regulatory reporting requirements

1. For regulatory accounting requirements, do you provide templates to utilities to complete?

a. If yes, please attach your regulatory accounting templates

Yes, we provide templates to utilities to complete and we will attach ypu the templates.

2. Do the companies also produce and submit to you statutory accounts?

a. If yes, do they differ from the regulatory accounting information? E.g. disaggregated and non-consolidated

Yes they produce and submit the statutory account, and they differ from the regulatory account.

3. Please specify all the regulatory accounting information which is requested. For example cash-flow statement, profit and loss account, balance sheet, additional documents.

The regulatory accounting information:

* Income statement
* Balance sheet

- Cash flow statement
- Analysis of turnover
- Analysis of operating and maintenance costs
- Regulatory asset base (RAB)
- Capital expenditure
- Depreciation
- Disposals
- Additions
- Major projects summary
- Provisions
- Related party transactions
- Allocation of joint and common costs
- Key financial indicator

4. Do you request additional reports such as detailed breakdown of OPEX, CAPEX information, physical data?

a. If yes, please list.

Yes, for Opex we request:

- Fuel (non-coal)
- Maintenance
- Other
- Lignite Royalties
- Materials/ services
- Personnel costs
- Security
- Other overheads
- TAM success fee

Yes also for Capex we request:

- operational assets
- load-related operational assets
- non-operational assets (IT, Administrative land and buildings, Vehicles, other)
- Nonload-related operational assets
- major capital expenditure projects

b. Are these split into controllable and non-controllable costs?

Yes they are split into controllable and non-controllable costs.

c. What are the differences between the cost reported in the regulatory accounting and those in the statutory accounting?

The differences between the cost reported in the regulatory accounting and those in the in the statutory accounting are:

- Depreciation
- Inflation is included in the regulatory accounting

d. In terms of depreciation, which method is applied and does this differ from the method used in the statutory accounts?

In the regulatory accounting we use the straight line method which is the depreciation scale and is much smaller than the method used by the statutory accounting.

e. How is the regulatory asset based established? Does the asset valuation concept differ from this used in the statutory accounts?

In the regulatory asset base are taken only the assets that are invested from the 2006, we didn't take into the account the assets before 2006 because they were to old and for them there were the subsidies from the government and from the donors. Yes, it differs for the depreciation scale.

5. For utilities conducting more than one activity e.g. generation and distribution, is the information separated between regulated and non-regulated business? Are excluded (but still deregulated) services subject to a separate regulatory accounting treatment?

Yes.

6. **Do you provide instructions/guidelines on how to fill in the regulatory accounting information?**

Yes we provide such instructions/guidelines on how to fill in the regulatory accounting.

7. **How does regulatory accounting data exchange physically take place?**

With the process of meetings with companies and, through emails and with the process of collecting data also at the company.

8. **Does the national statutory accounting rules comply with the International Accounting Standards?**

Yes.

Pricing

1. **Do you focus only on establishment of revenue requirements or you are also involved in the tariff setting process?**

We are involved in the establishment of revenue requirement and also in the approval of tariffs, we have consultations with company prior to final application .

2. **What are your objectives in the tariff setting process?**

The objectives in the tariff setting process are that tariff should eliminate the cross-subsidy between the customer categories, they should be affordable and to be cost reflective. Also the tariff should be non-discriminatory.

System of Auditing

1. **Are there provisions in the law that requires the regulatory accounts to be audited?**

    a. **If yes, who is responsible for conducting this?**

Yes it exist such provisions. The auditing of regulated utility does the KTA (Kosovo Trust Agency) which is responsible for the regulated utility and Independent Agency for auditing which have to evaluate the utility assets.

b. **Does the regulator perform any independent (or independently sub-contracted) audits itself?**

No, but only verification of the expenditures.

Kyrgyzstan

Procedures and rules for the examination of documents on tariff approvals

1. **How often do you request regulatory accounting information from regulated companies?**

Monthly.

2. **How much time does a regulated utility have to submit their regulatory accounting information? Please indicate submission timing.**

Monthly, by the 20th day of the month following the reporting month, and quarterly, by the 20th day of the month following the quarter.

3. **What is your procedure in requesting the regulatory accounting information? E.g. is there a consultation process, who is responsible for checking the data etc. Please describe/comment.**

In accordance with Decree of the Government of the Kyrgyz Republic No. 531 of August 19, 2003, energy companies submit mandatory reports on indicators of financial-economic activities of energy companies for the purpose of monitoring in accordance with annexes 1-3 (see attached).

The department of prices and tariffs of the regulatory body should verify presented information, analyze electricity balance.

4. **Which sort of production subset (generation, transmission, distribution, and retail) is covered by regulatory accounting requirements?**

All energy companies (generation, transmission and 4 distribution companies) are covered with requirements of regulatory accounting.

Regulatory reporting requirements

1. **For regulatory accounting requirements, do you provide templates to utilities to complete?**

    a. **If yes, please attach your regulatory accounting templates**

Yes (see attached, annex on 38 pages) however, this form was made up to the end of year 2006, but at present we have sent a letter to all energy companies on extension of this decree until year 2007.

2. **Do the companies also produce and submit to you statutory accounts?**

Yes.

    a. **If yes, do they differ from the regulatory accounting information? E.g. disaggregated and non-consolidated**

No.

3. **Please specify all the regulatory accounting information which is requested. For example cash-flow statement, profit and loss account, balance sheet, additional documents.**

In accordance with Decree of the Government of the Kyrgyz Republic No. 531 of August 19, 2003, energy companies submit monthly reports, and these reports show all aforementioned articles.

In addition, in article 26. «Accounting standards» of the Law of the Kyrgyz Republic «On electricity»

Irrespective of the legal form or type of ownership or organizational-legal structure of activities, all enterprises involved in generation, transmission, distribution or sale of electricity or heat should maintain their accounting documents in accordance with normative acts of the Kyrgyz Republic, taking into account international standards and practice of accounting, and whenever necessary to make them available for audits performed in accordance with international standards and legislation of the Kyrgyz Republic».

4. **Do you request additional reports such as detailed breakdown of OPEX, CAPEX information, physical data?**

No.

a. **If yes, please list**

b. **Are these split into controllable and non-controllable costs?**

c. **What are the differences between the cost reported in the regulatory accounting and those in the statutory accounting?**

d. **In terms of depreciation, which method is applied and does this differ from the method used in the statutory accounts?**

e. **How is the regulatory asset based established? Does the asset valuation concept differ from this used in the statutory accounts?**

5. **For utilities conducting more than one activity e.g. generation and distribution, is the information separated between regulated and non-regulated business? Are excluded (but still deregulated) services subject to a separate regulatory accounting treatment?**

Article 27. Separate maintenance of accounting documents of the Law of the Kyrgyz Republic «On electricity» states that «Holders of licenses of integrated enterprises should maintain separate accounting documents for each type of activities: generation, transmission, distribution of electricity and heat, similarly to enterprises that have status of an independent legal entity.

Enterprises (organizations) submit to the State Energy Agency under the Government of the Kyrgyz Republic (currently changes are being made in the Laws «On energy» and «On electricity» where SEA is replaces with “authorized state body»

6. **Do you provide instructions/guidelines on how to fill in the regulatory accounting information?**

Yes.

7. **How does regulatory accounting data exchange physically take place?**

Companies send reports within set terms in the electronic form and by mail with mandatory signature of the manager.

8. **Do the national statutory accounting rules comply with the International Accounting Standards?**

Now all companies mostly converted to International Accounting Standards.

Pricing

1. **Do you focus only on establishment of revenue requirements or you are also involved in the tariff setting process?**

The regulatory process includes both aspects.

2. What are your objectives in the tariff setting process?

- To set economically justified and socially acceptable pricing and tariff-setting mechanisms
- Prices have to include full cost of generation, transmission and distribution of heat or electricity, including costs related to production and technical maintenance, recovery of capital costs, attraction of investments and rate of return;
- Changes in prices should not cause any drastic economic difficulties for generators or consumers;
- Discrimination in the course of provision of services and tariffs, including service quality, is prohibited;
- All consumers of the same group with similar characteristics of consumption, served by the same distribution enterprise should have the same tariffs and services;
- Tariffs for each group of energy consumers show full cost of service provision.

System of Auditing

1. Are there provisions in the law that requires the regulatory accounts to be audited?

According to the Law on Energy, the regulatory body has the right to perform regulatory audit that includes inspection of cost of services and quality of services. At the same time, the regulatory body, if necessary, can initiate auditing of companies by an independent auditor.

a. If yes, who is responsible for conducting this?

In energy industries these are authorized state bodies that regulate activities in these industries.

b. **Does the regulator perform any independent (or independently sub-contracted) audits itself?**

Yes.

Latvia

<u>**Procedures and rules for the examination of documents on tariff approvals**</u>

1. **How often do you request regulatory accounting information from regulated companies?**

By Law regulator has the rights to ask any information when it is required for certain case.

2. **How much time does a regulated utility have to submit their regulatory accounting information? Please indicate submission timing.**

It depends on complexity of subject. For simple issues two eek, for complicated one months or more.

3. **What is your procedure in requesting the regulatory accounting information? E.g. is there a consultation process, who is responsible for checking the data etc. Please describe/comment**

Could be several ways. Letter signed by chair of regulator. By decision of board of regulator. Adopted regulation on submission of information on regular basis. Yes consultation process is present. Staff of regulator is responsible to check information.

4. **Which sort of production subset (generation, transmission, distribution, and retail) is covered by regulatory accounting requirements?**

All.

<u>**Regulatory reporting requirements**</u>

1. **For regulatory accounting requirements, do you provide templates to utilities to complete?**

No unified templates adopted, it goes in line with tariff calculation methodology wit certain degree of detalization.

a. **If yes, please attach your regulatory accounting templates**

2. **Do the companies also produce and submit to you statutory accounts?** Yes.

   a. **If yes, do they differ from the regulatory accounting information? E.g. disaggregated and non-consolidated.** Yes.

3. **Please specify all the regulatory accounting information which is requested. For example cash-flow statement, profit and loss account, balance sheet, additional documents.**

Cost structure and forecast of change of defined cost positions and justification for that.

4. **Do you request additional reports such as detailed breakdown of OPEX, CAPEX information, physical data?**

   a. **If yes, please list.**
   b. **Are these split into controllable and non-controllable costs?**
   c. **What are the differences between the cost reported in the regulatory accounting and those in the statutory accounting?**
   d. **In terms of depreciation, which method is applied and does this differ from the method used in the statutory accounts?**
   e. **How is the regulatory asset based established? Does the asset valuation concept differ from this used in the statutory accounts?**

Initial regulatory asset base (RAB) was determined on historical data from company balance sheet. Valuation is allowed, but regulator has the right to call for revaluation using any of valuation concepts.

5. **For utilities conducting more than one activity e.g. generation and distribution, is the information separated between regulated and non-regulated business? Are excluded (but still deregulated) services subject to a separate regulatory accounting treatment?**

Yes business activities are separated also non regulated.

6. **Do you provide instructions/guidelines on how to fill in the regulatory accounting information?**

If we ask information we determine in which form it should be submitted.

7. **How does regulatory accounting data exchange physically take place?**

By post and e-mail.

8. **Does the national statutory accounting rules comply with the International Accounting Standards?**

Pricing

1. **Do you focus only on establishment of revenue requirements or you are also involved in the tariff setting process?**

2. **What are your objectives in the tariff setting process?**

System of Auditing

1. **Are there provisions in the law that requires the regulatory accounts to be audited?**

   a. **If yes, who is responsible for conducting this?**

   b. **Does the regulator perform any independent (or independently sub-contracted) audits itself?**

Lithuania

Procedures and rules for the examination of documents on tariff approvals

1. **How often do you request regulatory accounting information from regulated companies?**

Quarterly and annually. Pursuant to the sheets of methodologies for calculation of electricity price caps, transmission system operator and distribution networks operators are required to deliver the following *quarterly* and *annual* information:

- calculation of electricity transmission and distribution service prices and their price caps;
- efficiency indicators;
- electricity balances;
- electricity tariffs applied by companies, consumption and revenue;
- corporate electricity sales according to customer groups; and
- other data required for proper supervision of the electricity market.

Pursuant to the Rules on Licensing of Activities within the Energy Sector, the following documents must be produced on a quarterly basis:

- financial statements of the licensed economic - financial activities (cash-flow statement, profit and loss account, balance sheet, and explanatory writing);
- market operator's report (free form);
- report on continuity of supply indicators.

On the annual basis, it must be supplied in addition:

- annual expenses audit report of the licensed activities;
- annual analysis of use of respective power network system;
- report on development prospects for respective power network system;
- annual complaint investigation report.

Taking into consideration the Monitoring Report on Security of Supply on the Lithuanian Electricity Market, technical and economical data must be collected and summarized *annually,* before July 31, to produce conclusions on continuity of electricity supply and internal as well as regional electricity market development prospects. Such information shall cover forecasts for three forthcoming years and reflect the following data in different aspects and periods:

- electricity generation, transmission and distribution capacities, connections with neighbouring energy systems;
- electricity capacity balances;

- electricity production, consumption, exports and imports;
- market concentration;
- electricity purchase and sales volumes;
- degree of market opening;
- market participants;
- market price dynamics;
- degree of eligible customers involvement;
- forecast electricity purchase, sales and exports volumes;
- forecast power capacity balances;
- needs for new power capacities; and
- planned electricity transmission and distribution network development and updating with possible weak points.

2. **How much time does a regulated utility have to submit their regulatory accounting information? Please indicate submission timing.**

Regarding price cap setting there is no direct timing, but these provisions of the Law on Electricity should be taken into account:

The price cap for transmission services shall be set or recalculated not later that three months and the price cap for distribution, public supply services and public electricity price – not later than two months of the beginning of the regulatory period or of the beginning of the respective year of the regulatory period.

The Commission shall announce the prices and tariffs set by the service provider no later than within 30 calendar days of the day of the receipt of the service provider's application, having first ascertained that the prices and tariffs are non-discriminatory for customers.

What is related with the actual data, all tables annexed to the Methodology shall be submitted within 40 days after the expiration of a reporting quarter, the preliminary yearly data shall be submitted within 2 months after the end of a reporting year.

According to the Law on Electricity the Commission (Regulator) shall have the right to request from the generation, transmission, distribution or supply undertakings whose activity is subject to regulation under this Law and from the market operator the information necessary for due supervision of the electricity market.

3. **What is your procedure in requesting the regulatory accounting information? E.g. is there a consultation process, who is responsible for checking the data etc. Please describe/comment**

If some issues arise reviewing the data submitted by the companies, the Regulator may ask for additional information and clarifications. If that is not enough or there is a need, the Regulator may organise a meeting with the companies and other interested parties. That is not described officially.

4. **Which sort of production subset (generation, transmission, distribution, and retail) is covered by regulatory accounting requirements?**

Regulatory accounting requirements are mainly for the network operators' activity, as for the natural monopolies, and are set in the Methodology (see the answer of the 1st question). There is also annexes for the public supplier (kind of supplier of last resort). Also the additional information is required as the efficiency indicators of network operators; electricity balance by voltage levels; applied electricity tariffs, consumption and income; electricity sale by customer groups: industry, commerce, budgetary organisations, streets' lightening, agriculture, and households, also data of export and import.

Regulatory reporting requirements

1. **For regulatory accounting requirements, do you provide templates to utilities to complete?**

    a. **If yes, please attach your regulatory accounting templates**

Attached. They can be also found on the NCC website: http://www.regula.lt/index.php?1788042939

2. **Do the companies also produce and submit to you statutory accounts?**

    a. **If yes, do they differ from the regulatory accounting information? E.g. disaggregated and non-consolidated**

Yes, if they see a need to provide additional data or are asked for the clarifications. These documents supplement the forms, required by the regulator.

3. **Please specify all the regulatory accounting information which is requested. For example cash-flow statement, profit and loss account, balance sheet, additional documents.**

Please, see the answer to question 1.

4. Do you request additional reports such as detailed breakdown of OPEX, CAPEX information, physical data?

a. If yes, please list.

Yes, but it depends on the situation. Usually the companies provide it automatically with the writing of clarification.

b. Are these split into controllable and non-controllable costs?

No.

c. What are the differences between the cost reported in the regulatory accounting and those in the statutory accounting?

The regulatory accounting is related with the transparency of costs effectiveness.

d. In terms of depreciation, which method is applied and does this differ from the method used in the statutory accounts?

Straight line depreciation, and it is the same for the statutory accounts. According to the Law on Electricity account shall be taken of the service provider's asset depreciation or amortisation rates established under the Law on Profit Tax and agreed with the Commission.

e. How is the regulatory asset based established?

According to the Law on Electricity setting the price caps for the transmission, distribution and public supply services regard shall be had to the value of the assets used by the service provider in the licensed activities, which is established on the basis of the service provider's accounts. Also guarantees shall be provided for compensation of the service provider's expenditures related to the accumulation and employment of capital borrowed for the activities under market conditions, irrespective of the service provider's capital structure and way of capital accumulation. The service provider's capital structure, equity and borrowed capital, conditions of capital accumulation and employment shall be established and calculated based on the service provider's accounts and the projections of changes in the structure of capital presented by the service provider.

f. Does the asset valuation concept differ from this used in the statutory accounts?

Yes, according to the Methodology the Regulator shall revise the list of assets used in the Transmission (Distribution) System Operator's licensed activity as well as other documents and the clarifications thereof provided by the company based on which it shall make the calculations.

5. **For utilities conducting more than one activity e.g. generation and distribution, is the information separated between regulated and non-regulated business?**

Yes.

Are excluded (but still deregulated) services subject to a separate regulatory accounting treatment?

Yes, for transmission, market operator, generation (2 HPP), and for distribution and public supply (supplier of last resort).

6. **Do you provide instructions/guidelines on how to fill in the regulatory accounting information?**

Yes, but they are short and referring mostly to the respective Laws.

7. **How does regulatory accounting data exchange physically take place?**

The Companies send 7 paper copies to each of 5 Commissioners, and 2 to the Electricity and Licensing departments. If needed, they are asked to do it electronically.

8. **Does the national statutory accounting rules comply with the International Accounting Standards?**

Yes.

<u>Pricing</u>

1. **Do you focus only on establishment of revenue requirements or you are also involved in the tariff setting process?**

Officially only for revenue requirements, but practically all details are discussed with the Regulator.

2. **What are your objectives in the tariff setting process?**

According to the Methodology, taking into consideration that the regulated electricity prices are the substitute of market prices, seeking to comply with the electricity price calculation methodologies and relevant price structure, the following objectives shall be implemented:

- Least costs – the prices shall serve as an incentive to the power companies to render the least cost services to their customers;
- Cost reflection – the prices shall reasonably and correctly reflect the costs of respective activities in the energy sector incurred in rendering services to customers as well as the cost entry based on the customers' needs, e.g. related to the construction of new generation sources and the growth of electricity consumption;
- Cost coverage – the prices shall be sufficient to secure sufficient revenues for power companies;
- Simplicity – the price structure shall be comprehensive to customers, enabling them to calculate their bills and to predict factors which may cause alteration in prices;
- Stability – avoiding high and frequent price fluctuations;
- Flexibility – the price structure shall be sufficiently flexible to comply with changes in costs, in spite of the fact that this may raise conflict with the requirement of stability;
- Equality – the prices shall discriminate neither the customers nor their groups and shall not be based on cross-subsidies.

System of Auditing

1. **Are there provisions in the law that requires the regulatory accounts to be audited?** Yes.

    a. **If yes, who is responsible for conducting this?**

Companies. According the Law on Electricity generation, transmission, distribution and supply undertakings shall be subject to mandatory independent audit. Generation, transmission, distribution and supply undertakings whose activity is regulated in accordance with the procedure established by this Law shall submit the accounts and the auditor's report to the Regulator.

b. Does the regulator perform any independent (or independently sub-contracted) audits itself?

No, usually due to the lack of financial resources.

Macedonia

<u>Procedures and rules for the examination of documents on tariff approvals</u>

1. How often do you request regulatory accounting information from regulated companies?

The Energy Regulatory Commission of the Republic of Macedonia request regulatory accounting information, from regulated companies once per year obligatory. This is in accordance with the legal provisions of the Energy law, therefore the regulated companies that performs energy activity of public interest, submits the annual reports and annual financial statements and audited financial reports to the Energy Regulatory Commission of the Republic of Macedonia, as well as consolidated accounts for the other activities and balances with review of the incomes, expenditures, financing sources, the manner of financing of the investments and the results of the working for each of the activities separately.

Also in accordance with the Law on Trade companies, all commercial entity shall prepare at the end of each business year an annual report and a financial statement in accordance with the adopted International Accounting Standards published in the Official Gazette of the Republic of Macedonia. For this report the business year is the same with the calendar year.

2. How much time does a regulated utility have to submit their regulatory accounting information? Please indicate submission timing.

According to the legal provisions of the Energy law, the holder of the license for pursuing relevant energy activity shall be obligated to report to the Energy Regulatory Commission of the Republic of Macedonia, in a manner, form, and terms, as defined in the license granted.

The regulated utility shall submit upon request of the Energy Regulatory Commission, their regulatory accounting information monthly, quarterly, semiannually and annually.

These reports are submitted within deadline of five working days after the expiring period referred to in the report.

The regulated utility shall be obliged to submit to the ERC the annual report and financial statements with all annexes in accordance with International Accounting Standards, for last business year on account of performing the annually control, till 10 march current year, the latest.

3. **What is your procedure in requesting the regulatory accounting information? E.g. is there a consultation process, who is responsible for checking the data etc. Please describe/comment**

The regulated companies, according to the Energy low and issued licenses, shall submit the accounting information to the Energy Regulatory Commission of the Republic of Macedonia. The ERC contact and remind the regulated companies about the licenses obligation for submiting their accounting information before the expiry of period defined in the license. When the ERC request the accounting information, but not only for this information, also when the ERC request other data and information from the regulated companies, there is a consultation process with the regulated companies. The reason of this consultation process is to make easer the preparing of report with the regulatory accounting information and to explain the questions they have about this. They have a possibility to came and discuss with the staff in the ERC and to clarify the undefined and non clear questions.

The Energy Regulatory Commission organizes the workshop with the regulated companies about the methodology for calculation of regulated revenue and price and filling up the tables which are the constituent part of the Rulebooks on the method and conditions for regulating the prices of regulated activities.

The staff from the Energy Regulatory Commission shall check and analyze the data and information submitted from the regulated companies.

4. **Which sort of production subset (generation, transmission, distribution, and retail) is covered by regulatory accounting requirements?**

According to the legal provisions of the Energy law, generation, transmission, distribution, and retail are covered by regulatory accounting requirements.

<u>**Regulatory reporting requirements**</u>

1. **For regulatory accounting requirements, do you provide templates to utilities to complete?**

    a. **If yes, please attach your regulatory accounting templates**

The regulatory accounting requirements are in accordance with the accounting system in the Republic of Macedonia respectively with the International Accounting Standards, and the Energy Regulatory Commission uses the same form of statements.

The regulated companies have possibility to use for the accounting information the same tables from the application for the price, witch are the constituent part of the Rulebooks on the method and conditions for regulating the prices of regulated activities.

2. Do the companies also produce and submit to you statutory accounts?

a. If yes, do they differ from the regulatory accounting information? E.g. disaggregated and non-consolidated

Yes, according to the Energy law the regulated companies are obliged to produce and submit to the Energy Regulatory Commission the statutory accounts. The statutory accounts refer to the all activities of the company (regulated and non regulated), and the regulatory accounting information shall be separate for each energy activity, (according to the Energy low). The form of the regulated account statements is the same as the statutory statement.

3. Please specify all the regulatory accounting information which is requested. For example cash-flow statement, profit and loss account, balance sheet, additional documents.

ERC request the following accounting information:

- balance sheet
- income statement
- cash flow statement
- costs information
- revenues information
- working capital information
- investments plan and costs
- sources of capital for the investments
- regulated value of the assets information
- financial indicators

4. **Do you request additional reports such as detailed breakdown of OPEX, CAPEX information, physical data?**

    a. **If yes, please list.**

Energy Regulatory Commission request to elaborate the investment program and plan (type of investment, realization period of the investment, costs and sources of capital for the planned investment), to elaborate the costs by type but also fixed and variable costs, the data about the capacity or realization in physical data, the number of consumers, the working hours of the assets etc.

    b. **Are these split into controllable and non-controllable costs?**

With the Methodologies for calculation of regulated revenue and price of the regulated activities are determinate the principles (the methods) for calculating of the normalized costs necessary to perform the regulated activity.

    c. **What are the differences between the cost reported in the regulatory accounting and those in the statutory accounting?**

The cost reported in the regulatory accounting refer to the regulated activity those reported in statutory accounting refer to all company.

    d. **In terms of depreciation, which method is applied and does this differ from the method used in the statutory accounts?**

The depreciation of the regulated assets is calculated according to minimum rates regulated by low, and this is the same method used in the statutory accounts.

    e. **How is the regulatory asset based established? Does the asset valuation concept differ from this used in the statutory accounts?**

Regulated assets are only those assets that are used to perform the regulated activity. The asset valuation concept for the regulatory asset is the same concept used in the statutory accounts, and the value of the assets is the book value of assets.

5. **For utilities conducting more than one activity e.g. generation and distribution, is the information separated between regulated and non-regulated business? Are excluded (but still deregulated) services subject to a separate regulatory accounting treatment?**

According to the Energy low a company carrying out two or more regulated activities or, besides the regulated activity, carrying out another activity that is not considered a regulated activity, or a company carrying out two or more activities within the regulated activity, shall be obliged to keep separate accounting for each of its respective activities, as well as consolidated statements for the other activities and to prepare accounting statements with an overview of the revenue, expenditure and results from the work for each particular activity.

6. Do you provide instructions/guidelines on how to fill in the regulatory accounting information?

The Energy Regulatory Commission provides instructions on how to prepare the regulatory accounting information to the regulated companies and by this reason organize the workshops with the regulated companies.

7. How does regulatory accounting data exchange physically take place?

The requested regulatory accounting data and information shall be submit in hard and electronically form.

***8.* Does the national statutory accounting rules comply with the International Accounting Standards?**

Yes, the national statutory accounting rules comply with International Accounting Standards.

Pricing

1. Do you focus only on establishment of revenue requirements or you are also involved in the tariff setting process?

In accordance with the Energy law, the Energy Regulatory Commission of the Republic of Macedonia has the responsibility to prescribe methodologies for the determination of the prices of certain types of energy and services in relation to pursuing of regulated energy activities, and also adopts decisions for the prices of the specific types of energy in compliance with the price setting methodologies and tariff systems for relevant types of energy and services in relation to pursuing of regulated energy activities.

2. What are your objectives in the tariff setting process?

The main objectives in tariff setting process have to ensure:

- Conditions for continuous and successful operation of the companies by determining a level of regulated return on capital;
- The future development of the companies by regulation based on incentives for improving productivity and efficient operation,
- Improvement of the quality of services provided by the companies;
- Stable and anticipated electricity market retaliations, providing favorable conditions for attracting investors; protection from abuse of dominant and monopoly position of companies;
- Protection of electricity consumers and provision of a secure, continuous and safe electricity supply;
- Conditions for sustainable development;
- Conditions for applying the principles of objectivity, non-discrimination and transparency.

System of Auditing

1. Are there provisions in the law that requires the regulatory accounts to be audited?

a. If yes, who is responsible for conducting this?

There are no specific provisions in the Energy law, but according to the Law on Trade companies all accounts have to be audited for joint stock companies and LIC's. Regulated companies are obliged to hire an independent auditing company for that purpose.

b. Does the regulator perform any independent (or independently sub-contracted) audits itself?

Yes, the Energy Regulatory Commission requests necessary data from the company for auditing and also can hire an independent auditing company for regulatory needs.

Moldova

Procedures and rules for the examination of documents on tariff approvals

1. How often do you request regulatory accounting information from regulated companies?

Monthly, quarterly, annually.

2. How much time does a regulated utility have to submit their regulatory accounting information? Please indicate submission timing.

Monthly information – not later than the 15^{th} day of the following month;

Quarterly information – not later than the 25^{th} day of the following month;

Annual information – not later than March 20.

3. What is your procedure in requesting the regulatory accounting information? E.g. is there a consultation process, who is responsible for checking the data etc. Please describe/comment.

ANRE's Decree approved the System of Reports to be submitted to the Agency by holders of licenses in the power sector; the reports are mandatory, they have to be filled in and presented in accordance with requested forms. Authorized employees of the regulated enterprise and employees of the tariff and other departments of ANRE are responsible for verification of data.

4. Which sort of production subset (generation, transmission, distribution, and retail) is covered by regulatory accounting requirements?

Generation, transmission and distribution.

<u>Regulatory reporting requirements</u>

1. For regulatory accounting requirements, do you provide templates to utilities to complete?

Yes.

a. If yes, please attach your regulatory accounting templates

Forms that comprise the Reporting system are attached.

2. Do the companies also produce and submit to you statutory accounts?

Yes.

a. If yes, do they differ from the regulatory accounting information? E.g. disaggregated and non-consolidated

Regulatory accounting information is prepared in accordance with the National Accounting Standards, but with more details.

3. Please specify all the regulatory accounting information which is requested. For example cash-flow statement, profit and loss account, balance sheet, additional documents.

The balance sheet, Income Statement, Statement of Owner's Equity, Cash Flow Statement, additional documents (forms C, P, PH, TD, DF).

4. **Do you request additional reports such as detailed breakdown of OPEX, CAPEX information, physical data?**

No.

   a. **If yes, please list.**
   b. **Are these split into controllable and non-controllable costs?**
   c. **What are the differences between the cost reported in the regulatory accounting and those in the statutory accounting?**
   d. **In terms of depreciation, which method is applied and does this differ from the method used in the statutory accounts?**
   e. **How is the regulatory asset based established? Does the asset valuation concept differ from this used in the statutory accounts?**

5. **For utilities conducting more than one activity e.g. generation and distribution, is the information separated between regulated and non-regulated business? Are excluded (but still deregulated) services subject to a separate regulatory accounting treatment?**

There are no utilities that perform more than one type of regulated activities. But for services that are not related to main regulated activity the information is separated and is subject to a separate accounting approach.

6. **Do you provide instructions/guidelines on how to fill in the regulatory accounting information?**

Yes.

7. **How does regulatory accounting data exchange physically take place?**

Mail, electronic mail, telephone, fax.

8. **Do the national statutory accounting rules comply with the International Accounting Standards?**

Yes.

<u>Pricing</u>

1. **Do you focus only on establishment of revenue requirements or you are also involved in the tariff setting process?**

ANRE also participates in the tariff setting process.

2. **What are your objectives in the tariff setting process?**

According to the current tariff methodologies, ANRE determines:

- The composition of expenses and costs that are to be included in calculation of tariffs;
- The method for calculation of profitability of investments made by the enterprise;
- The procedure for determining, approval and application of basic tariffs;
- The procedure for revision of basic tariffs.

System of Auditing

1. **Are there provisions in the law that requires the regulatory accounts to be audited?**

No.

   a. **If yes, who is responsible for conducting this?**
   b. **Does the regulator perform any independent (or independently sub-contracted) audits itself?**

Audits can be conducted by an independent auditor, and if necessary, the regulatory body conducts audits itself.

Mongolia

Procedures and rules for the examination of documents on tariff approvals

1. **How often do you request regulatory accounting information from regulated companies?**

On quarterly basis.

2. **How much time does a regulated utility have to submit their regulatory accounting information? Please indicate submission timing.**

All licensees requested to submit their quarterly financial reports by 20 of the next month, yearly financial report by February 10.

3. **What is your procedure in requesting the regulatory accounting information? E.g. is there a consultation process, who is responsible for checking the data etc. Please describe/comment**

According to terms and conditions of License issued by ERA, each licensee obliged to submit their financial reports to ERA. Auditing group of ERA responsible for checking the data.

4. **Which sort of production subset (generation, transmission, distribution, and retail) is covered by regulatory accounting requirements?**

Generation, transmission, distribution, and retail is covered by regulatory accounting requirements.

<u>Regulatory reporting requirements</u>

1. **For regulatory accounting requirements, do you provide templates to utilities to complete?**

    a. **If yes, please attach your regulatory accounting templates**

Yes.

2. **Do the companies also produce and submit to you statutory accounts?**

    a. **If yes, do they differ from the regulatory accounting information? E.g. disaggregated and non-consolidated**

Yes, the regulatory accounting information is detailed by Regulatory accounting standards.

Regulatory accounting is more detailed and separated by types of licensed activities.

3. **Please specify all the regulatory accounting information which is requested. For example cash-flow statement, profit and loss account, balance sheet, additional documents.**

Cash-flow statement, profit and loss account, balance sheet, assets, additional documents such as technical and economical informations according to formats approved by ERA.

4. **Do you request additional reports such as detailed breakdown of OPEX, CAPEX information, physical data?**

    a. **If yes, please list.**

Yes, operational and maintenance cost breakdown, capital expenses, etc.

b. **Are these split into controllable and non-controllable costs?**

Yes, they are splited.

c. **What are the differences between the cost reported in the regulatory accounting and those in the statutory accounting?**

No difference.

d. **In terms of depreciation, which method is applied and does this differ from the method used in the statutory accounts?**

Straight line method, it does not differ from the method used in the statutory accounts.

e. **How is the regulatory asset based established? Does the asset valuation concept differ from this used in the statutory accounts?**

The regulatory asset base is established based on asset value stated in the balance sheets. The asset valuation concept does not differ from this used in the statutory accounts

5. **For utilities conducting more than one activity e.g. generation and distribution, is the information separated between regulated and non-regulated business? Are excluded (but still deregulated) services subject to a separate regulatory accounting treatment?**

Yes, separated.

6. **Do you provide instructions/guidelines on how to fill in the regulatory accounting information?**

Yes.

7. **How does regulatory accounting data exchange physically take place?**
8. **Does the national statutory accounting rules comply with the International Accounting Standards?**

Yes.

Pricing

1. **Do you focus only on establishment of revenue requirements or you are also involved in the tariff setting process?**

We are also involved in the tariff setting process.

2. **What are your objectives in the tariff setting process?**

To allow licensees to earn adequate revenue in order to ensure normal operation.

<u>System of Auditing</u>

1. **Are there provisions in the law that requires the regulatory accounts to be audited?**

    a. **If yes, who is responsible for conducting this?**

Yes, independent auditing companies responsible for this.

    b. **Does the regulator perform any independent (or independently sub-contracted) audits itself?**

Yes we perform internal auditing of licensees.

Montenegro

<u>Procedures and rules for the examination of documents on tariff approvals</u>

1. **How often do you request regulatory accounting information from regulated companies?**

At least once a year.

2. **How much time does a regulated utility have to submit their regulatory accounting information? Please indicate submission timing.**

It’s not officially defined. Usually up to one month.

3. **What is your procedure in requesting the regulatory accounting information? E.g. is there a consultation process, who is responsible for checking the data etc. Please describe/comment**

The Agency staff requests and checks the regulatory accounting information.

4. Which sort of production subset (generation, transmission, distribution, and retail) is covered by regulatory accounting requirements?

All of the above mentioned.

<u>**Regulatory reporting requirements**</u>

1. For regulatory accounting requirements, do you provide templates to utilities to complete?

Yes we do.

a. If yes, please attach your regulatory accounting templates

You may find them attached.

2. Do the companies also produce and submit to you statutory accounts?

No, they don't.

a. If yes, do they differ from the regulatory accounting information? E.g. disaggregated and non-consolidated

3. Please specify all the regulatory accounting information which is requested. For example cash-flow statement, profit and loss account, balance sheet, additional documents.

Cash-flow statement, profit and loss account, balance sheet and the information on equity/debt structure are statutory. The very accounts, analytically disaggregated are only those for regulatory purpose.

4. Do you request additional reports such as detailed breakdown of OPEX, CAPEX information, physical data?

Yes we do.

a. If yes, please list.

- cost of import of electricity

- cost of fuel for generators
- cost of labour
- cost of spare parts and materials
- cost of third party's services
- current costs of bank services, telecommunications, post, insurance, and similar
- property tax and other obligatory taxes
- other operational costs
- depreciation
- financial expenses
- environmental costs
- return on investments
- ad hoc expenses

b. Are these split into controllable and non-controllable costs?

Yes they are.

c. What are the differences between the cost reported in the regulatory accounting and those in the statutory accounting?

All the costs which are not consequence of the regulated business are excluded.

d. In terms of depreciation, which method is applied and does this differ from the method used in the statutory accounts?

The linear method is applied and doesn't differ from the method used in the statutory accounts.

e. How is the regulatory asset based established? Does the asset valuation concept differ from this used in the statutory accounts?

Yes it does. All the assets which are not in function of the regulated business are out of RAB.

5. For utilities conducting more than one activity e.g. generation and distribution, is the information separated between regulated and non-regulated business? Are

excluded (but still deregulated) services subject to a separate regulatory accounting treatment?

All the electricity activities are regulated (generation, transmission, distribution and supply). The non-regulated businesses within the electricity company (tourism catering, maintenance) are not within the scope of regulation.

6. Do you provide instructions/guidelines on how to fill in the regulatory accounting information?

Yes we do. Besides, we organize frequent meetings with relevant staff from of the electricity subject.

7. How does regulatory accounting data exchange physically take place?

The electricity company is asked to fill up the prepared templates. Having them received, in course of analysis, we ask for further clarifications and/or organize meetings with referent staff of the electricity company.

8. Do the national statutory accounting rules comply with the International Accounting Standards?

Yes they do.

Pricing

1. Do you focus only on establishment of revenue requirements or you are also involved in the tariff setting process?

Having the revenue requirements established, the electricity company submits price lists and tariffs to the Regulatory Agency for approval.

2. What are your objectives in the tariff setting process?

The objectives are to determine justified costs and the methodology for determination of tariff structure which application provide licensees covering costs of their services and achieving reasonable rate of return and prevent cross subsidization.

System of Auditing

1. **Are there provisions in the law that requires the regulatory accounts to be audited?**

    a. **If yes, who is responsible for conducting this?**

No.

    b. **Does the regulator perform any independent (or independently sub-contracted) audits itself?**

No.

Poland

Procedures and rules for the examination of documents on tariff approvals

1. **How often do you request regulatory accounting information from regulated companies?**

Twice a year and always when there is any need.

2. **How much time does a regulated utility have to submit their regulatory accounting information? Please indicate submission timing.**

About 2-3 weeks after the regulatory inquiry.

3. **What is your procedure in requesting the regulatory accounting information? E.g. is there a consultation process, who is responsible for checking the data etc. Please describe/comment.**

Tariff Department requires certain data for regulatory process. Data are analysed and compared to other financial statements.

4. **Which sort of production subset (generation, transmission, distribution, and retail) is covered by regulatory accounting requirements?**

Generation, transmission, distribution, wholesale and retail.

Regulatory reporting requirements

1. **For regulatory accounting requirements, do you provide templates to Utilities to complete?**

   a. **If yes, please attach your regulatory accounting templates**

Yes DTA1a.

2. **Do the companies also produce and submit to you statutory accounts?**

   a. **If yes, do they differ from the regulatory accounting information? E.g.disaggregated and non-consolidated.**

Yes.

3. **Please specify all the regulatory accounting information which is requested. Fore example cash-flow statement, profit and loss account, balance sheet, additional documents.**

Cash-flow statement, profit and loss account, balance sheet, additional documents: DTA1, DTA1a, statistic statement G- 10.4.

4. **Do you request additional reports such as detailed breakdown of OPEX, CAPEX information, physical data?**

   a. **If yes, please list.**

Yes we demand data to benchmark OPEX of utility. F. e. It can be length of lines, capacity of transformers etc.

   b. **Are these split into controllable and non-controllable costs?**

Yes.

   c. **What are the differences between the cost reported in the regulatory accounting and those in the statutory accounting?**

Regulatory accounting is more detailed than statutory.

   d. **In terms of depreciation, which method is applied and does this differ from the method used in the statutory accounts?**

For regulatory purposes we are use the asset value before the re-evaluation.

f. How is the regulatory asset based established? Does the asset valuation concept differ from this used in the statutory accounts?

If the assets are re-evaluated then regulatory asset value is different than statutory.

5. For Utilities conducting more than one activity e.g. generation and distribution, is the information separated between regulated and non-regulated business? Are excluded (but still deregulated) services subject to a separate regulatory accounting treatment?

Yes for both questions.

6. Do you provide instructions/guidelines on how to fill in the regulatory accounting information?

Yes, Tariff Department provides basic guidelines.

7. How does regulatory accounting data exchange physically take place?

By traditional and electronic mail.

8. Does the national statutory accounting rules comply with the International Accounting Standards?

No.

<u>Pricing</u>

1. Do you focus only on establishment of revenue requirements or you are also involved in the tariff setting process?

Tariff Department is involved in the tariff setting process.

2. What are your objectives in the tariff setting process?

Set the utility's revenue on a level which cover justified costs of its regulated activity, protect the end-users from unjustified price level, and eliminate the cross-subsidies.

<u>System of Auditing</u>

1. Are there provisions in the law that requires the regulatory accounts to be audited?

a. If yes, who is responsible for conducting this?

No.

b. Does the regulator perform any independent (or independently sub-contracted) audits itself?

No.

Romania

The Romanian Electricity and Heat Regulatory Authority (ANRE)

<u>Procedures and rules for the examination of documents on tariff approvals</u>

1. How often do you request regulatory accounting information from regulated companies?

Under the licenses conditions, the companies (the licensees) are required to submit annually to ANRE the Financial Report that includes the regulatory accounts of these companies.

2. How much time does a regulated utility have to submit their regulatory accounting information? Please indicate submission timing.

The licensees should submit their Financial Reports after 20 working days after the due date to submit the Financial Statements (including the statutory accounts) to the Ministry of Finance.

3. What is your procedure in requesting the regulatory accounting information? E.g. is there a consultation process, who is responsible for checking the data etc. Please describe/comment

The licenses describe the minimum information that the licensees are required to submit to ANRE. The regulated companies should fill in and submit the Financial Reports in accordance with the "Financial Reporting Procedure" issued by ANRE. After receiving the reports, the Annual Reports Analysis Department (ARAD) within ANRE is responsible for checking the data in order to import them in the Authority Data Base. If the reports are not complete or there are wrong data, the ARAD's team will contact the economic entities asking for necessary corrections and then send them back to ANRE.

4. **Which sort of production subset (generation, transmission, distribution, and retail) is covered by regulatory accounting requirements?**

The companies should complete the reporting forms separately for each regulated electricity (or heat) activity for which they have license issued by ANRE (generation, transmission, market operator, distribution and retail)

<u>Regulatory reporting requirements</u>

1. **For regulatory accounting requirements, do you provide templates to utilities to complete?**

Yes, we provide templates using Excel software.

   a. **If yes, please attach your regulatory accounting templates**

These type of templates can be downloaded from ANRE website.

2. **Do the companies also produce and submit to you statutory accounts?**

   a. **If yes, do they differ from the regulatory accounting information? E.g. disaggregated and non-consolidated**

Yes, the companies produce and submit to the Regulatory Authority the statutory accounts. Yes, they differ from the regulatory accounting information.

3. **Please specify all the regulatory accounting information which is requested. For example cash-flow statement, profit and loss account, balance sheet, additional documents.**

   - Balance sheet;
   - Profit and loss account;
   - Cash-flow statement.

4. **Do you request additional reports such as detailed breakdown of OPEX, CAPEX information, physical data?**

a. **If yes, please list.**

The additional information are included in the financial reports, as follows:

Opex: Operating costs by regulated business function

Details:

- Repairs and maintenance
- Sources of costs
- Systems/Equipment/Fuel purchases
- Staff cost and staff number analysis
- Metering
- SCADA
- Customer records, billing and services

Additional information:

- Customers complains
- New connections
- Marketing and advertising

a. **Are these split into controllable and non-controllable costs?**

The reporting data from the annual reports were not split into controllable and non-controllable costs, until this year (2007).

b. **What are the differences between the cost reported in the regulatory accounting and those in the statutory accounting?**

The statutory accounting includes the costs for whole company; the regulatory accounting includes just the costs for regulated activities (activities that are object of ANRE licences).

The main differences between the costs reported in the regulatory accounting and those in the statutory accounting are the costs with depreciation.

c. In terms of depreciation, which method is applied and does this differ from the method used in the statutory accounts?

Linear depreciation for 25 years for existing assets at the beginning of the first regulatory period. For the additional assets is also applicable linear depreciation; the depreciation is according to life duration provided in the statutory accounts.

d. How is the regulatory asset based established? Does the asset valuation concept differ from this used in the statutory accounts?

Yes. The first RAB was set according to the formula for 2005 RAB which is maximum of 2002 book asset value. This rule was set because in 2003 and 2004 a process of reevaluation of asset was done by distribution companies. After 2005 the addition of new asset were allowed only according to the investment plan approved by ANRE.

After 1st of January 2006 the rules for RAB is according to the following formula :

$$BAR_t = BAR_{t-1} + \frac{(IA_t - EA_{t)})}{2} - AM_t - PDI_t + \Delta NFRR_t$$

where :

BARt is the regulated asset base for year t ;

BARt-1 the regulated asset base as of 31st December of year (t-1), taking into account all the asset inputs and outputs and the amortization of the assets in year (t-1);

AMt the sum between the annual amortization corresponding to the assets that are included in the (t-1) previous year RAB, and the amortization corresponding to the assets commissioned/decommissioned in year (t);

IAt inputs of assets recognized and approved by the competent authority during year t, including assets in progress;

EAt output of assets during year t through asset sale, decommissioning or transfer, and in value terms will equal the book value less accumulated depreciation of such assts;

PDIt provision for depreciation of assets in year t;

∆NFRR the change in regulated working capital for year t as compared to the value included when calculating BAR (t-1) that will not be higher than 1/8 of the initial target revenue of the distribution activity.

5. **For utilities conducting more than one activity e.g. generation and distribution, is the information separated between regulated and non-regulated business? Are excluded (but still deregulated) services subject to a separate regulatory accounting treatment?**

For utilities conducting more than one activity, the information is separated between regulated and non-regulated business. The excluded services are not subject to a separate regulatory accounting treatment.

6. **Do you provide instructions/guidelines on how to fill in the regulatory accounting information?**

Yes, the instructions on how to fill in regulatory accounting information are included in the "Financial Reporting Procedure".

7. **How does regulatory accounting data exchange physically take place?**

The forms should be completed electronically and the completed forms returned to ANRE on CD, diskettes or by e-mail. A printed copy of each of the completed reporting forms should be bound together with any supporting explanatory notes.

8. **Does the national statutory accounting rules comply with the International Accounting Standards?**

The national statutory accounting rules comply with the EEC Directive IV-th and EEC Directive VII-th.

Pricing

1. **Do you focus only on establishment of revenue requirements or you are also involved in the tariff setting process?**

For regulated supply activity the regulator establish the revenue requirements and approve the regulated cost/revenues for the selling/buying of electricity that are to be supplied to the captive customers. ANRE is also involved in tariff setting process.

2. **What are your objectives in the tariff setting process?**

According with Energy Law the process of setting tariffs for captive consumers take in account the assurance for final consumer protection.

<u>**System of Auditing**</u>

1. **Are there provisions in the law that requires the regulatory accounts to be audited?**

    a. **If yes, who is responsible for conducting this?**

In the "Financial Reporting Procedure" it is specified that the annual Financial Report should be audited by an independent auditor. There is a form to be filled in by the independent auditor or censors commission.

    b. **Does the regulator perform any independent (or independently sub-contracted) audits itself?**

Usually, not.

The National Regulatory Authority in Natural Gas Sector (ANRGN)

<u>**Procedures and rules for the examination of documents on tariff approvals**</u>

1. **How often do you request regulatory accounting information from regulated companies?**

The regulatory accounting information from regulated companies is requested annually.

2. **How much time does a regulated utility have to submit their regulatory accounting information? Please indicate submission timing.**

The submission timing for regulated utility of their regulatory accounting information is: six months for substantiating the regulated prices and tariffs and three months for annual adjustment.

3. **What is your procedure in requesting the regulatory accounting information? E.g. is there a consultation process, who is responsible for checking the data etc. Please describe/comment**

The regulated companies are obliged to submit annually their regulatory accounting information. The specialised department from ANRGN verifies this information.

4. Which sort of production subset (generation, transmission, distribution, and retail) is covered by regulatory accounting requirements?

The regulatory accounting requirements cover the transmission, distribution, underground storage and regulated retail.

<u>**Regulatory reporting requirements**</u>

1. For regulatory accounting requirements, do you provide templates to utilities to complete?

a. If yes, please attach your regulatory accounting templates

For the regulatory accounting requirements we provide the templates that should be completed by the companies. The templates are presented in attachment.

2. Do the companies also produce and submit to you statutory accounts?

a. If yes, do they differ from the regulatory accounting information? E.g. disaggregated and non-consolidated

Yes, the companies produce and submit statutory accounts, according to the accounting law.

The statutory accounts differ from regulatory accounting information in respect of the assets treatment.

3. Please specify all the regulatory accounting information which is requested. For example cash-flow statement, profit and loss account, balance sheet, additional documents.

The requested regulatory accounting information is:

- Statement of expenses
- Statement of revenues
- Report on regulated, non-current assets
- Report on current assets put in use

4. Do you request additional reports such as detailed breakdown of OPEX, CAPEX information, physical data?

a. **If yes, please list.**

The additional reports are presented in the annexes to 1.a. We also require reports regarding quantities of transmission, distribution, underground storage and regulated retail and for quantities of underground storage and transmission regarding capacities used. The reports are requested both for previous interval for the next one.

b. **Are these split into controllable and non-controllable costs?**

Yes, these are split into the controllable costs – OPEX (all the costs generated by the current activity of the operator that it would not bear if the activity was developed by a third party) and non-controllable costs - pass-through costs (the costs that operator cannot control, but it is necessary for him to accomplish them for developing regulated activity).

c. **What are the differences between the cost reported in the regulatory accounting and those in the statutory accounting?**

The differences between the cost reported in the regulatory accounting and those in statutory accounting concern the depreciation of assets and also not all the statutory cost are recognized in the regulatory activity (for example financial costs).

d. **In terms of depreciation, which method is applied and does this differ from the method used in the statutory accounts?**

The depreciation method applied for the regulated asset base is the linear one. The method is the same in statutory accounting but the difference concerns the depreciation time, which is established by decision of the regulatory authority.

e. **How is the regulatory asset based established? Does the asset valuation concept differ from this used in the statutory accounts?**

The regulated asset base is established on the entry value at historical cost. The regulated asset valuation concept differ from the one used in the statutory accounts because regulated asset base is annually adjusted with the inflation rate and also it has another period of depreciation.

5. **For utilities conducting more than one activity e.g. generation and distribution, is the information separated between regulated and non-regulated business? Are excluded (but still deregulated) services subject to a separate regulatory accounting treatment?**

The split between regulated and non-regulated business is shown in the annexe at the point 1.a.

6. Do you provide instructions/guidelines on how to fill in the regulatory accounting information?

We don't provide different instructions/guidelines for filling in regulatory accounting information; the same rules as in statutory accounting apply.

7. How does regulatory accounting data exchange physically take place?

The reports are submitted to the regulated authority, both on paper and in electronic format.

8. Does the national statutory accounting rules comply with the International Accounting Standards?

The national statutory accounting rules do not totally comply with the International Accounting Standards.

Pricing

1. Do you focus only on establishment of revenue requirements or you are also involved in the tariff setting process?

We are involved in establishment of revenue requirements and also in the tariff setting process.

2. What are your objectives in the tariff setting process?

The objectives in the tariff setting process are avoiding cross subsidisation between customer categories.

System of Auditing

1. Are there provisions in the law that requires the regulatory accounts to be audited?

Yes, the provisions are the "The criteria and methods for approving prices and establishing regulated tariffs in natural gas sector" approved by Decision no. 1078 in 18 December 2003 of the president of the National Natural Gas Regulatory Authority, Published in Monitorul Oficial no. 40 in 19 January 2005. The decision was amended by Decision no. 1250 in 13

November 2006 of the president of the National Natural Gas Regulatory Authority, Published in Monitorul Oficial no. 936 in 20 November 2006.

a. **If yes, who is responsible for conducting this?**

When providing regulated accounting records to ANRGN, the operators are obliged to present also an audit report, laid out by an external authorized auditor. Choosing the auditor is the task of the operator, the auditor being obliged to provide ANRGN an engagement letter on fair auditing, independently and in compliance with practice and rules of ANRGN of regulated accounting records.

b. **Does the regulator perform any independent (or independently sub-contracted) audits itself?**

The regulator is entitled to request, on its own expenses, a separate independent (or independently sub-contracted) audit of regulated accounting records, when the specialized departments find major mistakes in the financial reports.

Russia

Procedures and rules for the examination of documents on tariff approvals

1. **How often do you request regulatory accounting information from regulated companies?**

Once a year.

2. **How much time does a regulated utility have to submit their regulatory accounting information? Please indicate submission timing.**

A regulatory period (1 year).

3. **What is your procedure in requesting the regulatory accounting information? E.g. is there a consultation process, who is responsible for checking the data etc. Please describe/comment**

Terms and procedures for submission of tariff proposals are specified in Decree of the Government of the RF of February 28, 2004, No. 109. Regulatory bodies can invite expert organizations to analyze activities of enterprises.

4. Which sort of production subset (generation, transmission, distribution, and retail) is covered by regulatory accounting requirements?

All aforementioned types of activities.

<u>Regulatory reporting requirements</u>

1. For regulatory accounting requirements, do you provide templates to utilities to complete?

Forms for submission of materials are specified in relevant methodological instructions and templates elaborated on their basis.

a. If yes, please attach your regulatory accounting templates

2. Do the companies also produce and submit to you statutory accounts?

They do.

a. If yes, do they differ from the regulatory accounting information? E.g. disaggregated and non-consolidated

3. Please specify all the regulatory accounting information which is requested. For example cash-flow statement, profit and loss account, balance sheet, additional documents.

Order by the FST of Russia of February 10, 2006, No. 19-e/4 (accounting and statistical reports, physical data on the volume of provided services).

4. Do you request additional reports such as detailed breakdown of OPEX, CAPEX information, physical data?

These reports are presented in the framework of tariff proposals.

a. If yes, please list.

b. Are these split into controllable and non-controllable costs?

No.

c. What are the differences between the cost reported in the regulatory accounting and those in the statutory accounting?

d. **In terms of depreciation, which method is applied and does this differ from the method used in the statutory accounts?**

Depreciation is accounted for in accordance with the tax code.

e. **How is the regulatory asset based established? Does the asset valuation concept differ from this used in the statutory accounts?**

Cost based method and method of indexation are used in regulation. At present, methodological instructions are being developed using "return on invested capital" method with respect to tariffs for electricity transmission.

5. **For utilities conducting more than one activity e.g. generation and distribution, is the information separated between regulated and non-regulated business? Are excluded (but still deregulated) services subject to a separate regulatory accounting treatment?**

In accordance with the legislation organizations have to maintain separate accounting by regulated types of activities.

6. **Do you provide instructions/guidelines on how to fill in the regulatory accounting information?**

Yes.

7. **How does regulatory accounting data exchange physically take place?**

Information exchange takes place through a uniform information-analytical system.

8. **Does the national statutory accounting rules comply with the International Accounting Standards?**

No.

Pricing

1. **Do you focus only on establishment of revenue requirements or you are also involved in the tariff setting process?**

Tariffs are set

2. What are your objectives in the tariff setting process?

Ensuring functioning and development of regulated enterprises in accordance with consumer needs.

System of Auditing

1. Are there provisions in the law that requires the regulatory accounts to be audited?

No.

- **a. If yes, who is responsible for conducting this?**
- **b. Does the regulator perform any independent (or independently sub-contracted) audits itself?**

Regulatory bodies can invite organizations in the framework of research and development.

Serbia

Procedures and rules for the examination of documents on tariff approvals

1. How often do you request regulatory accounting information from regulated companies?

Energy Agency of the Republic of Serbia requests regulatory accounting information from regulated companies each time when they send a request for price adjustment. Beside that, we request accounting information twice a year (each six months).

2. How much time does a regulated utility have to submit their regulatory accounting information? Please indicate submission timing.

Regulated utility submits their regulatory accounting information to the Agency as well as its price proposal at the end of current year for the next year. The regulatory period in the Republic of Serbia is one year (one calendar year).

3. What is your procedure in requesting the regulatory accounting information? E.g. is there a consultation process, who is responsible for checking the data etc. Please describe/comment

Regulated utility submits their regulatory accounting information to the Agency as as well as its price proposal in accordance with data request templates for each licensed activity The Agency adjusts the data via consultation with regulatory utilities before the official submission of this information. The experts, that work in the technical and economic department, are responsible for the data validity.

4. **Which sort of production subset (generation, transmission, distribution, and retail) is covered by regulatory accounting requirements?**

Regulatory accounting requirements are covered for all regulated energy activities in accordance with the Energy law, such as: electricity generation, electricity transmission and distribution, oil and oil products transport, natural gas transport, storage and distribution, and electricity and natural gas wholesale and retail for tariff customers.

Regulatory reporting requirements

1. **For regulatory accounting requirements, do you provide templates to utilities to complete?**
   a. **If yes, please attach your regulatory accounting templates**

Yes. Our regulatory accounting templates will be sent to you after translation.

2. **Do the companies also produce and submit to you statutory accounts?**
   a. **If yes, do they differ from the regulatory accounting information? E.g. disaggregated and non-consolidated**

Yes. Regulatory accounting information comes from unbundling accounts, while statutory accounts are not unbundled.

3. **Please specify all the regulatory accounting information which is requested. For example cash-flow statement, profit and loss account, balance sheet, additional documents.**

For each of the regulatory activity the Agency requests: balance sheet, profit and loss account, detail list of operational costs, list of regulatory assets with depreciation rates, accounting code and other information and documents (information about assets fair market value assessment etc.).

4. **Do you request additional reports such as detailed breakdown of OPEX, CAPEX information, physical data?**

    a. **If yes, please list.**

Yes, such as physical data (volume, capacity, number of customers, etc.), CAPEX information, detailed breakdown of OPEX, etc.

    b. **Are these split into controllable and non-controllable costs?**

No, because current tariff methodologies do not request that.

    c. **What are the differences between the cost reported in the regulatory accounting and those in the statutory accounting?**

The regulatory accounting costs (operational costs and depreciation) do not include all costs from statutory accounting. They are related only to regulated activities.

    d. **In terms of depreciation, which method is applied and does this differ from the method used in the statutory accounts?**

Tariff methodologies use straight-line depreciation, but statutory accounts allow different methods of depreciation (straight-line, functional and decreasing depreciation). In practice, all energy entities use straight-line depreciation.

    e. **How is the regulatory asset based established? Does the asset valuation concept differ from this used in the statutory accounts?**

In accordance with tariff methodologies, regulatory asset base includes only fixed assets such as: intangible assets (without goodwill) and tangible assets (real estates, equipment and plants). Regulatory asset base does not include capital contributions and investments in assets which are not going to be activated in the regulatory period and which are not prudent and efficient. Asset valuation concept is the same in regulatory and statutory accounts.

5. **For utilities conducting more than one activity e.g. generation and distribution, is the information separated between regulated and non-regulated business? Are excluded (but still deregulated) services subject to a separate regulatory accounting treatment?**

Yes, they are.

6. **Do you provide instructions/guidelines on how to fill in the regulatory accounting information?**

Yes, we do, i.e. the Agency provides the data templates with prepared tables in Excel as well as the necessary instructions how to fill it in.

7. **How does regulatory accounting data exchange physically take place?**

Regulated utilities submit regulatory accounting data to the Agency, as well as their price suggestion, on all ready prepared table formats.

8. **Does the national statutory accounting rules comply with the International Accounting Standards?**

Yes, they do. International Accounting Standards are the base for statutory accounting rules (Law on Accounting and Audit).

Pricing

1. **Do you focus only on establishment of revenue requirements or you are also involved in the tariff setting process?**

Both former and latter. In accordance with the Energy Law, the Agency is responsible for expressing an opinion of the price suggested by the regulated energy entities, i.e. the Agency decides whether the price suggestions are calculated or not in accordance with tariff methodologies and tariff systems.

2. **What are your objectives in the tariff setting process?**

Main objectives are to establish transparent and objective tariff setting process, and to help regulated energy entities to calculate prices in accordance with tariff methodologies and tariff systems.

System of Auditing

1. **Are there provisions in the law that requires the regulatory accounts to be audited?**

    a. **If yes, who is responsible for conducting this?**

Yes, there are. Energy entities are obliged to provide independent audit of unbundling accounts and publish them in accordance with the Energy Law.

b. Does the regulator perform any independent (or independently sub-contracted) audits itself?

No, it doesn`t.

Turkey

__**Procedures and rules for the examination of documents on tariff approvals**__

1. **How often do you request regulatory accounting information from regulated companies?**

Regulatory accounting information from regulated utilities is demanded under two sub-categories, namely informations and documents related to revenue setting procedure and tariff setting procedure. The former is asked just before each implementation period while the latter is asked just before of each tariff setting period, in another word annual basis. We also ask some information about activities of regulated utitilites in order to monitor them on different time frequencies regarding the type of the data.

2. **How much time does a regulated utility have to submit their regulatory accounting information? Please indicate submission timing.**

The work towards determining the parameter values for revenue control to be in effect for an implementation period shall be commenced minimum twelve and maximum eighteen months before October 31 of the last year of the current implementation period. The licensees subject to tariff regulation shall prepare and submit to the Authority for Board approval their tariff proposals that include the prices to be effective in the following year and the applicable procedures and principles as per the provisions of the applicable legislation by the end of October every year. The legal entities subject to tariff regulation shall submit the Authority the information and documents at least sixty days prior to submitting their tariff proposals to the Authority:

3. **What is your procedure in requesting the regulatory accounting information? E.g. is there a consultation process, who is responsible for checking the data etc. Please describe/comment.**

There is no special procedure for requesting regulatory accounting information from regulated utilities. All rules related to reporting regulatory accounting information (including templates) are already determined both in the Electricity Market law number: 4628 and related secondary legislation, especially “Communiqué regarding Electricity Market Chart of Accounts, Regulated Items and Reporting”. Apart form this, any information and document required during the revenue control may be requested from the licensees and the legal entities may be invited for interviews. Regarding the revenue control process, at the end of each revenues (price) control period, a Board decision is issued including parameters and the duration of implementation period, while regarding the tariff setting process, The examination and evaluation of the tariff proposals shall be completed by the Authority before December 31 of the current year. If the tariff proposal is deemed appropriate, the tariffs proposals shall be approved. The tariffs approved shall be effective for the tariff period between January 1 and December 31 of the following year. The licensees subject to tariff regulation shall be obligated to announce their approved tariffs through publishing them in the press. In case the tariff proposal is not deemed appropriate, the reasons for rejection shall be notified to the licensee in writing and such licensee shall be given an appropriate period of time that will allow the Authority to finalize the examination and evaluation of the tariff proposal, within the limits of time set out in the Law, to modify its tariff proposal. License holders have obligation of submitting the Board full and true information. Moreover, legal entities holding licenses must keep their facilities, and their books and records of account ready for Board inspection and audit, and must make such facilities and books and records of account available to the Board for inspection and audit, when required by the Board. Legal entities holding licenses must also provide the Board any information and documents it may require in the performance of its duties. Also, it is possible to take into the consideration to examine the audited financial statements of the legal entities operating in the market or to have these reports examined and to determine the scope of the reports to be submitted by legal entities on service reliability, outages and other performance criteria and to ensure that these reports are regularly submitted to the Board.

4. **Which sort of production subset (generation, transmission, distribution, and retail) is covered by regulatory accounting requirements?**

Regulatory accounting guidelines covers transmission, distribution, retail sale and retail sale activities.

Regulatory reporting requirements

1. **For regulatory accounting requirements, do you provide templates to utilities to complete?**

Yes.

a. **If yes, please attach your regulatory accounting templates**

Since there are a lot of tables in secondary legislation for regulatory accounting guidelines, it is possible to reach them via the following web page address: http://www.epdk.org.tr/english/regulations/electric/RAG.xls

2. Do the companies also produce and submit to you statutory accounts?

a. **If yes, do they differ from the regulatory accounting information? E.g. disaggregated and non-consolidated.**

Yes, they have also obligation of producing and submitting statutory accounts to the Regulatory Authority. These accounts are different than regulatory accounts in terms of being consolidates, prepared for different purposes, on company basis, unbundled and ex-post.

3. Please specify all the regulatory accounting information which is requested. For example cash-flow statement, profit and loss account, balance sheet, additional documents.

The legal entities subject to tariff regulation shall submit the following information and documents prepared within the framework of the schedule determined for revenue control and the provisions of the “Communiqué regarding Electricity Market Chart of Accounts, Regulated Items and Reporting” as well as other provisions in the applicable legislation:

- The financial statements prepared for the current implementation period,
- Annual demand, cost and revenue estimates prepared for the next implementation period,
- The consumption levels and the related accrual and collection levels for the current implementation period for each customer category,
- The consumption, accrual and collection estimates for the next implementation period for each customer category,
- The investment plan progress and evaluation report for the current implementation period,
- The investment plans for the next implementation period.

The legal entities subject to tariff regulation shall submit the Authority the information and documents pertaining to the following issues at least sixty days prior to submitting their tariff proposals to the Authority:

- Pricing methodology,
- Service cost analysis,
- Sample price calculations.

Following the submission of the tariff proposal to the Authority, if included in the related Communiqué, legal entities shall also submit the Authority the calculations regarding revenue correction factor, loss-theft adjustment factor, and investment correction factor and the data forming the basis for such calculations.

Last but not least, the licensees shall be obliged to prepare annual activity report for the previous year in compliance with the applicable legislation and shall submit such reports to the Authority by the end of April every year.

4. Do you request additional reports such as detailed breakdown of OPEX, CAPEX information, physical data?

a. If yes, please list.

In generic terms, the secondary legislation covers all the necessary data and information that can be requested by the Regulatory Authority. Besides, any information and document required using the revenue control, examination and evaluation of the tariff proposals may be requested form the licensees and the legal entities my be invited for interviews.

b. Are these split into controllable and non-controllable costs?

No, there is no specific split into controllable and non-controllable costs.

c. What are the differences between the cost reported in the regulatory accounting and those in the statutory accounting?

The costs reported in the statutory accounting do generally reflect annual financial streams of companies and their financial viabilities on ex-post basis, unbundled and consolidated manner for financial and accounting purposes. Moreover, the difference between forecasts and realizations are covered by adjustments factors in terms of regulation during price review periods and those differences are regularly reported to the Regulatory Authority.

d. In terms of depreciation, which method is applied and does this differ from the method used in the statutory accounts?

The revenue requirements shall be calculated to allow for amortization of the Board approved net regulatory capital expenditures – to the extent the efficiency parameter allows – through revenues arising from regulated tariffs, together with the cost of capital incurring, within a period to be determined by the Board with due regard to the

- the economic life of the related assets
- the repayment periods expected under existing market conditions.

During determination of the amortization amounts for each year, the proposed customer prices and the total depreciation amount for the related tariff year shall be kept in regard. Amortization method can show some differences form those used in the statutory accounts.

e. How is the regulatory asset based established? Does the asset valuation concept differ from this used in the statutory accounts?

The regulatory asset disposal revenues shall include the revenues from the disposal of the assets established/constructed before the start of the first implementation period and assets that have been financed through capital expenditures included in the calculation of regulatory capital expenditures in any implementation period. For the first implementation period, the initial value of the non-amortized total capital expenditures shall be equal to zero. The calculations regarding the initial value of non-amortized total capital expenditures in the second and subsequent implementation periods shall be performed within the timeframe to be determined by the Board during the previous implementation period. The liabilities incurred before the implementation period shall indicate the capital expenditures that have been made by the licensees subject to tariff regulation before the start of the first implementation period and that will be included in the calculation of cost of capital and amortization amounts. Such liabilities shall be monitored as “Non-Amortized Stranded Liabilities”. If the related licensee is a public institution, the stranded liabilities shall be determined by the Board with due regard to the existing financial liabilities as of the start of the first implementation period and Liquid Assets and Marketable Securities that may be used to finance such liabilities. The financial liabilities that are not used to finance regulatory capital expenditures shall not be kept in regard. If the related licensee is a private company, the stranded liabilities shall be determined by the Board with due regard the assets that are essential for the performance of the activity and are demonstrated in the balance sheet items of the licensee. Assets valuation method can show some differences form those used in the statutory accounts.

5. **For utilities conducting more than one activity e.g. generation and distribution, is the information separated between regulated and non-regulated business? Are excluded (but still deregulated) services subject to a separate regulatory accounting treatment?**

For utilities conducting more than one activity regulatory account unbundling is compulsory in all activities regardless they are regulated or not. But, there is no separate regulatory accounting treatment for deregulated activities, except data and information asked for monitoring activities.

6. **Do you provide instructions/guidelines on how to fill in the regulatory accounting information?**

"Communiqué regarding Electricity Market Chart of Accounts, Regulated Items and Reporting" itself is a instruction/guideline on how to fill regulatory accounting information.

7. **How does regulatory accounting data exchange physically take place?**

The utilities are obliged to submit their regulatory information and to send them officially to the regulatory authority on written form. Additionally, Regulatory Information System (RIS) project which enables regulated utilities to submit their regulatory accounts and information in electronic format is going on.

8. **Does the national statutory accounting rules comply with the International Accounting Standards?**

Uniform Accounting System, which complies with International Accounting Standards is the system of accounts that has been defined as per the provisions of Accounting System Implementation Communiqués issued in with the Articles 175 and 257 of Tax Procedures Law no. 213 and that sets forth the basic principles of accounting practices and financial statements, as well as uniform chart of accounts and preparation and submission of financial statements,

Pricing

1. **Do you focus only on establishment of revenue requirements or you are also involved in the tariff setting process?**

We focus mainly revenues setting process for regulated activities. For tariff setting procedure our main duties and responsibilities are limited with examination, evaluation and approval of submitted tariff proposals and of course checking their appropriateness/compliance with the Law and secondary legislation.

2. **What are your objectives in the tariff setting process?**

Tariffs must comply with aims, procedures, rules, parameters and principles that are revealed in the Law and related secondary legislations. Apart form this, the main purpose of our tariff setting approach is to set free (of course within limits of Law and secondary legislation) regulated utilities to set their tariffs reflecting their regional and company specific peculiarities.

System of Auditing

1. **Are there provisions in the law that requires the regulatory accounts to be audited?**

    a. **If yes, who is responsible for conducting this?**

Yes, on the final stage the Board is responsible for conducting audit activities.

    b. **Does the regulator perform any independent (or independently sub-contracted) audits itself?**

Yes. The Board has the power to examine the audited financial statements of the legal entities operating in the market or to have these reports examined and To require any public or private entity or person, to provide any information and document deemed necessary and/or to review the same at the premises of such persons, in the course of performing its duties as per this Law.

Ukraine

Procedures and rules for the examination of documents on tariff approvals

1. **How often do you request regulatory accounting information from regulated companies?**

By NERC Decree of November 23, 2005, No. 1044 “On approval of the NERC reporting forms”, coordinated with the State Statistic Committee and registered with the Ministry of Justice of Ukraine on February 27, 2006, No. 179/12053, NERC reporting forms were approved as well as instructions on how to fill them in. According to the Decree, licensees (regulated companies) file to the electricity sector pricing policy department the following reporting forms:

- 4-NERC „Reporting and estimate data on productive supply of electricity by consumer groups and classes” – a monthly report;
- 6-NERC-energy supply „Report on financial results and execution of the cost budgets of licensed types of activities” – quarterly report;
- 9-NERC „Report on payments for electricity by the population and localities” – semi-annual report.

It has to be noted that according to the received reports, form 6-NERC-energy supply, the Commission carries out an on-going monitoring of energy companies’ costs associated with licensed activities, and in case any unjustified costs are identified in tariffs, the costs are adjusted when revising levels of tariffs for electricity transmission and supply.

According to the Procedure of calculation of tariffs for electricity and heat generated at CHP, TPP, NPP, economic entities with cogeneration of electricity and heat submit to NERC calculations of forecasted tariffs for sale of electricity and heat, as a rule, for one year. Together with tariff calculation, reporting materials for the relevant period of the previous year are submitted, as well as expected data for the previous period according to annexes "Calculation of tariffs for generation of electricity and heat", "Costs of generation of a unit of product".

Reports on tariffs for transmission, storage, distribution of natural gas and its supply at regulated tariffs, and reports on the tariff for transportation of oil through main pipelines are quarterly reports; reports on the situation with on consumers’ payments for consumed natural gas are monthly reports.

2. How much time does a regulated utility have to submit their regulatory accounting information? Please indicate submission timing.

Reporting form 4-NERC „Reporting and estimate data on productive supply of electricity by consumer groups and classes” is submitted by licensees that carry out entrepreneurial activities related to supply of electricity at the regulated tariff, irrespective of the forms of ownership and subordination. A reporting period is a calendar month. The report is prepared on a monthly basis as of the last day of the reporting month and is filed to NERC by the licensee not later than the 20th day of the month following the reporting one. The report is submitted to NERC after a relevant representative of NERC's branch office marks it as full and accurate. If there were no licensed activities during the reporting month, the licensee presents reports in relevant formats put blanks in relevant columns.

Reporting form 6-NERC-energy supply „Report on financial results and execution of the cost budgets of licensed types of activities" is filed by licensees that carry out entrepreneurial activities related to electricity, heat generation, transmission of electricity through local power networks and supply of electricity at the regulated tariff irrespective of the forms of ownership and subordination; it is filed on a quarterly basis by the 25th day of the month following the reporting period. A calendar quarter is a reporting period. Reports are prepared every quarter on a cumulative total basis from the beginning of the reporting year. The report is filed to NERC after a relevant representative of NERC's branch office marks it as full and accurate.

Reporting form 9-NERC „Report on payments for electricity by the population and localities" is submitted by licensees that carry out entrepreneurial activities related to supply of electricity at the regulated tariff irrespective of the forms of ownership and subordination. Reporting periods are half a year and a year. The report is filed to NERC by the 10th day of the month which follows the month following the reporting period, with a relevant mark of NERC's branch office that it has been received.

Reports on the tariff for transmission, storage, distribution of natural gas and its supply at the regulated tariff, and reports on the tariff for transportation of oil through main pipelines is submitted every quarter by the 25th day of the month following the reporting period; reports on the situation with consumers' payments for consumed natural gas are submitted every month by the 20th day of the month following the reporting month.

3. What is your procedure in requesting the regulatory accounting information? E.g. is there a consultation process, who is responsible for checking the data etc. Please describe/comment

According to NERC Decree of November 23, 2005, No. 1044 „On approval of NERC reporting forms", licensees submit approved reporting forms within specified timeframe. The licensee is responsible for authenticity of the information. In addition, reports are verified by relevant branch offices of NERC in terms of completeness and accuracy. NERC Order assigns a person responsible for collection and analysis of information submitted by licensees.

When it is necessary to get additional information, NERC sends a written request signed by the Chairman of the Commission or some Commissioner.

If a company failed to present reports within specified time or if submitted reports are inaccurate, NERC conducts consultations and ensures clarifications in the form of specially developed instructions.

If necessary, the Commission, with the help of an independent expert, can audit economic operations of the enterprise.

4. Which sort of production subset (generation, transmission, distribution, and retail) is covered by regulatory accounting requirements?

By NERC Decree of November 23, 2005, No. 1044 „On approval of NERC reporting forms" reporting forms were approved for licensees that carry out entrepreneurial activities related to generation of electricity, heat, transmission of electricity through local power networks and supply of electricity at the regulated tariff, irrespective of the forms of ownership and subordination.

Reports are submitted by types of licensed activities, namely, transmission and supply of natural gas at the regulated tariff.

Regulatory reporting requirements

1. For regulatory accounting requirements, do you provide templates to utilities to complete?

a. If yes, please attach your regulatory accounting templates

Reporting forms were developed and approved by NERC Decree of November 23, 2005, No. 1044 "On approval of NERC reporting forms" and registered with the Ministry of Justice of February 27, 2006, No. 179/12053- 200/12074. (See attached).

Reporting forms are in compliance with the Conditions and Rules for carrying out licensed activities in the electricity sector and licensed conditions of licensed activities in the oil and gas complex. Reports contain indicators that enable NERC to perform its functional duties: analyze and control implementation of a uniform policy in the field of settlement and payment relations of enterprises in the electricity complex, as well as creation of reserve stock of natural gas in the volumes and terms that correspond to the legislation of Ukraine.

These indicators enable NERC to supervise licensed activities of power sector licensees in the area of electricity transmission (form 3-NERC) and payments for it in supply at regulated (forms 5, 7, 11, 13-NERC) and non-regulated (form 7-NERC) tariff. In the oil and gas complex – reporting forms 1, 2, 3-NERC-gas provide information on the volumes of licensee's purchases of natural gas and supply of gas to consumers, and also enable control over reserve stock of natural gas needed to guarantee supply.

Based on the results of analysis of licensees' reports, letters are sent to licensees and branch offices of NERC with clarification of formation of reports and maintenance of accounting for volumes of electricity and payments for it, accounting for and conditions of supply of natural gas to consumers or, if necessary, branch offices are instructed to perform ad hoc inspections of licensed activities.

Receiving information from licensees on their licensed activities in the volumes and within timeframes set by NERC, allow the Commission to ensure timely control over licensees' compliance with license terms and conditions and rules for carrying out licensed activities, as that also guarantees protection of consumer rights, and also impose sanctions for violations of licensed activities in accordance with the current legislation.

Licensees submit reporting forms 6-NERC-energy generation "Report on licensed activities of economic entities involved in generation of electricity and heat" and 1-NERC "Report on use of fuel by licensees of generation of electricity and heat" approved by NERC Decree of November 23, 2005, No. 1044 "On approval of NERC reporting forms". Reports have to be submitted by licensees that carry out economic activities related to generation of electricity and heat irrespective of forms of ownership. Form 1-NERC is submitted on a monthly basis by the 25th day of the month following the reporting month, form 6-NERC – on a quarterly basis not later than the 25th day of the month following the reporting quarter.

2. Do the companies also produce and submit to you statutory accounts?

Financial statements are specified in the legislation and are submitted to NERC.

a. If yes, do they differ from the regulatory accounting information? E.g. disaggregated and non-consolidated

Yes, when filing documents for revision of tariffs, companies file mandatory (statutory) reports, such as the Balance Sheet, Income Statement, Cash Flow Statement, and Statement on Owner's Equity. These reports do not differ from regulatory accounting information.

3. **Please specify all the regulatory accounting information which is requested. For example cash-flow statement, profit and loss account, balance sheet, additional documents.**

Yes, when filing documents for revision of tariffs, in addition to NERC reports, companies also file mandatory (statutory) reports, such as the Balance Sheet, Income Statement, Cash Flow Statement, and Statement on Owner's Equity.

- Form 4-NERC-gas «Report on licensed activities of economic entities related to transmission, storage, distribution of natural gas and its supply at the regulated tariff»;
- Form 4-NERC-oil «Report on licensed activities of economic entities related to transportation of oil through main pipelines»;
- Form 5-NERC-gas «Report on the situation with payments for consumed natural gas».

4. **Do you request additional reports such as detailed breakdown of OPEX, CAPEX information, physical data?**

   a. **If yes, please list.**
   b. **Are these split into controllable and non-controllable costs?**
   c. **What are the differences between the cost reported in the regulatory accounting and those in the statutory accounting?**

Differences are related only to depreciation charges: under regulatory accounting – tax, legally - accounting.

   d. **In terms of depreciation, which method is applied and does this differ from the method used in the statutory accounts?**

Tax method is used when tariffs are revised in terms of depreciation charges.

The straight-line method is used in financial accounting; this method differs from the method used in mandatory (statutory) accounting.

   e. **How is the regulatory asset based established? Does the asset valuation concept differ from this used in the statutory accounts?**

Return on invested capital is accrued only for five companies that were privatized in 2001. The following is used as a regulated asset base: the purchase price of the block of shares during privatization plus new investments less depreciation.

5. For utilities conducting more than one activity e.g. generation and distribution, is the information separated between regulated and non-regulated business? Are excluded (but still deregulated) services subject to a separate regulatory accounting treatment?

According to the law of Ukraine „On natural monopolies", Conditions and Rules for carrying out entrepreneurial activities related to transmission of electricity through local power networks and supply of electricity at the regulated tariff, it is envisioned that a licensee should maintain accounting and prepare financial statements separately for each type of activities.

The law of Ukraine „On accounting and financial statements in Ukraine" envisions that the enterprise should itself establish the system of internal accounting, reporting and control, in the framework of which the enterprise could get necessary accounting and economic information, relevant details for relevant periods.

Therefore, each licensee should develop and approve the Procedure for allocation of costs and indicate accounts that are used for allocation of costs by types of licensed activities.

Licensees in the sphere of transmission and supply of natural gas at the regulated tariff have to maintain separate accounting by these types of activities and other types of activities not subject to be licensed.

6. Do you provide instructions/guidelines on how to fill in the regulatory accounting information?

NERC Decree of November 23, 2005, No. 1044 "On approval of NERC reporting forms" approves reporting forms and instructions on how to fill them in. The office accepts and analyzes the reporting forms. Consultations on arising questions related to filling in reporting forms are arranged on a regular basis.

7. How does regulatory accounting data exchange physically take place?

According to NERC Decree of November 23, 2005, No. 1044 "On approval of NERC reporting forms", reports are submitted by mail in paper form and in electronic form and to the relevant branch office of NERC.

The list of reporting forms by types of licensed activities of economic entities and frequency of their presentation are determined in annexes to the Decree and instructions on how to fill in the forms. Terms of the reporting on NERC forms correspond to the terms of reports on economic and financial activities of enterprises and organizations that are set by laws.

8. Does the national statutory accounting rules comply with the International Accounting Standards?

National accounting standards of Ukraine are harmonized with international accounting standards, taking into account national specifics of accounting at enterprises.

Pricing

1. Do you focus only on establishment of revenue requirements or you are also involved in the tariff setting process?

At present, there are 2 tariff methodologies in Ukraine:

1st methodology is applied to privatized energy companies (CJSC “A.E.C. Kievoblenergo”, “EC Zhitomiroblenergo”, “EC Sevastopolenergo”, “Khersonoblenergo”, “Kirovogradoblenergo” and CJSC “A.E.C. Rovnoenergo”). It is approved by NERC Decree of April 2, 2001, No. 309 “On approval of the procedure for determination of tariffs for transmission of electricity through local power networks and tariffs for electricity supply for licensees that supply electricity at the regulated tariff” and is coordinated by item 11 of Decree of the Cabinet of Ministers of Ukraine of April 7, 2001, No. 133-r “On the system of measures designed to establish favorable conditions for development of the power sector”. Please, note that the said Procedure was coordinated with investors at the time of privatization that took place in 2001.

The methodology envisions covering of economically justified costs of economic entities and proper return on investments made to develop power networks, and also envisions reduction of network electricity losses.

The methodology includes the following main provisions:

- The tariff includes the rate of return on capital and new investments in the amount of 17 % after taxes based on new investments and acquisition price of the company.
- When calculating retail tariffs, it is allowed to include sub-standard (commercial) losses of electricity within limits set by the Commission, but not more than 7 %. Standard technological and above-standard losses of electricity are set for 3 years.

- The methodology envisions setting the level of operating costs that would be adjusted every year taking into account changes in the wholesale price index, inflation rate and devaluation of hrivna in comparison with U.S. dollar and adjustment of tariffs in case consumption volumes change.

Adjustment of levels of operating costs is done by NERC if the total impact of the aforementioned factors on the level of operating costs entails increase in tariffs for transmission or supply by more than 5 %.

The main condition for applying the methodology is unconditional 100 % current payment for purchased electricity and restructuring of registered debt to the wholesale market. Under this methodology tariffs were calculated for 5 out of 6 privatized companies. According to the methodology tariffs for these companies are calculated on the annual basis; and only basic operating costs are adjusted (material costs by increase of the wholesale producer price index and wages – by the inflation rate). Basic operating costs are set for 7 years. Starting with year 2007, the sub-standard costs ratio that is taken into account in calculation of tariffs (according to the methodology) decreases, and it ensures decrease of the calculated retail tariff for „EC „Sevastopolenergo" and CJSC „A.E.C. Kievoblenergo" (however, as there are uniform tariffs for consumers in all regions, that did not have any impact on consumers in these regions).

Companies that work according to this methodology are profitable; they fully meet their obligations related to repayment of restructured debts and mandatory tax payments to the budget.

<u>2nd methodology.</u> Examination and approval of tariffs for transmission and supply of electricity for other companies is done in accordance with the Procedure for setting or revising tariffs for holders of licenses for transmission of electricity through local power networks and supply of electricity at the regulated tariff, approved by NERC Decree of August 1, 2001, No. 801.

The procedure sets conditions for revision of tariffs for transmission and supply for energy supply companies, and the main condition is full payment of current bills for electricity purchased from the state-owned enterprise „Energorynok" in the course of the last three months and taking obligations to make payments in time in future as well.

Main factors for changes in tariffs are:

- Loss-making operations in licensed activities due to reasons that are beyond the control of the licensee;

- Changes in the volumes of transmission and supply by at least 5 % of those envisioned in tariff calculations;
- Changes in the costs of transmission or supply by at least 5 % of those envisioned in tariff calculations due to reasons that are beyond the control of the company;
- Taking obligations to fulfill the investment program on construction, reconstruction and upgrading of networks, plant of the company, and adoption of the program on reduction of network losses.

In addition, when revising tariffs the Commission takes into account changes in the wholesale price index, inflation rate and devaluation of hrivna in comparison with U.S. dollar.

Before tariffs are changed, there is an inspection of justification of use of funds envisioned in the current tariffs and analysis of forecasted costs, the company should provide all supporting materials.

When it is found out that the company violates license terms, or has non-targeted and inefficient use of funds, the Commission has the right to decrease tariffs for the company or refuse to revise its level for a certain period of time.

Before the decision is made on the level of tariffs, open hearings are conducted, where all disputable issues related to costs that are to be included in the tariff are clarified. The final decision with respect to the level of tariffs is made at the open meeting of the Commission, at the same time the investment program is approved by the Commission, as well as the tariff cost structure.

2. What are your objectives in the tariff setting process?

The tariff methodology is designed to ensure full recovery of costs of electricity generation, transmission and supply, creation of necessary conditions for profitable operation of all sector enterprises and further development of the sector, ensuring transparency and controllability of the process of use of funds envisioned in the approved tariffs.

According to the current legislation, in the field of pricing the Commission developed and implemented methodologies for calculation of tariffs for transmission and supply of electricity, according to which tariffs for energy supply companies are determined in such a way that would provide a licensee with sufficient revenues to cover its justified costs and ensure profits, and also to motivate it to reduce costs and increase profitability of its operations.

Tariffs approved by the Commission should ensure coverage of economically justified production costs, receipt planned profit sufficient to ensure normal production and economic activities; payment of all taxes, mandatory fees and budgetary payments in accordance with the current legislation of Ukraine.

According to the Laws of Ukraine "On heat supply" and "On electricity" NERC's authorities also include regulation of tariffs for sale of electricity and generation of heat.

System of Auditing

1. **Are there provisions in the law that requires the regulatory accounts to be audited?** No.

    a. **If yes, who is responsible for conducting this?**

    b. **Does the regulator perform any independent (or independently sub-contracted) audits itself?**