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The Uniform System of Accounts for the Power Market Regulated Companies

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Abstract—*Regulatory accounting or as it is known in the industry, Uniform System of Accounts (USoA), provides a sound basis for recording of expenses and assets in the regulated energy utilities. It includes a detailed chart of accounts and instructions on how to use the chart of accounts so that all expenses can be properly accounted for, audited and used as the basis for setting tariffs. The USoA has proven to be a good tool for financial management of the utilities and without exception, the increased level of information provided by the USoA to utility management allows for better cost control and insights on the efficiency of their companies. It is a win-win success story as both consumers and investors reap benefits from this proven approach to regulatory oversight*.

Keywords— *Regulatory Accounting, Licensee Holders, Electricity Tariffs, Regulatory Authority*.

I. INTRODUCTION

The Georgian electricity sector has made remarkable progress over the last twenty years, advancing from huge losses and blackouts in the 1990s, to collection rates over 90%, generally reliable service and near self-sufficiency today. In spite of the improvements, Georgia still experiences a shortfall of domestic supply in winter and, therefore, the Government of Georgia must secure private investment to develop the estimated 20 TWh of untapped hydropower resources the country possesses and promote cross border electricity trading to Turkey and Europe to realize Georgia's electricity export potential.

While investors and developers are willing to sign initial investment commitments, investor access to project financing needed to turn these commitments into reality requires fundamental changes to Georgia's energy governance, regulatory, operating and legislative enabling environments.

Over the last decade the retail electricity rates in Georgia were set at government specified levels with the government providing large subsidies for power plants rehabilitation and operations while on the other hand mandating retail tariffs levels without considering the real of cost of service. That approach led to unanticipated and unwanted consequences. The electricity sector regulatory framework is in dire need of reform, now seeing:

1. Lack of transparency in rate setting process;
2. Poor record on investment into the aging distribution networks;
3. Lack of incentive to invest into new generation facilities with too low of a tariff for generation production aimed for sales in the local market;
4. No incentives in rates for better utility performance; and,
5. Uncertainty about long term rate stability.

Development of the USoA for the electricity sector of Georgia includes development of a regulatory chart of accounts for the electricity sector, instructions to the chart of accounts and capacity building of Georgian National Energy and Water Supply Regulatory Commission and the electricity sector licensees.

II. INSTRUCTIONS TO THE UNIFIED SYSTEM OF ACCOUNTS

2.1 Instructions to the Regulated Chart of Accounts

The Unified System of the Accounts (Regulated Chart of Accounts) is an unified outline (scheme) of registration and accounting of financial events affecting the company and its operation set by the regulator, Georgian National Energy Regulatory Commission.

Abow mentioned Unified System of Accounts (Regulated Chart of Accounts) is compliant with the National Chart of Account of Georgia.

The USoA meets the requirements of IFRS standards and financial regulation of the power sector of Georgia and it shall be used by the Electricity Licensees (Power Market Regulated Companies) for registration of the financial data in unified system to support the tariff development and monitoring, benchmarking and other regulatory information needs.

The Instructions shall enable licensees to record, maintain and report the financial data in accordance with the Unified Accounting Guidelines, Policy and Procedures set by the Georgian National Energy Regulatory Commission. The Instructions can enable to maintain the accounting to meet other requirements as financial and tax reporting.

In a Uniform System of Accounting, Electricity Licensees shall follow the Standard Transactions for similar events. New approach or treatment of standard event should be approved and accepted by Georgian National Energy Regulatory Commission.

The base for the Regulated Chart of Accounts (Uniform System of Accounts) is grounded with the existed financial legislation, national chart of accounts adopted by the Accounting Standard Commission of Georgia, tariff methodology, and reporting forms.

These Instructions have 3 main parts as follow:

Part I. GENERAL APPROACHES

Part II. THE REGULATED CHART OF ACCOUNTS

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Part III. INSTRUCTIONS ON ACCOUNTS OF REGULATED CHART OF ACCOUNT

The Code of a Regulated Account is specially stated and has two parts: general and specific.

General and Specific parts are separated with the point symbol.

The General part consists of first 4 digits. It describes generally the purpose of regulation; it either is identical with the classification of the National Chart of Accounts or is a new account set for regulation purposes.

The Specific part consists of digits with no limits in number. Each digit is the code of the subaccount for the previous (left) digit account. It describes the specific purpose of regulation.

All Regulated Accounts are mandatory for a Company that has to follow this instruction in accordance with the Georgian Legislation. A Company has no right to change the meaning of the accounts without permission of Georgian National Energy Regulatory Commission on the level set by this Instruction.

The account is not regulated if it (a) is not specially stated as regulated one and (b) is not a subaccount of the regulated account. Thus, they are not mandatory for the purpose of regulation. A Company is free to set (or use the codes of) any account that is not occupied by Regulated Accounts.

2.2 Instructions on "Contribution and Grants"

These Accounting Guidelines regulate the accounting of contributions and grants of companies operating in Georgian regulated power market. Power market regulated companies shall follow the rules and procedures, use the same approaches. The Accounting Guidelines are an essential part of USoA for Georgian regulated power market that supports tariff development, monitoring, benchmarking and other regulatory information needs.

According to IAS 16, Cost is the amount of cash or cash equivalents paid or the fair value of the other consideration given to acquire an asset at the time of its acquisition or construction or, where applicable, the amount attributed to that asset when initially recognized in accordance with the specific requirements of other IFRSs, e.g. IFRS 2 Share-based Payment.

In other words, cost of connection asset should be measured as aggregation of all costs to build that connection no matter how much was compensated by aid or paid by customer.

Company shall maintain the accounting by clear partition of initial cost by sources of finance maintaining the requirements of IFRS.

Grants **-** Granted aid is the financing with the purpose of aid, support, or any other motivation that is not related with the Company's product or service sale.

Granted aid's financing source either can be or cannot be a [direct] consumer of the Company's product or service. In accordance with IAS 20 "Accounting for Government Grants and Disclosure of Government Assistance", the granted aid shall be recognized as deferred income for the period of useful life of the asset.

Granted aid can be applicable for all power market companies: dispatch, transmission, distribution network, distribution supply, and generation.

Contributions **-** Contributions by customer are the financing for the connection to the distribution grid.

Contribution by customer's financing source is the direct consumer of Company's product or service. In accordance with IFRS, the price paid by the customer (customer contribution) shall be recognized as Revenue, IAS 18 "Revenue". Contribution by the customer is treated as deferred revenue for the period of useful life of the asset.

Contribution by customer is applicable for distribution network only.

2.3 Instructions on "Property Plant and Equipment"

The Accounting Guidelines on Accounting of Property, Plant and Equipment (PP&E) are the constituent part of Accounting Policy incorporated in Unified System of Accounting for Georgian Power Market Regulated Companies. The Accounting Guidelines on PP&E has been developed with the main purpose to insure that attribution to classes or grouping PP&E items, and accounts or records on PP&E are currently maintained by each licensee in uniform manner, from which reports may be made to the Commission for use in licensee monitoring process, determining the cost or expenses for each licensed project etc..

These Accounting Guidelines on PP&E attempts to cover matters such as:

- accounting standards applicable to licensees,
- provide regulatory treatment in those specific areas resulting from the regulatory process, those regulated company shall use for recognition, measurement after recognition, subsequent cost capitalization and maintaining records on PP&E items,
- provide a high level of details on the PP&E classification, classification units, the example items of different classes of PP&E, attribution rules of certain PP&E items to the asset groups and sub-groups

The Property, Plant and Equipment (PP&E) under Unified System of Accounting for Power Market Regulated Companies shall be treated in accordance with the IAS 16 'Property, Plant and Equipment'. IAS 17' Leases'; IAS 40' Investment Property'.

The break-down of PP&E classes is identical with National accounting regulation and attributed for following long-term tangible assets:

- Land
- Construction in Progress
- Buildings
- Constructions
- Machinery and Equipment
- Office equipment
- Furniture and fixtures
- Vehicles
- Leasehold improvement

For Power Market regulation purpose following classes added:

- Transferring Assets
- Contribution and Grants

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- Instruments and Other Long Term Tangible Assets in Operation
- Long Term Tangible Assets Not in Operation (in warehouse)

The stated long-term tangible assets are recognized as assets in operation except following assets:

- Construction in Progress
- Long Term Assets Not in Operation (in warehouse)

Fixed assets in operation are depreciable excluding Land and if it are not in operation are not depreciable.

The break-down of depreciation mirrors the correspondent depreciable fixed assets classification.

USoA identifies PP&E classes as related to:

- Electricity Regulated activity
- Non-regulated activity

PP&E that is related to Electricity Regulated Activity is defined by USoA as a tangible asset that is:

- held for use in generation of electricity, provision power market services or for administrative purposes;
- expected to be used for more than one year;
- Consistent with the Power Market Tariff Methodology and other rules adopted by the Power Market Regulator.

PP&E that is related to Non-regulated activity is defined by USoA as any other than stated above long-term tangible asset.

2.4 Instructuons on the Revenues, Cost and Expenses

The Revenue under Unified System of Accounting for Power Market Regulated Companies shall be treated in accordance with the IAS 18 'Revenues'.

The Regulated Revenue under USoA shall be consistent with the Tariff Methodology and other rules.

Regulated Revenue for Power Market Company is the gross inflow of economic benefits during the tariff regulatory period arising in the course of the regulated ordinary power market activities when those inflows result in increases in equity, other than increases relating to contributions from equity participants.

Regulatory Value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing Power Market parties in accordance with the regulation set by Power Sector Regulator.

Regulated Revenue includes only the gross inflows of economic benefits received and receivable by the Power Market entity on its own account. Sales taxes, goods and services taxes, value added taxes, and amounts collected on behalf of principal or any other third parties shall be excluded from Regulated Revenue.

Regulated Revenue shall be measured at the regulatory value of the consideration received or receivable taking into account the tariff methodology approved by Power Sector Regulator.

The amount of regulated revenue arising on a transaction is usually determined by the agreement between the Power Market Entity and the buyer or user of the electricity.

The swap of electricity is not considered as revenue.

USoA identifies the following Revenue centers as Power Market Activity as follows:

- Dispatch
- Transmission
- Distribution (Network)
- Distribution (Supply)
- Generation

There is separate type of Power Market activity as:

- Other

Each Activity as the Regulatory Revenue Center is the aggregation of embedded subgroups of revenue type.

USoA distinguishes the revenue type by the tariff set by Power Market Regulator.

Company shall maintain the breakdown of revenue by type and disclose it in the accounting policy individually if no other regulation for revenue accounting set by Power Market Regulator.

A Regulated Power Market Company shall disclose:

- The accounting policies adopted for the recognition of regulated revenue, including the methods adopted for metering and billing if it is not set by the Regulator;
- The amount of each significant category of revenue recognized during Regulatory reporting period if it is not set by the Regulator.
- The amount of Regulated Revenue included in each disclosed category.

III. Reporting Forms

3.1 Annual and Quarterly Financial Reporting Forms

The forms are based on the accounts of the company (in accordance with the adopted CoA) and filed with the GNERC each year and the Regulatory Body sets minimum reporting requirements to electricity licensed companies. Hereby stipulated forms are designated to monitor regulated companies and access their financial health and performance during the reporting period.

The license holders to whom this instructions apply are:

- Dispatch company
- Transmission companies
- Electricity Distribution (network) companies
- Electricity Distribution (supply) companies
- Generators, to whom GNERC sets tariffs

Electricity sector companies must complete and submit the annual and quarterly reporting forms specified by this document.

- Each Company shall submit annual reports by the 30th of April of the following year;
- Each Company shall submit quarterly reports by the 30th day of the following quarter.

All reports must be signed by both the general and financial authority of the Company. The Company has right to authorize a person to submit reports.

All submitted forms must contain name, position and valid contact information of person who is authorized and able to provide additional clarification regarding the report in case of additional questions raised from the side of regulator.

The full set of reporting annual form consist of following sections:

- Company information and data

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- Financial forms
- Non-financial forms (forms supporting for tariff calculation verification, benchmarking and sound database creation purposes).

If the Company holds more than one license it should provide combined reporting forms as well.

The Company as a minimum requirement must include information stipulated by regulator in given instructions. Those forms are:

1. Organizational Chart
2. Depreciation study.

3.2 Financial Forms

Financial reporting requirements refers to all entities listed in section 3.1, if not specified particular eligible entities.

The main purpose of financial reporting forms is to provide unbiased financial information of financial position and performance of the licensed company. Reporting should ensure, that other non-regulated activities are not subsidized with rate-payers money and that all transactions are carried out at open, prudent and value for money principles.

A licensed company shall provide the Board annually audited financial statements for the preceding calendar year for the corporate entity regulated by the GNERC. The distributor shall disclose the information about operating segment (IFRS 8 'Operating segments') whether there is a non-regulated business or more than one activity is regulated. The audited financial statements for reported year shall be submitted by April 30 of the next year.

The reprting forms are grouped by type of power market activity having identical numbering and, thus, meaning of tables as follows:

1 - Income statement for regulatory purposes;
2 - Statement of financial position for regulatory purposes;
3 - Regulatory fixed assets movement;
4 - Regulatory expense breakdown by nature;
5 - Property plant and equipment breakdown by plant assignment - applicable to electricity transmission, dispatch, generation and distribution companies;
6 - Trial Balance; and,
7 – CAPEX form.

Each reporting form consists of given cumulative headings and exact references to USOA accounts. The account shall be matched with the particular item of the report. For exact reference purposes, each account of COA has status of heading or entry account. If account status is 'heading account' under it there should be entry accounts definitely. Entry account is final, ultimate, level of accounting entries for USOA purposes.

3.3 Non-Financial Forms

Non-financial forms are additional information supporting the regulator in sound judgment and setting just and reasonable tariffs.

The reporting forms are grouped by type of power market activity having identical numbering and, thus, meaning of tables as follows:

1.Transmission system data applicable to transmission and distribution companies;
2. Electricity production info applicable to electricity production power plants;
3. Organizational Chart;
4. Staff Information Form;
5. Depreciation study report.

IV. Acknowledgments

By considering social or economic situation in the country, the regulation of natural monopolies of electricity sector, tariff regulation of electricity distribution companies is particularly actual because of increased interest of the society and the established tariffs by the regulatory body always becomes the subject of dispute and judgment for the distribution company and a large part of population as well. The amount of tariff for the licensee of the electricity distribution largely depends on the amount of reasonable and rational operating and capital expenditures determined by the regulatory body. Based on this, it is urgent to determine the necessary actions which are needed for the development of certain regulations and standardized approaches for the purpose of the introduction of the regulatory audit. Determination of the principles of the cost audit of natural monopolies of the energy sector is of special need for regulatory purposes in order the general entry given in the Law of Georgia about "Electricity and Natural Gas" – "rational and reasonable costs" to be reflected in the tariff - to be included in the frame of certain regulations/explanations and the Licensee company should be initially informed about permitted appropriate or inappropriate costs and the user should be informed about the expenses reflected in the tariff by keeping transparent and above principles in order to identify the types of acceptable or unacceptable expenditures within the structure of the tariff. Based on these factors, the research of the problem under the project will have both theoretical and practical importance.

V. Conclusions

Different types of users may need electricity with different technical specifications (voltage, service quality). Accordingly, the electricity consumed by them is different. There may be many categories of such users and their differentiation is carried out mainly by the technical specification of the electricity consumed by them but it is necessary to identify and group the costs of network development or operation related to technical specifications into "attributable" for each category and "common" costs for all categories in which the distribution of common costs for the users of all categories require the methodology based on certain logics.

The most important issue is the development of the logical principles of the identification of similar costs and their further distribution which should be in compliance with the directives and regulations of Energy Package 3.

The USoA is a good tool for financial management of the utilities and without exception, the increased level of information provided by the USoA to utility management

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allows for better cost control and insights on the efficiency of their companies.

REFERENCES

[1] "Law of Georgia on Electricity and Natural Gas" No 1934 of 30 April 1999 - LHG I, No 15(22), 14.5.1999, Art. 63;
[2] "Tariff Setting Methodology for Electricity Distribution, Pass through and Consumption Tariffs" Approved by Georgian National Energy and Water Supply Regulatory Commission, Resolution N14, July 30, 2014
[3] Chris Harris, "Electricity Markets, Pricing Structures and Economics", 2006, The Wiley Finance Series.
[4] Deloitte Consulting Overseas Projects LLC Branch in Georgia
[5] Gomez San Roman, Tomas. "The Economics of Regulation: Monopolistic Activities."
[6] Petrov Constantin, Nunes Rosaria – "Electricity Markets Regulation", 2009.
[7] Rivier, Michel. "Electricity Power Transmission." Regulation of Energy Utilities Training Course. Florence, Italy: Florence School of Regulation, 2009.
[8] Prof. Ignacio L. Perez-Ariagga, "Engineering, Economics & Regulation of the Electric Power Sector", Spring 2010; session 5&6, P 4.
[9] "Study on tariff design for distribution systems" prepared for European Commissio, DG Energy to the consortium of AF-Mercados, REF-E and Indra, January 28, 2015.
[10] № 41 Resolution of Georgian National Energy and Water Supply Regulatory Commission, 2016, December 27.
[11] Steven Stoft, "Power System Economics", 2002.
[12] Benchmark Regulation and Efficiency of Electrisity Distribution, Hugh Rudnik, Bonn, April 25-26, 2016.
[13] Regulation of Electrisity Distribution Business, Satu Viljainen, Kaisa Tahvanainen, Jukka Lassila, Lappeenranta University of Technology, 2014.
[14] Directive 2009/72/EC concerning common rules for internal market in electricity.
[15] Unbundling of Electrisity and Gas Transmission and Distribution System Operators, Finla Report, 205/December 5.
[16] Energy Management Handbook, Sixth Edition, Wayne C. Turner, Steve Doty, 2006.
[17] Method to Estimate the Costs and Benefits of Undergrounding Electricity Transmission and Distribution lines, Peter H. Larsen, Lawrence Berkeley National Laboratory and Stanford University, October 2016.
[18] www.matsne.gov.ge
[19] www.gnerc.org
[20] www.economy.ge
[21] www.energy.gov.ge
[22] www.energy-community.org

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