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ENERGY REGULATORY OFFICE



Asset categories and asset lives

Responses to Comments

Periodic Review of Input Values for TSO/MO and DSO

(2018-2022)

DISCLAIMER

This Report of Responses was prepared by ERO with the purpose of informing stakeholders in energy sector. The report does not represent a decision of ERO and shall not be interpreted as such.

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1 Introduction

Energy Regulatory Office (ERO) is carrying out the Periodic Review for the Second Regulatory Period (PRR2) to determine the Maximum Allowed Revenues (MAR) for Transmission System Operator (TSO), Market Operator (MO) and Distribution System Operator (DSO) for the period 1 April 2018 until 31 March 2023. KOSTT JSC carries out the activity of the TSO/MO, whereas KEDS JSC that of the DSO. The current regulated revenues were established for the First Periodic Review 2013-2017 in 2013 (PRR1).

As part of this review, ERO will determine in advance a number of input values for the calculation of MAR in order to provide adequate time for their public consultation. The same practice was applied during PRR1. The input values in question are:

- The starting level and expected rate of loss reductions in the Transmission and Distribution System.
- Expected Rate of efficiency in operational costs of TSO/MO and DSO.
- Weighted Average Cost of Capital (WACC) of TSO/MO and DSO, which is the subject of this Report of Responses.
- **The lives of assets which will be used for the purposes of calculating the regulatory depreciation of new investments.**

ERO published the Consultation Report with its proposals on assets lives and categories on 4 July 2017. KEDS was the only party which provided comments on Asset Lives Report. The comments of KEDS are published on the official website of ERO along with this report.

This Report of Responses summarizes the comments received from KEDS on the proposed lives and categories of assets for the Regulatory Period PRR2 and ERO's responses on them.

Following the publication of this report, ERO Board will review and carry out the final determination of Asset Lives to be included in the calculation of MAR for DSO and TSO for the Regulatory Period of PRR2.

Relevant documents

| | |
|--------------------------------------|---|
| Law No. 05/L - 085 on Electricity | http://ero-ks.org/2016/Ligjet/LIGJI_PER_ENERGJINE_ELEKTRIKE_ang.pdf |
| Law No. 05/L-084 on Energy Regulator | http://ero-ks.org/2016/Ligjet/LIGJI_PER_RREGULLATORIN_E_ENERGJISE_ang.pdf |
| Rule on TSO/MO Revenues | http://ero-ks.org/2017/Rregullat/TSO-MO%20Pricing%20Rule.pdf |
| Rule on DSO Revenues | http://ero-ks.org/2017/Rregullat/DSO_Pricing_Rule.pdf |



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| ERO's Consultation Report | http://ero-ks.org/2017/Tarifati/Raport_Konsultativ_per_jetegjatesine_e_aseteve_04072017.pdf |
| KEDS Comments on the Consultation Report | http://ero-ks.org/2017/Tarifati/Komentet%20ndaj%20Raportit%20Konsultative%20t%C3%AB%20ZRRE%20per%20jetegjatesin%20e%20aseteve_KEDS.pdf |

2 DSO asset lives and categories

2.1 Summary of KEDS comments

In its comments, KEDS provided the following arguments:

- KEDS proposes that a new category of assets is listed for the Low Voltage (LV) network and its related equipment. KEDS proposal is that the LV network depreciates at faster pace than the Medium Voltage (MV) network. Therefore, KEDS proposes that a shorter asset life of 20 years is applied for the proposed LV category of assets.
- KEDS proposes that a new category of assets is included for measuring devices. KEDS notes that the asset lives of meters and measuring devices must be in line with the provisions stipulated in the Metering Code which, according to KEDS, requires that measuring devices are calibrated every eight years.
- KEDS proposed that the asset lives of office equipment and furniture be reduced to 5 years, as opposed to ERO's current proposal of 7 years.
- KEDS also proposes that the IT and software asset lives is reduced to three years compared to ERO's current proposal of 5 years. KEDS argument is that the software needs to be up to date with the changing requirements of power systems.
- Most significantly, KEDS proposes that the new proposed categories are applied to existing assets as well. Although KEDS recognizes this is a burdensome exercise, it notes this can be done with the human capacities and IT resources that KEDS has on its disposal. KEDS notes that this enables parties to review and compare the asset lives and increases transparency to the Regulatory Asset Base.



2.2 Summary of KOSTT comments

Following the analysis of the proposals derived from the Consultation Report on Asset Lives and Categories, KOSTT agreed with the evaluations of ERO, except for pillars which shall be in the same category with the high voltage network, which were expressed by KOSTT during discussions.

In this Report, ERO reviews KEDS and KOSTT proposals on asset lives and categorization. ERO's conclusions are provided at the end of this report.

3 ERO's position on KEDS comments

3.1 The lifespan of low voltage assets

Regulatory policies and accounting evaluations for the lives and depreciation of material assets, in addition to being based on International Accounting Standards, international regulators' experience, also take into account benchmarking methods.

ERO has carefully analysed the proposal of KEDS and based on the data and information provided, agrees to have another category for the LV network and its relevant equipment and the lives of assets to be 25 years. Based on measurements and studies, it has been estimated by companies and regulators that the life of cables is 20-40 years, while that of transformers 25-30 years.

ERO agrees to have a new category of assets "category III", which will include: LV networks, substations, power transformers, and equipment with a lifespan of 25 years.

3.2 Asset lives of meters and metering devices

ERO, in order to more accurately evaluate this input, following the publication of the Consultation Report on Asset Categories and Asset Lives, has requested from KEDS JSC additional information regarding the lifespan of meters according to their type as specified by the manufacturer.

KEDS JSC submitted to ERO the detailed table on the lives of meters, the related calibration cost and the cost of changing the battery. It has also attached the requests of MTI for the calibration of the meter, "Administrative Instruction (MTI) No.02 / 2015" for the verification period of legal measuring instruments, the way of implementation and the re-calibration periods for the etalons which are used for the verification of legal measuring instruments.

ERO analysed the data provided by KEDS where depending on the type and manufacturer, the lives of meters (ACTARIS, ISKRA, ZPA, LUNA, LANDIS+GYR) are 15-20 years. Battery life is 10 years in most manufacturers, but some manufacturers have batteries with a lifespan of 15-20 years. Regarding the validity of the recalibration according to the Administrative Instruction (MTI) No.02 / 2015, the recalibration must be carried out every 8 years with the exception of indirect units (HI/I and HI) of the manufacturer Iskra and LANDIS + GYR where recalibration is required every 6 years.



ERO maintains the same position as in the Consultation Report where the meters will have a lifespan of 10 years and does not consider arguments related to calibration as grounded, as they are not included in the category of depreciation costs.

3.3 Office equipment and office furniture asset lives

KEDS did not provide convincing arguments for reducing the life expectancy to 5 years for the category of office equipment and furniture, therefore ERO will maintain its position presented in the consultation report where this category will have a life expectancy of 7 years. Such a decision is also based on the categorization of their lifespan by public institutions.

It should be emphasized that KOSTT has agreed with the position of ERO and a consistent position will be maintained for the energy sector.

3.4 IT equipment asset lives

ERO will maintain its position regarding the lifetime of IT assets, based on the technical lifespan recommended by the manufacturers, International Accounting Standards as well as regulators' evaluations. Furthermore, KEDS did not provide arguments for a lower life expectancy, while KOSTT agreed with ERO's proposal.

Therefore, ERO proposes to continue with the lifespan of IT equipment of 5 years.

3.5 Revising the asset lives of existing assets

Changing the life of an existing asset base would be a very complex process and inconsistent with ERO's ongoing views on basic regulatory principles. PRR1 determinations are made in a transparent process in consultation with licensees and the public, therefore ERO sees no reason to change a decision which has been taken in this way. Furthermore, ERO with the Regulatory Accounting Instructions has clarified this issue where it is quoted *“For the purpose of calculating the regulatory asset base, licensees may calculate the depreciation of capital expenditures related to prior regulatory periods using an average residual asset life for each asset category, rather than holding the depreciation on an annual basis according to historical capital expenditures. During the calculation of the average remaining lifespan of assets for each category of assets, the licensee must ensure that the value of depreciation allowed for the regulatory period is unchanged.”*

ERO proposes not to accept KEDS 'proposal regarding existing assets.

4 ERO's position on TSO/MO Comments

ERO received from KOSTT a summarized document of comments on all input values where in relation to the lifespan of assets, agreed with most of ERO views.

ERO has reviewed the only comment of KOSTT regarding the categorization of pillars and proposes to accept the comment as grounded by placing the "pillars" in the category of High Voltage network (category II) which will have a lifespan of 40 years.



5 Proposals of assets lives and categorization of TSO/MO and DSO assets

ERO, following the analysis of comments received from KEDS and KOSTT has determined the input values for categorization of assets and lifespan of assets for the Regulatory Period of PRR2.

The proposed categories of assets and their lifespan are presented in the following table.

Table 1: Transmission asset categories and lives proposed for KOSTT

| Assets | | Asset life (years) |
|--------|---|--------------------|
| I | Buildings, roads, sewerage networks, water supply, wells, lifts | 50 |
| II | HV network, pillars | 40 |
| III | Low voltage network, substations, transformers, etc. | 30 |
| IV | Trucks, cherry pickers and working machinery | 10 |
| V | Control and telecommunication, various equipment, fire protection | 8 |
| VI | Furniture, office equipment | 7 |
| VII | IT equipment, software, patents, licenses, cars etc. | 5 |

Table 2: Distribution asset categories and lives proposed for KEDS

| Assets | | Asset life (years) |
|--------|---|--------------------|
| I | Administration buildings | 50 |
| II | MV networks, substations, power transformers and equipment | 30 |
| III | LV networks, substations, power transformers and equipment | 25 |
| IV | Transformer stations (EMT and VMT) ¹ and equipment | 15 |
| V | Metering devices and equipment, trucks, cherry pickers and working machinery | 10 |
| VI | Furniture, office equipment | 7 |
| VII | Working Equipment, metering equipment and devices, cars, computers, IT equipment, software, furniture, office equipment | 5 |

¹ EMT and VMT are Energy Metering Transformers and Voltage Metering Transformers