

OPEX review techniques, efficiency and quality factors

Rimas Valungevičius,
Director of gas and electricity department, NERC Lithuania

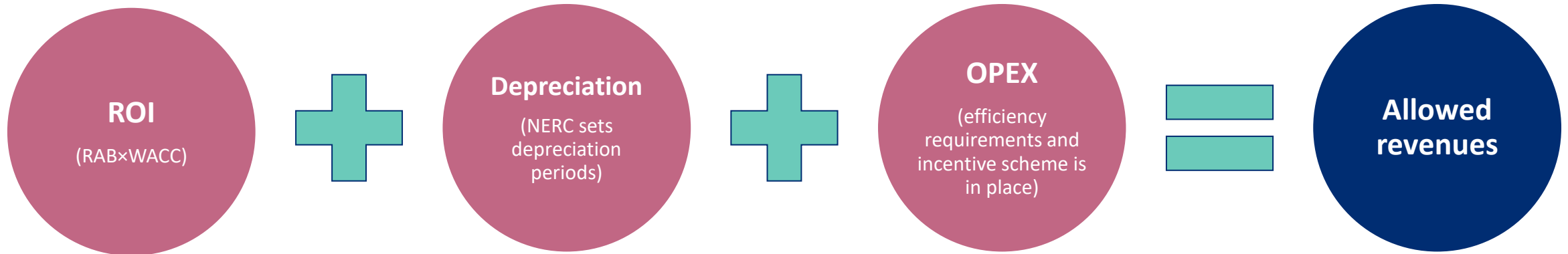


- The main price setting principles;
- Opex review technique and practical example;
- Efficiency and quality factors;

Pricing principles for regulated activities

Regulatory period	Council sets revenue cap for 5 years regulatory period
Adjustments	Revenue cap is annually adjusted (for inflation, investment, changes in volumes);
Investments	The regulated prices include only investments approved by the Council
Allowed revenues	Allowed revenues should ensure the effective implementation of regulated activities by the company;
ROI	The allowable ROI is set (if the company earns higher profit, the correction applies)

Revenue cap calculation



Determination of OPEX (1)

Determination of OPEX for the regulatory period:

- **OPEX (without wages)** forecasted according to the inflation minus efficiency ratio.
- **OPEX (wages)** forecasted according to the projected change of real average wage, minus efficiency ratio.

Determination of OPEX (2)

Data used to calculate OPEX for the regulatory period:

- The costs determined by the Council for the 4th year of the previous regulatory period or the actual reasonable annual size of these costs;
- Reasonable cost level evaluated during the audit (evaluated by Commission);
- Significant reasons which could affect the size and structure of costs;
- The number of employees at the beginning of regulatory period (provided by regulated companies);
- Macroeconomic indicators (inflation, wage growth) published by Ministry of Finance.

Efficiency ratio and others efficiency factors

- OPEX (without wages) efficiency ratio – 1 %;
- OPEX (wages) efficiency ratio for current regulatory period – 1 % , from the next regulatory period 1,5%;
- If the operator reduces OPEX (both) and makes appropriate decisions NRA could increase ROI (50%) from the saved amount;
- NRA evaluate regulated company indicated savings when NRA takes decision on investment decision.

Practical example of OPEX calculation (1) NATIONAL ENERGY REGULATORY COUNCIL

OPEX (without wages) setting for 2019-2023 regulatory period:

2017 approved cost: 11,16 mEur;

2017 factual cost: 8,1 mEur;

$$OPEX_{2019} = 8\,103\,878 \times \left(1 + \frac{3,9-1}{100}\right) \times \left(1 + \frac{2,5-1}{100}\right) = 8\,463\,974 \text{Eur}$$

$$OPEX_{2020} = 8\,463\,974 \times \left(1 + \frac{2,7-1}{100}\right) = 8\,607\,862 \text{Eur}$$

$$OPEX_{2021} = 8\,607\,862 \times \left(1 + \frac{1,3-1}{100}\right) = 8\,639\,048 \text{Eur}$$

$$OPEX_{2022} = 8\,639\,048 \times \left(1 + \frac{5,3-1}{100}\right) = 9\,010\,527 \text{Eur}$$

$$OPEX_{2023} = 9\,010\,527 \times \left(1 + \frac{22,4-1}{100}\right) = 10\,938\,780 \text{Eur}$$

Practical example of OPEX calculation (2)

OPEX (wages) setting for 2019-2023 regulatory period:

2017 approved cost: 19,6 mEur;

2017 factual cost: 11,23 mEur;

$$OPEX_{2019} = 11\,232\,311 \times \left(1 + \frac{8,9-1}{100}\right) \times \left(1 + \frac{7,5-1}{100}\right) = 12\,907\,442 \text{ Eur}$$

$$OPEX_{2020} = 11\,232\,311 \times \left(1 + \frac{10-1}{100}\right) \times \left(1 + \frac{8,3-1}{100}\right) \times \left(1 + \frac{7,4-1}{100}\right) = 13\,977\,741 \text{ Eur}$$

$$OPEX_{2021} = 11\,232\,311 \times \left(1 + \frac{10-1}{100}\right) \times \left(1 + \frac{8,8-1}{100}\right) \times \left(1 + \frac{6,5-1}{100}\right) \times \left(1 + \frac{3,3-1}{100}\right) = 14\,244\,345 \text{ Eur}$$

$$OPEX_{2022} = 11\,232\,311 \times \left(1 + \frac{10-1}{100}\right) \times \left(1 + \frac{8,8-1}{100}\right) \times \left(1 + \frac{10,2-1}{100}\right) \times \left(1 + \frac{9-1}{100}\right) \times \left(1 + \frac{8-1}{100}\right) = 16\,654\,997 \text{ Eur}$$

$$OPEX_{2023} = 11\,232\,311 \times \left(1 + \frac{10-1}{100}\right) \times \left(1 + \frac{8,8-1}{100}\right) \times \left(1 + \frac{10,2-1}{100}\right) \times \left(1 + \frac{10,6-1}{100}\right) \times \left(1 + \frac{12-1}{100}\right) \times \left(1 + \frac{8,1-1}{100}\right) = 18\,778\,463$$

Eur

NERC sets the minimum levels of the reliability indicators for natural gas (SAIDI; SAIFI);

The actual ROI of gas transmission and distribution services must be reduced:

- by 1% (for each reliability indicator between 5-10% worse than the level set by NERC);
- by 2% (for each reliability indicator more than 10% worse than the level set by NERC).



**THANK YOU
FOR YOUR ATTENTION!**

rimas.valungevicius@vert.lt