



## Cost-Reflective Tariff Toolkit

March 2024

With the support of the United States Agency for International Development (USAID) Energy Division, Energy Division, Center for Environment, Energy, and Infrastructure, Bureau for Development, Democracy, and Innovation (DDI), the National Association of Regulatory Utility Commissioners (NARUC) has developed a Cost-Reflective Tariff Toolkit consisting of a series of primers focusing on the regulator's role in achieving cost-reflective tariffs.

Establishing a sound economic basis for energy prices is one of the most critical functions of the energy regulator. Energy pricing has broad implications for the health of both national utility sectors and economies – for example, cost-reflective pricing allows for both economic viability and incentive for new entrants to enter the supply market. It also encourages competition between suppliers and increased investment in energy generation, resulting in a more stable and secure electricity supply. Existing inefficiencies in energy systems across the globe reinforce the need for stronger efforts to establish cost-reflective tariffs and financially sustainable electricity sectors.

Each primer described below is short and practical, and is meant to be used by utility regulators in emerging economies to spur private investment through designing rates that are based on actual cost of service and current best practices. For more information on these primers, please contact [international@naruc.org](mailto:international@naruc.org).

### Promoting Transparency and Public Participation in Energy Regulation: A Communications Primer for Utility Regulators



The objective of this primer is to guide utility service regulators around the world in the development of communications strategies for engaging members of the general public and key stakeholders.

It focuses on developing a set of recommendations that regulators in countries with emerging economies may want to consider when designing a communications strategy for engaging the public and key stakeholders. This set of recommendations is based on U.S. utility service regulators' practices in communicating with the public at large during their review of a utility's application for a change in tariff. Furthermore, the recommendations include minor adjustments to incorporate regional differences between the U.S. and countries with emerging economies.

Read it [here](#).

### Regulatory Accounting: A Primer for Utility Regulators

This primer is a guide to the structure and function of a system of accounts that regulated utilities can use to ensure they are accurately recording and categorizing financial transactions and presenting coherent data to the regulator. It describes the characteristics and value of a sound accounting system, presents in broad outline and detailed examples the Uniform System of Accounts, and offers



suggestions for how to implement a sound utility system where, as may be the case, the existing system is incomplete, inaccurate, or otherwise inadequate to serve the regulator's needs.

Read it [here](#).

### A Cost of Capital and Capital Markets Primer for Utility Regulators



This primer is a guide to helping utility regulators around the world understand the capital markets and estimate the cost of capital, which is one of the elements of effective cost-based ratemaking and developing cost-reflective tariffs. It describes capital markets and a set of pathways that regulators in countries with emerging economies may want to consider when estimating the cost of capital for use to determine the utility revenue requirement in ratemaking. This set of pathways is based on U.S. utility

regulators' practices in estimating the cost of capital. Furthermore, the pathways include some observations to incorporate regional differences between the U.S. and countries with emerging economies.

Additionally, this primer features two annexes – Annex 1 features a case study, and Annex 2 focuses on return on equity (ROE) incentives.

Read it [here](#).

### Rate Design for Cost-Reflective Tariffs

This primer is a resource for electricity regulators and utilities outlining the fundamental principles of cost-reflective rate design and describing key rate design processes. Additionally, it offers regulators and utilities a practical guide for adopting, reviewing, and assessing rate structures based on core principles, international case studies, and widely accepted practices. It is divided into four key sections:



Section 1: Provides an overview of the principles of rate design

Section 2: Explores key concepts and processes associated with rate design

Section 3: Discusses common rate structures and their various pros and cons

Section 4: Explores several issues in rate design that often arise in emerging markets

Read it [here](#).

### Primer on Primary Drivers of Electricity Tariffs for Utility Regulators



This primer is meant to help utility regulators around the world understand the primary drivers of electricity tariffs based on the revenue requirement concept, with a specific focus on the expenses that are incorporated into revenue requirements. These components are primary drivers of effective cost-based ratemaking and developing cost-reflective tariffs.

In addition, it contains an annex featuring a case study on the tariff-setting process of Uganda, which describes how the Uganda Electricity Regulatory Authority (ERA) approves cost-reflective electricity tariffs by incorporating expenses and rate base items into revenue requirements for its regulated entities. Read it [here](#).

## Depreciation Expense: A Primer for Utility Regulators

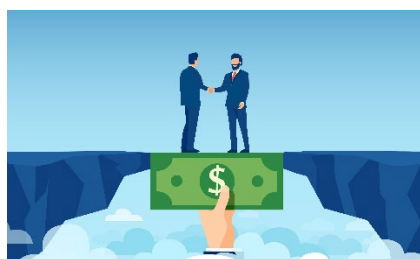
This primer is designed to assist energy regulators working in emerging economies with building their understanding and knowledge of key concepts related to depreciation. It presents key factors affecting allowed depreciation costs as well as alternative approaches and regulatory considerations when determining allowed depreciation in the context of cost-reflective tariffs for regulated entities operating in monopolistic market segments (e.g., network companies).



In addition, it contains two annexes. Annex I presents numerical examples, while Annex II provides case studies of how regulators in Georgia and Tanzania determine allowed depreciation for electricity transmission systems as part of the utility's tariff-setting process.

Read it [here](#).

## Primer on the Impact and Treatment of Grants, Donor Assistance, and Concessional Financing



This primer is designed as a resource to increase knowledge and equip decision makers with an understanding of the importance and impact of donor-financed assets on the tariff setting process in emerging economies.

It also provides key criteria that regulators can use to determine their best individual solution when choosing concessional finance products and offers examples of how utility regulators in countries with emerging markets have treated donor-financed assets in tariff setting.

Read it [here](#).

## The Impact of Electricity Tariff Reforms on Infrastructure Investment and Economic Development

This primer discusses the impact of electricity tariff reforms on a country's economic development. The implementation of cost-reflective tariffs, based on sound economic principles, ensures that the appropriate incentives are in place for attracting investments in the sector, as well as for safeguarding the financial viability of the electricity sector.

It is divided into the following key sections:

Section 2: Electricity and economic development

Section 3: The benefits of cost-reflective pricing

Section 4: Transition toward cost reflectivity

Section 5: Recommendations for tariff reforms

Section 6: Final remarks

Access the primer [here](#).

