

A utility approach to accelerate universal electricity access in less developed countries: a regulatory proposal

I.J. Pérez-Arriaga, R.J. Stoner, R. Rahnama, S.J. Lee, G. Jacquot, E. Protzer, A. González-García, R. Amatya, M. Brusnahan, P. Dueñas

Abstract— We propose a high-level definition of a large-scale business model designed to accelerate electricity access and attract corporate investment in electrification in developing countries. The model is based on the findings of an investigation of the factors underlying the low level of electricity access in a large number of developing countries, and an examination of practical alternative business models to replace the nearly universal government-owned power company model. Our proposal - the Electricity Company of the Future, ECoF - seeks to address the existing problems that cripple the incumbent power companies and discourage further investment. The ECoF is built around the concept of an enhanced distribution utility we term the «Integrated Distribution Company» (IDC), incorporating a wide variety of additional context-dependent activities including, for example, operating and investing in generation and transmission, operating battery charging stations, and manufacturing and selling appliances. The ECoF does not necessarily have to cover the entire ensemble of activities needed for electricity supply - its fundamental role is to provide electricity services in underserved areas. The structure and scope of the company should be adapted and implemented differently in each country.

Index Terms— electricity, infrastructure, regulation, development

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