



The Philippine electricity sector reform and the urban question

Morgan Mouton

► To cite this version:

Morgan Mouton. The Philippine electricity sector reform and the urban question: How metro Manila's utility is tackling urban poverty. Energy Policy, 2015, Urban energy governance: local actions, capacities and politics, 78, pp.225-234. 10.1016/j.enpol.2014.11.005 . hal-01254042

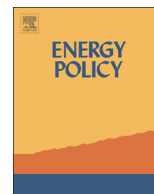
HAL Id: hal-01254042

<https://hal.science/hal-01254042>

Submitted on 2 Feb 2016

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



The Philippine electricity sector reform and the urban question: How metro Manila's utility is tackling urban poverty



Morgan Mouton

LATTS – Université Paris-Est, 14/20 Boulevard Newton, Cité Descartes, Champs-sur-Marne, 77447 Marne-la-Vallée Cedex 2, France

HIGHLIGHTS

- The electricity reform did not take the urban poor into consideration.
- The state retreated from issues of electrification.
- Decentralisation favoured the emergence of new, local actors for this aspect of energy policy.
- The distribution utility is left with an increased power over issues of access to electricity.
- Territorially and qualitatively, electrification programs are more diverse.

ARTICLE INFO

Article history:

Received 3 May 2014

Received in revised form

11 September 2014

Accepted 3 November 2014

Available online 15 December 2014

Keywords:

Urban poor
Electrification
Philippines

ABSTRACT

In the early 2000s, the Philippine government reformed its electricity sector following neoliberal principles: unbundling of the power industry, privatisation of assets and commodification of electricity. This paper shows that the reform was primarily driven by the need to secure electricity supply and cut down tariffs. These national objectives ousted other issues, and notably those that find their expression at the urban level, among which the question of access to electricity in Metro Manila's urban poor communities. The central state withdrew its attention from the issue of electrification, and local actors had to react as they were confronted to social tensions and practices of pilferage. As a consequence, city governments and local administrations are getting involved in this issue, which opens the way to participation of civil society. This paper shows how the “rolling back” of the central state led to new partnerships and arrangements between the distribution utility, local governments and community organisations. This movement points to an urbanisation of energy issues, which could bring positive results for end-users provided that it is accompanied by a clearer regulatory framework.

© 2014 Elsevier Ltd. All rights reserved.

1. Introduction

In the aftermath of the power crisis that occurred in the Philippines at the end of the 1980s and through most of the 1990s, a reform of the sector's industry was draughted in the hope to shelter the country against the shortage of electricity supply it had been experiencing. This choice of a new model of regulation has placed the Philippines at the centre of the heated debate between the advocates of the so-called “neoliberal” model of regulation, and

those who insist on the irreplaceable social function of state-owned actors in this critical industry (McDonald, 2009). The justification of our use of the term “neoliberal” in order to characterise the Philippine reform is twofold. First, the reform was encouraged by actors that have long been associated with this school of thought, notably the World Bank (Bayliss et al., 2011) and the Asian Development Bank (ADB), through advisory work and loan requirements.¹ Second, the content of the reform is in line with

Abbreviations: ADB, Asian Development Bank; BOT, Build–Operate–Transfer; DAEP, Depressed Areas Electrification Programme; DoE, Department of Energy; DU, Distribution Utility; EMC, Elevated Metering Cluster; ERC, Energy Regulatory Commission; IPP, Independent Power Producer; LGU, Local Government Unit; Meralco, Manila Electric Railroad and Light Company; NASECORE, National Association of Electricity Consumers for Reforms; NPC, National Power Company; NCR, National Capital Region; NGO, Non-Governmental Organisation; Transco, National Transmission Corporation; WESM, Wholesale Electricity Spot Market

E-mail address: morgan.mouton@enpc.fr

¹ The well-known World Bank (1993) paper *The World Bank's role in the electric power sector: policies for effective institutional, regulatory, and financial reform* received a lot of attention from Philippine policymakers. Beyond their mere influence, these two institutions had a more direct involvement in the reform with two loans that set precise requirements: a 1984 WB loan of USD 300 million required the adoption of laws on privatisation (that came to be Presidential Decrees 2029 and 2030), and a 1998 ADB loan (supported by the WB and the IMF) of another USD 300 million targeted more specifically the electricity sector. The second part of it was not made available before the EPIRA was adopted (Bello, 2005).

what Victor and Heller (2007) have termed the “textbook model” of electricity reform.²

There were two main concerns at the time of the reform: security of supply and tariffs. As a consequence, a lot of issues were left aside by the EPIRA, and notably problems that arise in urban poor communities such as electrification, electricity theft, or the politicisation of tariffs. While the urban poor³ living in low-income and often untitled areas constitute a significant proportion of Metro Manila's inhabitants – it is estimated that one in ten inhabitants lives in an informal settlement in the National Capital Region (NCR) (Porio, 2002, 2012) – they were overlooked by a legislation that hardly took notice of their situation. Such lack of attention has been observed before in a number of studies focusing on the outcome of neoliberal reforms for the urban poor (Baron and Peyroux, 2011). Soon after the implementation of these new schemes, the social dimension of service provision was re-discovered as public authorities had to face the social tensions produced by inadequate access to utilities, as well as the risk of tampering, theft and disconnections destabilising the network. It put into question the relevance of neoliberal reforms when tackling poverty. The World Bank itself called for a more cautious handling of reforms, stating that not all national contexts could benefit equally from privatisation and that strong regulatory mechanisms were required if access to services for all was to be achieved (World Bank, 2004). While important studies have been made in the case of water distribution (Sansom, 2006; Baruah, 2007), the electricity sector has yet to be investigated more closely, even if access to energy has been recognised as a key element for the development of urban poor communities (Tully, 2006). The precociousness of the reform make it an interesting case study in order to observe its long-term effects on electricity distribution. In addition, contrary to a majority of developing countries that have been undertaking reforms but adapting and implementing them in their own way, creating “hybrid” models (Eberhard, 2007; Gratwick and Eberhard, 2008), the Philippines have followed closely the guidelines provided by international institutions. This paper therefore aims at fuelling this debate by providing an assessment of electrification in the context of low-income areas of the Philippine national capital region.

So far, previous studies on the consequences of service privatisation and liberalisation in other national contexts have underlined two major consequences (Jaglin, 2007). First, one can observe a rescaling towards more local projects and schemes, with urban poor communities that emerge as spaces of *bricolage* and invention. Second, there is an increasing fragmentation between low-income districts when it comes to access to electricity, depending on the potential, social capital and capacity to mobilise of the population. The findings presented in this paper are consistent with these observations. The strong demand for service delivery in low-income districts used to be addressed by governmental programs, and was left unanswered when the central state stepped down from this issue in the aftermath of the reform. As a consequence, Meralco, the distribution utility, had to adapt and

change its repertoire of action by relying on new, urban actors. Local governments empowered by the politico-administrative decentralisation emerged as important stakeholders and started to take action. As a consequence, Local Governments Units (LGUs) at the level of cities and municipalities, as well as *barangay* halls⁴ at the level of districts, became involved in electrification schemes. The present paper highlights the partnerships that these local public actors form with organisations from civil society. In doing so, it adds up to a rich literature on state-community and utility-community collaborations, beyond the example of Metro Manila (Heller, 2001; Krishna, 2003). These localised institutional arrangements raise questions regarding the governance of the electricity sector, fuelling interrogations regarding an “urbanisation” of energy issues (Jaglin and Verdeil, 2013; Jaglin, 2014).

2. Methodology

This work is based upon field work of 5 months in Metro Manila, during the spring semester of 2013. It first aimed at investigating the reform in itself using the tools of public policy analysis, looking at how it had been designed and implemented, and studying its intended outcomes on urban poverty. In order to carry out this analysis, interviews were organised with key DoE and ERC officials, with Meralco executives and with stakeholders from civil society, notably the National Association of Electricity Consumers for Reforms (NASECORE). The archives of Meralco were also consulted.

The second level of analysis involved taking a closer look at electricity issues at the local level, focusing on how they were expressed and dealt with. In order to look at the implementation of electrification programs in urban poor communities, two areas were selected in Quezon City: *barangay* Payatas and *barangay* Pansol. Payatas is one of the major dumpsites of Metro Manila, and is home to one of the largest informal settlements in the metropolitan area, with an estimated 117,000 inhabitants in 2007 (Porio, 2008). While some areas of Payatas have benefitted from regularisation programs, it is still largely composed of untitled popular housing. The status of the land is mixed, with both public and private land. Pansol, on the other hand, is an example of a smaller community sheltering 725 families that was regularised in 1987, when the National Housing Authority (NHA) bought the land in order to redistribute it to its inhabitants in the form of individual lots. Most of the population is therefore eligible for receiving a proper electricity connection from the DU. Representatives from the administrations of these two urban poor communities were interviewed, and input was also collected from a handful of residents in order to corroborate the first findings.

3. In search of a national security of supply: the evolution of the Philippine electricity sector

EPIRA's draughting was carried out in a particular context: that of a past decade, the 1990s, characterised by electricity shortages. It is of paramount importance to have this element in mind in order to understand the choices made by decision-makers. This part will therefore explore the challenges related to the security of electricity provision. The second part of this section will retrace the history of the decisions taken in order to address the problem of blackouts, which eventually led to the restructuring of the electricity sector.

² Victor and Heller identify 4 core elements in the reform: ‘unbundling’, privatisation, creation of regulatory institutions (independent regulators that oversee competition and regulate the monopoly-prone segments of the sector) and creation of market (allow the market to work in the segments where competition can be introduced).

³ The term “urban poor” will be used in this paper in a broader meaning than the official Philippine definition. The National Statistical Coordination Board (NSCB) estimates that only 2.6% of the population in the NCR lives in poverty (to be compared with 18.9% at the national level). However, this figure does not grasp the full socioeconomic reality of the Philippine capital city, since it only takes into account extreme poverty: families leaving with less than PHP 20,344 per year, or US\$38 per month (US\$1 = PHP 44.709000, Bangko Sentral ng Pilipinas, 28/04/2014) for the whole family.

⁴ The *barangay* is the smallest politico-administrative unit in the Philippines.

3.1. A challenging power crisis that changed the perception of the sector

One of the main problems with electricity provision in emerging countries lies in demographics: the rapid increase of the population, notably in South-East Asia, exerts a real pressure on infrastructure and utilities in general, and electricity provision in particular (World Bank, 2005, 2010). This observation is very true in the case of the Philippines where the growth rate was as high as 3.54% in the period 1950–1955. Consequently its population quadrupled between the years 1950 and 2000, and is now reaching more than 90 million inhabitants. Given the demographic trends at work, one understands how the electricity sector failed to catch up with demand, and how blackouts became more and more frequent during the 1980s and the beginning of the 1990s. The consequences for the economy were acute. These episodes of brownout could last for up to 10 h every day, and were the direct consequence of a lack of power supply: the demand exceeded the system's capacity by 48% in 1992. Industrial areas suffered from blackouts, while shopping malls were asked to shorten their opening time by two hours. The economic cost of this failure to meet demand was estimated at US \$1.6 billion – or 1.5% of the GDP – for the year 1992 alone (Henisz and Zelner, 2001). One has to bear in mind an element of context to appreciate the seriousness of the situation: the country was seeking to achieve high economic development and attract foreign investors. In the quest for Foreign Direct Investments (FDIs), this inability to provide businesses with a stable and reliable source of electricity sent a bad signal to investors.

In order to cope with this problem, officials took measures to improve the generation capacity of the electricity sector through the fast-tracking of several power plant projects. The urgency of the situation made it necessary to make huge investments. Unfortunately the Philippines lacked the financial capacity to fulfill that on a large scale. From 1993 to 1995, the government turned more openly to the private sector and thus initiated a tendency that would lead to the EPIRA a few years later. In order to facilitate the private ownership of power plants, a legal framework had already been adopted in 1990 with the “Build–Operate–Transfer” law, which was amended in 1994. This recourse to the private sector was quite successful, if one considers that between 1992 and 1998 – the end of the crisis – the country's generation capacity increased by 5000 MW: a 70% increase in these 5 years (Sharma et al., 2004). It is clear that this power crisis durably affected the perception of the electricity sector by the elites: the public utility was considered inefficient while private companies were depicted as the country's rescuers.

3.2. The era of privatisation

The crisis put the reform of the sector on top of the decision-makers' agenda: it created a window of opportunity. By 1994, the Philippines had more than 40 contracts with Independent Power Producers (IPPs): more than the rest of the developing world as a whole (Woodhouse, 2005). While this issue was put on the agenda, policy-makers already had a solution in mind: the idea prevailed that the sector needed not only to be reformed, but also to be privatised. The DoE indeed discarded the idea of a reform without privatising the industry: “... it will not raise private capital and cash... NPC would still be dependent on the government... there will still be subsidies, distortions and political interferences... we still have to deal with government bureaucracy... one government entity will be selling to another government entity”.⁵ In this sense, the power crisis was determinant for the sector's reform. It revealed the need for a change in the industry, and set the terms of the debate for future policies.

The electricity reform is embedded in a movement of privatisation of state assets initiated by President Ramos (1992–1998). This massive privatisation of state assets comprises notably: the Philippine Airlines (1992), the Oriental Petroleum and Mining Company, the Paper Industry Corporation of the Philippines, the Philippine National Bank, the National Steel Corporation (1994) as well as most telecommunication facilities (1995). The municipal water distribution utility covering Metro Manila, the MWSS, was also privatised in 1997. To use the words of the former President, there was a will to develop a “new paradigm of governance”. The idea that state-owned enterprises (SOCs) were poorly managed and suffered from negative political influences was very present in the Philippines. Indeed, several privatisation processes shed light to this malfunctioning of SOCs, with the notable example of water distribution for instance. The public MWSS offered rates of PHP 8.78 per cubic metre prior to its privatisation, and the two winning concessionaires, *Maynilad* and *Manila Water*, offered respectively PHP 4.98 and PHP 2.32. This experience convinced the public opinion of the benefits of privatisation, and comforted the government in its position. Another element that explains this massive recourse to privatisation is exogenous, and lies in the global discourse that, at that time, encouraged such practices. The Philippine Government was indeed in close contact with the International Monetary Fund and the World Bank. The financial pressure was quite important for the Philippines at that time: if one takes the year 1998, the deficit for the Government amounted to PHP 40 billion, while the deficit for the entire public sector was PHP 73.7 billion.⁶

3.3. Implementation and assessment of the EPIRA

What is designated in this paper as the “electricity reform” refers to a series of legislative actions that aimed towards a common goal: the privatisation of the electricity industry, and the liberalisation of this sector in order to foster competition. The movement was initiated with the introduction of IPPs following the BOT law in 1990, and reached its conclusion with Republic Act No. 9136 – the EPIRA of 2001. This reform provided for the unbundling of the electricity industry, in order to allow for the privatisation of the sector. The generation segment had a mixed status before the EPIRA, with both privately run producers and NPC. The public company's assets were sold to private investors. The transmission segment is by nature different, since no competition can be introduced. The NAPOCOR division in charge of this activity became a distinct company, TransCo, which was privatised in 2003 through a concession agreement. The distribution segment was less impacted by the reforms, since Meralco was already a private entity.

The last stages of the EPIRA implementation will soon be completed: the privatisation of NPC is well-advanced (to this day, the generation assets of Luzon and the Visayas⁷ are now composed of 86.5% of privately run plants and most of the remaining state-owned plants are scheduled for privatisation in the coming year⁸), and slowly large consumers are beginning to use the WESM. As a consequence, the stakeholders have started making a first general assessment of the reform's impact. And in this regard, the EPIRA is being widely criticised in the country. The Philippines is known as the ASEAN country that has the highest electricity rates (Joint Foreign Chambers of the Philippines, 2010).⁹ Not only have the

⁶ Bello (2005, p. 168).

⁷ The two largest regions of the country, if one excludes the island of Mindanao, where political unrest largely prevents the implementation of public policies designed by the Philippine Government.

⁸ DoE (2013), slide 22.

⁹ The report shows that in 2010, the average rate for residential consumers in the Philippines amounted to 18USc/KWh (p. 122). However, note that this ranking

⁵ DoE (2001), quoted in Sharma et al. (2004), p. 7.

prices increased over time, but recent events have cast doubts on the transparency of competition in the electricity market: the Philippine Supreme Court has frozen an important rate increase from Meralco, as the DU is being investigated on alleged practices of collusion with power producers leading to artificially high power prices on the WESM (Business World, 20/01/2014; Rappler, 22/01/2014). Beyond the question of price, security of supply is also being questioned, especially if one considers the demand that is bound to increase, with the notable rise of a middle-class that distinguishes itself with new patterns of consumption, and for instance the use of air-conditioning systems (Sahakian, 2011). The country's generation capacity is still very dependent on traditional sources of energy. As of 2012, the Philippine generation capacity relies on coal (30%), hydro (22%), oil (18%), natural gas (18%) and geothermal (11%), solar and biomass representing less than 0.7% altogether (DoE, 2013). While it has been shown that the Philippines have a lot of potential when it comes to the development of solar and wind energy, the current regulatory framework has failed, so far, to attract significant private investment on renewable energies (Bakhtyar et al., 2013).

4. Urban electricity provision and poverty: the blind spot of the reforms

Following the end of Martial Law and its repressive stance towards informal settlers in 1986, quite a lot of public attention was directed towards poverty alleviation and universal access to basic services (Shatkin, 2004). The government launched programs promoting electrification, one of which will be discussed in this section. Meralco estimated in 1985 that the electrification rate in depressed areas was under 25% (Kikuchi, 1999),¹⁰ but by the end of the main electrification programme nearly all households had a connection. However the 1990s saw a change in the agenda of policymakers, and gradually the debate came to revolve exclusively around the questions of tariff and reliability of electricity provision. The electrification rate decreased in low-income areas, and an estimated 30% of the programme beneficiaries ended-up being disconnected because of back payments (Interview F).

4.1. Electrification for the urban poor: the rolling back of the central state

The Philippine State used to play a role in the promotion of access to electricity, in the more remote rural areas (it is a real issue in the Philippines, where the population is scattered in over 2000 islands) as well as in the urban centres where it was not technical but financial obstacles that posed problems. Important programs were carried out in the 1990s under the leadership of the Government, which managed to find the funding necessary for such an endeavour, and also contributed to the design and implementation of the programme through its various agencies and commissions.

The biggest of electrification programs was the *Depressed Areas Electrification Programme* (DAEP)¹¹: it was notable for two reasons. The first one was its scale: it targeted 229 “areas for priority development”, regrouping 320,000 households (exceeding the initial objective of 300,000 households) or about 2 million inhabitants.

(footnote continued)

can be questioned since it does not take into account the high level of subsidies present in other countries (Indonesia, Cambodia for instance).

¹⁰ In the Meralco franchise, the same report notes that the electrification rate was 92.9% at the time (p. 550).

¹¹ “Depressed areas” is the terminology used by the Philippine administration in order to designate informal settlements.

The second one was that it exemplified the shift in the dogma regarding popular settlements: the idea here was to provide electricity even in settlements that were located on contested land – be it public or private. It was the result of a series of meetings gathering the Meralco, the Presidential Commission on the Urban Poor (PCUP), the NHA as well as the Housing and Urban Development Coordinating Council (HUDCC), which started in 1989 (USAID, 2004). This programme was made possible by the *Japanese Bank for International Cooperation* (JBIC), which provided the necessary funds in the form of a 5066 million yen loan (USD 36.7 million).¹² The remaining 20% of the total cost were borne by Meralco. The DAEP ended in 1999, when the funds were all depleted. Its results were largely evaluated as positive, even if part of the beneficiary households later had to face disconnection because of their inability to pay the bills on time (Kikuchi, 1999; USAID, 2004).

Since the beginning of the 2000s, one can observe that the state has had a diminished role in the issue of access to electricity in popular settlements. The most important change is perhaps that now the central state does not initiate electrification programs. With the reform and the adoption of the principle of recourse to the private sector, these previous forms of public intervention have disappeared without any real alternative programs taking their place.

4.2. Tariffs and the poor

The question of access to electricity for the poorer is addressed through one policy instrument only: the creation of a subsidised tariff (see Table 1). All consumers, residential, commercial or industrial, finance it collectively, but it is limited to residential beneficiaries. This subsidy is consumption-based, and does not depend on the revenues of the household. While it targets “marginalised/low-income captive market end-users who cannot afford to pay at full cost”,¹³ it only takes into consideration the level of consumption of the household. This focus on the level of consumption is based on the premise that poorer households own less electric appliances, and therefore have a lower consumption of electricity. While this assumption is not false, this system suffers from serious shortcomings. First of all, this subsidy does not, as the law states it, target exclusively the “marginalised end-users”. Wealthy households, for instance, have secondary residences that they seldom use, and which often benefit from lifeline rates. On the contrary, in some cases poorer households have a consumption that is above the limit of the lifeline. An executive from the distribution utility (Interview F) indeed acknowledged this phenomenon, which he explained by advancing two possibilities. First of all, the size of their household is not taken into account, and therefore a family with ten members living under the same roof will consume more than a couple with no children. Second, the appliances owned by low-income earning families tend to be older, and can be less energy-efficient.

Apart from this redistribution mechanism, the social dimension of electricity distribution seems to be receiving very little attention from public authorities. The current regulatory framework in the Philippines states that the general policy is to be draughted by the *Department of Energy* (DoE). However the various officials from the Department that could be interviewed were not familiar with the question of electrification for the urban poor. It is striking that when Meralco launches an electrification programme in an urban poor community, it is not recognised as such by the DoE. The

¹² Calculated based on the average Yen/USD exchange rate for the year 1989 (¥/US\$=¥138).

¹³ Electricity Power Industry Reform Act of 2001 (Republic Act No. 9136), Rule 4 (yy).

Table 1
The lifeline subsidy scheme in the Meralco franchise area.

kWh Consumption	Lifeline discount (% of charge)
1–20	100
21–50	50
51–70	35
71–100	20

programme appears in the yearly *distribution development plan*, but it is not underlined or filed in a separate category from other extensions of the network: the public administration simply has no legibility over the electrification of depressed areas. While this issue would fall under the prerogative of the DoE, it is not considered as an issue, and it is looked over. The political vacuum created by the reform and the withdrawal of the central state from these issues has created a need for new arrangements, which involve a number of new urban actors.

5. Emerging partnerships to tackle electricity issues in low-income settlements

As the reform has left a political vacuum for urban actors to fill, this section looks at the new arrangements that have emerged in order to tackle the tensions created by the lack of access to electricity and a high incidence of pilferage.

5.1. A repositioning of actors at the urban scale after the reform

This re-emergence of urban electricity issues has an impact on the DU's behaviour, and is triggering a change in its internal policies and marketing strategies. It is visible in the domains of electrification and electricity pilferage. Although Meralco has been significantly empowered by the reform, it cannot develop its policies and projects alone and has to rely on new local partnerships. This tendency of relying on additional partners outside of state institutions is not unique to the Philippines, and has been documented in the case of other urban services (Baud et al., 2004; Sansom, 2006; Baruah, 2007). It is in line with the neoliberal framework, which promotes a reorganisation of civil society and the mobilisation of local communities in order to go along with market mechanisms (Jessop, 2002; Baron and Peyroux, 2011). In the present case study, it points to a downscaling of electricity issues, similar to what Jaglin and Verdeil (2013) have termed an "urbanisation" of the energy question. It translates into a mounting integration of energy issues within the agenda of urban actors, while in turn the traditional stakeholders of the sector are increasingly influenced by the way these new actors frame the problems and mobilise solutions.

5.1.1. Meralco: a strengthened utility that has to connect with other urban actors

When it comes to electrification, the DU has a significant room of manoeuvre. Indeed, the state has placed few constraints on Meralco. The EPIRA and its further development, the *Magna Carta* for residential consumers (2004) produced by the ERC, both mention the question of popular settlements. Article 6 of the EPIRA effectively excludes residents without security of tenure from electricity provision. The text offers a legal basis to Meralco for refusing applications in urban poor communities. This rule was the result of a lobbying from Meralco: the actors present at the time when the EPIRA was designed and passed mentioned that strict requirements (several documents testifying ownership of the occupied land have to be produced) were wanted by the DU

(Interviews C and D). This was a way for the company to "protect itself" and "not take sides in land conflicts" (Interview E).

The consequence of this rule is to position Meralco as the prime decision-maker when it comes to informal settlements, and this empowerment of the company is visible in the evolution of how electrification programs are carried out. Indeed, while they are carried out with the intervention of both the DU and the relevant LGUs, Meralco is the entity that takes the decision to do something in the first place. Beyond the mere problem of electrification, the DU also has certain autonomy when it comes to setting standards of service. The example of the visibility of the wires (whether they are hanging atop the streets or buried underground) is quite telling. The legislation hardly mentions the subject, and Meralco has been able to establish the following standard of service as jurisprudence: by default, wires are hanging atop the streets, unless an LGU or a private developer is willing to pay for the extra cost involved in infrastructure burial (Interview G). In this context, there is no incentive for Meralco to increase its expenditure for its wires. And the situation is translated by the variability of standards on the matter. In middle and low income areas, Meralco's installations, and in particular its wires, are very visible (see [Picture 1](#)).

On the contrary, other areas are benefitting from better infrastructure, with wires that are placed higher and more orderly, and that do not constitute a potential hazard (see [Picture 2](#), taken from a district neighbouring Pansol).

However other actors are also taking a stance on energy issues, and Meralco has to collaborate with them, either because they raise awareness and lobby for a shift in its action, or because the utility can form partnerships and share resources with them.

5.1.2. The increased role of city governments and barangays

While the electricity sector was undergoing a profound restructuring, another process was taking place in the Philippines: decentralisation. With the adoption of the *Local Government Code* in 1991, consolidated in 1992 by the *Urban Development and Housing Act* (UDHA), the Philippines witnessed the rise of LGUs. These "government units" are present on two levels. In Metro Manila, there are 17 administrative cities, each composed of several districts – *barangays* – that have their own administration. It is argued here that the two processes have produced a phenomenon of "downscaling" of energy issues. However, rather than being the result of a push from local authorities willing to take action and carry out an agenda of their own, this movement was triggered by the withdrawal of the Government. The emergence, in the decision-making process, of these lower strata of the administration was the result of the stepping down of the state at the national level. What is particularly interesting and innovative is that this phenomenon opens the door for a more important role of actors from the civil society.

The *Urban Development and Housing Act* (UDHA) of 1992 gives city government the responsibility to provide "power and electricity and an adequate power distribution system" in resettlement areas, socialised housing, slum improvement sites and "areas for priority development".¹⁴ In addition, the DU is required by the *Philippine Distribution Code* to consult and get input from them. The choice of the beneficiary area for an electrification programme as well as its proceedings is therefore the result of a discussion between Meralco and the city government. However this stepping up of LGUs in the energy landscape has to be nuanced. While the legislation has put them in charge of electricity provision, it has left them no coercive means of action. And, asymmetry of information clearly favours the DU when LGUs enter into negotiation with city governments. It is also notable that city governments do not have a department dedicated to issues regarding power

¹⁴ UDHA of 1992, article V, section 21 (b) and article VI (d).



Picture 1. The wires hanging over Pansol in Quezon City, Metro Manila, February 2013.



Picture 2. Loyola Grand Villas, Quezon City, Metro Manila, April 2014.

provision. The office in charge of the urban poor will usually follow the design of electrification programs, but overall, city governments have no trained personnel in order to deal specifically with energy issues. They have yet to assert themselves in order to go beyond their role of mere advisor to Meralco. Indeed, while electrification programs are carried out with the intervention of both the DU and the concerned LGUs, it is notable that Meralco is ultimately the entity that makes the decision. Executives of the DU involved in these electrification programs reveal that the company chooses the areas that will benefit from their action depending on the relationship that they have with city governments: “We work with the city governments that are willing to work with us, that are efficient” (Interview E).

The other administrative level empowered by the UDHA is the *barangay*, even if it is not specifically in charge of electricity issues. While these actors are usually not present during the talks between the city government and the DU – and in any case they have no direct power of decision in this matter – they remain important. Indeed, as the level of governance closest to the inhabitants, they are usually involved in the implementation phase of electrification projects. They stand between the DU and the beneficiaries, and are therefore key elements in the communication between these two parties. While they hold no power in the decision to electrify or not the area they are in charge of, their cooperation is usually a great asset for the success of a given project. On the contrary, their lack of cooperation can greatly

impede the development of such an endeavour. Therefore, while *Barangay halls* are not directly in charge of electricity provision by law, this issue is still present at this level of governance. For instance, it is notable that the question of electrification is an important issue in campaigns for the election of the *barangay* representatives (Interview B). It is also through the *barangay* administrations that organisations from civil society, NGOs and CBOs, manage to express themselves. These actors participate in the public life at the local level – and this participation is provisioned by law¹⁵ – and therefore discuss electricity matters with *barangay* officials, who will in turn communicate their inputs to the city level (Interviews A, B and I). The DU is now forming relationships directly with actors from the civil society – NGOs mainly – and in a way bypasses the state institutions. Among other advantages that such a partnership can have for Meralco is the possibility to use the NGO’s resources in order to finance the cost of the wires linking the clusters of metres to the newly electrified households. NGOs also have capacities to mobilise the community, which can be interesting for the DU. The most advertised of such partnerships so far is with the NGO Gawad Kalinga.¹⁶

5.2. Meralco’s struggle against pilferage: from repression to more diverse strategies

The fact that Meralco has a certain autonomy has led to a diversification of its action in low-income areas. Between a purely repressive approach focused on fighting illegal tapping, and a more inclusive one that aims at integrating the urban poor into the formal system, the DU has developed several strategies. The company is indeed left relatively free to make its own choices relatively to urban poor communities when households are not able to present a land title. The question is then: why is the utility concerned at all with this category of population? Until very recently, the company did not communicate much on its role as a service provider for the urban poor: it was for instance a fierce opponent to the introduction of lifeline rates when the EPIRA was being designed, and it tried to appeal the decision to renew the subsidised rates for another ten years in 2012. Some of Meralco’s executives perceive the measure as “unfair”, since it favours the most difficult customers – those who do not pay in time, who steal electricity – over the “good” customers who do not create any problems:

“Meralco was willing to remove the lifeline rate provision, because it is not fair to other consumers. When it was renewed for another ten years, we were not happy about that. The decision was very political, it was adopted during the time of Gloria Macapagal,¹⁷ when she needed to win the voices of the masses – and at that time the clamour was for lower electricity rates” (Interview H).

What triggered its action, however, was being confronted to the high incidence of electricity pilferage. It is all the more important for the DU that the ERC sets a limit to the “acceptable” losses of electricity–both technical and non-technical. The cost of losses will fall upon the DU once this limit is reached (Fig. 1). If losses are below this level, the amount of money saved is used to reduce tariffs. Figure 1 shows the evolution of these losses overtime.

¹⁵ On the role of civil society and the increasing participation of NGOs at the local level, see Shatkin (2000, 2007).

¹⁶ Gawad Kalinga – the Gawad Kalinga Community Development Foundation – was formed in 2003. It is a well-known NGO in the country, whose objectives are the following: ‘ending poverty for 5 million families by 2024; land for the landless; homes for the homeless; food for the hungry’ (<http://www.gk1world.com>).

¹⁷ Gloria Macapagal was President of the Philippines (2001–2010) at the time of EPIRA’s enactment.

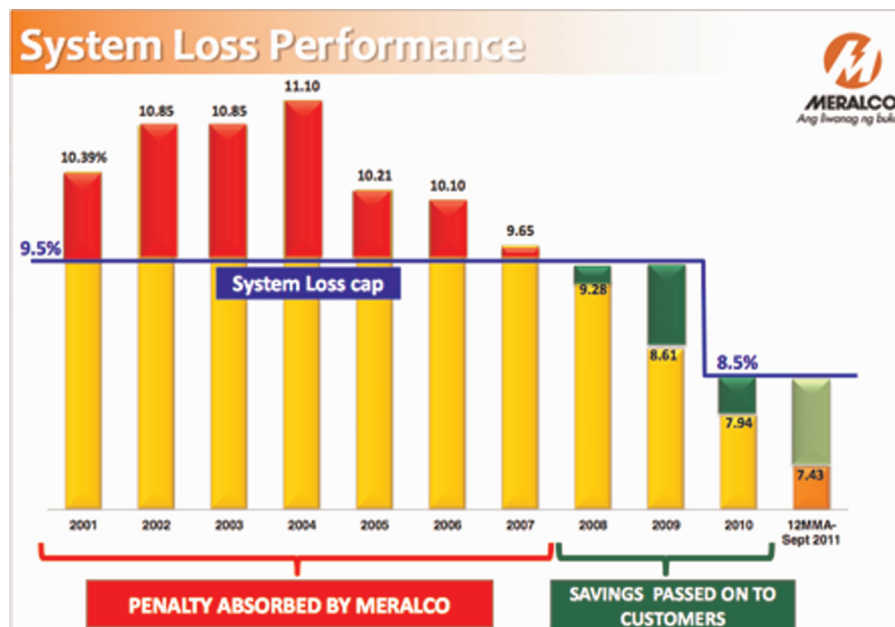


Fig. 1. The Evolution of electricity losses in the Meralco franchise.

Source: Meralco Presentation “How do you light up a nation?”, Meeting with the German Club, 22/11/2011.

In order to achieve this decrease in terms of losses, the DU has adopted several approaches. First, resources are dedicated to fighting electricity theft and tampering, with employees that are sent to affected areas in order to cut illegal connections and prosecute violators in front of ERC judges (Interviews D and F). In some areas controls by Meralco are as frequent as once a week. Usually, the wires are cut during the day, and the following night tappers re-establish the lines (Interview B). This game of cats-and-mice is very time-consuming for both the utility and the illegal tappers, which has led the company to try alternative modes of action.

Second, in recent years, Meralco has been trying to cast a more positive image of its role, and appear as a socially responsible organisation rather than a mere profit-seeking company. A good example of this is the installation of street-lighting, whose cost is divided between the LGU and the utility. This initiative shows the company's will to emphasise its social role, but also its effort to reduce electricity theft. Indeed, the lights are equipped with alarms that detect electricity tampering, and shut off electricity for the whole community when activated. In this case, the idea is to “make consumers face their responsibilities when they do not pay their bills” and “let them pay the price of living with no electricity service” (Interview I). Meralco's strategy is to “educate” the urban poor and install a system of incentives in order to reduce metre tampering and electricity pilferage.

Third, in order to offer the urban poor a more affordable service, and integrate them to the legal system of distribution, a new offer is being developed and tested by Meralco: pre-paid metering. The development of this system is still at its beginning: a pilot area has been designated and the scheme is being experimented, but the company is still working on the technical possibilities. The scheme has been approved by the ERC, but no date has been communicated for its entry in the market. The idea is to allow the consumer to load a certain amount in his or her metre – using the same selling points that are already in use for mobile telecommunication.¹⁸ This new system would be promoted for

different profiles of end-users, mostly low-consumers that are either poor or that own a secondary condominium which has a low consumption level. In the case of low-income consumers, the goal is to make them manage their consumption. It has been argued that lower-income populations struggle to pay an important sum of money every month, and can better adapt their consumption to their purchasing power if they have access to a pre-payment system (Botton, 2004). Pre-payment schemes have been adopted in number of developing cities, with results that have varied enormously depending on the acceptance of the system by the population (Tewari and Shah, 2003; Haselip and Potter, 2010). The success of this new approach in Metro Manila is therefore difficult to predict, but Meralco envisions that it is a good solution to reduce its non-technical losses (Interview H).

5.3. Urban electrification schemes of second generation: the emergence of new partnerships

While Meralco mostly adopts a repressive stance towards the urban poor, and is reluctant to grant informal settlements access to electricity, it has recently launched a new kind of electrification programme. The former DAEP had targeted the entire metropolitan area, and had proven to be costly. In 2011 the DU designed a new scheme and launched the RAISE programme. So far, it is estimated that it benefitted approximately 1500 households last year (Interview F). After witnessing the increase of pilferage in areas that had benefitted from the DAEP, the DU wanted to have better guarantees that the regular electricity connections it provided would be sustainable. Therefore, the key innovation in this programme is the fact that clusters of metres are now elevated (Elevated Metering Clusters, EMC) (Pictures 3 and 4). While wall metres were accessible in the context of DAEP, they are now located on top of a pole, so that the population cannot reach the metres easily. The results, in terms of electricity losses, are satisfactory in the eyes of the DU.

Concerning the financing of this endeavour, the situation is more complex than in the case of DAEP, since no source of funding

¹⁸ Load for mobile phones can be purchased in a multiplicity of selling points in the Philippines. It is available in supermarkets and other large retail centres, but it is also available in the omnipresent neighbourhood stores, *sari sari*, that cover the

(footnote continued)
entire metropolitan area.

is specifically dedicated to the electrification programme. Therefore the cost of RAISE projects is usually divided between various stakeholders, and the amount that each actor is responsible for is the result of a negotiation carried out prior to each project. Typically, LGUs will partly subsidise the cost for elevated metering clusters, while the beneficiary community will help by carrying materials, installing some of the wires and more generally assist the DU. Sometimes, Meralco One, the organisation in charge of social programs in the company – the descendent of the former *Department of Corporate Social Responsibility* – finances the cost of creating a connection (which involves a governmental fee and a price fixed by Meralco): such projects constitute 90% of its expenses. In some instances, the *Department of Social Welfare and Development* (DSWD) also contributes financially. In any case, the state agency is often involved in the planning of the RAISE projects. Finally, the cost of the wiring from the metres to the houses is usually borne by the end-users. It is also notable that in the case where the households have to pay the wiring to the metres, the solution is inconsistent with the regulation in place, which states that:

The distribution utility shall bear the cost of the wire extending from the metre to the actual premises of the consumer, except when the consumer requests for the clustering, and in such case, the consumer shall bear the aforementioned costs.¹⁹

These new electrification programs are the direct result of co-operation and negotiation between the LGUs and the DU. The actors that were interviewed insisted upon the role of consensus between all parties. This is why the projects tend to differ depending on which city is targeted inside of Metro Manila. There is not one model prevailing for the financing of electrification programs.

6. Conclusion and policy recommendations

In this paper, the electricity sector reform has been presented as being the result of an energy crisis on the one hand, and a will to apply the key principles of neoliberalism on the second hand. As a consequence, the legislation focused on two national objectives: power prices and security of supply. Public debate regarding the evaluation of the EPIRA is still very heated in the Philippines, and fuelled by the recurrent rises in power prices, and investigations regarding possible collusion between actors of the electricity industry (Interview 1). But beyond these national issues, the reform has had a more local impact, which becomes apparent when one looks at its consequences on the urban poor of Metro Manila.

The interaction between administrative decentralisation and the sector's liberalisation has had important consequences for energy policies. The central State being focused only on questions of security of supply and price-setting, LGUs and other urban actors had to step up and become a true interlocutor to Meralco. And through city governments, urban poor organisations can more easily express their concerns and wishes: this evolution of energy governance stresses the need for “local development” through popular participation and empowerment. Henri Coing (2002) insists on the idea that regulation is not all about the relationship between the regulator and the regulated: providing electricity requires that users be consulted and integrated into the discussions. In the case of urban poor communities, this point is critical: inhabitants who are refused access to the service tend to tap illegally into the network, thus disturbing the network and inducing costly efforts of repression on the part of the DU (Wang et al.,



Picture 3. An elevated metering cluster. Source: Meralco, “Delivering electricity to vulnerable communities”, Asian Development Bank Asia Clean Energy Forum, June 19th 2009.



Picture 4. An elevated metering cluster. Source: Meralco, “Delivering electricity to vulnerable communities”, Asian Development Bank Asia Clean Energy Forum, June 19th 2009.

2010). In this context, the trend initiated by Meralco may be generalised, to the benefit of the urban poor, but also of the DU itself. It is very much in line with the ideas that have prevailed in development theory and practice since the 1990s, and can be seen as another side of the neoliberal nature of the electricity reform. Mohan and Stokke (2000) indeed argue that “new managerialism” underlines the potential of decentralised action in order to weaken central ministries, and place the responsibility of service delivery on local authorities' shoulders.²⁰ It also translates into a financial

¹⁹ ERC Magna Carta, Resolution No. 25 of 2010, article 11.

²⁰ See for instance the World Bank's *World Development Report* of 1983, which makes a clear link between administrative decentralisation and market reforms.

burden shared between the different stakeholder: the DU, the LGU, the community itself, and sometimes and NGO involved in the programme. The other consequence of this devolution carried out without any transfer of resources is that electrification programs are now much fewer.

The urbanisation of energy issues can have very positive impacts on service delivery. However leading a real policy towards access to electricity for the urban poor would require the state to give LGUs real tools and resources. A first step would be for the DoE to include the question in its agenda. Indeed, while the government pays attention to rural electrification, urban areas are left aside and no efforts are made to have a homogenous policy over the national, or even metropolitan territory. There is an administrative layer at the metropolitan level—the *Metro Manila Development Authority* (MMDA) – in charge of policy coordination for the greater urban area, but its role in the formulation of energy policies is inexistent. Its action towards urban poor communities is largely a repressive one²¹ (Ragragio, 2003). As a consequence, there is no public authority overseeing these issues on the entire urban area, and successful models of electrification projects are

not generalised. A complimentary action would be to develop incentives for the DU to be more engaged in issues of urban electrification, and add a social dimension to its prerogatives. Such initiative can be steered by the regulatory agency, and in this regard, creating a “consumers satisfaction index”²² was a first step towards more performance-based regulation. This principle aims at increasing the company's efficiency through the creation of financial incentives, and could encourage Meralco to pay a closer attention to its poorest – but numerically significant – end-users.

Acknowledgements

The author wishes to thank the Department of Sociology and Anthropology of Ateneo de Manila University for its support. Special thanks go to Alvaro Artigas and Emma Porio for their help on the research project, Charlotte Halpern, Sylvie Jaglin and Jonathan Rutherford for their input on the paper itself.

Appendix. List of mobilised interviews

Interview	Organisation	Position/Department	Date and location
A	Barangay Hall – Pansol	Barangay Counsellor	19/02/2013, Quezon City
B	Barangay Hall – Payatas	Barangay Captain	11/03/2013, Quezon City
C	DoE	Electric Power Industry Management Bureau	12/03/2013, Taguig City
D	ERC	Consumer Service	22/03/2013, Pasig City
E	Meralco	Utility Economics Division	18/02/2013, Pasig City
F	Meralco	Home and Microbiz Division	31/01/2013, Pasig City
G	Meralco	Network Planning and Project Management	19/05/2014, Pasig City
H	Meralco	Home and Micro Business Marketing	08/04/2013, Pasig City
I	NASECORE	President	01/03/2013, Pasay City
J	Peace and Equity Foundation	Member of the board of trustees	07/02/2013, Quezon City

References

- Joint Foreign Chambers of the Philippines, 2010. Arangkada Philippines 2010: A Business Perspective. American Chamber of Commerce of the Philippines, Makati City, Philippines.
- Bakhtyar, B., Sopian, K., Zaharim, A., Salleh, E., Lim, C.H., 2013. Potentials and challenges in implementing feed-in tariff policy in Indonesia and the Philippines. *Energy Policy* 60, 418–423. <http://dx.doi.org/10.1016/j.enpol.2013.05.034>.
- Baron, C., Peyroux, E., 2011. Services urbains et néolibéralisme. Approches théoriques et enjeux de développement. *Regards croisés sur deux terrains contrastés (Burkina Faso, Afrique du Sud)*. Cahiers d'études Afr. 2–3, 369–393.
- Baruah, B., 2007. Assessment of public–private–NGO partnerships: water and sanitation services in slums. In: *Natural Resources Forum*. Wiley Online Library, pp. 226–237.
- Baud, I., Post, J., Furedy, C., 2004. Solid Waste Management and Recycling: Actors, Partnerships and Policies in Hyderabad, India and Nairobi. Springer Science & Business Media, Kenya.
- Bayliss, K., Waeyenberge, E.V., Fine, B., International Initiative for Promoting Political Economy, 2011. *The Political Economy of Development*. The World Bank, Neoliberalism and Development Research. Pluto Press, Distributed in the United States by Palgrave Macmillan, London, New York.
- Bello, W.F., 2005. *The Anti-Development State: The Political Economy of Permanent Crisis in the Philippines*. Zed Books.
- Botton, S., 2004. Les “débranchés” des réseaux urbains d'eau et d'électricité à Buenos Aires. *Flux*, 27–43.
- Coing, H., 2002. Régulation et gouvernance: la création d'une capacité régulatrice du service électrique au Venezuela. *Autrepart* 21, 55. <http://dx.doi.org/10.3917/autr.021.0055>.
- Eberhard, A., 2007. Infrastructure regulation in developing countries: an exploration of hybrid and transitional models. Public–Private Infrastructure Advisory Facility, World Bank, Working Paper.
- Gratwick, K.N., Eberhard, A., 2008. Demise of the standard model for power sector reform and the emergence of hybrid power markets. *Energy Policy* 36, 3948–3960. <http://dx.doi.org/10.1016/j.enpol.2008.07.021>.
- Haselip, J., Potter, C., 2010. Post-neoliberal electricity market “re-reforms” in Argentina: diverging from market prescriptions? *Energy Policy* 38, 1168–1176. <http://dx.doi.org/10.1016/j.enpol.2009.11.007>.
- Heller, P., 2001. Moving the state: the politics of democratic decentralization in Kerala, South Africa, and Porto Alegre. *Polit. Soc.* 29, 131–163. <http://dx.doi.org/10.1177/0032329201029001006>.
- Henisz, W.J., Zelner, B.A., 2001. The political economy of private electricity provision in Southeast Asia. *East Asian Econ. Perspect.* 15, 10–36.
- Jaglin, S., 2007. Décentralisation et gouvernance de la diversité: les services urbains en Afrique anglophone. In: Fourchard, L. (Ed.), *Gouverner les villes d'Afrique: Etat, gouvernement local et acteurs privés*. Karthala/CEAN, Paris, pp. 21–34 (dir.).
- Jaglin S., Verdeil E., 2013. Energie et villes des pays émergents: des transitions en question. *Flux*, no 93–94, juillet–décembre, 7–18.
- Jaglin, S., 2014. Urban energy policies and the governance of multilevel issues in Cape town. *Urban Stud.* 51, 1394–1414.
- Jessop, B., 2002. Liberalism, neoliberalism, and urban governance: a state–theoretical perspective. *Antipode* 34, 452–472.

²¹ The MMDA is the entity responsible for the eviction of informal settlements.

²² The customer satisfaction index is the weighted index that measures general and specific areas of customer satisfaction and priorities. Both satisfaction and level of importance by attribute are dictated by customers through an annual survey conducted among residential, core and non-core customers (source: Meralco annual report, 2010).

- Kikuchi, Y., 1999. Philippines “Metro Manila Depressed Area Electrification Project”. Asia Pacific Research Center, Waseda University, Tokyo.
- Krishna, A., 2003. Partnerships between local governments and community-based organisations: exploring the scope for synergy. *Public Adm. Dev.* 23, 361–371. <http://dx.doi.org/10.1002/pad.280>.
- McDonald, D. (Ed.), 2009. *Electric Capitalism: Recolonising Africa on the Power Grid*. Earthscan, London.
- Mohan, G., Stokke, K., 2000. Participatory development and empowerment: the dangers of localism. *Third World Q.* 21, 247–268.
- Porio, E., 2002. Urban poor communities in state-civil society dynamics: constraints and possibilities for housing and security of tenure in metro Manila. *Crit. Reflect. Cities Southeast Asia* 3, 265.
- Porio, E., 2008. Dispute Resolution and Access to Justice of the Urban Poor in the Philippines: A Scoping Study.
- Porio, E., 2012. Decentralisation, power and networked governance practices in metro Manila. *Space Polity* 16, 7–27. <http://dx.doi.org/10.1080/13562576.2012.698128>.
- Ragragio, J.M., 2003. *The Case of Metro Manila, Philippines, Understanding Slums: Case Studies for the Global Report on Human Settlements*. University College London (UCL).
- Sahakian, M.D., 2011. Understanding household energy consumption patterns: when “West Is Best” in Metro Manila. *Energy Policy* 39, 596–602. <http://dx.doi.org/10.1016/j.enpol.2010.10.032>.
- Sansom, K., 2006. Government engagement with non-state providers of water and sanitation services. *Public Adm. Dev.* 26, 207–217. <http://dx.doi.org/10.1002/pad.419>.
- Sharma, D., Madambab, S.E., Chan, M.R.L., 2004. Electricity industry reforms in the Philippines. *Energy Policy* 32, 1487–1497.
- Shatkin, G., 2000. Obstacles to Empowerment: Local Politics and Civil Society in Metropolitan Manila, the Philippines. *Urban Studies* 37, 2357–2375. <http://dx.doi.org/10.1080/00420980020002841>.
- Shatkin, G., 2004. Planning to forget: informal settlements as ‘forgotten places’ in globalising metro Manila. *Urban Stud.* 41, 2469–2484.
- Shatkin, G., 2007. Global cities of the South: Emerging perspectives on growth and inequality. *Cities* 24, 1–15. <http://dx.doi.org/10.1016/j.cities.2006.10.002>.
- Tewari, D.D., Shah, T., 2003. An assessment of South African prepaid electricity experiment, lessons learned, and their policy implications for developing countries. *Energy Policy* 31, 911–927.
- Tully, S., 2006. The human right to access electricity. *Electr. J.* 19, 30–39. <http://dx.doi.org/10.1016/j.tej.2006.0>.
- USAID, 2004. *Innovative Approaches to Slum Electrification*. Washington, D.C.
- Victor, D.G., Heller, T.C., 2007. *The Political Economy of Power Sector Reform the Experiences of Five Major Developing Countries*. Cambridge University Press, Cambridge; New York.
- Wang, L., Devabhaktuni, V., Gudi, N., 2010. Measures and setbacks for controlling electricity theft. In: *Proceedings of North American Power Symposium (NAPS)*, 2010. Presented at the North American Power Symposium (NAPS), 2010, pp. 1–8. <http://dx.doi.org/10.1109/NAPS.2010.5619966>.
- Woodhouse, E.J., 2005. The IPP Experience in the Philippines. Center for Environment Science and Policy, Working Paper 37.
- World Bank, 1993. *The World Bank's Role in the Electric Power Sector: Policies for Effective Institutional, Regulatory, and Financial Reform*. World Bank Publications, Washington, D.C.
- World Bank, 2005. *Philippines: Meeting Infrastructure Challenges*. World Bank Publications, Washington, D.C.
- World Bank, 2004. *Reforming Infrastructure: Privatization, Regulation, and Competition*. World Bank Publications, Washington, D.C.
- World Bank, 2010. *Addressing the Electricity Access Gap*. Background paper for the World Bank Group Energy Sector Strategy.

Further Reading

Official sources

- Department of Energy, 2001. Electric Power Industry Reform Act, Republic Act No. 9136.
- Department of Energy, 2001. *Electricity Industry Reforms: A Primer*.
- Department of Energy, 2013. *Power Updates/Status of PSALM privatizations, Customer Forum Presentation*, Cebu City, 15/03/2013.
- Electricity Regulatory Commission, 2010. Resolution No. 28, Series of 2010, A Resolution Adopting the Amendments to Magna Carta for Residential Electricity Consumers.
- Electricity Regulatory Commission, 2013. Order for ERC case 2001-900 and ERC 2001-646, 12/02/2013.
- MERALCO, 2011. *Meralco Franchise at a Glance as of 31/12/2011*.
- MERALCO, 2009. *Delivering Electricity in Vulnerable Communities – Lessons Learned from MERALCO's Experiences*, 19/06/2009. ADB Headquarters, Mandaluyong City.
- MERALCO, 1990. *Electrification of Depressed Areas in Metro Manila and Rural Areas within MERALCO's Franchise Area*, 12/02/1990. ASEAN Rural and Urban Conference.

Press articles

- Business World, 20/01/2014. Power Firms Question Inclusion in Meralco Rate Hike Case (<http://www.bworldonline.com/content.php?section=TopStory&title=Power-firms-question-inclusion-in-Meralco-rate-hike-case&id=82282>).
- Rappler, 19/12/2013. Drilon: Review EPIRA After ‘Apparent Failure’ (<http://www.rappler.com/nation/46252-drilon-joins-calls-to-review-epira>).
- Rappler, 22/01/2014. Meralco: We did not Mean to Inflate Power Charges (<http://www.rappler.com/nation/48632-meralco-inflate-power-charges>).