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## CHAPTER 10

# Power to the people? A rights-based analysis of South Africa's electricity services

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We...adopt this Constitution as the supreme law of the Republic so as to – Heal the divisions of the past and establish a society based on democratic values, social justice and fundamental human rights; Improve the quality of life of all citizens and free the potential of each person...

The Republic of South Africa is one, sovereign, democratic state founded on the following values:

(a) Human dignity, the achievement of equality and the advancement of human rights and freedoms.

(Preamble and section 1 of the Constitution of the Republic of South Africa, Act No. 108 of 1996)

Grace lives in a four-room 'matchbox' house<sup>1</sup> in Zondi, Soweto, in Johannesburg, with her three children, her brother, Siphso, his two children, and their elderly mother.<sup>2</sup> Both Grace and Siphso are unemployed. Their only income is from their mother's pension, which in April 2006 increased from R780 to R820 per month, and the monthly rental of R100 from the family of three living in the backyard shack.

Having accumulated substantial electricity arrears because they could not afford to pay the bills, at the beginning of 2001 the household benefited from a Soweto-wide electricity debt write-off. However, with average monthly charges of R400 (per volume of electricity used, higher in winter and lower in summer), Grace was still unable to afford the household electricity bills following the debt write-off. Despite paying what she could each month (usually around R100), arrears built up until, by late 2002, the household owed the City of Johannesburg over R5 000. With no chance of reducing the arrears, the household experienced regular service disconnections. In November 2002 Grace, who was tired of living under the shadow of electricity debt and disconnections, signed the consent form when Eskom contractors arrived to install a prepaid meter with promises to write off household debt.<sup>3</sup>

Grace has often regretted consenting to the installation of a prepaid meter, and it is the cause of much conflict in the household. Whereas previously Eskom disconnected the household's electricity service approximately once every two to three months (sometimes not restoring the supply for several weeks), now the household experiences automatic cut-offs at least twice a month, when the free basic electricity (FBE) amount<sup>4</sup> is exhausted and no additional tokens are bought to ensure continuous electricity supply. Although there are 11 people living on the premises, the house and backyard shack are considered to be one household by the municipal authorities (backyard shacks are technically illegal because no planning permission has been secured for their erection) and consequently Grace and Siphos tenants receive no separate FBE allocation. With 11 people on the premises using electricity, the FBE amount only lasts about a week. After the exhaustion of the FBE supply, Grace, Siphos and their tenants try to take turns to buy prepaid tokens. However, there is often not enough money to buy tokens, and the household is usually without electricity for a few days at a stretch each month. On such days, if she can afford it, Grace buys paraffin or coal, but often, especially towards the end of the month, the household has to go without any energy source at all.

Grace's story is indicative of the human consequences of the commercialisation of municipal services, including electricity, in South Africa. As the chapters in this book show, electricity policy is increasingly based on the kind of cost recovery-driven principles normally reserved for commercial markets. Although, as yet, there has been little actual privatisation (Eskom and municipal electricity service providers are all 100 per cent state-owned), electricity distribution<sup>5</sup> is increasingly commercialised, with Eskom and many municipal distributors functioning as corporatised entities according to business plans. The problem with this commercialisation of basic services such as electricity is that 'private market mechanisms distribute goods and services based on willingness and ability to pay' (Flynn & Chirwa 2005: 59). As this chapter will argue, such a market-driven rationale is at odds with South Africa's constitutional framework, with its implied right to electricity and its explicit rights to equality of, and to justly administered, electricity services.

Taking as its starting point the discrepancies between the constitutional promise and the lived reality of electricity services as experienced by low-income households such as Grace's, this chapter examines the human rights implications of the commercialisation of electricity in South Africa. Locating its analysis within a human rights framework, the chapter seeks to provide a set of tools for policy engagement and, ultimately, for public-interest litigation, with a view to improving electricity services to poor households.

The chapter begins with an overview of the implied right to electricity, followed by an examination of the explicit rights to equality of electricity services and to just electricity-related administrative action. It then analyses the electricity distribution framework from the perspective of low-income households, highlighting five of the most problematic aspects of commercialised electricity services, as well as

identifying possible constitutional and legal challenges in respect of each of the five areas of concern:

- inappropriate tariffs;
- insufficient FBE;
- disconnections due to inability to afford electricity services;
- imposition of prepaid meters;
- unequal customer services.

## A human rights framework

Normatively, electricity should be viewed as an essential good because:

[e]lectricity is a basic necessity and access to it has a wide range of positive developmental benefits for communities. Increased usage of electricity improves the level of welfare, decreases health expenditures and improves opportunities for low-income families, and women in particular. Poor communities should have access to electricity, and should be enabled to afford it without sacrificing other basic necessities. (Nefale & Roux 2003: 2)

This section develops the normative argument of electricity as an essential good within a human rights framework, analysing the implications for electricity providers of being located within a constitutional order that regulates basic services such as electricity. That is to say, notwithstanding theoretical arguments about what kind of service electricity is and who is best placed to provide it most effectively, this section sets out the constitutional and legislative conditions under which electricity provision, as a basic service, *must be* undertaken.

### *An implied right to electricity*

Unlike the right of access to sufficient water (section 27(1)(b) of the Constitution), in South Africa there is no enumerated right to electricity (nor is there a right to energy). However, this right can be implied in the right of access to adequate housing (section 26(1) of the Constitution). The fact that the right to housing implies more than merely having a roof over one's head was confirmed by the South African Constitutional Court in its landmark socio-economic rights case, *Government of the Republic of South Africa v Grootboom* (2000) (hereafter *Grootboom*). According to the Court, the 'state's obligation to provide adequate housing depends on context, and may differ from province to province, from city to city, from rural to urban areas and from person to person' and while 'some may need access to land and no more...some may need access to services such as water, sewage, electricity and roads' (*Grootboom* para. 37). This means that, in the Court's view, one of the factors relevant to a consideration of the right to housing is electricity provision.

However, this section of the judgment, as *obiter dictum*,<sup>6</sup> is only persuasive (it is not legally binding). It remains to be seen how or indeed if a right to electricity would be considered justiciable by the Constitutional Court, which has thus far failed to

provide much clarification of the state's positive obligations to promote the socio-economic rights of individuals (as opposed to a general right of everyone to a reasonable government programme in respect of the right).<sup>7</sup>

Notwithstanding the limited judicial enforcement of socio-economic rights by the Constitutional Court, this interpretation of an implied right to electricity is supported in international law<sup>8</sup> by the United Nations Committee on Economic, Social and Cultural Rights (CESCR), which monitors compliance with the International Covenant on Economic, Social and Cultural Rights (ICESCR).<sup>9</sup> The CESCR has construed the right to electricity as being inherent to the enjoyment of other socio-economic rights in a way similar to that in which it has construed the right to water (also not explicitly enumerated).

In the case of electricity, in General Comment 4 on the right to adequate housing (CESCR 1991), the CESCR has stipulated that 'all beneficiaries of the right to adequate housing should have sustainable access' to 'energy for cooking, heating and lighting' (para. 8(b)). Although General Comment 4 refers to energy rather than electricity specifically, the United Nations Special Rapporteur on adequate housing as a component of the right to an adequate living standard, Miloon Kothari, has clarified in his reports that the right to adequate housing 'includes access to essential civic services such as electricity' (Tully 2006: 524). Kothari's 2002 report states that 'the right to adequate housing – broadly defined' must be taken to 'include access to land, as well as other essential services such as water, electricity and sanitation...' (Kothari 2002: para. 49). Moreover, in specific relation to the rights of women, article 14 of the Convention on the Elimination of All Forms of Discrimination Against Women (1979),<sup>10</sup> which South Africa ratified in 1995, states:

States Parties shall take all appropriate measures to eliminate discrimination against women in rural areas...to ensure...the right...to enjoy adequate living conditions, particularly in relation to housing, sanitation, electricity and water supply...

In all of its General Comments on socio-economic rights the CESCR has stressed that economic accessibility, availability and affordability are essential elements of each right. Such requirements are even more strongly affirmed regarding vulnerable groups such as women, children, elderly and disabled people. In General Comment 3 on the nature of states parties' obligations (CESCR 1990), the CESCR has underlined that 'even in times of severe resources constraints...the vulnerable members of society can and indeed must be protected by the adoption of relatively low-cost targeted programmes' (para. 12). Moreover, as Magdalena Sepúlveda has pointed out, it is clear from the CESCR's work that commercialisation (or indeed privatisation) does 'not relieve the state of its obligation to ensure that minimum essential levels of each right are enjoyed by individuals, particularly the most vulnerable and disadvantaged groups within society' (2003: 367).<sup>11</sup>

Despite being a signatory, South Africa has never ratified the ICESCR.<sup>12</sup> Nonetheless, section 39(1)(b) of the Constitution stipulates that, when interpreting the

Bill of Rights, a court ‘must consider international law’. Crucially, given South Africa’s failure to ratify the ICESCR, the Constitutional Court has established that, for the purposes of interpretation, ‘international law would include non-binding as well as binding law’ (*S v Makwanyane* 1995: para. 35). It is consequently clear that the ICESCR is relevant to the interpretation of socio-economic rights in South Africa.

Taken together, there is therefore a strongly implied right to electricity in international and South African domestic law. This thesis is strengthened by the inclusion of electricity in the government’s ‘free basic services’ package. Arguably, the allocation of FBE to qualifying households (discussed below), alongside Free Basic Water, is an implicit acknowledgement of a right to ‘sufficient’ electricity along the same lines as the constitutional right of everyone to ‘access to sufficient food and water’ (section 27(1)(b)).

The inference of an implied right to electricity is that it is subject to the same obligations as the other socio-economic rights in the Bill of Rights, requiring the state to take ‘reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of the right’ (section 27(2) of the Constitution). In *Grootboom*, the Constitutional Court established that, to be reasonable, ‘measures cannot leave out of account the degree and extent of the denial of the right they endeavour to realise’ (para. 44). Moreover, government programmes must ‘respond to the needs of the most desperate’ and must ensure that social and economic rights are ‘made more accessible not only to a larger number of people but to a wider range of people as time progresses’ (paras 44–45). Such pronouncements by the Constitutional Court in the context of an implied right to electricity suggest that the state is obliged by the Constitution to provide more electricity to more people, but especially to vulnerable groups such as the poor, over time. However, as noted above, the extent to which any socio-economic right in its constitutional-right form is enforceable as an individual right to a resource or service is debatable.

Notwithstanding the implications of an implied right to electricity, there are more powerful arguments for a rights-based analysis of electricity services. From a constitutional standpoint, Eskom, as a state-owned corporation, and municipalities, as the local sphere of government, are bound by the Bill of Rights and must ‘respect, protect, promote and fulfil the rights in the Bill of Rights’ (section 7 of the Constitution). Of the rights that attach to the provision of essential public services such as electricity, the most important are the rights to equality of, and to justly administered, electricity services, which are not diminished through the corporatisation, commercialisation or even privatisation of services provision.

### *The right to equality of electricity services*

Regardless of the commercialisation of Eskom and municipal electricity entities such as Johannesburg’s City Power, electricity remains a public service that is 100 per cent state-owned.<sup>13</sup> As such, all policy choices by the state in relation to

electricity distribution must comply with the section 9 right to equality. This right obliges the state to ensure that electricity provision is equal (meaning that everyone should receive an equal standard of service) and equitable (in the sense that there should be no *unfair* discrimination between groups on any grounds, including those listed in section 9(3)<sup>14</sup>). Specifically, section 9(2) requires the state to take steps to ‘promote the achievement of equality’.

Against the backdrop of apartheid’s legacy of unequal municipal services provision based on unfair discrimination on the grounds of race (and, concomitantly, on class), section 9(2) enjoins the state to take ‘legislative and other measures designed to protect or advance persons, or categories of persons, disadvantaged by unfair discrimination’. In the case of *City Council of Pretoria v Walker* (1998) (hereafter *Walker*) the Constitutional Court clarified that positive discrimination policies aimed at correcting past inequalities between formerly advantaged and disadvantaged groups do not amount to unfair discrimination. Indeed, such essentially redistributive policies, designed to promote the achievement of socio-economic equality, are not only permitted, they are constitutionally mandated. As recognised by the Constitutional Court in *Walker*, the constitutional objective of equality ‘will not be achieved if the consequences of those inequalities and disparities caused by discriminatory laws and practices in the past are not recognised and dealt with’ (para. 46). In relation to electricity services, this means that the state is obliged to ensure that positive steps are taken to make electricity increasingly accessible and affordable to poor people.<sup>15</sup> In other words, the right to equality of electricity services incorporates the right to equitable services, i.e. the right to redistributive policies and practices that aim to redress socio-economic inequality.

There is no doubt that the post-apartheid state acknowledges the legacy and scale of the problem of unequal services provision. In the words of the White Paper on Local Government (DPLG 1998: para. 2.3):

Under apartheid there was systematic under-investment in municipal infrastructure in black areas. This deprived millions of people of access to basic services, including water, sanitation, refuse collection and roads. Developmental local government has to address this backlog. Its central mandate is to develop service delivery capacity to meet the basic needs of communities.

The state is also aware of the constitutional obligation to extend and to maintain affordable electricity services to everyone. The Eskom Conversion Act (No. 13 of 2001), for example, provides that in the process of converting Eskom to a public company, ‘the Minister must take into account...the promotion of universal access to, and the provision of, affordable electricity’ (section 6(5)(b)). Similarly, the Department of Minerals and Energy (DME) Ministerial Foreword to the White Paper on the Energy Policy of the Republic of South Africa (DME: 1998) states:

...the state must establish a national energy policy which will ensure that the national energy resources shall be adequately tapped and developed to cater for the needs of the nation. Energy should therefore be available to all citizens

at an affordable cost. Energy production and distribution should not only be sustainable, but should also lead to an improvement of the standard of living for all the country's citizens.

To this end, the National Energy Regulator Act (No. 40 of 2004) was formulated to provide a co-ordinated platform for managing a national energy policy in line with the White Paper on Energy's directives. And the finalised Electricity Regulation Act (No. 4 of 2006) – which replaced most of the Electricity Act (No. 41 of 1987) (in terms of which electricity licensing and tariff-setting had been regulated) – aligned electricity regulation with the Constitution. Importantly for this rights-based analysis, section 16(1)(e) of the new Electricity Regulation Act allows for 'the cross-subsidy of tariffs to certain classes of customers', which clearly permits the kind of redistributive pricing policies that advance socio-economic equality.

Finally, in terms of policy, the stated aim of the DME's *Electricity Basic Services Support Tariff (Free Basic Electricity) Policy for the Republic of South Africa* is to 'alleviate the negative impacts of poverty on communities' (DME 2003: 11). And it is worth remembering the Reconstruction and Development Programme (RDP), which in 1994 urged future energy policy to 'concentrate on the provision of energy services to meet the basic needs of poor households' (ANC 1994: para. 2.7.3).

In terms of service delivery, electricity, along with the other basic services (including water, sanitation and refuse collection), is governed by the overall policy framework for municipal service delivery, which stresses the need to advance equal services to all members of the local community. Thus, the White Paper on Local Government requires municipalities 'to assume a developmental role in providing basic services' (Khumalo et al. 2003: 8) and the RDP stipulates that 'an accelerated and sustainable electrification programme' should be introduced to provide electricity to all citizens (ANC 1994: para. 2.7.7). Furthermore, the Local Government Municipal Systems Act (No. 32 of 2000), which provides the details of municipal services provision, stipulates that municipalities must 'ensure that all members of the local community have access to at least the minimum level of basic municipal services' (section 73(1)(c)) and that such access should be 'equitable' (section 4(2)(f)).

On tariff policy specifically, the Local Government Municipal Systems Act requires the municipality to ensure that users are treated 'equitably in the application of tariffs' (section 74(2)(a)), ensuring that 'poor households...have access to at least basic services' through, inter alia, 'life line tariffs' and 'any other direct or indirect method of subsidisation of tariffs for poor households' (section 74(2)(c)).

As is elaborated further in the second part of the chapter, such equality-focused imperatives are directly relevant to practices related to tariff-setting, FBE and customer services. Such criteria suggest that, where they fail to advance socio-economic equality and/or to redress poverty, electricity services may be legally challenged.

### *The right to administratively just electricity services*

The embeddedness of electricity provision within a constitutionally entrenched human rights framework is further strengthened by section 33 of the Constitution, which guarantees everyone ‘the right to just administrative action that is lawful, reasonable and procedurally fair’. Moreover, the Promotion of Administrative Justice Act (No. 3 of 2000) (PAJA) clarifies various contours of the right, including defining what is procedurally fair administrative action. In the context of electricity services, the most important requirements are those for ‘adequate notice of the nature and purpose of the proposed administrative action’ (section 3(2)(b)(i)) and for a ‘reasonable opportunity to make representations’ (section 3(2)(b)(ii)).

These requirements are particularly important in the context of disconnections of electricity, which must comply with the notification and representation elements of the Act, and the imposition of the system of prepaid meters, which, arguably, does not comply with the requirement to allow representation at the point of automatic cut-off (when the FBE amount is exhausted and no tokens are purchased to ensure continuous electricity supply). These issues are dealt with in further detail later in the chapter.

Although there is a lot of outsourcing of electricity functions (including meter reading, meter installation and infrastructure installation and maintenance), electricity services per se have not yet been privatised. Nevertheless, it is worth noting, in light of possible future developments, that the application of the Bill of Rights is not limited to state action. Section 8(2) provides that ‘a provision of the Bill of Rights binds a natural or a juristic person [i.e. a company] if, and to the extent that, it is applicable, taking into account the nature of the right and the nature of any duty imposed by the right’. The rights to equality and just administrative action are two such rights that attach even to commercial enterprises, in that section 9(4) stipulates: ‘No person may unfairly discriminate directly or indirectly against anyone’ on any ground listed in subsection 2. Similarly, over and above ‘organs of the state’, PAJA binds ‘a natural or juristic person...when exercising a public power or performing a public function in terms of an empowering provision’ (section 1(b)). Thus, neither Eskom nor any municipality may divest itself of its constitutional and legislative responsibilities through privatisation or outsourcing of the electricity distribution function.

### **Applying the rights model to electricity services in South Africa**

Taken together, such constitutional and legislative obligations and policy commitments imply that electricity distribution is occurring within a rights-based framework that recognises both the implied right to electricity and the explicit rights to just and equal services. This section of the chapter suggests that, in the context of the commercialisation of electricity services, these rights are not being adequately safeguarded.



Access to sufficient affordable electricity of an adequate quality is intrinsically linked to positive transformative and developmental goals that underwrite South Africa's Constitution. In order to redress apartheid's legacy of socio-economic inequality as well as to continually improve the standard of living of citizens, it is essential that poor communities should have access to electricity 'and be able to pay for its use within their available resources without sacrificing other basic necessities' (CALS 2003: 4).

Whatever the sentiments about affordable energy expressed in policy documents such as the White Paper on Energy, it is clear that within the commercialised electricity industry, cost recovery and what Eskom refers to as 'cost reflectivity' – defined as 'the pricing method aimed at reflecting the full recovery of economic cost of supplying electricity to a customer' (DME 2004: 5) – undermine the redistributive potential of electricity provision. And, while significant advances have been made in terms of the absolute number of people connected to the electricity grid since 1994, many low-income households have subsequently been disconnected through the inability to afford electricity, as discussed below.

In stark contrast to the strategic role electricity played within the apartheid state, the post-apartheid government has struggled to wield leverage over essentially autonomous electricity entities. As noted by Maj Fiil-Flynn:

The contrasts from the apartheid era could not be more glaring. White consumers and industry were heavily subsidised by the state and Eskom played a leading role in promoting (white) welfare and prosperity in the country. External funding played a key role here as well with more than half of the World Bank's \$200 million in credits to the apartheid regime (from 1951 to 1966) going towards Eskom's expansion... To what end? Today, most low-income South Africans still rely for a large part of their lighting, cooking and heating energy needs on paraffin (with its burn-related health risks), coal (with high levels of domestic and localised township air pollution) and wood (with dire consequences for deforestation). (Fiil-Flynn 2001: 5–6)

Largely because of the commercialisation of electricity distribution following the democratic transition, the post-apartheid state has been unable to utilise electricity in the same developmental way for black/poor South Africans that the apartheid state was able to do vis-à-vis industry and white consumers. The commercialised distribution environment – in which distributors must operate as commercially viable entities and the primary tariff principle is to 'enable an efficient licensee to recover the full cost of its licensed activities, including a reasonable margin of return' (section 16(1)(a) of the Electricity Regulation Act) – limits the state's potential to deliver affordable, accessible electricity services to the poor.

This section delineates the lived reality of electricity services in low-income households from a rights-based perspective. The five major electricity-related problems faced by the poor are outlined and subjected to legal scrutiny in terms of the constitutional framework established earlier in the chapter, as well as other

relevant legislation. The section focuses on Soweto, which is the subject of three recent research reports (Coalition Against Water Privatisation 2004; Fiil-Flynn 2001; Nefale 2004), but is relevant more generally across South Africa.

### *Inappropriate tariffs*

Legislation and government policy make it clear that, in setting tariffs, the main principle to be followed by all entities involved in the supply of electricity is cost reflectivity. Within the commercialised and increasingly corporatised environment, electricity provision is separated into 'autonomous units, limiting the extent of cross-subsidisation' within or between services (McInnes 2005: 29). So, while the Electricity Regulation Act does 'permit the cross-subsidy of tariffs to certain classes of customers' (section 16(1)(e)), this is subject to the caveat in section 16(1)(a) that any licence condition 'must enable an efficient licensee to recover the full cost of its licensed activities, including a reasonable margin or return', and licensees are instructed to 'avoid undue discrimination between customer categories' (section 16(1)(d)). Municipalities are further constrained by the imperative to balance their budgets found in section G1.2 of the White Paper on Local Government, which clarifies that 'the Constitution effectively prohibits deficit budgeting at the local sphere' (DPLG 1998). David Hallowes points out that even the limited scope for cross-subsidisation that currently exists is likely to be undermined in the near future, as the DME's 2004 *Electricity Pricing Policy of the South African Electricity Industry* clearly aims to 'strip out all subsidies in time' (Hallowes 2006: 29).

As a consequence of the commercial limits of cross-subsidisation, state intervention to mitigate the actual cost of electricity provision to low-income households mainly occurs through complex transfers from the National Treasury, via the Department of Provincial and Local Government and the particular municipality, to the distributor (even if this is Eskom) in the form of the equitable share grant. Because the Constitution entrenches the autonomy of the local sphere of government, such transfers from the National Treasury cannot be ring-fenced and there is no guarantee that the funds are spent on free basic services for the poor. As such, the equitable share transfer is a relatively blunt tool for redistribution compared with a targeted system of cross-subsidised tariffs, reflected in a sufficient free basic amount followed by an upward curve of slowly rising price blocks, which only serve to penalise 'luxury consumption' (Bond 2004: 2).

In the absence of standardising cross-subsidisation and tariff intervention, a patchwork of some 2 000 varying tariffs persists across the country. Most tariff structures do not utilise the progressive kind of rising block tariffs that penalise luxury consumption while allowing low-level consumption (generally exhibited by poor people) to be much cheaper per unit. This means that in most cases, the FBE amount is followed by a standard expensive tariff cost. Moreover, many of the tariff systems continue to benefit empowered sectors and groups and are often based

more on cost reflectivity than on socio-economic justice. While it may be difficult to mount a legal challenge against the cost recovery pricing model, inequitable tariffs that in effect discriminate against low-income users potentially violate the right to equality, and certainly violate the spirit of the Constitution.

One of the objectives of the current Electricity Distribution Industry (EDI) restructuring process which aims to establish a Regional Electricity Distributor (RED) system, is the standardisation of tariffs. With only one RED (the Cape Town RED, called RED 1 (Pty) Ltd) established, it is too soon to say whether this objective will be met. As it stands, electricity distribution still reflects the apartheid-inherited policy of discounting industrial tariffs at the expense of domestic consumers which, while perhaps making commercial sense, runs counter to principles of transformation and social justice. So, despite the RDP calling for cross-subsidies from industrial users to township users (ANC 1994), the opposite practice continues in many jurisdictions. Under this apartheid-inherited rubric, low-income households, which consume less than 3 per cent of the electricity generated, pay on average double the tariffs offered to industry (Fiil-Flynn 2001: 3). So in 2001, for example, domestic consumers as a whole paid an average price to Eskom of R0.2459 per kilowatt-hour (kWh) (Sowetans paid much higher average prices), 'while the manufacturing sector paid [R0.1283] per kWh and the mining sector paid [R0.1232] per kWh' (Bond & McInnes 2006: 4).

In addition, many of the persistent tariff discrepancies discriminate against the poor. For example, the cheapest tariff without a monthly network or service charge for Johannesburg residents served by City Power is the Lifeline tariff at R0.4041 per kWh while the cheapest energy-only tariff for Soweto residents (supplied by Eskom), the Hometake tariff, is R0.4537 per kWh.<sup>16</sup> The consequence for low-income households of the relatively higher cost of electricity, as attested by Fiil-Flynn's (2001) research in Soweto, is that, despite efforts to try to follow electricity-saving instructions and given the demands on big households, residents are still not able to reduce their electricity charges to affordable levels.

The objective inability of low-income households to pay for electricity is confirmed in Michael Nefale's 2004 survey on attitudes to prepaid meters in Soweto. The average total household income in Nefale's sample of 800 respondents was R1 220 per month, and the average monthly household charge for electricity was R306 (Nefale 2004: 18). Given that this amount represents almost 25 per cent of the average household monthly income, it is not surprising that most households in Soweto are unable to pay their electricity bills. Clearly, whatever the actual costs of providing the service, the cost of electricity is too high for low-income households. Nevertheless, as demonstrated by Fiil-Flynn (2001), and corroborated in Nefale's more recent (2004) study, the majority of Soweto residents do attempt to make some monthly payment. In Fiil-Flynn's study regular bill payments were the norm, with 'each of the households interviewed indicating some level of payment', usually approximately half of the amount owed (2001: 12). In Nefale's survey, the average household payment per month was R173, which also

amounts to about half of the average monthly charge (R306) (2004: 18). Such data suggest strongly that unaffordability rather than a 'culture of non-payment' is responsible for non-compliance.<sup>17</sup> Moreover, Nefale's research also indicates that, far from reflecting a 'culture of entitlement' towards electricity services, the majority of Sowetans (77 per cent) recognise that 'electricity should be paid for once the free basic amount is exhausted', as long as it is affordable (2004: 19).

The net effect of low-income households not being able to afford electricity has been an endemic problem of arrears. According to Nefale's research, average electricity arrears in Soweto amount to over R3 000 per household, with the top end of the range at R117 632 (2004: 13). Such large arrears have the effect not only of contributing to financial stress within households who are willing to pay for services but who cannot afford the full amounts of their bills (Fiil-Flynn 2001), but also, increasingly, of leading to disconnections (discussed below).

### *Insufficient free basic electricity*

Apart from its integrated national electrification programme (extending the electricity grid to historically disadvantaged communities),<sup>18</sup> the government's main mechanism for intervening in the commercialised electricity sector to mitigate the effects of cost recovery-related tariffs has been the provision of FBE to qualifying households.

In the run-up to municipal elections on 5 December 2000, the government announced its intention to provide free basic services, including electricity, to low-income households. By this time some municipalities were already providing a free allocation of electricity to targeted households, funded internally through cross-subsidisation from other consumer categories including rates. Seeking to establish a uniformly applicable policy, the DME accepted the amount of 50 kWh per household per month proposed by a study conducted for Eskom and the DME by the University of Cape Town between 2001 and 2002 (Eskom & DME 2002: 11), and the resultant FBE policy was rolled out from mid-2003 onwards.

However, despite the objective of creating a standardised system of FBE allocation, the disjointedness of the apartheid-inherited distribution system – in terms of which, in general terms, Eskom distributes to formerly black areas and municipalities distribute to formerly white areas – has meant that there have been major discrepancies in FBE implementation across the country. In areas under Eskom's distribution licence, DME policy applies, meaning that 50 kWh of FBE is provided to households that consume less than 150 kWh of electricity per month. But distributing municipalities have not uniformly implemented FBE at this threshold. For example, it was only in 2005 that the provision of FBE was equalised between residents of Soweto and residents of the rest of Johannesburg. Prior to that, households in the (historically white) suburbs of Johannesburg could qualify for 50 kWh FBE from their electricity provider (City Power) if they chose a 'tariff option B', which provided FBE if they consumed less than 1 020 kWh per month.

Soweto households, in contrast, with Eskom as the provider, could only receive the 50 kWh FBE amount if they consumed less than 150 kWh per month (almost 10 times less than the City Power qualifying threshold). Under this system, only approximately 1 000 households in Soweto qualified for FBE (Salvoldi interview). Since the equalisation (using a qualifying threshold of 802 kWh per household per month for the whole of Johannesburg, including Soweto), a further 82 000 households in Soweto now qualify for FBE (Govender interview).<sup>19</sup>

Over and above discrepancies in the implementation of the FBE policy, the amount of 50 kWh per household per month is also problematic. This amount is based on the research undertaken by the University of Cape Town in 2001 and 2002 (Eskom & DME 2002), which was formalised in the DME's *Electricity Basic Services Support Tariff (Free Basic Electricity) Policy*, which found that 56 per cent of households in South Africa connected to the national grid in Eskom's licensed area consume less than 50 kWh of electricity a month (DME 2003: 11). However, according to Professor Anton Eberhard of the Infrastructure Industries Reform and Regulation Management Programme (Graduate School of Business, University of Cape Town), the 50 kWh amount is probably not suitable for urban areas with big households and multiple energy demands (Eberhard interview), not least because the FBE amount does not take into account the typically large sizes of low-income urban households.

Indeed, although the 50 kWh amount arguably can make a big difference in rural areas where otherwise no electricity is afforded, studies on low-income usage of electricity in urban areas indicate that 50 kWh is not enough to make a developmental and environmental impact. Fiil-Flynn's study of Soweto indicates that low-income households (with an average combined income of around R1 000 per month) typically consume approximately 500 kWh of electricity per month (2001: 12). Eskom estimates that the average household in Soweto (including more wealthy households) consumes approximately 600 kWh per month (Salvoldi interview). Clearly, at 10 per cent or less of average total consumption, 50 kWh of FBE is insufficient to meet the needs of the typically large households in poor urban areas. By Eskom's own calculations, it takes an estimated 60 kWh per month to cover lighting needs alone in an average low-income urban household in South Africa (Eskom 1996: 13). With insufficient FBE allocations and electricity charges that are largely unaffordable for low-income households, many poor South Africans are not able to benefit appropriately from the expansion of the electricity grid.

Further research is necessary to determine appropriate pricing and/or FBE regimes that will contribute to the goal of advancing socio-economic equality in South Africa. Until more equitable regimes are implemented, the government's electrification programme will continue to be undermined by disconnections; as fast as new households are added to the grid, others will be disconnected from it for failure to pay for the electricity they need to enjoy an adequate standard of living. As currently implemented, any persisting discrepancies in the rollout and

threshold for qualification of FBE could be subjected to a section 9 equality challenge with a view to achieving an equitable FBE regime such as the FBE equalisation undertaken by the City of Johannesburg in 2005.

### *Disconnections due to inability to afford electricity*

Operating as commercialised entities, municipal service providers, along with Eskom, cannot afford to carry the financial burden of non-paying consumers without raising tariffs to unacceptably high levels. Consequently, electricity consumers who are chronically in arrears are disconnected from the grid (Bond & McInnes 2006). Despite the severity of this measure, there are no national guidelines and no requirements for additional caution regarding the disconnection of electricity services to vulnerable groups and low-income households. Eskom and other electricity service providers are not, for example, required to consult social welfare departments or to check if consumers are on any indigent register<sup>20</sup> before disconnecting their supply. The result has been that, 'seldom used before 1994 [and the commercialisation of electricity distribution], service cut-offs have become a major mechanism of payment enforcement and have been implemented throughout the country' (McDonald 2002: 11).

This has meant that although, as of February 2002, the electrification programme had connected 3.15 million additional homes since 1994 (South African Institute of Race Relations 2006: 422),<sup>21</sup> the progressiveness of the government's electrification programme has been undermined by cost recovery-related disconnections within the industry. According to Fiil-Flynn's research, disconnections due to inability to pay for electricity numbered up to 20 000 households per month in Soweto alone in early 2001 and this rate accelerated after April 2001, when Eskom invoked a decision to cut the electricity supply to households that were more than R5 000 in arrears for more than 120 days (Fiil-Flynn 2001: 14–15). In Fiil-Flynn's survey, 45 per cent of households experiencing cut-offs were disconnected for more than a month, and 'many reported cut-offs of up to nine months in length' (2001: 15). Based on a national survey, which suggests that 13 per cent of South Africans have experienced electricity cut-offs due to non-payment of arrears, David McDonald estimates that 3.25 million households across South Africa suffered electricity disconnections between 1994 and 2004, which is approximately the same number of households that were connected to the grid in the same period (2002: 12). McDonald makes the point that 3.25 million households, extrapolated to individuals – 'taking a conservative estimate of two other household members for every respondent who said they had experienced a cut-off' – means that the actual number of people affected by electricity disconnections since 1994 ranges from 5.5 million to as high as 9.7 million (McDonald 2002: 12).

People whose electricity services are cut off face a multitude of negative consequences. These include health problems related to the use of alternative sources of energy such as coal and paraffin, and increased danger of household

fires due to candle or paraffin use. Clearly the increased use of wood and coal also has a detrimental environmental effect. In addition, given the gendered nature of domestic work in South Africa, many of the additional household burdens fall on women. So, when food spoils due to lack of refrigeration, or when alternative energy sources need to be secured, it is invariably women who have 'more work to do' (Fiil-Flynn 2001: 18). Fiil-Flynn's research also points to a rise in domestic violence against women as a result of household conflict related to electricity disconnections.

Households that have had their electricity cut off due to inability to pay their bills face reconnection fees that are often impossibly high given the fact that, for the service to be reconnected, electricity providers usually insist on arrears being paid in full (Fiil-Flynn 2001). As a result, many households 'live permanently without electricity, while others are forced into a vicious cycle of illegal connections/disconnections and power interruptions' (Fiil-Flynn 2001: 16). This is particularly so for very poor households. McDonald's research indicates that it is 'the poorest of the poor who make up the largest absolute number' of those who have experienced cut-offs (2002: 13).

Notwithstanding arguments about the substantive unfairness of disconnecting electricity to low-income households, there is the possibility of mounting a legal challenge to disconnections that are not procedurally fair. In order to be lawful, disconnections of electricity services must meet the PAJA requirement for procedural fairness. This means that any distributor that plans a disconnection must provide the household with adequate notice of the proposed action (section 3(2)(b)(i)) and reasonable opportunity to make representations (section 3(2)(b)(ii)), which could include raising the issue of inability to afford the service. Thus, in instances such as are documented by Fiil-Flynn (2001), where customers were neither notified that their electricity supply would be cut off, nor given the opportunity to dispute bills or to rectify payments problems, the distributor is acting unlawfully and the decision to disconnect the electricity supply could be taken on review. The fact that very few, if any, cases have been brought on these grounds is largely due to a lack of legal assistance/aid for civil matters and the seeming complexity of electricity-related cases.

### *Imposition of prepaid meters*

In response to the dual problems of widespread arrears and rising resistance to service cut-offs in low-income areas,<sup>22</sup> in recent years Eskom, along with many municipal service providers, has embarked on a campaign to install prepaid meters as a cost recovery mechanism (beyond the FBE amount, additional units of electricity must be purchased in the form of tokens to enable electricity provision). There is nothing wrong with prepaid meters per se, where they have been introduced out of genuine choice. Indeed, prepaid meters are welcomed in many residential areas as a means of bypassing inaccurate municipal billing (discussed below), as well as of managing household finances. However, as Nefale's research

indicates, there is a strong correlation between positive attitudes to prepaid meters and higher income levels. Conversely, the poorer the household, the more negative is the attitude towards prepaid meters. In Nefale's survey, the majority of respondents whose household monthly income was above R800 agreed with the statement 'A prepaid meter is the best way of providing electricity for our household', whereas the majority of respondents whose household monthly income was below R800 disagreed with the same statement (Nefale 2004: 18).

There are two important factors behind the clear correlation between lower household income and negative perception of prepaid meters. First, poorer households are less able to afford electricity tokens after the 50 kWh FBE amount is used up, which, with a prepaid meter, means automatic disconnection from the grid. Research conducted by the Coalition Against Water Privatisation in one of the poorest areas of Soweto, Phiri, found that the overwhelming majority of respondents with prepaid meters regularly run out of electricity between one and three times a month and a fifth of them experience repeated automatic disconnections (sometimes referred to as 'self-disconnections' because the disconnection occurs within the house as opposed to at the source of electricity distribution)<sup>23</sup> of between four and six times each month (Coalition Against Water Privatisation 2004: 13). In Nefale's study, 48 per cent of respondents identified 'cut-offs brought by prepaid meters' as the reason why there is so much resistance to prepaid meters in Soweto (2004: 19).

Second, households in poorer localities commonly are not given any choice about the installation of prepaid meters, whereas in richer areas prepaid meters are only installed following customer request and a formal application procedure. In Soweto, which comprises relatively poorer households (compared with other suburbs in Johannesburg), 83.5 per cent of respondents in Nefale's survey who have a prepaid meter in their home did not apply for it (2004: 7). This contrasts with the policy of, for example, City Power, which distributes electricity to Johannesburg's predominantly higher-income residential areas, whose 'point of departure' for the installation of prepaid meters 'is choice' (Padayachee interview).

The fact that prepaid meters are imposed on low-income households, whereas they are only installed on request in richer areas, arguably amounts to unfair discrimination based on socio-economic status and is potentially a violation of the constitutional right to equality.<sup>24</sup> Moreover, any change in service provision from a normal metered supply to a prepaid meter that is made without proper consultation contravenes section 4(2)(e) of the Local Government Municipal Systems Act, which requires the municipality to 'consult with the local community about' (i) 'the level, quality, range and impact of municipal services' and (ii) 'the available options for service delivery'. Furthermore, although yet to be challenged in South Africa, it is possible that prepaid meters might be judged to be unlawful (as water prepaid meters were in the UK)<sup>25</sup> on the administrative justice grounds that at the time of automatic disconnection following exhaustion of FBE or credit



in the form of prepaid tokens, they provide neither 'adequate notice' as required by PAJA section 3(2)(b)(i), nor 'reasonable opportunity to make representations' as stipulated in section 3(2)(b)(ii) of PAJA.<sup>26</sup>

### *Unequal customer services*

Apart from being largely unaffordable, electricity accounts in low-income households are also often unreliable, reflecting widespread inaccurate accounting systems, chaotic billing and infrequent meter-reading. In many municipalities this is the consequence of a two-tiered revenue management system, in which the accounts of the most valuable (in terms of revenue) consumers are prioritised over those of middle- and low-income households. This is the case in the City of Johannesburg, where the accounts of the top 13 000 customers by value (what the City commonly refers to as 'key customers') are handled by customer relations managers within City Power, whereas the accounts function for everyone else (approximately 275 000 households), including low-income households within City Power's area of licence,<sup>27</sup> is undertaken by the City's overstretched revenue administration unit.

There are three major problems with this kind of revenue management system. First, it results in bifurcated accounting, with good services for top-end consumers and poor services for everyone else. In the City of Johannesburg, the more valuable consumers are handled efficiently and effectively by well-trained customer relations managers, who ensure accurate billing, reliable meter-reading and prompt resolution of problems. In contrast, the remainder of consumers, who are dealt with by the City's revenue management administration, experience a vastly inferior service, with systemic problems of inaccurate accounts and billing.

Second, the disconnection of the bulk of customers' accounts (handled by the City) from all other customer services issues across all customer categories (handled by City Power), creates an artificial separation between accounting services and customer services for everyone other than the top 13 000 customers. This means that, absence of customer relations managers notwithstanding, it is difficult to consolidate data and to resolve complaints because information and autonomy are split between institutions. Conversely, the top 13 000 customers are dealt with by an integrated accounts and customer services environment in which information is consolidated and problems can be speedily addressed.

Third, by removing the more difficult billing component (for everyone below the top 13 000 customers) from the equation, an inaccurate impression may be created of the overall performance of the commercialised service provider. In other words, where a service provider such as City Power is responsible for the accounts of only 13 000 key customers, it is relatively easy for it to score well on customer services-related indicators (which are an important consideration for renegotiating or renewing contracts) when, in actual fact, the overall accounts system, as managed by the City, is in a state of chaos.

The chaotic state of Johannesburg's basic services accounting system and the concomitant 'billing chaos' is acknowledged by the City. In an article on its official website celebrating the launch of a new municipal bond, the City admitted that one of the challenges it faced in issuing the bond was 'dealing with its billing chaos' (Abraham 2006). Yet, despite the City's acknowledgment of the endemic problem of inaccurate billing, and, in the absence of an integrated customer service system, low-income households are subjected to legal action, disconnection and the imposition of prepaid meters. City Power's 'key customers', on the other hand, experience 'an intimate level of customer care from City Power's top management' (Khumalo et al. 2003: 31), which includes regular meetings 'to enable the service provider and key customers to discuss areas of mutual concern' (Khumalo et al. 2003: 28).

Khumalo et al. demonstrate that, despite providing the City's 'political leadership with a semblance of concern for continued access to electricity services by low-income households' (2003: 20),<sup>28</sup> this bifurcated system results in poor customer care for everyone other than 'key customers'. In their survey of the impact of electricity service delivery and customer satisfaction in Johannesburg, Khumalo et al. found that, while there was great customer satisfaction among the 13 000 top consumers, the majority of users in Johannesburg (whose accounts are managed by the City) 'felt that City Power treated them unequally and gave them lower priority' (2003: 31). Indeed, this research found that, largely as a result of being relieved of the responsibility of managing the majority of electricity consumers' accounts, 'City Power has tended to concentrate its efforts to improve the quality of customer care and customer relations on a small section of its customer base, at the expense of deteriorating relations with the majority of its customers' (Khumalo et al. 2003: 35).

Such discrepancies in customer services, which result in the inferior treatment of low-income households compared with 'key customers', could be subjected to an equality-clause challenge based on unfair discrimination. Moreover, if the unfair discrimination is the result of inaccurate billing and/or inadequate customer services (for example, if a low-income household is disconnected on the basis of faulty accounting), any such challenge may be strengthened by reference to section 95 of the Local Government Municipal Systems Act, which stipulates that a municipality must:

- (d) where the consumption of services has to be measured, take reasonable steps to ensure that the consumption by individual users of services is measured through accurate and verifiable metering systems;
- (e) ensure that persons liable for payments, receive regular and accurate accounts that indicate the basis for calculating the amounts due;
- (f) provide accessible mechanisms for those persons to query or verify accounts and metered consumption, and appeal procedures which allow such persons to receive prompt redress for inaccurate accounts;
- (g) provide accessible mechanisms for dealing with complaints from such persons, together with prompt replies and corrective action by the municipality...

## Conclusion

On the eve of EDI restructuring, South Africa's electricity distribution system is divided between the state-owned electricity corporation, Eskom, and some 200 distribution businesses operating within 187 municipalities across the country. Collectively, the municipalities – whether directly or through commercialised entities – serve about 60 per cent of total electricity consumers, accounting for approximately 40 per cent of electricity consumption by sales volume.

This unusual distribution set-up is a hangover from what Fine and Rustomjee (1996) have referred to as apartheid's 'minerals-energy complex' (MEC), a system of accumulation in which mining, petrochemicals, metals and related activities accounted for a quarter of economic activity, but which saw very few African households connected to the electricity grid (see McDonald, Chapter 1 of this volume, for an extended discussion of the MEC). In this racially divided system of distribution, typically, municipalities distributed electricity to white residential areas and Eskom distributed to industry and, following the collapse of the black local authority system, to black townships. More than a decade after the democratic transition and under the shadow of long-awaited EDI restructuring, the fragmented distribution system retains many of its apartheid-inherited contours. In the City of Johannesburg, for example, Eskom continues to distribute electricity to Soweto while the municipal entity, City Power, distributes to the historically (and substantively) white suburbs.

It is hoped that concomitant discrepancies, along with the problems faced by low-income households that have been raised in this chapter such as unequal FBE provision and inappropriate tariffs, will be addressed in the EDI restructuring process. However, as has been flagged by various authors in this book, it is questionable how far restructuring can redress underlying inequities if it occurs within the commercial paradigm.

The government has acknowledged the critical role electricity plays in improving the quality and potential of life for poor South Africans. However, as this chapter and others in this book have shown, severe limits have been placed on the transformative potential of electricity by the constraints of a highly commercialised sector. In particular, electricity distribution has been driven more by principles of cost reflectivity than by concerns to create sustainable basic services for poor people.

Many of the resulting inequalities and inequities can be challenged using the rights-based framework proposed in this chapter. Others, if not technically unconstitutional and/or unlawful, must certainly be regarded as immoral in a democracy committed to 'improving the quality of life of all citizens', freeing 'the potential of each person' and, ultimately, 'the achievement of equality' (preamble and section 1(a) of the Constitution).

## Notes

- 1 A 'matchbox' is the typical council house built in Soweto between 1955 and 1968 to accommodate people relocated from informal settlements. It is approximately 40 m<sup>2</sup> in size and comprises a kitchen, a living room and two bedrooms, with an outside tap and lavatory. As in Grace's case, backyard shacks are common.
- 2 Grace and Sipho are not their real names. I have known them and followed their experiences with electricity and water services since July 2004.
- 3 Prepayment metering is a system for dispensing electricity (and water) which transfers the credit-control function from municipalities and/or water services providers to consumers because, in order to access electricity, consumers must pay for it in advance, by means of tokens. Like cell phone airtime bought on a pay-as-you-go basis, the tokens are ordinary paper slips with a numerical 20-digit code, which must be entered into the prepaid meter's keypad. If valid, the prepaid meter accepts the credit and the customer can consume electricity until the credit runs out, at which point the prepaid meter interrupts the electricity supply.
- 4 In terms of the government's FBE policy, discussed in further detail later, qualifying households receive a basic amount of 50 kilowatt-hours of electricity free each month.
- 5 In South Africa, as in many other countries in the world, electricity services are divided into generation, transmission (the power grid) and distribution (sometimes referred to as reticulation in the municipal sphere). This chapter focuses on distribution because it is the 'delivery' component of electricity services. As such it is most critical to this rights-based analysis, which views electricity as an essential service to be extended and maintained as a public good. However, issues of electricity generation are critical to issues of cost recovery, discussed later.
- 6 An *obiter dictum* is an opinion voiced by a judge that is not legally binding.
- 7 The *Grootboom* judgment established that, regarding positive obligations, the right of access to housing requires the state to formulate and to execute housing programmes that are 'reasonable' (*Grootboom* para. 41). The judgment explicitly steered away from any reference to individual rights to housing per se, and it also rejected the argument that socio-economic rights have a mandatory minimum core that must be immediately realised, as stipulated by the UN's CESCR in General Comment 3 on the nature of states parties' obligations (CESCR 1990: para. 10).
- 8 Regrettably, the African Charter on Human and Peoples' Rights (ACHPR) (1981), which South Africa ratified in 1994, is silent on the subject of housing or electricity rights. The only article that could possibly be interpreted to contain an implied right to electricity is article 24, the right of everyone to 'a generally satisfactory environment favourable to their development'. However, the African Commission on Human and Peoples' Rights, which is charged with the enforcement of the ACHPR, has not thus far in its communications interpreted article 24 as implying a right to electricity. None of the other human rights documents of the African Union refers to electricity specifically (see for example Pretoria University Law Press 2005). Nor do any of the individual constitutions within the Southern African Development Community region.

- 9 See [www.unhchr.ch/html/menu3/b/a\\_ceschr.htm](http://www.unhchr.ch/html/menu3/b/a_ceschr.htm).
- 10 See [www.un.org/womenwatch/daw/cedaw](http://www.un.org/womenwatch/daw/cedaw).
- 11 Sepúlveda cites as evidence of this principle para. 35 of General Comment 14 on the right to the highest attainable standard of health: 'to ensure that privatisation of the health sector does not constitute a threat to the availability, accessibility, acceptability and quality of health facilities, goods and services' (CESCR 2000); Concluding Observations Philippines E/1996/22 para. 120; Concluding Observations Peru E/1998/22 para. 161; and Concluding Observations Australia E/2001/22 para. 395 (Sepúlveda 2003: 367).
- 12 Many, including this author, suspect that South Africa's non-ratification of the ICESCR relates to concerns over being held accountable to the minimum core content standard set out in General Comment 3 (note 7).
- 13 Eskom is wholly owned by the Department of Public Enterprises. City Power is wholly owned by the City of Johannesburg.
- 14 According to section 9(3) of the Constitution 'the state may not unfairly discriminate directly or indirectly against anyone on one or more grounds, including race, gender, sex, pregnancy, marital status, ethnic or social origin, colour, sexual orientation, age, disability, religion, conscience, belief, culture, language and birth'.
- 15 The connotation of the right to equality of electricity services is therefore almost the same as that of the implied right to electricity. The difference is that the right to equality is an explicit right, and one that the courts seem readily willing to accept.
- 16 Information obtained via telephone call to City Power customer services, 23 June 2006; [www.eskom.co.za](http://www.eskom.co.za), accessed 24 April 2006.
- 17 For the conservative view, i.e. that widespread non-payment of bills is due to unwillingness rather than an inability to pay for electricity, see Ajam 2001 and Johnson 1999.
- 18 The national electrification programme was funded by Eskom until 2000, but since then it has been funded by the Treasury through the National Electrification Fund in the DME (Eberhard 2005).
- 19 The City of Johannesburg's FBE equalisation followed an intervention by the Centre for Applied Legal Studies in which the unfair discrimination against Soweto residents was highlighted. This intervention suggests that other equality-based interventions might also succeed.
- 20 Most municipalities have indigent registers, which serve to provide a social package for low-income households as a means of ensuring a basic standard of living. I suggest that part of any social package should include extra safeguards against electricity (and water) disconnection due to inability to pay for services.
- 21 This figure exceeds the RDP's goal of 2.5 million new homes by 1999.
- 22 For an examination of one of the most successful campaigns around electricity services, as mounted by the Soweto Electricity Crisis Committee, see McInnes 2005.
- 23 The term 'automatic disconnection' is used in this chapter because it accurately reflects a technocratic process without recourse to representation. It also does not risk the possible inference in the term 'self-disconnection' of disconnection being the result of choice.

- 24 Any adjudication of this issue would probably attempt to balance the consideration of equality of service with the need for cost recovery on the part of the service provider. There is not much indication from the courts as to which side of the balance is likely to carry more weight. But if less restrictive means of cost recovery are possible, this would weigh in heavily on the side of equality.
- 25 *R v Director General of Water Services, ex parte, Lancashire County Council, Liverpool City Council, Manchester City Council, Oldham Metropolitan Borough Council, Thameside Metropolitan Borough Council and Birmingham City Council* 1999 Env. L. R. 114.
- 26 For an outline of the administrative law aspects of the right to access to sufficient water, which includes a discussion of the legality of prepaid meters, see Flynn and Chirwa 2005.
- 27 This excludes the areas directly supplied by Eskom (including Soweto), which is responsible for its own customers' accounts, billing and meter-reading.
- 28 According to Khumalo et al., the probable reason for the City of Johannesburg retaining control of the accounts of ordinary households is to limit the 'massive electricity cut-offs for non-payment' that could result from the implementation of City Power's 'harsh cost recover measures' (2003: 19).

### References

- Abraham A (2006) *Joburg shares expertise with other cities*. City of Johannesburg official website. Accessed 6 April 2006, [www.joburg.org.za](http://www.joburg.org.za)
- Ajam T (2001) Intergovernmental fiscal relations in South Africa. In N Levy & C Tapscott (eds) *Intergovernmental relations in South Africa: The challenge of cooperative government*. Cape Town: Idasa
- ANC (African National Congress) (1994) *The Reconstruction and Development Programme: A policy framework*. Johannesburg: Umanyano Publications
- Bond P (2004) *The battle over water in South Africa*. Accessed 13 February 2008, <http://www.africafiles.org/article.asp?ID=4564>
- Bond P & McInnes P (2006) Decommodifying electricity in post-apartheid Johannesburg. In H Leitner, J Peck & E Sheppard (eds) *Contesting neoliberalism: The urban frontier*. New York: Guildford Press
- CALS (Centre for Applied Legal Studies) (2003) Comment on the draft Electricity Distribution Industry Restructuring Bill. Johannesburg: CALS, University of the Witwatersrand
- CESCR (United Nations Committee on Economic, Social and Cultural Rights) (1990) General Comment 3 on the nature of states parties' obligations (art. 2(1) of the International Covenant on Economic, Social and Cultural Rights). Accessed 13 February 2008, [www.unhcr.ch/tbs/doc.nsf/\(symbol\)/CESCR+General+comment+3.En?OpenDocument](http://www.unhcr.ch/tbs/doc.nsf/(symbol)/CESCR+General+comment+3.En?OpenDocument)
- CESCR (1991) General Comment 4 on the right to adequate housing (art. 11(1) of the International Covenant on Economic, Social and Cultural Rights). Accessed 13 February 2008, [www.unhcr.ch/tbs/doc.nsf/\(symbol\)/CESCR+General+comment+4.En?OpenDocument](http://www.unhcr.ch/tbs/doc.nsf/(symbol)/CESCR+General+comment+4.En?OpenDocument)

- CESCR (2000) General Comment 14 on the right to the highest attainable standard of health (art. 12 of the International Covenant on Economic, Social and Cultural Rights). Accessed 13 February 2008, [www.unhcr.ch/tbs/doc.nsf/\(symbol\)/E.C.12.2000.4.En](http://www.unhcr.ch/tbs/doc.nsf/(symbol)/E.C.12.2000.4.En)
- Coalition Against Water Privatisation (2004) *The struggle against silent disconnections: Prepaid meters and the struggle for life in Phiri, Soweto*. Johannesburg: Coalition Against Water Privatisation & Anti-Privatisation Forum
- DME (Department of Minerals and Energy, South Africa) (1998) *White Paper on the Energy Policy of the Republic of South Africa*. Pretoria: DME
- DME (2003) *Electricity basic services support tariff (free basic electricity) policy for the Republic of South Africa*. Pretoria: DME
- DME (2004) *The electricity pricing policy of the South African electricity industry*. Pretoria: DME
- DPLG (Department of Provincial and Local Government, South Africa) (1998) *White Paper on Local Government*. Pretoria: DPLG
- Eberhard A (2005) From state to market and back again: South Africa's power sector reforms. *Economic and Political Weekly* 50: 5309–5317
- Eskom (1996) An analysis of the implications of supply capacity limitations in low income residential areas. Mimeo. Pretoria: Eskom
- Eskom & DME (2002) *Options for a basic electricity support tariff*. Research Project 400903, University of Cape Town
- Fiil-Flynn M (2001) *The electricity crisis in Soweto*. Municipal Services Project Occasional Papers Series No. 4. Cape Town: Municipal Services Project
- Fine B & Rustonjee Z (1996) *The political economy of South Africa: From minerals-energy complex to industrialisation*. London: Hurst & Company
- Flynn S & Chirwa DM (2005) The constitutional implications of commercializing water in South Africa. In D McDonald & G Ruiters (eds) *The age of commodity: Water privatisation in southern Africa*. London: Earthscan Publications
- Hallowes D (2006) *Sustainable energy? Towards a civil society review of South African energy policy and implementation*. Discussion paper. Johannesburg: Earthlife Africa
- Johnson RW (1999) *Not so close to their hearts: An investigation into the non-payment of rents, rates and service charges in South Africa's towns and cities*. Johannesburg: The Helen Suzman Foundation
- Khumalo G, Ntlokonkulu L & Rapoo T (2003) *Alternative service delivery arrangements at municipal level in South Africa: Assessing the impact of electricity service delivery and customer satisfaction in Johannesburg*. Research Report 102. Johannesburg: Centre for Policy Studies
- Kothari M (2002) *Report of the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living*. United Nations Commission on Human Rights E/CN.4/2002/59
- McDonald D (2002) *The bell tolls for thee: Cost-recovery, cut-offs and the affordability of municipal services in South Africa*. Pretoria: HSRC

- McInnes P (2005) Chapter 1: The policy context. In 'Making the kettle boil: Rights talk and political mobilisation around electricity and water services in Soweto'. Unpublished MA dissertation, Department of Sociology, University of the Witwatersrand
- Nefale M (2004) *A survey on attitudes to prepaid electricity meters in Soweto*. Johannesburg: Centre for Applied Legal Studies, University of the Witwatersrand. Accessed 8 January 2007, [http://www.law.wits.ac.za/cals/meters/Prepaid%20Meters%20\(ultra\).pdf](http://www.law.wits.ac.za/cals/meters/Prepaid%20Meters%20(ultra).pdf)
- Nefale M & Roux T (2003) Promoting access to affordable electricity: Comments on the draft Electricity Distribution Industry Restructuring Bill. *Economic & Social Rights (ESR) Review* 4(4): 19–21
- Pretoria University Law Press (2005) *Compendium of key human rights documents of the African Union*. Pretoria: Pretoria University Law Press
- Sepúlveda M (2003) *The nature of the obligations under the International Covenant on Economic, Social and Cultural Rights*. Oxford: Intersentia
- South African Institute of Race Relations (2006) *South Africa survey 2004/2005*. Johannesburg: South African Institute of Race Relations
- Tully S (2006) The contribution of human rights to universal energy access. *Northwestern University Journal of International Human Rights* 4: 518–548

### **Court cases**

- City Council of Pretoria v Walker* 1998 (3) BCLR 257 (CC)
- Government of the Republic of South Africa v Grootboom* 2000 BCLR (11) 1169 (CC)
- R v Director General of Water Services, ex parte, Lancashire County Council, Liverpool City Council, Manchester City Council, Oldham Metropolitan Borough Council, Tameside Metropolitan Borough Council and Birmingham City Council* 1999 Env. L. R. 114
- S v Makwanyane* 1995 (3) SA 391 (CC)

### **Interviews**

- Eberhard A, Infrastructure Industries Reform and Regulation Management Programme, Graduate School of Business, University of Cape Town, 27 July 2004
- Govender P, Director, Contract Management Unit, City of Johannesburg, 5 April 2006
- Padayachee V, Vice-President: Customer Services, City Power, 6 April 2004
- Salvoldi S, Electricity Pricing Manager, Eskom Distribution, 6 April 2004