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# CHAPTER 3

## Delhi

### Regulation in the Shadow of Privatisation

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#### Introduction

The Delhi Electricity Regulatory Commission (DERC) operates as a critical component of arguably the most high-profile electricity sector reform effort in the country. That the operation of the DERC is instrumental to the success of a high-stakes privatisation effort - only the second such in India after Orissa - makes it an important case for further study. Moreover, that the DERC is regulating private rather than public entities also makes it worth examining closely.

The DERC was established in March 1999, and passed three orders in January 2001, May 2001 and February 2002, relevant to setting the stage for the subsequent reform. The Delhi Vidyut Board was unbundled, with the resultant three distribution companies privatised in a joint venture structure in July 2002. The governing framework for the five year reform period was enshrined in a Delhi Government policy directive, which set certain parameters of sector operation, and left others to the DERC. Since 2002, the DERC has issued five sets of tariff orders, although these have not always been on a timely basis. The DERC began operation with a single Member,

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This chapter draws on information obtained through interviews and documentary evidence. All interviews were conducted on a not-for-attribution basis. Consequently, while specific points obtained in interviews are referenced in a note, interviewees are only identified by their broad institutional affiliation.

whose term ran until 2004. Subsequently, a three person Commission, consistent with the pattern in other states, was appointed.

### *Summary of Performance*

While this chapter is focused on the DERC and how it operates rather than the larger evolution of the electricity sector in Delhi, this section provides a brief snapshot of performance in the sector to set the stage for the discussion that follows. The Delhi reform story has been a rocky one. Midway through the five year initial phase of reforms, public unrest grew over charges of poor performance, particularly by two of the three companies, BRPL and BYPL.<sup>1</sup> In 2005-6 there were public agitations and unrest over a tariff increase to consumers despite a perception of poor performance. However, performance appears to have improved toward the end of the five year period.

Table 1 summarises some relevant data, from which a few observations immediately become apparent. First, one of the Discoms, NDPL, has substantially over-achieved their loss reduction target (Aggregate Technical and Commercial losses or ATC targets), to the tune of nearly 9 per cent by 2005-6. This overachievement has contributed substantially to bringing the sector as a whole to a position of revenue surplus by 2006-7. The other two companies have met their target in almost all years (BYPL in 2002-3 is an exception) but have not substantially overachieved. Second, collection of past arrears has contributed substantially to the financial turn-around. Third, by

**Table 1:** Performance Statistics for Three Private Discoms in Delhi

		2002-3	2003-4	2004-5	2005-6	2006-7
AT&C Loss Achieved % (target)	BRPL	47.40	45.06	40.64	35.53	(31.10)
		(47.55)	(46.00)	(42.70)	(36.70)	
	BYPL	61.90	54.30	50.12	43.89	(40.20)
		(56.45)	(54.70)	(50.70)	(45.05)	
	NDPL	47.80	44.87	33.79	26.52	(31.10)
		(47.60)	(45.35)	(40.85)	(35.35)	
Revenue Gap at						
Existing Tariff (cr)		1,185	1,735	1,862	520	(195.42)*
Tariff Increase (%)		0	5.02	9.80	6.66	0
Revenue from						
Tariff Increase (cr)		0	103	379	319	0
DVB Arrears Collected (cr)		-	210	103	55	0
Government Support (cr)		1,364	1,260	690**	138	0

\* Projected surplus, includes DVB arrears collected.

\*\* In 2004-5 a regulatory asset of 697 cr was also created.

Source: Data taken from DERC documents.

2006-7, all three companies had done sufficiently well for the sector to generate a surplus and require no additional government support.

While the overall picture is one of considerable reform achievement in financial terms and savings to the public exchequer, continued reports of consumer discontent over service quality from Delhi's citizens, unanswered questions about the performance of some of the companies raised by independent organisations and a larger sense that the DERC lacks credibility with the public, all of which are discussed further below, temper the overall sense of achievement.

## Reform Context

A bold and ambitious privatisation-led reform effort provides the overarching context within which any understanding of the DERC necessarily rests. Our focus here is not on an assessment of the privatisation – whether design or implementation – but on the implications for the regulatory process. We first discuss the motivation for and basic timetable of reform, then turn to the antagonistic interaction between regulator and government over key design elements, then examine the final governance framework, and finally discuss the impact on the regulator.

### *Motivation for Reform and Reform Timeline*

As with many other State Electricity Boards, the performance of the Delhi Vidyut Board had been on a sharp downward trend through the 1990s. Reported Aggregate Technical and Commercial (AT&C) loss levels had jumped from the range of 20–25 per cent in the early 1990s to nearly 50 per cent by 1998. According to senior officials responsible for framing the reforms, public confidence in the utility was also extremely low, culminating in agitations and even riots against a poor and deteriorating power situation in the summer of 1998.<sup>2</sup> For a new government elected in December 1998, the power sector therefore became a top political priority; developing and initiating power sector reforms became an early and high profile aim of the political leadership.

Two external factors strongly shaped the reform decision.<sup>3</sup> First, reformers were driven by a perception that there was only a narrow window of political opportunity to implement reforms and realise results before a new election. As a result, they decided not to involve the World Bank or other external agents, which, it was suggested, would slow down the process. Second, the Orissa experience with reform and privatisation was coming unstuck at around the same time as Delhi reformers were planning their reforms. Hence, they were acutely aware of the need to avoid Orissa's pitfalls. However, at no point did the Orissa example translate to a rethinking of

privatisation as the central plank of reform, but only to efforts to design a different approach to privatisation.

Creation of an independent regulator in March 1999 was a key part, and indeed, the first step, in the reform process. The DERC was initially established with limited powers, notably no control over licensing. By October 2000, full powers were conferred on the DERC as part of a Delhi Electricity Reforms Ordinance, which was passed in November 2000 and came into force as an Act in March 2001. The bidding and privatisation process unfolded during 2001 and 2002, with the regulator playing an important role, as discussed further below, in determining and establishing key parameters. As this chronology suggests, the DERC was a nascent and inexperienced body at the time of key privatisation and reform decisions. This inexperience compounded the already problematic situation of having to walk a line between asserting its independence and providing support for the overarching reform programme.

### *Early Antagonism between Regulator and Government*

Two important early episodes illustrate the tension placed upon the regulator by the reform context: rejection of a government request for multi-year tariffs and the regulator's struggle against the larger policy directive framing the reform process. In the first case, the DERC decided against a multi-year tariff, while in the second, it had to accept the Government's authority. Both cases, however, illustrate the pitfalls of what was only partial regulatory autonomy in the service of structural reforms.

For reform designers within the DVB, drawing from the lessons of other countries and earlier efforts as in Orissa reducing regulatory uncertainty was critical for success of the reforms.<sup>4</sup> Accordingly, they proposed a tariff setting formula which locked into a fixed trajectory all the critical parameters for tariff setting, such as the loss reduction trajectory, and the capital expenditure for each year. In reply, the regulator said that although the idea merits consideration, 'it is not the mature stage' for fixing multi-year tariffs. Specific problems anticipated included an adequate information base in the absence of relevant information systems, the practicality of uniform loss targets for all companies, the challenge of sensible long-term investment plans given the lack of information about fixed assets then held, the lack of specificity on efficiency improvements and quality of service in the DVB proposal.<sup>5</sup> Interestingly, the regulator also noted the unanimous public objection to long-term tariffs: 'No member of the public supported DVB's request for a five year formula for setting tariffs'.<sup>6</sup> Moreover, he suggested the public perceives the proposal as a 'product of the concern for creating a privatisation enabling environment rather than serving the consumer'.<sup>7</sup>

In interviews, an official involved in the reform held a view that the

regulator was merely taking the safe way out and sought to avoid responsibility and accountability for necessary tough decisions.<sup>8</sup> However, there were several representations made before the regulator during hearings that such a multi-year approach was not justified at the time, a position that stakeholders from all sectors reaffirmed in interviews conducted for this study. Whether or not these views were informed or appropriate, the Government did not feel it could move ahead, and particularly could not impose a loss reduction target without regulatory concurrence. The way out was to make the loss reductions themselves the basis for bidding, thereby removing this key parameter from regulatory discretion, but indirectly rather than directly. However, approval of capital expenditure, repair and maintenance and other critical variables remained with the regulator. In these cases, the regulator appeared to be signaling autonomy to defend what he saw as the public interests, above being a team player in a larger government-led reform scheme.

A second battle occurred over the Government's Policy Directive, which laid out the framework for the reform. Here the regulator challenged the legality of the directions themselves, arguing that they are 'not in the nature of policy directions in the public interest within the meaning of the [Delhi Electricity Reform] Act'.<sup>9</sup> This position also found favour with stakeholders, who argued that the Government 'cannot rewrite the Act in the name of issuing policy directions'.<sup>10</sup> Whatever the merits of the argument, which turn on how the term 'public interest' is decided, since the Act named the Government itself as the final arbiter of any dispute, the matter was quickly settled in favour of the Government.<sup>11</sup> While accepting this decision, the DERC did make a point of reinforcing their autonomy, reiterating that within the scope of the Policy Directive they retain control on allowable costs and revenues for the purpose of future tariff determination.<sup>12</sup>

These episodes suggest a regulator determined to send public signals regarding autonomy, and also one that either recognised the validity of stakeholder perspective, or used them strategically, or both. At the same time, the fight over the Policy Directive, in particular, was somewhat quixotic, given the legal cards were entirely stacked in favour of the Government. Perhaps the clearest message that occurs from these two episodes is that early actions are shaped by the regulator's perceived need to establish early credibility with the larger public.

### *Restricting the Regulator: The Governance Framework for Privatisation*

Just as the regulator was forced to play a balancing act, so too was the government. Having established the DERC as an independent body, it then found itself in a position of limiting regulatory risk even while avoiding

charges that it was limiting regulatory independence. Once the effort to get the regulator to agree to a multi-year tariff failed, the proposed way forward – locking in loss reduction through the bidding process – was only a partial solution. The result was divided control – in that some parameters were under the regulators control and others were established up front by the government – between the government and the regulator. A World Bank study of the Delhi reform reaches a similar conclusion, and indeed recommends that curtailing regulatory discretion in the early years of reform may be a necessary evil.<sup>13</sup>

The Delhi Government's Policy Directive established the loss reduction trajectory (indirectly through the bidding process), a method for bulk supply costs on a multi-year basis, automatic pass through of these costs, and specified a 16 per cent rate of return on the capital base. The DERC retained control over scrutiny of operating expenses and capital expenses without being bound to any specific formula, and based on balancing the results of this scrutiny against the revenue requirement, the eventual tariff. Given expectations of continued losses for at least a few years, the Government also pre-specified a transition loan amount for the five year transition period (which it revised upwards shortly before the handover). It is certainly possible that knowledge of the available subsidy was a factor in the regulator's subsequent decision-making.

The impact of this divided control was exacerbated by divided motivations. For the Delhi Government, ensuring a successful privatisation was the overarching goal, in the expectation that privatisation would lead to loss reduction and quality of service improvements in the medium to long term. While the DERC saw itself as 'facilitator of the overall reform process'<sup>14</sup> as a new public entity it also had to build public credibility in the very short term. This dynamic between differing perceptions of the public interest, and the resultant back and forth between the Government and the DERC, come to the fore in some examples of the DERC's early actions.

Prior to privatisation, the DVB petitioned for a 35 per cent tariff increase in 2001 on the grounds that there had not been a tariff hike since 1997. From the DVB's point of view, this hike would have decreased pressure for subsequent hikes during the privatisation period, limiting any public association between privatisation and tariff increases. However, given credibility concerns, as a new regulator seeking to build public confidence, the DERC balked at a 35 per cent tariff hike based on an uncertain future promise of gains to consumers. As a result, the DERC allowed only a 15 per cent hike, much to the annoyance of senior DVB officials, one of whom accused the DERC of 'spoiling the opening position for privatisation'.<sup>15</sup> Notably, it is not at all clear whether the Government and the DVB were on one mind on this point, and therefore whether the DERC was taking this stance against or with the Government's view.

A second example illustrates that the element of bargaining was exacerbated by the information vacuum in the sector. According to the privatisation process, the DERC was to set the base levels of Aggregate Technical and Commercial losses (ATC) that future gains would be measured against. A high base level would make achievement of targets easier and privatisation more attractive, while a low level would make privatisation less attractive but ensure consumers earlier gains. While in theory this should be a single figure objectively obtained through data analysis, in practice the lack of basic technical information about the sector meant that it involved considerable guess work. The DERC estimates were probed and challenged by the Government. Participants describe a scene where the principals on both sides supported by their consultants argued over various figures.<sup>16</sup> The DERC ultimately developed eight separate and alternative estimates that were discussed with the Government, of which the highest starting level was finally selected as the base ATC level.

The DERC's actual tariff decisions over the five year initial period provide the third example of how divided control and differing motivations combined to hamstring the reform. For the Government to set the parameters under its control, it had to make assumptions about the DERC's future decisions regarding tariffs. It assumed annual percentage increases of 10-10-10-5-3, over the five years of the transition period as detailed in a cabinet note on the basis of which the privatisation was approved.<sup>17</sup> In practice, the regulator has set far lower cumulative tariff increases, based on its own analysis of the specific requirements on a year to year basis.<sup>18</sup> In the first year there was no filing, and in the second year the DERC set a 5.5 per cent increase. In 2004-5, the regulator refused to set a tariff increase to meet the entire revenue gap, instead raising tariffs 10 per cent and creating a regulatory asset to meet the gap. In 2005-6, the increase was 6.6 per cent. Having set up an independent regulator, the Delhi Government could not credibly force higher tariff increases. Moreover, sensitivity to public unrest over tariff hikes was not the concern of the regulator alone but also a concern for the government itself.

In sum, the combination of divided control and differing motivations - privatisation first for the government and public credibility first for the regulator - was deeply problematic.<sup>19</sup> By attempting to balance the contradictory objectives of limiting regulatory uncertainty to investors and achieving regulatory credibility with the public, neither objective was substantially met.

### *Impact on Regulator: Greater Politicisation and Heightened Scrutiny*

Establishment of a regulator coterminous with initiation of a major restructuring and privatisation as was attempted in Delhi placed the regulator

in the midst of a high stakes game, but with a few parameters removed from its control. The DERC faced a fixed five year timeline for the initial phase of privatisation, predetermined desired outcome (certain loss reductions and revenue neutral and a Discom performance), but without full control over regulatory levers, notably the efficiency gains. There are certainly arguments to consider on whether the regulator was too timid with tariff increases and sufficiently bold in its monitoring and scrutiny role, issues we consider later in this chapter. However, separate from whether the DERC made the best use of the cards it was dealt, there is little doubt that the privatisation context forced it to operate in a high stakes situation, and before it had an opportunity to establish credibility with the public.

Over the five year period, the Delhi electricity sector has been subject to a review by the Comptroller and Auditor General of India, as well as to review by the Public Accounts Committee (PAC) of the Delhi Legislative Assembly. This context is an important part of understanding the DERC's early performance. A high profile reform inevitably places political pressure on all actors involved, and the regulator is no exception. Thus, ironically, while establishment of an independent regulator is meant to depoliticise decision making, the DERC was required, from its inception, to operate in a heightened atmosphere. To do so would, at minimum, requires an established credibility, which as a body just a year old when the privatisation arrangements were put in place, a problem compounded by a slow start, the DERC did not have. The DERC experience suggests the need for establishing credibility of a nascent regulatory authority before linking the success of a major restructuring and reform to its performance. It also highlights the risk to regulatory credibility of policy instruments aimed to partially by-pass the regulator.

## Institutional Structure and Capacity

### *A Slow Start*

The DERC was hampered in its early phase by a lack of understanding of and support for a regulator within the larger bureaucratic establishment. Within Delhi's bureaucratic and hierarchical culture, there was little understanding of where to place the regulator.<sup>20</sup> While the regulator had a high position in the hierarchy according to the statutes bureaucrats within the government did not accord the DERC position much respect. A typical view was that the regulatory role was simply an arithmetical one, and one that two clerks used to perform in the erstwhile DVB.<sup>21</sup> This lack of respect is relevant both for cooperation with the extended government machinery and for the perceived ability of the regulator to enforce his orders.



The DERC also started very slowly with minimal staff and capacity, and only incrementally built up its ability to take on the daunting task of regulating a sector undergoing privatisation. For the first three quarters after establishment, the DERC operated with only the Chairperson, the Secretary, and two support staff, and operated out of a DVB apartment. This time was spent developing basic procedural regulations, such as on conduct of business, human resources and so on, and a concept paper on tariff setting philosophy.<sup>22</sup>

There was no external technical help available to the DERC during this period. As a result, the regulations were simply adapted from templates downloaded from web sites of other previously existing regulators, including the Central Electricity Regulatory Commission. In some cases, based on previous experience, certain sections were drafted from scratch, one example being the regulations on public hearings in the tariff regulations.<sup>23</sup> While there is nothing wrong in principle with drawing on an existing model, there are two reasons to be concerned about this somewhat ad hoc process. First, there are no indications that any assessment was, in fact, conducted to examine whether regulations lifted from elsewhere were adequate. Second, without internal deliberation, the letter of the approach may have been transplanted, but an understanding of the significance of various procedures to the regulatory process – notably stakeholder consultation – may have received short shrift.

The only training available to DERC was through a ‘twinning’ programme with American regulators that involved exchange visits. The DERC was matched with counterparts at Maryland and Pennsylvania in the US. According to some in DERC, this experience seems to have led to and perhaps strengthened an emphasis on transparent process at DERC.<sup>24</sup> However, according to others, the US system was sufficiently different, particularly in its judicial orientation, to make the experience somewhat irrelevant to the DERC.<sup>25</sup>

This slow start to the DERC, based on limited internal staff capacity and no external assistance is particularly problematic given the enormous demands that would be placed on the DERC within a year or so of its existence.

### *Commissioner Selection*

The individual selected to be the first regulator can have an enormous influence on the institution, since he is responsible for shaping procedures and informal understandings and practices. In the case of the DERC, the selection was particularly important since despite provision in the statutes for a three person Commission, for several years there was but a single Commissioner.

The Commissioner brought a background as an engineer from the Central Electricity Authority. At the time of appointment, he was considered to have the technical skills to do the job, and no there were no suggestions of any improprieties in the selection process. Although his background as a technocrat was somewhat of an anomaly against the prevalence of senior IAS officers as Chairpersons of regulatory commissions in most states, his appointment is the exception that proves the rule. Some internal DERC views suggest that senior IAS officers were peeved at the Chairperson's appointment as they expected the regulator should have come from their ranks, and that this ill feeling came in the way of cooperation with the regulator.<sup>26</sup> Since his appointment, IAS officers have been front-runners to replace him. Most of the front-runners have also been insiders and indeed heads of various key institutions in the sector. Notable candidates include a former Chief Secretary, a former Chairman of the DVB, a former Energy Secretary of Delhi, and the head of the Delhi Transco. Thus, while the Chairperson was not an IAS member, selection process for his successor does provide grounds to reinforce the widespread perception that IAS members and those close to the sector are typically appointed regulators.

There are also anecdotal hints that politicians continue to play a central role in regulatory selection. The formal process of nominating candidates from which a regulator is selected is supposed to be in the hands of an independent selection committee. However, in Delhi differences between the Chief Minister and the Lieutenant Governor of Delhi, who favoured different candidates, have played a role in the selection process.<sup>27</sup> That politicians feel empowered to signal encouragement to one or other potential aspirant suggests that continued political control over the selection process is treated as unexceptional.

Differences between the Chief Minister and the Lieutenant Governor of Delhi are also responsible for the initial failure to appoint a three person Commission.<sup>28</sup> As a result, despite legal provision for a Chairperson and two Commissioners, the DERC made do with a single regulator for its first five years. There are mixed opinions about Chairperson's own preference on this score. A significant number of close DERC observers from within and outside suggest that while he formally supported adding two members, he preferred having full control over the DERC, and consequently did little to realise this objective.<sup>29</sup> This failure to appoint additional Commissioners is significant, whatever the reason, as having three Commissioners is an important part of the institutional design for checks and balances, as well as for breadth in expertise.

The Delhi case also shows how regulators' actions – both professional and personal – are subject to intense scrutiny with implications for public perceptions. Over the first regulator's tenure, there were two related incidents

that were repeatedly mentioned in interviews as having somewhat dented public perceptions of his credibility. During the first regulator's tenure, a newspaper reported a dispute with a DERC employee who accused the regulator of wrongfully firing her after she raised issues of accounting improprieties, while he maintained she was released for poor performance.<sup>30</sup> As part of the accusations traded, the staff member also alleged that the regulator's son improperly took on a position as a management trainee at one of the privatised distribution licensees, only to subsequently resign when his appointment became public knowledge.<sup>31</sup> In both cases, the charges did not hold in a court of law, but the episodes illustrate that regulators face an extremely high threshold in maintaining public credibility.

Following the first regulator's retirement, two Members joined the DERC early in 2005. The first brought a technical background developed at the Central Electricity Authority and the Central Electricity Regulatory Commission, and second is a finance expert from the Power Finance Corporation. The DERC functioned with two members but no Chairperson for a year until the appointment in early 2006 of a new Chairperson, who brought a background in law and tax policy. This extended and punctuated timeline suggests unexplained delays in appointing a full three member commission.

In sum, the DERC's credibility, and perhaps effectiveness as well, were called into question due to the persistence of a single person regulator, the failure to appoint additional Members due to differences between the Chief Minister and Lieutenant Governor, and arguably by perceptions of flawed actions by the regulator himself. That it took nearly a full seven years for a complete three person regulatory commission to be appointed and start operating suggests both unlucky circumstances, and weak political commitment to effective and credible regulation in Delhi.

### *Staff Selection and Capacity*

Attracting and retaining competent staff is a considerable challenge for the DERC. It has become normal practice for key posts to be vacant for long periods. For example, the Director of Law and Director of Tariffs positions were both vacant for almost a year.<sup>32</sup> Previously, the Director Engineering had to double up as the Director Tariffs for a two year period, because the DERC could not find a suitable person.<sup>33</sup> Surprisingly, given high housing prices in Delhi, a significant obstacle to hiring staff is the lack of staff housing available for the DERC to offer aspiring staff. Table 2 provides some summary information on the staff profile of DERC.

The preferred route to hiring staff is through deputation from other government departments. In the case of DERC, not only the utility but also the Central Electricity Authority was a source for appointments. Fresh

**Table 2:** Staff Profile of DERC

Category	2000-1	2001-2	2002-3	2003-4	2004-5	2005-6
Sanctioned Staff (Officers)	-	25 (19)	47 (19)	46 (19)	70 (27)	75 (27)
Total Staff		4	28	28	26	32
Officers		3	15	16	13	14
Officers with Background from Delhi Utilities			2	1		
Officers with Background from any Other Public Electricity Utility					1	1
Officers on Deputation from Delhi Utilities			2	1		
Budget (Rs Lakh)	54	225	175	225	250	350
Amount Spent on Consultants (Rs Lakh) (% of total)	0 (0)	9 (4%)	7 (4%)	39 (17%)	23 (9%)	90 (26%)

Source: Information in this table was provided by DERC.

graduates from technical or business programmes tend not to be attracted to regulators in part because they have better job prospects elsewhere, particularly consulting, since the DERC is bound by government salary scales. This leaves staff at other power sector utilities or the Central Electricity Authority. Based on the guidelines provided by Government, the DERC first seeks employees on deputation and only after failing to find staff through this route, seeks to hire employees on contracts. If the regulator is risk averse, so are potential employees, who are unwilling to risk a permanent move to an unknown agency. For example, a senior staff member joined DERC because his expected promotion at his home department had not come through. Once his promotion was approved, he returned to his original organisation.<sup>34</sup> However, there may be some early indications that this mutual wariness may be changing, as regulation is increasingly viewed as a growing area. However, to the extent this is true, regulatory bodies are seen as a stepping stone to more lucrative careers elsewhere.

In the opinion of some employees, the transience of regulatory staff, due both to reliance on deputation and rapid turnover, has had a cost on the institutional memory within DERC.<sup>35</sup> It has also had an impact on building a specialised cadre who understand the requirements of a regulatory role, and which takes consistent practice and training. For example, one staff member who was formerly with the Central Electricity Authority said that when he first joined DERC he was 'behaving like a planner' and training and on the job experience is absolutely necessary to inculcate a regulatory approach.<sup>36</sup>

Under these conditions, the DERC relies heavily on consultants to provide necessary skills and expertise. There is little evidence that consultants have transferred skills over time to DERC staff. For example, from its

inception, the DERC relies on consultants to prepare all its tariff orders, a situation that has not changed even after preparation of four tariff orders in the post-privatisation period. Indeed, it appears that consultants have been hired as a surrogate for staff. In the first few years, a preference was given to consultants with past experience with DERC.<sup>37</sup> As the first Chairperson put it, he wanted people who 'understand my thought process'.<sup>38</sup>

More recently, there are signs that the DERC is explicitly trying to enhance its self reliance. For example, the review order for the last two years has been prepared by the DERC without any consulting assistance.<sup>39</sup>

In sum, the DERC has been faced with a daunting challenge in building adequate capacity. Perhaps most worrying, despite some efforts, the DERC has not established itself as a new, high profile, and prestigious place to work, thereby neither attracting entrants from outside the government, nor the most talented staff available within government agencies, a problem exacerbated by high turnover. As a result, the DERC relies on external consultants for core functions, notably the ARR process.

## Tariff Review Process

### *Internal Process*

Although the DERC relied heavily on external consultants for the Annual Revenue Requirement (ARR) process and preparation of the tariff order, consultants worked closely with staff and under the overall control of the Chairperson. In the ARR process, staff and consultants would both review the ARR documents, and then bring up issues for discussion. Consultants would then make a series of presentations to the regulator and staff, which would form the basis for discussion, and for queries to the licensees. In general, the division of labour was that consultants would produce the desk analysis and be responsible for preparation of the final order in all its dimensions, while staff would undertake any field visits, and coordinate communication with the licensee.<sup>40</sup> In addition, the Chairperson would use consultants as a brain trust, giving them a list of issues and asking them to prepare material on the listed subjects.<sup>41</sup>

From the consultants' perspective, staff did participate fully in internal meetings, had the capacity to engage on issues, and manage the interaction with licensees. Staff do remain substantively engaged in the ARR process, on occasion differing from consultants and winning acceptance for their views. One such example is an early DERC decision on treatment of depreciation.<sup>42</sup> However, through their role in framing debates through their initial analysis, and their responsibility for writing and delivering the final order, consultants appear to have a more substantial role.

From a staff perspective, consultants were seen as 'basically modellers' who were able to swiftly and competently build necessary models, a skill that was lacking within the DERC staff.<sup>43</sup> However, staff felt that they retained overall control over the regulatory direction, since they provided the principles around which the models were to be built. Staff also felt that consultants, most of whom come with a business background or training, tend to be sympathetic to the licensees, and so the regulator and staff had to scrutinise and verify consultants' input. Moreover, consultants were 'overbooked' and that the time of senior consultants was particularly difficult to assure, leading to efforts to specify the number of hours of senior consultants time in the contract.<sup>44</sup> Consultants themselves noted that a team of 5-6 consultants would typically prepare 4-5 tariff orders in a year.<sup>45</sup>

The picture that emerges is of some measure of differing cultures and perspective between DERC staff seasoned in public power entities and technically skilled consultants with a business background. While staff do play a non-trivial role, the external perception from, for example, the regulatory affairs department of a licensee, is that consultants do the bulk of the work on tariff orders.<sup>46</sup> The failure to develop a strategy for training and passing over responsibility, and the challenge of hiring a full complement of trained staff implies that this situation is likely to continue into the future.

## Performance Review

The process of reviewing performance in Delhi is somewhat different from other states because of the governance framework for privatisation. Since loss reduction targets were written into the privatisation agreement, the regulator cannot directly control this key parameter. However, the regulator continues to have an important role with regard to both monitoring and enforcement, and can also use various techniques to urge loss reductions over and above the targeted levels. In this section, we explore the actions taken by the DERC related to loss reduction performance, and scrutinise the DERC's efforts at steering the companies using directives and the extent of compliance with those directives.

As suggested earlier (see Table 1), while the overall picture by the end of the five year period is a reassuring one, there are a number of confounding factors. According to a report by an independent research and advocacy organisation, Prayas Energy Group, there are various anomalies in the data reported by some of the companies, which in turn call into question the effectiveness of the DERC.<sup>47</sup> While we cannot verify this analysis, the careful nature of the study, and the failure of either the companies or the DERC to refute the content of the study, suggests these issues are worth considering.

The Prayas study finds that in the early years, BRPL and BYPL met their AT&C targets largely through gains in collection of arrears, rather than through loss reduction. This is problematic, since it suggests that the gains are one time, and that the companies have not managed to bring down the key parameter of losses. Second, they found anomalies in the Average Billing Rate for BRPL and BYPL, in particular, a dip for a couple of years even though one would expect a steady increase in the ABR. This is significant, since for the same overall realisation rate, a lower ABR makes the AT&C loss levels appear lower than they are, but this anomaly was not discovered or discussed by DERC. While the study does not explicitly say so, the implication of this finding is that loss reductions were produced through data manipulation rather than real gains on the ground. Finally, BRPL and BYPL report that consumption figures for all major commercial and industrial categories decreases in the year 2003-4. This unexplained decrease, to the tune of about 10 per cent and 17 per cent of commercial and industrial consumption for BRPL and BYPL respectively with obvious implications for revenue requirement, was not initially picked up by DERC, although they have since looked in the issue.

### *Regulatory Proactiveness or Reactiveness*

In this section, we draw on interviews to develop a picture of the DERC's engagement at the micro level, to understand whether and how it corresponds to the macro picture. In particular, was the DERC relatively irrelevant to sectoral performance, which was dictated by individual company drivers and the overall incentive framework, or did the DERC play a proactive role in sector performance?

To begin with, the iterative, often informal, and non-transparent nature of interaction between DERC and the licensees in the course of scrutinising the ARR and filling data gaps makes an assessment of the DERC's scrutiny somewhat challenging to carry out. Following submission of the ARR, the DERC submits deficiency notes to the petitioners, and follows up with meetings to review material and discuss questions of fact or interpretation. Some of these meetings may be minuted, while others are informal meetings. As in the other states studied, these 'technical validation' meetings are neither publicly announced nor are they open meetings. Therefore it is hard to establish whether the DERC is fully diligent, and how they negotiate the line between reasonable scrutiny and micro-management.

A scrutiny of minutes of meetings held prior to the 2004-5 tariff order, and deficiency notes sent by the DERC for the 2005-6 orders, and, both obtained from DERC, shed some light on the nature of the DERC's scrutiny.<sup>48</sup> The DERC queries are largely of a gap filling nature. A recurrent theme is requests for scheme-wise capital expenditure details and execution

of these works, a topic which we examine in the next section. Other queries focused on obtaining quarterly sales and revenue figures, and other financial revenue figures such as details of loans, cash and bank balances, and tax returns. These documents provide at best a partial picture and a single snapshot of what is a long series of interactions. The absence of further probing in these documents by no means proves that DERC did not conduct such probing, both because the documents are partial and because deeper investigations may not have been written. However, it does suggest the need for a clear and cogent publicly available paper trail on DERC investigations that the public can access, which is not currently available.

More instructive on the DERC's approach to scrutiny are interviews with the regulator and senior DERC staff. The first Chairperson suggested that the regulator 'must give some flexibility' to the companies, otherwise the regulator risks becoming a micro-manager.<sup>49</sup> As he stated, 'I am not a policeman, I am not an auditor, I am a regulator'. An example of this regulatory style was the creation of a regulatory asset, which the first regulator viewed as a measure to simultaneously manage a tariff shock and trigger efficiency gains. These comments seem to suggest a regulatory approach that rested on surveying the big picture, and perhaps benchmarking, but not delving into the details, particularly in the early years when the companies were finding their feet. This message certainly came through to DERC staff who suggested their work 'should not be seen as an investigation'.<sup>50</sup>

This self-imposed check on scrutiny appears to have slowed or stifled various DERC initiatives. For example, there was internal discussion within DERC of imposing a bidding requirement for contracts beyond a certain amount.<sup>51</sup> This effort was motivated by an internal perception that some of the licensees may be inflating costs of equipment and services sourced from sister companies. Interestingly, this perception was also shared by consumer groups.<sup>52</sup> However, in the view of the Chairperson, this requirement would be unduly restrictive on the freedom of the companies to seek their own avenues for best performance.

In another example, DERC staff proposed measures to better understand the billing and payment system.<sup>53</sup> One measure would have required all bills for more than Rs 4,000 to be paid by cheque rather than cash, but was rejected by the regulator on the basis that small consumers without a bank account may be disadvantaged. This measure was subsequently introduced in 2005-6 under a new set of regulators, triggered by new income tax policies that set Rs 4,000 as a threshold for tax scrutiny.<sup>54</sup> In addition, DERC finance staff sought to look more carefully into the revenue stream of Discoms to understand how bill payments were tracked and processed. Once again, this measure was not approved.<sup>55</sup> However, in 2005 the DERC did start sample checks of licensee books to follow the cash trail in order



to better understand AT&C losses.<sup>56</sup> These early failed efforts at greater scrutiny take on particular significance given the evidence of anomalies in ABRs that emerge from a scrutiny of tariff filings.

In other cases, the DERC failed to investigate issues that were raised by stakeholders. For example, Delhi Transco had raised the issue that per unit realisation was not as expected.<sup>57</sup> Delhi Transco also noted that domestic consumption was growing and commercial and industrial consumption was lower than expected, despite load growth over the same period.<sup>58</sup> The failure to explore these issues is particularly problematic given that they were drawn to the attention of DERC by stakeholders. Once again, more recently, the DERC has followed up on these issues.<sup>59</sup>

While there is a legitimate case that regulatory scrutiny can be over-intrusive, in the light of credible investigations that show uninvestigated anomalies in billing rates and consumption levels, these examples suggest that DERC could certainly have been more proactive in its early years. Perhaps most problematic is the failure to explore specific issues raised by stakeholders. It appears that DERC staff sought to dig deeper in some areas, presumably based on information that suggested a need for further investigation, but were held back by the hands-off regulatory approach. More recently, the DERC has adopted a more proactive approach, revisiting and introducing some of the measures it had considered but failed to implement earlier.

### *Directives Compliance and Use of Penalties*

One important way in which DERC attempts to steer and guide the Discoms is to issue directives with every tariff order. This section we examine the types of directives issued, the follow-up actions of the DERC in case of non-compliance, and the use of the DERC's statutory authority to issue penalties to enforce compliance with its directives or orders.<sup>60</sup>

In the early years, the DERC used directives to fill in the weakened information base, requiring development of a Management Information System, introduction of computerised billing and preparation of fixed asset registers.<sup>61</sup> Other important directives included adherence with the DERC's performance standards regulations, submission of a Detailed Project Report (DPR) for all capital investment schemes and obtaining approval for a subset of them, and provide district level data on AT&C losses. Many directives require the Discoms to seek prior approval before committing expenses, such as for increases in repair and maintenance expenses.

Compliance with these directives and DERC follow-up was mixed. For example, while preparation of fixed asset registers and details of capital works in progress was directed in February 2002, by October 2003 all three Discoms had only produced partial information, claiming that they

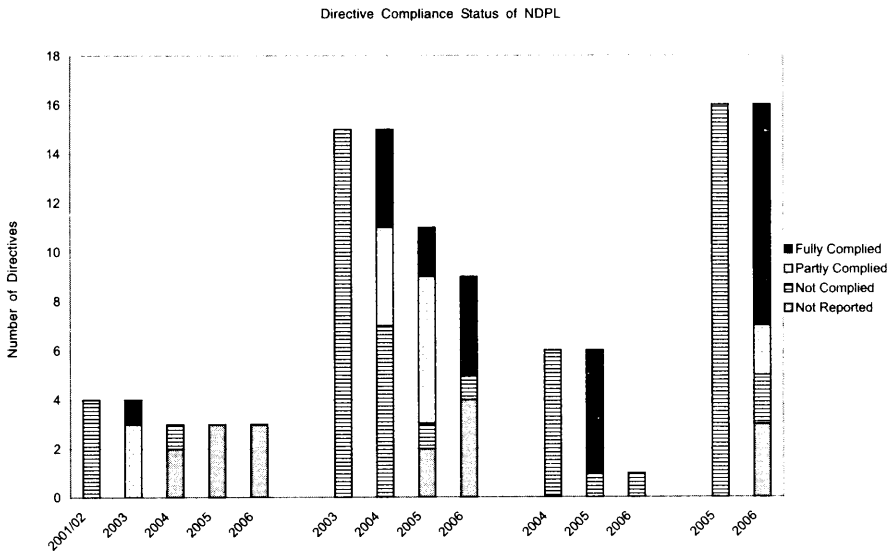
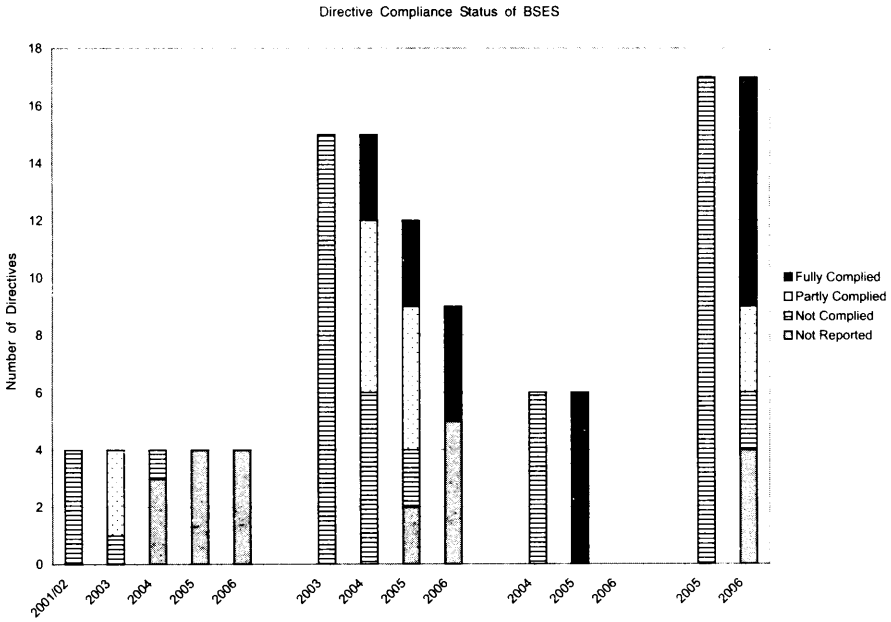
needed further information from the Government to fully comply. By June 2004, this information had not been received, and there is no further follow up action by DERC. In the important example of adherence with DERC's Performance Standards Regulations issued in June 2003, all three Discoms report in June 2004 that they are in the process of implementing these regulations, but DERC notes continued consumer complaints. However, there is no further follow up by DERC.

Other directives were more thoroughly followed up. For example, a June 2003 directive to submit full DPRs for capital investment schemes was followed up for the three subsequent years after only partial compliance. A directive requiring installation of meters at the periphery of districts in order to compute district wise AT&C losses was not complied with a year later, but after further follow up in 2004, was fully complied with by 2005. An important 2005 directive to provide more transparent reporting on energy input, sold, billed and revenue realised was complied with by all companies, although the DERC noted that there was a delay in submission, and urged more timely future submission. A second directive requiring that payment of more than Rs 4,000 be paid by cheque was not complied with, with all companies reporting that the software was not available for this task. The DERC ordered that the software be modified and the directive complied with within a month.

From a transparency and accountability perspective, the DERC's approach of clear and distinct reporting on directives, at least in the subsequent year after a directive is issued, is creditworthy. Directive compliance is reported in a separate section of each tariff order, in a manner that allows stakeholders to rapidly and easily gauge compliance.

Figure 1 provides a moving snapshot of DERC reporting on compliance with directives, organised by the start year in which directives are issued. The two BSES companies are clubbed together for convenience. This figure allows us to examine both the rigour with which DERC follows up its directives, and the extent of compliance. Thus, the first cluster of bars, which represents year by year reporting on directives issued in 2001-2 shows that after just the second year, the DERC fails to follow up with compliance on its directives, with most directives going unreported upon for both sets of companies. In another example, of the 15 directives issued in 2003, by 2006 ten are complied with but five remain unreported upon for the BSES companies, with a similar picture for NDPL. For directives issued in 2005, DERC fails to report on four of seventeen directives to BSES companies in the following year, and three of sixteen NDPL directives, although compliance rates are higher than in the early years.

Another tool available to the regulator to steer the licensees are its powers to issue penalties. Under the Delhi Electricity Reform Act, 2000, Section 33(1) the DERC is empowered to impose fines up to one lakh



**Figure 1:** Compliance with DERC Directives, 2001-2 to 2006

*Note:* Each cluster of bars tracks compliance and reporting status – fully complied, partly complied, not complied and not reported – for directives issued in the first year of the cluster. Thus, the first cluster of bars tracks and reports on directives issued in FY 2001, the second covers those issued in 2003, and so on. The data are drawn from successive years of DERC tariff orders.

rupees for non-compliance with its directives or orders plus rupees six thousand for each additional day of non-compliance. An identical fine is allowed for under Section 142 of the Electricity Act 2003. How were these provisions used by the DERC?

The DERC's most high profile use of a penalty occurred in 2004-5 in response to under-achievement of capital investment by both BYPL and BRPL. The DERC imposed a 'token penalty' of Rs 1 crore on both companies while estimating the ARR for that year, particularly against the under-investment but also in the context of broader non-compliance.<sup>62</sup> Notably, there had been considerable stakeholder pressure for imposition of penalties against non-compliance.<sup>63</sup> The penalty was applied against a total approved revenue requirement of Rs 250 crore for BYPL (reduced from a petitioned amount of Rs 570 crore), which suggests that a Rs 1 crore penalty is indeed, only a token amount. Nonetheless, against a backdrop of regulatory commissions that are reluctant to impose penalties, it is noteworthy that the DERC sought to signal that non-compliance with its directives would be penalised.

With regard to penalties imposed on the distribution companies pertaining to consumer grievances, a very strong pattern emerges of extremely limited use of the penalty provision upto 2004, and considerably greater use of the penalty provision from 2005 onward. Notably, this shift has occurred at roughly the time of transition from the first regulator to the second set of regulators. Prior to 2005, the DERC imposed only one penalty on BYPL of Rs 1,000 for failing to comply with a DERC order to rectify an incorrect bill, and for not acting to correct its error despite having had ample time in which to do so.<sup>64</sup> By contrast, from September 2005 to December 2006, the DERC has imposed 30 penalties, ranging from a low of Rs 500 to a high of Rs 1,00,000, with most cases clustering between Rs 5,000 and Rs 10,000.<sup>65</sup>

Prior to 2005, there do appear to be cases where penalties were justified but not imposed. For example, in one case, BRPL sought to wrongfully collect revised connection charges of Rs 1,350 per KW versus the actually applicable charge of Rs 100 per KW amounting to a substantial difference of Rs 10.5 lakh. By dint of BRPL's failure to submit to the DERC and have approved its schedule of charges before applying revised charges, BRPL was charged with violating the DERC's Performance Standard Regulations. While finding this to be so, the DERC asked BRPL to make a submission in this regard, but did not follow up the case and impose a penalty.<sup>66</sup>

There may be multiple explanations for the shift in the number of penalties starting in 2005. Prominent among them is the establishment of the Consumer Grievance Redressal Forum in late 2004 and the possibility that more cases have been referred to the DERC in recent years. A full examination would require obtaining information about the number of cases placed before the DERC in the two time periods. However, based on the information available, it seems highly likely that there has been a shift in

regulatory style toward greater willingness to impose penalties on the licensees for consumer complaints after 2005.

In sum, the DERC stands out among regulatory commissions for having imposed a substantial penalty on a licensee for performance, here for underachievement of investment. It also penalised behaviour that was anti-consumer, but the approach to doing so shifted dramatically in late 2005, with a new set of regulators using the penalty power far more freely than the first regulator appeared willing to do. Prior to this period, the DERC appeared at pains not to be perceived as an aggressive and intrusive enforcer, especially in the start up phase of electricity reforms in the state.

## Investment Scrutiny

In the high pressure reform environment of Delhi, the DERC faced the job of balancing the need for rapid and large investment as a way of improving performance and reducing losses, against the well known incentive to 'gold plate' under cost plus regulation, and the willingness of consumers to bear tariff hikes driven by high investment. In this context, what was the DERC's approach to scrutiny of investments made by the Discoms?

The Commission did take several steps toward careful scrutiny of investment plans. In particular, the DERC reduced the expenditure allowed well below that submitted by the Discoms on a number of occasions, introduced a requirement for scheme by scheme scrutiny, undertook site visits to verify investment, and substantially censured what was, in practice considerable underinvestment against the approved amount by some of the companies, even imposing a fine on one occasion. Some of these efforts become clear from a quick review of various DERC orders.

In the first year post-privatisation (2002-3), all three Discoms invested far less than claimed in the petition, giving the argument that the short-term need was repair and maintenance work to strengthen the existing system. The DERC stated that it 'understands and accepts the compulsions' of the Discoms, but suggests that capital expenditure has to be undertaken on a priority basis.<sup>67</sup> As part of its scrutiny the DERC sought information on the status of the actual expenditure for 2002-3, and the preparedness to execute investments in 2003-4. This information was analysed and, in addition, DERC conducted sample checks starting with the procurement process through to certification of completion. Based on this scrutiny, the DERC directed the petitioners to submit scheme-wise reports and to obtain its approval for all future capital investment schemes.<sup>68</sup>

For the second year (2003-4), the DERC found that capital investments were far lower than projected for the two BSES companies – 27 per cent of claimed investment for BRPL and 26 per cent for BYPL – which was explained by the lack of updated field information and failure to obtain

land.<sup>69</sup> By contrast, NDPL had invested 85 per cent of its petitioned amount. In addition to criticism for these low investment rates, the DERC took the two BSES companies to task on a number of counts, noting that the BSES companies had only partly complied with its directives to submit scheme-wise reports, and had failed to submit a key network optimisation study which provides evidence of its preparedness to undertake capital expenditure. As a result, for the following FY 2004-5 year, the DERC approved only an amount equal to 46 per cent of the petitioned amount for BRPL and 36 per cent for BYPL while allowing 100 per cent for NDPL. It also directed all the petitioners to submit the complete DPR and cost-benefit analysis for schemes of more than Rs 2 crore to obtain scheme-wise approval.

By 2004-5, the BSES companies claimed investments well in excess of the approved amounts.<sup>70</sup> However, the DERC was unconvinced, and spelled out quite clearly the reasons why it did not feel it prudent to allow the full investment. For example, for BRPL it argued that the expenditure did not correspond to the scheme-wise approval of the DERC, that capital costs were higher than that approved by them, and that the company had failed to submit scheme-wise actual expenditure. Moreover, they found indications – such as a substantial increase in inventories – to suggest that while BRPL had purchased equipment this had yet to be utilised in works. Finally, BRPL had failed to submit scheme-wise details of actual expenditure. Based on these reasons, DERC only considered expenditures equivalent to the amount approved in the previous order for the purpose of the ARR, but stated that these expenditures would have to be approved on a scheme-wise basis. In 2005-5, as noted earlier, the DERC fined by BRPL and BYPL a ‘token’ penalty of Rs 1 crore off the ARR due to the under-achievement of investment by the two companies.

For the following year (2005-6), the DERC found the submitted expenditure of Rs 1,400 crore too high (by comparison NDPL had submitted Rs 303 crore, although for a smaller area). Instead, it approved investments at a ‘normative’ level, based on actual investments over three years, amounts invested, and loss reductions claimed as a result. This worked out to 34 per cent of the petitioned amount for BRPL and 36 per cent for BYPL, while NDPL’s full submitted amount was approved. Any amount in excess of this normative amount would be subject to a cost benefit calculation. Finally, the DERC directed submissions of DPRs for schemes in excess of Rs 2 crore as before, but also schemes less than Rs 2 crore but that aggregated to Rs 20 crore.

Thus, the DERC did reduce petitioned investment amounts considerably, often by more than half in the case of the two BSES companies. In its review in the succeeding year, the Commission also frequently disallowed substantial components of claimed investment, again

to a greater extent for the BSES companies. This scrutiny undoubtedly saved the consumer considerable expenditure. However, even after these efforts, judgements on what is an appropriate scale of investment in a rapidly changing sector are contested and may vary. According to the study by Prayas Energy Group, the DERC approved investments that were five to seven times higher than the levels estimated by the pre-privatisation consultant, and about three times higher than investments made per MW by another rapidly reforming state, Andhra Pradesh.<sup>71</sup> Given that these are widely different numbers, the DERC would have been well served to carefully argue and publicise the basis for its investment review and approvals.

### *Use of Site Visits*

Not all the evidence available to the DERC is documented in the orders, which is the basis for the discussion above. The 2004 and 2005 orders do make mention of site visits conducted by DERC staff, but do not report on those visits. Based on interviews, however, these site visits do appear to have uncovered evidence of inflation of capital expenditure.<sup>72</sup> In one example, old equipment with 1970s identification plates were installed, although the petitioner had claimed new and much more expensive equipment had been installed. This finding was backed by photographic evidence. As a result of this investigation, the approved value of the works in question was reduced dramatically, to 3 per cent of the submitted amount. However, this finding was not documented in the order, nor was it publicised, nor was any penalty imposed on the licensee.

Among stakeholders, there was certainly a perception that the DERC could have done more, particularly on the concern of inflated costs. These concerns were expressed formally, notably by Delhi Transco and the PHD Chamber of Commerce and Industry.<sup>73</sup> In the opinion of observers from Delhi Transco, for example, more could have been done to bring costs down through competitive bidding, board scrutiny and benchmarking.<sup>74</sup>

Finally, it is not fully clear whether DERC sufficiently carefully assessed whether proposed investments were matched to the priorities of the reform effort. Delhi Transco, in particular, has questioned whether the consumer should be asked to pay the costs of corporate offices, and high technology automation projects, which are arguably not central to the primary goal of loss reduction.<sup>75</sup> In response, the DERC has merely stated that it has examined scheme-wise investments before determining the ARR, but does not comment on the substance of the objections.<sup>76</sup> In more recent tariff orders, however, the DERC does appear to be moving in the direction of greater explicit consideration of relative costs and benefits, with explicit mention made of seeking least-cost options.<sup>77</sup>

In sum, while the DERC has exercised considerable control over the investment costs, and taken the rare step of site visits, there remain some gaps. These include no transparency on the site visits, and a failure to adequately scrutinise, or at least explain, how it assesses whether and how investment schemes meet priority needs.

These limitations are consistent with the approach of the first regulator, for whom it was important to provide flexibility to the companies. Indeed, the approach taken was that it is the ‘responsibility of the company to prove prudence’ rather than the task of a proactive regulator.<sup>78</sup> However, given the DERC’s own scepticism of the investment plans of some of the companies, as evidenced by its decision to drastically reduce investment amounts, and concerns raised by knowledgeable stakeholders, there is a case to be made for a more proactive attitude to investment scrutiny.

## Tariff Decision

The annual tariff decision, politically charged at the best of times, was perhaps even more so in Delhi. On the one hand, the DERC faced the looming deadline of a five year transition period after which the sector was meant to be financially self sustaining, increasing the pressure for tariff hikes. On the other hand, the regulator faced a highly mobilised and politically vocal public in India’s capital city, who vocally resisted increases. Moreover, the DERC had to contend with an anxious government that had staked much of its political credibility on successful electricity reform. In this section, we examine how the DERC dealt with these pressures.

### *Informal Communication with the Government*

The overwhelming impression among stakeholders from all segments was that the DERC communicates closely with the government on its tariff decisions. For some, the perception was that the Chairperson of the DERC held discussions with senior politicians prior to tariff decisions in order to seek advice on the political acceptability of tariff decisions, and to coordinate on a final decision.<sup>79</sup> For others, the impression was of even less independence, that the government predetermines the acceptable tariff decision and the regulator conforms to the government’s diktat on political acceptability.<sup>80</sup> As one interviewee put it, the government ‘assumed a superior role over the regulator and the regulator was not able to say “this [tariff setting] is my role”’.<sup>81</sup> None of the stakeholders interviewed for this study expressed a view that over the first five years the regulator had established a track record of independent decision-making, particularly on tariff setting.

These perceptions by no means confirm that the regulator was, in fact directed by the government. However, they do point to a very considerable



problem of credibility for the DERC. If the public perception is that regulatory decisions remain under the control of the government, then faith in the regulatory system can rapidly erode. Indeed, as we discuss later, the choice of the Delhi public to make representations directly to the government rather than to the regulator may well be driven by a public perception that despite the establishment of a regulator, decision-making power continues to rest with the government.

### *A Conciliatory Approach to Regulation*

In its decision-making, the DERC had to balance its demands on consumers, the Discoms, and the government. To balance the books, it either had to increase tariffs, request greater subsidy, or squeeze Discom revenue requirements. While the DERC took some steps in all these directions, based on a scrutiny of its regulatory decisions, the early years of the DERC are characterised by a reluctance to take any of these difficult steps sufficiently far to ensure the future financial health of the sector. While balancing interests is a key part of a regulator's job, the DERC has operated through a form of regulatory triangulation, seeking to limit its demands on all three key constituents.

With regard to demands on the public, the DERC's orders are peppered with references to the need to be sensitive to public sensitivities, and its tariff increases have been limited. For example, in 2003 the DERC noted that it is aware that tariffs for the domestic category increased by 22 per cent in the previous year against an overall increase of 15 per cent, so chooses to limit the increase in 2003 to 5 per cent.<sup>82</sup> Similarly, in its 2004 order, the DERC notes that given that the quality of supply has not improved 'to any great extent. . . it will not be fair to inflict a sharp increase in the tariffs on them [the consumer]'.<sup>83</sup> As a result the DERC raised tariffs 10 per cent and created a regulatory asset to meet the remaining revenue gap, as discussed further below.

If the public was let off lightly, what of the Discoms? The argument that the public should not be asked to pay for the sins of ill-performing companies certainly have merit. It is the case that the DERC did take some measures to bring down costs, notably through revising downward investment plans, and on one occasion imposed a penalty on two firms for underinvestment. However, as the sections above on performance and investment conclude, on the whole the DERC adopted a hands-off regulatory style. This light-handed approach persisted despite calls from various stakeholders to investigate specific issues, and perceptions within the DERC itself that the situation called for more aggressive scrutiny.

With regard to the government, if the perceptions about informal communication between the DERC and the government are correct, then

the DERC was mirroring government judgements on the political acceptability of tariff increases. The Government did also raise the subsidy level midway through the five year transition period, which gave the DERC a little more breathing room.

In brief, in its early years the DERC seems to have adopted what one stakeholder called a 'don't rock the boat' and another referred to as a 'conciliatory' regulatory style.<sup>84</sup> This approach rests on taking a soft option that appeals to the largest possible number of stakeholders, but at the cost of a limited time horizon. This approach contrasts with the motivation behind establishment of an independent regulator, that such a body would be less prey to short-term political pressures. Instead, the DERC seems to have substantially internalised government political pressures. The larger question is whether the DERC could have done a better job of insulating itself, or whether the assumption that a regulatory agency can operate in this insulated manner is itself questionable.

### *Creative Adjustments*

In the first three or four years of the transition period, this approach of regulatory triangulation with a short horizon left the regulator with large revenue gaps. The DERC took various steps that they justified as rational and defensible, but which were seen by many stakeholders as a way of avoiding having to push any of the three key groups – consumers, Discoms and Government – to agree to challenging regulatory steps. Here we briefly discuss two of these measures – accounting of arrears collection from the DVB era, and the establishment of a regulatory asset in 2004.

According to the transfer scheme of the Delhi Government, collection of any arrears owed to the former DVB were to be shared between the Holding Company created as part of the transfer scheme and the Discoms in the ratio of 80 : 20. However, in its very first order post-privatisation, the DERC argued that the 80 per cent allotted to the Holding Company, which the Government intended to use to pay down past liabilities, represented revenues that should not leave the sector and should go to Transco. The benefit, of course, is that the revenue gap would shrink by an equivalent amount. Consequently, the DERC treated arrears as accounted to Transco and requested the Government to revisit the matter and suitably amend the transfer scheme. There followed a lengthy and repetitive set of exchanges between DERC and the Delhi Government. The Government refused to amend the transfer scheme, whereupon in its 2004 tariff orders the DERC once again made the case for amendment and resubmitted to the Government, only to have it rejected again. Despite being rejected twice, the DERC stuck to its guns and retained the same approach – considering

80 per cent of arrears collection as Transco revenue – in its 2005 and 2006 orders.<sup>85</sup>

The contribution of the arrears collection to limiting the need for a tariff hike is considerable. At its high point in FY 2003-4, the arrears collection stood at Rs 210 crore, approximately twice the Rs 103 crore that the sector earned from the tariff increase of 5 per cent.<sup>86</sup> The DERC itself estimated that the arrears collection had added Rs 330 crore in the first three years, and absent this amount the tariff would have had to go up another 9 per cent in 2004.<sup>87</sup> Substantively, the DERC based its case on the argument that in all its prior calculations, such as setting the base levels of AT&C losses, no distinction is made between collection of past receivables and current outstanding dues. Indeed, the confusion arises from the division of responsibilities between the Government and the DERC in setting up the governance framework for privatisation, with insufficient coordination between the two. That the government has allowed the DERC to repeatedly flout the transfer scheme is surely explained by the Government's own interest in limiting tariff hikes, even at the expense of failing to pay down past liabilities. As one former bureaucrat put it, the Government objected at the bureaucratic level, but not at the political level.<sup>88</sup>

In a second example, the DERC created a regulatory asset to meet a substantial revenue gap that would otherwise have required a 30 per cent hike in tariffs.<sup>89</sup> In subsequent discussions, the regulator suggested the regulatory asset was a clever piece of regulation that triggered efforts at efficiency gains from all the Discoms and Delhi Transco, in order to minimise the amount of time they had to carry it on their books.<sup>90</sup> However, it is noteworthy that the regulatory asset was effectively apportioned between the three Discoms and the Transco based on various measures of the size of each company and had little to do with structuring incentives for performance.

The decision to create a regulatory asset was controversial, and was disputed before the Appellate Tribunal by the three Discoms. In its decision, the Tribunal did not accept the rationale offered by the DERC, suggesting that 'pre-judging . . . the issue with a notion to avoid tariff increase . . . itself constitutes sufficient cause for interference on the ground of bias'.<sup>91</sup> In essence, the Tribunal argued that the DERC had side-stepped the intent of the Government's policy directive, and should have instead steadily increased tariffs 'though it may lead to a hue and cry among a section of consumers, who fail or refuse to acknowledge realities'. One does not have to agree with the specific solution of the Tribunal – an alternative would have been greater scrutiny of Discoms leading to reduced revenue requirements and enhanced performance – to agree with the larger judgement that the DERC

has sought to avoid confronting difficult decisions in the sector. Both examples discussed here are consistent with a conciliatory approach to regulation aimed at judging and staying within limits of acceptability, and instead finding creative solutions to balancing the books, even at potential long-term cost to the sector.

### *Change in Regulator: Did it Bring a Shift in Style?*

The discussion above has focused almost exclusively on the DERC as it operated under the first Chairperson.<sup>92</sup> Based on the limited evidence available so far, the new leadership of the DERC is less concerned with managing political realities and more direct in their approach. For example, in their 2005 tariff order, the DERC increased tariffs by an average of 6.7 per cent but in keeping with the overarching policy direction provided by the Electricity Act, increased the tariff of subsidised categories, notably domestic, by 10 per cent.<sup>93</sup> By contrast, in his order of 2004, the previous Chairperson had decided that given public irritation with metering and billing problems and low quality power, he would not take steps to remove cross subsidies, and pegged the domestic tariff hike at the level of the average.<sup>94</sup>

The more direct approach of the new DERC leadership sparked considerable consumer protests, and forced a political crisis. Faced by growing public protests, the Delhi Government had to ultimately step in and defuse the situation by agreeing to pay half the tariff increase and requiring the Discoms to pick up the other half.<sup>95</sup> Various stakeholders, not only from consumer organisations, but also from industry and Discoms, were critical of the by-the-book approach of the new regulators, and felt that the DERC should have anticipated the public outcry.<sup>96</sup>

The new leadership has also adopted a more proactive approach backed by a greater willingness to investigate. Examples of this approach include sample checks of licensee books, greater willingness to levy penalties, and more aggressive examination of issues raised by stakeholders.

The DERC thus presents two examples of regulatory style, one based on politically astute triangulation with potentially problematic long-term consequences, and another based on a more proactive regulatory style and forthright decisions without an eye to political niceties, which result in short term problems. In a politically charged context like Delhi, where the regulator has to steward rapid change without alienating powerful constituencies, effective regulation would appear to require some political astuteness. At the same time, if difficult decisions are not to be deferred to the indefinite future, effective regulation would also appear to require a firmer hand at the tiller, and more detailed oversight of a rapidly changing sector.

## Quality of Service

Public unrest over quality of service for Delhi's consumers has been a critical issue, affecting both the public perceptions of the Delhi electricity reform and the credibility and competence of the regulator. Public complaints against perceptions of over-inflated bills, inadequate grievance procedures, lack of responsiveness from the Discoms and the like have simmered since the early days of the reform.<sup>97</sup> From the perspective of this study, the important question is the extent to which and proactiveness with which DERC sought to intervene on this important subject.

The DERC did pass a Performance Standards (Metering and Billing) regulation in mid 2002, which laid down standards of service quality on important issues such as how complaints were to be handled, metering procedures, disconnection and pilferage and so on. These regulations were drawn largely from available regulations, notably those in Orissa, and modified through an internal process of revision.<sup>98</sup> Although there was a public process of comment, these comments were not closely scrutinised nor used by the DERC due to lack of available staff and expertise. In 2004, these regulations were supplemented by additional regulations for establishment of a Forum for redressal of consumer grievances, and establishment of an ombudsman.

However, after passing these regulations, both staff within the DERC and close observers note that the Commission did not devote much time and attention to following up and reporting against the performance standards.<sup>99</sup> As with the regulations themselves, the lack of staff and capacity were cited as a reason for a muted follow up. Moreover, the DERC, at the request of the Discoms that pleaded the need for more time to put in place systems, had postponed the enforceability of the penal clauses in the regulations.<sup>100</sup> The lack of attention is reflected in the DERC orders, where in response to consumer complaints about billing and metering, the DERC simply refers to the 2002 Performance standards, and exhorts the Discoms to improve performance. These comments are made in response to consumer statements, but there is no systematic section in the tariff order that provides information on and discusses progress in quality of service. Perhaps most problematic, the DERC does not appear to have made a systematic effort to request information on quality of service parameters such as quantity and type of complaints, status of redressal, functioning of the grievance redressal forum and other such information on a regular and sustained basis.<sup>101</sup>

The public perception continued to be that the DERC had not taken sufficient steps to address quality of service issues. This unrest bubbled over into public protest, particularly after a tariff hike in 2005. Resident Welfare Associations, in particular, organised public meetings and rallies in August, November and December 2005 protesting what they perceived as inflated

bills, forcible changing of meters.<sup>102</sup> They also saw the tariff hike as particularly unjustified given perceptions of bad service quality. The DERC was not exempt from this criticism and described as a 'mute spectator'.<sup>103</sup>

However, the DERC had not been entirely inactive. In 2004 it conducted suo moto proceedings on metering and billing in response to consumer complaints. Noting that it was dissatisfied with the performance and the delay in putting systems in place, the Commission once again issued directions, which as it noted, were already in the existing regulations, but it did not take any further follow-up measures, and notably established no system of data collection on service quality. The DERC also sought to engage the public through advertisements in newspapers providing information and awareness on issues relating to metering. As a follow-up step, the DERC led a meter testing drive, which did not show many faulty meters, but did show faulty wiring.<sup>104</sup> The DERC also commissioned two studies of billing systems, once in November 2004, and one in January 2006. However, the results of these studies have not been made public. Finally, the DERC returned to a comprehensive review and revision of its Performance Regulations, which it had initiated in 2003, soon after the initial regulations were framed. While this revision process had been ongoing in the background, the process accelerated in 2005, with a draft set of regulations put out for public comments in October 2005.

From this brief review, the DERC appears to have got its formal structures for quality of service – the regulations – in place early. Even here, however, the initial regulations suffered from procedural problems. The revised regulation has been subject to much more thorough review, but the preparation process has taken three years due in part to delays resulting from situations beyond the DERC's control, such as a public interest litigation and a stay on the release of the regulations. Where the DERC is most vulnerable to criticism that it did not take adequate proactive measures on quality of service lies in its failure to systematically gather data from the Discoms using internationally recognised performance standards and, as a result, in its very restricted follow up with regard to enforcement of regulations. While it made public comments in support of consumer perspectives, the lack of enforcement failed to convince the public that the DERC was a trustworthy recourse for its quality of service concerns, which led to open public unrest.

## Rule-Making

The DERC has been somewhat reticent in its rule-making function, particularly with regard to market-framing regulations. After an initial flurry of regulations required to set up the regulator, the DERC had a period of

relative quiet, punctuated only by consumer redressal related regulations. In 2005, however, the DERC did approve regulations on trading activity and open access regulations. In this section, we examine how the DERC went about its regulation-framing tasks, with a particular emphasis on the procedural dimensions and the role of stakeholder inputs.

The establishment of open access rules as mandated by the Electricity Act 2003, has the potential to entirely transform the sector, and is, therefore, a significant piece of regulation. In Delhi, however, the actions of both the DERC and stakeholders suggest a far more lack-lustre process than the issue deserves. Notably, the DERC has so far only tackled the open access regulation itself, and not the associated and more politically charged question of cross-subsidy surcharge. It remains to be seen if the surcharge issue arouses more debate and deliberation.

According to DERC personnel, the rules were drafted drawing on the experience with other states.<sup>105</sup> The draft regulations allow for phased introduction of open access over a year for customers with connected load of one MW and above. According to the DERC, there are about 200 or 250 consumers that meet this profile in Delhi.

The draft regulation was posted on the DERC web site and a notice seeking comment was published in several newspapers in mid 2004. In response, only four responses were received: one from an individual, one from the PHD Chamber of Commerce and Industry, and two from the distribution licensees.<sup>106</sup> The content for the first two is identical, probably because the individual has worked as a consultant for the Chamber. Hence there are only 3 distinct substantive comments. Given the small number of comments, the DERC decided to forego a hearing on this issue. However, the Commission did issue an order discussing and explaining its responses to the various stakeholder views, and providing reasoning for its final decisions. Production of an order accompanying regulation is a positive step, since it provides stakeholders a basis to understand whether and how their comments have been used and incorporated into the final order.<sup>107</sup>

The comments by the individual and the Chamber asked for clarity on the methodology for pricing and energy accounting. The DERC decided to defer these issues to a later date. In addition to procedural suggestions, both licensees try to suggest greater rights for themselves in the rules. NDPL suggests giving the licensees themselves the right to sanction new load. BRPL/BYPL suggests that existing licensees should be the last in curtailment priority in the event of capacity shortage. The DERC rejected both views and instead handed over these decisions to separate nodal agencies. The DERC did, however, accept certain procedural suggestions and suggestions on dates by which open access would be phased in following from the comments.

In sum, the open access regulation has been subject to little discussion, particularly given its importance, because of a failure to use due process to

stimulate engagement. This sparse debate speaks to the challenge the regulator faces in stimulating real discussion on 'upstream' policy issues that have great significance for consumers, but are technical and remote. Part of the responsibility surely lies with consumers and consumer groups, including industry associations who could, perhaps, have done more to organise discussion around this important issue. However, the question arises as to whether a more proactive DERC could have made more effort to educate and stimulate debate on this issue, perhaps by issuing a discussion paper pointing out the implications of different forms the rules could take. In particular, that the DERC decided not to hold a hearing at all rather than stimulating more participation speaks to a somewhat fatalistic rather than proactive approach to regulation.

The lack of internal DERC capacity is one reason cited for the limited success at engaging the broader public in the rule-making process.<sup>108</sup> For example, while issuing discussion papers is a potentially effective means of engaging the public, the DERC has typically failed to produce such discussion papers. It is notable that on this score, as well, there appears to be a shift toward greater public engagement, with the 2006 publication of a discussion paper on multi-year tariffs. This is a welcome development, and perhaps indicates a greater attention within the DERC to proactive engagement with stakeholders in the rule-making process.

## Stakeholder Engagement in Practice

The DERC had in place procedures for transparency and public engagement that are broadly consistent with those of other regulators. In this section we examine how these procedures were operationalised. With the high visibility of the reforms, and the deeply political nature of the Delhi public, having structured and institutionalised means of public engagement were very important since the likely alternative is political mobilisation. In Delhi, as we discuss below, the DERC's credibility with the public did suffer over the course of the reform process, leading to pressures for the Government to step back in. Here we examine stakeholder engagement in practice using the categories of transparency, participation and accountability.

### *Transparency*

The DERC's Conduct of Business regulations state that records of the DERC's proceedings shall be open to inspection by the public, unless the DERC specifies certain parts confidential or privileged.<sup>109</sup> During the course of this project, the DERC was accessible and cooperative with release of information. At the same time, there were considerable weaknesses



in the organisation and user-friendliness of the DERC's information systems.

While the DERC established a web site early, the clarity and the organisation of the web site compares poorly to some other Commissions. For example, only a small sub-set of total DERC regulations were available, all the tariff orders were not available on the web site, and links to specific orders, such as the suo moto order on redressal of consumer grievances did not work.<sup>110</sup> Moreover, there is no schedule of past and future hearings, nor is there a dedicated section for consumers. By late 2006, many of these errors had, however, been rectified.

While the DERC is open in principle to providing documentation, in practice it is a challenge for a stakeholder to identify the document required and access it. The Commission does not have an index of available documents for stakeholders to consult. There is a room set aside for a library, but as yet the materials present do not constitute a library in any meaningful sense; neither DERC documents nor external relevant documents are placed in the room in an organised and accessible format. Finally, on occasion, the DERC staff were unable to retrieve key documents, such as the letter of 18 December 2001 from the first Chairperson to the Delhi Government objecting to the Government's policy directive. The rapid staff turnover, as well as failure to institutionalise robust document retrieval systems may have contributed to this weakness.

DERC's relationship with the media is one of mutual mistrust. While the first Chairperson began with intensive media outreach and was seen as doing a good job placing the DERC on the media map,<sup>111</sup> over time DERC has become less engaged with the media. From a media perspective, hearings are perceived as not being open to the media, and little effort is made at media outreach, for example, through media releases.<sup>112</sup> From the DERC perspective, the Delhi media has played an irresponsible role in fanning public sentiment on the basis of incomplete information, by, for example, focusing on metering issues without the benefit of full information on the technical details. In one example, the State Consumer Disputes Redressal Forum had taken suo moto cognisance of a news article on electronic meters, and passed an order restricting their installation. From the DERC perspective, this decision was based on partial and biased reporting, that spread misinformation about the reliability of electronic meters. In an interview, a senior DERC official approvingly cited a High Court order staying the Consumer Forum's decision, which stated that the court 'would like to place on record its anguish regarding the manner in which the news items [related to electronic meters] were published'. The judge concludes by 'hoping for the press to exercise self restraint'.<sup>113</sup>

The media and the DERC have been locked into an unproductive

relationship with negative results for both consumer education and the public perception of the DERC. While the media has kept debate about the Delhi reforms on the front page through detailed reporting, some of the more vocal segments are candid that they voice the view of middle and upper class consumers since this is their main market.<sup>114</sup> As a result, reports are filed without interviewing industry representatives, employees unions, slum dwellers and other relevant Delhi citizens, which can lead to one sided reporting that does not contribute to an honest debate. Certainly, insiders within the DERC and the government feel strongly that a subsection of the media has been counter-productive rather than constructive in stimulating an effective public debate. At the same time, as the focal point for interface with the public, the DERC could and should have had a more proactive outreach strategy with the media, including inviting media to hearings and holding briefings in order to use the media as an avenue for consumer education. The DERC's stated attitude toward the media – that they are 'neither invited nor rejected' – does not support a regulatory body's task of engaging the public.<sup>115</sup>

### *Participation: Who Participates and How?*

The same set of parties consistently intervenes in all three company filings. In absolute numbers, about 80 objections have been filed for each company, barring the first year where about 520 objections were filed for DVB as a whole. The number and composition shows no change over time. The breadth of interveners in 2001-2 was distinctly greater than that of the remaining years. This larger number could have been due to early interest in the DERC as a new body, but the substantial decrease after the privatisation is not easy to fully explain.

Industry and resident associations dominate the interventions in Delhi, in approximately equal proportion. All industry and consumer representatives, including individuals, civil society organisations, consumers and industry representatives have consistently comprised over 90 per cent of objections since 2001-2. Representatives from slums and *juggis* are conspicuous by their absence. The remaining are comprised of unions, public utilities, and other institutions, but only 1-3 of each in any given year. However, public utilities (such as Delhi Jal Board and Delhi Metro Railways) raise a wide range of issues, and so their influence is not accurately reflected by the small number of objections.

Consistent with the discussion above, interventions in Delhi focus more on grievances related to billing and assigned tariff categories than in other states. These make up about a quarter of the concerns raised in 2004-5. These objections also may not reflect grievances raised directly with utilities by people who may not have chosen to participate in the regulatory process.

### *Stakeholder Capacity*

An examination of the capacities that stakeholders bring to the participation process shows that there is surprisingly weak capacity within Delhi to engage in the regulatory process. The most vocal group of Resident Welfare Associations (RWA) operates as a united 'Joint Front' and works to mobilise individual RWAs to participate in hearings. However, their joint representations are prepared in an *ad hoc* fashion, drawing on news reports, occasional analyses by NGOs and so on. There is no division of labour among the RWAs to scrutinise the vast quantities of information, nor any effort to mobilise resources to hire consultants or other expertise.<sup>116</sup> RWAs note that their own resources are too meager to enable them to hire experts. While they do consult with NGOs, the resources available to these NGOs are also limited.

Surprisingly, industry groups also bring relatively little coordinated effort to the DERC process. For example, the PHD Chamber of Commerce and Industry (PHDCCI), with 1,600 members and 100 associations as members, has not been able to persuade its broader membership to engage in the regulatory process. While the PHDCCI hired a consultant to help draft its representations for the first several years, members have typically taken little interest in commenting or participating in this process.<sup>117</sup>

Perhaps the most capable and engaged participant in the DERC so far has been the Delhi Transco itself. Since its finances are directly affected by the acts of the Discoms and the decisions of the regulator, it has been active and vocal in DERC hearings processes. In part, this activity may be driven by the unique terms of the policy directive, which inextricably link the finances of the Transco and the Discoms. Under different arrangements, the Transco may be less motivated to play such an active role.

### *Perceptions of Effectiveness of Stakeholder Participation*

Within the DERC, the overarching impression of stakeholder comments is that they have proved to be of limited utility.<sup>118</sup> Comments tend to cluster around a few issues that focus attention, and tend to raise issues related to personal grievance rather than substantive issues. Perhaps unsurprisingly, rate increases, rather than the issues that lie behind them, occupy consumer attention. Many consumers are uninformed on the regulatory process, with the notable exception of a few well informed and constructive NGOs. This disappointment with consumer comments also spills over to industry, which are also perceived, as a group, to have not provided very useful comments.

As a qualification to this blanket view, consultants associated with DERC noted that stakeholders do provide useful ideas on issues that directly pertain to them. For example, the consultants drew on stakeholder comments for

ideas on tariff rationalisation, removal of monthly minimum charges, misuse conditions and so on.<sup>119</sup> However, when it came to the larger issues in the ARR process, there were few new ideas from consumers. Even if consumers occasionally raise substantive points, the DERC and their consultants suggested that they had normally thought of these issues as well.

Within stakeholders, perspectives of the DERC ranged from entirely ineffective to moderately effective under the conditions obtaining in Delhi. Consumers, particularly from Delhi's powerful Residents Welfare Associations (RWAs), were the most skeptical of the DERC.<sup>120</sup> In their view, the DERC had failed to establish a track record of independent decision-making from the government; as a media person put it the government and regulator are not separate in the eyes of the consumer.<sup>121</sup> The Government was seen as intentionally keeping the regulator weak by keeping posts vacant, notably by not nominating Members for a number of years. As with Government, there was a similar perception of lack of independence from licensees; coordination between the two was seen as occurring through contact between their respective consultants. Moreover, that the Chairperson of the DERC would have lunch with the heads of the licensees during hearings created the impression of a nexus between them, and, at minimum, was an example of insensitivity to the important of building consumer trust. Consumer groups also felt that the DERC had intentionally failed to build stakeholder capacity, which should be the 'first duty of regulators', because they did not want strong representation against utilities. When asked about decisions that appear independent and pro-consumer, such as the rejection of the Government's proposal for multi-year tariffs, these were dismissed as a necessary cover for other, more significant decisions that either followed the Government line, or supported the Discoms. The picture that emerges is a near-complete breakdown of trust between this important group of consumers and the DERC. Indeed, this breakdown contributed to the decision by RWAs to politically mobilise against the tariff hike of 2005, which eventually led to an effective tariff rollback by the Delhi Government.

Another consumer perspective from an NGO also holds that the DERC has been ineffective, and in particular has failed to follow up on suggestions from consumers.<sup>122</sup> However, the blame for this is placed at the door of the Delhi Government. While the Chairperson was systematic and knew his job, he was unduly bound by the Government policy. As a result, credibility in the DERC process has fallen, as consumers increasingly do not see it as the most useful avenue through which to raise their objections.

The industry perspective is similar, but somewhat more charitable to the DERC.<sup>123</sup> The DERC is seen as having done a 'fairly good' job compared to the past and given the generally poor state of governance. This view is a pragmatic one, which evaluates the DERC within a larger expectation of

incremental change at best: '... have to look at realities ... independence of pulls and pressures is asking too much'.

Finally, there is little doubt that ongoing and simmering resentment against the BRPL and BYPL's customer interface has taken a heavy toll. The persistent perception of over-billing, ill-functioning meters, and heavy-handed tactics, whether justified as consumers argue, or falsely whipped up by the media as the licensees suggest, and the failure of the DERC to deal decisively with this growing perception, has eroded the DERC's credibility in the eyes of the public. As one informed observer put it, the DERC 'failed to present the Commission as the consumers' friend'.<sup>124</sup>

Despite this larger credibility deficit, there was a uniform perception that the introduction of transparency, and to a lesser extent, some measure of participation, was a gain from establishment of the DERC. With its establishment, 'information is in the public domain' and 'everything [is] open to question' while previously everything was 'shrouded in mystery'.<sup>125</sup> Moreover, a sense that the 'public has been heard' was seen as a positive even if there were difference of opinion on whether the ability to have a voice could make a difference.<sup>126</sup>

Substantive gains from public participation are difficult to conclusively demonstrate. However, from the tariff orders there are indications of stakeholder influence, but only on details that pertain to consumers. For example, in the early days of the DERC, stakeholders argued against an arbitrary definition of connected load based on counting one tenth of the plug points in a residence, and suggested instead the definition should be based on statistical analysis. Industry similarly objected to a methodology of computing load based on idle capacity. Both these cases, where the DERC took on board consumer objections, suggest that consumer feedback does play a role in providing a check on what would otherwise have been arbitrary decisions.<sup>127</sup> While both these are examples of intervention that directly benefits the intervener, there are also a few cases of intervention in the broader public interest. For example, one stakeholder objected to raising the permissible load on tubewell use, noting that many plots on which tubewells were located were used for residential or commercial and not agricultural purposes. The Commission agreed and rejected the proposal.

However, there are instances, as discussed in the relevant sections above, where larger-scale issues have been raised and not taken cognisance of by the DERC. The most egregious case in this regard is Delhi Transco's observation about possible problems in billing, on which the DERC failed to follow up.<sup>128</sup> Another case in which the DERC did less than they could have is the call by the PHD Chamber of Commerce and Industry for the DERC to follow up on its own directive of 2003 requiring compliance with its Performance Standards regulation, by requiring licensees to make public

data on consumer complaints and their redressal.<sup>129</sup> By the time of the Prayas study in May 2006, these data were still not available.<sup>130</sup> Finally, while consumer unrest led the DERC to take suo moto action on metering and billing, there was very little and inadequate follow up action.

The picture that emerges is of an embattled Commission facing a threat to its external credibility. The combination of a high profile reform, a deeply politicised consumer base, a problematic consumer interface in the case of some companies, and a low capacity regulator seen as insufficiently proactive, have all contributed to this situation.

### *Accountability*

A necessary complement to stakeholder participation is ongoing feedback on how the DERC is conducting its business and in particular, how it is utilizing external inputs. In this regard, the DERC tariff orders are commendable for their clarity in two important dimensions. First, the orders clearly state which stakeholder comments they are considering and provide a discussion of the Commission's reactions. Second, the orders have a distinct section on directives, which states clearly the degree of compliance with each directive, and any follow up action. However, on this latter point, the order for 2006-7 fails to completely follow up on the directives for 2005-6, suggesting a drop in standards. There remain further grounds for improvement in reporting compliance with directives, notably by providing a unique reference number to directives to enable compliance to be tracked over multiple years.

The DERC has failed to produce annual reports, which are not only important for the public, but also are intended to provide a snapshot of the Commission's activities to the legislature. Although it has been in existence seven years, the DERC has only produced one annual report, covering the period December 1999 to March 2003.

### *Stakeholder Engagement: Concluding Reflections*

Stakeholder interview suggest that there has been a steady slide in consumer confidence in DERC. For its part, DERC's investment in stakeholder engagement has had some gaps. Its transparency provisions, while formally adequate, are highly inadequate in practice. While participation in hearings is substantial, and reporting on this participation is complete, the DERC has failed to convince stakeholders it has their interests at heart. The history of unresolved consumer grievances and the failure to rapidly resolve quality of service issues is an important part of this lack of credibility. A failure to deliberately use the media as a form of outreach is another shortfall. The perception that the Government continues to call the shots has also weakened the DERC.

For their part, stakeholders in Delhi's heated political environment have been perhaps too quick to devalue the role of the DERC. The debate has been dominated by 'middle class' RWAs, to the exclusion of other stakeholders, including low income groups, industrial workers and the like. As a result, the Delhi reforms process has been consumed by consumer grievance issues such as metering and billing, which are important as part of a larger story, but have become nearly all-encompassing.

As a result, the avenue for expression of views and opinions has quickly shifted away from the DERC, as debate has swung back to the arena of organised politics, in what one DERC official dubbed 'forum shopping' by Delhi's consumers.<sup>131</sup>

This shift is exemplified by the consumer agitation of 2005 and the subsequent roll-back of the DERC's tariff hike. Much of this history relates to the five year transition period of the reform, and the limits on the regulator and the political scrutiny and pressures that accompanied that period. With the end of the five year transition period in 2007, the DERC has new opportunities to demonstrate its ability to work for all types of consumers. Indications of a new, and more engaged, regulatory style by the second set of regulators also affords a potential opportunity for positive change.

## Conclusion

The DERC was confronted with the challenging task of regulating a rapidly transforming sector, under the constraints of a Government-led reform scheme and under intense scrutiny. The picture that emerges is of a regulator with relatively weak capacity struggling to find its feet. In the process, it has served the public interest in some important dimensions, notably by bringing down approved levels of investment by Discoms, and by introducing a measure of transparency that comes with the regulatory process. At the same time, the DERC's credibility as institution capable of safeguarding the public interest has not emerged unscathed. In addition to specific shortfalls, such as a failure to proactively deal with growing consumer complaints, the DERC has not established itself as suitable independent from Government control. These overarching points are elaborated in this concluding section.

### *Institutional and Political Context: Regulation in the Shadow of Reform*

The DERC was faced with being a steward of reform under a challenging set of conditions. Any reform context calls for rapid change, and therefore for bold measures, whether in terms of investment, tariff hikes, or continuous

monitoring and course correction to ensure that reform milestones are met. However, a new regulator is faced with the additional challenge of building credibility. The DERC was forced to operate in a high stakes situation before it had established the necessary credibility, either with licensees or the public. In addition, it operated within the Delhi Government's framework for reforms, which divided control between the regulator and a pre-established set of parameters, notably for loss of reduction performance. Thus the regulator was neither entirely subjugated to a larger reform design, nor was the agency free to shape reform of the sector in a flexible manner based on an ongoing assessment of the situation. Instead, there were implicit pressures operating on the regulator due to the Government's framework. For example, the Government assumed a certain tariff increase trajectory in its design calculations. The DERC was not tied to these numbers, but if it did not match them, it was open to the accusation of undermining reforms, while if it did, it was open to the charge of lacking independence. The Delhi experience suggests that dividing control and placing implicit pressures on the regulator risks stunting its credibility with the public from the start.

Faced with this situation of balancing reform supporting decisions and building credibility, the DERC followed an approach that has been described as 'conciliatory'. In Delhi's political context, it rapidly became clear that tariff hikes, especially against a backdrop of consumer unrest with quality of service, was a politically explosive, and potentially politically costly issue. From a public perspective, the DERC under its first Chairperson appears to have internalised this stance. The DERC was widely seen as being in communication with the Government on the political sensitivity of tariff hikes, and modulating its positions accordingly. In order to meet the revenue requirement, the DERC took several steps that sometimes were justified in other ways, but to external perception seemed to be ways of avoiding a tariff hike. These included the manner in which depreciation was calculated, creation of a regulatory asset and a change in the manner in which collection of arrears were distributed within the sector.

### *Regulation in Practice: Hands-off Regulatory Style*

The DERC was not equipped, at the start, to deal with the substantial burden of regulating and overseeing a large and high profile privatisation and reform effort. By working with only one Commissioner for its first five years, the DERC's style of operating was tied very closely to the perspective and approach of a single regulator. With regard to staff, the DERC has struggled to attract and retain qualified individuals. Part of the reason for this failing is structural constraints, such as the shortfall of qualified people who are able and willing to shift jobs. However, even within these constraints, the



DERC has failed to establish itself as an attractive place to work compared to other opportunities in the sector.

The staff capacity shortfall has considerably shaped the functioning of DERC. Most immediately, it has led to a continued and ongoing reliance on consultants for the ARR process, with little transfer of skills and experience to staff along the way. Consultants certainly brought skills that otherwise were lacking at DERC. However, a reliance on consultants combined with difficulties attracting and retaining staff have taken a toll on building an institutional memory. Limited staff capacity has also contributed to a failure to produce discussion papers to stimulate discussion in the rule making process (although this practice has recently been initiated), inadequate monitoring of key issues such as quality of service, and unsatisfactory internal procedures to ensure transparent functioning.

In the absence of formal guidance or previously established norms of operation, the regulatory style of the DERC appeared to be driven by the approach of the individual regulator. During the first regulator's tenure, which consisted of the bulk of the period covered by this study, the DERC erred on the side of a 'hands-off' and non-intrusive approach. Notably, conviction in the wisdom of this approach was not always shared by staff, who in several instances sought approval for more investigative scrutiny. This approach shifted under the leadership of the regulators that followed, in a direction toward more direct investigations.

The pattern that emerges is one of a regulatory agency that follows procedure but stops short of proactive intervention. For example, the DERC failed to look more carefully at the billing and revenue management practices of the Discoms although there were suggestions from within staff to do so. The DERC also did not explore stakeholder comments that suggested the pattern of consumption across consumer categories was counter-intuitive. In the area of investments, the DERC's scrutiny of prudence did lead to considerable consumer gains through reductions in petitioned investment and decisions to disallow substantial components of investment. In this case, the regulator did go the extra step and conduct site visits of particular investments, but chose not to report and follow up on the results of these visits.

Finally, the ability of the DERC to steer Discoms through directives is uneven at best. While the DERC has evolved a clear reporting format on directives, in many instances it fails to follow up on its directives and ensure compliance. As with other regulatory commissions, the DERC has shown a reluctance to use its penal powers in case of non-compliance. However, it has issued a 'token penalty' to two Discoms for underachievement of investment.

In the context of reforms and therefore rapid changes, there is arguably a case for a proactive regulatory approach. Because of a mix of capacity constraints and a hands-off regulatory style, the DERC has evolved an

approach of setting parameters but stopping short of a more proactive approach.

### *Role of Stakeholders: A Decline in Stakeholder Confidence*

For various reasons both internal and external, the DERC has not fully established itself as a credible avenue for representation of stakeholder, and particularly consumer interests. Much of this has to do with the politicised context of Delhi, heightened by a high profile and high stakes reform arrangement. Within this context, as described earlier, the DERC had to play a balancing act between building credibility with stakeholders and supporting reform decisions.

However, several aspects of DERC functioning that are within its control have also contributed to a decline in stakeholder confidence. The DERC's practice of transparency does not match its procedures, and in particular, the DERC lacks institutional mechanisms to make it practical and convenient for stakeholders to obtain documents. On a related topic, the DERC has allowed its relationship with the media, which would otherwise be a good mechanism for transparency, to deteriorate.

At the same time, the available mechanisms for public participation have only been used in limited ways by stakeholders. There is a predominance of grievance related concerns, and participation is concentrated in industrial users and resident welfare associations. Low income groups are conspicuous by their absence. Moreover, the capacity of stakeholders to participate is limited, and no stakeholder group has sought to devote or raise resources to enhance the standard of intervention.

Perhaps unsurprisingly, the DERC perceives stakeholder comments as useful only to the extent that they provide a snapshot of consumer issues on the ground, but not at all useful when it comes to larger substantive regulatory questions. For their part, stakeholders, especially from the politically powerful resident welfare associations, were sceptical of the DERC's ability to make decisions independent of the Government, leading them to downgrade their involvement in the DERC process and upgrade their political actions. For its part, the Government has done little to signal a belief in regulatory autonomy. Particularly damaging has been consumer outrage against perceived unfair practices by two of the Discoms and the failure of the DERC to put a halt to these practices.

Under these circumstances, the ability of the DERC to provide a channel for depoliticisation of the sector is limited. To do so will require fixing not only flaws in the interface with stakeholders, but also the perception that the DERC is reactive rather than proactive, and that it is far too closely bound by the Government's own motivations. With electricity so closely intertwined with electoral fortunes, it is hard to imagine the Government

relinquishing control. To shift toward depoliticisation of the sector will require stakeholders embracing and working with the regulator, and the regulator proving itself worthy of that trust.

## Notes

1. 'Ambani discoms are slacking, says DERC' *Times of India*, 27 August 2005; 'CM tells BSES to shape up', *Hindustan Times*, 12 July 2005.
2. Jagdish Sagar, 'Power Sector Reforms in Delhi: The Experience so Far', unpublished manuscript.
3. Sagar, pp. 4-5.
4. Sagar, p. 6, 9.
5. DERC, Petition No. 1/2001, Annual Revenue Requirement for FY 2001-2 and Tariff Determination Principles for the years 2002-3 to 2005-6, 23 May 2006.
6. DERC, Petition No. 1/2001, 2.3.4.2.
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17. Interview with former Delhi Government official, 30 January 2006.
18. DERC, various tariff orders.
19. DERC, Tariff Orders, various years.
20. Interview with senior DERC official, 7 December 2006.
21. Interview with former DERC staff member, 14 December 2005.
22. Interview with former DERC official, 14 December 2005.
23. Interview with former DERC official, 14 December 2005.
24. Interview with senior DERC official, 7 December 2006.
25. Interview with former DERC official, 16 February 2006.
26. Interview with former DERC official, 14 December 2005.
27. Interview with former Delhi Government official, 30 January 2006, former DERC official, 16 February 2006, Delhi Government official, 22 February 2006, former DERC official, 24 March 2006.

28. Interview with former Delhi Government official, 30 January 2006, former DERC official, 16 February 2006, Delhi Government official, 22 February 2006, former DERC official, 24 March 2006.
29. Interview with former Delhi Government officials, 30 January and 22 February 2006 and former DERC officials, 14 December 2005 and 16 February 2006.
30. *Times of India*, 5 November 2003. Also mentioned in interview with former DERC staff, 14 December 2005.
31. *Times of India*, 5 November 2003. Also mentioned in interview with former Delhi Government official, 30 January.
32. Interview with Secretary, DERC, 7 December 2006
33. Interview with former DERC staff, 16 February 2006.
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35. Interview with former DERC staff, 16 February 2006.
36. Interview with former DERC staff, 16 February 2006.
37. Interview with former DERC staff, 14 December 2005.
38. Interview with first Chairperson of DERC, 24 March 2006
39. Interview with senior DERC staff, 7 February 2007.
40. Interview with DERC staff 16 February 2006 and DERC consultant, 27 January 2006.
41. Interview with first Chairperson DERC, 24 March 2006.
42. Interview with former DERC staff, 16 February 2006, and interview with consultant, 17 January 2007.
43. Interview with former DERC staff, 16 February 2006.
44. Interview with former DERC staff, 16 February and 14 December 2005.
45. Interview with regulatory consultant, 27 January 2006.
46. Interview with staff at distribution company, 24 March 2006.
47. Prayas Energy Group, *A Critical Review of Delhi's Privatised Distribution Companies and the Regulatory Process*, Prayas Occasional Report 1/2006, May 2006.
48. DERC letters F.3(86)/Tariff/DERC/2005-6/7022, 14 January 2005; F.3(87)/Tariff/DERC/2005-6/7023, 14 January 2005. DERC summary of discussions held with BRPL, 7 January 2004 and Summary of Discussions held with NDPL, 7 January 2004.
49. Interview with first Chairperson, DERC, 24 March 2006.
50. Interview with former DERC staff, 16 February 2006.
51. Interview with former DERC staff, 16 February 2006.
52. Interview with consumer representative, 20 January 2006.
53. Interview with former DERC staff, 16 February 2006.
54. Interview with senior DERC official, 7 February 2007.
55. Interview with former DERC staff, 16 February 2006.
56. Interview with senior DERC official, 7 December 2006.
57. DERC Tariff Order, 2005-6 for BYPL, 2.35.
58. Interview with senior official at Delhi Transco, 23 March 2006.
59. Interview with senior DERC official, 7 December 2006.
60. A summary of directives and compliance status used for this analysis is available from the authors on request. The approach used to study directives and compliance is summarised in an appendix to this report.

61. DERC Tariff orders, various years.
62. DERC Tariff order BYPL FY 2004-5, 7-184.
63. DERC Tariff order BYPL FY 2004-5, 2-16.
64. DERC Order No. F.11(132)/DERC/2004-5/6341, 22 November 2004 against petition No. 72/2004.
65. 'Details of Cases wherein Penalty have (sic) been imposed on the Licensee', Internal DERC document.
66. DERC Order No.F.7(23)A/DERC/2002-4/2718-2719, 21 July 2004.
67. Doc 11, BRPL 2003, 3.3.
68. Doc 11, BRPL, 2003, p. 73-4.
69. Prayas Energy Group, 2006.
70. Doc 17, BRPL, 2005-6.
71. Prayas Energy Group, 2006, p. 25-26.
72. Interview with former DERC official, 16 February 2006.
73. DERC Tariff order, BYPL, 2004-5.
74. Interview with senior Delhi Transco official , 23 March 2006.
75. DERC Tariff order, BYPL, 2004-5, 2-22.
76. DERC Tariff order, BYPL, 2004-5, 2-61.
77. DERC Tariff order, BRPL, 2006-7, 65.
78. Interview with first Chairperson of DERC, 24 March 2006.
79. Interview with senior former Delhi Government officials, 30 January and 26 February 2006; and media reporter, 2 February 2006.
80. Interview with senior Delhi Transco official, 23 March 2006, consumer representative, 20 January 2006 and NGO representative, 1 February 2006.
81. Interview with consultant, 17 January 2007.
82. DERC Tariff order, BRPL, 2003-4, 5.5.
83. DERC Tariff order, BYPL, 2004-5, 4.7.
84. Interview with senior regulatory affairs official at a Discom, 24 March 2006, and interview with consultant, 17 January 2006.
85. The issue is summarised in DERC Tariff order for BRPL, July 2005, pp. 4-7 to 4-10.
86. Prayas Energy Group, Table 10.1, p. 64.
87. DERC Tariff order, BRPL, July 2005, p. 4-9.
88. Interview with former Delhi Government official, 30 January 2006.
89. Argumentation for the regulatory asset is spelt out in DERC Tariff order for BYPL, June 2004, 4.7.
90. Interview with first Chairperson, DERC, 24 March 2006.
91. Appellate Tribunal for Electricity, Decision on Appeal Nos. 155, 156, and 157 of 2005, 21 July 2006.
92. Interviews for this project were conducted between December 2005 and June 2006, when the two new members of the DERC had occupied their positions for barely a year, and before the new Chairperson had been appointed.
93. DERC Tariff Order, BRPL, July 2005, p. 6-8.
94. DERC Tariff Order, BYPL, June 2004, p. 6-151.
95. This agitation was covered in several newspapers:  
     'DERC Hikes Power Tariff by 10 PC', *The Financial Express*, 11 June 2004,

- Gayari, Natasha, 'DERC Tariff Hike: Tough Times for Consumers', *Powerline*, June 2004; Ghosh, Saikat, 'Citizens' Forum to Launch Stir on 28 August', *The Indian Express*, 6 August 2005; 'Dikshit Rules Out Power Hike Rollback', *The Hindu Business Line*, 17 June 2004; 'After Midnight Calls, CM Pulls Up Discoms', *The Indian Express*, 12 July 2005; 'RWAs Call for Rollback of Power, Water Tariff Hike', *The Indian Express*, 7 August 2005.
96. Interviews with Discom official, 8 December 2006; industry representative, 31 January 2006; NGO, 1 February 2006.
  97. Reported in Prayas Energy Group, p. 58, 'Delhi's Angry Middle Class' *Civil Society*, September-October 2005, pp. 8-12; and in DERC's own orders, for example, DERC Tariff Order for BYPL, June 2004, Sec 2.24.
  98. Interview with DERC official, 13 December 2006.
  99. Interview with former DERC official, 16 February 2006, and consultant, 17 January 2007.
  100. DERC suo moto proceedings related to metering and billing issues, 6 February 2004.
  101. Prayas Energy Group, p. 59-61.
  102. Delhi Residents' Welfare Associations Joint Front notices and press releases, 6 August 2005, 21 November 2005, and 17 December 2005.
  103. Delhi Residents' Welfare Associations Joint Front notice of a protest rally on Saturday 17 December 2005.
  104. Prayas Energy Group, p. 58.
  105. Interview with senior DERC official, 7 December 2006.
  106. Comments obtained from DERC.
  107. While the process was initiated under the first Chairperson, it was concluded by the two Members appointed in 2005.
  108. Interview with DERC staff member, 7 December 2006.
  109. DERC Comprehensive (Conduct of Business) Regulation, 2001, available at [www.dercind.org](http://www.dercind.org)
  110. [www.dercind.org](http://www.dercind.org), checked on numerous days in June 2006.
  111. Interview with former DERC staff, 14 December 2005.
  112. Interview with media reporter, 2 February 2006.
  113. Delhi High Court order, 22 November 2005, WP(C) Nos. 22158-59/2005 & WP(C) No. 22160/2005
  114. Interview with media representative, 2 February 2006.
  115. Interview with DERC official, 7 December 2006.
  116. Interview with representative of RWAs, 20 January 2006.
  117. Interview with official, PHDCCI, 31 January 2006.
  118. Interview with senior DERC officials, 7 December 2006 and 8 December 2006.
  119. Interview with former DERC consultant, 27 January 2006 and 17 January 2007.
  120. Interview with RWA representative, 20 January 2006.
  121. Interview with media person, 2 February 2006.
  122. Interview with consumer NGO, 1 February 2006.
  123. Interview with representative of industry association, 31 January 2006.
  124. Interview with former Delhi Government official, 30 January 2006.

125. Interview with representative of industry association, 31 January 2006.
126. Interview with former Delhi Government official, 22 February 2006; RWA representative, 20 January 2006.
127. DERC Order on Rationalisation of Tariff for DVB, January 2001.
128. DERC Tariff Order, BYPL, 2005-6, 2.35.
129. Submission by PHDCCI to DERC for 2005-6 tariff orders.
130. Prayas Energy Group, 2006, p. 61.
131. Interview with DERC official, 7 December 2005.