Access to Power: Governance and Development in the Pakistani Electrical Power Sector

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Abstract

IJLAL NAQVI: Access to Power: Governance and Development in the Pakistani Electrical
Power Sector
(Under the direction of Charles Kurzman)

This dissertation explores governance in Pakistan through a study of the state-run electrical power sector. At both the micro and macro level, the Pakistani power sector provides a lens into the heart of the Pakistani state and its governance institutions. This ethnographic and historical study offers an in-depth look at state operations in a developing country, situates the current Pakistani power crisis in a larger context of continuity through periods of dictatorship and democracy, and suggests how efforts to make state service delivery more responsive to citizens might be reconceived.

A historical review of the Pakistani power sector establishes first and foremost that the current crisis is the product of longer-term processes for which the policy solutions currently being proposed (with the support of international donors and multilateral lenders) are inadequate. Depoliticized attempts at power sector reform have little to offer in light of the pervasively informal and negotiated nature of the fragmented Pakistani state. The institutions of power sector governance are mutually constituted by the formal rules and the informal - personal relationships, language, violence, money, and power. These rules of the game are as relevant to relations within and between public sector organizations as they are to the engagement of citizens with their state. The same rules apply at the margins of the state – informal squatter settlements – as at the core, though the resources brought to bear and the resultant outcomes are different.

The internal incoherence of this state underscores the limitations of formal rules in determining outcomes, and the poor prospects for reform efforts that focus exclusively on the formal aspects of governance. To proactively engage with the question of political will leads away from top-down policy perspectives and counter to the depoliticizing tendencies that currently shape policy reforms. Instead, an energized and informed local participation can be a counterweight to the inertial tendencies of a Pakistani state whose reforms tend to be co-opted by existing power centers rather than result in changed outcomes.

To my parents, Leylac, and Sofi.

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Advanced Engineering Associates International gave me the flexibility I needed to finish my writing while I worked for them in Pakistan. My colleagues at AEAI were always open to

sharing their immense experience of the Pakistani power sector, from which I benefitted greatly.

I am grateful to the Pakistani public servants who allowed me into their worlds for a while, particularly to the employees of the Islamabad and Lahore Electric Supply Companies. I cannot name them or identify the locations, but I thank them for entertaining my questions and tolerating my enquiries. So much of what I've written describes a broken system which doesn't serve Pakistanis well, but I also want to note the constraints that employees of the electric utilities work under and acknowledge that they routinely work outside the bounds of their duties and under dangerous conditions to keep this underresourced system running as best they can.

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My daughter Sofi won't remember this time, but I'm glad that finishing means that she can play with her Dad instead of see him working all the time.

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List of Abbreviations

CDA Capital Development Authority

CPPA Central Power Purchasing Authority

DISCO Distribution Company

FESCO Faisalabad Electric Supply Company

GEPCO Gujranwala Electric Power Company

HESCO Hyderabad Electric Supply Company

Hubco Hub Power Company

IESCO Islamabad Electric Supply Company

IPP Independent Power Producer

kWh Kilowatt hour

LESCO Lahore Electric Supply Company

MEPCO Multan Electric Power Company

MW Megawatt

MWP Ministry of Water and Power

NEPRA National Electric Power Regulatory Authority

NGO Non-Governmental Organization

OGRA Oil and Gas Regulatory Authority

PEPCO Pakistan Electric Power Company

PESCO Peshawar Electric Supply Company

QESCO Quetta Electric Supply Company

SDO Sub-Division Officer

TESCO Tribal Area Electricity Supply Company

USAID United States Agency for International Development

WAPDA Water and Power Development Authority

XEN Executive Engineer

Chapter 1

Introduction

This dissertation explores governance in Pakistan through a study of the electrical power sector. Electrical power is a basic service of fundamental importance to quality of life and economic development. In Pakistan, the state takes responsibility for the provision and subsidization of electrical power. Among state services, electrical power is notable for the breadth of its coverage (62% of Pakistanis had access to electricity in 2009 (International Energy Agency 2010)) and the fact that – with few exceptions – rich and poor Pakistanis alike rely on the state-owned electrical utilities for their electricity. The power sector is arguably the broadest point of regular contact between the Pakistani state and its citizens. The sector is currently in crisis and has been since 2007. Loadshedding (a rolling blackout) routinely exceeds 12 hours a day in the major cities. The federal government's subsidy to power consumers over the past three years exceeds 1 trillion rupees (\$117 billion) and has added 10% to the total national debt; this subsidy is more than the entire public sector development budget over that same period. At both the micro and macro level, the Pakistani power sector provides a lens into the heart of the Pakistani state and its governance institutions.

The idea for this research project started in the summer of 2005 when I was part of a disgruntled mob of middle and upper class Pakistani men which had gathered in front of the

local office of the electrical utility in a residential neighborhood in Lahore. We had been without power for most of the night and in the hundred plus degree heat many people could not sleep or be comfortable deprived of fans and air conditioners. The assembled group had come to the office to find out why their power was out and when it might be restored. My father had made me come down to the office. I had resisted – what was the point? – but he insisted and I relented. This incident provided the genesis of this research project because during that night I first encountered ordinary Pakistanis demanding that their state provided them with the service they wanted and needed. I was familiar with Pakistanis requesting or applying for service delivery through formal application procedures – supplemented on occasion by some discretely folded currency – but not with this raw expression of demands on the state which hinted at citizenship rights.

Armed with little more than their frustration these otherwise-stolid burghers fumed in the heat but got no satisfaction from the employees of the electrical utility who were on duty that night. Eventually, one person who had gotten into the office (the majority of us stayed outside) informed the rest of the crowd that the phone line had been deliberately disconnected so that the employees on duty would no longer have to listen to any complaints and enquiries. People started to make bold claims about what they would do to resolve the situation. One man claimed that he would march to the Chief Executive of the electrical utility's house, to which another responded "I'll follow you, lead the way." A suggestion was made to go to the house of the *nazim*¹ of Lahore and a group of about 30

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¹ At that time the position of *nazim* was the head of local government and comparable to a mayor.

people gathered to walk or drive the quarter mile to his house. I left for home, having no confidence that the mayor would achieve anything.

The eventual choice of appealing to the mayor was influenced by his proximity. The mayor has absolutely no authority over the electrical utility and – if he were to do anything – it would be to call someone at the utility and request that they address the problem. Petitioning one's elected representative to help in redressing a grievance is a staple of democracy, but the appeal to the mayor also fits the pattern of supplicating a notable member of society to put pressure on state officials. Several hours later the electricity came back on, without any indication of why it had gone or why it returned when it did – a lack of transparency and accountability that I was to become very familiar with.

The period 2007-2011 has proven a real challenge for Pakistani citizens and the government. As a sign of the importance of the electricity crisis currently gripping Pakistan, Yousaf Raza Gilani (Pakistan's Prime Minister) promised to address it in his inaugural address to the National Assembly². Loadshedding regularly reached six hours per day in urban areas and eight hours per day in rural areas in early 2008. Pakistanis launched both violent and peaceful protests to express their dissatisfaction, and this issue was covered by the media on a close to daily basis. On April 14th 2008, some 2,000 residents of Multan (including a union of power loom workers) rioted over prolonged power outages. They burned banks, shops, vehicles, and the offices of the local electric power company. Some protesters carried a banner reading "Constant load-shedding is our financial murder."³

² The Daily Times, March 30th, 2008

³ Tanveer, Khalid. "Pakistan Power Cuts Spark Rioting." Associated Press. April 14, 2008.

Pakistan's political leadership responded by suspending the chief bureaucrat responsible for electricity production. In Swat on September 23rd 2008, two days after Islamist militants destroyed part of the local electrical power distribution system, thousands of protesters burned tires and banks in the main urban center of Swat. In an interview in the daily *Dawn*, a protester asked "How can anyone survive without electricity, gas, water and food," and "Where is the government and where is its writ?" Law enforcement personnel opened fire on the protesters, killing six and injuring fifteen. For both 2009 and 2010, a keyword search of the daily Dawn's archive (Pakistan's newspaper of record) produced over 100 distinct instances of public protests in each year. 2011 has been another bad year for electricity shortages, with a new record 8000 MW shortfall (approximately 50% of demand) being set shortly before this dissertation was submitted. The October 2011 shortages resulted in riots in which distribution company offices were burned in Lahore and Gujranwala, and 200 rioters arrested.

These instances of a breakdown in the provision of electricity throw some of the main issues this dissertation engages with into sharp relief. Pakistanis demand that the state provide them basic services, and the state commits to the provision of these services. How that demand is expressed, the response it receives, and the nature of the relationship between citizens and the state that those exchanges describe are the subject of this study.

⁴ Khan, Hameedullah. "Firing leaves six protesters dead in Swat." *Dawn*. September 24, 2008.

⁵ Khan, Ahmad Fraz. "Deficit over 8,000MW: Power crisis leaves people in distress." *Dawn*. October 2, 2011.

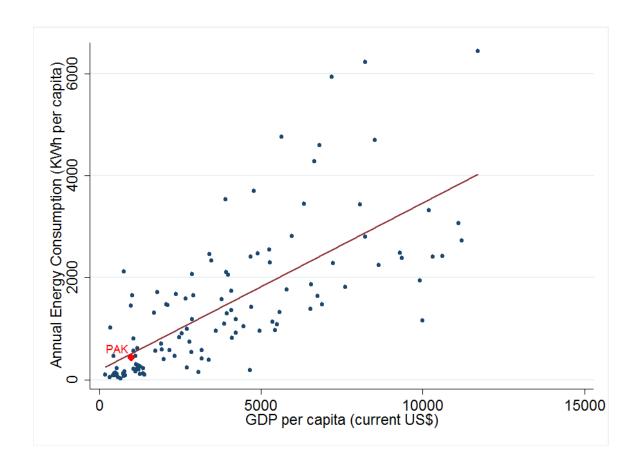
⁶ Khan, Ahmad Fraz. "Power riots engulf more cities, towns in Punjab." *Dawn*. October 4, 2011.

⁷ Khan, Rameez. "Electricity blackouts: 200 rioters sent to jail as power protests continue." *Express Tribune*. October 4, 2011.

The remainder of this introduction provides basic facts and background on the Pakistani power sector and the government of Pakistan, and presents the underlying theoretical motivations of this study and the methods employed in my fieldwork. Chapter two of the dissertation is a historical study of planning in the Pakistani power sector since 1955. In chapter three I examine the gap between the lived reality of the state and its self-representation, and the implications of that gap for the application of institutional theories to governance reform. In chapter four I compare citizens' encounters with the state electrical utility across lines of social inequality. Chapter five contains policy recommendations I developed that respond to the need to change the rules of the game for governance in the power sector. Chapter six presents a brief conclusion.

1.1 Basic Facts about Power in South Asia

Figure 1.1 Plot of Electricity Consumption and GDP for Low and Middle Income Countries, 2008



Source: World Development Indicators 2011⁸

In Figure 1.1 above, the scatter plot for low and middle income countries (defined per the World Bank criteria of per capita income less than \$12,276) shows a strong correlation of 0.78. The linear line of best fit drawn through the scatter plot also shows that countries with higher income tend to have higher energy consumption. Pakistan – marked by the red diamond and the PAK label – is low on both axes, and very close to the line of

⁸ Available at: http://data.world<u>bank.org/data-catalog/world-development-indicators</u>

best fit with other nations scattered above and below. Pakistan's level of electricity is close to other nations with comparable income levels, and fits the broad trend of higher levels of electricity consumption at higher income levels.

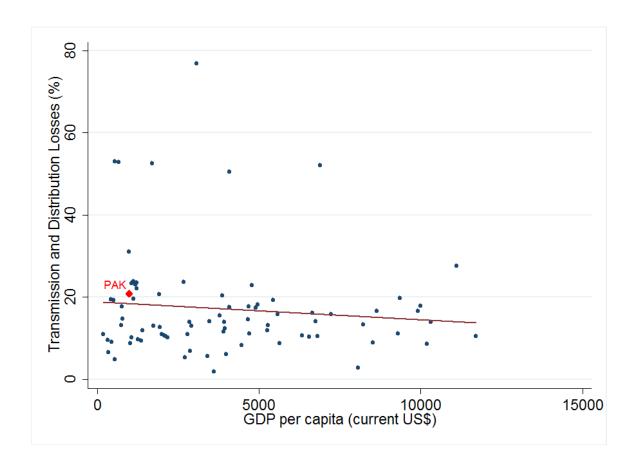
While correlation does not always imply causation, the vast literature investigating the direction of causality between economic growth and energy consumption has no simple summary:

"The review of literature states that a relationship exists between energy use and economic growth. However, when it comes to whether energy use is a result of, or a perquisite for, economic growth, there are no clear trends in the literature. Depending on the methodology used, and country and time period studied, the direction of causality between energy consumption and economic variables has remained empirically elusive and controversial" (Mehrara 2007: 2940)

Mehrara's conclusion regarding oil exporting countries is that there is strong unidirectional causality from GDP to energy consumption, without any feedback, but that the characteristics of these countries are unusual due to the prevailing energy subsidies. Erdal et al (2008: 3839) find in their review of the literature on the causality between economic growth and energy consumption in countries similar to Turkey that "a mutual causality between economical growth and [electricity consumption] is common in especially developing countries." By mutual causality the authors mean a bidirectional causality between economic growth and electricity consumption: that increasing income can lead to higher electricity consumption, and that increasing electricity consumption can drive higher income. Of the studies they reviewed, seven found bi-directional causality, five found that energy consumption caused economic growth, two found that economic growth caused energy consumption, and two found no causal relationship. Mutual causality between

electricity consumption and economic growth is not universal finding, as one recent study of Bangladesh (Mozamder and Marathe 2007) argues for the promotion of energy conservation on the basis of a finding of unidirectional causality from national income to electricity consumption. Reasonable hypotheses on the causal relationship between electricity consumption and income can certainly be advanced for Pakistan, but will not be explored here. For the purpose of this paper it is sufficient to acknowledge that there is a strong correlation between electricity consumption and national income, and a reasonable expectation that electricity consumption can increase national income as well as result from growth in national income. The possibility of bidirectional causality may be reinforced by the chronic electricity shortages currently facing Pakistan, but Bangladesh also faces such shortages and the study of Bangladesh quoted above did not support this finding.

Figure 1.2: Plot of Transmission and Distribution losses against National Income for Low and Middle Income Countries, 2008



Source: World Development Indicators 20119

Transmission and distribution losses (also called system losses) are that proportion of electricity generated which is not billed to consumers. System losses are divided into technical and non-technical losses. Technical losses arise from the physical characteristics of the wires over which electricity is transmitted from one location to another. They can be reduced through good engineering practices regarding the planning and maintenance of the

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⁹ I excluded two outliers from the above graph: Togo, with 123% losses; and Benin, with 92% losses. Besides being unreasonably high, neither figure matches other published figures for those two countries (see World Bank 2009). The Republic of Congo (77% losses) is retained as it is reasonably consistent with other sources. None of these three datapoints are especially pertinent to the discussion here.

physical infrastructure. Non-technical losses include theft and other inefficiencies as a result of which the electrical utility does not bill consumers for the electricity which entered its system. Non-technical losses and electricity theft are discussed in detail in later chapters. A still further problem is that a utility will bill consumers for consumption of electricity, but that its collections will be incomplete.

The overall relationship between system losses and national income is that system losses tend to be lower in higher income countries. Correspondingly, the line of best fit drawn on the scatter plot in Figure 1.2 above slopes downward. Pakistani transmission and distribution losses are quite high at 21% and lie above the line of best fit. Many other nations, however, have similar or higher losses than Pakistan, and the distance from the line of best fit is quite small.

In terms of both overall consumption and system losses, Pakistan is close to the levels of other countries at similar income levels and the linear trend lines which can be drawn based on this data. In these two assessments, Pakistan has a lot in common with other countries at comparable income levels.

1.2 Conceptualization of the State

Most theory development regarding citizenship and the provision of state services has drawn on the historical experience of Western Europe and North America, while somewhat parallel issues are discussed in the rest of the world as development studies. This project aims to bring the two streams of work together with a particular focus on how

citizenship in the post-colonial state is understood across lines of social inequality. Equality of citizenship is a fundamental tenet of the modern state and is central to both the American Declaration of Independence and the French Declaration of the Rights of Man and the Citizen. T.H. Marshall's (1950) seminal statement on citizenship takes such civil rights as the first step towards political and then social rights, the latter being defined as securing the "modicum of economic welfare and security" necessary for a civilized life per the prevailing standards. While Marshall is often criticized for imposing a somewhat teleological trajectory on his formulation, his discussion of the British Poor Laws recognizes the existence of social rights without a full grounding in civil and political rights – and he is critical of the implications for citizenship. Yasmin Soysal (1994) has tackled the situation of contemporary minority groups in Europe from a similar framework. More recent scholarship on citizenship still takes Marshall as its reference point, but sees citizenship as "less an expression of belonging to a national community and more the practice of such a belonging" (Procacci 2004: 342). Procacci argues that "citizenship is, and has operated as a multidimensional set of strategies for building a community and actively participating in it" (Procacci 2010: 20).

Though modern citizenship¹⁰ as it has evolved in Western Europe and North America is based on equal rights, post-colonial states struggle both with the legacy of past domination and the contemporary reality of widespread poverty and substantial social inequality. Mahmood Mamdani's (1996) formulation is that post-colonial states inherited a "bifurcated state" which distinguished between colonist citizens invested with rights under

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¹⁰ I use the phrase 'modern citizenship' to denote the rights-based vision of citizenship coming out of the Western European and North American experience.

the rule of law and colonial subjects under "a regime of extra-economic coercion and administratively driven justice." Mamdani maintains that this distinction remains as a sort of non-racial apartheid in which "[a]lmost all of the state is in the cities, and concerned with the cities; almost all of the money goes there." Yet the urban elite's relationship with the state is rarely engaged in the literature, while studies that focus on the experience of the urban and rural poor (for example, Ahmed 2008, Chatterjee 2004, von Schnitzler 2008) are more prevalent. We should not assume that the citizenship of urban elites follows the Western European and North American model. Dipesh Chakrabarty's (2000) challenge is to "provincialize" the European and North American experience as one possible trajectory which informs but does not delimit the future of the global south. Indeed, Achille Mbembe (2000) argues that:

"In all the countries [colonies] the act establishing sovereign authority was never a contract since, strictly speaking, it involved no *reciprocity* of legally codified obligations between the state, powerholders, society and internationals."

Focusing on the lack of a reciprocal contract at the moment at which sovereignty was established draws the wrong lesson from the origins of European citizenship. Scholars of the welfate state argue that Rights evolved over a long period of time as a product of struggle. Evelyne Huber and John Stephens (2001), as one prominent example, describe the welfare state as a struggle over redistribution shaped by domestic power relations, political institutions, and the complex of relations in the international economy and state system, all of which are mediated by political parties. The literature on the welfare state has been applied to the study of social democracy in poor countries by Richard Sandbrook et al. (2007) and Patrick Heller (1999). These authors primarily explain successful development

outcomes in poor countries through the organized representation of disadvantaged groups (such as through a leftist political party) leading to the provision of state services to the poor. Class structures in developing countries such as Pakistan, however, frequently do not favor the resolution of such struggles in favor of rights for disadvantaged groups (Alavi 1972; Jalal 1990).

In Dipesh Chakrabarty's (2000) *Provincializing Europe*, he writes of the need to engage with contemporary issues in the global south neither by taking the early modern experience of Western Europe as a template, nor by rejecting the project of scientific knowledge (including social science) with its roots in that experience, but to take the voyage through European thought in an "anticolonial spirit of gratitude." Chakrabarty encourages us to draw on European intellectual traditions, but advocates a normative stance oriented towards the welfare of subordinate classes and countries.

The developmental challenge of getting subordinate states to provide for subordinate classes is central to the research presented here. While the theorizations discussed above can guide the conceptualization of such a study, the question of how to approach it methodologically remains. For the historical and macro portion of this study (chapter two) I drew on the written plans and reports of the Pakistani state organizations as well as the international organizations active in Pakistan's power sector. The other chapters take a different approach based on Timothy Mitchell's (1991: 78) position of taking the distinction between state and society as an internally drawn line, "within the network of institutional mechanisms through which social and political order is maintained." The

production and reproduction of what the state does, and who it serves in doing so are engaged with through ethnographic fieldwork.

1.3 Methods and Fieldwork

The focus of this study is on the processes through which state officials and private citizens negotiate the delivery of a crucial state service. The goal is to understand these processes, and the variance that exists across social classes. The primary methodology that I employed is ethnographic: in-depth interviews and participant observation. That ethnography is the correct methods for these goals is emphasized in William Axinn and Lisa Pearce's (2006) discussion of the merits of different methods of data collection. The strength of ethnography is in its ability to generate a rich understanding of the processes and mechanisms that underlie observable behavior. Qualitative interviews are the preferred choice for capturing interviewees' subjective understanding of their relationship with the state (Weiss 1994).

Michael Burawoy's (1998) extended case method serves as a formal statement of the ethnographic methodology from which I work. In *Global Ethnography* (Burawoy et al. 2000) Burawoy and his co-authors describe four moments of the extended case method, each of which is a different kind of extension. The extension in this study is from micro to macro, to see the local action of processes not limited to the sites of study. I use Islamabad to explore conditions in Pakistan, and Pakistan as an example of a developing country. I do not claim that this is a representative case, but that the processes active here can shed light on situations in other countries as well. I also use the state-run Pakistani power sector to

speak to governance issues more broadly. The objects of study are the governance institutions of the state.

1.3.1 Case Selection: Islamabad

Islamabad has a somewhat peculiar character among Pakistani cities due to it being the federal capital and the location of many government offices. The state, in various forms, is much more present than is the case in other cities. State services in general are above average, electricity supply more regular, and residents have more personal connections to the state. By studying Islamabad one sees Pakistani state institutions at what is arguably their highest level of effectiveness. The chances of citizens getting the state to meet their needs should be highest in Islamabad of anywhere in Pakistan, so when the processes through which citizens engage the state fail in Islamabad there will be little chance of them succeeding anywhere in Pakistan. Additionally, where citizens are more effectively served by the state in Islamabad, we could learn why similar processes are less effective elsewhere.

1.3.2 Fieldwork and Interviews

Every ethnographer has to gain access to the setting they choose to study. In Islamabad, I can claim being an authentic resident besides being an ethnographer. I have lived there before, from 2001-2002, am a citizen of Pakistan, and have family members currently living and working there. This claim to authenticity of residence meant little in terms of gaining access to my target organizations, however. Finding, getting to speak to, and observing my respondents involved regular reprisals of this process of gaining access. Unlike Geertz (1973) in Bali, my getting 'in' was not accomplished at a single stroke, but always a matter of degree and subject to ebbs and flows.

My approach to gaining access was based on securing introductions to my field sites and a non-threatening presentation of myself as a student. I faced the challenge of recruiting respondents by identifying areas I wanted to access and using the networks of my existing contacts to gain access to them. Once I had established some relevant contacts, I used their networks to introduce me to new field sites and in recruiting new respondents. By and large, this strategy was successful.

The most difficult entrée was at the sub-division level at IESCO. Through a former colleague from my work in the federal government in 2001-2002 I met a serving power sector official in Lahore, Maqsood sahib. Maqsood sahib found my project interesting and agreed to support me by introducing me at IESCO headquarters, from where I was referred to Omar sahib, a mid-level manager. Omar sahib was chosen as an appropriate person for me to talk to by the IESCO leadership by virtue of being a good and competent officer. Omar sahib introduced me to the sub-division officer, Farid sahib, in whose office I did most of my field research. Much later I learned that Farid sahib's sub-division is a 'model sub-division' with reduced staff (33% less) and increased wages (33% more). While the Omar sahib did not tell me this himself – he was probably trying to put WAPDA's best foot forward – it has helped me meet my objective of studying the best service delivery environment.

The primary challenge in gaining cooperation from my respondents was to show that I was not a threat. Being a student was an important part of winning trust, as I could

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¹¹ Sahib is an Urdu word roughly equivalent to the English 'Mister' and can be used both with a person's last name or first name. It is a standard form of polite and respectful address, often omitted when dealing with someone lower in social standing. In my fieldwork I employed it as a default, though for people I was closer to in age and more comfortable with I would use *bhai* (brother). As is customary in polite Urdu I did not address people solely by their first name. The abbreviation for *sahib* is sb.

position myself in terms of conducting a study without a profit motive or corruptionexposing agenda. The digital voice recorder that I had intended to use in my interviews was completely unwelcome and I only used it in one interview – that of a retired federal secretary in his own home. I did however keep my notepad out and visibly take notes during and after conversations as a reminder of the informed consent my respondents provided verbally. Without a written record of their participation there is nothing concrete to link quotes and actions to particular individuals, thus protecting the anonymity of my respondents. No IESCO employee or location has been identified in this work, as was promised to my respondents. 12

Much later in my fieldwork I realized that my respondents' networks (in which they were introducing me) had certain characteristics. At one stage, several of my respondents turned out to be members of the tablighi-jamaat, a non-violent proselytizing social movement. At another, I had a sequence of Shi'a respondents who were particularly helpful to me – perhaps because I have a recognizably Shi'a last name. Tapping these networks was unintentional, and I was quite indiscriminate in meeting with whoever would talk to me.

Respondents showed varying levels of engagement with my research ranging from interest and support, to indifference or even some hostility. Only one IESCO employee refused outright to speak to me - the head of the union at Farid sahib's sub-division. He never explained his reasons. Many other union members and officer bearers did speak to

¹² Farid sahib did ask that his sub-division's help be acknowledged. I am not acceding to his request, with

regret, as I want to protect him and his staff from any negative consequences of their assistance to me.

me. Others were more subtle in expressing their reluctance, still more answered questions without saying anything interesting.

While I did have an interview schedule (see Appendix 1: Interview Schedule) for my semi-structured interviews, asking those questions was often a less useful strategy than simply being present, keeping a conversation going, and observing people. In one interview I made a conscious effort to ask the questions as I had prepared them¹³. The respondent, a line superintendent in charge of maintenance with over 20 years of experience had answers for me which presented a profile of smooth operations which I knew to be false. After going through my interview schedule I chose to stay with him and keep talking to him. In the course of the conversation, he revealed that consumers were upset about waiting for new connections due to the lack of available equipment, and that he had to buy axes for his crew out of his own pocket because the sub-division couldn't supply them. These points contradicted earlier statements he had made. Direct questions were rarely useful in teaching me what people actually do or think.

My list of field sites and brief descriptions follow:

- <u>Distribution companies.</u> These are the organizations with operational responsibility for delivering electricity to consumers, sending them bills, and managing everything to do with the electrical grid within a given area.
 - Two urban sub-divisions in Islamabad. Two urban sub-divisions in Islamabad formed the basis of most of my fieldwork at IESCO. I conducted extensive

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¹³ Field notes April 1, 2009

- interviews in every section of these sub-divisions and long periods of observations of the IESCO employees in their dealings with consumers.
- LESCO and IESCO management offices. I interviewed mid-level and senior level distribution company officials in Lahore and Islamabad. These included headquarters staff as well as mid-level managers.
- One rural sub-division near Islamabad. I conducted interviews but only
 limited observations of consumer experiences. This site was primarily taken
 on as a negative case to give contrast to the fieldwork in Islamabad's urban
 sub-divisions.

Policy Level Organizations

- Ministry of Water and Power. The Ministry is at the apex of the state-run power sector. I interviewed senior officials as well as those with lesser responsibilities (Personal Secretary, Staff Officer) at the Ministry of Water and Power.
- Planning Commission. The planning commission is responsible for preparing the inputs to the energy chapters of the five year plans. My interviews included generalist bureaucrats and energy sector specialists.
- Pakistan Electric Power Company. The Pakistan Electric Power Company sits above all the distribution companies and is staffed by power specialists. My interviews were at the highest level with operational oversight over the entire power sector.

 National Electric Power Regulatory Authority. I interviewed current and former officials of the regulatory authority.

• International Donors and Multilateral lenders

 I interviewed Pakistani and international energy sector specialists with experience of preparing and assisting in the implementation of Pakistan's internationally funded power sector reform plans and projects.

Civil Society

- Trader groups (anjuman-i-tijaran). Commercial areas elect representatives to address their collective interests and mediate disputes. I interviewed both shop owners and their elected representatives.
- Industry groups. I interviewed representatives of local industry groups and others who headed industries themselves.
- Non-governmental organizations. I interviewed several members of an NGO working to promote a rights based approach to the power sector.

Municipality

 Capital Development Authority. I interviewed both at the leadership level and lower level officials with specific responsibility for citizen groups of interest.

Citizens

Katchi Abadis in Islamabad. I conducted interviews at three of Islamabad's
 katchi abadis (squatter settlements), including people in leadership positions
 with regards to electricity.

 Upper and Middle-class residents of Islamabad. I interviewed Islamabad residents recruited from many channels including distribution company offices, family, friends and neighbors.

While in Pakistan I took a job with USAID's Generation and Transmission

Improvement Program as Senior Adviser for Research and Outreach. I have worked there since February 2011 and plan to continue until December 2011. For the first seven months I was seconded to the Power Wing of the Ministry of Water and Power. At the Ministry I was part of the Governance Restructuring Team tasked with advising and assisting the Ministry of Water and Power with the implementation of the Power Sector Reform Program. While in this position I met and spoke with people from almost every relevant Pakistani and international organization active in the Pakistani power sector at the policy level. I do not use this experience as a field site for my research project, although it has definitely informed my understanding of the Pakistani power sector.

All field notes and interview transcripts were analyzed and conceptually coded using the Atlas ti software. This conceptual coding provided the basis for a thematic analysis of how the interviewees described the Pakistani state-run power sector and their experiences with it. I also recorded regular 'notes on notes,' which I used to start the writing process (Emerson et al 1995). Quotations from my field notes have been marked with the date and included throughout this dissertation.

In recruiting state sector employees I followed a strategy of using snowball sampling based on initial introductions by key informants for both my policy level interviews and for employees with operational responsibilities. A random sample might be preferable for claiming generalizability of results, but my objective is to study the best case of service delivery rather than the average. Further, key informants were adamant that approaching WAPDA employees without the right introduction or purely through formal channels (i.e. with approval for my study from the executive leadership) would almost certainly make interviewees suspicious and defensive. Key informants were emphatic that while interviews at the policy making level would not be difficult to obtain, the only path to meaningful access at the operational level would come through a friendly, informal introduction, and that my access to the office of an SDO would be entirely dependent on the SDO in question.

Recruiting citizens was a task complicated by the lack of an appropriate sampling frame. Further, class, legal status, and connections with the state are collinear to an extent, but the number of interviews feasible for this study did not permit me to establish a research design which would separate out their influences. I employed two main recruiting strategies for citizen interviewees. Firstly, I recruited people from the offices where I conducted my fieldwork. I gave people my business card and information sheet and asked for permission to contact them regarding an interview. At the *katchi abadis* ¹⁴ I contacted NGOs who work on behalf of the residents. Again, I asked for referrals beyond the initial points of contact. I also drew on my own experience as an electricity consumer having lived

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¹⁴ A *katchi abadi* is an informal squatter settlement.

in Islamabad from 2008-2011, and frequently recruited friends and colleagues as well as asked them to provide referrals.

The language of the vast majority of my fieldwork is Urdu and I speak Urdu fluently. As befits a native of Lahore, I speak Urdu with a slight Punjabi accent, although my knowledge of Punjabi itself is rudimentary. There have been few uses of Punjabi in my fieldwork other than for cursing. Pashto is also occasionally used among WAPDA staff who know themselves to share a Pashtun¹⁵ heritage, but never in general usage. I have transliterated Urdu usage for verbatim quotes in my fieldwork, but otherwise my notes are in English. English words and sentence fragments crop up routinely while Urdu is being spoken, particularly when official tasks are being discussed. Anything documented is typically in English, but I do have some examples of customer forms which are in Urdu.

Language is a component of my self-presentation in this fieldwork. My Punjabi accent helps people relate to me as a Pakistani while my fluent English is a key caste and class marker in Pakistan. Further, my genes (my mother is Austrian and my father Pakistani) mark me as visibly different. While I usually prefer to avoid the unwanted attention this brings, it is to my advantage in recruiting for my fieldwork as most Pakistanis are curious about me as someone so foreign and yet somehow also Pakistani. Graduate student wages notwithstanding, I am also far better-off than the WAPDA employees I interact with. I have not tried to hide these differences. I believe that my partial outsider status facilitates access while allowing me to keep a reasonable distance from the fieldwork. Overall, I have found

¹⁵ The Pashtuns are an ethnic group found mostly in the North-West of Pakistan and Afghanistan.

that people in my fieldwork were very receptive to me and generally appreciative of my research efforts.

Chapter 2

The Silences of Development Discourse in Pakistani Power Planning, 1955-

2011

This chapter explores the history of planning in the Pakistani power sector from the first five year plan in 1955 onwards. The themes this chapter explores are the consistent themes in the analysis of the power sector and the problems it has faced since 1955, many of which remain current. Against these themes I explore four cases in greater detail. These examples illustrate some of the ways in which the Pakistani state has not been able to address the major dimensions of the problems facing the power sector despite their consistent identification by planners and policy makers. This chapter exposes the silences of Pakistani energy planning when it comes to political obstacles to development and the underlying failure of bureaucratic-rational logic.

The timeframe covered in this chapter starts with the first five year plan in 1955 and continues through the present day in 2011. Electrical power in Pakistan prior to 1958 was the purview of private regional utilities without any national integration or planning. The era of national planning begins in 1955 with the first five year plan, but truly kicks-off with the founding of the Water and Power Development Authority (WAPDA) in 1958. Through WAPDA, the Government of Pakistan constructed three large dams (Mangla in 1967,

Warsak in 1960, and Tarbela in 1974) and integrated the previously distinct islands of generation and distribution through a national transmission backbone. WAPDA coexisted with private utilities until 1972 when the government of Zulfigar Ali Bhutto's Pakistan People's Party nationalized the private power utilities as part of its program to eliminate the "exploitation" and "evil" it considered inherent in the capitalist system (Pakistan People's Party 1970). The intent to re-introduce private capital to the power sector was indicated under the military regime of General Zia ul Haq (1977-1988), although it was not until the late 1990s that private participation in the power sector returned in force with private power producers contracting to sell power to the national transmission and distribution companies. WAPDA's power generation, transmission, and distribution functions were separated into distinct entities with the aim of eventually privatizing many of them. A regulatory body, the National Electric Power Regulatory Authority (NEPRA), was established in 1997 to oversee the sector in its new form. Pakistan's largest thermal generation plan at Kot Addu was privatized in 1996¹⁶ and Karachi's vertically integrated utility (with its own generation capability) was privatized in 2005¹⁷. The current state of the power sector is a hybrid of private and public sector components.

Viewed chronologically, the movement to nationalize and then privatize the power sector, along with the tremendous growth in scale of the power sector as a whole, chart a story of substantial change over time. To concentrate on change and growth, however,

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¹⁶ Management of the 1650 MW Kot Addu Power Company (KAPCO) was transferred to a UK firm, International Power, on purchase of a minority stake of 26% after international competitive bidding.

¹⁷ A 71% share of the Karachi Electric Supply Company (KESC) was sold to Al Jomaih group of Saudi Arabia and Kuwait's National Industries Group in 2005. Abraaj Capital of Dubai took over management of KESC in 2008.

misses the continuity of both the issues the power sector is grappling with and the consistent failings of the attempts to resolve these problems by reforming the sector.

Continuity, despite all the changes, is the story of this chapter.

In the sections which follow I first establish the priority which the power sector has had in Pakistani planning. Second, I explore the continuity in the analysis of the sector's problems. Third, I examine areas of concern and activity which highlight the key issues shaping the performance of the power sector over time. Fourthly, I analyze how development discourse on the Pakistani power sector is depoliticized and silent on the non-implementation of projects and the repetition of reform programs.

2.1. The Recognition of the problem

Every single power sector plan and assessment since the first five year plan was published in 1955 has recognized the importance of an adequate and reliable supply of electricity to the performance of Pakistan's economy. The *First Five Year Plan* published in 1955 points to "the crucial significance of developments in the water and power field for the success of the entire process of economic development" (336). In 1965 the *Third Five Year Plan* warned that "The importance of water and power facilities, therefore, cannot be overstressed" (289) and identified electrical power as both cause and effect of economic growth (303). The *Fourth Five Year Plan* gave electrical power "top priority":

"... availability of cheap and abundant supply of power is of paramount importance not only to create physical infrastructure for economic development particularly in East Pakistan but also to spread the social benefits of power supply to a larger section of the population. Within the limited financial resources, therefore, top priority as been given in the plan to generation transmission and distribution throughout the country." (421)

The *Sixth Five Year Plan* (1983-1988) reflected on global energy scarcity and the oil price shocks of 1973 and 1979 in stating that "No developing country can, therefore, expect to maintain a reasonable rate of growth in the economy without a forceful and comprehensive energy policy" (256). The *Seventh Five Year Plan* (1988-1993) opens the chapter on energy with the view that "The prosperity and future welfare of Pakistan largely depends on our commitment to support rapid economic growth with adequate and assured inputs of energy" (193). Almost 20 years later, the *Medium Term Development Framework* for 2005-2010¹⁸ baldly opens its introductory section with the statement that "Energy is the lifeline of economic development." Every single economic plan of the Government of Pakistan gives an extremely high priority to electrical power. There is no point in the history of Pakistani energy planning when this recognition was absent or that the role of electrical power was seen as anything other than central to the economic future of the country.

2.2. A Persistent Diagnosis

The same set of problems for the Pakistani power sector are identified consistently since 1955. These include the fuel mix and the cost of imports; a limited generation capacity; and transmission and distribution losses .

2.2.1. Fuel Mix and Cost of Imports

The fuel mix in the power sector is the proportion of generation which comes from different fuel sources. The most important sources of power generation in Pakistan are

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¹⁸ The *Medium Term Development Framework* is a plan produced by the Planning Commission to guide the Government of Pakistan through the period 2005-2010. It is not, however, one of the numbered five year plans, though there is no significant difference in approach or content between the MTDF and a five year plan.

hydro-electric and thermal. Hydro-electric power is dependent on rivers, with which Pakistan is naturally blessed. Thermal power generation is based on the combustion of primarily fossil fuels such as coal, natural gas, and various fuel oils. Pakistan also has a small contribution from nuclear power. Once generated, electricity from the different sources is indistinguishable to the consumer, but the different fuel sources vary greatly in terms of their cost, consistent availability for power generation, and origin.

The local availability of fuels is important for Pakistan because imported fuels must be paid for in foreign currency. Since its founding, Pakistan has struggled to generate sufficient export earnings to pay for its import needs, particularly the demands of the military for equipment and supplies (Jalal 1990). The *First Five Year Plan* notes "very heavy net expenditures of foreign exchange" (385) to import fuels and minerals, and that "It is clearly of great importance to find and develop larger domestic sources of these materials" (386). Regarding local coal mining, the first plan says that "The most important consideration here is the very large savings in foreign exchange produced by investing in coal mining" (390). Coal mining as an industry and economic fuel source would contribute to the economy – and the recognition of the importance of energy supplies for economic development shows that planners were very aware of that argument – but all of these benefits were secondary, in their eyes, to reducing demands on Pakistan's limited supply of foreign exchange. From the beginning, the managers and planners of Pakistan's economy have had great sensitivity towards the cost of imported fuels.

"There seems to be no doubt that a combination of habit, prejudice, and lack of clear-cut national policy has resulted in recent years in large imports of coal, at

considerable costs in foreign exchange, to fulfill needs which could have been fulfilled economically by indigenous coal: We recommend that the Government declare their policy as being one of favouring the use of indigenous coal, whenever economic, and of supporting its development and conservation." (390)

The assessment that "habit, prejudice and a lack of clear-cut national policy" lie behind the import of coal shows the extent to which imports are seen as poor policy – that it is not happening for any good reason. In a similar vein, the plan highlights the positive impact that the availability of natural gas (at Sui in Balochistan and Sylhet in Bangladesh) will have on Pakistan's balance of payments (389). The foundation of the first plan gives a lot of attention to the impact of the fuel mix on the cost to the economy of imported fuel.

Subsequent plans maintain the imperative need to use local fuel sources and limit the import burden resulting from the use of imported fuels. The second plan observes in its second paragraph that "The need to import fuels causes a heavy drain on the foreign exchange resources of the country" (265). The third plan highlights the importance of the local fuel and mineral industry because it "substitutes for imports" (489). The first version¹⁹ of the fifth plan lists "Intensive exploration for indigenous resources of fuel" (285) first on its list of the government's strategy for energy sector development after noting that local oil primarily substitutes for imported oil. The revised version of the fifth five year plan expands on this theme to prioritize hydroelectric generation, ensure wide access to hydroelectric power to "economise fuel consumption" (179), and to find and exploit local sources of oil and gas.

¹⁹ The Fifth five year plan had a version for 1977-83 and then was revised in a second version for 1978-83

More recently, the Medium Term Development Framework of 2005 includes as the second of four objectives in the chapter on energy security "to optimize utilization of the country's indigenous resource base to reduce dependence on imported fuel through an institutionalized strategy." Pakistan's failure to achieve this fourth objective is apparent in the limits on power generation imposed by the high cost of imported oil. Pakistan's Minister for Water and Power said on April 18 2011 that "Pakistan has not yet recovered from the 2008 oil price rise and we have no planned subsidies for the summer months because we can't afford it."

2.2.2. Capacity Constraints

Since its earliest days the managers of Pakistan's power sector have had to struggle with the lack of adequate power generation capacity. The race to eliminate power shortages by adding new capacity has been a regular feature of five year plans, with the Sixth Five Year Plan describing a difficult recurring situation:

The Sixth Plan faces formidable tasks. It has to overcome the shortages which have already acquired disturbing proportions. It must provide adequately for augmenting supplies to support economic growth and new investment during the Sixth Plan. Simultaneously, there should be initiation of long range planning for the Seventh Plan and beyond to avoid shortages re-emerging at a later date. (Planning Commission 1983: 252)

Depressingly, this view reoccurs because the failure to meet the targets for increases in installed capacity is a persistent theme.

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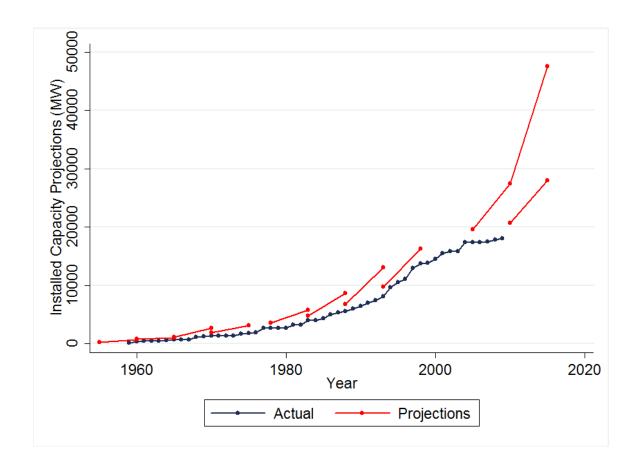
²⁰ Reuters. "Pakistan Unable to Continue Fuel Subsidies." *Dawn*, April 19th 2011.

Installed capacity is the ubiquitous measure of how much electricity can be produced in the Pakistani power sector. It is derived from nameplate capacity, which is the capacity at which a power plant is rated at the time of its installation. There are several reasons why the simple sum of power plant installed capacities is a misleading measure of what the national system can produce. Firstly, every power plant must be maintained, with annual maintenance typically taking up one month in every year when that power plant will be unavailable. Secondly, system reliability is ensured through spinning reserves - capacity which is reserved as backup in the event of a failure in other parts of the system. In times of power shortages such as the last five years, however, reliability from maintaining spinning reserves is foregone and that capacity is committed to generation instead. Thirdly, wear and tear on the machinery is reflected in what is called the derated capacity – what the power plant can produce at the current time as opposed to the date of its installation. Most thermal power plants in the Pakistani power system have a derated capacity equivalent to some 75% of their nameplate capacity²¹. Lastly, breakdowns of the equipment and the availability of fuel are reflected in the dependable capacity, which is what the power system can be relied upon to produce on any given day. Installed capacity is the sum of derated capacities of individual power plants and is widely reported, but dependable capacity – the more accurate measure – is never reported because it fluctuates too often. These inaccuracies notwithstanding, installed capacity is the upper limit of what is available, and it is still indicative of the total power generation capacity in the system as a whole.

Figure 2.1: Actual and Planned Growth in Installed Generation Capacity, 1955-2010

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²¹ See Table G-3 in *Electricity Marketing Data* (National Transmission and Despatch Company 2010: 5)



Source: *Electricity Marketing Data* vol. 35 (National Transmission and Despatch Company 2010); Planning Commission Five Year Plans

The continuous blue line plots actual growth in installed capacity over time. Only captive power plants for industrial facilities are excluded. The graph of installed capacity over time shows an increase in Pakistan's total power generation capacity from 268MW in 1955 to 18022 in 2009, which represents an annual growth rate of 8.1% over that period.

The shorter red line segments are planned growth targets from five year plans which grow increasingly inaccurate over time. After the independence of Bangladesh in 1971, the planned growth curves resemble a series of hockey sticks sitting on the steadily increasing

installed capacity line, each representing a mythical take-off (per W.W. Rostow 1960) which is never achieved.

The extent to which planning targets have been achieved over time is summarized in the table below.

Table 2.1: Achievement of Plan Targets in Installed Capacity, 1955-2010

	Installed Capacity	Planned	% of Target
	at Start of Plan	Addition	Achieved
First Five Year Plan (1955-1960)	168	379	101%
Second Five Year Plan (1960-1965)	550	324	82%
Third Five Year Plan (1965-70)	815	1,198	78%
Fourth Five Year Plan (1970-1975)	1,743.4	3,001	51% (est.)
Fifth Five Year Plan (1978-1983)	3,280	2,090	73%
Sixth Five Year Plan (1983-1988)	4,809	3,795	50%
Seventh Five Year Plan (1988-1993)	6,716	6,558	46%
Eight Five Year Plan (1993-1998)	9,786	6,562	86%
Ninth Five Year Plan (1998-2003	15,421		
Medium Term Development Framework (2005-2010)	20,289	7,880	6%
Tenth Five Year Plan (2010-2015) ²²	20,782	8,370	

Source: Planning Commission 5 year plans²³

 $^{^{\}rm 22}$ Information is taken from a draft version as the Tenth Plan has not been officially released.

The extent to which the targets of the five year plans for installed capacity have been achieved has mostly followed a steady decline over time. The fourth plan period is an exception in that only 51% of the planned gain was achieved, down from 78% in the third plan and 73% in the fifth plan. The fourth plan period is marked by the independence of Bangladesh and are referred to as the "non-plan years" due to the seven year interregnum from 1971-1978 during which Zulfiqar Ali Bhutto's supposedly socialist-leaning government dispensed with medium term planning.²⁴

In terms of achieving the targeted increase in capacity, the most successful plan after the first is the Eighth Plan of 1993-1998. This plan was notable for the induction of independent power producers in 1997 and 1998 totaling 2,188 MW, or 39% of the total gains during the plan period. The public sector did not add the capacity it was supposed to, in part because the oversubscription of independent power producers was already leading to a surplus of generation capacity and reduced the need for public sector additions. The induction of independent power producer under the 1994 policy is discussed in section 2.3.3 below. The addition of new capacity came at a significant cost which has had a long term impact on the financial sustainability of the power sector.

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²³ The data on installed capacity at the start of the plan and planned additions are drawn from the plan in question. For the first four plans, only figures for public utilities are included. Targets and capacities of power plants in Bangladesh as well as industrial facilities are excluded. Independent power producers added after 1994 are included. Data on the achieved gain in installed capacity is taken from the next five year plan, unless noted otherwise. All years here refer to fiscal years ending on June 30th.

²⁴ On the Planning Commission website (<u>www.planningcommission.gov.pk</u>) where all five year plans except for the ninth are available, the fourth five year plan is labeled "The Non-Plan Years." The fourth plan is included here out of completeness as – even less than the other plans – it ceased to provide a guiding framework after 1971.

The least successful plan in terms of the achievement of planned targets is the Medium Term Development Framework of 2005-2010. The period 2005-2010 saw reductions in private sector hydro-electric and thermal generation capacities of 19 and 5 MW respectively. The only gain was in the addition of new independent power producers. Between the commissioning of the 1450 MW Ghazi Barotha dam in 2004 and 72 MW Khan Khwar hydro-electric project in 2010, not a single megawatt of capacity was added in the public sector. 1440MW were added to the sector through independent power producers. The *Medium Term Development Framework*'s power sector component is the worst example from Pakistani planning history of a plan without implementation.

The challenge of implementing plans in a timely manner was anticipated in the *First*Five Year Plan:

"The unnecessary delays which often hamper development are particularly dangerous in this field. They seriously affect both progress and costs and generally appear in the following forms:

- (a) Interminable debates on policy and technical opinions;
- (b) Numerous and specific sanctions for proposed actions;
- (c) Detailed and precise pre-audit of proposed expenditures; and
- (d) Time-consuming, laborious and costly procedures in the procurement of services, equipment materials and import licenses. (Planning Commission 1955: 336)

The approach proposed in the first plan was decentralization and delegation of authority to the extent possible, and to employ unskilled labor for construction rather than mechanization in order to minimize foreign exchange costs. Although the first plan met its target for growth in public utilities in what was then West Pakistan, the assessment given in the second plan was that "impatience and enthusiasm took the place of prudence and

engineering judgment," and that "careful preparation" was the key (Planning Commission 1960: 201). Backward looking critical assessments are common in the five year plans, particularly as the achievements slip further and further from targets in later plans.

The Seventh Five Year Plan devotes an entire chapter to implementation, noting that project monitoring at the Planning Commission showed that "of 154 projects reviewed, 55 per cent were revised, 86 per cent were behind schedule, as many as 94 per cent lacked proper implementation schedules while 56 per cent had cost overruns (Planning Commission 1988: 156). The Planning Commission remains exercised over the issue of project implementations and timely completions, but is unable to translate this concern into effective oversight or to genuinely nurture implementation capacity in other government organizations.

The declining capability of the Pakistani state apparatus over time is supported by many scholars. Ilhan Niaz (2010) takes the view that the inheritance of the Indian Civil Service (the "steel frame" of the raj) was diluted over time, resulting in a diminished capacity. Prime Minister Zulfiqar Ali Bhutto's mass dismissal of 2000 civil servants in March 1972 is a key turning point towards personalization and politicization of governance, after which directives from the Prime Minister replaced "resource-allocation decisions based on multi-year planning made by technocrats in the Planning Commissions" (Laporte 1991: 117). The decline in achievement of planning targets suggests some support for this view.

Not all observers are so favorable about the early days of the bureaucracy in Pakistan:

Most of the senior officers were twice my age. Their style of work and thinking had been shaped by long experience of serving virtually as clerks under White masters. The *first concern of these glorified clerks was personal survival*. As long as they acted in accordance with their precious manuals no one could hang them. They were petty bureaucrats and lacked the imagination to see what was at stake. They blocked innovation at every stage, which took up a lot of our energy when we tried to get things done. They had neither the will nor the ability to take responsibility.

Unlike my petty bureaucratic colleagues, I assumed that my job was to get things done. I had not yet absorbed the bureaucratic ethos of first worrying about saving my skin and not acting unless I was covered by rules or sanction from a higher authority. (Alavi c.1995, italics mine)

Hamza Alavi's view that Pakistani bureaucrats are risk-averse to the point of inaction has been repeated to me in interviews with serving bureaucrats who identify the imbalance between potential punishment for doing something versus limited rewards for innovation.²⁵ Behaviors leading to poor performance by state officials are by no means limited to recent times or any one type of regime.

The relative performance of democratic and dictatorial governments in achieving plan targets is difficult to assess because of the long duration of power sector projects.

Ghazi Barotha dam, for example, was completed in 2004 and counts as the most significant addition in generation capacity of the Musharraf era. However, bid documents for the civil works at Ghazi Barotha were issued in August 1994 (Asian Development Bank 2005), during Benazir Bhutto's second government. Either of these two regimes could claim credit for the addition of Ghazi Barotha's generation capacity, as well as the intervening Nawaz Sharif Government (1996-1999).

²⁵ Field notes February 6, 2008

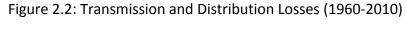
Similarly, blame for the three year delay in the completion of the Ghazi Barotha project must be shared around.

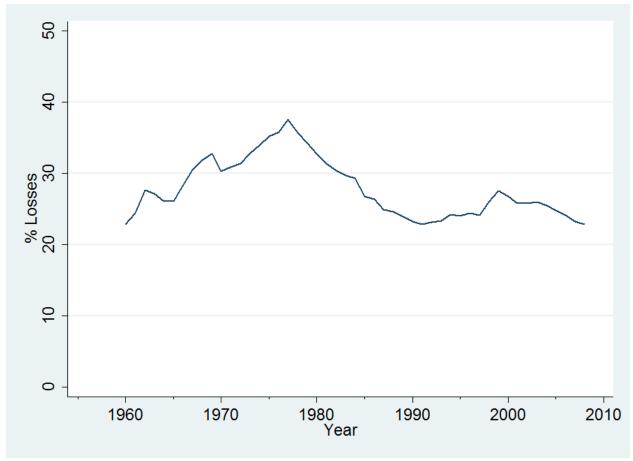
Project implementation was delayed by 3 years, due to (i) late handover of land for the power channel and the power complex, which caused resettlement delays; (ii) various contract delays for the main components, mainly due to WAPDA's financial shortfall in counterpart funding; (iii) some difficulties arising from labor unions and various contractors not having been paid for several months; and (iv) necessary repatriation of foreign consultants from the site, owing to the events of 11 September 2001 in the United States. (Asian Development Bank 2005: 5)

The difficulty in land acquisition stretched from 1995 to 1999, thus implicating the same governments which would take credit for the project's origination. In 2001, the National Accountability Bureau started investigations into the World Bank sponsored land acquisition process. The World Bank responded by threatening to suspend disbursements to the Government of Pakistan because it felt the investigation wasn't recognizing the Bank's legally mandated role (World Bank 2004b: 14). Further, the project appraisal expected the government to introduce a 30% tariff increase in 1998 to meet the increased payment demands of the independent power producers. Such an increase was untenable – a fact recognized by the World Bank as an error for which it bore some culpability (World Bank 2004b: 13) – and without a tariff increase WAPDA was unable to meet its contributions to the project's financing, thus further delaying the acquisition of land. For good measure, the September 11th 2001 attacks and invasion of Afghanistan delayed the project in a manner for which no party to the project can be considered responsible. With blame for delays and credit for its completion to be shared out, it is difficult to associate the Ghazi Barotha project with any one government.

2.2.3. Transmission and Distribution Losses

High transmission and distribution losses have plagued the Pakistani power sector since its earliest days. Transmission and distribution losses represent the share of total energy generated which is not billed to consumers. Figure below shows these losses since 1960.





Source: *Electricity Marketing Data* vol. 35 (National Transmission and Despatch Company 2010)

Average system losses peak at 37.6% in 1977 and were at an historical low of 22.8% in 1960. The years 1974-1979 are the only period when national losses exceeded 33%. Losses of less than 23.5% were achieved in the years 1990-1993 and 2007-2008.

These figures are national averages, and there is great variation within Pakistan.

While the Islamabad distribution company had losses of under 10% in 2010, the Hyderabad and Peshawar distribution companies had losses of over 35%. There is also great variation within each of these distribution companies. Even within the Islamabad distribution company which has the best overall statistics, and even within the Islamabad circle which has the best performance within the Islamabad distribution company, 23 out of 234 11KV feeders had system losses of over 50%. The prevalence of high system losses across the country and over time has resulted in average losses of 27.8% from 1960-2010, which means that consumers did not pay for over a quarter of all energy generated in that period.

The first mention of high transmission and distribution losses as a serious problem comes in the Fourth Five Year Plan – issued in 1970 – which states that "During the Third Plan, the service was marred by load shedding and abnormally high system losses" (425). The concerns about theft and system losses are prompted by the observation that "Deficits appeared for the first time in the revenue accounts of WAPDA" (422). This newfound concern notwithstanding, losses remained higher than their 1970 levels (30.5%) until 1983.

None of the plans since 1970 which discuss the problem of high system losses engage with the causes of losses and offer more than a cursory glance at how to address the problem. The plans refer to combatting losses through "concerted action" involving an

"independent inspection squad" (Fourth Plan), or a "major effort" (Seventh Plan), though the outcome by 1993 was judged to be "pathetic" (Eighth Plan).

Although the levels of losses are quite high, industry observers remain cautious as to the accuracy of these figures. The technical audit of the Islamabad distribution company conducted by The United States Agency for International Development (USAID) in 2010-2011 concluded that the official figure of 9.8% losses for FY 2009-10 was "inconsistent with the findings of both of IESCO and [USAID] loss analysis" (MWP-USAID Power Distribution Improvement Program 2011: 39), suggesting a higher rate of 13.7% was more accurate ²⁶. In India, "more realistic estimates" increased the recorded losses of Area Electricity Boards (Kale 2004: 470-471), and a similar situation could occur in Pakistan. In a public hearing regarding a tariff notification, the chairman of the distribution company serving Lahore admitted that consumers were being over charged approximately 8% of their consumption. ²⁷ By overcharging their paying customers, the utility reduces losses as they from an accounting perspective. Despite the utility's chief executive admitting that consumers are being cheated the federal government has taken no action to date.

2.3. A Fixed Repertoire of Actions

Repeated engagement with the same problems results in some of the same solutions being put forward multiple times. I examine four types of intervention common to power sector policies since 1955. These include the exploitation of gas reserves in

²⁶ This technical audit was based on a survey of five feeders.

²⁷ Khalid Mustafa. *The News*. April 16, 2011

Balochistan, hydroelectric power at Gomal Zam dam, the introduction of independent power producers in the 1990s, and attempts at improving governance through structural change.

2.3.1. The Natural Gas Reserves of Balochistan

Pakistan's gas resources are spread across three provinces, but 68% of its gas reserves and between 36-45% of its gas production are located in Balochistan²⁸. The exploitation of Baloch resources by the Pakistani state is a source of long standing grievance. Baloch nationalists argue that the province is inadequately compensated for providing these resources. Gas royalty payments to Balochistan are proportionately one fifth of those paid to Punjab and Sindh (Wirsing 2008). These payments were fixed at the time the gas fields were developed, and as the Baloch gas fields are the oldest their prices are the lowest. Exclusion from the benefits of Baloch resources, such as the lack of domestic gas supply to the town of Sui (Pakistan's largest and oldest gas field), also rankle. The Baloch also complain of having little involvement in the decision making concerning mega-projects in Balochistan such as the Gwadar port, Mirani dam at Turbat, and Makran Coastal Highway (Ahmad 2011: 4), and that few of the jobs generated by the project are going to the local people. Five separate insurgencies between Baloch nationalists and federal forces have taken place since Pakistan's founding, the most recent of which is ongoing since 2004 (Ahmad 2011). 29 Pakistan's energy infrastructure and personnel are frequent targets of

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²⁸ Country Analysis Brief: Pakistan, December 2006, available at www.eia.doe.gov.

²⁹ Dates of previous insurgencies were 1948, 1958-60, 1962-69, and 1973-77. Ahmad (2011: 4) reports 1600 casualties in 1850 conflict incidents, of which 50% are civilians, 23% militants and 22% security forces.

attacks by the Baloch nationalists. QESCO suffered a capital loss of Rs. 245 billion due to acts of sabotage from March 2003 through September 2010.³⁰ Sabotage of gas pipelines is also commonplace, with 54 incidents reported in January to September 2011 by the South Asia Terrorism Portal.³¹ The Pakistani state has tried to forcibly suppress the insurgency through military operations as well as the undocumented and illegal disappearances of thousands of Baloch.³² Pakistan will struggle to utilize its gas resources well so long as the Baloch insurgency continues.

The question "why aren't we [Pakistan] properly exploiting our gas" was vigorously rejected as invalid by a Pakistani oil and gas executive. The physical characteristics of Pakistani fields and prospects are of modest appeal to a multi-national oil and gas company. The low prices allowed for Pakistani natural gas by the Oil and Gas Regulatory Authority limit the profit from operating a gas field. Most importantly, the lives of oil and gas workers are at risk. Two Pakistani employees of a Hungarian oil company were killed in January of 2011 and two others kidnapped.³³ Under these circumstances, the executive said, "you cannot expect reputable firms to operate in Pakistan."³⁴

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³⁰ Presentation of the QESCO Chief Executive Officer to the Planning Commission Workshop on Power Sector Reforms, October 5th 2010.

³¹ "Balochistan Timeline." South Asia Terrorism Portal. Institute for Conflict Management. New Delhi. Available at http://www.satp.org/satporgtp/countries/pakistan/Balochistan/timeline/index.html#

³² The missing persons cases taken up by the Supreme Court of Pakistan were part of the high-profile conflict between Chief Justice Iftikhar Chaudhry and the Musharraf regime. Prime Minister Gilani said that the number of Baloch missing persons was between 6000-8000 under the Musharraf regime. The Human Rights Commission of Pakistan has documented many of these cases, with neither the HRCP nor any other observers giving credence to Musharraf's claim in an April 2009 interview with Al Jazeera that these people went missing on their own (Human Rights Commission of Pakistan 2010: 104-106).

³³ Peto, Sandor. "Hungary's MOL says two workers killed in Pakistan." *Reuters*. January 20, 2011.

Pakistani energy policy is affected by security issues in Balochistan, and the insurgency in Balochistan is also fueled in part by Pakistani energy policy. Perceived injustices in shares of the benefits from Baloch natural resources are used by Baloch nationalists as justification for the insurgency (Ahmad 2011, Wirsing 2008). Insurgency in turn limits access to existing gas reserves and constrains further exploration.

The Seventh National Finance Commission Award of 2009, which distributes

Pakistan's taxation revenues among the federal and provincial governments, provided

greater compensation to Balochistan for natural gas, but no impact has been seen as yet on
the insurgency.

2.3.2. Gomal Zam Multi-Purpose Hydroelectric Dam

Due to the foreign exchange burden of imported fuels for power generation for the Pakistani economy, a focus on the development and exploitation of indigenous fuel resources has been a constant factor in energy planning. The most important indigenous fuel resource for Pakistan is hydroelectric power. The contribution of hydroelectric power to total power generation was 65% in 1960, and ranged between 49% in 1966 to 78.7% in 1979 after the construction and expansion of the Tarbela Dam. Since 1980, the share of hydro-electric power in Pakistan's total power generation has steadily declined to 32.8% in 2009. Although total power generation from hydro-electric power has grown at a compound rate of 8.5% per year since 1960, it has not kept pace with total power

Available at: http://uk.reuters.com/article/2011/01/20/pakistan-killings-idUKLDE70J2AZ20110120

³⁴ Field notes June 22. 2011

generation which has grown at a compound rate of 10.03% per year from 1960-2009 (National Transmission and Despatch Company 2010).

Gomal Zam dam is located near the Afghan border in South Waziristan agency, one of Pakistan's seven tribal agencies and six frontier regions which constitute the Federally Administered Tribal Areas (FATA). After 2001, FATA became the stronghold of the Taliban and the launching point for attacks on NATO troops in Afghanistan (Rashid 2008). FATA has never been fully incorporated into Pakistan, and is excluded from the jurisdiction of the Pakistani Supreme Court by article 247 (7). While FATA has elected representatives to the Pakistani parliament since 1997, acts of parliament do not apply to FATA (per article 247(4) of the Pakistani constitution) unless the President deems otherwise. In the absence of legislative and judicial checks and balances, the executive branch appoints political agents to administer FATA under the 1901 Frontier Crimes Regulation. On August 12th 2011 President Zardari amended the Frontier Crimes Regulation to allow political parties to become active in FATA and to allow FATA residents a first ever right of appeal against decisions of the political agent. FATA exists on the margins of the Pakistani state in every sense, but the funding and security problems experienced at Gomal Zam are indicative of state formation throughout the country (Das and Poole 2004).

The history of the Gomal Zam dam in South Waziristan illustrates the stop start progress of many construction projects in Pakistan. First identified as a site for water storage in the mid-nineteenth century, it was selected as the site for a dam location by WAPDA in 1959. Construction began in 2001, but was halted in 2004 after the kidnapping of

two Chinese engineers working on the site. The project was restarted in 2007 with an expected completion date of 2010, but ran into problems in January 2010 when the contractors stopped working due to non-payment by the Pakistani Government. The United States Agency for International Development (USAID) included Gomal Zam into its energy sector support to Pakistan in July 2010 and paid the contractors so that work could resume. The construction of the dam was completed in spring 2011, the reservoir filled over the summer, and power generation is scheduled to start in late 2011. The irrigation component of the dam project was originally intended to be completed at the same time as the dam, but it is already behind schedule as there is no funding for it. As a multi-use dam, Gomal Zam is expected to provide water storage, flood protection, and power generation. Flood protection is already in place, and significantly mitigated the impact of the 2010 floods on the downstream districts of Tank and Dera Ismail Khan. Power generation is scheduled to start in late 2011. However, the cost of Rs. 10.4B (US \$122 million) could never be justified based on the power generation of 17 MW alone. The irrigation component of the project – such an important part of the economic case for the dam – is scheduled for completion in 2013, but is unfunded and is already three years behind schedule. The lack of available funds which resulted in the 2010 stoppage of work and the lack of progress on the irrigation component are not unusual. Many public sector projects in Pakistan have been announced but never started, and many have been started but not finished for a lack of funds.

The location of Gomal Zam has complicated the project significantly. Of the project's total cost of Rs. 10.4 Billion, Rs. 0.348 Billion have been spend on security. On a visit to the site in April 2011 I saw over a hundred soldiers around the dam site. Automatic weapons

are a common (though still disturbing) sight for me after several years in Islamabad, but I kept a wide berth from the soldier I saw carrying a rocket launcher. Travel to the dam from the nearest towns is controlled by the Pakistan army. Approved visitors are escorted in a convoy to the dam, though one engineer complained to me that being part of a conspicuous military convoy made them more of a target. Short trips between the dam site, the helipad, the powerhouse and the rest house are also done in convoys of pickup trucks and SUVs bristling with soldiers. The security at the dam did not prevent the kidnapping of two Chinese engineers in 2004. One of these engineers returned, but the other was killed. The construction company withdrew its participation in the project in 2006 as a result of this incident. Security has been a serious obstacle to the progress of this project.

2.3.3. Independent Power Producers

The impetus for the power policy of 1994 which led to the mass induction of independent power producers in Pakistan can be found in the work of international donors and multilateral lenders:

"In the 1990s, international financial institutions (IFIs) like the World Bank, International Monetary Fund and Asian Development Bank (ADB) convinced the Pakistan government that the fiscal situation could not improve unless and until the losses from PSEs [Public Sector Enterprises] are substantially curtailed or eliminated, and that this was only possible through a massive restructuring of these entities leading to their privatization." ³⁶

³⁵ Field notes April 21, 2011. I visited Gomal Zam as a member of a USAID team inspecting the construction of the dam. I was working as a consultant with the contractor through which USAID support to the construction of the dam was being managed.

³⁶ Transformation of Public Sector Entities, Speech delivered by Mr. M. Ali Shah, Country Director, ADB,

The approach of unbundling public utilities, seeking to privatize them, and encouraging private investment is part of the set of neoliberal policies introduced in poor countries, often as a condition associated with large multilateral loans. Generally known as the Washington consensus, these policies have been thoroughly criticized for their blanket application without being tuned to the country setting (Stiglitz 2002), the failure of these economic reforms (van de Walle 2001), and causing economic hardship (Collier and Gunning 1999). The World Bank and USAID provided the leadership for power sector reform in Pakistan in the early 1990s through their championing of the mammoth Hub River Company (Hubco) private power generation plant and establishment of the basic strategy for power sector reforms in Pakistan respectively.

The Strategy for Privatization of the Pakistan Power Sector prepared by a USAID contractor in 1992 is much more than a caricatured import of Washington Consensus principles despite being built around them. The central tenet is to "provid[e] for the greatest possible role for the private sector and the movement over time towards full competition" (USAID 1992: i). This approach is proposed as the solution to three "critical goals" of the Government of Pakistan:

- A. Enhance Capital Formation for the Pakistani Power Sector (PPS) outside the Government of Pakistan (GOP) Budget and without Sovereign Guarantees;
- B. Improve the Efficiency of the PPS through Competition, Accountability, Managerial Autonomy, and Profit Incentives; and
- C. Rationalise Prices and Social Subsidies, while Maintaining Certain Socially Desirable Policies such as Rural electrification and low Income "lifeline" Rates.

(USAID 1992: i)

The 1992 strategy doesn't go into a lot of detail as to why or how private management will necessarily do a better job than public sector management. This reasoning is addressed to some extent under goal B, but the construction of this critical goal contains both a goal (efficiency, albeit undefined) and a chosen approach – private management. The long term viability of public sector management is not considered, though the conditions and sequencing of reforms which can provide the setting for the success of private management are discussed.

The principal prerequisite for the privatization strategy is the corporatization of WAPDA: its reorganization into discrete profit centers with independent management and separate accounts. Once these corporatized sub-divisions establish a commercial track record, then they will be ripe for privatization (USAID 1992: iii). Further:

"The introduction of profit incentives and competition, if properly implemented, will ultimately

improve the efficiency of the [Pakistani power sector]. These improvements cannot be achieved, however, without fundamental changes in the [Pakistani power sector] and the promotion of a business, regulatory, and political climate conducive to private investment." (USAID 1992: 4-1)

This sequencing puts the entire burden of reform on WAPDA and the Government of Pakistan. For WAPDA to reorganize itself and secures its commercially viability before privatization means that the hard work of ensuring timely and complete payments, eliminating political interference, and balancing costs and revenues will be substantially completed. Additionally, for the Pakistani state to successfully promote a business,

regulatory, and political climate suitable for private investment would be a tremendous achievement at a time of political turmoil and economic uncertainty. For privatization to be undertaken after these achievements by WAPDA and the broader state suggests that the authors have limited hope for privatization to address the fundamental problems underlying poor power sector performance.

The authors of the 1992 strategy understood the limits of private sector management and were cognizant of the preconditions for the private sector to offer any advances over the public sector.

"The [Pakistan Power Sector] whether privatized or not, will be able to raise private, non-guaranteed, non-concessionary financing at 'reasonable' cost only when private investors have confidence in the entities and environment in which they are investing. This will require enforceable contracts for power sales and fuel purchases, predictable and fair regulation, and a stable social and political environment. This situation does not now exist in Pakistan." (USAID 1992: 2-2)

The conclusion which follows is no invitation to pop the champagne:

"In summary, privitisation cannot guarantee that the [Pakistan power sector] will have adequate capital to build all the new power plants WAPDA wants to build, or to eliminate power shortages and involuntary load shedding that result from inefficient pricing practices." (USAID 1992: 2-3)

Despite their entirely valid reservations, the authors of the 1992 strategy still put out a relatively aggressive timetable to achieve decentralization, corporatization and selected privatization by in 1992-1994, with full operation of the private and competitive Pakistan power sector from 1996 onwards.

In order for the 1992 strategic plan to become reality it needed to be worked into specific policy prescriptions. In October 1993, shortly after taking office, Prime Minister Benazir Bhutto constituted a twelve member task force to:

"draw up a co-ordinated and comprehensive Energy Policy, formulating strategies for the elimination of load shedding, recommending proposals for mobilization of resources and promoting private sector investment, and making recommendations for enhancing indigenous oil and gas production." (GOP 1994)

The Prime Minister gave a deadline of six weeks to complete the report. Twenty-three additional members were drafted to provide specialist knowledge. The committee was headed by the Prime Minister's Special Assistant for Economic Affairs and included the highest ranked bureaucrats in the power sector as well as prominent industrialists in a manner suggestive of an embedded bureaucracy (Evans 1995). The virtues of the *Report of Prime Minister's Task Force on Energy* become most apparent when contrasted with the 1994 policy which was ostensibly based on it.

There are major differences between the task force report and the 1994 policy in terms of the amount of new capacity to be added and the manner in which projects are to be identified. The task force report called for 1500 MW by 1998, and the policy itself anticipates about 1500 MW of new projects, but the 1994 policy set no limits on the new capacity. More serious, though, is that the 1994 policy was based on receiving unsolicited bids at a pre-determined price.

The proposals may have been for private sector investment, but there was no competition involved because the price was fixed in the policy. The generosity of the terms can be gauged by the massive investor response; almost 30,000 MW worth of proposals

(Private Power and Infrastructure Board 2001), 2000% of what the task force report required. Competition on price typically involves a pre-identified project to be prepared for bidders who compete on price and other technical criteria. While such solicited bids were envisioned in the task force report, and competition is central to improving the efficiency of the Pakistani power sector per the 1992 strategic plan, the 1994 policy did not adopt that approach and never attempted to introduce price based competition into the power generation market.

A second manner in which the 1994 policy failed the goals of the 1992 strategic plan was in that it involved sovereign guarantees for private investors. The payments on which the economic value of the IPPs depend are guaranteed by the Government of Pakistan, meaning that the IPPs can invoke the sovereign guarantee if they are not paid on time, and that failure to honor the guarantee is a default by the Government of Pakistan on its legal commitments which would have a significant negative impact on the economy of Pakistan. The logic behind a sovereign guarantee for private investors is that it mitigates the risk of the investment:

"It is doubtful whether any IPPs could have been financed in Pakistan without government guarantees since perceptions of Pakistan's risk had limited financing to terms of 18-36 months." (Fraser 2005)

The consequences of such a guarantee, however, are that the Government of Pakistan now bears contingent liability for the investment with a risk of conversion to direct liability.

Twice in 2011 independent power producers have invoked the sovereign guarantees of the Government of Pakistan due to non-payment of dues by the state-run power sector. This pattern of having governments bear the risk for private investors was repeated in private

investment in electrical power in Indonesia, also with the involvement of the World Bank (Wells and Ahmad 2007: 4).

under the 1994 policy. Eleven of the Sixteen IPPs set up under the 1994 policy (88% of the total MW, and thus close to the same percentage of total investment) received funding from the World Bank group, and 85% of the foreign debt was from official sources (Fraser 2005). The foreign debt was repayable in 10 years on average and backed by the Government of Pakistan's sovereign guarantee. As the primary financiers of Pakistan's IPPs, it is the World Bank and other international financial institutions whose risk perceptions were being mitigated by Pakistan's sovereign guarantees. The debt with which 80% of the \$5.3 billion total IPP investment was undertaken was owned by private investors despite the Government of Pakistan's guarantee. Pakistani consumers paid for that debt within (on average) ten years of the plants achieving commercial operations, but ownership remained with private investors. The investments were considered untenable without sovereign guarantees, but at the same time the international financial institutions would not countenance lending the money to the Government of Pakistan itself.

In addition to the task force report's superior approach to adding new generating capacity, the task force report includes energy conservation measures which were absent from the policy. After presenting the schedule for adding new capacity, the report notes that the "Task Force would, however, like to caution that the success of the programme is

hinged on forceful and effective implementation of demand management measures."

(Government of Pakistan 1994: 11)

The reorganization and corporatization of WAPDA was the focus of a later report entitled *Report of the Committee Constituted by the Ministry of Water and Power for Corporatization of WAPDA (Power Wing),* dated October 3rd 1997 (Ministry of Water and Power 1997). The principle meaning of corporatization here is that WAPDA be disaggregated into commercially viable profit oriented units based on the existing Area Electricity Boards. One of the authors, Mian Shahid Ahmad, was the USAID officer in charge of the 1992 strategy paper. There is a clear continuity between the 1992 strategy and the 1997 report; the later report is primarily concerned with one objective within the framework laid out by the 1992 strategy. The timetable in the 1997 plan is less aggressive than in the 1992 strategy; corporatization within two years and a competitive market within 5 years after corporatization. No mention is made of the intervening five years when no progress on these same goals was made, though there is a warning regarding the need to follow through on the government's commitments:

"The committee [of authors] wishes to stress that unfaithful or half-hearted implementation will not yield the expected results, and consequently, the Policy and the very concept of corporatization and privatization will stand discredited."

Although the distribution companies were reorganized into discrete entities in 1998 under the NEPRA act, the hard decisions identified as necessary precursors to corporatization and privatization were never fulfilled.

The 1992 strategy and 1997 report both acknowledge that they are asking for a sea change in the principles of operation, but say little or nothing to address how that change will be achieved. The 1997 report recognizes that currently, "most of the managerial decisions involve social and political considerations" yet it offers nothing regarding the transition from the status quo to a position where the "primary focus of each corporate entity will be profit" (Ministry of Water and Power 1997: 11). Executive fiat alone, it would seem, was supposed accomplish this transformation. Corporatization never happened, and the social subsidies and flawed hiring practices of the electrical utilities still make news today.

The 1992 USAID privatization strategy deserves credit for not blindly celebrating all private power schemes. In particular, they note the inappropriate "use of imported oil at Hub River over imported coal or domestic fuels." The USAID privatization strategy also had misgivings about the role of sovereign guarantees:

"Currently, new generating capacity being developed by private interests, such as the Hub River project, are receiving such substantial GOP and World Bank guarantees and underwritings that they do not represent good examples of private investment." (USAID 1992: 3-6)

The Hubco project went ahead despite this stated opposition in one of the key policy documents of Pakistan's unbundling and privatization.

Behind the scenes of the international actors promoting a private sector agenda for developing country power sectors were other cautionary voices as well. At a roundtable between Electricité de France and the World Bank (World Bank 1993), several reservations were voiced by French participants. Notably, they did not see any plan to achieve the

desired separation of utility management from the political establishment; they saw a generic plan and no requirement for specific analysis on a case by case basis; and they feared that the functioning of an efficient regulatory agency would require "institutional maturity and a balance of power which is not necessarily the prerogative of developing countries" (17). The French commentary also included a regret that the notion of public service had been discarded in this reform agenda – which can be read as a commentary on the social construction of economic rationality differing between France and the United States (Dobbin 1994). In general, the roundtable participants recognized that complex institutional transformation such as the deregulation and privatization of the power sector in a developing country would be hampered by deficiencies in administrative capacity, and that few examples of such reforms existed to draw upon. All of these reservations have validity in the Pakistani experience and elsewhere: twenty-one of thirty-four private power projects starting in the 1990s renegotiated their central agreements with the host government by 2005 (Woodhouse 2006: 173). Similarly, a discussion paper at the World Bank Group (Glen 1992) concluded that inducting private capital under sovereign guarantees can defeat the initial goals of adding to the investment in a country.

USAID funded technical assistance for privatization and unbundling ended in 1994 per the Pressler amendment which disallowed aid to countries developing nuclear weapons. With the departure of USAID and its consultants the Government of Pakistan lost access to a lot of the expertise it had relied on in developing the 1994 Power Policy. Several of the clearly written provisions of the policy were bypassed in the course of the induction of independent power producers. Mian Shahid Ahmed, the head (Contracting Officer's

Technical Representative) of the USAID project which produced the 1992 Privatization

Strategy, believes that he and his team could have prevented some of the departures from policy had they remained in place. While the skepticism expressed in the 1992 strategy towards Hubco supports that view, he never had the opportunity to influence the response to the 1994 policy as USAID's involvement ended in 1994 subsequent to the Pressler Amendment.

The World Bank's involvement with Hubco failed to meet its own standards for professional conduct in its lending to support the entry of the independent power producers. The Implementation Completion Report (World Bank 2001) found the outcome to be unsatisfactory, the World Bank's performance to be unsatisfactory, the Government of Pakistan's performance to be unsatisfactory, that the framework established for independent power producers was unsustainable, and that there was negligible contribution to institutional development.

In its assessment, the World Bank notes that lending to Hubco consumed the entirety of its first fund for private sector energy development, and that the project was perhaps too big as the initial IPP in Pakistan. The Energy Operations Division Manager made the appraisals directly for the PSEDP, and the World Bank report notes that "High level senior management attention may have led to inadequate attention being given to dissenting views during the review process" (World Bank 2001: 18). The scale of the World Bank's commitment to Hubco led to it becoming a broker in resolving issues between the Government of Pakistan and Hubco. The World Bank's "involvement went far beyond what

was prudent for a development banker and exposed the Bank to conflicts of interest and reputational risk" (World Bank 2001: 18).

The Government of Pakistan's legal challenge to Hubco's power purchase agreement in 1998 undermined the strength of contracts in Pakistan in two ways. In an out of court agreement ending the dispute, the terms of the power purchase agreement were negotiated downwards. Hubco's commercial agreement with the government was not honored. Hubco was also prevented by court order from bringing the case to international arbitration, although the terms of Hubco's agreement explicitly referred to international arbitration for dispute resolution. The government's argument – and the Supreme Court's basis for the estoppal order preventing Hubco from approaching international arbitration – was that the agreement itself was obtained through corrupt means (Barrington 2000). Both the estoppal and the renegotiation of the Hubco's power purchase agreement point to a weakness of contracts with the Pakistani Government.

The most grievous shortcoming of the Hubco project is visible in the period 2001-2006 when economic dispatch was implemented at the National Power Control Center. The job of the National Power Control Center is to organize and manage the generation of power so that demand is met. Economic dispatch is the process of prioritizing power generation plants in order of their variable costs and using them in that order. During 2001-2006 when economic dispatch principles were used for the first time, Hubco's energy production declined from 7168 kMWh in 2000-01 to a low of 1648 in 2003-04, or 23% of its

2000-01 production, because it made no sense to run this expensive power plant ahead of cheaper alternatives (Rifai 2009).

While Hubco was uneconomical relative to other power plants (public and private), the entire IPP program was set up to be a loss-making proposition for Pakistan. The World Bank states that "the issue whereby WAPDA would lose implicitly US \$\psi4.1\$/kwh bought from IPPs was acknowledged but not addressed through the loan" (World Bank 2001: 18). The breakdown of the loss is that the IPPs would be paid US \$\psi6.5\$/kwh by WAPDA, 24.2% of units would be lost in getting those units to consumers (transmission and distribution), meaning that WAPDA's cost per unit served to a consumer was effectively US \$\psi8.6\$/kwh while the average revenue in 1994 was US \$\psi4.5\$/kwh. The World Bank review describes it as "highly unlikely that the tariff increases of this magnitude would have been politically or socially acceptable, or even commercially sustainable" (World Bank 2001: 18).

Neither the Government of Pakistan nor the World Bank managed to keep the IPP program under control. The World Bank and other lenders were paid back in 10 years, but the consequences of unaffordable power based on expensive imported fuels is very much still with Pakistan.

2.3.4. Structural Change

Power sector reform initiatives have introduced several major structural changes in an attempt to change the processes and outcomes of the power sector. These initiatives have typically been backed by international donors and multilateral lenders, with – at best –

mixed success. In this section I will examine the National Electric Power Regulatory

Authority (NEPRA) established in 1997, and the recent initiatives to create an autonomous

Central Power Purchasing Authority.

NEPRA, like any regulatory authority, can only fulfill its role with the right staff with relevant expertise. The NEPRA Act of 1997³⁷ states that the chairman "shall be an eminent professional of known integrity and competence with at least twenty years of related experience in law, business, engineering, finance, accounting, economics, or the electric utility business." To recruit such a person when the post was last vacated in September 2007, NEPRA placed an advertisement in Pakistani newspapers for which it received 72 applications to the post of chairman by October 20 2007. ³⁸ A shortlist of 17 applicants was interviewed by a committee headed by the secretary of the Cabinet division, and the committee sent its recommendation to caretaker Prime Minister Soomro³⁹ for approval on January 18 2008. The committee's recommendations were returned without decision on February 14th. The next day – three days before parliamentary elections which would lead to a new Prime Minister being installed – the caretaker Prime Minister appointed his Principal Secretary Khalid Saeed to the post of NEPRA Chairman, but also had him retain his then post of Principal Secretary to the Prime Minister. Saeed had not applied for the position of NEPRA Chairman and cannot be considered to have 20 years of related

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³⁷ An Act to provide for the regulation of generation, transmission and distribution of electric power. The Gazette of Pakistan, Extraordinary. December 16 1997.

³⁸ "Khalid Saeed retained as Nepra Chairman," *Aaj News*, January 7 2009 Available at: http://www.aaj.tv/2009/01/khalid-saeed-retained-as-nepra-chairman/

³⁹ Parliament had been dissolved prior to the 2008 elections originally scheduled for January 8 2008, but delayed to February 18 2008 due to the assassination of Benazir Bhutto.

experience. On February 26th 2008, the Pakistan Senate passed a near-unanimous resolution against Saeed's appointment, noting his lack of qualifications, occupation of two government posts simultaneously (which is unconstitutional), and describing the process as "against accepted norms." 40 Saeed resigned from his post as Principal Secretary to the Prime Minister some four hours before the senate resolution against him was moved, but retained his new post as NEPRA Chairman. ⁴¹ Despite the senate resolution, a petition before the Lahore High Court challenging his appointment, 42 and reaching retirement age, Khalid Saeed stayed in his post as Chairman NEPRA. Moreover, an amendment to the NEPRA act on August 12 2011 added "and public administration" to the list of fields in which NEPRA chairmen can have had their requisite 20 years of experience. Not only was the appointment process circumvented to appoint an unqualified candidate in 2008, but now administrators with no relevant experience can legally head NEPRA. The post of NEPRA chairman is now primed as a ripe cherry for retiring bureaucrats wanting to stay on the government payroll beyond their retirement. The lesson is not just that the newly formed regulatory agency was subverted by existing power structures, but also that media attention, a senate resolution, and continued involvement by international donors in electricity reform could not stop it from happening.

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Available at: http://app.com.pk/en /index.php?option=com content&task=view&id=29955

⁴⁰ "Senate resolve against appointment of Khalid Saeed as Chairman NEPRA," Associated Press of Pakistan, February 26 2008.

⁴¹"PS to Soomro guits as Senate passes resolution," *The News*, February 27 2008.

⁴² "Appointment of Nepra chief challenged in LHC," *OnePakistan News*, 11 February 2010 Available at: http://www.onepakistan.com/news/national/32834-Appointment-Nepra-chief-challenged-LHC.html

The pattern of ineffective reform through structural change is present in the proposed separation and operational autonomy of the Central Power Purchasing Authority from the National Transmission Dispatch Company in the Power Sector Reform Program.

The Central Power Purchasing Authority represents a crucial link in the finances of the power sector because it is the aggregation point for most of the Rs. 700 billion (\$9 billion) which flows through the power sector. The distribution companies buy power through the Central Power Purchasing Authority, which manages all payments to the private and public sector power producers.

The establishment of an independent Central Power Purchasing Authority is viewed by the Asian Development Bank as a step towards competitive market conditions in the Pakistani power sector. The Asian Development Bank provided a \$950,000 loan for technical assistance (i.e. advisory services, mostly from international consultants) to the Ministry of Water and Power for the Establishment and Commencement of Operations for the Central Power Purchasing Agency (Asian Development Bank 2009) in order "to achieve transparency, market focus and private sector investments." The technical assistance was deemed "partly successful," and in describing the outcome the completion report observes that:

"While the consultants submitted the deliverables within agreed time frames, the weak capacity of [the Ministry of Water and Power] and political will of the [the Ministry of Water and Power] stalled the full establishment and operations of the CPPA"

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⁴³ Payments to the 16 Independent Power producers inducted under the 1994 policy do not go through the Central Power Purchasing Authority and are handled by a specialized unit of the Water and Power Development Authority called the WAPDA Private Power Organization.

This assessment reveals three powerful shortcomings of the loan and the thinking behind it. First, the paper output of such a project – no matter the expertise behind it – is of little to no use on its own. Second, the use of the term political will, and the project's distance from what the Ministry of Water and Power was willing and able to do, both call into question whether the project was ever appropriate. Third, the completion report notes the setback, but sees an "opportunity to further extend assistance to strengthen regulatory arm of the sector." The Asian Development Bank is willing to send more money after bad in providing further technical assistance and would continue to offer technical assistance without engaging with the absence of political will. Unless political will is considered in anticipation of a project's problems the concept is reduced to a *deus ex machina*.

The outlook for the Central Power Purchasing Agency is very poor. With the help of USAID contractors, the Ministry of Water and Power advertised the post of Managing Director of the Central Power Purchasing Authority in the *Dawn* newspaper in 2010 and prepared a shortlist of candidates. The main qualifications were experience with large commercial contracts and private sector finance experience. The final selection from the shortlist is to be made by a Cabinet committee with whom the decision has been pending since mid-2011. In the meantime, the Minister of Water and Power directed the appointment of an acting Managing Director who was the former CEO of the Hyderabad distribution company serving the Minister's home province of Sindh. All transparency and due process in the appointment has been bypassed in this appointment to a crucial position whose function is to ensure transparency in the handling of billions of dollars. International

donors and multilateral lenders carefully designing this institutional reform have failed to out-maneuver the local actors.

2.4. Silences of Development Discourse on the Politics of Power Sector Reform

The poor record of meeting planning targets results in power shortages and loadshedding which have periodically grown to crisis proportions. In response to these crises the political leaders of Pakistan have made ambitious claims that the crisis will be resolved within a few years. One such example comes from the power crisis of the mid-1980s. In 1986 WAPDA was charged by the Prime Minister with developing a plan to end loadshedding by 1990. The plan to achieve this goal is outlined in the *Power Development Plan For Elimination of Loadshedding by January 1990* (Water and Power Development Authority 1986) which opens with a description of the power crisis and a statement of intent:

For the past few years, the country has been in the throes of a power crisis, the like of which has never been experienced before. This imbalance between power demand and supply has emerged as the major bottleneck in the growth and development of country's economy, and has adversely affected the investment climate. If due cognizance of the worsening situation is not taken and the power shortage is allowed to extend into the next decade, this will seriously hamper the rate of industrial growth in the future. It is therefore imperative that a comprehensive accelerated programme be launched immediately with the objective of improvement of the efficiency of the power system, and elimination of load shedding.

The Government of Pakistan is fully cognizant of this need and stands committed to the goal of autarky in electrical energy for the country and extension of reliable electrical supply to the entire population. Accordingly, the Prime Minister has issued directions to WAPDA to prepare a comprehensive plan for eliminating load shedding completely by January 1990, and to ensure that ninety percent (90%) of all villages in the country are electrified by June 1990. This report presents the plan prepared by WAPDA in response to the Prime Minister's directive, and identifies the capital outlay that is required for the implementation of these plans. (WAPDA 1986: 1)

The challenges in meeting this aggressive schedule were apparent to the authors. They worked backwards from a deadline of January 1st 1990⁴⁴ and identified possible projects to meet the target. Their complete disbelief in the validity of the plan is evident in the caveats they present. The scale of the investment required was completely untenable: sector investment would need to rise to Rs. 27.4 Billion from Rs. 4 Billion. The tight timeframe allowed no room for delays. For good measure, the authors note that incorporating thermal power generation using imported fuel would be a great risk as the price of oil could increase. The plan also relies on energy conservation and reducing theft, although there are no details as to how this will be achieved. The authors knew that the plan was both untenable and perhaps undesirable, yet it was submitted to fulfill the demands of the country's leadership.

The Friends of Democratic Pakistan report issued in 2010 also works backwards from a target date, planning to end loadshedding in three years. The authors knew the date to be aggressive and even unreasonable, but used it to demonstrate both what needed to be done and what they considered to be possible. The *Prime Minister's Vision Statement for Accelerated Development of Pakistan's Power Sector for Sustained Economic Growth* issued on May 24th 2010 (Government of Pakistan 2010) works on the goal of adding 20,000 MW by 2020, effectively doubling Pakistan's generation capacity in 10 years. This ambitious goal was based on substantial additional private investment and support from multi-lateral lenders, as Pakistan could not generate such investment domestically (IGI Securities 2010).

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⁴⁴ This date appears to represents nothing more than a round number.

⁴⁵ Field notes June 2011.

Some 14 months later, the fund to be created for these investments has not materialized because multi-lateral support and possible government financing is instead being diverted to cover the sector's subsidies.

The *Prime Minister's Vision Statement* acknowledges that the key policy action required for its success is:

"restoring financial sustainability of the power sector (tariffs policy and financial discipline), reduction of transmission and distribution losses, introduction of suitable private-public participation structures, streamlining the institutional framework and industry's structure, and establishment of the Energy Development Fund." (9)

The vision statement contains no plan to address these issues even though it acknowledges them as the key action required.

The elimination or reduction of subsidies is a good example of a pre-condition to the success of reform which is unlikely to happen. Both the *Prime Minister's Vision Statement* and the Friends of Democratic Pakistan report identify electricity subsidies as undermining the financial sustainability of the power sector, and the Pakistani state. Few observers could disagree: the federal government paid Rs. 259 billion (\$3 billion) out of the 2010-2011 budget to support the power sector, which is over 10% of the entire federal budget (Ministry of Finance 2011). The federal government's subsidy to power consumers over the past three years exceeds 1 trillion rupees (\$117 billion) and has added 10% to the total national debt; this subsidy is more than the entire public sector development budget over that same period. The subsidy is simply too large to be affordable, yet the PPP government balks at implementing tariff increases which would reduce the subsidy by raising prices to consumers. The recent history of such efforts to substantially increase consumer prices in

Pakistan is a cautionary tale. In January of 2011, a petrol price increase of 9%⁴⁶ was reversed⁴⁷ after the ruling coalition briefly lost its majority in parliament when a key coalition partner withdrew its support due to the price increase.⁴⁸ Increasing electricity prices is a politically loaded issue which cannot be taken for granted.

Relegating the removal of electricity subsidies to a pre-condition for reform removes policy from the political sphere. In this way, the citizen and the political process are written out of policy making. This depoliticization expands the claim of the bureaucratic apparatus of the state to power by referring power relations through bureaucratic channels (Ferguson 1990:274). Even if the discourse is depoliticized, decision making in the Pakistani power sector is not — as shown with the experience of fuel price increases in 2011. The inevitable failure of policy reform in the event of preconditions remaining unfulfilled allows the planners and policy makers to point to politicians as the source of the failure. Responsibility for the gap between planning and implementation has no takers.

Policy makers and planners simply do not address the non-implementation of policy proposals. Generations of energy plans and reform programs push a fixed repertoire of actions, which are not implemented and leave a persistent diagnosis uncorrected.

Depoliticization of the development discourse locks us in to this cycle of failure because it precludes discussion of non-implementation. Depoliticization is part of an assertion of

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⁴⁶ "Petrol prices raised by 9pc Ogra's New Year gift to nation," *Dawn*, January 1 2011.

⁴⁷ "Fuel price hike reversed in bid to prop up govt," *Dawn*, January 6 2011

⁴⁸ "MQM to join opposition in NA and Senate," Dawn, January 3 2011.

power by technocrats in an 'anti-politics machine' whose b;indness to politics serves to expand state power (Ferguson 1990). Planners blame politics for non-implementation and seek to refer power relations back to state channels.

Implementation is the difference between Pakistan having a functioning power sector and the disaster that it is now. By implementation I mean the follow through to complete actions which the state has committed itself to. In this case it could be, for example the construction of a dam or thermal generation plant, but equally it refers to implementation of a policy, meaning that the written policy has to become the rules of the game. The state has demonstrated that it cannot change the rules of the game. Aid, in limiting itself to working through state channels, also cannot change the rules of the game.

2.5. Conclusion

The problems of the Pakistani power sector are layered. Capacity constraints, the cost of imported fuel required by the type of capacity we have, and the financial burden imposed by poor billing and collections practices all interact to produce the crisis of the Pakistani power sector in 2011. Each aspect of the problem must be addressed in its own right, but a comprehensive solution is what is truly required.

The fixed repertoire of actions employed to meet this crisis purport to present such a comprehensive solution, but they fail where similar approaches have failed in the past by not engaging with the politics of Pakistani decision making in the power sector. Driven by international donors and multi-lateral lenders, technical solutions strip away politics yet fail to achieve their objectives for a lack of political will. International actors do not engage with

political will pro-actively, but it becomes something of an absent *deus ex machina* in project completion reports. Chapter five on policy recommendations describes a proposal for looking at the basis and origins of political will in order to lay the groundwork for a demand-driven reform.

Such an approach, however, is poorly suited to the World Bank, Asian Development
Bank, or an international donor who might be perceived as meddling too directly in
Pakistan's domestic affairs. The World Bank is prevented from any such action per section
10 of Article IV of its Articles of Agreement:

The Bank and its officers shall not interfere in the political affairs of any member; nor shall they be influenced in their decisions by the political character of the member or members concerned. Only economic considerations shall be relevant to their decisions, and these considerations shall be weighed impartially (World Bank 1989)

The Asian Development Bank has a nearly identical prohibition on political activity in Article 36(2) of its charter (Asian Development Bank 1965). Nonetheless, both engage in extensive governance programming under which steps towards transparency and accountability in the power sector could be taken, the terrible track record of governance programming notwithstanding (see chapter three).

The disengagement with Pakistan's politics and what Pakistan's rulers want is exemplified by the position of Senior Energy Adviser proposed in the Friends of Democratic Pakistan report. The Senior Energy Adviser was to report directly to the Prime Minister — above the relevant ministers, in effect — and would be empowered to drive through reforms. The designers of the FODP program intended to solve the implementation problem

that previous reform programs had struggled with by effectively bypassing the politicians (there was to be no "blank check"). ⁴⁹ No Senior Energy Adviser post with these powers was created. Although the Friends of Democratic Pakistan – including representatives of the Pakistani government – met in Brussels in October 2010 and issued a joint communiqué endorsing the energy plan (Friends of Democratic Pakistan 2010b) among other items, the Pakistani Minister of State for Foreign Affairs declined the additional aid because it would not allow decision making regarding the spending of that aid to rest outside the Pakistani government. ⁵⁰

Power sector governance initiatives are mostly restricted to structural changes, such as the creation of the regulatory body, which lack teeth because the political will to empower such alternate structures is absent. Instead, they are co-opted by existing power centers and remain as window-dressing.

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⁴⁹ Interview with an employee of an international financial institution familiar with the preparation of the FODP report. Field notes September 8 2011.

⁵⁰ Kiani, Khaleeq. "Govt agencies to manage flood aid, donors told." *Dawn*. October 22, 2010

Chapter 3

Institutions, Culture and Governance: Get Yourself Connected

The first rule of getting anything done at an office of the Islamabad Electric Supply Company (IESCO) is that you must pursue your application in person. It isn't simply enough to file the paperwork - the IESCO staff must be chased to ensure that they process it in a timely manner. Babur is a 26 year old Line Superintendent who has worked for IESCO for eight years. He handles new connections and I often sat at his desk discussing his work or observing the efforts of customers in securing a new connection.

An older man (50+) with greying hair comes in to Babur's office, sits in a chair beside the door (I'm sitting in the one in front of Babur's desk). He describes a connection that hasn't been completed for a month, despite a demand notice being signed. Babur gets the file, indicates that no contact information was given and says that when he went to the site, no one was there. The older man explains that his mother had passed away and he couldn't attend to the application. He leaves after he arranges to revive the application with Babur. Babur tells me after he leaves that 'if the customer doesn't follow up within a few days then nothing will happen' as there is too much work to do and they focus on the things that demand their attention. Babur says that failing to follow up means that the request isn't really important.⁵¹

How do consumers⁵² of the Islamabad Electricity Supply Company get power to run a television, a refrigerator, and stave off the 115 degree summer heat? The first and most straightforward answer to that question is that they show up in person. The personalization

⁵¹ Field notes January 13, 2009

⁵² IESCO employees use the term "consumer" (using the English word when speaking Urdu) to refer to people getting electricity service through them and I follow their usage.

of the encounter with the state matters for governance because it shows its pervasively informal nature. In the above example Babur was initially diligent, but without sustained personal contact with the consumer he readily turned his attention to other matters which people were actively pursuing. There are rules which apply to this request for a new connection, but those rules only function through personal contact with Babur. In this way, practices of governance are made up of entangled formal and informal elements which together are mutually constitutive of the rules of the game.

3.1 Synthesizing Academic Literatures on Institutions, Culture and Governance

Governance is the essential means to pro-poor development (DFID 2001, DFID 2010, World Bank 2004). Development encompasses human freedoms and capabilities (Sen 1999) such as education and life expectancy as well as income. Assessing development solely in terms of economic growth and per capita Gross Domestic Product is no longer development orthodoxy (for practitioners or academics) since the introduction of the Human Development Indicators (United Nations Development Program 1990). Indeed, differentiating between growth and development allows for the recognition of cases where development has been achieved without growth (Heller 1999, Sandbrook et al 2007) and growth has not led to development, with the exemplar case of growth without development being Pakistan (Easterly 2003). Easterly attributes Pakistan's systematic underperformance on social and political indicators to elite dominance and ethnic divisions, in the face of which state and international aid driven social programs have simply failed. Easterly's insights are compelling, but in the absence of a revolutionary reordering of Pakistan's political economy the problem of achieving social development through the state

and international aid still remains. Achieving development in the face of power inequalities is the story of Kerala, a key case of development without growth. To address how this might be possible and to understand why this hasn't happened in the past requires a study of governance.

Governance matters for development because "it determines our security from conflict, disease and destitution; our freedom to participate in our societies and to have a say in the way we are governed; and our opportunities to educate ourselves and to be economically productive, securing a better future for ourselves and our communities" (DFID 2010: 2). The expansive breadth of what is entailed in governance is reflected in Kauffman et al.'s (2009) widely-used indicator of governance across six dimensions, namely: Voice and Accountability; Political Stability and Absence of Violence; Government Effectiveness; Regulatory Quality; Rule of Law; and Control of Corruption. Governance is the process which links state actions and development outcomes.

The breadth and precision of the World Governance Indicators notwithstanding,⁵³ the authors caution that "changes in formal rules (often associated with so-called 'actionable' indicators) need not lead to desired changes in outcomes" (2009: 4), and that anyone using the indicators must be conscious of the gap between formal rules and implementation in practice. This implementation gap does not lend itself readily to measurement, yet it speaks to the core of effective governance. Unfortunately, too much attention has gone to formal rules alone.

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⁵³ Critics of measures such as the dominant measures of governance find them "problematic, suffering from perceptual biases, adverse selection in sampling, and conceptual conflation with economic policy choices" (Kurtz and Schrank 2007).

Governance reforms that concentrated on formal rules and excluded the informal realities of country context have been a failure. OECD development aid targeting governance as a set of formal rules has had "limited impact" despite spending in excess of \$10 billion per year (Institute of Development Studies 2010: 5, 69-70; see also World Bank 2008 and NORAD 2009):

"Programmes to improve the investment climate, strengthen the rule of law, or fight corruption do not fail just for lack of ownership or attention to politics. They fail because they make the wrong starting assumption: that progressive change consists in, and can be achieved through, strengthening formal, rules-based institutions that reflect a clear division between public and private spheres of life."

The message that governance reform requires attention to more than the formal rules of governance is now well entrenched in development thinking. However, a compelling theoretical framework for governance which incorporates formal rules with a coherent treatment of the informal norms, constraints, and other intangible elements has not yet come to prominence. The leading candidate is the new institutionalist economics, although this literature suffers from an extremely broad understanding of institutions.

The seminal statement of new institutionalism in economics is Douglass North's (1990: 3) formulation that "Institutions are the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction." These rules can be formal – codified by human beings – or informal "such as conventions and codes of behavior" (4). That the institutionalist framework includes informal rules is a major step beyond neo-classical economics, in which treatment of the Global South relied on "social arrangements that economists usually take for granted, but which are conspicuous by their absence in poor countries" (Rodrik 2007: 153). Northian informal institutions are

conceptually cluttered in that they contain everything from *panchayats* (village councils) to the Protestant Ethic.

However, scholars often restrict themselves to the formal rules even when building on North's formulation of institutions. Daron Acemoglu et al's (2001) widely cited paper linking the strength of current institutions in the Global South to European settler mortality uses a commercially developed risk of expropriation as a measure of the strength of formal institutions. The details of the "cluster of institutions" that the authors are interested in include "constraints on government expropriation, independent judiciary, property rights enforcement, and institutions providing equal access to education and ensuring civil liberties, that are important to encourage investment and growth" (Acemoglu et al. 2001: 1370-71, footnote 3). Despite the breadth of the authors' interests across legal, political, economic, and social institutions, the variable employed is a "Risk of Expropriations" as a proxy for institutions, an indicator developed by a company which provides political risk assessments for international business. The operation of institutions is thus reduced to a single black-box (Acemoglu et al. 2001: 1396), a situation not remedied by a later paper unbundling the effects of property rights institutions (Acemoglu and Johnson 2005: 988) which still asks how institutions have their effect.

A recent thread in comparative politics has been to start to explore the interaction of informal and formal institutions based on a typology developed by Helmke and Levitsky (2004, 2006). Helmke and Levitsky posit that the interaction can be complementary, accommodating, competing, or substitutive, depending on the effectiveness of the formal

Helmke and Levitsky framework has at least an important shortcoming; it assumes the prior establishment of formal institutions on which informal institutions act (Gryzmala-Busse 2010: 331). Alternately, formal institutions "may have been plunged into a deep sea of preexisting informal rules and institutions" (O'Donnell 2006: 289). There is no reason to give precedence to codified rules over the informal, even though that is frequently the case.

Recent state-of-the-art papers in the Annual Review of Political Science have similar tendencies to the literature in economics. Mares and Carnes (2009) present health policy in developing countries in terms of their formal rules and Levitsky and Murillo (2009) explore variation in the strength of political institutions through the enforcement and stability of constitutional and other legal structures. None of the twenty-two chapters of The Oxford Handbook of Comparative Institutional Analysis (2010) look at informal rather than formal institutions. North himself wrote that "while formal rules can help in creating [institutional frameworks conducive to economic growth], it is the informal constraints embodied in norms of behavior, conventions, and internally imposed codes of conduct that are critical" (North 1998).

While North's institutionalism is a valuable first step in socializing *homo economicus*, Alejandro Portes (2006) quotes Geoffrey Hodgson's (2002) critique of economists for their inadequate tools to distinguish between types of institutions and the social action within them. Hodgson (2006) calls for:

"A dual stress on both agency and institutional structure is required, in which it is understood that institutions themselves are the outcomes of human interactions

and aspirations, without being consciously designed in every detail by any individual or group, while historically given institutions precede any one individual." (8)

Portes' (2006) conceptual reanalysis of institutions and development tries to do exactly that through a "thick institutionalism" which incorporates sociological treatments of culture and action. In particular, Portes is careful to distinguish between norms, roles, and cultural toolkits under the rubric of the informal. Norms (including mores and folkways when they are particularly well established), come bundled as roles which also embody a set of cultural skills or toolkit (Swidler 1986):

"These cultural "tool kits" also contain many other elements from scientific and professional know-how to demeanor, forms of expressions, manners, and general savoir faire suitable for specific social occasions." (Portes 2006: 238)

To complete this conceptual reanalysis Portes distinguishes the cultural realm of "values, cognitive frameworks, and accumulated knowledge" from social structures as the realm of "interests, individual and collective, backed by different amounts of power" (Portes 2006: 237). For Portes, institutions are symbolic blueprints but are not social structures themselves (Giddens 1993).

Elisabeth Clemens and James Cook's (1999:442, 444-445) review of politics and institutionalism is particularly conscious of the need to maintain the processes of conflict and innovation integral to politics while recognizing the higher-order patterning effect on actions exerted by institutions. The patterning effect of political institutions (and the state more generally) must be sustained and reproduced (Archer 1988, Giddens 1984, Sewell 1992).

Revisiting the theorization of institutions sets up an examination of governance which privileges neither the formal nor the informal. The result is to present institutions as the interplay of codified rules with cultural norms and roles in the context of power relations. The informal does not act on the formal as a constraint (or enabler), but rather the two are mutually constitutive of governance.

A question remains, however, in whether organizations should be treated as unitary actors (per North 1990), or as an instantiation of the symbolic blueprint governing roles (Portes 2006)? Hodgson (2006) suggests that the answer is somewhat dependent on the level of analysis to be employed. Perhaps over long periods the Northian approach of taking organizations as players of the game whose rules are delineated by institutions is justified, but in a more immediate study of governance such as mine an organization cannot be treated as a unitary actor. Instead, the permeability and location of boundaries which differentiate state employees from power consumers, departments of a single state organization, or between state organizations become essential ingredients of understanding governance.

The general trend of applying a more sociologically theorized treatment of institutions to development outcomes has been taken up in the field of health by contributors to the edited volume *Successful Societies* (Hall and Lamont 2009). The contributors are particularly interested in how "institutions and cultural structures combine to advance (or limit) collective well-being" (Hall and Lamont 2009: 1-2)⁵⁴. Peter Evans'

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⁵⁴ In a footnote to the introduction the editors define their terms (Hall and Lamont 2009: 4, footnote 4): "Cultural structures are representations (identities, scripts, frames, myths, narratives, collective

(2009) chapter in *Successful Societies* takes on this theme in the context of famine prevention. Evans argues that:

"Perhaps the single most important determinant of successful famine prevention is the ability of society, especially its less privileged members, to make the state respond. In Kerala, not just service delivery, but the character of the state itself is the product of the political mobilization of civil society, again particularly the less privileged." (123)

Governance – in this case famine prevention – results from the ability of citizens to engage the state and "make it respond" – an ability which is both culturally constituted in terms of social imaginaries and collective narratives, and the political presence which citizens can mobilize. Without an organized protest capacity the Keralan state's response would be closer to the typical "sluggish and corrupt" character of subcontinental reforms (Evans 2009: 119)⁵⁵. In *Successful Societies*, the interaction of culture and institutions is crucial to effective governance.

The trouble with the Northian treatment of culture as "collectively constituted, stable, and intergenerationally transmitted over periods that extend across centuries" (Heydeman 2008: 29, footnote 4) is its tendency towards cultural essentialism. Avoiding this problem demands a closed engagement with culture which is specific and local rather than decontextualized across time and space. In engaging with the specificities of culture, Lisa Wedeen (2002) advocates for the treatment of culture as meaning-making in a practice-

imaginaries) that feed into behaviors and social boundaries. Institutions are defined as a set of regularized practices, whether formal or informal, with a rule-like quality in the sense that the actors expect those practices to be observed."

⁵⁵ Evans (2004, 2005) has made more programmatic statements about building on the institutional literature based on North (1990), oriented to the development ends of Sen (1999), and informed by sociological treatments of culture and action.

oriented approach, though ethnography in political science appears to be consigned to acting primarily as a corrective to decontextualized theory (Schatz 2009). Javier Auyero (2006: 258) insists that ethnography has a particular place in the study of politics because "the pace of political action, the texture of political life, and the plight of political actors have all been cast into the shadows created by the unnecessary and deleterious overreliance on quantitative methods in both political science and political sociology." The nitty-gritty details are more than just anecdotes, particularly when the object of study is the interplay of culture and institutions in the codified and informal practices of governance. Michael Burawoy (1998: 13) argues that "context is not noise disguising reality but reality itself." Per Burawoy's (1998) extended case method, I use ethnographic techniques to engage with and reconstruct the theorization of institutions for development.

There is a trend in the study of institutions for development which increasingly looks beyond formal rules to the informal and cultural enablers of action. My research contributes to this trend of looking beyond formal institutions, with a specific focus on the interaction between the codified and the informal, as witnessed in several small electrical utility offices in Islamabad, Pakistan and the headquarters of the Islamabad and Lahore electrical utilities. Rather than offering a statistically representative picture of Pakistan as a whole, or of all the Global South, it offers a pattern and an illustration of the value of examining formal-informal interactions at the micro level, where development outcomes result from the interplay of culture and institutions in governance. The institutions which drive development outcomes are mutually constituted by their formal rules and the cultural repertoires through which they are enacted. Ethnographic research has a particular

contribution to make to this theoretical trend because decontextualized approaches to development have a poor track record as a basis for policy.

3.2 Introducing the Case

Basic services don't work in Pakistan. Electricity is no exception, with major metropolitan areas regularly enduring loadshedding (planned outages) of 12 hours per day during 2009 and 2010, and even worse outages in smaller cities or rural areas. As a sign of the importance of the electricity crisis on the national stage, Prime Minister Yousaf Raza Gillani promised to address the electricity shortage in his 2008 inaugural address to the National Assembly⁵⁶. However, since then, outages have worsened, the government's promised end dates for loadshedding have slipped by, and addressing the electricity shortages is near the top of the United States Agency for International Development's plan for spending \$7.5 billion in aid. With an estimated impact of 2% of GDP (Ministry of Finance 2010)⁵⁷, the scale and importance of the electricity crisis has escaped nobody's attention. Although the current situation is one of crisis, I show in the second chapter of my dissertation how such crises have occurred previously in Pakistan and that the causes are systemic. The micro-foundations of this systematic macro dysfunction are described in this third chapter of my dissertation.

In a concentrated set of visits over four months and then regular visits over the following eighteen months I spent time with each of the departments in multiple urban sub-

⁵⁶ The Daily Times, March 30, 2008

⁵⁷ Burki (2009) assesses the impact at 1%, but his calculations date to 2007 when the scope of the crisis was less.

divisions of Islamabad. In this time I interviewed IESCO employees, observed them dealing with customers, and talked more generally with them about their work and their lives. I was not an employee of IESCO and rarely contributed to their work in any way. My presentation to the IESCO field offices where I conducted my field research was as a Ph.D. student studying service delivery in the electrical power sector.

The office of the IESCO Sub-Divisional Officer (SDO) in one of Islamabad's better neighborhoods is a drab building between a small market and a street of bungalows. An educational institution and an office also operate out of the residences on this street. The paint on the exterior of the building has faded, peeled and weathered to a mottled grey. Spare electrical equipment, a pickup truck, and the personal motorcycles and cars of the employees are usually parked outside. A small blue board outside identifies the office as the "Office of SDO (Engineering)."

The SDO is responsible for operations in his sub-division of some 25,000 households and this office is the primary point of contact for customers with any questions such as about the duration of outages, inquiries about new connections, or billing complaints. This sub-division is organized on functional lines into four departments: new connections; meter reading; disconnection and reconnection; and maintenance. Each department is headed by a Line Superintendent (the rung below the SDO in IESCO's hierarchy), who can have up to 25 years of experience. Within each department there may be a second (subordinate) Line Superintendent as well as Linemen and Assistant Linemen who report to the Line Superintendent heading the department.

3.3 Personal Touch

Personal contact is a necessary step in dealing with IESCO and, consequently, dealing with personal requests is a major component of what IESCO employees do in a day. These demands do not relent even when they are otherwise engaged, such as in one field visit with Omar Sahib, an Executive Engineer (XEN):

Throughout this time [the 4 hours I was in the office] there have been a steady stream of IESCO employees and consumers bringing in papers to sign, particularly bills which need to be adjusted or addressed in some way. One example. A youngish fellow in jeans, collared t-shirt, with shiny black shoes (cheap and flashy) asks to pay in installments. He brings in the bill, Omar Sahib signs it, and he says "most kind" (in English). At least 20 such people come in during the 2 ½ hours I'm there, at least 30 phone calls too. Omar Sahib has two mobile phones. ⁵⁸

Complaints regarding the size of a bill are frequently put to IESCO employees. In his capacity as XEN Omar Sahib is able to permit a bill to be paid in installments, though this request must be made in person as the XEN's signature is required on the actual bill. Almost every such request is granted, so long as the customer has a reasonable record of making timely payments. Omar Sahib tells me that it serves IESCO to allow payment in installments because at least some payment will be made on time and there is more chance of the entire bill being paid in course. Allowing a bill to be paid in installments also pleases the consumer and is far less effort than denying it as a consumer will typically protest and argue with the IESCO employee if rebuffed.

Omar Sahib's role in allowing consumers to pay in installments personalizes bureaucratic operations. Requests are made in person, verbally, at his desk. IESCO consumers can't avoid encountering him and making a polite request if they wish to pay in

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⁵⁸ Field notes September 8, 2008.

installments. Similarly, getting a new connection involves dealing with Babur in person. One of the steps involved in getting a new connection is paying a security deposit, the amount of which depends on what Babur estimates that the usage of the new-connection will be.

People will often ask Babur to reduce his estimate, and even those with little means or influence can apply a simple yet surprisingly effective approach: they ask nicely.

A 20-ish man and his mother are going between Babur's office and Farid sahib's office in an attempt to get their connection. The man has a black suit on, highly polished black shoes, and a white shirt with several buttons open. His shirt collar is spread wide over the jacket's lapels, with a little chest hair showing. He chats to Babur, saying that he noticed they have the same name and that he didn't realize that Pashtuns are also called Babur. (Babur is of Pashtun ethnicity). The young man wants Babur to reduce the estimate of the electricity consumption for his house from 14 to 10 Kilowatts [this will reduce the required security deposit by Rs 24,000, or almost \$300]. He sits next to Babur at Babur's desk, smiling frequently as they look over the paper work together. Babur smiles as they chat and reduces it to 12 Kilowatts. ⁵⁹

Babur was under no obligation to help, with the young man offering neither threats, inducements, or having powerful connections. Babur's reduction of the estimate is a deviation from the strict letter of his duty, which is to accurately estimate the load the connection will take. These estimates are systematically underestimated, leading to an underestimation of the load requirements for the grid serving that area. An inaccurate load estimate means that the quality of service may be compromised due to poor planning – and IESCO staff often complain about their inability to plan due to these poor estimates.

Aside from the need to follow up with an application to ensure that it is addressed, people have to deal personally with Babur because they don't know the requirements of the new connections process. While documentation is available and given out – such as the

⁵⁹ Field notes January 13, 2009.

"Abriged [sic] Terms and Conditions" for a new connection – it deters rather than informs the applicant.

Babur gives me a copy of the "Abriged" [sic] Terms and Conditions. They're 4 pages of single spaced, dense prose [in English]. I ask if he's read them. Babur shakes his head, laughs, and says no. Babur: "Zubair Sahib, have you read them?" Zubair shakes his head. He doesn't even look up from his files. Babur laughs again: 'How many years' service and even he hasn't read them ... when you read them, let us know what they say!' 60

The formal rules governing new applications are literally in a foreign language to Pakistanis.

While many Pakistanis do read English, their facility with it is far less than with Urdu.

Formal procedures are obscured and only accessible through in-person requests to the IESCO officers. Simple requests, politely stated, are a way to get things done but they require the applicant to appear at the office in person (sometimes repeatedly) and to be grateful to the IESCO employee who helps them. The assistance of an IESCO employee is often necessary because they are the only ones who know what has to be done. Further, contact must be personal – usually face to face – or else the IESCO employee will turn their attention to the task which someone is pursuing in person.

The necessity of personal contact is the first plank towards the mutually constitutive role of codified rules and informal norms in establishing the institutional field of governance. The informal practices – such as showing up in person – are a necessary precondition for the working of the codified rules. The institution is reliant on such informal practices.

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⁶⁰ Field notes October 2, 2009.

3.4 Payment for Services Rendered

IESCO procedures are tedious – assuming one even knows them. For example, the process for getting a meter reconnected after it has been disconnected for non-payment requires the customer to: 1) pay the bill at the bank; 2) take the paid bill to the sub-division office to receive a reconnection order; 3) take the reconnection order to the revenue office in order to receive a notice demanding a reconnection fee; 4) the reconnection fee must be paid at a bank; 5) the receipt of the reconnection fee must then be taken back to the revenue office where the customer will obtain a reconnection order; 6) the reconnection order has to be taken back to the sub-division office whose staff will reconnect the disconnected meter. Each stage requires paperwork to be completed by hand and the receipt to be carried by the customer to the next step in the process. The sub-division office, revenue office, and bank are not at the same location, nor will the relevant personnel necessarily be available. Unsurprisingly, IESCO employees will help customers out for a small fee (sometimes called "speed money" or described as money for petrol or bus fare). Qasim is an IESCO employee in the disconnection and reconnection department of a subdivisional office which serves several unfashionable neighborhoods of Islamabad.

Qasim receives a phone call. He tells the caller that he's in his office, to come upstairs. A young man comes in, they chat briefly, and he gives Qasim a bill along with about Rs 2000. After he leaves, Qasim turns to me to explain that guy is a "jannay wallah" ['someone he knows'] and their meter has been disconnected for a while. He's going to get their RCO [re-connection order] for them. He goes on to explain that 'to get an RCO is complicated.' For older people and ladies - or the people one knows - he or other IESCO staff will help them out. And they'll get a small Rs 100-200 payment for this. "Is may kuch illegal nahin hai." 'There's nothing illegal in this.' [Qasim looks at me as he says this, but his eyes meet mine only briefly and

then flick downwards.] Qasim starts explaining the RCO procedure and I make him repeat it so that I can write all the steps down.⁶¹

The procedure to reconnect a disconnected meter is a good example of a codified rule controlling service delivery, but this example also demonstrates how such codified rules are filtered through social norms and expectations in truly becoming the rules of the game.

Qasim is in effect a gatekeeper because those codified rules are generally unknown. I never saw anyone ask for them at the sub-division office during my fieldwork. The terms of a reconnection are included in the 2010 Customer Service Manual available on the IESCO website, 62 but this laudable step towards transparency wasn't in place at the time of my fieldwork and will not (on its own) serve the 88% of Pakistanis without internet access. 63 At a minimum, a consumer seeking a reconnection will have to approach Qasim in person at least once in order to simply learn the procedure. The tediousness of the procedure—trips to different locations to secure receipts and approvals—also represent a significant transaction cost. Weighing up a tedious and unknown procedure it is little wonder that many consumers will gladly pay a small amount to Qasim to process their paperwork. The written procedure will be followed in the end, but only when mediated by an officer who

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⁶¹ Field notes, February 24, 2009.

⁶² Available at http://www.iesco.com.pk/downloads/Consumer%20Service%20Manual-2010.pdf
Downloaded on May 2nd 2011.

I cannot verify when the Customer Service Manual 2010 was posted, but the document's properties indicate that it was created on May 12th 2010. No earlier version of this document was posted online.

⁶³ The World Development Indicators database lists internet users as a percentage of total population at 12% for Pakistan. I fully support the use of the internet to promote transparency in the power sector, but it is more effective in reaching influential audiences such as NGOs or the media than it is in reaching the general public. My policy recommendations (see chapter five) combine the use of the internet with outreach efforts towards the media and civil society in order to have information on the internet reach a wider audience.

gains a rent due to their exclusive knowledge. The rules of the game are social because they must be accessed through a gatekeeper and oriented towards rents both because of the gatekeeper role and their tediousness.

Salman holds the same position as Qasim but in a sub-division serving generally wealthier areas. He too is familiar with speed money.

Salman differentiates between taking money for acts which don't harm the "mecma" (institution, meaning IESCO) and acts which do. Expediting paperwork, possibly 'cutting the process' (process ko kaatna), on additional payment by the customer doesn't harm WAPDA⁶⁴. Salman clarifies that the parent organization hasn't lost anything in this exchange – it gets its full payment. Expediting a connection can mean a lot of revenue to a business. 'There's no harm (nuksan) to WAPDA in this.'65

When describing instances where IESCO employees take money the distinction between that which harms and does not harm IESCO is carefully maintained. To speed up an otherwise legitimate procedure is acceptable, as is taking charge of the processing of someone's paperwork. In a later exchange on the same topic:

Salman says that he only knows one or two people in this office who would take a payoff to enable the theft of electricity.

Salman carefully distinguishes this from taking a fee to help someone navigate IESCO paperwork. He admits that that practice too has "rishwat ki shakal" ('the look of corruption'), but that there is "no loss to the authority." Salman's colleague Haroon Sahib, an older Line Superintendent with a wry sense of humor, says that I might call this a "service fee."

I suggest that he might for example take Rs 100-200 to help someone get a meter reconnected as a "facilitation fee" – Haroon Sahib smiles at that term.

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Although Salman is an IESCO employee he regularly uses WAPDA – the Water and Power Development Authority – to refer to his employer. WAPDA was disaggregated in 1997, with IESCO being formed as one of its successor organizations. Despite the passage of 13 years it is far more common to refer to WAPDA than IESCO (or the other successor companies) among both state employees and private citizens.

⁶⁵ Field notes 1/6/09

Salman: "Jis level ka kam, us level ka ..." ('the level of work, that level of ...) Salman raises his hands upward, fingers extended. He doesn't name the act of receiving a payment. 66

Salman and Haroon Sahib are entirely comfortable admitting to taking money to help people navigate the formal procedures of IESCO. Taking money when IESCO is harmed is presented as immoral and not the work of a good employee.

Salman describes an episode where he was offered 1 lakh⁶⁷. The man was setting up 4 cell phone towers and needed electricity connections. When getting a connection you can get it done on a cost-sharing basis [cost of infrastructure shared by IESCO], which is cheaper for the customer. His cost was going to be 6 lakhs because Salman wanted him to install his own transformer, which was the technically superior solution. He wanted cost-sharing so that his cost would only be 90,000. He offered Salman 1 lakh to do it that way.

I clarify: he showed you the notes?

'Cash on the table.'

I ask: Won't everyone else in your office know if you are taking money like that?

Salman: 'only 30,000 would have ended up in my pocket.' Not only does everyone else know but they have to take part. 'It can't happen unless the whole team takes part.' Salman would have 'to give 2000 here, 3000 there to get the paperwork done.'

Rent seeking is a collaborative exercise which requires the active participation of many staff members. It also can't be secret because of the paperwork requirements for any substantial initiative. For rent seeking of this kind to exist it has to be widespread in practice and generally tolerated, including by administrative superiors.

⁶⁷ 1 *lakh* rupees, Rs. 100,000, is approximately US \$1200.

⁶⁶ Field notes 9/30/09

⁶⁸ Field notes 1/6/09

The collective engagement in corruption is exemplified by IESCO's internal auditing, which extracts payments from sub-division offices.

In Babur's office, I sit at his desk and look at what he's doing. He's got two official IESCO books in front of him, both landscape orientation ledgers with very thin leaves (so that the carbon papers are more effective). One is the Store requisition order book that I've seen before. The other is the electrical measurement book. Babur explains to me that this book is cross referenced to the store requisitions, and that in this book they must track what was done with the requisitioned materials. He tells me that this is for the auditors. I ask him (somewhat incredulous), flipping the leaves of the thick book, whether they look through all these. Babur says 'No (smiling slightly), they just take our money.' He looks at Zubair, Javed and Wasim who are sitting in the room and asks "how much did they take this year? 45,000? [No one responds, though they're listening. Zubair, Javed and Wasim don't seem willing to confirm or deny that statement]. They took 45,000 this year. And the local auditors are separate." I ask if they took this money collectively from the whole subdivision. Babur smiles again and says "From the customers." I ask "What contact do they have with the customers?" Babur answers "But we do." IN: "So they take it indirectly through you." Babur nods. 69

The need to pay off the audit department necessitates collecting the money from customers. The IESCO employees are conscious of their own moral responsibility for their behavior despite being tied into a corrupt system. Shortly following the above exchange Javed says to me – first in Arabic then in Urdu – that "Both the giver and taker of *rishwat* are *jannami*" (going to hell). Turning to Wasim and Zubair, Javed adds "But you know what Omar Sharif said – that sometimes the taker is compelled (*majbur*)." All of us laughed, but the use of the word *rishwat* (a more formal invocation of corruption), the Arabic phrase and the reference to hell mark his acknowledgement that some of what they do is wrong, even if their hand is forced.

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⁶⁹ Field notes October 20, 2009

The necessity of corruption within IESCO is underscored by the practice of purchasing appointments. After the above discussion regarding audits, I asked Babur how an IESCO employee could join the Audit department.

IN: "How do you get appointed to be in the audit department?"

Babur explains that you do a B. Com or an MBA, then apply in response to the ad in the newspaper announcing the hiring. [The same process as for other positions].

I clarify: "But how do you actually get appointed?"

Babur doesn't immediately respond and continues to look at me.

IN: "Are these positions filled according to merit?"

Babur: "It would take lakhs to get an appointment." 70

The phenomenon of paying for an appointment is not unique to the audit department but is in fact common in IESCO. When I asked Salman what was different in the time when the Army was running IESCO⁷¹ the first thing he tells me is that people didn't have to pay for their appointments.

Salman tells me that it now takes 2.5 *lakhs* to be appointed as a Line Superintendent and 5-6 *lakhs* for an SDO. When Salman joined under Brigadier Waseem Zafar this was not the case. Salman did not have to pay for his appointment. Salman: "The person who paid this, won't he make it back though corruption?"⁷²

Having paid for a position – whether an internal transfer to a post or the initial hiring – there is a financial imperative to make that money back. A clerk in the drafting section had his promotion to a higher pay grade held up because he wouldn't pay the 25,000 which was

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⁷⁰ Field notes October 20. 2009

⁷¹ From 1998-2002 the Pakistan army took administrative charge of IESCO and all other distribution companies in a move distinct from General Musharraf's coup of 1999. The then elected Prime Minister invited the army in to clean up the corruption in the distribution companies. I explore this fascinating episode in the institutional history of the power sector.

⁷² Field notes February 10, 2009

being demanded of him to process his promotion. When I suggested that at least he didn't have to seek out bribes to pay back the bribe he pointed out that the salary increment over the past year would have covered the initial cost of the promotion. The clerk regretted that he had waited so long to pay the bribe and was reconsidering his stance. The purchase of more lucrative postings than a clerkship in a drafting section, however, necessarily leads to rent seeking because the sums involved are far greater than the compensation provided through salary increases. Those disinclined towards rent seeking may well be channeled to lesser posts, or – if they pay for the appointment – then become part of the system they despise. To continuously fight against corruption would put an individual against both subordinates and superiors who are part of that system.

Pakistanis working in the state-owned power sector are aware of the distinction between the formal and the informal and carefully shade the moral valence of their actions. They can peer outside the limitations of their social environs, but find it very hard to act outside of them.

Paying to get what one needs from IESCO is a pervasive practice both within the organization as well as in dealings with consumers. For consumers, the payments described in this section enabled the workings of the codified rules by greasing the cogs and wheels of the bureaucratic machine. The existence and validity of the codified rules is never questioned, but the parties involved understand that – unless they have other pressure to apply – paying for what one wants is the way to benefit from the application of the rules. For IESCO employees, they pay for appointments, pay so that their promotions are

processed, pay their superiors a share of their own takings, and pay off the auditors who monitor them.

The type of institution described by these pervasive practices of paying for one's due is one in which the formal rules are reduced to background noise. The outcomes of this game are dictated by power, relationships, and money rather than rules.

3.5 Powerful Consumers

Powerful consumers behave and are treated differently from the ordinary and even middle class consumers. In following Babur at the subdivision in a wealthy area of Islamabad I saw several encounters with powerful customers and the different approaches they employed. The first instance pertained to a new connection for a security barrier that was being installed at the entrance to a parking lot serving several government offices. One of the offices was expecting a visit from the Interior Minister the next day and needed this barrier in place before the visit. Babur received a phone call from the office in question, promised to take care of things within twenty minutes, and then had the paperwork ready for a driver who was sent over with some supporting documentation some fifteen minutes later. Normally, customers must pursue such matters in person and it can take days to get this done. The idea of an IESCO officer completing his end of the formalities for you in twenty minutes after a request on the phone is unheard of for an ordinary customer.

In a second incident Babur was visited by Rehman Sahib who wanted to get an electricity connection for a girls' school in a middle-class area of Islamabad. Babur wasted

no time in making enquiries about the cost of the connection by phoning his colleagues who deal with construction. Further, he and a lineman who had joined the conversation told Rehman how to file a report on a burned out transformer which had served a mosque neighboring the girls' school. Rehman Sahib claims that he'll have the transformer replaced "before you've even sent on the report" by speaking to Raja Pervez Ashraf, the Minister of Water and Power. Rehman names his contacts to underline his own importance. While he accomplishes what he needs to, his manner does not impress all of the IESCO employees:

I speak with [an experienced lineman] in the entry way to the office regarding Rehman Sahib and the school. "Our officers listen to him out of fear" ("Officer hamaray dar ke baat maantay hain"). 'He takes the names of [President] Zardari and the Minister, but he's really nothing.'⁷³

Powerful people intimidate IESCO employees, and claiming to know one or to be acting on behalf of one is a good way to get things done. IESCO employees usually won't directly oppose someone making those claims, even when they don't actually believe what they are told about the citizen's powerful connections.

Babur regularly has to deal with Cheema Sahib, a frequent visitor to the sub-division office who submits and follows up on applications he handles for others. He's about 5'6" tall, slightly built, typically dressed in a *kurta shalwar* and tweed jacket, with a trimmed moustache and a pointed nose. When I asked Cheema Sahib how he gets work done at IESCO he answered "Bas, darra ke" ("By intimidation"). But Cheema Sahib insists that he's never given any money to the IESCO staff and involves two nearby IESCO staff into our

⁷³ Field notes October 2, 2009

discussion to back him up. They affirm that he's never given them any money beyond some money for petrol, though Asadullah adds that "All pay their respects to the court you come from" ("Jis darbar say aap ahtain hain, vanh to saray salaam kartain hain"). ⁷⁴The court (darbar) being referred to here is akin to the royal court of the Mughal emperors. ⁷⁵ Asadullah means that Cheema is the representative of a higher power whom all must acknowledge and bow down to in a similar manner to how members of the royal court were once treated. Later on when Cheema has gone Asadullah tells me that he has some connection to the Ministry of Water and Power but doesn't specify to whom. On only one of the dozen or so times that I saw Cheema Sahib at the sub-division office did he encounter any resistance to his demands.

Babur responds saying that 'if the need is for more than 20 meters [of cable] then' "I am very sorry" [for the last part Babur switches from Urdu to English].

Cheema: [rapid response] "Don't start your English with me, sisterfucker" and insists that Babur 'do the work.'

Babur doesn't say anything more.

After Cheema leaves, Babur says to me that 'the guy who's stuck is the one who has to take it up the ass' [Babur is bitter, complaining that he's in a difficult position with this connection request but can't get out of it]⁷⁶

Babur's use of English is an attempt to reach for a more powerful register with which to resist Cheema's demands. The bureaucratic regulations and paperwork of IESCO are all in English even though the IESCO employees and customers employ either Urdu or one of the

⁷⁵ While one can also use *darbar* for a shrine, a royal court would be the more common usage. In both cases the meaning is very similar.

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⁷⁴ Field notes February 10, 2009

⁷⁶ Field notes January 13, 2009

regional languages. The harsh vulgarity of Cheema's response shows the disregard of any rules that might apply – Babur's English – and reinforces his superior position. The above exchange is exceptional because Babur tried to resist a powerful customer.

A lack of timely and complete bill payments is a longstanding problem for Pakistan's electricity distribution companies. The problem is even more prevalent with public sector customers than it is with private. For IESCO this is a particular concern given the density of public sector organizations located in and around Islamabad. In an IESCO Executive Engineer's office a summary of arrears on his office wall indicates that public organizations owe 80% of all arrears in his division despite consuming only 20% of electricity supply. The Media reports ensure that the public is aware of this component of the national electricity crisis:

An IESCO notification said the President's Secretariat owed it Rs 21.6 million, the Azad Kashmir government Rs 1.3 million and the Immigration and Passport Secretariat Rs 1.5 million.

Also, the chief commissioner's office owed Rs 16 million and the Senate office Rs 10.5 million to IESCO.

It said the Federal Government Hospital, Education Ministry and Punjab police were also among the defaulters.⁷⁸

IESCO undertakes periodic drives to recover its outstanding dues and at one of these times I spoke with Haroon, an older Line Superintendent in the Disconnection and Reconnection section of an Islamabad sub-division, about his experience in getting public sector organizations to pay their bills.

⁷⁷ Field notes May 7, 2010

⁷⁸ Daily Times. 15 November 2009

I ask Haroon if he was involved with the collection of bills and he says yes, but that it is the XEN and SE who have to deal with the large government customers.

IN: Do you go to them?

Haroon: Yes, but they tell me they don't have the funds and I come back

IN: Who can you get money from?

Haroon: those orphaned departments (*yateem*)⁷⁹, we can get them to pay. We aren't allowed to cut off the Police, the CDA streetlights, the CDA main office, or the Army.

IN: Is that a rule?

Haroon: Yes definitely that's an order. We can't just do it according to our choice (marzi). There's an order from above.

The army will make partial payments, perhaps 60,000 on a bill of 100,000. They always clear everything in June. [June = end of fiscal year]. In June they take whatever money they have left and pay off the WAPDA bills. They know they have to pay WAPDA ("dehna hi dehna hai"). Plus it is not from their pocket - the government is paying to the government. So they clear the bills. 80

Haroon presents IESCO's dealings with the army — which in this case will be any one of many military organizations with offices in Islamabad — in terms of the power dynamics of the Pakistani state and the unassailable primacy of the army. The army cannot be browbeaten or threatened into paying its bills on time — that is only for "orphaned" departments lower down in the heap of Pakistani state organizations. Yet IESCO does have enough clout that it must eventually be paid, though occasions when IESCO has disconnected the electricity supply to the CDA, police or some military offices are rare. As Haroon rationalizes, it's not as if they're paying out of their own pocket. Haroon understands payments between state

⁷⁹ When I asked a higher education official who complained to me of high electricity bills why he simply didn't pay, he responded that 'the universities can't play that kind of game.' Field notes May 7, 2010

⁸⁰ Field notes July 13, 2010

organizations as being conceptually different to private consumer payments. When I ask him if there will be late charges on the arrears he flatly says "No," because 'the government doesn't charge late fees to the government.'

On another day I hear Farid Sahib, the SDO in the sub-division where Haroon works, on the phone regarding the disconnection of the electricity meter of a Director of Finance for an unspecified public sector organization:

I can't just disconnect the meter of the director finance like that.

•••

I've been authorized to cut off your meter.

So send me that voucher.

Sir, just send me something [voice rises in pitch] so that I don't have to cut off your meter.⁸¹

Farid Sahib is going out of his way to avoid the confrontation that would doubtless occur if he had to confront a senior bureaucrat and compel their compliance.

Abbas, a senior officer at LESCO explains the functioning of WAPDA's successor organizations in terms of the society they are in:

"The development of a society, in all sectors, goes side by side. Can't have one institution on U.S. or European standards and the others are on subcontinental standards. They either all go up together or not at all. WAPDA is an integrated department of the government of Pakistan. If you think WAPDA can elevate itself from the *gund* (dirt) and become a super institution, it can't happen. We all live in the same country. It isn't possible."

⁸¹ Field notes July 13, 2010

IN: But what about the motorway police?⁸² They are the same people as in the normal police, but they function well.

Abbas: You might think you know the motorway police but you don't know them like I know them. I was posted to [location] as a punishment while I was an SDO. It's on the motorway, 100 km from Lahore. I was afraid that I would have to leave my job because I couldn't afford to go there every day, but a colleague told me that it would be no problem. Here's what I did. Every day I got on a motorway bus for free. I got off on the motorway, walked across the motorway to the motorway police's facility. They received me there and gave me tea. My car was parked there – illegally – and I drove it out of a back gate – which they are not allowed to have – and went to my job. When I came back I would park my car inside the compound again. They would give me tea and we would talk. They would flag down a bus, have them seat me for free, and I would return to Lahore. Every day. Except Daewoo. I never went on the Daewoo buses.

What they do for their own relatives I can't speak about.

Sometimes I would drive my car from there to my house.

IN: but you need a motorway ticket at the other end. [exiting the motorway involves presenting your entry ticket at a toll plaza]

Abbas: "They would give me a fake ticket from the nearby entry point. The motorway police won't stop a bus, but they are better than the normal police. They'll stop a general to show it [their enforcement of the law]. The motorway is a very small area. You can watch it closely. You can't see what happens in the WAPDA system."

"Their mentality can't be changed. Their social relations (talugat) can't be changed."

"They obliged me because I am a WAPDA officer. I could take care of them with their electricity and help them should there be any small problem. They take care of people from government departments (*mecma*), who can oblige them." 83

Abbas' experience with the motorway police shows a reciprocal exchange of favors facilitating a systematic subversion of the rules that those departments are supposed to

The motorway police are widely regarded as being one of the few non-corrupt institutions in the country. Their salaries are 50-75% higher than those of comparable bureaucrats, but Noor (2009) attributes their superior performance to social disapproval and expectations of fair dealings within the organization.

⁸³ Field notes March 24, 2010

uphold. The motorway police violate the rules of the motorway in exchange for preferential treatment with their electricity supply. Abbas makes no apologies for having the motorway police break their rules for his benefit. His livelihood was at stake, and his reciprocation was not beyond what he would have done for any other public sector organization – many times without as much benefit to himself.

Abbas later told me a story of a run-in between a low-ranking officer of the Federal Investigation Agency (a branch of Pakistani law enforcement) and the LESCO officer who caught him for stealing electricity. The conflict resulted in several arrests and raids on LESCO equipment stores when the LESCO officers insisted that the law enforcement official pay the fine for stealing electricity. I related the story to Maqsood Sahib, who was working in a PEPCO⁸⁴ headquarters. He nodded along, then gave his own example:

A Hyderabad excise man was caught stealing electricity. The SE [Superintendent Engineer, two levels in the hierarchy above an SDO] who caught him was very hardline and insisted on the fine being paid per the procedures. The excise man explained that he was with customs and excise and asked that the SE let him off. The SE refused.

"The very next day the excise man impounded every single HESCO vehicle in Hyderabad. None of them had paid tax. None of them ran according to the rules. If you try and hold any of them [government departments] to the rules then they will get you back!"

Relations between public sector organizations in Pakistan are as informal as those of the dealings with private consumers. There is an expectation among public sector organizations that the rules do not apply to them, nor are payments between them real money. Should these norms be violated in an attempt to apply these rules then conflict

⁸⁴ The Pakistan Electric Power Company, the parent company of regional distribution companies such as IESCO and LESCO.

arises, even overtly, with state sector employees using the power of their positions to attack their rivals⁸⁵.

The list of powerful consumers includes both public sector entities and private consumers. Their distinguishing feature is in the response that they get from the staff of IESCO who find ways to accommodate their needs. There is a shared expectation between powerful consumers and IESCO staff that failure to satisfy such a consumer will lead to negative consequences.

The codified rules of IESCO are, in true Weberian (Weber 1991 [1925]) fashion, legalistic, impersonal, and rational. The rules apply to everyone, are to be implemented without reference to the personal standing of the official or the consumer, and rational in that the written rules are publicly stated in advance. The rules of IESCO's bureaucracy are thus in conflict with a social setting in which it is expected that powerful consumers must be accommodated. These shared expectations are underpinned by a power structure in which resources are unequally distributed. The work that IESCO employees do in serving powerful consumers heads off destructive conflicts in which they would probably come out worse.

3.6 Resistance and Conflict

Conflict between IESCO employees and private consumers can escalate from verbal abuse to physical attacks. In the office of one of the less wealthy subdivisions of Islamabad a

Disagreements and rivalries among state organizations are by no means unique to Pakistan. Graham Allison's *Essence of Decision* (1960) had a model of bureaucratic decision making as politics – time bound, personalistic and rivalrous. Nor was Robert Moses, the driving force behind so many New York City public works, any stranger to working outside the rules (Robert Caro 1974).

fight broke out in the hallway while I was there. A customer had hit an IESCO officer (Qasim) after an argument over a disconnected meter.

Qasim describes the customer's case to me. An ERO (Equipment Removal Order) was issued on the 6th of January. His meter was removed on Feb 1st. The ERO affected letter was issued on Feb 26. On March 31st (today) the customer has come to say that the bill was paid, but didn't have the bill with a payment stamp. He demanded that Qasim complete the RCO (Reconnection Order) process for him. Qasim told me: "He had a beard so I only said 'Step away'" [after the customer started to get aggressive].

The customer then demanded that Qasim issue a statement on stamp paper⁸⁶ saying that he had paid. When Qasim refused, he then slapped Qasim in the face. This led shortly to the commotion which drew out all of Qasim's colleagues and ended the confrontation.⁸⁷

Once the letter reporting that an ERO has been affected is issued, the customer must go through the lengthy RCO process to get their meter reconnected. Prior to that letter being issued a customer need only settle the bill. Qasim deviates from procedure (strictly speaking the letter should be issued immediately on removal of the meter) because the disconnection of the meter frequently prompts a customer to settle their bill quickly. In this case the customer claims to have paid the bill in the window between the meter's physical removal and the issuance of the letter, but has no receipt to back up his words. Qasim's mention of the man's beard is a reference to the perceived piety in keeping a beard – he doesn't want to fight with a pious person. Qasim was saved from having to fight back himself by the intervention of his colleagues. After the disturbance everyone returned to

⁸⁶ A notarized statement

⁸⁷ Field notes March 31, 2010

their offices and work in less than two minutes. The altercation which had just taken place was an unusual occurrence, but one which Qasim's colleague Jaffar could relate to:

Jaffar said that if that had been him he would have hit the customer. Jaffar tells me the story of someone doing that with him. Jaffar said that he listened to a few threats from a man who had identified himself as the subordinate of an SP [Superintendent of Police]. Then he took both him and the SP and "threw them both outside." Jaffar laughs softly. "I punched him very hard." [Jaffar is tall and broad shouldered. Qasim is short and round.]⁸⁸

Violence is certainly not part of the job description of IESCO employees, but it is part of the experience of the job.

An IESCO employee who had been sent to Europe for training told me of a conversation he had with someone from a Scandinavian electrical utility on the same training course. On being told that Pakistan has terrible problems with the theft of electricity the Scandinavian man was confused: "How do you steal electricity?" he asked, simply not comprehending what that would entail. In Pakistan the theft of electricity occurs when consumers don't pay for the electricity they receive. The theft of electricity is a subset of what are known as line losses – the amount of electricity entering a system which is not paid for. While the rule of thumb is that 10% losses are unavoidable "technical losses," Pakistani distribution companies had line losses of 22.63% in 2009⁸⁹ on aggregate and the individual distribution companies ranged from 11.8% line losses in the Faisalabad Electric Supply Company (FESCO, serving an industrialized portion of the Punjab province) to 45% in the Peshawar Electric Supply Company (PESCO, serving Khyber-Pakhtunkhwa province in

⁸⁸ Field notes March 31, 2010

⁸⁹ Excluding the Karachi Electric Supply Company (KESC). Source: Power System Statistics 2010.

the North-West). The non-technical component of line losses are essentially theft, and they can be substantial.

The standard conception of electricity theft in Pakistan is what is known as the *kunda* (literally a hook), meaning a line drawn down from overhead electrical wires which does not go through a meter. An advertisement produced by PEPCO as part of a public campaign against electricity theft pictures an employee of the utility unhooking an illegal connection of this type. ⁹⁰ In central urban areas such illegal connections are rare. A Lahore Electric Supply Company (LESCO) executive tells me that:

'Within Lahore city there is no *kunda*. In villages and suburbs, isolation allows kunda. They get warning of a checkup and then they take it down. *Kunda* works in tight knit communities where there is solidarity. We can only respond by switching off the whole feeder which punishes all people in the community.'⁹¹

In Islamabad as well where line losses are typically 11-12%, the only place you can find *kunda* connections is in the village of Golra on the outskirts of Islamabad. Golra is administratively in Rawalpindi despite effectively being part of Islamabad. It has none of the planned layout of Islamabad and its electricity lines run overhead above narrow winding streets quite unlike the well-spaced roads of Islamabad's planned residential sectors. In Golra line losses are closer to 30%⁹² and the IESCO staff can't prevent *kunda* connections when the lines run directly over or close to rooftops where they can neither monitor nor

⁹⁰ Available at: http://www.pepco.gov.pk/images/kunda.JPG Accessed on September 15, 2010.

⁹¹ Field notes March 27, 2010

⁹² Interview with an IESCO employee.

access the power lines. In the standard narrative, *kunda* connections in places like Golra are too numerous to be controllable.

Theft can also take place through a legal connection if the meter is tampered with.

When I asked Tariq, an IESCO Line Superintendent for Detection (with responsibility for monitoring theft), how this was possible he ran through the following list:

Tilt the meter. Slows down the operation.

Artificial earth on the meter connection. The meter stops, but electricity is passed through.

Slow the meter down.

Loop system (the connection to the house is somehow looped around the connection to the meter, so it isn't measured).

Power factor. Tariq describes a connection which reduces the count of the ampere passed through by means of a device which manipulates the power factor. He says that this occurs with industrial connections.

Magnets.

Attach a screw to the dial. It slows.

Make a hole in the body of the meter, stop the disk.

I asked Tarig if he can't easily identify the stopped meters. He said that:

'They are always just a little ahead of us. They'll allow 300 rupees of consumption rather than 500. We learn new methods of theft from the thieves - they are always coming up with new techniques.'93

The manipulation of electricity meters has even made its debut in Pakistani literature, with one rural electrician character being famed for "a signature ability, a technique for cheating the electric company by slowing down the revolutions of electric meters, so cunningly done that his customers could specify to the hundred-rupee note the desired monthly savings"

⁹³ Field notes April 7, 2009

(Mueenuddin 2009: 13). The manipulation of electricity meters and the *kunda* system have in common an opposition to the electrical utility and its employees who must be outwitted and avoided.

An important companion to theft is overbilling, a process through which one meter's electricity consumption will be under-reported and instead added to the bills of various neighboring houses. Overbilling is significant enough that when the new LESCO CEO in 2010 made a concerted effort to eliminate overbilling LESCO losses increased 2% within three months. ⁹⁴ Note that losses increased because the theft itself wasn't stopped, only the attempt to compensate for those losses. The role of the meter reader is central to overbilling because they manually note down meter readings. Hajji Sahib is a meter reader whom I joined on his meter reading rounds.

Hajji Sahib tells me about an English consultant who came to IESCO years ago. Hajji Sahib says that his first question was 'how much is the salary of the meter readers?' On being told, he simply said 'goodbye.' Hajji Sahib describes the argument that you can't expect a company to function well and avoid corruption when you aren't paying people decently.

IN: 'How much would be enough?'

Hajji Sahib: 'Look at the Motorway police. They are paid Rs 25000 per month and have an easy life'

"kis nay apna khabr ganda karna?" ("who wants to dirty their grave," to dishonor themselves and soil their legacy). 95

Hajji justifies his own – unspecified – misdeeds as a meter reader with reference to his poor paycheck. The moral dimension of his behavior is clear to him:

⁹⁴ Interview with a LESCO executive. The anti-overbilling drive couldn't be sustained because of these additional losses.

⁹⁵ Field notes January 23, 2009

Hajji Sahib describes his return from the Hajj, which was an awesome experience for him. He 'swore to stay straight', 'made a careful budget,' 'no swearing and no sharartain (literally naughtiness, but he's referring to corruption in his work), and he stuck to this for a month. The prices rose on basic goods and he went back to 'being shararti.'96

Hajji Sahib is not the only one aware of the moral consequences of participating in the theft of electricity. In the Ministry of Water and Power I spoke with a retired military officer who was now working in the ministry. When we agreed on electricity theft being the domain of the rich and powerful he said "Look at me: I'm an educated man, I'm wearing a suit and tie, I steal electricity." The retired officer acknowledged that a man of his education and position should do better, but that he stole electricity because he could.

3.7 It Works Both Ways

The limited ambit of the codified rules of the state form only a small part of the rules of the game, as the previous sections have argued. This should not, however, be viewed in a purely negative light. On many, many occasions I've seen or heard about IESCO employees working to make their underfunded distribution network continue to function despite their lack of resources and the danger.

Transport is a constant problem faced by IESCO employees. There are too few official vehicles to get them around the area that they work in, and there is not enough money to pay for the fuel consumed by these official vehicles. In the case of meter readers, they arrange for their own transport from the sub-division office where they will start the day to the location where they will do their allotted meter readings for the day. This transport can take a variety of forms. I shared a cab with four meter readers one sunny

⁹⁶ Field notes January 23, 2009

morning (6 adult men inside an 800cc Suzuki). With another meter reader we took a wagon (a privately operated bus route) in which we were joined by someone taking a chicken home from market. With another meter reader I rode pillion on his motorbike. Transport costs for a meter reader will easily add up to Rs. 1000 per month out of a salary which may only be Rs. 6000 a month. Wasim sahib, a line superintendent of maintenance, was constantly driving off to supervise fault repairs in his beat-up car. Without these IESCO employees arranging their own transport there is no way their system could function.

Basic equipment is rarely available at IESCO in sufficient quantity or quality. Two line superintendents in charge of maintenance described buying tools such as axes for their workers themselves. Helmets and boots are non-existent, and ladders a rarity. I've seen men climbing up a pylon wearing plastic flip-flops without any ropes or ladders or protective equipment. From July 2009 to June 2010 IESCO had 12 fatal accidents among its linemen (USAID 2011: 30). Like many Pakistanis, IESCO staff are forced to take risks that could be avoided with more money and better equipment.

This role of IESCO staff in trying to do their job despite the missing equipment and dangerous conditions is recognized by consumers at times. An professor at a public university told me about the following events he had witnessed near his home in one of the nicer Islamabad neighborhoods:

Professor Nadeem says that some time ago there was a loud bang on his street and the door of the transformer housing was blown away never to be seen again. The transformer on his street had burned up. The maintenance people came after a while and he spend some time observing them. Professor Nadeem "They couldn't afford a new one so they had to repair this one. The lineman got some old newspaper from the neighboring houses and they made a small fire which they used

to heat the cables they were joining together. I looked at the leaflet of maintenance instructions that they had and it described how everything was to be done, but they didn't have a blowtorch or any of the tools that were described in the leaflet."

IN: One thing I'll say in their defence is that they don't have money for spares or the equipment they need, but somehow they do what they need to do. They don't follow the proper procedures, but they'll get a result which is close enough.

Professor Nadeem: I agree. They adapt themselves to working with these limitations and we adapt ourselves to living with the constraints of the electricity supply.⁹⁷

Focusing only on the negative aspects of informality doesn't do justice to the risks taken and efforts made by IESCO staff. Formal procedures and regulations are not the major determination of what work gets done or how it gets done. The positive aspect of this approach is that when the IESCO staff are on the job, they routinely look to overcome the lack of resources and equipment to which they are entitled.

3.8 Conclusion

The everyday experience of securing service delivery reveals how the cultural norms and expectations of behavior in state service delivery leave little room for the operation of formal rules – rules which it is neither possible nor desirable to observe. Based on the interviews and observations of my fieldwork I show how the rules of game in service delivery are shaped by language, power, rents, and violence as much as they are by the codified rules supposedly governing service delivery. Neither the rulebook nor social reality on their own define the rules of the game, which are instead mutually constituted by the interaction of the two.

⁹⁷ Field notes April 7, 2010.

If governance reforms are intended to achieve superior development outcomes by changing the rules of the game then they need to be based on an accurate understanding of what those rules actually are. The unwritten aspects of the rules are just as important as the written, though they may be harder to change. Focusing on changing written rules has the advantage of being well suited to a technocratic mindset and a top-down administration. In Pakistan, as with many developing countries, an important cause of poor service delivery is the ineffectiveness of internal administrative mechanisms. Bureaucratic commands are simply not fulfilled, though the paperwork may suggest compliance. Because behavior in public service is not effectively governed by the rules, changes in those rules are unlikely to bring about the desired changes in behavior.

Recognizing the role of culture in constituting the institutional field of governance along with codified rules can form a basis for governance reforms which are attentive to a specific situational context. In the Pakistani case, a focus on the formal representations of the state as they are codified and reported would doom reforms from the start as they would not engage with the reasons behind the inefficiencies of the institutional field as it stands. If development is to be achieved through the institutional reforms of governance, reforms must be based on the state as its citizens must engage with it for service delivery and not as the state would see itself.

Electricity consumers in Islamabad secure service delivery by showing up in person, paying IESCO employees for their assistance with improper and proper work, by enforcing their will, and subverting official procedures or even fighting for what they want. The formal

edifice of codified rules can only be accessed and navigated through informal channels and in person. When the rules of the game are understood to incorporate culture and power, then helping citizens navigate the rules of the game becomes an inherently political exercise. Instead of reform focused on codified rules, reform must focus on information, collective bargaining, and the avenues available for getting the state to respond which are specific to the context in question.

Chapter 4

State Service Delivery at the Margins

electrical utility. The study is centered on the experiences of a *katchi abadi* (informal settlement without documented land title) in central Islamabad. The myth that communities such as *katchi abadis* or favelas was exposed long ago (Perlman 1976). Anthropological literature on marginalized communities such as this *katchi abadi* characterize them as a place to study the state in formation and indicative of the functioning of the whole (Das and Poole 2004). My research supports that contention, finding similarly personalized processes of negotiation and informal practices in the *katchi abadi* as in the surrounding neighborhoods with well-established land titles. Where the experience of the *katchi abadi* is more unusual – though not unique – is in the active role of representative bodies in negotiating with the state and even substituting for some of the functions of the distribution company. The extreme limits of that trend can be found in a few residential communities where the neighborhood authority has taken over the management of the distribution system.

4.1 State Services as a Driver of Development and a Snapshot of the State

4.1.1 Importance of Service Delivery to the Poor for Development Outcomes

The centrality of poverty reduction for development was cemented in the adoption of the millennium development goals, with poverty understood as a multi-faceted concept in line with Sen's (1999) formulation of development in terms of freedoms and capabilities rather than simply a measure of income. Consequently, addressing the shortcomings of state service delivery for pro-poor development is a crucial issue for development practitioners, as reflected in the World Development Report 2004: Making Services Work for Poor People:

"Too often, services fail poor people—in access, in quantity, in quality. But the fact that there are strong examples where services do work means governments and citizens can do better." (World Bank 2004b: 1)

The electrical power sector is an appropriate arena for studying how citizens make claims on the state in Pakistan because it is a critical component of modern life and is recognized by Pakistanis as such. The World Bank (World Development Report 2004b: 1) includes it amongst "those services that have the most direct link with human development—education, health, water, sanitation, and electricity." Electrical power is a basic requirement for private life as well as commerce and industry. In the wealthy nations of the global north the availability of electrical power is rarely not in abundance, but in Pakistan there is currently a drastic shortfall of supply. The entire country experiences multiple hours of power outages every day. Pakistanis are paying a lot of attention to

electrical power at the moment, and, because electrical power is – with a few exceptions⁹⁸

– a state service in Pakistan, Pakistanis are making demands of the state towards its
provision.

4.1.2 Studying the State at its Margins

A second literature to which this essay seeks to contribute is the anthropological literature on the margins of the state (Das and Poole 2004) which also deals with the encounter of the poor with the state in the global south. As with the practitioner oriented development literature, the urban elites are largely absent as the focus is on peripheral people and places far from the core of state sovereignty. However, these margins are argued to be critical to understanding the state because "margins are a necessary entailment of the state, much as the exception is a necessary component of the rule" (Das and Poole 2004: 4). Further:

"Because the state project is always an unfinished project, it is best observed at the margins, but these margins are not simply peripheral places – they run into the body of the polity as rivers run through a territory." (Das 2007: 183)

Although the core of the state is rarely directly mentioned, we are to understand the margins not as "sites of disorder where the state has been unable to impose its order" (Das and Poole 2004: 6), but indicative of the functioning of the whole as well.

Das's only explicit statement regarding the core itself is an aside:

"My intention is not to romanticize these practices [of bribery, stealing state services, and links to the underlife of politics] – for very similar processes operate in

⁹⁸ The main exceptions are the city of Karachi, large industrial facilities with independent power generation facilities, and small diesel powered generators used in large homes or in shops in case of power failures.

upper income neighborhoods in which bribes are offered for stealing of electricity or running of factories in residential colonies – but under the conditions in which residents of *jhuggi jhodpi* colonies⁹⁹ live, such negotiations become necessary to ensure economic survival." (Das 2007: 174-175)

If indeed similar processes do operate for urban elites as well as the poor then this has serious ramifications for the pro-poor development agenda in that there is no formal, legible, and rational core to the state from which to expand, only the concentration of power which allows urban elites to secure favorable outcomes. Focusing on the urban elites also serves as a kind of check on the claims made in the margins literature to see if the implied message about the core is actually accurate.

4.2 Electricity Supply to Katchi Abadis

4.2.1 Katchi Abadis in Islamabad

One feature of note is that the residents of *katchi abadis* in Islamabad are primarily Christian and moved to Islamabad from central Punjab (Rasool 2010). The origins of these *katchi abadis* lies in housing for construction workers during the mid-1960s when Islamabad was being built. Katchi abadis now amount to an estimated 30% of Islamabad's 0.8 million residents (Rasool 2010). Since then, several of Islamabad's *katchi abadis* have formed around housing for the lower income staff (especially sanitary workers) of the Capital Development Authority, Islamabad's municipal corporation. These low income and low status jobs are consistent with ill-treatment of Christians which is commonplace in Pakistan. Christians are a minority group in Pakistan, constituting 1.59% of the total population in

Jhuggi jhodpi colonies is a term for informal squatter settlements in India. In Pakistan they are usually known as katchi abadis.

1998.¹⁰⁰ Some of the worst acts of religious persecution in recent Pakistani history have been committed against Christians; the arrest for blasphemy of a 14 year illiterate boy accused of writing slogans against Islam is one such example.¹⁰¹

Their status as a stigmatized minority group only underscores the difficulties faced by the *katchi abadi* dwellers of Islamabad, yet – their very real troubles notwithstanding – they have still managed some successes in terms of recognition by the state. Eleven of the 34 *katchi abadis* in Islamabad are notified for regularization per the Punjab *Katchi Abadi* Act 1992, the criteria for which is that they had more than 40 households before 23rd March 1985. Regularization leads to a formal lease of the land and access to all state services for the occupants of the *katchi abadi*, but is not without some drawbacks. For the Capital Development Authority to regularize the 44¹⁰² Quarter *katchi abadi* where I did most of the fieldwork presented in this chapter, regularization would involve planning the housing of the *katchi abadi* so that it conforms to building standards and thus contain fewer housing plots. Which households would not be accommodated, and where the surplus households would be relocated to, are points of contention that have stalled the regularization process since the proposed relocation site is unacceptably far from Islamabad.

¹⁰⁰ Pakistan Census 1998. Available at http://www.statpak.gov.pk/depts/pco/statistics/statistics.html

The blasphemy case against Yousaf Masih is documented in the US Department of State's *International Religious Freedom Report 2007* for Pakistan. Available at http://www.state.gov/g/drl/rls/irf/2007/90233.htm.

¹⁰² Several of the Islamabad *aatchi abadis* are known by the number of quarters (residences) for government employees around which the *katchi abadi* sprung up. No real names of *katchi abadis* are used here.

4.2.2 Electricity Theft in Islamabad

Stealing electricity describes any activity whereby the consumer does not pay for all the electricity they consume. At an aggregate level the distribution company records transmission and distribution losses meaning the difference between the number of units (kilowatt hours) received less the number of units sold. The simplest version of electricity theft, and one which has entered common usage, is the *kunda* – a naked wire hooked to an overhead electrical line which bypasses any consumer electricity meter A crucial distinction lies in the role of the distribution company employees in the theft, whether they know about it and whether they benefit from it. Some *kunda* connections are hidden from view and have not been discovered by the distribution company employees. Urban areas with overhead lines such as Golra village on the outskirts of Islamabad are a prime location for such *kunda* connections. According to an IESCO employee who has worked in the Golra area:

'Line losses are 30% in Golra. The transmission wires run overhead, so someone will pull it onto their roof, and attach a wire. The *kunda* system. We can't check people's roofs because that will "straightaway make a police case." The property owners don't let us onto their roofs.' 105

The hidden *kunda* from which distribution company employees get no benefit is only one form of electricity theft.

¹⁰³ Selling a unit means that it is billed to a consumer. Collections were 88% of units sold for the 2010-2011 fiscal year.

¹⁰⁴ The term *kunda* can also be used for any kind of illegal tapping into the distribution system, though it originally refers specifically to the hooked connection described here.

¹⁰⁵ Field notes March 2, 2011.

Other *kunda* connections are plentiful and in full view, but the distribution companies are not willing to challenge the local residents to remove them. Such situations are more common in Karachi where local politics are frequently violent, but less so in the Punjab and are unknown in Islamabad. Even in Islamabad though, some consumers remain untouchable when it comes to theft. In an urban subdivision of Islamabad, one of several mosques illegally constructed in designated green belts was thought to be stealing electricity. The subject arose in a meeting of the sub-division officer, Farid sahib, with Salman, his line superintendent in charge of disconnection and reconnections:

Sajjad [second in charge of the meter reading department] brings a bill to Farid sahib while Salman is sitting there. Sajjad suggests that the meter is sticking and the readings are wrong. Sajjad says that this is at a mosque - he says which one.

Farid sahib (to Salman): 'you know which maulvi this is? The masjid is built on [qabza, illegal occupation] green space. Musharraf couldn't shift him, Zardari couldn't shift him.' "bouht khatarnak hai" (he's very dangerous).

Sajjad: 'We should put a check meter on'

Salman: 'A check meter? I have enough to do without running into this guy. [Farid sahib and Salman talk over each other at this point, with Sajjad laughing]

A check meter is a second electricity meter introduced in sequence with the original as a theft detection measure. Check meters are also installed in response to consumer complaints regarding excessive bills so that the distribution company can verify that the meter is accurate. When a check meter is installed without a consumer complaint, however, that is an indication that the distribution company employees suspect the consumer of theft. Salman is very conscious that accusing a mosque of theft, and a mosque so politically powerful that it's leader can resist the will of presidents at that, is not a prospect that has

much attraction for him. In such cases the theft is known, but the distribution company employees feel overmatched in challenging the thief and fear the reaction.

Organizational backing is an important determinant of the willingness of IESCO employees to clamp down on theft. In 1998 the Pakistani army was invited by the then Prime Minister to take over management of the state-run electricity sector. The army's mandate included reducing theft, and made several interventions intended to serve that aim. Yousuf (an experienced IESCO Line Superintendent in charge of detection) and Mumtaz (Yousuf's subordinate), relate to me some of their experiences in working with army officers attached to the distribution company:

Yousaf describes how a major once sat with him and they sent bills in lakhs of rupees to "barray generaal" (big big generals).

Mumtaz: 'That's what I was saying to you. We need proper backing if we are going to tackle people like that.' [Language: Back is used in english, the rest is in urdu. It means support, or backup - but with authority and power to complete the task at hand].

I clarify that this was in 1998 and 1999 when the army was running WAPDA.

Yousaf: 'The brigadier protected the staff. The havildar [sergeant] protected us. When there was a problem, he backed us.' 106

The lower staff felt empowered by the army presence to challenge those they would have otherwise been wary of – including senior army officers. Wasim sahib, a long-serving IESCO line superintendent remembers the army's involvement with IESCO very well. A major accompanied the sub-division officer on his tasks, even sitting in his office, and soldiers (*sipahi*) were deputed to accompany IESCO staff on all their activities.

¹⁰⁶ Field notes April 9, 2009.

At 12 noon sharp their lunch truck would come and - whatever they were doing - the Army guys would drop their work and eat. 'Even they are better than us. They eat on time. We can't even pray on time. They made money, ate and drank, and left'. ("Paisa bhi kamaya, khaya piya bhi, or challay bhi qaey")¹⁰⁷

The fact that the soldiers were fed is a primal but consequential separation from their IESCO counterparts whose spiritual and physical needs are not recognized and catered for. In Wasim's eyes it underscores a basic dignity denied to IESCO staff. Ijaz, an IESCO line superintendent in his late twenties in Islamabad's rural fringe, terms it a lack of respect:

'We don't give less service (khidmat) than the army. Without water or the phone people can get by for a while, without electricity you can't. We need/want that respect. Like the army.'108

The message from multiple IESCO staff was the same: back us and we'll enforce the rules, but don't expect it if we aren't supported. IESCO staff noted which Brigadiers dealt fairly with them and which did not.

4.2.3 How Katchi Abadi Dwellers Get Electricity

One of my key informants in 44 quarter is Shahbaz¹⁰⁹, who – like almost all the residents of 44 quarter – is Christian. Shahbaz is approximately 35-40 years old and is married with children who attend the public schools near 44 quarter. Shahbaz is quite short and slightly built. Shahbaz's home is in 44 quarter. It is a three story brick and cement building which has not seen any new paint in some time. The streets of 44 quarter are uneven, sloping and packed dirt. A tiny uncovered drain a few inches wide runs in front of the houses on Shahbaz's street. I can touch both sides of the alley at the same time. Near

¹⁰⁷ Field notes February 20, 2009.

¹⁰⁸ Field notes April 9, 2009.

¹⁰⁹ A pseudonym, as are all the names of 44 quarter residents used in this chapter.

Shahbaz's front door is an electricity pylon on which I've seen a barefoot boy of about five climbing and playing. The pylon carries a live electrical wire, but isn't itself electrified. It would be incomprehensible and unacceptably dangerous for this situation to arise in the United States or Western Europe. Children of very young ages are everywhere, usually playing unattended. I am often passed by bicycles and motorcycles on this street when I visit. Men and women are often talking on the street, frequently congregating around doorways which seem to be open more often than not. Shahbaz and his wife and children live on the ground floor of their house, and other members of his extended family live on the upper two stories. The two rooms on the ground floor are a living room and a bedroom. The floor is bare cement. The ceiling is perhaps seven feet high and gives me a distinctly claustrophobic feeling when I stand. There is a small fridge in the bedroom – that is the only visible appliance.

According to Shahbaz, the type of theft occurring in *katchi abadis* in Islamabad occurs with the participation of the distribution company employees. Shahbaz tells me that "The same money, instead of going to WAPDA's treasury went to police and WAPDA staff." Shahbaz says that the distribution company employees were paid off to leave illegal connections alone, as were the police. Although I found no distribution company employees admitting to their participation in this theft, many of them accepted such arrangements as being relatively common. Without overhead wiring in their neighborhood, it wouldn't have been possible for the 44 quarter to hide their *kunda* connections 111.

1.

¹¹⁰ Field notes March 19, 2010

¹¹¹ It is much more difficult and more dangerous to connect to an underground electricity line.

Located in the middle of a residential area, the 44 quarter is too visible to avoid scrutiny and they would have been exposed to demands for bribes to maintain their illegal connections or else faced the threat of punitive action for which they are relatively easy targets given their minority status. The *katchi abadi* has been served by undocumented connections for most of its history.

44 quarter's illegal connections were forcibly taken down in an army-backed intervention in 1998. The army's role in power sector management came about at the invitation of the elected Prime Minister Nawaz Sharif. In an admission of his government's incompetence at public administration which foreshadows his own government's removal in the following year, Nawaz Sharif asked the Pakistan army to take over the management of public distribution companies in order to reduce theft. IESCO and the other distribution companies had serving army personnel assigned to them, including at senior management levels. The chief executives of the distribution companies were replaced by brigadiers on deputation from their usual military assignments.

The residents of 44 quarter responded to the disconnection of their electricity supply by forming a committee to approach the brigadier in charge of IESCO. The gist of the argument they put to the brigadier was that if they weren't allowed *kunda* connections, they should be allowed legal connections. My informants at 44 quarter feel no qualms about the *kunda* connections. Shahbaz tells me that "It's our right [to electricity]. If you won't give it to us, then we'll take it like this." ("*Hamara right bunta hai. To aap nahin dain*

gain, to hum is taran lain gain.")¹¹² Another informant states that it is "inevitable, in this heat,"¹¹³ that people will get electricity connections however they can. The 44 quarter residents see electricity as something fundamental for decent living to which they too should have access, and their appeal to the brigadier was on largely humane rather than legalistic grounds.

The meeting of the 44 quarter residents committee with the IESCO brigadier went well. The compromised reached by the parties was for 44 quarter to be served by a few documented meters, but that all the wiring and management of the system beyond the meters would be the responsibility of the residents. ¹¹⁴ This decision served IESCO by ensuring that 44 quarter residents would pay for their electricity consumption, and met the needs of the 44 quarters by ensuring their electricity supply. The arrangements are distinctly an exception to the rules which define a consumer as "a person or his successor-in-interest who purchases or receives electrical power for consumption and not for delivery or re-sale to others, including a person who owns or occupies a premise where electrical power is supplied" (IESCO 2010: 4). The provision of electricity for delivery and resale to others is the job of a distribution company. The brigadier's decision contravenes these rules, but IESCO's consumer services manual limits service provision to applicants who can

¹¹² Field notes March 19 2010

¹¹³ Field notes July 28, 2010

While the distribution company's responsibilities always end at the consumer's meter, it is not usual for there to be anything other than household wiring at the other side.

provide "ownership proof of the premises" (IESCO 2010: 8) and thus cannot be provided to individual *katchi abadi* residents so long as the regularization process is incomplete.

The path to a legal connection for a *katchi abadi* resident requires a No Objection Certificate (NOC) issued by the Capital Development Authority which certifies that the applicant for the electricity connection is the legal owner of the land. An operations manager of the Karachi Electricity Supply Company (KESC) told me he wanted to see the law changed so that land ownership could be separated from the process of getting a legal electricity connection. He had argued for this change in national power sector reform workshops but without success. In his view – and that of the distribution company he works for – some residents of Karachi's squatter settlements will take up the offer of legal connections. Their payments needn't be complete or perfect to represent an improvement over the current levels of theft.

The illegality of the earlier *kunda* connections of the residents of 44 quarter is complicated. From the residents' perspective, they paid state officials for their electricity consumption and were denied legal alternatives. The distribution company employees and the police officers they paid kept that money personally rather than perform the duties of their offices. The culpability for the theft has to be shared.

In the absence of No Objection Certificates and legal individual connections the committee representing residents of 44 quarters accepted the compromise of communal

¹¹⁵ Field notes 4 October, 2010

metering. The residents of 44 quarter would be allowed a connection to serve them for which they would be given a joint bill.

1 transformer with an industrial meter was installed. NB the *katchi abadi* people paid for this transformer. They took Rs 1500 per house to pay for the transformer, and Rs 300 each to pay for the wiring in the *katchi abadi*. But they bought a very light grade of wire and it couldn't take the load and burned up. They patched it together with wires that people had, that they used to use for their illegal connections. Every month some money was put aside to fix the wiring. 116

The committee managed the process and the money for connecting the several hundred households of 44 quarter to the communal meter. Shoaib was a member of that committee (he mentions that the brigadier was a "very nice person" and tells me that his inclusion was on the grounds that he is considered educated (*purray-likhay*). Shoaib lives in 44 quarter and is employed by the residents' committee to manage the billing and maintenance of the electrical system.

The committee met for 2-3 days [prior to the negotiation with IESCO]. They formed a constitution for the committee (I asked to see this later in our conversation, he smiled and said that they made it once upon a time and that no one knew anything about it now).

The committee has a dozen people. I ask who is on it and how they were selected (select, in english, is the word he uses to indicate determination of committee membership). Shoaib says that there are 10 alleys (*galli*) in the community (*abadi*), and that for example in this alley there are 36 houses. In this way 2-3 people per alley are selected. (his numbers don't add up, but I don't press him). I ask how he would describe the people chosen and he says that they are the elders (*bozurg*) of the *katchi abadi*, people whom one respects (*izzat*). ¹¹⁸

Shoaib was chosen by the committee to collect bills. He explains his choice in terms of character, that he is as a *namazi* (someone who performs the five daily prayers) would be among Muslims. For 8 months he did this. Then the committee asked him

¹¹⁶ Field notes July 28, 2010

¹¹⁷ Field notes July 28, 2010.

¹¹⁸ Field notes July 28, 2010

to do this in a more formal fashion with time set aside every day for collecting bills, for which they pay him a salary.

Shoaib has in fact taken on many of the functions of the distribution company. He manages billing, collects the money, gives receipts, keeps records, and also handles maintenance in their electricity system.

The committee adds 30-40,000 to the bill to cover management, electricians (three), and Shoaib's bill collecting. 5-7000 is collected for monthly maintenance. In the summer rains this is nowhere near enough, but in the winter there is hardly any damage that requires upkeep.

Some people aren't charged the full amount. Widows, one blind person and one woman "who has no one." The several churches aren't charged. These are pentecostal and catholic. I ask why there are so many churches. Shoaib tells me it is because they are so small.

Shoaib does many of the same tasks as a sub-division officer would. He also handles situations where there is difficulty in paying bills. 44 quarter prints its own bills with instructions on the back for making payments. Paying on installments is not unusual, and sometimes the committee can reduce the bill somewhat. Strictly commercial arrangements are also not observed for churches and those individuals whom the committee deems needy and worthy of help. The amount of the bill is standardized based on an assessment of the household's consumption.

I ask how they determine the charges for each household. Shoaib says he knows every house on every street. They are "like a family." He knows everyone's name, and his paternal grandfather's (dada) name. We have no formality in going to each other's houses. Paying for extra facilities (fridge, a motor for pumping up water) costs up to extra 300 per month. 119

Shoaib is confident that he knows the ins and outs of every household. His deep local knowledge is essential to keeping the communal system going.

¹¹⁹ Field notes July 28, 2010

This sharing of a common meter is also present in 75 Quarter and 50 Quarter (two other *katchi abadis* in Islamabad where I interviewed residents), but their committees have been less scrupulous than Shoaib. Collection for the municipal electricity bill is handled by a leadership committee comprised of *katchi abadi* residents. Neither in 75 Quarter nor 50 Quarter was anyone able to explain how the current leaders obtained their position or describe what was entailed in being a 'leader.' Their inability to explain the nature of a leadership position suggests a lack of formalized process in becoming a leader, and the lack of a process for changing leaders. In 50 Quarter each household is assessed a standard rate of Rs. 700 (US \$12), which is raised to Rs. 800 (US \$13) if the household has a fridge. In 75 Quarter the fee is Rs. 1000 (US \$17) per household, but despite the higher charges the neighborhood has accumulated an arrears worth approximately two months of billing. One resident of 75 Quarter blamed the pastor of a church in the *katchi abadi* (who is on the leadership committee) for non-payment of the bill, suggesting that he was embezzling some of the money.

Even in 44 Quarter, the communal system has not always worked out well. The communal meter must be put in someone's name, which creates the opportunity for that person to take advantage of their position. Shahbaz tells me the following story based on 44 Quarter's first experience with communal metering in 1995.

¹²⁰ Field notes March 10, 2008. The exchange rate for the US\$ has since moved from Rs. 60 in 2008 to Rs 85 in 2011.

There is no good data on household incomes in *katchi abadis*. One resident mentioned an income of Rs. 8000 (US \$133) per month from working as a sweeper with the CDA, which is a high paying job for *katchi abadi* residents. The World Bank lists an annual Gross National Income per capita of \$770 for Pakistan in the *World Development Indicators 2007*.

The bill used to be shared out at the rate of about Rs. 900-1200 per HH per month. 3-4 people were selected to deal with WAPDA. A committee of about 20 people got together to choose the person whose name the meter would be put in. "That man had not even a cycle to his name. He was a government employee (*mullazim*), went to work wearing slippers. Now he has cars. He's become a big-shot (*Choudhry bun giya hai*)."

"This is Pakistan. (Yeh Pakistan hai). Who has money is king (badshah)." 44 Quarter residents brought legal suits against him, but "we'd talk and he'd use his money to get away free"

The communal system which now serves them well was once an opportunity for a member of their own community to exploit the residents of 44 quarter. The legal system offers them no recourse to justice against someone with substantial resources.

In their quest for the formalization of their land tenure rights and securing service delivery, the residents of 44 quarter have engaged with various political actors in a very pragmatic manner. Shahbaz tells me that "We're not with any political party. We work with whoever is in power."

I ask Shahbaz who helps them deal with the Capital Development Authority and the distribution company, and he lists politicians from just about every major party.

Aasim Sajjad Akhtar, an activist and academic, helps a lot in dealing with the Capital Development Authority. Akhtar says that the Capital Development Authority call the *katchi abadi* dwellers the *qabza* group, but argues that 'these people are Pakistanis, they're too poor to buy land, what's going to happen to them if you throw them out of their homes? If we can help a refugee from another country then why can't we help our own people?' Akhtar sets up meetings for them with CDA leaders. He mediates power for them.

Shahbaz describes Akhtar as a political leader, who, like all political leaders, gets power from the people who back him. ¹²¹

¹²¹ Field notes March 19 2010.

Through their different political contacts the *katchi abadi* dwellers bring whatever pressure they can to have the Capital Development Authority complete the regularization to which they are already committed. This engagement with political society is transactional in the sense that Shahbaz proudly tells me of how the 44 quarter residents secured a majority of votes for the candidate they backed at their local polling station.

The residents of the *katchi abadis* used the language of rights more than anyone else I spoke with in Pakistan. In the blunt terms of Shahbaz, a community leader and NGO worker, "With a meter you get rights."

We've spend hundreds of thousands of rupees (*lakhs*) on our houses, but there's no benefit. When you have rights, you benefit if you invest in your house. With a proper road you could get a car in. That would be very valuable.

After plotting only 300 houses would be possible. Some people would be moved way. The Capital Development Authority initially offered Alipur Farash, but that is too far away. Each HH has 3-4 earners to sustain it. Their jobs are in Islamabad, the commutes would cost too much. The Capital Development Authority board has the plan for approval. It's almost done. ("Takriban tai ho giya hai.") Shahbaz thinks it will go through in a week.

After plotting [regularization], everyone will get No-Objection Certificates. Each plot will have value. No problems with authorities in getting gas and electricity connections on our own.¹²²

Shahbaz is conscious of the material benefits that can accrue from formal land title. He hopes that the shady dealings with state officials will cease. The focus on formalization of their existing patterns of service delivery is a consistent theme which, in the eyes of *katchi abadi* residents, represents their escape from exploitation. Unfortunately, many of the

¹²² Field notes March 19, 2010

katchi abadi residents who have succeeded in getting a toe-hold in the world of formal rights via an electricity meter in their name have come to regret it.

4.2.4 The Uncertain Benefits of Formal Rights

Although IESCO's compromise with the residents' committee to provide electricity to 44 quarter through communal metering is a functional solution (every household in 44 quarter has electricity), it was always viewed as second-best by the 44 quarter residents. Since 1995, the 44 quarter residents have continuously pushed to try and regularize their katchi abadi and secure the right to have individual meters for electricity supply. A local NGO has been at the forefront of these efforts, chiefly in engaging with politicians and activists in putting pressure on the Capital Development Authority to complete the process in a timely manner. 44 quarter has been surveyed twice by the Capital Development Authority in 1995 and 2002. Households identified in the survey are noted with the Capital Development Authority as residences with rights to municipal services. Shahbaz tells me that for meters approved in 2002, the demand notices (the distribution company's equipment orders for the connection of new premises) were issued in 2007, and that is was 18 more months until the meters were finally installed in 2009. The money for these demand notices was given by a member of the national assembly out of their official budget for development projects. Shahbaz's explanation for the delay is that the distribution company employees resisted because it would reduce their monthly earnings from the communal meters. Nonetheless, Shahbaz and the 44 quarter residents' fight for individual meters had partly been won by 2009.

As some individual meters were installed in 2009, 44 quarter residents were told by an IESCO officer that they would regret it and that they would want the old shared meters back. That prediction was borne out in 44 quarter in many cases. An individual meter can be a mixed blessing as it requires a greater degree of direct dealing with the distribution company. The buffer from a communal meter is gone, and so are the protections which came with it.

Having a meter is by no means a complete solution to electricity woes as it opens up a new relationship with the distribution company based on the legal obligation to pay. The primary school next to the *katchi abadi* where the *katchi abadi* residents send their children has a meter, but found itself facing an unreasonable bill.

The headmistress tells me that they recently upgraded the school's electrical connection from a single phase meter to a three phase meter. When the meter was installed, it didn't have a zero reading and the linemen installing it didn't tell her or get her to note the reading. The first bill was for Rs. 29000. A typical bill is Rs. 2000-3000. She complained and they told her that this was the proper reading. She refused to pay. WAPDA insisted. She said she would have to requisition it from the directorate - she didn't have that much - and she wasn't going to do that. The WAPDA officer told her that it was the government's money and not hers, so why not just requisition it. She said that even if the money was approved she wouldn't give it to them because she hadn't used the electricity. However she tells me that at the same time she initiated a requisition request from the directorate to cover the bill just in case - but didn't tell WAPDA. That request was approved - but WAPDA stopped bothering her about the bill so she didn't give them the extra money. I ask if she knows if the case was settled or how WAPDA came to stop bothering her, and she says no. She has no idea why WAPDA isn't asking for the money anymore, and she certainly isn't going to stir that mess up if they've moved on. 123

The school was able to see off the attempt at extortion from the distribution company employees, but without a resolution to the case there is every chance that a future

¹²³ Field notes June 11, 2010

headmistress will have to respond to the same outstanding bill. Even for a government school – well established in the formal system – formal rights and an individual electricity meter are new opportunities for predation rather than a solution.

The experience of getting an individual meter for a house is described to me by Adam, a young man of about 21 who is working in a community based organization at 44 quarter. Also present are Noman and Asif, two young men who also work there. We are in the office of the organization they all work for at 44 quarter.

IN to Adam: Do you have your own meter as well?

Adam: We do. We all got it at the same time. But now we've switched to the second line.

IN: What do you mean by the second line? (I'm suspecting an illegal connection)

Shahbaz: You've gone back to the shared bill

Adam: Yes, we were billed too much and changed it back over. We got a bill for 12000 rupees.

IN: How did you use that much electricity? What do you have in your house?

Adam: We didn't use it! We have some energy saver bulbs and a fan. We don't have a fridge, we don't have a water pump. When my mother leaves the house every day she turns off the mains and we don't turn it back on until 4pm.

IN: So did you go to WAPDA?

Adam: Yes we went to WAPDA. But just like the motorway police they say to us "No excuse, no sorry", and they made us pay.

IN: Did you go to WAPDA?

Adam: Yes it was me. And Shaukat came too [Shaukat is a third young man, same age. He came in during our conversation and joined us].

IN: Did any of the elders of your family go?

Adam: No. I went. We tried to get Moeen sb (a community leader) to come with us, he said he would, but it didn't work out.

IN: did you go once?

Adam: I went 2-3 times.

IN: What happened in the office?

Adam: The first man I went to see sent me to another one. The next one sent me to another one. He told me that there was no meter assigned to our house. I said then how are we getting a bill? He told us that they'll check it out. That they'll come and see if the meter is working properly. They said there's a leak in our house, that the electricity is being wasted.

Shahbaz: How can you have a leak with electricity? This isn't a gas pipe.

Adam: They are taking the money from us in installments. And the next bill came to 7000. So we switched back to the shared meter, which is 1200 per month. And now our bill from the meter - which we aren't using - is 75 rupees.

IN: Installments won't save you.

Adam: No.

IN: But you can see your meter and read it yourself. Do you know how many units it consumed in that time?

Adam: Yes. It went from 40 to 58 units.

IN: In a whole month you used just 18 units?

[Something's up here. That's ridiculously little. In between he's mentioned a burned meter that was replaced before the huge bill came]

Shahbaz: The people who have their own meters are very careful. The ones who share it will waste electricity. because they don't have to pay. Look, now their bill has come down and they're using more electricity. What kind of meter do you have?

Adam: old style, not digital.

IN: That's too bad, the digital ones are supposed to be harder to tamper with.

Adam: Those can be altered too.

IN: Aren't you tempted to adjust your meters so that the bill comes back to normal?

Adam: I don't know how to do that. And if we did, our neighbors would all wonder what we're doing.

Shahbaz: You wouldn't do it yourself, you'd hire someone to do it for you. Or pay the lineman to make sure your bill is fixed. Pay him 500 so that your bill comes back down to 1000.

Adam: We haven't tried to do anything like that. We aren't the only ones. Our neighbors have complained about high bills too.

IN: There must be a form you have to fill in to complain about your meter.

Adam: I don't know what form it is. They didn't give me any form.

"We aren't educated enough" ("hum itnay purray likhay nahin hain") that we can deal with WAPDA.

IN: You went to school. Why do you need to be *parray-likhay* to deal with WAPDA?

Do you have your bill? I'd like to take a look at it if you don't mind. 124

Adam says parents aren't home, home is shut. But he'll show it to me.

Adam and his family were poorly equipped to handle the challenge of dealing with the state on its terms. Although Adam describes himself as insufficiently educated to deal with WAPDA, he tells me that he passed his Matriculation (10th grade) and, in conversation with me, is reasonably confident and able to express himself. Nonetheless, the opacity of the process at the distribution company office and the behavior of the distribution company staff is enough to deter him. Adam tells me that his family is resigned to paying this bill that they cannot afford and did not incur. Their retreat to the communal system is a retreat to a system where they will be protected from extortion by Shoaib and the other committee members.

A related experience to the abandonment of an individual electricity meter comes from some households from Islamabad *katchi abadis* who were relocated as a result of the regularization process. These families were given small plots of land in the residential

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¹²⁴ Field Notes June 8, 2010

sectors of Islamabad, including the relatively well-off area of F-10. These families took possession of the land, but most of them sold their properties and returned to *katchi abadis* in Islamabad (Rasool 2010: 20).

The choice to sell the land to which they had formal title in order to return to *katchi abadis* throws a different perspective on the value of formal rights and also the state's responsibility to continue to provide such regularization programs to *katchi abadi* residents. Matthew Hull (2008) reports a similar set of circumstances with villagers on the outskirts of Islamabad being compensated when they are relocated as a result of the city expanding, only to move to the next area where expansion will take place to seek out further compensation. The decision of the relocated *katchi abadi* residents to return to informality suggests that the program for their relocation was poorly conceived. On the other hand, these families were best placed to judge how to manage their resources, and their actions suggest that living with a cash windfall and returning to informality is preferable to formal rights.

4.3 Comparisons

4.3.1 Survey Evidence on Electricity Theft

Pakistanis from all backgrounds, and not just in *katchi abadis*, have consistently noted theft and corruption in the state run electricity sector. A USAID funded survey in 2010 found that between 17-22% of electricity consumers across Pakistan were aware of electricity theft in their area, and between 19-33% had ever registered a complaint regarding electricity theft (United States Agency for International Development 2011: 31-

32). 125 That more people had reported electricity theft than were aware of it is not noted in the report, though it is possible that people were reporting theft in other areas from where they currently reside. Using the lower range for awareness, approximately one in five Pakistani electricity consumers is aware of the incidence of electricity theft in their area. A nationwide survey conducted by Transparency International – Pakistan in 2002 found that 320 households out of 3000 had had some dealings with public officials in electricity in the past year. Of these 320 households, 102 had paid the office staff to get their connections.

99 of the 320 households had paid to have their electricity bill reduced in the past year (Transparency International – Pakistan 2002). 126

Even amongst the other poorly performing state services, the electricity sector is viewed negatively. A nationwide survey by Gallup Pakistan in August 2009 asked:

"Some departments of our country are said to be very troublesome to deal with. Have you had any troublesome experience with the following departments?"

83% of respondents identified the electricity sector (WAPDA), which is a higher level than for the police, courts, the gas utility, or schools. In an earlier Gallup survey in 2007, asking about corruption in the public sector, 37% of respondents put utility companies in the extremely corrupt category. In a 1986 Gallup study, WAPDA was scored 7 out of 9 in terms

¹²⁵ The range is across consumer types: Industrial, Domestic, Commercial, and Agricultural.

¹²⁶ The sample is only urban and semi-urban. The sampling methodology claims to be "random," with every 3rd or 5th house of a street selected, but the particular localities were chosen "based on Researcher's past experience & knowledge."

A more recent Transparency International – Pakistan survey (2009) has a more flawed sampling methodology. Surveyers went to public places to find respondents haphazardly, describing this as "simple random" sampling.

¹²⁷ Gilani Research Foundation. 2009. "Public's Perceptions about Various Government Institutes" Available at: www.gallup.com.pk/Polls/10-9-09.pdf

of corruption behind only land administration, police, and customs (Gallup 1986: 161). The broadly held and longstanding view that corruption is prevalent in the state-run electricity companies must be viewed in the context that all public sector activities are seen as riddled with corruption in Pakistan. An August 2010 Gallup survey found that 52% of all Pakistanis said that "no task can take place without bribery," while a 1985 Gallup survey had found 54% of all Pakistanis saying that "no work could be done without the use of bribery."

Despite the longstanding perception of corruption in the electricity sector, satisfaction with electricity supply has not always been as low as it is now. In a July 2009 nationwide poll by Gallup Pakistan, 74% of respondents described their satisfaction with electricity supply as "very little" or "dissatisfied". 129 In a 2002 survey conducted by the National Reconstruction Bureau, however, 63% of respondents were "satisfied with the electricity supply in their area." Satisfaction with electricity supply may well be based on the extent of loadshedding, as the electricity shortfall was greater in 2009 than 2002. A possible interpretation of this data is that corruption then can be seen as a ubiquitous feature of electricity supply, but one that Pakistanis can live with if the supply is at an adequate level. Certainly, Pakistanis from all walks of life (and not just the *katchi abadis*) have to regularly encounter corruption and theft in the electricity sector.

Available at: www.gallup.com.pk/Polls/24-7-09.pdf

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¹²⁸ Gilani Research Foundation. 2010. "Complaints About Bribery Remain High And Unchanged During The Last 25 Years"

Available at: http://www.gallup.com.pk/pollsshow.php?id=2010-08-19

Gilani Research Foundation. 2009. "Gilani Poll's Score Card of Satisfaction with Public and Private Services:

Both Public and Private Education and Health Score Well. Electricity, Roads, Sewage, and Safety Score
Poorly"

4.3.2 Privileged Individuals

The material presented in Chapter three provides extensive examples of how the themes of violence, rents, power, and personal relationships dominate the rules of the game in dealing with the state run electrical sector. Wealthy individuals, industries, and even other public sector organizations must all navigate the same waters in securing their electricity supply. In this section I supplement the observations in chapter three with some additional illustrations of how the world of formal rights and legal connections has much in common with the experience of the 44 quarter residents.

Industrial consumers are some of the most prized consumers for a distribution company to have as they are very easy to monitor and service. Zeeshan's family own an industrial facility in one of Islamabad's industrial sectors which his brother and he run on a daily basis. He has an Masters in Business Administration from the United States and is wealthy enough to drive a Land Rover. Zeeshan's industrial facility is served by a legal connection and he has all the rights which come with that, but even in this situation his experience is that the formality of the relationship is not relevant:

"To have a relationship (taluqat) with a government officer here means that you are giving them money. Nothing else (Bus.)"

At every level they take money. To get a new connection you have to give money. Else you'll wait 10 years. Since Pakistan was made, you have to pay to get work done. Everything's foundation (*bonyad*) is money. They won't do for you an unpermitted (*najaiz*) thing, but you have to pay for your rights. ¹³⁰

Zeeshan's view is that one's rights may or may not exist on paper, but it is money which determines whether you can enjoy those rights. As an industrialist, Zeeshan's main concern

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¹³⁰ Field notes April 9, 2010.

(along with cost) is the predictability of the electricity supply so that he can schedule his shifts, and it is on this topic he meets regularly with the IESCO staff. He needs their cooperation for the success of his business, and in those relationships with IESCO officers he has to pay for the predictability of his supply.

When the house I lived in from 2008-2011 developed some electrical problems in 2010 I called the local sub-division office to register my complaint. This is an unremarkable suburban neighborhood where I rented the top half of a two story house. The residents of this neighborhood are typically college graduates, professionals with good salaries, and relatively well off. After six attempts over three days, I succeeded in having an IESCO lineman come to my house to look at the electrical problems. He found a loose connection in my distribution box and tightened it, but the problem reoccurred two days later. The following exchange is with Shahid, an electrician who had worked for me frequently and I had called over to look at the problem:

I called the electrician (Shahid) and told him the situation. I asked if it was something he could deal with or whether I should call WAPDA. He said he'd look at it.

When Shahid came he opened the door of the d-box to look inside. I told him not to do anything dangerous. There are three sets of wires there, but the ones running to my meter are much thinner (copper, not aluminium). He took a testing device of some sort out and checked that current was flowing - it was. He then took a pliers and started pulling and twisting the top-most of the three cables (the loose one). I heard crackling and a thin wisp of smoke came up from the box, which Shahid then banged and kicked a few times.

'You can't work on a live system' I pleaded with Shahid. He replied that 'You can only work on it like this' and continued to poke and pull at the loose wires (with continued smoke and sound effects) until the third phase light on the meter came on. Displeased with the result, he then undid the twists of wire with his pliers and redid them to his satisfaction (I was nervous and wanted him to stop, but thought better of interrupting him).

After he was done [with the repairs] Shahid asked me: 'What did the lineman do when he came?'

IN: 'He tightened the connection like you did, and then told me off for not doing it properly when it was originally connected. He said that I would have to get the proper connections put on.

Shahid: Everything after the meter is done by the electrician, everything before is WAPDA's responsibility. We aren't allowed to touch it. If I had dropped my pliers and it had touched two wires then the transformer back there could have blown up.

IN: I asked if he could do it and he said that it was my responsibility to arrange for it, but that he could do the work for me if I wanted.

Shahid: He wanted to get some money from you. This is Pakistan. This is how things work here. Don't give him any money for this, or else he'll loosen it every time he goes by so that you'll call him and he can get a little more money for it. The thing to do is to call somebody higher in their office, explain the problem, and have them attend to it.¹³¹

The source of the fault is located in the distribution box. As Shahid states, that can only be attended to by the IESCO staff because any errors on Shahid's part could have damaged equipment which served my neighbors as well as me. The lineman misinformed me in an effort to get some money from me. Shahid feared (rightly) that my naiveté would cost me money. Even though my relationship with IESCO is based on the formal rights of a contract for electricity supply, in practice those formal rules form the basis for transactions of favors, money, and power relations. To secure the electricity supply I needed, I employed a private contractor to do the work of the electricity company. The work was dangerous and completely against IESCO rules, but the alternative was to pay the IESCO lineman to do the same task in his personal capacity even though it was actually in his official job description.

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¹³¹ Field notes July 6, 2010

4.4 Conclusion

The above studies on electricity supply in Islamabad provide a commentary on what it means to be a citizen of Pakistan in terms of formal and informal engagements with the state for the supply of electrical power. Electrical power is an important basic service in its own right and this case is relevant to the provision of other basic services by the state such as water, roads, sewage, and health care.

While most of this chapter discusses the experience of a *katchi abadi* in trying to secure service delivery, the comparisons with privileged individuals and broader survey evidence from Pakistan show the common patterns in the negotiation of service delivery for both people with supposedly secure formal rights and those trying to get in. The case of the *katchi abadi* exemplifies how the processes of state formation at the supposed margins of society are closely linked to those at the core. Whether rights are formally recognized or not, the hard work of securing service delivery is shared by Pakistani citizens in an uncivil society where the state is rarely bound by its codified obligations.

Partha Chatterjee (2004) distinguishes between rights bearing citizens in civil society in contrast to the populations of political society who desire rights but are excluded.

Unsurprisingly, the description of marginalized populations in India has much in common with the case of the Pakistani *katchi abadi*, but the ideal type of civil society can scarcely be seen in an environment where even the citizens must fight for and purchase their rights from a fragmented state. The codified obligations of a contractual relationship are as much of a hazard as a solution for *katchi abadi* residents, and some retreat voluntarily to their

familiar arrangements. Formal rights can be used to reinforce patterns of exploitation and inequality.

The *katchi abadi* residents have effectively duplicated many of the functions of the distribution company in their communal arrangement. Although not legally sanctioned in Pakistan, the 44 quarter communal metering arrangement has much in common with a cooperative society. In the United States, non-profit rural cooperatives serve 75% of the country's land mass and serve as a viable alternative to the distribution company model. Having evolved this organizational model indigenously, there is a strong case to consider legalizing these arrangements and allowing *katchi abadis* to manage their own distribution, as they already seem to do this better than their distribution companies.

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¹³² National Rural Co-operative Association. "About our Members." Available at: http://www.nreca.coop/members/Pages/default.aspx

Chapter 5

Policy Recommendations for Pakistan's Electricity Crisis

Pakistan's electricity crisis has multiple causes, but these present themselves primarily in the form of two phenomena: loadshedding and inter-corporate debt. Loadshedding is the practice of disconnecting some areas to reduce overall demand for electricity. Electrical power must be generated as needed because it cannot (with minor exceptions) be stored. If demand substantially exceeds supply then a major blackout with days of outages can result, as happened in the Northeastern United States and Canada in 2003. In Pakistan, where the shortfall of supply is chronic, loadshedding is used to manage demand to within the levels of available supply. During the Pakistani summer of 2011, 12 hours of loadshedding a day was common in the major urban areas. This will typically follow the schedule of one hour on, one hour off, though deviations from the unannounced schedule are common and highly frustrating for consumers. Aside from the annoyance and discomfort, the disruption to commerce and industry is massive.

An important feature of loadshedding is that it can only be measured in terms of a counter-factual, because you cannot measure the power that is not supplied. Estimates of how much energy would be consumed in a given area at a given time of day are based on years of consumption data available with distribution companies. In the loadshedding schedule determined by a distribution company, each feeder has an estimated load for the

on the target given to it by the National Power Control Center. Each distribution company has to reduce its demand by the same percentage.

Measuring the reduction in energy consumed due to the imposition of loadshedding is not straightforward. Some types of usage are only displaced by loadshedding, not eliminated. For example, if I cannot use my electric iron from 5-6pm, then I do my ironing earlier in the day and consume that energy regardless of loadshedding. Loadshedding can also increase consumption due to the inefficiencies arising from responses to the unreliable and discontinuous nature of supply. Industries must run their manufacturing processes in batches rather than continuously, consuming more electricity as large equipment powers up. The widespread adoption of battery backup systems (also known as an unlimited power supply, or UPS) is inefficient because it takes 5 kwh to charge a battery for 1 kwh of consumption. Small diesel generators have proliferated in homes and businesses. These are much less efficient than large powerhouses.

The impact of loadshedding includes deterring investment. The World Bank's Enterprise surveys found that 15.6% of firms in 89 countries including Pakistan considered electricity to be the most serious constraint to business operations. The only constraint cited more often – by 15.7% of respondents – was access to finance (World Bank 2010: 3, footnote 1). 78% of Pakistani firms surveyed in 2007 identified electricity as a major or very severe obstacle, up from 50% in 2002. A 2003 Lahore University of Management Sciences survey of the

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¹³³ Pakistan Electric Power Company. "Frequently Asked Questions" Available at http://pepco.gov.pk/faqs.php

investment climate found that 80% of small and medium enterprises had deferred investment due to the cost and reliability of electricity (Haq 2005). The overall impact of loadshedding on the Pakistani economy in 2009-2010 was estimated by the Ministry of Finance to be 2% of GDP (Ministry of Finance 2010, Institute of Public Policy at Beaconhouse National University 2010). There is no doubt that the insufficient supply of electricity is hindering economic growth.

Closely related to the insufficient supply of electricity in both the short and long term is the insufficient flow of money up the supply chain for electricity which results in intercorporate debt. Inter-corporate debt (despite its more common name of circular debt) is a linear sequence of unpaid bills up the power generation supply chain. Fuel suppliers are owed money by power generation companies. The power generation companies are owed money in turn by distribution companies. The distribution companies, whose responsibility it is to collect from their customers, cannot pay their bills on time because they don't bring in revenues sufficient to cover the cost of the electricity they buy. The distribution companies' revenue shortfall is partly due to theft and partly due to non-payments on the bills they issue to private and public sector consumers, as well as unpaid subsidies from the federal government.

The government publicly announces solutions to circular debt in the form of millions and billions paid off to power producers, but these are only temporary blips. The phenomenon known as circular debt is the outward manifestation of fundamental failures of governance. It has four basic causes, most of which the government is unable or

unwilling to address. These are subsidies, line losses, late payments, and an energy mix heavy on expensive imported fuels.

There are several types of subsidies in the pricing of electricity, but the biggest by far is the tariff differential subsidy. The term tariff is used in policy discussions for the price of electricity to consumers. The differential involved is the difference between what the regulator, NEPRA, determines that the DISCO should charge, and what the Government of Pakistan notifies as the official tariff. This difference is illustrated in table Table below. A Lahore area residential consumer served by LESCO paid Rs. 12.77 per kwh for every unit they consumed above 700 (the highest consumption category). NEPRA assessed that they should pay Rs. 15.50 per unit if LESCO were to meet its costs. The gap of Rs. 2.73 per unit is the tariff differential subsidy which the federal government must pay for the power LESCO is supplying. The subsidy is greater at lower levels of consumption for residential users (Rs 4.89 per unit for mid-tier consumption in the Lahore area), and greater in other regions such as Peshawar where the equivalent subsidies are 5.08 at the top level and Rs. 9.06 per kwh for mid-level residential consumers. On average, blending all categories and weighting by consumption, the NEPRA average tariff was Rs 10.17 per kwh, while the Government of Pakistan's average notified tariff was Rs. 7.12 per kwh¹³⁴. This gap of 3.05 per kwh is the loss per unit sale of electricity which must be covered by the federal government. In FY2007-2008 the tariff differential subsidy was Rs. 87 billion, in 2008-2009 it was Rs. 133 billion, in 2009-2010 it was Rs. 226 billion, and in FY 2010-2011 it is estimated at 145 billion (FODP 2010).

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¹³⁴ NEPRA presentation Power Sector Regulation, October 4, 2010.

Table 5.1: Average Tariff and Subsidy by DISCO

	Mid-level Residential (100-300 kwh/month)		Top-level Residential (>700 kwh/month)		Agricultural Tube-wells	
	NEPRA	GOP	NEPRA	GOP	NEPRA	GOP
LESCO	11.25	6.34	15.50	12.77	7.00	5.11
GEPCO	10.95	6.34	14.75	12.77	6.00	5.11
FESCO	11.00	6.34	15.00	12.77	7.00	5.11
IESCO	10.00	6.34	14.00	12.77	6.00	5.11
MEPCO	10.55	6.34	15.50	12.77	7.00	5.11
HESCO	11.00	6.34	14.00	12.77	7.50	5.11
PESCO ¹³⁵	15.40	6.34	17.85	12.77	8.00	5.11
QESCO	11.00	6.34	14.00	12.77	8.78	5.11

Source: Tables 77 and 79, NEPRA's State of the Industry Report 2010

All DISCO consumers are charged the same prices – a uniform national tariff notified by the government – even though NEPRA determines a different tariff for each DISCO. NEPRA's process is intended to reflect the cost of service for each DISCO, though it is not based on a true cost of service study but an assessment of the revenue each DISCO requires to run its operations. NEPRA's goal is that the DISCO's consumer revenues balance the cost of purchasing power.

 $^{^{\}rm 135}$ The tribal areas distribution company, TESCO, is included in PESCO for tariff purposes.

The determination that DISCOs need different levels of revenue per consumer (per Table 5.1 above) can in part be justified by the different social and physical characteristics of the territories served by each DISCO as described in below.

Table 5.2 below.

Table 5.2: Distribution Company Profiles, as of June 2010

DISCO	Customers per	Area of Service	Industrial & Bulk	Line Losses
	KM of 11kV line	(km ²)	Consumers (% of	
			unit sales)	
LESCO	128	19,064	41%	14%
GEPCO	124	17,207	31%	11%
FESCO	81	36,122	37%	11%
IESCO	93	23,160	42%	10%
MEPCO	63	105,505	23%	19%
PESCO	81	74,521	29%	37%
TESCO	56	27,220	4%	24%
HESCO	33	137,387	26%	35%
QESCO	17	334,616	5%	21%

Source: DISCO Performance Profile 2009-2010, prepared by the Power Distribution Improvement Program of USAID.

Line losses tend to increase with the area of service and decrease with customer density. Losses also decrease with a greater proportion of industrial and bulk 136 consumers as these are the easiest to monitor. DISCO management even refer to these as "zero loss" consumers. The distribution companies with the best performance in terms of line losses are GEPCO, FESCO, and IESCO. These have relatively small service areas with a higher density of consumers and more industrial and bulk consumers. The worst performing distribution companies are HESCO and PESCO, which have very large service areas, dispersed consumers, and fewer industrial connections. This basic analysis applies broadly but not to all cases. MEPCO has a larger service area than PESCO, lower consumer density, and a lower proportion of unit sales to industrial and bulk consumers, but line losses of only 19% against 37% for PESCO.

As with many utilities, urban areas are easier to serve because consumers are densely clustered. In rural areas, dispersed populations impose additional service costs.

Typically, the length of the feeder lines which serve consumers must be longer, and DISCO staff will have to cover more of an area to serve their consumers. The physical length of a line adds to technical losses because the resistance of a conductor increases with its length. Population density and length of feeder line alone cannot, however, justify the much higher line losses of the worst performing DISCOs.

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¹³⁶ Bulk supply consumers are those who take 11kV or more directly from the distribution company. A housing society such as Bahria Town – much like a housing development in the US – will take bulk supply from the distribution company and handle the metering and distribution for the residents itself. The distribution company then only has to serve one bulk consumer rather than many individuals.

Line losses come in technical and non-technical varieties. Technical line losses represent inescapable leakages due to the fundamentals of conductor materials and system design. The non-technical line losses – chiefly theft – make up the difference between the technical losses and actual losses of up to 30-40%. Theft frequently occurs with the collusion of WAPDA employees who are paid many multiples of their meager salaries to look the other way or doctor the books. All kinds of consumers steal electricity from the roughest Karachi neighborhood to the swankest F-6 mansion in Islamabad.

Losses contribute to the sector's liquidity problems because the distribution company is responsible for the electricity they distribute, regardless of whether they bill for it or not. Ultimately, the revenue shortfall from the distribution companies due to losses must be borne by the federal government through taxation and borrowing, just as it must do for the tariff differential subsidy.

The tariff differential subsidy is an enormous fiscal burden for Pakistan. For the FY2010-2011 the government budgeted Rs. 30 Billion for the tariff differential subsidy, whereas the actual level of the subsidy is estimated at Rs. 150 Billion. In FY2009-2010 the tariff differential subsidy was estimated at Rs. 250 Billion, or almost 10% of total government revenues. For the Pakistani government to bear this fiscal burden it would have to raise tax revenues, which the Pakistani government has shown little capacity to do. The international donors backing Pakistan have been picking up the tab, but the IMF is refusing to provide further loan tranches until this subsidy is eliminated.

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¹³⁷ Total Government Revenues for FY2009-10 were Rs. 2,590 Billion according to the Ministry of Finance's State of the Economy Report (Ministry of Finance 2010)

What the tariff differential subsidy represents is a loss on each unit of electricity sold. Beyond the theft and other losses, even when electricity is legally sold and paid for on time, the federal government must pay a portion of the bill. The power sector as a whole does not achieve cost recovery, and cannot do so under the current set up. Adding more generation capacity will only compound the problem by increasing the size of the subsidy.

While individual government employees may steal their electricity, government institutions are much more likely to simply not pay their bills. In Islamabad, only 20% of electricity consumption is in the public sector, but they owe 80% of the arrears¹³⁸. The reasons are various. Government institutions habitually don't often enforce rules on one another as their employees are much more used to exchanging favors from which they personally benefit. Moreover, without powerful organizational backing, a low-ranking officer of the distribution company will not directly challenge powerful government organizations. Non-payment of bills by public sector agencies limits the ability of the distribution companies to make timely payments to their suppliers, who pass the problem up the supply chain of electricity until it reaches fuel importers.

By relying on imported fuels for non-gas thermal power generation Pakistan introduces two pressure points into the energy sector. The first is that international fuel suppliers require immediate payment and impose a hard constraint which domestic power sector entities do not impose on the Pakistani government. The second is that when oil prices go up Pakistani power producers pass on that cost to power purchasers per their

¹³⁸ Field notes April 6, 2009.

tariff agreement. A Fuel Price Surcharge automatically increases consumer tariffs to reflect oil prices. Power producers benefit from a similar provision.

Inter-corporate debt and load-shedding link together when there is no money to import fuel oil. Without oil, thermal generation from fuel oil is reduced and loadshedding increases to balance supply and demand of power. In the near term, these two are enough to choke the economy and keep the power sector mired in its dysfunctional state.

Inter-corporate debt is crippling for the long-term prospects of the power sector because it drives investment out of the power sector. Private capital has avoided the Pakistani power sector even when investing in telecommunications (IGI Securities 2010). For the state's power sector managers to make irregular payments while expecting continued operations is a surefire way to deter investment.

Multilateral investment in the sector is deterred by the tariff differential subsidy. So long as the federal government cannot afford this subsidy – and it cannot – the donor community picks up the bill to save Pakistan from financial collapse. The IMF's negotiations with the Pakistan government for the current tranche of its \$11.3 billion loan currently have the elimination of the subsidy as a sticking point. The estimated \$5 Billion spent on the tariff differential subsidy for FY 2009-2010 and FY 2010-2011 could have provided some 4000MW of thermal power generation capacity or paid for approximately half of a major hydroelectric project such as the Diamer-Basha dam. The standpoint of the IMF is that the Pakistani government must implement key features of the reforms which it has agreed to.

5.1 The Existing Reform Paradigm

5.1.1 The International Reform Program

The most recent expression of the reform paradigm pushed by the World Bank, Asian Development Bank, USAID and other donors is the Friends of Democratic Pakistan (FODP) Integrated Energy Sector Recovery Report & Plan published in October of 2010 (Friends of Democratic Pakistan 2010a) and endorsed by the Friends of Democratic Pakistan (including a Pakistani representative) in Brussels the same month. It was produced by a joint task force co-chaired by the Asian Development Bank's Country Director and the Secretary for Water and Power. The members of the task force who wrote the report were serving Pakistani government officials as well as international and Pakistani energy specialists recruited by the FODP consortium.

The five principal elements of the FODP plan are to:

- 1) Strengthen Energy Sector Governance and Regulation;
- 2) Rationalize Pricing and Energy Subsidies
- 3) Develop Energy Finance Capability
- 4) Mainstream Energy Efficiency into Energy Policy
- 5) Fast Track Investment Projects for Energy Security

The plan laid out in the FODP report is based on a target to end loadshedding in three years (by 2013). Both the target and the plan to meet it are aggressive. As of October 2011,

many initial (and key) steps on the roadmap had been missed. For example, no Senior Energy Advisor has been added to the staff of the Prime Minister. The adviser's brief of monitoring and pushing through the implementation of actions in the energy sector has consequently been conspicuous in its absence.

The FODP report describes energy sector governance as fragmented and says that the "disequilibrium" and "disharmony" generated by this fragmentation undermines the achievement of energy security. The solution proposed is an integrated energy sector in which water, power, oil and gas are not planned and regulated separately. A single ministry of energy which will combine the existing Ministry of Water and Power and Ministry of Petroleum and Natural Resources is the key objective. Further, the two regulatory authorities for power (NEPRA) and oil and gas (OGRA) must be merged. As an immediate measure, a senior energy adviser position on the staff of the Prime Minister will monitor and push through the implementation of energy sector actions such as those laid out in the FODP plan. The report also observes that "Public sector energy companies (PSECs) should be run on good corporate governance models and have a commercial orientation with incentives for improved performance" (21).

The proposals for rationalization of pricing and subsidies focuses on the elimination of the tariff differential subsidy while also addressing other subsidies within energy pricing.

The core principle of this rationalization is cost recovery at the sector level, though each tariff should be "cost-reflective" (68). The subsidization of residential consumers by industrial and commercial consumers will be ended, while remaining subsidies for the

lowest-end residential consumers will be targeted so that wealthier consumers do not benefit. In the current tariff structure, all consumers benefit from the subsidy and only 0.4% of the tariff differential subsidy goes to the lifeline consumers who use less than 50 units per month. Tariff increases will be phased in, particularly for the distribution companies with the highest cost of service where some consumers would see more than 100% increases in their tariffs.

An important component of the FODP plan is the provision for energy finance, without which the expansion plans for generation capacity will never get started. The fund described in the FODP plan relies on contributions from the donors, but this fund has not gotten off the ground due largely to the fact that its monies have been redirected towards the payment of the tariff differential subsidy. The absence of financing has limited donor support for "fast tracking" any particular investment projects. So long as that subsidy remains, international support for increases in generation capacity will be very limited.

The FODP report describes supply and demand side measures to introduce efficiency savings in energy consumption. The two largest initiatives described under energy efficiency relate to the widespread introduction of compact fluorescent lights in place of incandescent bulbs, and the renewal of the Pakistan Building Energy Efficiency Code (which was originally developed by USAID in 1990 but never saw much use).

The current status of the international reform agenda can be seen in the progress of the Government of Pakistan's Power Sector Reform Program.

5.1.2 The Government of Pakistan's Power Sector Reform Program

The *Power Sector Reform Program* announced by the Prime Minister on September 27, 2010 (Government of Pakistan 2010b) is the Government of Pakistan's proposed solution to the power crisis. Its objectives are:

- Eliminate load shedding as soon as possible
- Sustainability of the power sector
 - No tariff differential subsidy
- Power pricing to be made affordable by:
 - o Efficiency improvements across the sector
 - Better fuel mix
 - o High efficiency generation

The government proposes to achieve these objectives by addressing five key areas:

- Governance and Efficiency
- Regulatory
- Financial Issues
- Fuel Mix Issue
- Investment

Each area has a list of actions associated with it and dates by which those actions are to be done. As of October 2011, the major actions of the reform program have not been achieved.

Under governance and efficiency, the major task is of dissolving PEPCO. PEPCO was originally created as a temporary body which would cease to exist once the DISCOs were privatized. Rather than the DISCOs being privatized, PEPCO gained strength by acquiring powers from WAPDA. The logic of eliminating PEPCO is that it is inhibiting the transformation of DISCOs into independent corporate entities. The original deadline given

in September 2010 for the dissolution of PEPCO was March 31st 2011. By January this date had slipped to June 31st 2011, and then 30 October 2011. As of this writing, PEPCO still exists.

Changing the fuel mix in the short term requires natural gas to be allocated to the power sector rather than for other uses. In 2005, the power sector's share of Pakistan's natural gas consumption was 44%, but by 2010 the power sector's share had gone down to 29%. Annual growth of natural gas consumption in that time was 2%. The sectors that grew in their share of natural gas consumption were transport, private industry, and domestic. The power sector needs more natural gas to produce affordable power. Appeasing the public through subsidized fuel for transport and cheap cooking fuel for homes comes at the expense of worsening the power crisis. Small power plants for private industries are necessarily less efficient than the larger plants feeding the national grid. The most egregious wastage of gas, however, comes in the form of fertilizer production using natural gas (18% of total consumption in 2005-2010). Providing this gas to the power sector and instead importing fertilizer would save Pakistan approximately Rs. 140 billion a year, even net of the subsidies needed to keep prices of fertilizer at current levels. Opposition from the fertilizer lobby would be strong, the Pakistani executive has not taken this option, and the misallocation of cost-efficient fuels for power generation contributes to the power sector's capacity and financial woes.

The financial obstacles in front of the power sector are significant. The reform program proposes to increase prices by 2-3% per month in order to raise sector revenues to

cover the cost of generation and thereby eliminate the tariff differential subsidy. When the tariff differential subsidy is unpaid, it contributes to inter-corporate debt. The reform program proposes to deal with existing inter-corporate debt by issuing term finance certificates (i.e. long term bonds). Despite tariff increases from October 2010 through May 2011, it wasn't enough to eliminate the tariff differential subsidy. The government did, however, pay the subsidy, thus ensuring that it did not add to the existing stock of inter-corporate debt. The remaining amount of inter-corporate debt is estimated by the Planning Commission at Rs. 350 billion as of October 2011.

A major impact of the failure to deal with the tariff differential subsidy and intercorporate debt is the inability to attract investment to the power sector. Private investors are deterred because the continued accumulation of inter-corporate debt means that investors are unpaid due to the power sector's low revenues. The IMF's strong stance towards the elimination of the tariff differential subsidy in negotiating the latest tranche of Pakistan's loan of \$11.3 billion is based largely on this point – that the loan is not intended to sustain the power sector's poor governance. Pakistan did not meet the conditions of its 2008 *Letter of Intent* to the IMF (Government of Pakistan 2008, International Monetary Fund 2009), which included the elimination of electricity subsidies by June 2009. Conditionalities in international lending have not been effective. The Government of Pakistan has now abandoned its IMF program as of September 30 2009, ¹³⁹ a move which has led the Asian Development Bank to withhold its loans until the IMF certifies the health

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¹³⁹ Imtiaz, Huma. "IMF programme: Why should we take further loans, asks Sheikh" *Express Tribune*. September 28, 2011

of the Pakistani economy. ¹⁴⁰ The Asian Development Bank has historically had substantial involvement in Pakistan's power sector and has a strong involvement in the funding for Pakistan's large Diamer Basha dam.

The consistency between the Government of Pakistan's reform program and the proposals of international community is very strong. Such opposition as there is comes in the form of a lack of implementation on the part of the elected and unelected arms of the state. Formal agreement with international partners but a failure to interrupt business as usual can be seen as a classic decoupling strategy (Meyer and Rowan 1977) aimed at gaining international legitimacy and funding while not disturbing the beneficiaries of the existing system. The international pressure and attention on performance in the power sector have increased though, and scrutiny on results is undermining the extent to which policy and performance can be decoupled. Thus far, shortcomings of implementation and a gulf between the formal policy and operational reality persist.

5.2 Critique of the Existing Paradigm

Both the international and Pakistani plans for power sector reform only engage with governance in terms of corporate governance. The consequences of such a one dimensional engagement with the concept of governance is reflected in the limited activities undertaken under the heading of governance. For power sector reforms, these focus on the constitution and independence of boards of directors with the idea that professional corporate boards can be imported to Pakistan and that these will contribute to the professionalization and corporatization of power sector entities. At the end of 2010, the members of the boards of

¹⁴⁰ "Fallout from bailout: No more budgetary support loans until IMF approval, says ADB." *Express Tribune*. September 30, 2011.

directors of the DISCOs were dismissed. New members were inducted by the Ministry of Water and Power and given training on their responsibilities to guide and monitor the management of the DISCOs. Even if changing the boards had merit – and the caliber of some of the outgoing board members such as Syed Yawar Ali, the former Chairman of the Lahore board, suggests that some were worth retaining – the environment in which they have to work has not changed. One new Peshawar board member told me that attempts to reduce theft in particular areas has prompted phone calls from the relevant members of the provincial assembly telling PESCO not to harass their constituents. A major problem for distribution companies is collecting on the bills they issue, but many customers they simply cannot touch. As of July 2011, public sector entities owed Rs. 300 billion to the distribution companies against Rs. 142 billion for the private sector. 141 The DISCOs cannot collect on these arrears. To shut off public sector customers is a rare deed, inviting retaliation and consequences (see chapter two). Of the amounts owed by private consumers, 61% is owed by running defaulters. These are customers who have been served disconnection notices but who have not been disconnected. Where people of wealth and status are concerned, the officer of the distribution company may choose not to antagonize these customers and avoid risking their wrath. Corporate governance in the public sector is part of a much wider set of issues and cannot be treated in isolation from its social environment. Governance has normative and political dimensions which are integral to achieving the desired changes.

The domestic and international plans for power sector reform don't engage with the politics of power sector dysfunction. At the provincial level, each province has its own

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¹⁴¹ Circular debt data from the Planning Commission of Pakistan.

position with regards to the efficiency of its distribution companies, the resources it provides to the national generation pool, and its relative power with respect to the federal government and other provinces. The viewpoints of the provinces are represented at multiple junctures of the policy making process. In parliament, Sindh, Punjab, and NWFP all have parties strongly associated with their provincial identity. Indeed, the Pakistan People's Party is the only sizable party with any claim to national representation. At the Council of Common Interests – whose mission is policy formulation and regulation for the second legislative list of the fourth schedule of the constitution, including inter-provincial coordination and electricity – the four chief ministers of the provinces are members along with the Prime Minister and three nominees of the federal government. While decisions can be taken on a majority basis, in practice the council is used to build consensus among the provinces. A provincial government dissatisfied with the decision of the council can refer the matter to parliament, whose decision will be final. The council ensures both in theory and practice that the provinces are included. At NEPRA, the four members (who, along with the Chairman, constitute the decision making authority of the regulatory body) each represent one of the four provinces. At each of these three policy making venues for electricity the provinces are strongly represented. The four provinces are too well represented in the policy making arena to allow their views to be bypassed. The provincial politics of power must be dealt with.

The reform plans need to challenge the unspoken assumption of political will. The FODP report was adopted by Pakistan's cabinet, but this does not equate to political will. In fairness to the international donors and financial institutions of the FODP, they could

scarcely seek out political will beyond the endorsement of the highest political authority in the country. While these plans require political will, there are no activities included which seek to generate or sustain commitment to reform.

Both the international and Pakistani reform plans try and reform state institutions through state action. They want to make the power sector state owned enterprises more effective, but only seek to work through the failed paradigm of top-down authority.

Soifer's (2008) interpretation of Mann's (1984) concept of infrastructural power is helpful in understanding the problem of poor distribution company collections. Soifer offers three aspects to the state's capacity to impost its policies. The first is in the state's capability to exercise control through its resources, the second is in the ideational weight of the state, and the third is in its geographic reach through the territory of the state. Applying this model to the Pakistani power sector we see that the state – while accumulating resources per Alavi's (1972) overdeveloped state – has little systematic control over operations at a sub-division level (chapter three). The state's ideational weight comes to bear on the Pakistani orientation towards India (Cohen 2004), but has not created a disciplined or ordered nation through capillary systems (Foucault 1977). Neither by intent or shaping the "conduct of conduct" can the Pakistani state compel payment for electricity 142. The geographic reach of the Pakistani state is perhaps subservient to the first dimension, but even that limited capability has a very uneven reach.

The Pakistani state does not

¹⁴² In *Our Lady of Alice Bhatti*, an Pakistani tough-guy derides younger generations by saying "Hell, had they ever stolen anything? And no, electricity didn't count; you were still a sissy puss." (Hanif 2011: 136).

have the kind of internal cohesion and integrity required to reform itself by fiat, and certainly not across all of its territory.

The issues of line losses collections – making sure that the distribution companies get paid – is a local one. Chapter three gives many examples of ways in which distribution company operations are influenced and sometimes compromised through local influences. However, formal authority for the power sector is federal in that the distribution companies are administratively under the federal Ministry of Water and Power. The existing paradigm is flawed because it does not address these limitations in the Pakistan federal government's exercise of power.

5.3 The Problem of Implementation

Plans for the future of Pakistan's energy sector are plagued by a lack of implementation. The lack of implementation is rarely engaged with, as demonstrated by the sequence of five year plans with unmet targets analyzed in chapter two. The most recent plan produced for Pakistan's energy sector can be found in the Pakistan Business Council's position paper on energy. The authors, a group of energy sector executives primarily with interests in oil and gas, describe two scenarios for 2025. The "business as usual" scenario is an unmitigated disaster in which Pakistan will "pay a huge cost not only in an economic sense, but also in terms of serious social issues and slow progress towards the creation of a stable social and political society" (Pakistan Business Council 2011: 6). In brief, Pakistan cannot survive on its current energy trajectory because its fuel import bill will balloon to

\$62 billion¹⁴³ at current oil prices, and perhaps double that if crude oil prices increase to \$200 per barrel in 2025 as forecast. The proposed scenario of the Pakistan Business Council is a more sustainable balance of local and imported fuel sources. Achieving the proposed scenario is dependent on "political will and resolve to implement an integrated energy plan" (9). The Pakistan Business Council does not, however, engage with this single crucial factor. They, like the authors of every other energy plan for Pakistan I have seen, do not discuss how political will is generated and sustained.

The Pakistan Business Council's plan is unusual only in the bluntness with which it calls out the government of Pakistan for its expected lack of follow-through and implementation. In the substance of their recommendations they – like every other plan – assume that political will is a given and that the only constraints on the apparatus of the state in implementing the proposals that are laid out are the technical knowledge of the state organizations. Like the FODP report, they engage with governance to the extent that this refers to the legal frameworks which control the operation of state enterprises. What would be different if these plans took seriously the question of generating and sustaining political will?

The proposal I outline below is based on the premise that the leadership of the Pakistani state will maintain the existing pattern of failing to implement reforms or complete projects until the Pakistani people can effectively demand these changes. The logic for this approach follows from viewing subaltern groups struggling for rights in the

¹⁴³ If the 2025 crude oil price rises to \$200 per barrel as predicted by the financial institutions cited in the Pakistan Business Council then the import bill will be \$124 billion.

light of power relations theory (Huber and Stephens 2001; Sandbrook et al. 2007 for its application to the global periphery), in which the success of such a struggle is dependent on the capacity of subaltern groups to force through their issues.

In order to support demand driven reform, governance in the power sector must come to mean democratic governance premised on transparency and accountability. I primarily understand accountability in terms of the channels through which citizens can make the state respond (in the sense employed by Evans (2009) regarding public activism in Kerala). In Pakistan, these are weak and poorly developed. Transparency can be achieved through action by public sector organizations. Information that they already prepare and circulate must be made available more broadly. However, relying on public sector organizations to take the initiative on transparency is unappealing. They, after all, have the most to hide.

The activities described below are entirely communications activities which are intended to deliver transparency and accountability to the state-run power sector organizations. The goal is to empower civil society organizations to demand accountability and results from the state in an informed and effective manner.

5.4 Anticipating the Problem of Implementation

The policy initiatives I propose reflect the political economy of Pakistan's power sector and emphasize the role of communications as a necessary change in the character of Pakistani governance. The absence of any political sensibility in the existing policy paradigm undermines its effectiveness and is possibly its greatest flaw. Not only do policy measures need to be made in recognition of Pakistan's underlying political economy, but the

weakness of the state itself is a massive barrier to policy implementation. Until and unless this failure of implementation is recognized as a binding constraint on what policy can and should be, policy making and planning will remain ineffective. The proposals outlined in this section are intended to compensate for these shortcomings.

Pakistan is a fragile federation. Power sector policy can either reinforce the stresses between the provinces or diffuse them. Each province has its own profile of generation and distribution, and the there is a rough symmetry in that the fuel producing provinces have poorer performance at the distribution level. Disaggregated pricing for distribution and generation will damage the sector as a whole and be politically toxic.

The uniform national tariff serves an important function in maintaining the harmony of the Pakistani federation. While the best performers among distribution companies are in Punjab, the cheapest generation options come from sources in Khyber Pukhtunkhwa, Sindh and Balochistan. Investment in hydro-electric power is largely done by the federal government, and each province (mostly Khyber Pukhtunkhwa) gets profit shares for the hydro-electric generation. However, Khyber Pukhtunkhwa has not been paid royalties in a timely fashion in the past, and they may still feel ownership over the hydro projects located in Khyber Pukhtunkhwa. Just as the benefits of preferred fuels are shared through the common generation pool, the uniform national tariff shares the strengths and challenges of the different DISCO territories across the federation. Power was moved from the concurrent list to the federal list in the 18th amendment, suggesting that a federal perspective is

appropriate. Working with electricity as a national issue rather than a provincial one is the basis of this proposal.

Arguments for approaching electricity as a provincial issue have some merit, but come with substantial risks. The benefit is that ownership of the major distribution problem preventing theft and collecting payments – would be in the hands of provincial politicians with the deep local connections to address these issues. However, there is no guarantee that they would seek to do so rather than continue with some variation of the status quo in which they seek jobs for their constituents and rents for themselves over reforms which give long term benefit to the whole province. Moreover, a complicated new electricity market would have to be designed to adjust for the allocation of different sources of power generation. Breaking up the common generation pool would mean that provinces would compete to have the cheapest energy allocated to them. Regardless of the qualities of the market design (no doubt drawing on best international practices), tremendous pressures would be put on the people deciding on these allocations of power to favor one province or distribution company. The private sector cannot remove institutional weaknesses by magic, and "the process of involving the private sector is itself been a significant source of rents" (Kenny 2007: 2, 10). Every experience of such structural reforms in the Pakistani power sector suggests that the capacity of existing power structures to subvert new structural arrangements exceeds the capacity of pro-reform constituents to prevent such abuses (chapter two).

The binding constraint in the elimination of the tariff differential subsidy is not in the design of a new tariff mechanism. Many valid proposals can be generated. The constraint is a political one and to do both with what decision makers are willing to take on and the management of the negative response that will come from two quarters. In the first part, prices will have to rise across the board, and perhaps more for some consumers than others. In the second part, consumers of the distribution companies which are performing better, will have to pay more than their fair share in order the balance the sector's books by compensating for those distribution companies which are not performing as well.

Of two existing proposals for eliminating the TDS¹⁴⁴, one ignores the political constraints or tries to circumvent them by limiting the approach to administrative actions. One could, for example, propose to introduce a new regressive tax on electricity consumption to replace the existing RGST, and administer this tax centrally through a central authority (such as the central power purchasing authority) and use it to compensate for the revenue shortfalls of the distribution companies which are performing poorly. Parliament would have to remove and introduce the taxes in question. Alternately, the central power purchasing authority could alter the power purchase agreements of the distribution companies so that the poorer performing distribution companies can purchase power at a lower rate. The regulatory authority would make the changes to the existing set up in this case. Both of these proposals work to eliminate the tariff differential subsidy, but both have their shortcomings. The second approach removes politically sensitive decision making to the administrative level. It is not engaged with the political consequences of the

¹⁴⁴ Both of these proposals were under discussion among people working on power sector reform in 2011.

policy, as paying customers. The first approach requires parliamentary to act twice in introducing a new tax and removing an existing one. The Pakistani parliament's appetite for new taxation is limited. Moreover, the impact of the tax on the provinces – which would be the major discussion point – is not engaged with in the design of the tax.

5.5 A Governance Agenda for the Pakistani Power Sector

This governance agenda is intended as an intervention in the Pakistani power sector to promote transparency and accountability in the Pakistani power sector. Unlike the policy alternatives discussed above, the components of this governance agenda are a program for a non-government organization which would promote democratic governance in the power sector as its single objective. The reason for locating this agenda outside of the public sector is that a reassertion of civil society is needed to counter the forces of state and market in representing the will of the public (Burawoy 2005). The pattern of reform efforts repeatedly lacking political will for implementation (chapter two) needs to be broken by a coherent and informed expression of demand for governance reform outside of the public sector.

The governance agenda I outline below has four components: 1) SMS Delivery of Loadshedding Schedules; 2) Media Workshops; 3) Website; 4) Civil Society meetings. I discuss each of these below.

5.5.1 Short Message System (SMS) Delivery of Loadshedding Schedules

Electricity consumers can mitigate the impact of loadshedding if it is more predictable. Predictability in loadshedding schedules could improve business and industrial output as well as lessen dissatisfaction at peoples' homes. Visible efforts towards making loadshedding predictable could improve the public standing of DISCOs. Having a public spotlight on loadshedding schedules could also encourage DISCOs to be more disciplined in sticking to their publicized schedules.

Using SMS makes sense because it is a cheap and reliable way to reach electricity consumers. Pakistan's ratio of cellular subscriptions to total population is 65.9% as of June 2011, making mobile phones an extremely appealing means of mass communication for governance applications in Pakistan.

The crucial feature of delivering loadshedding schedules via SMS is that users can be charged for the service. A Rs. 1 per SMS, 70% of which must be given to the mobile phone company whose network carries the call, will provide ample funding to cover all operational expenses for this service and the other components of this governance agenda. Charging users for the SMS service requires first arranging for a four digit 'short code' to be issued by the Pakistan Telecommunication Authority, which will allow any mobile phone in Pakistan to message the same number for loadshedding schedules.¹⁴⁶

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Telecom Indicators from the Pakistan Telecommunication Authority.

Available at: http://www.pta.gov.pk/index.php?option=com_content&view=article&id=269&Itemid=599

This statistic is provided to show the prevelance of mobile phone usage and not to suggest that exactly 65.9% of Pakistanis have active mobile phone subscriptions.

¹⁴⁶ Details of SMS services over mobile phones were provided by Omar Malik, Telenor Value Added Services,

The data requirement can be fulfilled through information which is already available in digital form with the distribution companies. Every consumer has a unique consumer number and each consumer number is mapped to a specific feeder which serves them. Loadshedding schedules are specific to a feeder, meaning that the loadshedding schedule for a distribution company and a consumer number provide all the information required to match consumers to their loadshedding schedules. The loadshedding schedules are prepared by each distribution company in excel spreadsheets which are printed out and faxed to distribution company offices and grid stations when the schedules are changed. 147 Loadshedding schedules in excel format can be found on some of the distribution companies websites, although these are mostly out of date (IESCO's website has one from December 2010 on its website in October of 2011) when they are available at all. While the information is all available, the challenge would be in securing the cooperation of the distribution companies. Meeting that challenge would be possible through a combination of public pressure and legal challenge such as the right to freedom of information specified in article 19a of the Pakistani constitution (and potentially the Right to Information bill introduced by parliamentarian Sherry Rahman¹⁴⁸).

personal communication.

¹⁴⁷ Field notes April 6, 2009.

¹⁴⁸ "Knowledge is power: Sherry introduces Right to Information Bill." *Express Tribune*. October 12, 2011.

5.5.2 Promoting a Professional Media

The media have a crucial role to play both in informing the public and in amplifying and directing public demands towards their effective resolution. Equipping the media to do so requires making the most of the information which will be gathered and prepared about the power sector. That information needs to be packaged and prepared for the independent media to disseminate. A series of media training workshops which combine training on journalism with education about the power sector in general will be the forum for disseminating specific information and reports about power sector operations.

In addition to disseminating power sector information and trainings, the workshops can also have a roundtable component in which energy sector officials and experts participate.

The media trainings I describe are a response to Pakistan's burgeoning private media which has grown from 2000 journalists in 2002 to 17000 journalists in 2009. The average age has fallen, as has the depth of experience and background in journalism. In a specialty subject such as energy there is wide interest but not enough specific knowledge.

5.5.3 Website

The major components of the website will be:

Loadshedding schedules by feeder for the whole country.

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¹⁴⁹ Adnan Rehmat, Executive Director of Intermedia. Private Communication.

- Theft info by feeder for the whole country. To make the information more effective
 it should be linked to a map which shows the rough geographic area served by this
 particular feeder.
- Listing of arrears for public sector organizations.

This website has to serve as a reference point for thorough and detailed information about the power sector.

In addition to publishing information, the website can serve as a forum to which citizens can contribute and comment, particularly in a monitoring capacity regarding official plans and statements. While the internet isn't truly a mass medium in Pakistan, it is useful for reaching policy makers, analysts and writers who will be communicating with larger audiences.

5.5.4 Civil Society Meetings

A single non-government organization on its own is not enough to push this governance agenda. Full success would resemble a social movement rather than an NGO, and getting wide participation in such an effort will be essential. These meetings will generate and focus local level scrutiny on collections and losses. Transparency, however, can be derailed as a democratizing influence if it isn't geared towards serving the needs of citizens (Fung et al 2007). In producing measures of governance, these must be sector specific and carefully calibrated to their context (Andrews et al 2010). An essential task of the civil society meetings will be in informing the objectives of power sector transparency

so that the right information is made available to the public. Further, the guiding spirit of these meeting will be a democratic one in terms of demanding accountability from public sector organizations on the basis of citizenship in the manner of empowered participatory democracy (Fung and Wright 2001).

Heller (2001) has linked the capacity of similar efforts to achieve sustained success to the involvement of institutionalized bodies such as political parties and labor unions. Civil society meetings and the activities of this NGO in general – if some measure of public participation and attention can be achieved – have the potential to attract reform minded allies.

Chapter 6

Conclusion

6.1 Governance and Development in the Pakistani Electrical Power Sector

The original motivation for this paper stemmed from the problem of human development broadly understood, the central role of the state in meeting that challenge, and the question of how citizens can get their state to be responsive in delivering the services they need and want. The choice of electricity as the site of this research study has several justifications. Electricity has a crucial role in a country's economic growth as an enabling infrastructure for growth. Its availability and reliability influences investment decisions and levels of output. In daily life, electricity is both highly noticeable in its absence and consequential in its impact by forcing Pakistanis to rearrange the patterns of their lives around its availability. Electricity also has an iconic quality in that it is emblematic of modernity, and its acquisition an important symbolic marker of progress. For Pakistan specifically, electricity is a good site for studying the state in action because its breadth and reach touches a larger proportion of the population than almost any other state service, and it is relied upon by the rich and poor alike as well as industries and businesses.

The choice of Islamabad as the prime site of this study was based on the density of rich, highly educated, and well-connected consumers of electricity being served by

Pakistan's best physical infrastructure for electricity distribution. For electricity and state service delivery, Islamabad is in many senses the best case scenario. If good service delivery is going to happen in Pakistan, Islamabad seems like fertile ground for the emergence of a more responsive state. Chapters 2-4 explore this set of issues and questions in historical and comparative perspective, while chapter 5 takes a more normative and prescriptive stance in charting a direction which will result in better service delivery from a more responsive state.

The historical review of the Pakistani power sector establishes first and foremost that the current crisis is the product of longer term processes for which the policy directions currently being proposed (with the support of international donors and multilateral lenders) is inadequate. The crisis consists of problems that have been seen in the past, and which will remain with us. The limited set of actions being proposed for the power sector are ahstorically conceived, and therefore don't acknowledge past failures, the sources of those failures, and is disengaged from the problem of implementation which has plagued similar sets of proposals in the past. Despite failures of implementation being blamed on a lack of political will, the planning process attempts to depoliticize decision making in the power as a technical problem requiring technical solutions by power sector experts. This process of depoliticization —which attempts to locate power within the formal state — is a willful disengagement with the social and political environment in which the lived reality of power sector decision making exists on an everyday level.

The limitations of what is codified and formal in determining the "rules of the game" is the main message of chapter 3. The institutions of power sector governance are mutually

constituted by the formal and informal, shaped by personal relationships, language, violence, money, and the power each party to an interaction can exert. The informal and negotiated nature of the state is pervasive, and as relevant to relations within and between public sector organizations as it is to the engagement of citizens with their state. The internal incoherence of this fragmented state underscores the limitations of formal rulesets in determining outcomes, and the poor prospects for reform efforts which focus on the formal aspects of governance alone.

The nature of the state described in chapter 3 is based on the study of its core – the best case scenario of Islamabad. In chapter 4 an Islamabad *katchi abadi* is used to examine the extent to which similar processes dominate at the margins of the state as at its core. Although outcomes are different, and *katchi abadi* residents are acutely conscious of formal rights denied to them, the manner in which they engage with the state is substantially similar to their wealthier and more connected neighbors. Where they have enjoyed success is in collective organization to lobby elected representatives, and an attractive option for *katchi abadis* may be in the establishment of a cooperative housing society which legalizes some of their current practices and would strengthen their bargaining position with the electrical utility.

Depoliticized attempts at power sector reform have little to offer in light of the pervasively informal and negotiated nature of engagement with the fragmented Pakistani state. To tackle the question of political will rather than use it as an excuse leads away from top-down policy perspectives. Instead, as laid out in chapter 5, an energized and informed

Pakistani civil society can be a counterweight to the inertial tendencies of a Pakistani state whose reforms tend to be co-opted by existing power centers rather than leading to new outcomes. Chapter 5's policy recommendations are based on the importance of information, and using transparency to make accountability possible and increase the responsiveness of the Pakistani state. Although very hard to achieve – and the failure of past reforms initiated by well-meaning and informed people is testimony to this – the need to fight leads in the direction of activism and a public sociology of purposive engagement with civil society.

This research project combines analytic and normative perspectives on the Pakistani electrical power sector. It is an analysis of how development outcomes rely on a governance which is the product of informal and formal elements. The question of reform is engaged with both historically, revealing the repeated pattern of crises and reform, and prospectively with some suggestions for challenging these historical forces through an assertion of civil society for a more democratic governance. In the following section I look at some potential constituencies for reform and their recent experiences with the Pakistani power sector.

6.2 Potential Constituencies for Reform

The Government of Pakistan, international donors, and multilateral lenders have all failed to address the underlying problems which scupper market-oriented reforms in the electricity sector. They are all acutely aware of the underlying problems and have referred to them in their own reports (chapter 2). Nonetheless, they have pushed through damaging

policies in spite of doubts and cautions which are occasionally voiced. The planning commission, multilateral lenders and international donors have all recognizing the lack of implementation of their plans, but only advocate more of the same.

Approaching the power sector's problems from the perspective of new institutionalist economics leads to governance reform through changes to formal rules. The inappropriateness of the new institutionalist economics approach is in the disjuncture between the macro setting and lived reality of the everyday state, which is most apparent in the different between the rules and reports of power sector operations on paper in comparison to what actually happens (chapter three). The everyday state is deeply and irrevocably engaged with its social setting, but the written rules are not. On paper, the federal governments mimics the form desired by international donors and multilateral lenders (Meyer and Rowan 1977), but the everyday state is decoupled from this superficial presentation (DiMaggio and Powell 1991). Efforts at reforming governance institutions will continue to founder on this gap between the reality of the state at an operational level and the inability of the state's technocrats to address that reality. The depoliticization of the power sector at the policy level means that reforms simply cannot address the underlying problems.

An unexpected finding of this research was that the set or processes demarcating the boundary of state and society are repeated within and across state organizations. This fragmented state is incoherent and at odds with itself. Hierarchies of power, rent seeking and violence are as relevant within the sphere of the state as they are in the encounter of

citizens with the state. In Mitchell's (1991) terms, the institutional ordering of polity and society has scant respect for the boundaries of this state. Salwa Ismail's study of the everyday state in Egypt found not just a state in society (Migdal 2001), but society in the state (Ismail 2006) in terms of social relations between individuals. In my research I found that these personalistic and power based relations also apply between state organizations.

Engagement with the everyday state has great similarity for rich and poor alike in terms of process, though the impact on the poor is of course much greater and it is much harder for them to negotiate those same processes. The desire for formal rights animates much of the engagement with the state in *katchi abadis*, but is often unrewarding for them when it is achieved. Formal rights don't end the practices of rent-seeking and personalistic relations which make up the encounter with the state. Where subordinate groups in *katchi abadis* have succeeded in achieving some level of service delivery, they have done so by internalizing many of the functions of the distribution company and organizing to deal collectively with public officials and elected representatives. This state is not bifurcated in any meaningful way (Mamdani 1996), nor does membership in civil society provide much relief from the concerns of political society (Chatterjee 2004). Service delivery is achieved through compelling demands and not a sense of obligation or reciprocal exchange of rights and obligations as per a social contract (Mbembe 2000).

The policy recommendations I propose run counter to the depoliticization and purely formal engagement with governance institutions that are visible in the Pakistani power sector. A more transparent power sector, from which citizens collectively and

actively demand effective service delivery is a distant dream in many senses, but it is closer attuned to the lived reality of engaging with the state for the delivery of electrical power than an approach to institutions which focuses on the written representations of the state.

This conclusion uses a few examples to illustrate the central theme of this study: that engagement with legalistic and formal aspects of governance are not only weaker in terms of efforts and results, but that these formal approaches are regularly subsumed into personalistic and informal sets of relations which correspond to existing power relations. The examples which follow look to organizations which appear natural constituencies for reform in bringing formal rights into the power sector, but whose efforts have largely not threatened the status quo.

6.2.1 Non-Governmental Organizations (NGOs)

The Consumer Rights Commission of Pakistan looks like a perfect fit for promoting access to electricity in a formal and rights based framework. Their mission statement describes the goal of "facilitat[ing] the emergence of an organized movement in Pakistan, so that the citizens could have legally enforceable rights." Their work has included promoting the freedom of information, running a safe drinking water campaign, and

¹⁵⁰ Mission Statement of the Consumer Rights Commission of Pakistan. Available at: http://www.crcp.org.pk/mission_statement.htm

engaging political parties to commit to reducing electricity losses in the run up to the 2008 elections. 151

They have two ongoing sets of activities which relate to electricity. The first is the Electricity governance scorecard which they are creating for Pakistan. This work is funded by the open society institute. On this front CRCP has arranged a few public meetings, but at the time of writing the production of the scorecard is progressing slowly. The level of funding corresponds with the amount of funding provided by the open society institute. Salman Humayun, Executive Director, describes Pakistani NGOs as contractors looking for donor funded projects, and he acknowledges that CRCP fits that mold to some extent. With their advocacy work

The CRCP also pursues consumer electricity complaints in a program independent of donor funding called the Consumer Complaint and Redress Forum. This effort is funded through membership dues and a waste management project. The style of engagement and its success is linked to the efforts of Colonel Hashemi (retired), who has a way of dealing with obstructive bureaucrats:

"If you talk meekly or weakly no one will bother to talk to you. I do talk forcefully ... otherwise people don't listen" [said in context of dealing with the government. He doesn't claim to be a serving officer, and doesn't suggest that the CRCP is a government agency, but knows that these misconceptions do exist and uses them to his advantage] 152

¹⁵¹ "CRCP Engages Political Parties on Citizens' Agenda," January 10, 2008. Available at: http://www.crcp.org.pk/pr 10 jan 2008.htm

¹⁵² Field notes October 1, 2009.

Some 15-20 cases per month are received by the CRCP under this program. Summary figures were not available, but Col. Hashemi described most of them as being satisfactorily resolved, even when that took a year or more.

6.2.2 Political Parties

With parliamentary elections scheduled for January of 2013, the upcoming calendar year of 2012 will be an election year. The prospect of the Pakistan People's Party – with its populist roots – substantially cutting subsidies on basic services such as electricity in an election year is unlikely. The resignation of the Governor of the State Bank in July 2011 was attributed in the media to disagreements on the federal government's inflationary borrowing from the state bank, ¹⁵³ suggesting that fiscal tightening is not planned for 2011-12. The 2008 election manifesto of the PPP includes a section on "Ensuring Energy Infrastructure" (Pakistan People's Party 2008).

Parliamentarians and political parties remain regularly exercised about the state of electricity in Pakistan. Yousaf Raza Gillani (Pakistan's Prime Minister) promised to address the electricity shortage in his inaugural address to the national assembly. ¹⁵⁴ The opposition parties in the past 3 years, this means the MQM and the PML-N (irrespective of their on and off coalitions with the PPP) have regularly spoken out and moved on electricity related issues, particularly when the PPP-led government has raised prices in order to lower the

153 Iqbal, Shahid. "State Bank Governor Kardar resigns?" *Dawn*. July 14, 2011

"Power capacity to be increased" *The Daily Times*, March 30, 2008

Available at: http://dailytimes.com.pk/default.asp?page=2008\03\30\story_30-3-2008_pg1_4

subsidies it pays on electricity. When, in January 2011, the PPP government raised fuel tariffs by 10%, the MQM left the coalition government and the PML-N issued a *10 Point National Agenda*¹⁵⁵, the first point of which was to reverse the price increase of petroleum products and to publicly present a policy towards the end of loadshedding of electricity and gas. The provision of electricity and the pricing of electricity are important and regular topics addressed by the parliament.

The Pakistani variation on what is known in the US as pork-barrel politics can involve bringing nationally or provincially funded projects to a politician's constituency, but more typically the politician will arrange for the appointment of selected people in government jobs. The publicly-owned power sector companies, with a collective employment of 120,000, are a plum target. In a case currently under adjudication in the Lahore High Court, the appointment of 1,173 government power sector employees has been challenged on the grounds that the posts were intended for local residents of Faisalabad, Gujranwala, Toba Tek Singh, Khushab, Sargodha and Mianwali, while all of the appointed employees were residents of Gujjar Khan, the constituency of the former Minister for Water and Power during whose tenure they were appointed. While the legality of the termination of these appointments is still under adjudication, the origin of the appointees is not challenged in the case.

Pakistan Muslim League –Nawaz. "Nawaz Sharif ka 10 Point Qawmi Agenda," January 20, 2011.

Available at: http://www.pmln.org/downloads/document_8_nawaz-sharif-10-point-national-agenda.pmln

¹⁵⁶ "Termination of Pepco employees stayed," *Dawn*. July 20 2011. Available at: http://www.dawn.com/2011/07/20/termination-of-pepco-employees-stayed.html

6.2.3 Business Consumers

The textile industry contributes 60% of Pakistan's total export earnings and employs 38% of the manufacturing labor force (Ministry of Finance 2011). The leading industry body, the All Pakistan Textile Mills Association, has been particularly active in the recent energy crisis in response to the significant damage being done to the textile industry. According to Gohar Ejaz, the head of the All Pakistan Textile Mills Association, "Around 17 million jobs are at risk. One million jobs have already been lost. No investment is being made by the industry because of the gas shortages."157 Ejaz's recommendations are focused on the availability of natural gas rather than electricity because textile mills primarily generate their own electricity with gas-fueled power plants rather than rely on the national grid. Gas availability is crucial to the competitiveness of these large industrial plants due to the reliability and control over power generation, and co-generation facilities which capture the waste heat and steam lead to further efficiencies that make a powerful case for selfgeneration in export oriented industries such as Faisalabad textile mills (Anwar 2007). Gas shortages have now derailed textile mills production and curtailed the benefits of opting out from the national grid.

Aside from textile mills, however, there are many small and medium enterprises in the textile industry known as power looms. These family owned businesses incur a much greater direct cost of electricity and are particularly damaged by its unreliability (Anwar

¹⁵⁷ "Aptma demands share in new gas production," *Dawn,* September 23, 2011 Available at: http://www.dawn.com/2011/09/23/aptma-demands-share-in-new-gas-production.html

2007). Due to their small scale, they use diesel powered backup generators rather than the larger and more sophisticated gas power plants at the textile mills. It is also illegal for private consumers to use natural gas power generators without prior agreements such as those negotiated by the larger textile mills. Power shortages in January 2008 resulted in mass protests: "Protestors carrying banners, placards and iron rods in their hands blocked roads, burnt tires, and looted buildings and police remained unable to stem the situation." The protesters dissipated after being promised by the distribution company that loadshedding would be restricted to 8-10 hours, but the subsequent three years have not seen those promises born out. Anwar's analysis of power loom businesses is that they were unable to overcome the collective action problem in addressing their electricity concerns for the lack of an appropriate institutional framework. In contrast, Anwar finds that Sialkot's small and medium enterprises in the surgical and sports goods industries were able to leverage local business associations and effectively negotiate with government for their infrastructure needs.

In the summer of 2011, the Sialkot Chamber of Commerce and Industry proposed to the Ministry of Water and Power that its members will pay a 50% premium over the current cost of electricity in order to ensure reliable electricity supply electricity. The extra money would be used to ensure a steady supply of high sulfur furnace oil for generation, the high cost of which is central to the crippling electricity shortages, but there are several serious

¹⁵⁸ "Anger over power cuts in Punjab explodes," *Dawn*, January 2, 2008 Available at: http://archives.dawn.com/archives/144430

implications of allowing this new arrangement, which would differentiate amongst consumers in terms of the quality of service provided on the basis of their ability to pay.

There are many parallel commercial arrangements for infrastructure which serve as examples. For example, one can pay more for broadband internet access as compared to dialup internet access for improved speeds and different characteristics (e.g. always on). Even within broadband internet there are several categories, such as higher maximum speeds, higher minimum speeds, or unlimited downloads. Many of these examples exist within Pakistan¹⁵⁹. An important difference between internet access and electricity, however, is that public sector entities don't dominate internet access in the way that they do for electricity. ¹⁶⁰ Further, the Government of Pakistan has historically committed to making electricity widely available at reasonable cost, and made this a priority of its development plans (chapter two). In short, while market relations dominate internet access, electricity is a more complicated field in which the Government of Pakistan has made commitments inconsistent with market logics.

6.2.4 Independent Power Producers

On the generation side of the electricity supply chain, the independent power producers contribute 39% of installed capacity (National Transmission and Despatch Company 2010). Since the issuance of the 1994 policy, x% of the increase in installed capacity has come from the private sector. The ability of WAPDA to pay the independent

159 See the Nayatel suite of internet access offerings at www.nayatel.com

¹⁶⁰ Since restrictions on internet service provision were eased in 2000, Pakistan has had many competing internet service providers.

power producers on time has been challenged from the start of their operations. The payment scheme for independent power producers ensures the profit of the investors in two ways. Firstly, they get paid certain fixed capacity charges based on their availability for dispatch, irrespective of whether they produce electricity or not. These fixed charges alone will guarantee a positive rate of return to the investors. Variable charges based on the actual production of power ensure that operating costs are also covered. Secondly, late payments to the independent power producers by WAPDA incur penalties. The difficulty for independent power producers comes in that the penalty for the late payments only arrives with the rest of the payment, and purchasing fuel (which they must do in order to be available for dispatch) then must be arranged through their own credit. Independent power producers are effectively asked to arrange short term financing to cover cash flow problems of the power sector.

Problems with paying the independent power producers have happened several times. Independent power producers have previously been denied capacity payments because they were unavailable for dispatch. They were unavailable for dispatch because WAPDA had not paid them on time, and they needed to be paid in order to procure the fuel from international markets they required so that they could be available for dispatch. This argument, however, was rejected by WAPDA. The independent power producers had no legal recourse because their contracts specifically cater for such circumstances: if WAPDA does not make its payments, then the independent power producers can invoke a sovereign

¹⁶¹ In fact, independent power producers are also protected from exchange rate fluctuations and their payments are also indexed against inflation in the United States.

guarantee from the Government of Pakistan which must then cover the debts. By failing to invoke this guarantee, the independent power producers were then liable for the failure to be available for dispatch, which provided legitimate grounds for WAPDA to deny them a portion of the capacity payments for the period they were unavailable.

In May 2011, the independent power producers were once again owed payments by WAPDA, but this time four companies issued notice for non-payment of dues and then invoked the sovereign guarantees after thirty further days of non-payment. The Government of Pakistan would be in a position of sovereign default if it did not pay the independent power producers, which would have serious consequences for future investments as well as the government of Pakistan's ability to borrow money. The Minister for Water and Power negotiated with the independent power producers and convinced them to withdraw their notices in exchange for a promise that they would be paid by the end of June.

On August 25 2011, the independent power producers were again owed money, and nine IPPs served notice to the Central Power Purchasing Agency for the payment of Rs. 31 billion in arrears. For good measure, the nine IPPs served another notice on September 10 2011 for a further Rs. 15 Billion which had become overdue on September 1. The response of the federal government was to suspend daily payments ("Normal Daily Payments") to

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Hussain, Kashif. "Four power producers invoke sovereign guarantees." Express Tribune. June 16, 2011

¹⁶³ "IPPs serve notice to govt for fresh over-dues," *Daily Times*, September 13 2011. http://www.dailytimes.com.pk/default.asp?page=2011\09\13\story 13-9-2011 pg5 11

these IPPs which cover 50% of the fuel costs incurred during operations¹⁶⁴. Without daily payments, the nine IPPs were under even greater financial constraints to purchase the fuel which they needed in order to be available for dispatch. If the IPPs are not available for power generation, then their contracts stipulate financial penalties.

A resolution was reached after two days of negotiations between the IPP Advisory

Council (whose chairman Yousaf Abdullah, is a former federal secretary of Petroleum and

Natural Resources) and the federal government's team led by the Minister for Water and

Power. The IPPs withdrew the notices they had served in exchange for a resumption of daily

payments and a commitment that the remainder would be cleared by October 14 2011. The

terms of the IPP's power purchasing agreements under the 2002 policy are to remain

intact. 165

There are some positive aspects to these confrontations between the Government of Pakistan and the independent power producers. The independent power producers have partially succeeded in imposing a hard constraint on the Government of Pakistan and brought a certain discipline to the honoring of contracts. If some payment discipline is imposed here, then it could ripple through the rest of the power sector in ending tolerance for the high levels of running default among consumers. Timely and complete payments would be an important step towards a financially sustainable power sector.

Mustafa, Khalid, "Govt pushing 9 IPPs to default on power generation," *The News*, September 11, 2011 Available at: http://www.thenews.com.pk/TodaysPrintDetail.aspx?ID=67152&Cat=6&dt=9/11/2011

¹⁶⁵ Bhutta, Zafar, "Govt agrees to pay Rs45b to IPPs by mid-October," Express Tribune, September 16, 2011

What gains there may be in payment discipline, however, are offset against the manner of their achievement. Serving notice and threatening to invoke sovereign guarantees is a dangerous game of brinksmanship which indicates the end of a contractual relationship rather than the smooth functioning of market relations. The September 2011 incident whereby the IPPs no longer received their daily payments could have been grounds for litigation, but the compromise reached is certainly less destructive to the working relationship between the IPPs and the federal government.

By forming a collective body which represents them in negotiating with the federal government, and hiring an ex-federal secretary as their agent, the IPPs have presented a formidable obstacle to the bad management practices of the government and have shown some success in forcing the federal government to meet the terms of its contracts.

Collective business influence and overlapping personal networks can form the basis for constructive embeddedness (Evans 1995) which can promote developmental outcomes, if some measure of internal coherence and autonomy (absent during the origins of the IPPs) can be maintained.

6.3 A Public Sociology for Governance and Development

In Michael Burawoy's call for public sociology during his presidential address to the American Sociological Association (Burawoy 2005: 11) he divides sociological labor into four cells formed by arraying academic and extra-academic audiences against instrumental and reflexive knowledge. Professional sociology (academic audience and instrumental knowledge), the scientific domain governed by peer-review at research universities, is the

rigorous starting point from which forays into the other cells can begin. That is my goal for this dissertation and the academic publications which I intend to follow it with.

My further goal, however, is a public sociology (reflexive knowledge and an extraacademic audience) of governance and development in the Pakistani power sector. While
the labeling of the current crisis as a governance problem has already begun (e.g. Planning
Commission 2011), civil society's engagement with the power crisis is weak and the terms
of the discussion have been defined by the Government of Pakistan along with international
donors and multilateral lenders. This dissertation will be a first step towards reasserting civil
society against market fundamentalism and state unilateralism in the Pakistani power
sector.

While I have been engaged in policy sociology (instrumental knowledge and an extra-academic audience) for the past year, I found little scope there for a critical perspective when the definition of the problem and its solution are dictated by the funding agency. For example, in the United States Agency for International Development's Terms of Reference for a key power sector reform project, the goals include the elimination of subsidies and the adoption of a "commercial" rationality for the state owned distribution companies (USAID 2010). Any contractor engaged in this program is legally bound to work towards the achievement of these goals, irrespective of what they might consider the merits of imposing a commercial rationality on a public sector organization providing a vital state service. The pursuit of a public sociology in this field cannot be bound by external agendas.

In this role of public sociologist as partisan (Burawoy 2005: 24), I want to articulate and represent issues with which the Pakistani public is already struggling. If the power crisis is indeed to be engaged with in terms of governance then civil society must be fully represented in that discussion. If governance is to mean democratic governance, in which public representatives and state organizations are confronted with statements of public demands and subsequently held to account concerning their achievement, then civil society has to be both informed and engaged with the specific context of the Pakistani power sector. The communications agenda outlined in section 5.5 is my proposed means of doing so, which would be self-sustaining financially and independent of Pakistani or international influence to the extent possible. Such a public sociology would be part of a struggle for recognition and rights such as those waged by subaltern groups including American Suffragettes and Keralan communists, and a step towards a more democratic governance in Pakistan.

Appendix 1: Interview Schedule

Interview guide for "The Culture of Power"						
(for private citizens)						
Age (categories): 18-25 25-35 36-46 46-55 56+						
Male/ Female:						
Place of origin:						
Level of education:						
Time:						
Location:						
[for me to notice, and not to ask: physical appearance, clothes, tiredness, mannerisms, also						
description of location of interview]						
Interview guide for ethnographic interviews in neighborhoods. Use frequent follow up						
questions and probes, following the lead of the subject rather than the order provided.						

- Electricity supply
 - Connection
 - Can you describe the process of getting an electricity connection?
 - How much does it cost to get a connection?
 - How long does it take?
 - Ongoing supply

- Approximately how much do you pay per month for electricity?
 - Is this a significant sum for you?
- How do you pay your bill? (where, cash/ cheque)
- How often does the meter reader come to your house?
 - Please describe what happens when the meter is read.
 - Has a WAPDA lineman ever come to your house? What happened?

Load shedding

- O Has the electricity gone out at your house in the last week?
 - If Yes:
 - How often? How long did it go for?
 - What did you do when it went?
 - Did you try and contact WAPDA? What happened?
 - O What did you expect them to do when you called?
 - N: Does it ever go out at your house?
 - [If Yes, follow up as if for Yes above. If No, probe as to how this house is exempted from a nationwide phenomena]
- O What difference does load shedding make in your life?
 - Which of the following appliances do you own? Air conditioner, television, fridge.
- O How do you pass the time when the electricity goes out at your house?
- O Does load shedding affect your work as well?
 - [same follow up questions]
- O How could WAPDA make loadshedding less painful for you?
- O Would you like to see a loadshedding schedule in advance?
- O What would you do if you there was a power outage at your house right now?
 - If some action is indicated: How long would you wait first?

Institutional confidence in WAPDA

- O Do you trust WAPDA to provide good service?
 - What kind of service do you expect from them?
- O Have you ever tried to contact WAPDA about loadshedding or outages?
- O Have you ever tried to contact them for any other reason?
- O Have you ever visited their office to ask about loadshedding?
- O Have you ever visited their office for any other reason?
- O Possible Follow-ups for all WAPDA questions:
 - What was the result?
 - Did they take note of your concerns?
 - Was the problem solved?
 - How would you describe the experience?

- Did you try to use any connections (saffarish¹⁶⁶) to get the result you wanted? [see questions on personal ties below]
- O Why do you think loadshedding happens?
 - Whose responsibility is it?
 - Do you think that Pakistan will always have loadshedding?
- O Do you think that everyone bears their fair share of loadshedding?
 - Who do you think is treated unfairly? Who is treated the best? How do you know?

Personal ties

- O Do you know anyone in WAPDA who could help you if there was a problem?
 - What is your relationship to them?
 - Have you ever tried to get them to help you? If No: Why not? If Yes: What happened?
- O Do you know anyone in local or national government who could help you?
 - Follow ups as above
- O Do you think that using your contacts would help solve any problems with WAPDA?

Saffarish describes an attempt to get something accomplished by drawing on an inside connection or a high ranking person.

Interview guide for "The Culture of Power"

(For employees of WAPDA)

Age (categories):	18-25	25-35	36-46	46-55	56+	
Male/ Female:						
Place of origin:						
Level of education:						
Time:						
Location:						
[for me to notice, and	d not to	ask: ph	ysical a	ppearai	nce, clothes, tiredne	ss, mannerisms, also
description of locatio	n of inte	erview]				

- Please describe your job
 - How long have you had this post?
 - How long have you been a WAPDA employee?
 - What previous posts have you held?
 - What is the relationship of this post to the larger WAPDA system?
 - Who do you report to?
 - How many people report to you?
 - What do you think of as your main responsibilities?
 - Which takes up the most of your time and attention?
- O Why did you take this job?
 - Why are you still in it?

Service

- O What do you think of as good service on the part of the WAPDA?
 - How is this measured?
 - Where good service is provided, how is quality maintained and ensured?
 - Where good service is not provided, why not?
 - What would you say needs to be changed to make sure quality service is provided?
 - O Is good leadership the answer?
 - O What about changing the rules of the bureaucracy?
 - O What technical improvements would you like to implement that would lead to better service?
 - O What else could you suggest?
- What kind of interactions do you have with customers? [for customer facing jobs]
 - Please describe specific examples from the past few days.
 - Do your personal acquaintances or family members ever contact you about their service?
 - What have they asked for?
 - What did you do about their requests?

Load shedding and outages

- O How do customers respond to loadshedding?
 - Do customers try and contact you in that time?
 - How frequently?
 - What are some of the things they've said to you?
 - How do you respond?
- Would it be possible to provide a weekly loadshedding schedule in advance to customers?

- What effect do you think this would have on consumers?
- Would this have any impact on WAPDA?
- Are customer responses to loadshedding any different to other types of interruptions?
 - Have you ever been threatened by customers as a result of loadshedding or other outage?
 - What is the worst outage that you've ever directly experienced?
- O Do you think that everyone bears their fair share of loadshedding?
- Personal experience as a customer
 - O Where do you live?
 - O What is the electricity supply like in your neighborhood?
 - O What do you do during periods of load shedding?

```
انٹرویو گائیڈ برائر" کلچر آف پاور"
                             18-25 25-35 36-46 46-55 56+
                                                                          عمر (کیٹگری):
                                                                          . برداعورت
                                                                                 آبائي مقام
                                                                          تعليمي استعداد:
                                                                                     وقىت
                                                                                      مقام
 { مين ديكهون كا ، اور سوال نهين كرون كا : ظاهري حالت، لباس ، اكتابث ، راه و رسم كي پابندي ، اور
                                                            انٹرویو کر مقام کی وضاحت بھی}
علاقع ميں قومياتي انٹرويو گائيڈ - دہرائے جانے والے سوالات اور ممکنات کا استعمال کريں ، ذيل ميں دئيے
                                                             گئے دی گئی ترتیب سے قطع نظر
                                                                        ☆ بجلي كي سيلائي
      كيا آپ بجلي كا كنكشن حاصل كرنر كاطريقه كاربيان كرسكتر سين؟
                               كنكىشن حاصل كرنر پركتنا خرچ آتا سر؟
                                           اس ميں كتنا عرصه لگتا سِر ؟
                                                                                0
                                                               جارى سيلائي
                    آپ بجلی کر لیر اندازاً سر ماه کتنی رقم ادا کرتر سیس؟
                             0 کیایه رقم آپ کے لیے اہمیت رکھتی ہے؟
                    آپ اپنابل كيسر ادا كرتر بير؟ (كمان ، كيش/ چيك)
                                 میٹرریڈر آپ کر گھراکثر کب آتاہر؟
                     0 پليز بتائيں كه جب ميٹر پڑھا جاتا سر تو كيا سوتا سر؟
                   0 كيا واپدًا كا لائن مين كبهي آپ كر گهر آيا ؟ كيا سوا؟
                                                                        لوڈ شیڈنگ
                         كيا پچهلر سفتر آپ كر گهر كي بجلي گئي تهي ؟

 اگرساں:

                     کتنی بار؟ یه کتنی دیر کر لیر گئی؟
                   جب بجلي چلي گئي تو آپ نر کيا کيا؟
کیا آپ نر واپڈا سر رابطه کیا یا رابطه کرنر کی کوشش کی؟
```

كيا ہوا؟

```
    ہیں بلاتے ہیں تو کیا توقع رکھتے ہیں؟
    کیا آپ کے گھر کی بجلی ہمیشہ جاتی ہے
```

0 {اگر سان ۱۰ گراوپر دیے گئے سوال پر جواب سان میں ہے تو جاری رکھیں ۔اگر نہیں تو اندازہ لگائیں کہ یہ گھر ملک گیر عمل سے

کیسے مستثناء ہے}

لوڈ شیڈنگ آپ کی زندگی میں کیا تبدیلیاں لاتی ہے؟

جب آپ کے گھر کی بجلی جاتی ہے تو آپ اپنا وقت کیسے گزارتے ہیں؟

کیا لوڈ شیڈنگ آپ کے کام پربھی اثر انداز ہوتی ہے؟

– (وېبى سوالات دوباره)

واپڈا لوڈ شیڈنگ کو آپ کے لیے کم تکلیت دہ کس طرح بنا سکتی ہے؟

اگر عین اس وقت آپ کے گھر کی بجلی چلی جائے تو آپ کیا کریں گے ؟

اگر کسی ایکشن کی نشاندہی کی گئی ہر: آپ پہلر کتنی دیرتک انتظار

کریں گر ؟

🖈 واپڈا پر ادارتی اعتماد

کیا اچھی سروسز کے لیے آپ واپڈا پر اعتماد کرتے ہیں؟

- آپ ان سے کس قسم کی سروس کی توقع رکھتے ہیں؟

کیا آپ نے لوڈ شیڈنگ یا بجلی جانے کی صورت میں کبھی واپڈا سے رابطہ کیا ہے؟

کیا آپ نے کبھی کسی دوسری وجه سے ان سے رابطه کیا ہے؟

واپڈا کے متعلق تمام سمکنه فالو اپس کے سوالات :

نتیجه کیاتها؟

کیا انہوں نر آپ کی شکایت کا نوٹس لیا؟

کیا سسئله حل کیا گیا؟

آپ اس تجربر کو کیسر بیان کریں گر؟

کیا آپ نے مطلوبہ نتائج کے حصول کے لیے کوئی رابطہ (سفارش) استعمال کی ؟

(ذاتی تعلقات کر بارے میں ذیل کر سوالات کو دیکھیں)

آپ کے خیال میں لوڈ شیڈنگ کیوں ہوتی ہے؟

- اس کی ذمه داری کس پرسے؟

- کیا آپ سمجهتر ہیں که پاکستان میں لوڈ شیڈنگ ہمیشه جاری رہر گی؟

کیا آپ کر خیال میں ہر کوئی لوڈ شیڈنگ میں منصفانہ شئیر برداشت کرتا ہر ؟ کس سر

بہترین سلوک کیا جاتا ہے؟آپ کو اس کا کیسے علم ہوا؟

🖈 ذاتى تعلقات

- O کیا آپ واپڈا کسی ایسے فرد کو جانتے ہیں جو کسی مشکل میں آپ کی مدد کر سکے ؟
 - آپ کاان سے کیارشتہ ہے؟
- کیا آپ نے کبھی ان سے مدد حاصل کرنیکی کوشش کی ؟ اگر نہیں: کیوں نہیں

؟ اگر ڄاں: كيا ڄوا؟

- کیا آپ لو کل یا قومی حکومت میں کسی کو جائتے ہیں جو آپ کی مدد کر سکے؟
 - مئدرجه بالاسوالات كرين
- کیا آپ سمجھتے ہیں تعلقات کو استعمال کر کے آپ واپڈا سے متعلقہ مسائل کو حل کرنے میں مدد حاصل کر سکتے ہیں؟

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انفرويو گائيد برائر"كلچر آف پاور"
```

عمر (كيڤگرى) : : 46-55 56+ 35-35 36-46 46-55 56+

سرد*ا*عورت :

آبائی مقام :

تعليمي استعداد :

وقت:

ىقام :

{ میں دیکھوں گا ، اور سوال نہیں کروں گا : ظاہری حالت، لباس ، اکتابے ، راہ و رسم کی پابندی ، اور انٹرویو کر مقام کی وضاحت بھی}

واپٹا کر ملازمین کر سوالات

0 ملازمت

- پلیز اپنی ملازمت کی وضاحت کریں
- آپ کتنر عرصه سر اس عمده پر سین ؟
- آپ کتئے عرصہ سے واپڈا میں ملازست کررہے ہیں؟
 - آپ کن عہدوں پر فائز رہر ہیں؟
 - اس عہدے کا واپڈا کے نظام سے کیا تعلق ہے؟
 - آپ کس کو جواب دہ ہیں ؟
 - کتئر لوگ آپ کو جواب دہ ہیں؟
 - آپ کر خیال میں آپ کی اہم ذمہ داریاں کون سی ہیں؟
- کون سی ذمه داری آپ کا زیاده تر وقت اور توجه حاصل کرتی بر ؟
 - آپ نریه ملازمت کیوں اختیار کی؟
 - آپ ابھی تک اس ملازمت میں کیوں ہیں؟

∜سروس

- O آپ واپڈا کی طرف کس کو اچھی سروس قرار دیتر ہیں؟
 - اس كااندازه كس طرف كيا جاتا بر؟
- کون سی اچھی سروس فراہم کی جاتی ہے ، اس کی کوالغی کو کیسے جانچا جاتا
 - ہے اوریقین دہانی کی جاتی ہے ؟

```
O کہاں پراچھی سروس فراہم نہیں کی جاتی ، کیوں نہیں؟
  آپ کے خیال میں کوالٹی سروس فراہم کرنے کے لیے کن تبدیلیوں کی ضرورت
                                                                                     <u>ہے</u>؟
                                 كيا جواب اچهى ليڈر شب سر؟
 بيوروكريسى كر قوانين كى تبديلي كى بارح سين آپ كا كيا خيال سر؟
  اچھی سروس کر لیر آپ کون سی تکنیکی تبدیلیون کر خواہاں ہیں؟
                           اس كر علاوه آپ كياتجويز كرتر سِين؟

    کنزیومرز کے ساتھ آپ کے کیسے روابط میں؟ [کسٹمرز کا سامنا کرنے والی جاب کے لیے

                                                                                       [
                پلیز پچھلے چند دنوں کی خصوصی مثالیں بیان کریں
  کیا آپ کر ذاتی شناسا یا فیملی ممبران نے کسی سروس کے بارے میں
                                                                  کبھی آپ سے رابطہ کیا؟
                       انهوں نر کس چیز کا استسفار کیا؟
                     آپ نے ان کی درخواستوں کا کیا کیا؟
                                              🖈 لوڈشیڈنگ اور بجلی کا بند ہونا

    کسٹمرز لوڈ شیڈنگ پر کیاردعمل کرتر ہیں؟

    کیا کمسٹمرز اس وقت آپ سے رابطہ کرنے کی کوشش کرتے ہیں؟
                                   عام طور پر کس طرح؟
                          وه آپ سر کیا کچھ کہتر ہیں؟
                 آپ اس پر کس قسم کا ردعمل کرتر ہیں؟
                کیا کمسٹمرز کو لوڈ شیڈنگ کا ہفتہ وار پیشگی شیڈول دینا ممکن ہر
                   آپ کر خیال پراس کا کنزیومرز پر کیا اثر ہو گا؟
                             کیا اس کا واپڈا پر کوئی اثر پڑے گا؟
    کیا کسٹمرز لوڈ شیڈنگ پر دوسری قسم کی خرابیوں سر الگ قسم کا ردعمل ظاہر
                                                                               کرتے ہیں ؟
 کیا لوڈ شیدنگ یا بجلی بند ہونر کی صورت میں کمسٹمرز نر کبھی آپ
                                                                      كو دهمكيان دين سِين؟
```

سب سے بدترین بجلی کی مداخلت جس کا آپ کو براہ راست تجربه ہو

ا كون سى تھى؟

O کیا آپ کے خیال میں ہر کوئی لوڈ شیڈنگ میں اپنا منصفانه شئیر برداشت کرتا ہے؟

الم کسٹمرر کی حیثیت سے ذاتی تجربه

- آپ کہاں رہتے ہیں؟
- O آپ کے علاقے سیں بجلی کی سپلائی کیسی ہے؟
 - O آپ لوڈ شیڈنگ کے دوران کیا کرتے ہیں؟

Appendix 2: Project Information Sheet (Citizen)

Hello. My name is Ijlal Naqvi and I am a PhD candidate in Sociology at the University of North Carolina at Chapel Hill. I am conducting interviews for a research study, and would like to ask your permission to interview you. To join the study is voluntary. You may refuse to join, or you may withdraw your consent to be in the study, for any reason, without penalty.

The objective of this study is to understand the experience of Pakistani citizens in getting their electricity service from the public electricity supply companies. I will ask you questions about your the conditions of electricity supply in your home and neighborhood. I am interested in your personal experiences, your understanding of how the public sector electricity supply should work, and how you might respond to some hypothetical scenarios I will ask you about.

The interview will last for up to one hour, though you can stop it at any time. I will take notes about what you say, and – with your permission – make a recording of the interview. You do not have to answer any questions that you do not wish to answer, for any reason. You may ask to stop the recording at any point in the interview, for any reason.

Your name and any personal identifiers will not be recorded. If I quote from your comments in my research, you will remain anonymous.

If you have questions, or concerns, you should contact me or my advisor (contact details are below).

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پروجيكٹ انفار ميشن شيٺ برائے "كلچر آف پاور"

سپلو! میرا نام اجلال تقوی ہے اور میں چیپل ہل میں شمالی کیرولینا کی یونیورسٹی میں سوشیالوجی میں پی ایچ ڈی کا امیدوار ہوں ، میں ریسرچ اسٹڈی کی غرض سے انٹرویو لے رہا ہوں اور آپ سے آپ کا انٹرویو لینے کی اجازت چاہتا ہوں۔تعلیم میں شمولیت اختیاری ہے ۔آپ اسے جاری کرنے سے انکار کر سکتے ہیں یا آپ اپنی مرضی سے کسی بھی وجہ سے بغیر کسی جرمانے کے اسٹڈی کو ترک کر سکتے ہیں

اس اسٹائی کا مقصد پاکستانی عوام کا پبلک الیکٹرسٹی سپلائی کمپنیوں سے ان کی الیکٹرسٹی سروس کے حصول کے تجربے کو سمجھنا ہے۔ حس آپ سے آپ کے گھر اور پؤوس میں بجلی کی سپلائی کی صورت حال کے بارے میں سوالات کروں گا مجھے آپ کے ذاتی تجربات، آپ کے خیال میں پبلک سیکٹر سپلائی کو کیسے کام کرنا چاہیے اور میں آپ سے جن مفروضات کے بارے میں آپ سے صوالات کروں گا آپ کا ان پر کیا رد عمل ہو گا میں دلیجسی ہے۔

یہ انٹرویو ایک گھنٹر تک جاری رہے گا اگرچہ آپ کسی بھی وقت اسے ختم کر سکتے ہیں س۔ میں آپ کے بیانات کے نوٹس لوں گا۔ آپ کی اجازت سے ۔انٹرویو کو ریکارڈ کروں گا۔اگر آپ کسی وجہ سے کسی سوال کا جواب نہ دینا چاہیں تو نہ دیں۔ آپ انٹرویو کر دوران کسی بھی پوائنٹ پر اسر روکنر کا کہہ سکتر ہیں س۔

آپ کانام اور داتی شناخت ریکارڈ نہیں کی جائے گی ۔اگر میں اپنی ریسرج میں آپ کی رائے کا حوالہ دوں گا تو آپ گمنام رہیں گے ۔

اگر آپ کوئی سوال کرنا چاہیں یا کوئی تعلق رکھنا چاہیں تو آپ مجھ سے یا میرے ایڈوائزر سے رابطہ کریں (رابطے کی تفاصیل ڈیل میں ہیں)

ريسج مين شركت كننده كي حيثيت سم اين حقوق كم حوالم سم كيا آب كم كوئي سوالات بس ؟

انسانی رضاکاروں پر تمام ریسر ج کا ایک کمیٹی جائزہ لے گی جو آپ کے حقوق اور ویلفنیر کا دفاع کرے گی ۔اگر ریسر ج سے متعلق اپنے حقوق کے بارے میں آپ کے پاس کوئی سوال یا دلچسپی ہے تو آپ رابطہ کر سکتے ہیں، گمنامی سے اگر آپ چاہیں، ادارتی ریویو بورڈ سے 3113-966-991 + پر یا ہذریعہ ای میا IRB subjects@unc.edu

پرنسىپل تحقىق كننده : اجلال قوى معبه معنانده ، اجلال مقوى معنانده ، معبه معنانده ، اجلال مقوى معبه معبال معبه معبال معبه معبه معبال معبال

Appendix 3: Project Information Sheet (Bureaucrat)

Hello. My name is Ijlal Naqvi and I am a PhD candidate in Sociology at the University of North Carolina at Chapel Hill. I am conducting interviews for a research study, and would like to ask your permission to interview you. To join the study is voluntary. You may refuse to join, or you may withdraw your consent to be in the study, for any reason, without penalty.

The objective of this study is to understand the experience of Pakistani citizens in getting their electricity service from the public electricity supply companies. I will ask you questions about your experiences with the electrical power sector in both your private and official capacity. I am interested in your personal experiences, your understanding of how the public sector electricity supply should work, and how you might respond to some hypothetical scenarios I will ask you about.

The interview will last for up to one hour, though you can stop it at any time. I will take notes about what you say, and – with your permission – make a recording of the interview. You do not have to answer any questions that you do not wish to answer, for any reason. You may ask to stop the recording at any point in the interview, for any reason.

Your name and any personal identifiers will not be recorded. If I quote from your comments in my research, you will remain anonymous.

If you have questions, or concerns, you should contact me or my advisor (contact details are below).

What if you have questions about your rights as a research participant?

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject

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پروجیکٹ انفارسیشن شیٹ برائے "کلچر آف پاور"

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اس اسٹڈی کا متصد پاکستانی عوام کا پبلک الیکٹرسٹی سپلائی کمپنیوں سے ان کی الیکٹرسٹی سروس کے حصول کے تجربے کو سمجھنا ہے۔ حسی آپ سے الیکٹریکل پاور سپلائی سیکٹر میں آپ کے پرائیویٹ اور دفتر کی جگہ پر تجربات کے بارے میں سوالات کروں گا۔مجھے آپ کے ذاتی تجربات، آپ کے خیال میں پبلک سیکٹر سپلائی کو کیسے کام کرنا چاہیے اور میں آپ سے جن مفروضات کے بارے میں آپ سے سوالات کروں گا آپ کا ان پر کیا رد عمل ہو گا میں دلچسپی ہے۔

یہ انٹرویو ایک گھنٹے تک جاری رہے گا اگرچہ آپ کسی بھی وقت اسے ختم کر سکتے ہیں س۔ میں آپ کے بیانات کے نوٹس لوں گا۔آپ کی اجازت سے ۔انٹرویو کو ریکارڈ کروں گا۔اگر آپ کسی وجہ سے کسی سوال کا جواب نہ دینا چاہیں تو نہ دیں۔آپ انٹرویو کے دوران کسی بھی پوائنٹ پر اسے روکنے کا کہہ سکتے ہیں س۔

آپ کانام اور ذاتی شناخت ریکارڈ نہیں کی جائے گی ۔اگر میں اپنی ریسرج میں آپ کی رائے کا حوالہ دوں گا تو آپ گمنام رہیں گے -

اگر آپ کوئی سوال کرنا چاہیں یا کوئی تعلق رکھنا چاہیں تو آپ مجھ سے یا میرے ایڈوائزر سے رابطہ کریں (رابطے کی تفاصیل دیل میں ہیں)

ريسرج مين شركت كننده كي حيثيت سر اينر حقوق كر حوائر سر كيا آب كر كوئي سوالات سن؟

انسانی رضاکاروں پر تمام ریسرج کا ایک کمیٹی جائزہ لے گی جو آپ کے حقوق اور ویلفئیر کا دفاع کرے گی ۔اگر ریسرج سے متعلق اپنے حقوق کے بارے میں آپ کے پاس کوئی سوال یا دلچسپی ہے تو آپ رابطہ کر سکتے ہیں، گمنامی سے اگر آپ چاہیں، ادارتی ریویو بورڈ سے 3113-966-991 + پر یا ہذریعہ ای میل IRB subjects@unc.edu

> پرنسپل تحقیق كننده : اجلال تقوى 8456 8455 ، 0302 مىرولىنا، چيپل ېل پى ايچ دى اميدوار، شعبه سوشيالوجى، يونيورسٹى آت نارتھ كيرولينا، چيپل ېل فيكلئى ايڈوائزر: چارلس كرزمين، 1007 1919 1+، https://www.auc.edu

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