

Institutional Endowments and Electricity Regulation in India

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Abstract

In 1991 Indian government launched systematic economic reforms programme. The infrastructure industries such as telecommunications and electricity have subsequently been restructured and opened to private sector participation. Accompanied with the restructuring and privatisation has been setting up of independent regulatory agencies for telecommunications and electricity. While there is a single Telecom Regulatory Authority of India (TRAI) for whole country the electricity regulatory system in India is central and provincial. In addition to Central Electricity Regulatory Commission there are 18 other provincial (state level) State Electricity Regulatory Commissions (SERCs) that have been set up by the local (state) governments to regulate electricity markets, encourage competition and private investment. This is due to the federal nature of government in India and also because Indian constitution lists electricity in Concurrent List, meaning both the federal and state level governments are authorised to frame policies regarding electricity supply industry except for nuclear power which is in domain of only federal government. Although most of the government owned state electricity boards are now unbundled and corporatised there is little or no privatisation and the private sector investment in generation and distribution has been very little. A major cause for this could be lack of effective regulatory arrangements.

This paper will examine the Indian electricity regulatory developments from an institutional economics perspective following Levy and Spiller (1994) and Stern and Holder (1999) framework to analyse the regulatory systems. While discussion will encompass issues at national level, a case study of a particular state Gujarat will be provided to map the regulatory developments in context of the institutional endowments and see whether that could explain the limited success of regulatory system in achieving the expected outcomes namely effective economic regulation and encouraging competition in the segments where it is possible. The analytical framework used in this study is expected to lay foundation for a bigger study encompassing all the state regulatory commissions at a later stage.

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Introduction

Regulatory reforms in developed and developing countries accompanied with privatisation and deregulation of public utilities have generated substantial research interest in academic circles. The focus of much of the work on economic regulation has been on the instruments of regulation such as incentive regulation based on rate of return or price cap. Only recently the issues of the regulatory process and institutional arrangements have started attracting attention of the scholars. Levy and Spiller (1994) in their seminal paper argued that institutional aspects regulation need equal attention if the regulatory reform has to be effective in creating and sustaining environment for attracting and retaining private investment in the regulated industries. Institutional arrangements for practice of regulatory policy play a key role in providing stable and effective regulatory environment. Levy and Spiller (1994) provide empirical support for their arguments in their study of national institutional endowments and telecom regulatory institutions in five countries. Subsequently the analytical framework has been used by Stern and Holder (1999) to study regulatory governance in developing countries of Asia. This study proposes to extend this work in Indian context with reference to electricity regulation. Stern and Holder (1999) did include electricity regulators in India in their study, but since 1999 there have been legislative changes as well as setting of many more state level regulatory commissions.

The paper is organised as follows. In next section a brief description of institutional framework is provided. The regulatory governance and criteria to measure it are discussed. This is followed with description of the institutional endowments at national and state level in Indian context setting the scene for discussion of electricity regulatory system in following section. Discussion and concluding remarks are provided in the last section.

Institutional Framework Analysing Regulatory Structures

The privatisation and regulation experiment in the UK and many other countries is much studied phenomenon². In most of the studies on economic regulation, the focus has been on instruments of regulatory policies such as price controls or rate of return. Earlier literature on regulation of US electricity, telecommunications and other regulated industries also show

² There are several studies including, Vickers and Yarrow (1988), Kirkpatrick and Parker (2005), Newbery and Pollitt(1997) and so on.

similar trends. As Levy and Spiller (1994) note that much of the literature on regulatory challenges concentrates on regulatory instruments such as incentive regulation.

Attempts by several economies in since 1980s to find market based solutions to supply of infrastructure services have not been uniformly effective. Levy and Spiller (1994) argue that a nation's institutional endowments influence the regulatory design. Following North (1990) and others a nation's institutional endowment is argued to comprise five elements:

1. Country's legislative and executive institutions
2. Country's judicial institutions
3. Customs and other informal but broadly accepted norms that are generally understood to constrain the action of individual or institution
4. Character of contending social interests within a society and the balance between them, including role of ideology.
5. Administrative capabilities of the nation

Through historical analysis of the regulatory structure in the broader contexts of the national institutional framework of their sample countries, Spiller and Levy highlight the interaction of political institutions with regulatory process and potential impact of such interaction on the regulatory performance. They analysed the regulatory designs of telecommunications industry in five countries (UK, Jamaica, Philippines, Argentina and Chile). They argue that, *“the credibility and effectiveness of a regulatory framework- and hence its ability to facilitate private investment-varies with a country's political and social institutions.”* (Spiller and Levy, 1994, p.202). Therefore, of the five elements of national institutional endowments listed by North (1990), Spiller and Levy concentrate on the first two elements in their study. They conclude, *“that success of regulatory systems depends on how well it fits with a country's prevailing institutions, if a country lacks the requisite institutions or regulatory system that is incompatible with its institutional endowment, efforts at privatization may end in disappointment, recriminations, and the resurgence of demands for re-nationalisation.”* (Spiller and Levy, 1994, p. 242).

Spiller and Levy's study makes another important contribution by providing an analytical framework to study the regulatory governance separately. They identify regulatory design as comprising of two elements namely *regulatory governance* and *regulatory incentives*. They

define *regulatory governance* as, “*governance structure of a regulatory system as the mechanism that societies use to constrain regulatory discretion regulatory discretion and to resolve conflicts that arise in relation to these constraints.*” (p. 205). *Regulatory incentives* on other hand comprise *the rules governing utility pricing, cross or direct subsidies, entry, interconnections etc.*

Stern (1997) and Stern and Holder (1997) extend the study of regulatory systems but concentrate on the regulatory process in addition to Levy and Spiller’s focus on institutional design and formal accountability of regulatory institutions. Stern (1997) focuses on issues of informal accountability which are listed by North as points 3 and 4 above. Explaining the distinction between the formal and informal accountability Stern and Holder (1997) split the attributes of institutional framework into two categories. They describe formal institutional mechanisms that are written in the legislation and informal mechanisms as regulatory process encompassing the implementation of the regulatory laws. The later process involves interpretation and understanding of law among the stakeholders (namely regulators, regulated participants and consumers). Stern and Holder (1997) identify six inter related aspects of regulatory framework and provide results from a survey of regulatory practice for infrastructure industries in Asian countries. Three of the six aspects relate to institutional design (the formal accountability) and other three relate to regulatory process and practices (informal accountability). The formal accountability aspects include:

- Clarity of Roles and Objectives
- Autonomy
- Accountability

The informal accountability aspects studied are:

- Participation
- Transparency; and
- Predictability.

(Stern and Holder, 1999, p.42)

Stern and Holder report the results of a survey of a twelve infrastructure industries in six developing countries from Asia namely, Bangladesh, India, Indonesia, Malaysia, Pakistan and Philippines. Regulatory arrangements were appraised on above mentioned aspects of regulatory accountability against an ‘international best practice’, which authors develop

based on regulatory experience in OECD countries. The definitions used for best practice by Stern and Holder (1999) are given in the box 1 below:

Box 1: Criteria for Regulatory Governance and Best Practice Definitions
<ol style="list-style-type: none">1. Clarity of Roles and Objectives: The regulatory function is well articulated, well enshrined in primary legislation, and clearly separated in practice from policy and commercial functions.2. Autonomy: There is a separate regulator with arrangements for appointment and financing which appear to guarantee autonomy of action.3. Participation: A comprehensive process of formal consultation (including public hearings and publication of and comment on consultation responses) is followed before decisions are made.4. Accountability: There is full accountability in terms of appeals, including a specific legal right of redress. The accountability of the regulator to Courts or parliament for fulfilling general legal duties is appropriate without being excessive.5. Transparency: All regulatory documents are available to the public, except where specifically classified as confidential and the regulator publishes major decisions as well as the reasoning behind major decisions.6. Predictability: Regulatory powers and duties cannot be changed without changes in primary law; key regulatory instruments or documents cannot be changed without undergoing appropriate processes; and there is a clear policy and coherent approach behind all decisions. <p>Source: Stern and Holder, 1999, p.45.</p>

In the following section we draw from this analytical framework and examine the electricity regulatory experience at CERC and Gujarat state regulatory commission (GSERC). We first narrate in brief the national institutional endowments that form background to the reforming legislation affecting electricity industry.

National institutional endowments in India

As a sovereign parliamentary system Indian government is characterised by two houses of parliament³ with a written constitution clearly separating the functions of legislative, executive and judiciary. Indian judicial system is similar to one in the UK as it evolved during the British rule of India and has retained much of the character in post independence period also. Constitution of India provides high level of independence and security to judges. Indian judiciary, particularly High Courts and Supreme Court enjoy high level of credibility. Except during a short period between 1975-77 when emergency was declared by the then government, the judiciary and legislature have enjoyed the independence from the executive.

Although India is a parliamentary democracy a multi party electoral competition for power has emerged only recently. There were attempts between 1950 and 1985 by other political parties⁴ to compete with Congress party, it remained effectively one party system till the Bharatiya Janta Party (BJP) really challenged the strong hold of Congress party at the national level. Subsequently however, many regional political parties and various leftist political parties have become significant enough to thwart emergence of bipolar political system at the Central level. Indeed since 1991, there have been minority governments supported by smaller parties or coalition government at the Central level. It is rather ironic fact about recent Indian polity that major economic reforms were launched by a minority Congress government supported by few regional parties. The executive has substantial control over legislative agenda and legislature when one of the main national political parties has clear electoral mandate. However, the recent general elections to Indian parliament in the years 1991, 1996, 2002 have shown that coalitions may impose severe restrictions on the legislative and executive powers of the government. A pertinent example is 'disinvestment policy' which is potentially a corner stone in turning around most of the public sector enterprises. Although 'disinvestment'⁵. NDA (National Democratic Alliance) coalition

³ Lower House (Lok Sabha) is the primary legislative body with Members of Lower House elected directly in a fairly transparent and impartial electoral system directly by the people. Upper House (Rajya Sabha) comprises of members indirectly elected through the electoral school comprising of the provincial (State) legislature.

⁴ For example in mid 1960s a group of libertarian politicians led by late C Rajgopalachari, challenged the Jawaharlal Nehru's policies on economic front and set up a Swatantra Party. The experiment did not last long and slowly Swatantra Party lost momentum. Again in 1977 a coalition of various parties emerged after the emergency period declared by late Mrs. Indira Gandhi. That experiment also did not create a viable second dominant party.

⁵ Various governments since early 1990s have preferred to use term 'disinvestment' to 'privatisation'. There has also been a concern about 'disinvesting' government stake from the so called 'Navratnas' or nine jewels in form

government led by main political party BJP keen on implementing the disinvestment policy, which it essentially inherited from previous Congress led minority government, set up a separate ministry at federal level with a Cabinet Minister in charge of the programme. However, the UPA (United Progress Alliance) coalition government led by main political party Indian National Congress that took over power from NDA, decided not to have disinvestment ministry and reduced emphasis on disinvestment policy. This has practically halted privatisation programme. The reason for this major shift in the policy implementation is the fact that UPA government is supported in parliament by various communist parties who have significant presence in a parliament where neither main stream party could secure the clear mandate from people.

After becoming a sovereign republic Indian various national governments with effectively one dominant party (Indian National Congress⁶) broadly followed a 'command and control economy' model leaning more towards erstwhile Soviet Union style planned economy. Excessive regulation of private sector and substantial segment of industrial economy (steel, electricity, gas, petroleum, heavy engineering, tele-communications among other sectors) was dominated by public sector enterprises. The legacy of public ownership of utilities still continues. Public ownership of utilities has lent itself to interference by the executives which has affected the economic performance of the PSUs. Political interference is most visible in form of distributive politics in electricity industry. Publicly owned electric utilities have been used to provide power to certain segment of customers, particularly farmers, at a highly subsidised rates or even free of costs in some states. In petroleum and gas supply industry the kerosene, cooking gas (Liquified Petroleum Gas) are highly subsidised resulting in huge cross subsidies or losses.

Electricity regulation in India

Indian constitution lists electricity in Concurrent List, meaning both the federal and state level governments are authorised to frame policies regarding electricity supply industry

of profit making public enterprises. These are most profit making oil and gas companies and few engineering public enterprises. Left parties in India objected to selling of profit making enterprises and very frequently the labour unions of public enterprises have got support from not only left parties but also from main opposition parties.

⁶ The name of Indian National Congress had change during periods when late Mrs. Indira Gandhi dominated the party and there were break up groups in the party. It was called for sometimes during 1980s as Congress (I) where I stood for Indira Gandhi.

except for nuclear power which is in domain of only federal government. This national level institutional endowment meant that the public sector only could supply power in the country. Hence the industry structure remained monopolistic till the reforms were undertaken in 1991. After 1991 not only was the public sector monopoly removed from the industry but regulation of the industry was delegated to regulatory commissions and also in some cases assets of public enterprises were privatised.⁷ These developments have changed the institutional landscape and market structure that now guide the development of the industry.

Since 1991 reform of electricity industry has witnessed slow and inconsistent policy response. The electricity sector was opened up and private investment was invited in generation. In early 1990s a large private investment project in electricity generation in the state of Maharashtra was implemented by Enron (jointly with GE and other companies) and ended in a disastrous situation. The project was negotiated between the state government of the day and the consortium of companies. The contracts were signed between the public sector distributor MSEB and the generation company promoted by Enron as Dhabol Power Company. Subsequently the project was re-negotiated two times after change in the ruling political party in the state. Eventually the project was shut down when the public distributor (MSEB) failed to honour the payment for its purchases despite the escrow accounts, guarantees by the State and Central governments. The case could not be resolved amicably and the matter went to international arbitrator and courts.

Recent legislation that has guided the creation of reform, restructuring and regulation of electricity industry in India is Electricity Regulatory Commissions Act, 1998 which was later repealed and replaced with Electricity Act, 2003. Central Electricity Regulatory Commission (CERC) created in 1998 to over see the development of electricity markets at national level and also to lead in providing regulatory framework for the states to follow. Subsequently 18 major states have set up state electricity regulatory commissions (SERCs). These SERCs are created after each state legislature has passed a relevant legislation. The structure and functions of SERCs are similar in all states. The central government still guides the overall development of the industry and its regulation through National Electricity Policy. Therefore, institutional analysis of regulatory governance in India requires mention of the national

⁷ In some cities such as Ahmedabad and Mumbai private electricity suppliers were there before the 1991 reforms were launched. In the state of Orissa and national capital Delhi, the restructuring of state electricity boards was followed with privatisation of distribution companies.

electricity policy. The latest such policy was issued by the government in February 2005. The main aims of the policy are given below:

- Access to Electricity - Available for all households in next five years (i.e., 2010)
- Availability of Power - Demand to be fully met by 2012. Energy and peaking shortages to be overcome and adequate spinning reserve to be available.
- Supply of Reliable and Quality Power of specified standards in an efficient manner and at reasonable rates.
- Per capita availability of electricity to be increased to over 1000 units by 2012.
- Minimum lifeline consumption of 1 unit/household/day as a merit good by year 2012.
- Financial Turnaround and Commercial Viability of Electricity Sector.
- Protection of consumers' interests.

The achievement of above objectives requires new investment in the generation, transmission and distribution. All these three activities of the industry are at present owned and managed by either central government or state government entities. Preceding the announcement of National Policy of 2005, there was a major legislation (The Electricity Act 2003⁸) that laid down in detail the institutional and regulatory framework that is being implemented by the Central and state governments. While the National Policy and Electricity Act both envisage restructuring and privatisation of public sector electricity suppliers, there has been little progress on this in reality. Most state governments have restructured, also called 'unbundling', the state electricity boards by separating the generation, transmission and distribution activities and incorporating separate entities for each of the activities. But these corporatised entities continue to function as quintessential public enterprises. Our focus in this paper is however, not on the working of these corporations but on the functioning of regulatory commissions that have been created by the central and state governments respectively. These commissions constitute the regulatory structure that potentially will ensure the working of market oriented electricity industry in India. But before we look at regulatory commissions some relevant features of the Electricity Act 2003 that have implications for scope and practice of regulators are worth listing below⁹:

- o Delicensed generation.

⁸ The Electricity Act 2003, adapted substantially the provisions of Central Electricity Regulatory Commission Act 1998 that has now been replaced by Electricity Act, 2003.

⁹ Developing a Common Platform for Electricity Trading, CERC, July 2006, www.cercind.org

- o Non-discriminatory open access in transmission mandated.
- o Single buyer model dispensed with for the distribution utilities.
- o Provision for open access in distribution is to be implemented in phases.
- o Provision for multiple distribution licensees in the same area of supply has been incorporated.
- o Electricity trading is recognized as a distinct licensed activity.
- o Development of market (including trading) in electricity made the responsibility of the Regulatory Commission.

The description of electricity reforms envisaged by the National Electricity Policy and the Electricity Act require substantial autonomy, capabilities and stability in the regulatory process. Following from Stern and Holder (1999) and Periera et. al (2006) information on the regulatory process was collected from the CERC and GERC. The relevant legislations and the websites of the two commissions were referred for data collection. This was followed up with the interviews with the senior officials of the regulatory commissions in Delhi for CERC and Ahmedabad for GERC. Based on the analysis of above information following observations are made:

Regulatory Process and Governance in India:

We first describe and comment on the electricity regulatory arrangements at the national level and then discuss a state level regulatory commission's governance.

Clarity of Roles and Objectives:

CERC states its main objectives as '*The Commission intends to promote competition, efficiency and economy in bulk power markets, improve the quality of supply, promote investments and advise government on the removal of institutional barriers to bridge the demand supply gap and thus foster the interests of consumers*¹⁰.' Created as a quasi judicial body CERC has been given a clear mandate in the Electricity Act, 2003 (see Box 2 below).

¹⁰ www.cercindi.org

Box 2: The Act lists following as the functions of CERC

- (a) to regulate the tariff of generating companies owned or controlled by the Central Government;
- (b) to regulate the tariff of generating companies other than those owned or controlled by the Central Government specified in clause (a), if such generating companies enter into or otherwise have a composite scheme for generation and sale of electricity in more than one State;
- (c) to regulate the inter-State transmission of electricity ;
- (d) to determine tariff for inter-State transmission of electricity;
- (e) to issue licenses to persons to function as transmission licensee and electricity trader with respect to their inter-State operations.
- (f) to adjudicate upon disputes involving generating companies or transmission licensee in regard to matters connected with clauses (a) to (d) above and to refer any dispute for arbitration;
- (g) to levy fees for the purposes of this Act;
- (h) to specify Grid Code having regard to Grid Standards;
- (i) to specify and enforce the standards with respect to quality, continuity and reliability of service by licensees.
- (j) to fix the trading margin in the inter-State trading of electricity, if considered, necessary;
- (k) to discharge such other functions as may be assigned under this Act.

Source: Electricity Act, 2003, Government of India, New Delhi.

While it would appear that the Act is clearly defines the functions of the Commission, in terms of actual regulatory process issues have come up before the Commission where it has had to seek the clarification from the Ministry of Power¹¹. In a personal interview with the officials at the CERC about the clarity of the roles it was clear to see that Commission had clarity about regulatory objectives.

Autonomy: The top executive body of CERC comprises Chairman and three members of the commission. The Electricity Act 2003, lays down clear procedure for appointment of the chairman and members. The selection procedure for chairman and the members is also clearly laid down. However, the selection committee comprises of members who come from the Ministry of Power and various other central government departments or agencies and some others who are nominated by the government. So in a way the appointment process is influenced by the central government decisions. The selection committee proposes two names for the Chairman's post to the Minister for Power who in turn recommends only one of the

¹¹ The case relates to treatment of the power purchase agreement between a new power generation company set up by Torrent Group, a private sector electricity generator and distributor in state of Gujarat and the State Electricity Board of Madhyapradesh. See order of CERC in this regard at <http://cercind.gov.in/150206/154-05.pdf>.

names to the highest body in the executive for final approval. However, once appointed members and the chairman of the commission enjoy substantial protection from any arbitrary government action. The Act provides for fixed term (5 years) of appointment. The termination of the appointment requires prolonged process of enquiry by Appellate Tribunal. This protection does provide an effective check on the arbitrary action on part of government. So far in the short history of the commission no chairman or member has been removed by the government.

Other aspect of autonomy is financial autonomy. CERC gets its funding as budgetary support from Ministry of Power and therefore is subject to same procedures for getting budget approved as other departments of the government. However, more important than the financial autonomy is the issue of creating appropriate posts and recruitment to them. This is where the regulatory commission is viewed more like a department of government than an independent agency. If CERC identified need for creating a post within commission, it needs to get approval from the Department of Personnel and Training in the government and the final decision may be taken only after opinions of Legal Department and Finance Department have been considered. Recruitment from outside present government employees is also unlikely as most of the senior officers in the commission come on deputation from other government departments. This way the autonomy of the agency is slightly diluted.

Participation: CERC has been engaging with wider stakeholders in the society. In addition to 24 member Central Advisory Council representing various stakeholder groups, the commission has been circulating the consultation papers electronically on various issues on which it formulates rules or takes decisions. One of the observations that came up in the meetings with senior officers of the commission was that there was little or negligible effective participation from the academia in the regulatory debate.¹² So while regulatory commission tries to involve other stakeholders in the regulatory process, it seemed that except few consumer organisations and some academics, wider participation is not yet there in Indian electricity regulation. However, some Civil Society institutions¹³ have taken initiatives that may strengthen the participation of stakeholders in the electricity regulation.

¹² This feeling was echoed in more than one meeting with regulatory commission officers at state level also.

¹³ Consumer Unity and Trust Society, Jaipur, TERI, New Delhi, Prayas Group, Pune.

Accountability: Two dimensions for the accountability of the commission can be discussed here. There is a formal process of reporting to the government and parliament about the activities of the commission in form of Annual Report. In addition the accounts of the commission are audited by the Comptroller and Auditor General of India.

Other dimension of accountability is the creation of Appellate Tribunal for Electricity at national level which hears the appeals against the decisions of the central and state level regulatory commissions.

Transparency: The operations of the CERC are quite transparent. All the relevant legislative, regulatory, policy documents and information about the industry are placed in the public domain through the website of the agency. Schedule of hearings, the tariff orders and consultation documents are available in public domain. There is transparency in the hearing process also. All affected parties have right to represent their case in hearings. However, the information about the industry that is provided through CERC pertains to the central government utilities, while state level information is not provided. This issue about the quality and relevance of information about the industry was raised during the interviews and the view seemed to be that there is no standard regulatory information format.¹⁴

Predictability: Stern and Holder (1999) mention that a good practice on predictability requires that regulatory powers and duties cannot be changed without changes in primary law; key regulatory instruments or documents cannot be changed without undergoing appropriate processes; and there is a clear policy and coherent approach behind all decisions. The Electricity Act, 2003, lays down in detail the regulatory procedures and empowers the commissions to make appropriate rules as well. However, the autonomy and predictability of the commission could be threatened in case government decides to use its power to issue directions. Section 107 of the Electricity Act provides for such powers and reads as,

“ (1) In the discharge of its functions, the Central Commission shall be guided by such directions in matters of policy involving public interest as the Central Government may give to it in writing.

¹⁴ This matter was also raised with state regulatory commission officers. But there seemed to be lack of clarity about the import and format that could be useful for regulatory process.

(2) If any question arises as to whether any such direction relates to a matter of policy involving public interest, the decision of the Central Government thereon shall be final.”¹⁵

While the central government has not issued policy directions that have interfered with the working of CERC, there have been instances at the SERC level where state governments have issued such directions that have effectively interfered with regulatory decisions of the commissions¹⁶. In addition to the possibility of using powers under section 107, there was a recent case where the line ministry made some rules about creation of consumer grievance redressal forum that effectively took away the powers of SERCs to protect consumer interests if the disputes pertained to billing errors (see box 3)

Box 3: Mix up of institutional roles: Predictability and autonomy at stake

In 2005, Maharashtra Electricity Regulatory Commission (MERC) declared billing practices followed by the distribution companies which included both private and public sector companies, to be improper. The commission directed these companies to stop practice of issuing amendment / supplementary bills and average bills and also to refund money to consumers on account of such bills. The refund payable to consumers on account of these orders is to the tune of Rs. 3000- 4000 million.

The distribution companies appealed against these orders to the Appellate Tribunal for Electricity (ATE). The ATE in its judgement passed in March 2006 concluded that matters relating to wrong billing practices are in the nature of billing disputes, and moreover said that the state regulatory commissions (SERCs) have no jurisdiction to entertain consumer petitions on these issues even if the wrong / excessive bills are due to (a) systemic violation by utility and / or (b) non-compliance with statutes. According to ATE Consumer Grievance Redressal Forums and Ombudsman created under Electricity Act are the competent forums to deal with such complaints. ATE judgement does mention following as function of the SERC as legitimate function as per Act:” ..to specify or enforce standards with respect to quality, continuity and reliability or service by licensees;”. But from the judgement of ATE it seems that ‘proper billing’ can not be considered a service which seems to have been interpreted ATE in the narrower technical sense of the term.

Now the MERC along with few consumer groups has appealed against judgement of ATE to the Supreme Court of India who will now listen to the parties and decide the matter.

Source: ATE, Appeal No. 30 of 2005, 164 of 2005 and 25 of 2006 and www.nrvasgroup.org

¹⁵ The Electricity Act, 2003, Section 107.

¹⁶ SERCs are created through state level legislations which essentially replicate the structure, procedures and policies incorporated in the central Electricity Act, 2003. This Act specifies main features of state regulatory commissions.

The above case shows the complexity of regulatory process in India. Although the Act does mention that protection of consumer interest is one of the regulatory functions, but the institutional mechanism provided is through Consumer Grievance Redressal Forum (CGRF) and an Ombudsman. From the reading of the Act 2003, it seems the regulatory commission should lay down the guidelines for constitution of the CGRF by licensees, subsequent rules promulgated by Ministry of Power require that only distribution licensee will decide who can sit in these CGRFs, subject to some qualification norms. This has essentially eroded SERCs capacity to create neutral CGRF.

Regulatory Process and Governance in Gujarat

Most of the discussion to six parameters of clarity of objectives, autonomy, participation, accountability, transparency and accountability is applicable in case of Gujarat Electricity Regulatory Commission (GERC) through state legislation passed in 2003. Referring back to the case of MERC and jurisdiction issues raised by the case mentioned in box 3 above it is interesting to note here that GERC while requiring the distribution licensees to create Consumer Grievance Redressal Forums prescribes in its guidelines that 1/3 of the members of the CGRFs should be consumer representatives¹⁷.

While there is clarity of objectives and there are many functions of the commission mentioned in the Act, it seemed from the interviews that SERCs view their main functions as licensing for distribution and fixing the tariffs. The participation and consultation process though is there in principle, it still appears low with few people interested in the regulatory process. This is less of an institutional weakness but more of a reflection on the society who still sees state entities as main suppliers of the power.

An issue not specifically captured by the six criteria of governance but with potential implications for regulatory process is that of cross subsidies. A large proportion of electricity

¹⁷ Establishment of Forum for Redressal of Grievances of Consumers Regulations , Notification No. 4 of 2004, GERC, Ahmedabad. I intend to check with the GERC whether they changed this rule in light of the above mentioned ATE judgement interpreting the Electricity Act, 2003 differently and in light of the rules of Ministry of Power directing that only licensee officers should man the CGRFs. There is no such announcement on the website of GERC.

consumers namely; agricultural and household consumers, the cross-subsidy is an important determinant in tariff fixation. Given the sensitivity of this issue the state governments are careful in selecting the chairman and members of the commission. The key to effective economic regulation at state level is the commission's ability to enforce its tariff orders. The agricultural consumers pay the price that is effectively determined by the state government as it decides the level of subsidy it can afford. The commission has had limited success in reducing the subsidies.

Regulatory capabilities critically depend on human and financial resources of an agency. In GERC in addition the full time staff, the commission uses services of consultants for getting appropriate input into its decision making process. The reliance on consultants also meant that systematic information that is necessary regulatory decisions is not available readily. There appeared to be need of regulatory accounts in a standard format. The commission, like it was found in other SERCs¹⁸ that such format is missing. On funding side commission gets budgetary support from the government, but it appears that commission gets adequate fees from the potential and current licensees to recover its costs substantially.

Discussion and concluding remarks

The discussion is divided into two parts. First we try to compare the findings from this study with those reported by Stern and Holder (1999). Second, we try to offer some explanatory remarks about findings before concluding the paper.

The Stern and Holder collected information about federal regulatory agency as it existed at that time in 1998. The federal agency for electricity regulation in India at that time was Central Electricity Authority (CEA) which examined the electricity investment proposal from techno-economic perspectives and regulated the markets. But following Central Electricity Regulatory Commission Act, 1998, CERC was created essentially to take charge of economic regulation of electricity industry. Therefore, the two agencies are quite distinct now. CEA still exists but it works more as advisory body to the government on the technical aspects and other long term capacity planning issues of the electricity generation and transmission. On the

¹⁸ I am in process of collecting information from other SERCs in India.

six parameters Stern and Holder rank CEA as low on clarity of objectives¹⁹, about average on autonomy, very low on participation, low on accountability, average on transparency and very low on predictability.

Based on the provisions of the Electricity Act, 2003 and state legislation for GERC as well as information collected in interviews with the officials in these commissions, it can be argued that CERC/GERC could be rated as high on clarity of objectives ('D' in Stern and Holder symbols).

On autonomy they could be rated between average and high, although the reading of Acts suggests that the commissions, enjoys high level of autonomy the procedural issues involved in getting budgetary support, creating posts and determining terms of the employment of its staff make it difficult to agree with the face value of provisions. However, compared to government department, the CERC/GERC chairman and members enjoy significant immunity against arbitrary actions of the government. This is a big achievement on autonomy dimension for electricity regulation.

Stern and Holder report participation to be very low in their study. However, there is a definitive evidence to suggest that engagement with the stakeholders is quite high in CERC and average in case of GERC. The point worth repeating here is that at present not many individuals or groups in India are quite keen on participating in regulatory debates or processes. Accountability level is also high with clearly defined authority of Appellate Tribunal where decisions of the commission could be challenged and have been challenged.

Transparency of CEA was found to be average by Stern and Holder, but in case of CERC/GERC there are quite clear indications in form of public announcement of hearings in advance, announcement of all orders and their availability through commission's website that make it a highly transparent agency. Stern and Holder report very low predictability for CEA. However, the Electricity Act, 2003 has provides substantial powers to the commissions to make the rules and enforce them. As we have seen above that the enforcement capacity of the commission is still not adequate, but it has improved substantially and can be considered high although not at the level of best practice suggested by Stern and Holder where it will be

¹⁹ CEA is ranked s B which is quite below the best practice grade of E as explained in Stern and Holder (1999)

considered generating enough confidence in private sector to make investment in the regulated business.

Given the short history of Indian electricity regulation, it will be appropriate to consider these findings and the ratings of regulatory commissions on governance criteria as contingent. As Stern and Holder point out to regulatory life cycle, the regulatory institutions, at least at the state level, are still in their infancy stage and learning the ropes. This may explain the low on participation in case of GERC.

It was observed that in CERC and GERC there was perceived need for people with specialised knowledge of the regulatory issues. But since most of the staff comes from other government departments or state electricity boards, there appears to be issue of capacity gap. Dubash and Singh (2005) point to the possibility of regulatory inadequacy in developing countries and the difficulties of regulating the industry with regulatory models developed in context of developed countries. This is further compounded by the fact the private participants in the regulated segments of industry, namely distribution, are hardly there. Most of the distribution is still done by public sector enterprises which are owned by state government. This does not make it easy for commissions to enforce some of the standards and regulations.

The institutional framework used to understand the regulatory governance in India has provided an opportunity to examine the regulatory process objectively. An important finding from this study has been that despite having clear legislative mandate, the regulatory governance is still vulnerable to state interference. The multi-party political system, institutional framework that has evolved during 'command and control' approach to economy, public ownership of electricity industry (with embedded distributive politics) have created an institutional and political legacy that is likely to delay the emergence of effective and efficient regulatory regimes in India. Stern and Holder (1999) and some other scholars have mentioned relative success of the Telecom Regulatory Authority in India in ensuring development of competitive markets and as a result the telecom prices have gone down in real terms as well as access has improved. The key difference is that the telecoms services before liberalisation were not accessible to the poor and lower middle income consumers in India therefore, the state level political fall out of privatisation and reform were less important. In case of electricity the situation is quite reverse. The farmers and household

consumers are important political constituency at state level and electricity is a state subject unlike telecommunications. This reality is likely to see the electricity regulation in India moving slowly from its infant state now to youth and maturity. Going back to the five elements of institutional endowment listed by Douglas North, we agree with Stern and Holder (1999) in emphasising the importance of points 3 and 4 for understanding the regulatory governance in India. Given that Indian government is likely to organise gas, roads, ports and airports around market principles. Some of these industries will be regulated and this will imply that final point in North's list about administrative capabilities also assumes importance in Indian context.

As a way forward this research is being extended to other states in India and to other industries such as telecommunications.

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