

Introduction

India has now almost 60 electricity regulators in the CERC (Central Electricity Regulatory Commission) and the SERCs (state electricity regulatory commissions), eight in the TRAI (Telecom Regulatory Authority of India), and three in the Tariff Authority for Major Ports. Many more are to come as there are proposals to create more IRCs (independent regulatory commissions). There is pending legislation for an oil and gas regulator and there is said to be one for coal. There are proposals to create them for civil aviation and the railways. Water may have such regulators at the centre and in the states as electricity does. Independent regulators exist not only in infrastructure services but also in stock markets (SEBI [Securities and Exchange Board of India]), insurance (Insurance Regulatory and Development Authority), and pharmaceuticals (National Pharmaceuticals Pricing Authority). Another is being contemplated for drugs regulation.

IRCs are a significant departure from the traditional practice of implementing legislation and government meta-policies through rules and regulations framed by government officers. They herald a change in the method of governance.

Electricity is a complex and major area of infrastructure in which IRCs at the central and state levels have been functioning for many years (having been formed in 1994 in Orissa, in 1998 at the centre, and in

subsequent years in some states). Can we learn anything from the Indian experience of independent regulation of electricity? Are there any common principles and frameworks that we can identify and use to enhance the functioning of IRCs? This study examines the experience in electricity regulation and considers the lessons we can learn and use to improve its effectiveness. These findings can also be generalized to apply to other such bodies.

The essential difference in India between the old and the new styles of regulation is that the former involves decision-making by bureaucrats and ministers in a closed environment and through selective consultation. Documents and information used in the process are kept secret; rarely are reasons given for decisions. On the other hand, the new style is expected to be open, fully consultative, transparent (with all information and documents, as a rule, being available to anyone who wishes to examine them), and with reasons given for all decisions including responses to any opposition or alternative suggestions that might have been made during the consultation.

While there is apparent separation of powers between the legislature, executive, and judiciary in India, in practice and over the years there has been a considerable blurring of power between the executive and the judiciary with the latter taking on an 'activist' role and initiating action on matters of public interest. The executive has also, in the interpretation of legislation during execution, tended to exercise considerable discretion. Do IRCs blur this separation further and are they consistent with the letter and spirit of the Constitution?

There are increasingly complex questions that the executive has to decide in a developing economy. This is particularly relevant in infrastructure sectors like

electricity, telecommunications, water, and oil and gas. The issues are technological, have macroeconomic effects, affect vulnerable and weaker sections of society, and hold substantial financial implications for operators and users. There is no single 'correct' solution and their resolution requires interdisciplinary expertise. Also, all those likely to be affected must get an opportunity to be heard. It is in such situations that the mechanism of independent regulation could be useful. Such matters are difficult to resolve through traditional adversarial courtroom procedures and secretive administrative decision-making processes.

To be effective, the 'independent' regulator must be truly so. The regulatory body of which he is a part must be capable of understanding the issues and formulating a vision of where the sector is headed. This vision may be part of the legislative process but he must have the power to move it in the desired direction. He must not be subject to any extraneous influences from the government or from the entities to be regulated or from other beneficiaries. For true independence, the search, selection, appointment, remuneration, extension, termination, and re-employment processes applicable to members of regulatory bodies must be completely transparent. We will attempt to consider the significance of independence for electricity regulators vis-à-vis actual experiences.

IRCs in India were intended to encourage private and foreign investment in the sector; safeguard consumer interests; promote competition, efficiency, and economy in the sector; accelerate decision-making; facilitate investors and others in planning and raising finances for long-term investment; and supply quality services under regulation at economic prices. How successful have the ERCs (electricity regulatory commissions) been in

meeting these objectives? If not, why? Can the ERCs be considered in isolation in any such assessment or are there other elements in the political and administrative environments that must march in step?

Different countries, as well as different IRCs in India, have used different procedures for creating such bodies and making them function. The approach of different regulatory bodies to transparency has varied. For instance, the UK's OFFER (Office of the Electricity Regulator) used consultation papers to elicit comments on its proposals. TRAI also uses consultation papers. The Uttar Pradesh ERC uses a variant of 'draft orders' so that its final decisions are made known after an initial process of consultation, for further views to be given before the final order is issued. The ERCs in India have, by and large, used courtroom procedures. Is this always appropriate? Are there alternatives to enable deeper participation and consultation?

Can the desired characteristics of the new style be statutorily grafted on to old-style regulation? This question has relevance when the system being regulated (as with electricity) is largely government-owned. There is an old and close relationship between the utilities being regulated and the government officers who regulated them—a relationship that continues even when independent regulators take over from the executive. What are the characteristics of the regulation of largely state-owned enterprises? Is the IRC an appropriate response for regulating them?

The issues get further confounded when the political system in the country practices the separation of powers between the legislature, the executive, and the judiciary or the policy-making, rule-making and implementation and interpretative aspects of governance. These powers are (said to be) combined in the case of the independent

regulator in one body—the regulator. In electricity, this is made more complicated in India (as in the US) by the subject coming under concurrent jurisdiction of the central and state governments. In the US, the FERC (Federal Energy Regulatory Commission) regulates inter-state transactions while state governments are responsible for intra-state matters. In India, there is a stated separation by subjects though the centre has somewhat more powers. Over the years in the US, federal power over electricity has been increasing, though many feel that there is as yet no unified approach over the country, leading to unreliability of supply and inability to optimize tariffs. Is this inevitable? It is clear that electricity flows on the wires according to the laws of physics and not those of politically determined state boundaries. When there is inter-connection between states in a grid, the federal or central commission regulating electricity must safeguard grid security and, in some situations, lay down rules to regulate the flow of electricity even within states. How effective has this been and how can centralization improve matters?

There are clear advantages of new-style regulation. For one, it is designed to reduce the distance between members of the community and the government, induce a sense of participation, and enable citizens to take on responsibility. That the regulator is independent and uninfluenced by extraneous considerations could instil greater confidence in investors. The new style can enable open consideration of special interests of select groups and provide for justified interests. It can mandate efficiency from utilities. Any exploitation of consumers can be brought out into the open. To what extent have these expectations been realized with the ERCs?

Another issue is that of making the regulators accountable for their actions. India's ERCs have been

modelled on the US experience, where regulators – like top bureaucrats – are political appointees. Regulators are therefore accountable to the political party that appointed them, not on a daily basis but in terms of the ideology they bring to bear on various issues. Further, the US electricity system is largely in private hands. In India, the bureaucracy is expected to exist outside politics and to advise ministers dispassionately (as in the UK). Moreover, the Indian electricity system is largely state-owned. Is the American model valid for India?

Some believe that the very independence of regulators makes them unaccountable for their actions. In old-style regulation, this accountability was, in theory, enforced through a reporting system to a hierarchy of bosses and oversight even by the legislature. Of course, the new-style regulator has to take decisions after open consultation, give reasons for the decisions, respond to all issues raised by different interest groups, review decisions if aggrieved parties approach him to do so, be ready to be overruled on appeal to higher courts, and undergo close scrutiny by knowledgeable media representatives and increasingly expert NGOs. But IRCs consist of non-elected persons with considerable authority. Is there sufficient accountability? Can it be strengthened and made more transparent?

For the new-style regulation to be effective, the IRCs must be easily approachable by concerned parties. At the same time, this should not lead to a mushrooming of interests that have to be consulted every time, leading to a delay in the process. We need to examine how this has been done in different countries and in different areas in India where independent regulation has been introduced. Some alternative models include consultation papers as used by OFFER, regular courtroom procedures as in the

US, and private and informal consultations as with regulators like SEBI. Is there an ideal method?

The IRCs must be able to discharge all the functions given to them under the law. Their decisions must have some consistency in approach in similar situations. Entities regulated by them must be able to use and quote precedents. Their orders must be implementable. They must not be merely theoretically correct and logical but also practical. The ERCs need to occasionally review the progress in implementation of their orders. At the same time, they must not become 'superbosses' who micromanage the regulated entity. As quasi-judicial bodies, the ERCs' orders can be appealed against in higher courts. To what extent has a body of consistent rules and principles affecting common issues in electricity (that can be titled electricity regulatory law) evolved as a result?

This study includes a brief analysis of orders by electricity regulators on similar issues. It shows that in the five states that first set up SERCs, there have been distinct and contradictory approaches on some important issues but on tariffs, there have been consistent but not very successful approaches. For example, the Andhra Pradesh ERC has been against captive generation since, in its view, that would adversely affect SEBs (state electricity boards). Other commissions have on the whole been positively inclined to these additions to generation capacity. Wheeling of captive power was loaded with penal transmission charges in Andhra Pradesh. Third-party sale was allowed in Karnataka but not in some other states. All PPAs (power purchase agreements) earlier entered into were re-examined and opened by the ERCs for further amendments. The chief reason was that the costs quoted

by operators were considered excessive. The regulators determined tariffs with attached efficiency targets but the targets were based on inaccurate information and were never met. Little was done to force an improvement in the information. This was also the reason for tariffs being determined on an annual basis, thus engendering some unpredictability. How can this situation be improved?

The purpose of creating the ERCs is to achieve improvement in electricity supply, ensure commercial viability of the sector, optimize tariffs for consumers and investors, improve system efficiencies and electricity quality, attract investment into the sector and also, in a country with extreme poverty like India, serve and supply affordable electricity to vulnerable groups and geographically distant consumers. Was it appropriate to expect the ERCs to fulfil these objectives? Did they have the resources and capability to achieve them? Was desired level of administrative support available? Have the ERCs pursued these objectives? If yes, to what degree of success? If they have not been successful or have not been moving in that direction, to what extent is it because of the weakness of the institution?

There are other issues that must be considered. The legislature makes policies and the government implements it through rules and regulations. Depending on the specificity of the drafting of the legislation, the process of regulation itself involves greater or lesser discretionary power, which is the same as policy-making. In transferring the responsibility of regulating a part or the whole of a sector or function to an independent regulator, should the government transfer all related discretionary powers as well?

In Indian electricity legislation, the central regulator 'regulates' tariffs and other matters while the state

regulators ‘determine’ tariffs and decide on other matters. If there is this difference, the central regulator logically has the same policy-making powers as far as the discretion to make rules is concerned in the process of implementing the law. The state regulators may not have discretion in the areas that they ‘determine’ matters and, hence, may not have similar policy-making authority. Has the proliferation of the ERCs (one CERC and around 24 SERCs) made it difficult to achieve consistency in the decisions about the sector? Would it be desirable to have fewer SERCs?

To what extent is it desirable for the concerned governments to have the powers to issue policy directives to the central and state ERCs? How can this power be best used in the interests of the sector? How can the ERCs play a role objectively, expertly and after consultation, in providing policy advice to governments before they issue a policy or policy directive?

Independent electricity regulation in India has had some successes but the IRCs have not brought about the transformation that they were expected to. Many reasons can be found for this. The selections of members and staff were skewed towards administrators and others who had spent their careers in the government. The independence of regulators appears to have at times resulted in a communication gap between regulators, regulated entities, and governments. Administrators and utilities were unwilling to accept the authority of the new independent regulators; non-compliance, delays, disobedience, frequent reviews, and appeals were common responses to orders of the ERCs. The ERCs themselves seemed to confuse independence with non-accountability and failed in many cases to follow the few reporting requirements. Are these reasons sufficient to

explain the relative inefficacy of the ERCs? Or is the reason to be found in the genesis of their creation (namely external pressures, not realized need) and the consequent absence of strong political and administrative commitment to their effectiveness?

The tendency in the US (which also has a federal Constitution) is for a growing role for the federal regulator. The FERC, especially after the near nationwide blackout in August 2003, is trying to get powers so that it can play an increasingly pivotal role in regulating electricity by creating a national grid and in tightening regulation of trading and markets. Its decision to forbid Enron from operating in the California market is one instance as are the heavy fines imposed on companies that 'gamed' the California market at the expense of consumers.

With electricity as a concurrent subject under the Constitution in India (perhaps because when the Constitution was drafted, the technology for transmitting electricity over long distances was not available), it was decided that the best way to propel development of the sector would be at the state level. Over the last 50 years, the states have made substantial contributions towards the generation capacity and geographical coverage. However, being much closer to user groups, state governments find it difficult to resist populist pressures. The dismal state of the electricity sector in some states and the large subsidy payments are now pulling down the finances of state governments as their revenue deficits come closer to the deficits in the electricity sector while electricity reliability remains poor. What direction must the sector take in India if it is to change for the better? What role must the ERCs play in this scenario?

At the same time, government ownership of such a huge sector at the central and state levels has created

particular problems. For one, it has created a vested interest among the bureaucracy and the political classes for keeping the sector under government ownership and control. There are enough arguments in favour of that, ranging from the need to serve the poor to the possibility of profiteering by the private sector. Decisions were taken without concern for transparency or consultation with affected groups. The tariffs of the central generating sector kept rising at a faster rate than other costs for the SEBs that were the customers. These tariffs were decided by the central government for their undertakings and the customer had little say in the decisions. This say was further diminished over time as the states fell behind in paying bills to the central undertakings.

When it was realized that much greater generation capacity was needed to satisfy the demand for electricity, the government decided to throw generation open to private investment in 1991. While there was much investor interest, little investment took place because of the uncertainty over the ability of the buyers – the SEBs that distributed power – to pay for the purchases. In 1996, the Conference of Chief Ministers approved the CMNAP (Common Minimum National Action for Power), which included establishment of the ERCs at the central and state levels, rationalization of retail tariffs, and participation of the private sector in distribution. An enabling ordinance to allow private investment in transmission was issued in 1997 and converted into a law in 1998. (There was considerable pressure from multilateral lending agencies to create ERCs, as state governments that created the ERCs were better positioned to get large funding from them.)

Within a short period from 1998 to 2002, 24 ERCs – including the CERC – were set up. Members and staff were almost entirely former and current government

employees. State governments and the central undertakings dragged their feet in letting these ERCs function to their maximum potential. The lack of information, the hiding of information, non-compliance, and even defiance of the regulator's directives (sometimes with the tacit approval of the concerned government) resulted in considerable delays and, sometimes, poor decisions. Could the ERCs have done better in this situation?

Little private investment has taken place in generation or transmission and there has been poor response to the attempts at privatizing distribution entities. It is felt that one reason is the reopening of signed PPAs between independent power producers and the SEBs, as it goes against the principle of the sanctity of contracts. The ERCs have prevented some contracts from being implemented. Should there be a role at all for the ERCs on contracts signed prior to their formation?