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**INDEPENDENT REGULATORS**  
**THE CASE OF THE INDIAN ELECTRICITY REGULATOR<sup>1</sup>**

**Introduction/Motivation**

Independent regulators (IR) have mushroomed worldwide in the last two decades, giving rise to the notion of the ‘regulatory state’ or fourth branch of government. Notably, developing countries have instituted these regulators to guide and oversee reforms in infrastructure sector, typically a transition toward private sector involvement.<sup>2</sup> IRs in many developing countries have been thrust on sectors with weak institutions, entrenched politics and, in some cases, a strong public sector presence. In India, due in part to failed privatization, IRs regulate state-owned utilities in such an environment. By design and mandate, IRs have significant power, but in practice exhibit weak outcomes. Few empirical studies have been conducted in India, and in developing countries in general, to explore the early experiences of IRs. This case describes the decision-making process of state electricity regulatory commissions (SERCs) in India, with a specific focus on the Karnataka Electricity Regulatory Commission (KERC). This paper is premised on the contention that IR in India and in other developing countries, are inextricably linked to their broader institutional and sectoral environment, an understanding of which is critical to explaining decision-making within these institutions. The insights from this inquiry therefore have broad applicability in states in India and other countries with similar contexts.

**Summary Findings**

Regulatory institutions in their design and structure have the makings of rational organization, with clear objectives, centralized decision-making and powers of a court. In India, they work quite the opposite way in practice. A weak judiciary, goal ambiguity and government interference significantly weaken a rational basis for action. In practice, regulators refrain from a full exercise of their powers. They satisfice at best, based on a set of rules, values and constraints that derive both from external sectoral and political-

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<sup>2</sup> Over 40 countries have set up regulators in the last decade. World Bank Database on International Directory of Utility Regulatory Institutions (1999)

economic conditions and an internal culture of compliance imbibed from careers in bureaucracy. From a theoretical perspective, their decision-making framework can be understood at three levels. Resource dependency frames regulators' perceptions of their working environment and their responsibilities. Due to resource constraints, they perceive themselves as lacking the ability to carry out the full extent of their mandate. As a result, in making decisions they seek to shield their reputation as well. The primary resource IRs seek is legitimacy. In everyday affairs, the tangible resource they require to carry out their mandate is information, which takes the form of data and expertise. The practical constraints of information asymmetry vis-à-vis the utilities and weak enforceability (from lack of socially and politically conferred legitimacy), dilute and undermine the regulatory powers conferred upon them. Regulators adapt, not by seeking control that they lack (as predicted by theory), but by adjusting their goals and strategies for achieving these goals. In effect, this response explains in part their reluctance to exercise powers. These adjusted decision criteria and their own values serve as their decision rules. Within this framework, they carry out their mandate through a combination of satisficing<sup>3</sup> (to meet their adjusted goals) and making sense of both the consequences and appropriateness of their decisions (to protect their reputation).

## **The Case of the Karnataka Electricity Regulatory Commission**

### *Background/Context*

Electricity is a “concurrent” subject under India’s constitution, which places it under both central government and state government control. The jurisdictional division between the two falls along predictable lines of inter-state vs. intra-state commerce, and centrally owned vs. state-owned facilities and organizations. In 1948, the sector was organized around state-level, publicly owned and controlled State Electricity Boards (SEBs), the state monopoly power companies. SEBs had a dual nature as commercial entities and as instruments of development policy. They are vertically integrated institutions, generating, transmitting and distributing electricity to customers in the state. SEBs grew to employ between 50,000 and 80,000 employees in larger states.

Since the SEBs effectively operated as extensions of the state Energy Ministries, they have fallen prey to political interference on many fronts. Primarily, SEBs serve as instruments of access to vote banks. Ministries direct SEBs to excessively subsidize particular consumers (usually farmers), and place investments strategically in politicians’ constituencies – a practice likened to ‘campaign financing’. To finance these subsidies and non-economic investments, industries are charged exorbitant tariffs. Industrials remain disgruntled within the system, or exit the system by setting up their own generation or colluding with field personnel.

Over the last thirty years, as a result of this politicization and SEBs’ own internal inefficiencies and agency problems, their finances deteriorated considerably, to the point of being consistently in the red. Meanwhile, the Electricity Act 2003 requires IRs to phase out cross subsidies and rationalize tariffs. Finance ministries at state and central levels, backed by international donors, have given notice that budgetary subsidies to the sector must be targeted and transparent.

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<sup>3</sup> Using March’s language of bounded rationality March, J. G. (1994). A Primer on Decision-Making. New York, The Free Press.

### *The Establishment of Independent Regulators in India*

Driven by conditionalities of international loans and an internal policy direction toward private sector participation, state policymakers in the late nineties established independent State Electricity Regulatory Commissions (SERCs) based on the US model of regulation. SERCs were set up by statutory mandate, pursuant either to the central Electricity Regulatory Commission Act of 1998, or state reform acts, such as the Karnataka Reforms Act 1999. The SERCs – the subject of this study - would discipline the SEBs and usher in a new generation of reforms. They were placed in the unenviable situation of untangling the knots in a now well-entrenched mess of public sector inefficiency and political interference. More curiously, SERCs in India would regulate state-owned electric utilities – the SEBs – and usher a transition toward privatization and competition.

The SERCs were established as instruments of depoliticization – they would rebalance tariffs, regulate investments and operating costs of SEBs based on economic, technical and financial principles.

Tariff setting involves scrutinizing utilities' annual revenue requirement based on their cost structure, power purchase, and investments, and setting rates on cost recovery and a reasonable rate of return. What makes this task challenging is the absence of sufficient data to determine several aspects of ratemaking: in particular, since utilities under political pressure provide free power to farmers, they mask their inefficiencies by overstating farmer consumption, and understating technical and commercial (theft) losses in the system. One of the regulators' task is to parse out the grey area between agricultural consumption and actual system losses, so as to discipline costs related to the latter, without affecting subsidies related to the former. In addition, regulators have the unenviable task of regulating investment in substandard physical infrastructure. Since most Indian systems are underinvested, utilities are expected to invest, at least to maintain if not upgrade the system (e.g., replace burnt out transformers). But regulators inherited a culture where politicians, and not engineers, directed investments. Thus, the regulator faces the difficult task of pruning investments amidst pressures to invest.

Another important function entails setting up market rules for competition pursuant to the central Electricity Act of 2003, which ushered in private participation in competitive markets. This was a new playing field for the Indian electricity sector, which involved steep ascent of a learning curve to understand international experiences with markets, and their application in the Indian context – a complex and challenging task for any organization let alone the recently established, resource-starved regulators. Regulators have to understand economic aspects of markets, but also the technical implications for different market structures, since in electricity physics and economics are closely interdependent – all product 'delivery' takes place on a common grid that obeys laws of physics, not markets.

### *Regulatory Powers – Theory vs Practice*

The Acts gave SERCs the powers of a civil court to fulfill their mandate – exceeding the highest power in the bureaucracy, both in terms of perquisites and legal

powers (e.g., like a judge, they could “search and seize” any SEB office to obtain information necessary to carry out their mandate). Their orders become law when passed.

Lack of enforceability dilutes the strength of their legal powers. Their orders can be challenged in court (on points of law), and judges can stay their orders pending resolution. Further, regulated utilities can flout regulators directives with little consequence, if they have the government behind them. In fact the government often directs SEBs to flaunt tariff orders or directives (such as tariff increases to farmers). Thus, in practice regulators wield power to deny utility demands (such as investments and cost increases), but lack the agency without government support to place demands upon them (such as to implement metering).

The law still gives IRs unfettered independence, if they choose to exercise it. They are non-majoritarian bodies, whose Members are appointed by the Government. But for a perfunctory requirement to submit annual reports to the legislature, they have little formal accountability to the Government.

Because of this risk of unaccountability, the enabling legislation laid down a unique governance structure based on transparency and public participation. They are required to hold public hearings on issues, issue explanatory orders to their promulgated rules that detailed their rationale, comments from stakeholders, and the basis for their judgments. They are thus akin to a 4<sup>th</sup> branch of government, with a mix of legislative, administrative and quasi-judicial powers.

### *Organizational Structure*

Regulators consist of one to three Members, including a Chairperson and two other members, typically one ‘Technical’ and the third ‘Economic’. Regulators typically rule on issues by consensus, but formally require 2 out of 3 to agree on an issue. Government appoints all regulators, but from a candidate list shortlisted by a Search Committee, who solicits candidates from both private and public sectors. Members have five-year tenures, from which they can be removed only on very egregious grounds, such as moral turpitude. In practice, they do not face the risk of premature removal.

Regulators direct a staff to assist them in analysis, data gathering and writing. These usually consist of Directors, Deputy Directors and lower level staff for each functional area. A Secretary of the SERC serves as the point of interaction between the SERC and the outside world. In practice, the Secretary and Director of Tariffs take on the bulk of the staff responsibility to provide research, content and engage in public relations. The overall staff strength is 20-30, with 10 or less non-administrative staff. For e.g., the KERC had only 9 key staff, and 3 consultants on contract.

In practice, Members get selected through an ostensibly independent search committee from an applicant pool consisting mostly of retired bureaucrats from the Indian Administrative Service. In practice, rumors of political interference abound. They may or may not have prior experience with the power sector. Staff get deputed mostly from the SEBs, with few exceptions. In Karnataka, over 90 percent of staff spent the bulk of their careers with the SEBs. In all cases, the staff and Members have spent their careers in the public sector.

### Key Actors within KERC

*First Chairperson:* authoritative, ‘maverick’ leader with no previous background in the sector, but closely connected to the Chief Minister who hired him.

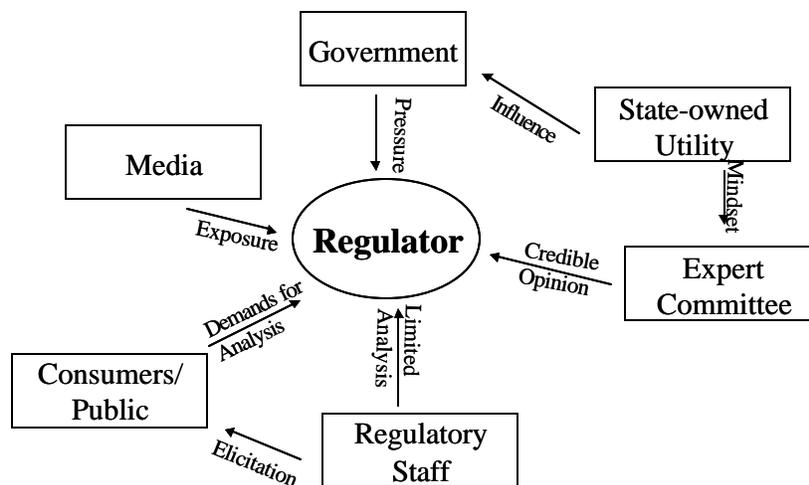
*Second Chairperson:* deep background in the sector, mostly with the SEB, then with the Energy Ministry, representing somewhat of a conflict of interest. Informal and sympathetic to the SEB cause

*First Secretary:* unusually competent and opinionated, with strong views that KERC ought to represent consumer interests.

*Regulatory Staff:* Nine key staff members, with 3 contracted consultants.

Figure 1 below shows the entities that influence regulatory behavior in the external environment. These illustrate their influence for a specific decision discussed below, but apply more generally to decision-making.

**Figure 1 - External Actors Involved in Regulatory Decision on Investment Proposal Review**



### Decision-making under the KERC

This case examines and explains the decision-making within the KERC since its institution in 1999. As mentioned, the regulator became the institutional focal point of reform post 2000, tasked with a significant reorientation of the sector toward attracting private sector investment and competition to the SEB as a means to discipline them. The analysis will also look specifically at two decisions in this time period: the first, the KERC’s judgment under the first Chairperson on passing through to consumers the cost of a Power Purchase Agreement (PPA) with a power plant concluded prior to the institution of the KERC, but surrounded in controversy. The second, during the regime of the second Chairperson, focuses on an unprecedented transmission investment proposal to upgrade the entire transmission network in Karnataka. Both these decisions were contentious, laden with political content and carried far-reaching economic ramifications.

These cases were chosen for their contrasting approaches to decision-making. In the first case, the KERC took an aggressive stance to block passage of PPA costs rather than a safer response of inaction, given the fait accompli the project and contract presented from a legal standpoint. In the second case, the investment proposal was unprecedented in size, and virtually indefensible to implement in the proposed timeframe, although it addressed a long overdue system deficiency. The regulator appeared to conduct perfunctory scrutiny, and approved the project in the midst of political pressure.

### *The Power Purchase Contract*

Prior to the formation of KERC, the Tannir Bhavi Power Company (TBPC) entered into a controversial and ambiguous PPA with the state-owned utility, at an unprecedented cost. It was well known that the government always negotiates and controls these PPAs on behalf of the utility, and in this case amidst rumors of corruption. Under the KERC mandate, KERC was obligated to grandfather PPAs entered into and concluded prior to KERC's formation, while all new PPAs required the approval of the KERC to pass-through their costs in rates.

When the TBPC PPA came before the KERC, it faced public pressure to reopen the PPA due to its high cost, but pressure from the government to accept it. Regardless of KERC's intent, the law appeared to tie its hands. The utility now had to bear the cost of the contract or face consumers' ire, and it wanted the PPA costs passed through but with modifications.

The KERC initially ordered the utility to proceed with arbitration (under the contract provisions) to resolve its disputes and then accept the resulting verdict, until which time it withheld pass-through. The Secretary of KERC, a firm believer in KERC's role of protecting consumer interests, wanted to set aside the PPA completely, believing it to be unjust and spurious. The Commission compromised to defer to the arbitration panel after seeking legal opinion on their options.

The arbitration panel ruled in favor of the power company, with little substantive discussion of the disputed provisions. The Commission would not submit. Based on another legal consultation, the KERC came out with a unique legal interpretation of the term 'concluded contract', so as to interpret the grandfathering provision to apply only to contracts where both parties 'mutually consented' to the PPA. The controversy undermined this consent, and therefore gave KERC cause to review it. Needless to say, its subsequent order denied passage through to consumers, which the utility challenged in court.

### *Transmission Investment Case*

The SEB proposed an annual investment of \$600 million that was more than five times the size of the highest implemented budget in the SEB's history. KERC set up an expert committee to review the proposal. In the resulting report, the Committee reduced the annual investment to \$400 million, leaving the rest for future consideration, but did not question the investment fundamentals.

This decision, at its face, lends itself to, and should have been approached as, a rational choice framework. The object of review in such a case is to determine the results of a cost-benefit analysis of the proposed investment(s) and/or determine the cost-effectiveness of reaching a desired level of reliability/redundancy in the transmission

network. Both these represent fairly standard procedures for investment appraisal worldwide. According to the utility, many transformers operate too close to their technical limits, thereby risking failure or reducing their life expectancy, and increases losses.

Other aspects of this proposal cast doubt on its motives and practicality. Multiple sources indicated that the utility developed the project proposal to fit a pre-determined government outlay. Would the regulator have access to such information? It is unclear, but very likely the case, given the close relationships regulatory staff and members have from their past history.

The regulator's first reaction to this proposal was to set up an expert committee. Note that earlier in its tenure (under the previous Chairperson), the regulator was forced to reduce scrutiny of investment schemes to those above a certain size, and dissolved a committee that he set up to appraise all projects. What made the regulator set up this committee in light of this history? It was apparent that this proposal merited scrutiny due to its magnitude. The regulator expressed on several other occasions his reservations on their internal capacity to provide a defensible analysis, particularly without sufficient data. His response on one of those occasions was to hire a consultant to conduct fieldwork, so as to obtain a *credible* source on the basis of which he could make a decision. In the same way, it is very likely the regulator sought a credible opinion from the committee for its ruling on this investment. The Chairperson himself pointed out, this committee gives the regulator "some semblance of credibility" in reducing what everybody knew was an impractical level of investment in one year.

The Commission constituted the committee with a strong utility representation. A retired bureaucrat who ran the utility for many years chaired the committee. He had faith in the fundamental premise of the proposal, and believed his role to lend a dose of pragmatism to the project. One other member was a representative from the consulting organization who drafted the proposal. His role was to provide data for the review. The third member was a former member of the KERC. That the background of the first two represented a potential conflict of interest did not concern the Chairperson or the regulatory staff. The Committee's expert report recommended staggering the project's implementation, reducing the annual outlay from \$600 million to \$400 million on practical grounds. The tone and content of the report did not question the project selection or justification, but rather dwelled on prioritizing segments within the project so as to permit its sequential implementation, and correcting any errors and inconsistencies in the analysis.

Upon completion of the report, the KERC in its order adopted the recommendations of the Committee, without discussion, independent analysis or any other opinions. At the same time, the regulator went through the motions of a public hearing, and requiring the utility to provide written responses to objections raised in the hearing. Staff solicited objections from the public to encourage scrutiny of the investment. Objectors who received such responses criticized them for being unresponsive. Many objections demanded more information and thorough analysis of the project. The tariff order did not discuss these objections substantively in their eventual order, neither did they require the committee to incorporate the objections in their analysis and written report.

The regulator faced other external pressures besides those from consumers. The government made known its displeasure with the Expert Committee formation. The regulator had no doubts of the government's desired outcome. The regulators would also have in the back of their mind prior experience of the utility calling on its master, the Energy department, to chastise the regulator for stalling on past project proposals, to which the Chairperson had succumbed.<sup>4</sup>

Finally (referring to Figure 1), the Chairperson was well aware of the media glare on the project, and lamented the conflict regulators face in their scrutiny between ensuring prudence and coming across to the public as "anti-development".

### *The Decision-Making Process*

How did the KERC arrive at these important decisions? What decision-making process did it undertake, and what influenced this process? What theories of organizational behavior help explain them? In both cases, the decisions lent themselves to 'rational' decision-making based on economic principles and technical cost-benefit analysis (in the investment case) and straightforward interpretation of KERC's legal boundaries. Yet, the procedures carried out – constituting an Expert Committee, holding public hearings, soliciting comments from the public - involved standard procedures that were part of decision-making. Did they influence the outcomes in substance? Did KERC take into account public objections or expert opinion in its decisions? Finally, it would be remiss to ignore political considerations, given the overt and tacit pressures from Government. A variety of divisive issues influenced the public's perception of KERC: the PPA would please the government and project sponsor, but potentially damage the KERC's reputation as consumer-friendly; large investments appeared reform-friendly on the surface, but would later result in higher rates. But different stakeholders had varying degrees of clout. How did KERC respond to these political pushes and pulls? Were coalitions formed to influence KERC? Did networks develop and operate to lobby with KERC?

### Perceptions of Regulatory Performance

Stakeholders in Karnataka at this stage were weary of the poor power quality and escalating costs of electricity. The KERC promised hope of reform, but delivered little since its formation in 1999. Still, the public placed its trust in the KERC by virtue of its initial strong stance toward consumer protection and reform. The regulator confronted the government publicly in the TBPC case, giving the impression of a willingness to challenge the entrenched politics of the sector. But with time, as sector performance continued to decline, and with the ushering of the Electricity Act, KERC showed no signs of proactive rulemaking toward reform, instead waiting for direction from either the government or regulators in other states.

The public, and particularly farmers, agitated over further rate increases after KERC hiked prices to keep up with increasing utility costs in the first few years. Despite this, public participation in the regulatory process was meager, and concentrated in a few

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<sup>4</sup> In a previous investment proposal, the KERC reviewed and requested data from the utility for almost a year amidst regular pleas for approval – this culminated in a strongly worded letter from the Energy department, accusing the regulator of retarding development of the sector. The Commission approved the project immediately.

ill-equipped consumer groups. Industry largely exited the SEB network by setting up their own generators. The Government, in parallel, developed plans to privatize the SEBs, in the process proposing modifications to the Karnataka Reforms Act to reduce investors' perception of 'regulatory risk' by narrowing regulators' discretionary scope. The bureaucracy in Karnataka, particularly in the electric sector – including leadership in the SEB – loathed the KERC, and had little respect for its credibility or authority. Having the government safely behind them, the SEB management consistently ignored KERC's directives and challenged many orders in the High Court. The Government interfered in the KERC's affairs on a number of occasions, further damaging its credibility in the public eye. Politicians continued to funnel parochial campaign-related investments into the SEB's tariff filings.

In the midst of this, the tenure of two key personnel at KERC – the Chairperson, and the first Secretary – expired in 2004. Their replacements were virtual antitheses of them, in style, background and influence.

## **Synthesis – Revisiting the Cases**

### *The Power Purchase Contract*

The decision to 'take on' the TBPC issue is best explained as driven by personal values. The Secretary felt the KERC has an obligation to protect consumer interests, and the KERC's judgment was the consumers' last opportunity for reprieve. That the consequence of the decision was mostly symbolic, since taxpayers would pay for the contract anyway, further strengthens its value basis. The Chairperson, though sympathetic to this position, felt compelled to consider KERC's reputation and future repercussions of publicly confronting government. His compromise to defer the decision to the arbitration panel reflected him satisficing his objective of fulfilling his duty as to the public while respecting norms of conduct with his 'superiors' and incumbent powers.

A year later, after the arbitration panel ruled in favor of the power company, KERC reversed its earlier stance and came up with its innovative legal position to yet again deny pass through. Reversing its previous position represented a serious offense to many stakeholders, not least the utility. This decision reflects the dynamic nature of sense-making and re-evaluation of roles and values based on external feedback of legitimacy. The public did not take the arbitration verdict well – within informal circles in the sector, it was viewed as farcical. The Chairperson could, again, have safely accepted the verdict. This time around, arguably he risked irreparably damaging his and KERC's reputation with the government and the utility, but would win favor with consumers. This position could only have been taken by an authoritative Chairperson, and someone with a bias toward consumers, both of which were consistent with his reputation.

A rational approach based on strict adherence to mandate would have without doubt led to acceptance of the PPA in the first case. Rational action with satisficing ulterior objectives of balancing external perceptions of KERC's legitimacy may explain the initial position. The final order post-arbitration, however, can only be explained by a rule-based approach.

### *The Investment Review*

The investment review represents a more complex decision-making process, with several possible explanations. The resource constraints, interpreted in this case as the lack of expertise and overarching concern for externally conferred legitimacy, clearly underlay the entire decision-making process. Even though the regulator could have attempted a detailed and extensive study, and exercised greater agency in obtaining information than he did, such a study would have been unprecedented, and fraught with uncertainty, perhaps prohibitive enough for a capital investment of this magnitude and with this visibility. Thus, arguably the resource dependency issue ruled out the possibility of a reasoned assessment of the proposal that would have been consistent with their mandate. An in-depth review of the project would have been futile, and ruffled the feathers of the utility and government. The Chairperson received fair warning of this as soon as he constituted an Expert Committee.

The Chairperson's paramount concern was the credibility of the ruling on the investment.

A ruling by an Expert Committee consisting of individuals from the 'establishment' would ensure the legitimacy of the decision in the eyes of the government and utility, more than one from the KEREC. The Chairperson saw no problem with the constitution of the Committee. Whether the apparent utility bias was intended to determine the outcome (tactical move toward satisficing) or whether the KEREC simply relied on sources they knew (resource dependency) is difficult to ascertain. But the Chairperson also gave clear indication of yielding to government pressure, even in past investment proposals, which were outside the public eye (and therefore not 'reputation' driven). Compliant behavior was entirely consistent with his past history in the Energy ministry and utility, and the noticeable relaxation in relations between KEREC and the utility after his takeover. .

Nevertheless, public reputation played a part. The investment was over five times the amount ever spent by the utility in the past. The KEREC had to have factored the visibility of the project in going through the motions of a hearing, and appointed a Committee, to give credence to his decision.

### **Conclusion**

In this case, regulators in the context of India's political economy of power have evolved into extensions of the bureaucracy. They fall short of their expected roles of rational decision-makers and agents of institutional change who employ techno-economic decision criteria, and exercise their civil court powers . Unsurprisingly, regulators fall back on patterns of behavior exhibiting compliance to governmental authority, while struggling to simultaneously maintain credibility with a number of stakeholders with competing demands. As a consequence of these complex demands, they exhibit a mix of sincere efforts at fulfilling their mandate, tactical satisficing to appease multiple demands, or straightforward adherence to past practices. Regulators and utilities, backed by the government, engage in a constant battle of brinkmanship, testing the limits of their authority with each other. Ultimately the lack of procedural rigor and goal specificity allows them to draw on their own, cultivated rules of appropriate action, based on their personal values and relationships. Regulatory outcomes end up being personality-

dependent on the one hand, and externally driven by the government behavior towards them on the other.

### **Possible Next Steps?**

Governments need to establish regulators' credibility through their support, so that regulators need not preoccupy themselves in their tenure with a search for legitimacy. Regulating state-owned entities poses unique challenges. Lack of enforceability weakens regulators' agency, which increases their dependence on externally conferred legitimacy. Regulatory institutions need to attract wider pools of applicants so as to break the ecological ties with government that filter into decision-making. This cannot happen overnight, since limited applicant pools result from as much as lead to poor credibility. But the selection process has significant scope for improvement. The incumbent government's presence in the search process can be weakened,<sup>5</sup> and the justification for selection made public and transparent. But these recommendations, though strengthened by this analysis, are well known, and rests on political will.

The regulatory tasks will always involve significant goal ambiguity and uncertainty. As a result, regulators will always fall back on their values to guide their decisions. Rational choice theory suggests that the greater the specificity and guidance from policymakers on regulatory mandate, the more regulators can be held to 'rational' bases for their decisions. On the other hand, the less the discretionary room to make value-based decisions, the more likely regulators will be forced to inject reason into decision-making. The ex-post judicial remedies are limited by their inefficiency, but also are limited to addressing points of law. The ambiguity of regulator's objectives demand substantive scrutiny of regulatory decisions.

Regulatory identity is quite important in this case. Regulators need to inculcate in members and staff a stronger sense of identity and purpose. Permanent staff, stronger training and interaction with other regulators, both within and outside the power sector, would serve to cultivate their role. Rigorous internal procedures, more visibility of internal process, could also breed an identity *by process*. Regulators' concern for their reputation can be exploited in this regard to force more public scrutiny, and prevent perfunctory adherence to the stakeholder participatory process. Stricter, consistent formats for public hearings, with requirements for interactive participation between objectors and regulated utilities, and greater media involvement, could force regulators to engage with substantive issues more thoroughly.

That behind the technical face of tariff-setting and market making the regulatory mandate actually aims to reform politically entrenched institutions must factor into goal definition and policy guidance. Process and structural improvements will only improve the regulatory institutions to a certain extent. The external constraints on which regulatory efficacy depends will not reduce without political support for reform. As the ex-Secretary of KERC said, "you can't expect islands of excellence in a sea of mediocrity".

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<sup>5</sup> The Chief Secretary of the state chairs the Selection Committee.

**The New York Times**  
**Electricity Crisis Hobbles an India Eager to Ascend**  
<http://edapps.stanford.edu/caselibrary/docs/46/Electricity-Crisis-New-York-Times.pdf>  
By SOMINI SENGUPTA

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