

Viewpoint

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The Real World of Power Sector Regulation

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"Governments throughout the world engage in three main activities: they tax, they spend, and they regulate. Regulation is the least understood . . ."¹

Confusion

Regulation is government intervention. When a government regulates, it imposes direct and indirect controls on the actions of state-owned or private enterprises in a particular sector. Government controls on prices are the most common form of economic regulation in the power sector. But regulation often goes beyond simple price or tariff controls. State-owned power enterprises are commonly required to get government approval for many minor operating and investment decisions.

A government may regulate openly and directly through published rules, decrees, and licenses. Or it may regulate through informal contacts between ministries and the managers of the regulated enterprise. State-owned enterprises are especially vulnerable to this "hidden" regulation. As a top official in an Asian government-owned utility explains, "What matters most is not what the ministry writes in its decrees, but what the minister says in his telephone calls." Regulation is therefore not a new phenomenon for most countries, but there is often much confusion about what it means. A typical reaction from politicians and officials hoping to privatize some or all of their power sector, and at the receiving end of advice on regulatory policy, is, "But this is nothing new! Our government has always controlled the activities of state-owned enterprises through different ministries. And these controls have created many prob-

lems. We don't need to reinvent the past and put a new label on it."

What the prime minister needs to know: One word, two meanings

Much of the confusion comes from one word being given two meanings. There is old-style regulation and new-style regulation. Old-style regulation (often labeled coordination, review, or oversight) has been the prevailing mode in countries where state monopolies run the power sector. Typically, it involves extensive control by one or more ministries over the operations and investments of a vertically integrated state power enterprise. This state power enterprise is protected from competition but usually is not allowed to charge tariffs that recover its costs.

Old-style regulation is not an option for any country serious about encouraging significant, sustained private investment in its power sector. Private investors simply will not show up (or, if they do come, they won't stay long) if a country tries to maintain a regulatory system that is unlimited in scope, unclear in operation, and inclined toward micromanagement. Private investment requires new-style regulation that is limited, transparent, and "lets managers manage." The choice between the two regulatory approaches is ultimately a pragmatic one. If a country really wants private investment in its power sector, it has no choice but to adopt a new regulatory system that keeps promises and exercises self-restraint.





Why sector-specific regulation?

Why should there be a special set of rules for the power sector? The usual answer is that regulation is needed to prevent the exercise of monopoly power by a natural monopoly. There is, of course, no point in having sector-specific regulation when competition is feasible. But for a developing or formerly socialist economy just beginning to privatize its power sector, the main benefits of regulation do not come from eliminating the efficiency losses due to monopoly power that are described in economics textbooks. The big gains come from creating a system of private ownership that can reduce the

BOX 1 THE EIGHT BASIC DESIGN QUESTIONS

- **Should there be a single regulator or a commission?**
- **Should the regulatory entity have jurisdiction over one sector or several?**
- **What activities or parameters should be regulated?**
- **What are the control mechanisms for price and quality?**
- **How are regulatory rules created and enforced?**
- **What are the desired political and legal attributes?**
 - **Should the regulatory entity be “independent” of government?**
 - **Should the regulatory process be transparent?**
- **Who “regulates the regulator?”**
- **How should responsibility be divided between the regulatory entity and other government authorities?**

economic losses produced by the capacity shortages, cost overruns, and inefficient operations so common in state-run utilities. Privatization, by itself, does not always trigger a need for sector-specific regulation. But privatization in the power sectors of developing and formerly socialist economies usually goes hand in hand with the government’s granting legal monopolies to one or more new private entities. Consumers don’t care whether a new monopoly is natural or unnatural; they simply want to be protected from monopoly prices. If they believe that the government is not protecting them from the new monopolists, privatization won’t last long.

Investors also want protection. Once they have invested in generating plants or distribution systems that have no value in other uses, they are vulnerable to being held (economic) hostage. Independent power producers (IPPs), for example, often talk about the need for a “stable regulatory environment.” This is a polite way of saying, “Once I have signed the power sales contract, I expect it to be honored.” Investors will not invest in a country if they believe that their investment will disappear through direct expropriation or through many small regulatory actions that add up to de facto expropriation. In a country with little or no history of private ownership in the power sector, regulation is needed to convince private investors that they will recover reasonable costs and earn a profit commensurate with the risk they take.

Regulation, then, is simply a system that allows a government to formalize and institutionalize its commitments to protect consumers and investors. Ideally, the policies to be implemented by the regulatory entity should be specified in the energy or regulatory law. But a new regulatory institution is not always required. If privatization is limited to IPPs’ making long-term power sales to state-owned utilities, regulation need be no more than a series of transaction-specific contracts between the government and the IPPs. When privatization is more comprehensive—involving, for example, privatization of distribution—a regulatory agency must be created because it is impossible to prespecify the complete terms of regulation in one or more contracts.

The “independence” question

Eight basic design questions must be answered whenever a new regulatory system is required (box 1). While it is not possible to address all eight questions in this Note, it is worth focusing on the question that always generates the most controversy: Should the regulatory entity be independent of the government? Most presidents and prime ministers react to the idea of an independent regulatory entity with dismay and disbelief. The typical response is, “Why would I want

BOX 2 MINISTER VERSUS REGULATOR: WHO DOES WHAT ...

Minister of energy

- Translates general government policy into sector policy.
- Approves major capital expenditures (while-state owned).
- Mandates fuel stocks for national security reasons.
- May require use of certain fuels during supply interruptions.
- Controls imports if there are real national security concerns.

Electricity regulator

- Issues and enforces licenses and concessions.
- Sets prices when there is no competition.
- Monitors financial viability of operators.
- Sets service standards and monitors compliance.
- Arbitrates disputes between operators.
- Arbitrates disputes between operators and consumers.
- Provides information and advice to the ministry.

to create a regulatory entity that I can't control? Elections can be won or lost because of electricity prices. Electricity prices are too important to be left to an independent regulatory commission."

This strongly negative reaction to the notion of an independent regulatory commission is the result, in part, of three misunderstandings. The first comes from the fact that the word *independence* is confusing. No regulatory entity can be truly independent. Even if a regulatory entity is a nonministerial commission or office, it is still a creature of government because it was created by government. What people really mean by an independent regulatory entity is a government entity that does not have to get the approval of the prime minister or other high-level political authorities to raise (or lower) tariffs. A conscious political decision has been made to give the regulator autonomy in tariff changes and other decisions. Independence does not mean the absence of accountability. There is still accountability, but it is to the tariff standards in the law, not to the minister.

A second misunderstanding is the belief that the regulatory entity must be given complete authority over all policy decisions that affect the power sector. This is a mistaken presumption. In countries with independent regulatory entities, executive departments or ministries retain control over many fundamental policy decisions affecting the sector. The basic split is between policy development by the ministry and policy implementation by the regulatory entity (box 2 shows how decisions could be divided between a ministry and an independent regulatory entity).

The third and perhaps most important misunderstanding arises from confusion about the reason for independence. Independence is not an

end in itself. Instead, it is a means to an end. What ultimately matters is not whether the regulatory entity is independent, but whether the government can give a credible commitment to investors and consumers. If a government can give credible commitments without an independent regulatory entity, there is no real need for independence. But in most countries, prime ministers and presidents have found it difficult to resist the temptation to keep tariffs low when they have direct or hidden, indirect control over tariffs. Thus, the basic rationale for creating an independent regulatory entity insulated from day-to-day political pressures is that such an entity may be better able to give a commitment that investors can believe in. Of course, a regulatory entity could be legally independent and still renege on its commitments, becoming a "rogue" regulatory body. Therefore, independence must be combined with well-specified tariff-setting criteria—and backstops that encourage compliance.

An alternative to independence is a completely specified regulatory regime that leaves little or no discretion to the regulatory entity. This is the approach taken in Chile and Peru. It arises out of a fundamental mistrust of government, both inside and outside the regulatory commission. It is appealing because it is perceived as the regulatory equivalent of going on "autopilot," but it is likely to work only when a government has a clear idea of the industry structure it wants, moves quickly to this structure, and then doesn't change its mind.

Backstops to regulation?

A country may adopt all the formal trappings of an independent regulatory entity while, behind the legal facade, the prime minister still retains effective control over the fundamental regulatory



decision—tariff levels. Are there “backstops to regulation” that will make the prime minister think twice about renegeing on regulatory commitments? Two backstops are worth considering. The first is widespread domestic ownership of the private power companies. This backstop works when enough voters have been converted into investors. For example, in Chile, about 35 percent of the equity shares of private electricity companies are owned by Chilean pension funds. It is relatively easy for authorities to quash tariff increases when the owners of the power companies are foreigners or a few friends of the former prime minister. It is much harder to do so when the pensions of many local citizens depend on the dividends paid by these companies.

The second backstop is international guarantees of regulatory performance. The World Bank recently created stand-alone guarantees for various sovereign risks, including government regulatory actions. The guarantees are limited to protecting private lenders against debt service default. The guarantee fee ranges from 40 to 100 basis points and is in addition to the interest rate charged by lenders. As a condition for issuing a guarantee, the Bank will require a counterguarantee from the government that, if it fails to live up to its regulatory commitment, it will reimburse the Bank for the amount paid out in compensation. The guarantee program is likely to work only if governments can be persuaded to take out insurance against their own possible misbehavior and if future regulatory performance can be described precisely enough to make it clear when the guarantee would be triggered.

Transparency

Regulators are always under suspicion—especially new regulators in developing and formerly socialist countries, because often their first big task is to lift prices up to costs. (In contrast, regulators in the United States and other industrial countries work hard to get prices down to costs.) The need to raise prices often coincides with privatization, so consumers will inevitably suspect that the regulator has “sold out” to the new private power com-

panies. If the regulatory agency is to have any legitimacy, it must be able to convince the public that the price increases reflect costs previously suppressed or subsidized by the government, not monopoly profits.

The best way to do this is to make the regulatory process as transparent as possible. Transparency means openness. It has three principal dimensions: specifying the rules, opening up the process, and explaining the decisions. The British regulator, for example, specifies its rules in the licenses issued to each power sector entity. The advantage of putting all the rules in a single place is that it increases certainty. The U.S. system, dominated by lawyers, places an excessively high premium on the openness of the process. The typical U.S. rate case involves expert witnesses, cross-examination, written briefs, and counterbriefs—all open to public view—and strongly resembles a court case. It is a slow and costly system, and there is no clear evidence that it produces better decisions. Probably more important than the openness of the process is the requirement that the regulator issue written explanations of its decisions. The discipline of justifying in writing decisions that could be appealed reduces the chances of the regulator’s becoming a “rogue” regulator.

A common mistake

Currently, more than twenty countries are reforming their power sectors. For most prime ministers, this reform simply means restructuring and privatizing state-owned enterprises. What they forget or may not know is that a government cannot regulate private power companies in the same way that it regulated state enterprises. Power sector reform will succeed only when governments reform both the sector and the way it is regulated.

¹ Scott H. Jacobs, “Building Regulatory Institutions: The Search for Legitimacy and Efficiency” (OECD, Centre for Cooperation with Economies in Transition, Paris, 1994).

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