Delhi, the second state in India to privatize its electricity distribution four years ago, witnessed widespread protests by the RWAs (resident welfare associations) and NGOs recently, against the tariff hike announced by the regulator. The city began demanding a complete rollback of the 10% hike for the domestic class. Under pressure from its own legislators and citizens, the government finally announced its decision to provide subsidy for offsetting this increase. The public ire was seen more as an expression of discontent with the service providers after privatization rather than against the domestic tariff increase. Even three years after private distribution companies have taken over, a lot remains to be done to meet consumer expectations for better services. The emerging awareness amongst consumers will force utilities to focus more on consumer interface to attend to problems. The RWAs have made their point effectively; they now need to be gracious and allow all concerned entities the time for appropriate response. On their part, the Delhi government and distribution companies must present a time-bound action plan to the citizens of Delhi. Now, the regulator will have to shoulder greater responsibilities towards monitoring the discoms' performance and taking proper action at the right time in order to avoid occurrence of such instances in future.

The above examples often raise the question whether privatization is the solution for improving service efficiency or not? Privatization in itself, is not the solution. For privatization to succeed, an effective regulatory oversight is a must. It is an awakening call for all stakeholders, in particular the government. A repetition of this would not only raise questions about the necessity to privatize electricity distribution but could also derail the ongoing reforms process in the sector.

Another concern is the region’s dependency on crude imports, standing at more than 70%, which has been projected to increase to as high as 95% in 2030. Oil prices in international markets have been increasing at an unprecedented rate, which further reinforces the regions oil vulnerability. Unlike previous price hikes, which were caused by supply disruptions, this increase in price has been in part, triggered by an unabated increase in demand and by constraints in production capacity. Experts in the sector are of the view that the high prices are here to stay for some time. Thus, there will not be any respite from the high oil prices that pose unique challenges to the developing world. In this situation, effective subsidy administration is a challenge. There is a need for well thought of and coordinated policies that not only ensure development of oil markets in an effective manner but also provide well-targeted subsidy schemes to protect the real poor.
Access in gas sector in India: learning from outside

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Introduction

The setting up of an effective regulatory mechanism is an essential aspect of development of network economies. These economies are by nature, usually, natural monopolies and are characterized by the economies of scale and scope. In addition, high investments and sunk costs are required in these economies to augment the need for a credible regulatory mechanism. A key issue that needs to be addressed by regulators in these economies is the introduction of competition. An option available to regulators for introducing competition in these network economies is that of allowing for the TPA (third party access). The Commission of the European Communities defines third party access as ‘a regime providing for an obligation, to the extent that there is capacity available, on companies operating transmission and distribution networks…to offer terms of use of their grid, in particular, to individual consumers or distribution companies in return for payment’.

Competition in the Indian gas sector

In India at present, regulation of the gas sector is at an early stage of development. An efficient gas transportation system would be critical to development of the sector in the country. Gas accounts for about 10% of the total energy requirement in India. For the coming years, keeping in view the recent gas discoveries by Reliance, Gujarat State Petroleum Corporation, and others, there would be an increase in the share of gas for meeting the total energy requirement. Further, with energy security taking the forefront, efforts are being made for augmentation of gas supplies.

Regulation in gas sector: present status

The upstream subsector of the oil and gas sector in India is regulated by the DGH (Directorate General of Hydrocarbons), Ministry of Petroleum and Natural Gas. The two legislations for the sector, namely the Petroleum and Natural Gas Regulatory Board Bill and Natural Gas Pipeline Policy, both are in the draft stage. GAIL (erstwhile Gas Authority of India Ltd) has at present, the exclusive right to develop and operate the gas transmission system in India. It is also a major gas distributor in the country. It owns most pipelines in the country barring a few in Gujarat, Mumbai, and Delhi (Basu and Shukla 2004).

This article outlines a few issues relating to introduction of competition in the sector. Further, it discusses access arrangements in two countries, the US and the UK, and summarizes the learning for the Indian gas sector.

To start with, in terms of access to third party, there are two major concerns that need to be looked at.

1. **Exclusive right to GAIL for laying down pipelines**

Many experts believe that granting GAIL the exclusive right to lay down pipelines would hinder the growth of competition in the sector. It may even act as a potential source of monopoly abuse. However, on the other hand, keeping in view the embryonic stage that India’s natural gas sector is presently in, exclusive rights to one company for laying down the pipeline may foster growth in the sector, but at later stages, care would be needed for having regulation that would support competition in the sector.

2. **Basis for provision of transmission services to different operators**

The second issue that requires to be dealt with is that of third party access to pipelines. There are two options available for providing access to different operators.

   i. **Common carriage**

   Under the common carriage arrangement, operators are provided access to pipelines on an ‘as required basis’, wherein users are not committed to the long-term use-of-system contracts (NERA 1996). Alternatively, it can be defined as a facility (pipeline) obligated by law to provide services to all potential users without discrimination, with...
services to be prorated among users in the event that capacity is not sufficient to meet all requests. As there is no committed usage of the capacity available, the transmission company is expected to maintain an additional capacity. Estimating, building, and maintaining additional capacities in pipelines have investment obligations attached.

ii Contract carriage Under the contract carriage arrangement, operators are provided access to the additional facilities only if they are willing to sign a firm contract for use, a facility that voluntarily provides its services to others on a private contractual basis. System development under this case takes place in response to the demand from users, which in turn, facilitates financing of new developments.

International experience

United States

Internationally, contract carriage has been the preferred method for providing access to pipelines. For instance, in the US (United States), access to transmission facilities is provided on a contract carriage basis.

In case of the US, involvement of the government has been minimal. Enactment of the Natural Gas Act, 1938, was the initiating point of regulation of prices and activities of gas companies. The act gave higher powers to the then regulator FPC (Federal Power Commission), later known as FERC (Federal Energy Regulatory Commission), for managing interstate pipelines and wholesale markets. The country, being a federal state, has regulators at two levels: the FERC for regulating interstate transactions and various state agencies for regulating intra state pipelines.

Landmark changes were brought about in the gas regulatory regime with the enactment of two legislations: the FERC order number 436(1985), which introduced the OA (open access) to the interstate pipeline transportation resulting in a limited usage of long-term contracts and FERC order number 636(1992), which required unbundling of the interstate gas suppliers into separate natural gas and pipeline transportation affiliates. Under the order, there was unbundling of the pipeline transportation and merchant function, and it required pipelines to provide for the OA in transportation and storage in a non-discriminatory manner. Along with access, pipelines were also required to provide equal and timely access to information relevant to the OA services.

At present, access to the pipelines is provided on an OA on a first-come-first-served basis. These operators are contract carriers. Under the contract carrier system, shippers execute transportation contracts with the pipeline and storage companies. Users desiring an uninterrupted supply of gas generally get supply on a firm basis, and users who could stand an interruptible supply get contracts at lower prices. Once the entire capacity of the pipeline has been contracted on a firm basis, another shipper cannot get a firm supply of gas unless (1) an existing firm shipper's contract expires, (2) an existing firm shipper releases or resells all or a portion of its capacity, or (3) the pipeline undertakes an expansion. In case of competing bids, access is provided on a non-discriminatory basis to the bidder offering the highest ‘net present value’ to the pipeline. However, there is a ceiling on the maximum pipeline tariff that is authorized by the FERC (Maberry, Wellington, and Williams 2004).

United Kingdom

Another country that has made substantial progress in promoting the OA and competition in the gas sector is the UK. Before enactment of the Gas Act, 1986, the BG (British Gas) was the single monopoly present in the market supplying over 99% of the available gas in the country. Under the Gas Act, 1986, the government took a view that the private sector would be able to manage the sector more responsibly and

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1 Details available at <http://www.duke-energy.com/company/energy101/glossary/C.asp>, last accessed on 1 August 2005
2 Details available at <http://www.duke-energy.com/company/energy101/glossary/C.asp>, last accessed on 1 August 2005
3 The Gas Act, 1986, is considered to be the initiating point for gas regulation in the UK
efficiently as compared to the state utilities (Roberts 2004). Consequently, the BG was privatized under the act in its existing monopoly structure.

However, even after privatization, the BG had the exclusive right to supply gas to tariff customers with consumption less than 25,000 therms per annum. The BG was subject to a stringent regulatory framework in 1991 and the regulator gave an undertaking for progressively divesting its gas supply agreements. This paved the way for competition in the sector and by 1992, 20% of the industrial gas demand was met by the new entrants (OECD 2002).

The next substantial change in the regulatory structure came with enactment of the Gas Act, 1995. The policy imperative under the act was to increase gas-to-gas competition. The act mandated corporate separation of transporters, gas wholesalers, and retailers. Transporters and dominant suppliers had a statutory duty not to give undue preference to any customer (other than in response to competition in case of suppliers) (OECD 2002). Given these directives, the BG decided to demerge the entity into two separate entities: namely, Centrica, which took charge of gas production, sales, and supply business, and BG Plc., which was responsible for transportation and storage business. Subsequently, in 1999, the BG was restructured again and BG Group Plc. became the parent company with indirect holding in BG Transco (Gastech 2003).

Another key aspect of the Gas Act, 1995, was that it mandated the BG Transco to issue a network code, detailing the terms and conditions of transmission and storage for shippers. With the introduction of competition in the sector, a change was witnessed in the contractual agreements between producers and independent suppliers.

Gas markets in the country have evolved significantly over the years. In 1986, the market was driven by bilateral contracts, which were subsequently replaced by a spot market. Later, spot markets were replaced by a gas-trading arrangement called the flexibility mechanism. Under this system, balance in the demand–supply was maintained in the pipeline system through market-based interactions. The Transco traded natural gas through auctions. Interested shippers posted their bids, specifying volumes and prices at which they wanted to buy or sell. The Transco bought natural gas if it expected that injections into the system be less than withdrawals, and sold natural gas if it expected the reverse (Juris 1998).

At present, gas trade is done through over the counter market mechanism. This is a 24-hour, screen-based, anonymous market operated by the independent market operator that allows participants to trade gas in different markets (Gastech 2003).

The introduction of gas reforms and regulation has had a substantial affect on the sector in the country. As a result of introduction of competition, there has been a 62% decline in the real industrial prices from 1985 to the year 2002. In case of domestic consumers, prices have come down by about 19% from 1995 to 2002 (Roberts 2004). At present, a number of options are available to consumers. There is a range of suppliers, tariffs, services, and payment options for the consumer to choose from. And lastly, through all these measures, security of supply of gas was maintained.

Conclusions

As can be seen from the cases, introduction of third party access or OA substantially impacted the sector in the respective countries. There has been an increase in the choices available to consumers along with a fall in prices charged from them.

Gas regulation in the US has come a long way. Initially, the regulator had a lot of power to control functioning of different stakeholders in the value chain. Presently, its involvement in the working has declined substantially. The FERC now is focusing on providing reasonable prices, and terms and conditions for transportation through interstate pipelines (OECD 2000).

In case of the UK, initially, there was a single state-owned monopoly functioning in all subsectors: exploration, transmission, and distribution. However, after enactment of the Gas Act, 1986, and subsequent regulatory interventions, the utility was privatized and unbundled. Further, competition was also introduced.

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4 Definition of gas shipper under section 7A(20) of the Gas Act: A gas shipper is a company that has a contract with transporters to transmit gas through the pipeline system.
Both countries have introduced a competition and have benefited. In the UK, in the initial stages of development of the sector, there was a single entity managing all subsectors. This is similar to the case in India with GAIL being a single entity managing transmission and distribution of gas. However, as the sector would develop in the country, just as in case of the UK, there would be a need for introducing competition in the sector for preventing abuse of monopoly power.

One of the areas of difference in the regulation adopted by the two countries is the basis on which transmission services are provided in them. The US provides access on the basis of a contract carriage whereas in case of the UK, parties trade through an ‘over the counter’ exchange. In its report titled Regulatory Framework for Gas Industry in India, NERA (National Economic Research Associates) had recommended a contract carriage OA for India. A key concern for adopting contract carriage OA would be non-availability of the developer at an appropriate time. In case of a common carriage, such a concern would not arise if the government entrusts one entity for building the required infrastructure. However, for the operator to undertake such activities, it would have to be given incentives such as an assured rate of return. According to the report, whether new or incremental transmission infrastructure needs to be developed, contract carriage would be more efficient.

At present, there are two pending legislations: the Petroleum and Natural Gas Regulatory Board Bill and draft Policy for Development of Natural Gas Pipeline Networks. With no definite regulatory structure in place, there is a lot of ambiguity in the various areas of work in the sector. For example, under the draft Policy for Development of Natural Gas Pipeline Networks, it is proposed in Clause 6(vi) that the design capacity of a pipeline would be at least 25% more than the capacity required by the developer and all those tied up for the capacity. Further, the policy suggests that the excess capacity would be available on an OA basis. According to a few experts, mandatory construction of the excess capacity in pipelines could act as a big hindrance in the development of pipeline infrastructure in the country. Another issue is construction of a gas grid in the country. Originally, GAIL was entrusted with the responsibility of building the 7900-km-long grid. However, later, there were discussions on introduction of multiple players in the gas transmission subsector. Consequently, at present, little progress has been made towards construction of the grid.

These are a few issues that have led to ambiguity in the sector. Such issues would need to be sorted out before setting up a regulatory framework for promoting efficiency and competition in the sector.

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Gastech. 2003 Natural gas transmission system operators in the United States, United Kingdom and Australia [Energy International, Inc./Gastec Technology BV Report No. 02-1119-BR0022-V3]


OECD (Organisation of Economic Co-operation and Development). 2000 Directorate for Financial, Fiscal and Enterprise Affairs Committee: Competition law and policy on promoting competition in the natural gas industry OECD

In South Asia, the trend of sector-specific legislation mandating independent regulators started in the mid-1990s. Yet, with sector-specific regulatory agencies being the order of the day, there has been no attempt to systematically compile their orders and judgements across sectors for the benefit of different actors in the regulatory process.

*Regulatory Law in Practice: compendium of orders in electricity and telecom sectors* is thus a pioneering publication containing summary orders and judgements of electricity and telecom regulators in India, Pakistan, and Sri Lanka between 1998 and 2003. By giving an overview of both the electricity and telecom sectors, the compendium presents succinct summaries of the decisions of regulators and courts in India, and of regulators from other South Asian countries.

Divided into two parts – one dealing with electricity regulation and the other with telecom regulation – the compendium systematically compiles orders, regulations, and judgements issued by regulators (central and state electricity regulatory commissions, the Telecom Regulatory Authority of India, and the Telecom Dispute Settlement Appellate Tribunal) and by high courts and the Supreme Court of India. It also summarizes regulatory orders issued by agencies such as the National Electric Power Regulatory Authority, the Pakistan Telecommunications Authority, and the Telecommunications Regulatory Commission of Sri Lanka.

The electricity part of the compendium contains important orders pertaining to power purchase agreements, third-party sales, consumer issues, licensing, and tariff, while the telecom section covers regulatory orders pertaining to inter-connection services, tariff re-balancing, and quality of service.

The compendium has been published under the aegis of SAFIR (South Asia Forum for Infrastructure Regulation), formed in May 1999 as a network of organizations in infrastructure sectors from Bangladesh, Bhutan, India, Nepal, and Sri Lanka.

Academics, law practitioners, consultants, and members of regulatory commissions and utilities will find the publication useful.
Energy

India: Draft Integrated Energy Policy
As the relative prices play an important role in the choice of fuel, the draft policy points out that prices of different fuels are the most vital aspect of the Integrated Energy Policy. The Draft Integrated Energy Policy has suggested that
- prices of different fuels cannot be set independently of each other,
- all commercial primary energy sources must be priced at trade parity prices at the point of sale,
- some key initiatives need to be taken by the government that include separating the regulatory responsibility/functions of the government from its current dominance of the energy sector,
- each regulatory body should be charged with the responsibility of creating an enabling environment to foster competitive and transparent markets for energy supplies/services,
- solution to the energy crisis lies in measures that cut across confines of the five energy subsectors and the related infrastructures such as railways and ports,
- firms such as the National Thermal Power Corporation acquire technology that increase their fuel-conversion efficiency from an average of 30% to 35%,
- in order to exploit the vast coal reserves, the policy suggested recovering coal-bed methane, in-situ coal gasification, carbon-capture, and sequestration, and
- reinforce the National Solar Mission to promote innovation and acquisition of state-of-the-art technologies.

USA: Broad energy bill passed by senate
The senate passed a broad energy bill at the end of June with 16 000 million dollars in tax incentives aimed at boosting the domestic energy production to feed the growing demand. Its long-term goal is to gradually reduce prices for the consumer, especially gas prices, as will it make the licensing process for the new liquefied natural gas terminals more efficient and will open more federal land for drilling. There is a considerable task to resolve differences between this senate bill and a version passed by the House of Representatives in April. Key provisions of the bill include the following.
- Direct the president to reduce the US oil demand by one million barrels a day by 2015 and increase the emergency oil reserve to one billion barrels from the current 700 million barrels
- Require a federal inventory of oil and natural gas reserves in the US offshore
- Provide incentives for natural gas production from deep wells in the shallow waters; streamline leasing and permitting rules for tar sands, outer continental shelf, and oil shale drilling projects
- Impose reliability operating standards on utilities
- The FERC (Federal Energy Regulatory Commission) to be given authority to exercise more powers, such as approve new LNG import terminals, impose civil penalties
- Cancel the Public Utility Holding Company Act, which barred certain utility mergers
- Offer an estimated two billion dollars in tax breaks to companies for the CO₂ emissions
- Foster ethanol-additive usage in gasoline refining
- Set standards to reduce the energy use and offer rebates for energy-efficient appliances

Oil and gas

European Union: European regulators consult on gas balancing rules
The ERGEG (European Regulators Group for Electricity and Gas), an advisory group to the European Commission, has launched a consultation on gas balancing rules. The aim is to develop detailed gas balancing guidelines by the year 2006, which improve the current gas-balancing principles published by the Council of European Energy Regulators in 2003. These guidelines will in-principle be voluntary, but the European Commission could make them binding.
India: Petrochemical policy to moot plans for SSI revival
The soon-to-be finalized National Policy on Petrochemicals will propose several policy and regulatory measures to the government, including increasing the current level of investment in plant and machinery for the SSI (small-scale industry) units from 10–50 million rupees, phasing out the compulsory reservation of items of plastics for manufacture by the SSI units and the Jute Packaging Materials Act in a time-bound manner. As per a draft cabinet note on the subject, it has also mooted an incentive scheme for the urban local bodies on plastic waste management and recycling. The measures proposed in the policy include setting up of a task force to ensure availability of feedstock at competitive prices and adding fresh cracker capacity. The competitiveness of the sector is dependent on the availability and pricing of feedstock. To increase investments and demand, the rationalization of import duty, excise duty, and sales tax/VAT has been mooted. The note has also proposed measures for technology and R&D. This includes a petrochemical technology upgradation fund to be sourced from the imposition of cess on per tonne of polymer production and imports to give soft loans at concessional rates for modernization.

Pakistan: OGRA decision on gas tariff hike by month-end
The OGRA (Oil and Gas Regulatory Authority) has determined that the rights of all stakeholders would be protected in accordance with the law and in the best interest of public. This was stated by OGRA Chairman Munir Ahmed while summing up a public hearing on a petition of the SSGCL (Sui Southern Gas Company Ltd) for rise in gas tariff due to inflation and cost of gas purchase from gas field operators. He said that the authority would carefully scrutinize this petition and take decision after the hearing of another petition of the SNGCL (Sui Northern Gas Company Ltd) for revision of gas tariff. The petition was for review against the OGRA’s determinations of 20 May 2005 of SNGCL’s revenue requirement for the fiscal 2005/06.

Pakistan: Policy for non-stop gas supply soon
The government will soon announce the new gas policy in order to ensure an uninterrupted supply of energy to both the industrial and domestic consumers, Prime Minister Shaukat Aziz said. Addressing a meeting that reviewed the future energy needs of the country, he said that in order to sustain the present momentum of economic growth, meet the rising energy demands, and provide electricity to all by 2007, the government has chalked out a comprehensive strategy. The strategy includes intensive exploration of gas within the country and its import, enhancement of power generation, as well as encouraging the use of alternate energy resources.

Spain: New rules for gas retailers
The Spanish government has asked the energy regulator CNE (Comision Nacional de la Energia) for comments on the new draft regulations for gas retailers. The objective of the proposed rules is to guarantee security of supply. According to the draft regulations, the Spanish gas system operator, Enagas, will fine retailers whose compulsory gas reserves are below the legal requirements. In addition, the draft regulations include the possibility of Enagas holding auctions for exchange of gas among retailers: first step towards the creation of an organized secondary gas market in Spain.
New Zealand: Government approves regulation for gas pipelines
Price regulation of gas pipeline services provided by Vector and Powerco will commence in August after the Minister of Energy accepted recommendations made by the Commerce Commission. Savings of up to 18.5% for Vector customers and 12.2% for Powerco customers may be possible, according to the commission. Previous analysis has predicted public benefits of 6.9 million Australian dollars (5.3 million dollars) and 3.7 million Australian dollars (2.8 million dollars) from the regulations of Vector and Powerco, respectively. Vector’s chief executive, Mark Franklin, predicted that there would be little overall impact.

UK: OFGEM publishes guidelines on release of information to gas market
UK’s energy regulator OFGEM (Office of Gas and Electricity Markets) issued guidelines to consider gas market information proposals on a case-by-case basis. The guidelines will give the industry increased certainty and clarity on OFGEM’s decision-making process. Together, with new arrangements to allow appeals to the Competition Commission on OFGEM’s decisions on modifications to the gas network code, the guidelines will also add further accountability and transparency to OFGEM’s decision-making process. This could potentially include information about the offshore gas industry. However, it will not be making any amendments to the gas transporters licence (including Transco’s National Transmission System licence) that could limit the amount of information provided to the market. Therefore, any proposals to amend rules governing the gas industry, by raising a modification to the gas network code to release more information, will be considered by OFGEM on a case-by-case basis.

Power
Belgium, France, The Netherlands: Regulators open consultation for integration of electricity markets
In order to facilitate regional market integration between the wholesale electricity markets of Belgium, France, and The Netherlands, the energy regulators CREG (Commission for the Regulation of Electricity and Gas), CRE (Contrat de recherche externalize), and Dte (Office of Energy Regulation) have launched a joint consultation document, which covers issues such as cross-border capacity, market transparency, market power, and cooperation between regulators. The consultation takes into account the differences in design and rules of the three markets.

India: CERC modifies draft Electricity Grid Code
The CERC (Central Electricity Regulatory Commission) has added a new chapter on the Inter-Regional Energy Exchange in the revised draft of the Indian Electricity Grid Code to enhance the grid security and ensure an energy balance among the five regions of the country. The Grid Code has been revised in light of various provisions of the Electricity Act, 2003, and the operational experience gained since February 2000 when it was first implemented by the CERC for interstate transmission, a CERC release stated. With improvement in the frequency regime after implementation of availability-based tariff in all regions of the country, it has become possible to introduce a free governor mode of operation of generating units, which automatically corrects the frequency fluctuations.

Pakistan: KESC privatization
Hassan Associates (Pvt.) Ltd, the second-highest bidder for 73% KESC (Karachi Electric Supply Company) shares has conveyed to the government its willingness to match the price offered by a consortium led by Saudi Kanooz Al Watan Group in the February deal. Bidding for the sale of 73% shares of the KESC, the power supply giant, was held on 4 February this year. A consortium led by Kanooz Al Watan of Saudi Arabia was the highest bidder with an offer of 1.65 rupees per KESC share, totalling 15.859 billion rupees (approximately, 268 million dollars). Hasan Associates, the second consortium in the run, gave the offer of 1.01 rupees per share (totalling 9.7 billion rupees). With mandatory investment of 4.3 billion rupees in preference shares, its offer amounted to 14 billion rupees. But, for one reason or the other, Kanooz could not make the transaction even 45 days after the PC’s acceptance letter, resulting in cancellation of the deal. As per the privatization rules, the second-highest bidder...
is always asked to match the price offered by the highest one if the latter backs out from the deal. The rule was applied in this case also and now the CCoP (Cabinet Committee on Privatization) is likely to issue the acceptance letter to Hassan Associates.

**Sri Lanka: CEB restructuring plan**

The CEB (Ceylon Electricity Board) restructuring plan does not involve privatization as the cabinet memorandum endorsed in this regard last week did not involve privatization as a component. Under the proposed new restructuring plan of the CEB, four companies would be set up for power generation, transmission, bulk sales, and distribution purposes.

The number of distribution units would be increased from the present three to four. The government has taken steps to restructure the CEB, to strengthen its management, and provide electricity to consumers at cheaper rates. Under this programme, separate management boards would be set up to streamline financial management and procure investments. A ‘Protection of Public Properties from Privatization Bill’ will be presented in the Parliament to enhance stability of the CEB during restructuring.

**Telecom**

**Bangladesh: Government speeds up efforts to restructure BTTB**

The government has speeded up its efforts to restructure the BTTB (Bangladesh Telegraph and Telephone Board) into a holding company by December this year. In line with the process, the ministry has already sent the name of Detecon, a German-based telecom consultancy firm, for approval to the cabinet committee on purchase. An agreement will be signed with the German firm after approval by the purchase committee to device a restructuring model for a holding company and recommendation on the possible number of required workforce.

**Bangladesh: BTRC plans amendment to interconnection rules**

The Bangladesh Telecommunications Regulatory Commission wants to amend the Interconnection Regulations, 2004, to make regulations more effective and up-to-date in order to solve the interconnectivity problem, which is now a big concern for the telecom sector in the country. Changes will be made in consultation with stakeholders and experts in the field. The amendment was necessary because of the dispute that arose between the private mobile phone operators and state-owned Teletalk Bangladesh Ltd after the former revealed their reluctance to sign the interconnection agreement with Teletalk, ignoring the consumers’ interest. However, four operators finally signed interconnection deals with Teletalk after intervention of the regulatory commission.

**India: TRAI for incentives to boost rural telephony**

TRAI (Telecom Regulatory Authority of India) Chairman Pradip Baijal has made a strong case for providing incentives, including cheaper spectrum, to operators for entering the rural areas to sustain growth in the booming sector. A tele-density (fixed as well as cellular phones) target of 15% by 2010 has been set by the government. The figure stood at 9.86 by July-end. The urban tele-density is currently 30 while the rural tele-density is 1.75, far behind the urban figure. Stating that the universal service obligation fund, introduced in India for rapid expansion of telecommunication in the rural and inaccessible areas, should be viewed as the ‘universal service opportunity’ fund, Mr Baijal said, that there is a huge opportunity in rural areas and the government is trying to create a competitive market. He also said that some change in the telecom policies is expected shortly, which include the following.

- Towers to be set up in the rural areas, in absence of which, it will be difficult to take the growth curve up. For this, incentives should be given.
- Availability of a regime where raw material (spectrum) is cheap.
- Telecom sector needs further consolidation as presence of multiplicity of players renders the spectrum inefficient.

TRAI is reviewing the ADC (access deficit charge) and the recommendations will be
submitted to the government shortly. It also plans to move towards a revenue-based model and merge the ADC with the USO fund by 2008 when there will be zero ADC.

**Pakistan: PTA directs WLL operators to implement single cell mobility**

The PTA (Pakistan Telecommunication Authority) has directed all WLL (wireless-in-local-loop) operators to implement single-cell limited mobility as per the solution defined in a determination issued by the authority to resolve the problem of limited mobility. The authority, in its detailed determination, has given 45 days time to the WLL operators to ensure the implementation of limited mobility. A compliance report would also be submitted to the authority by them in this regard. Under the determination issued by the PTA, inter-cell handover and inter-frequency handover from 450 MHz to 1900 MHz or 479 MHz, etc. would not be allowed. Furthermore, the call in progress would be dropped in case of crossing over to neighbouring cells.

**Sri Lanka: Celltel innovates new prepaid billing method**

Mobile telecommunications provider Celltel set a new standard for billing of calls on its prepaid platform with the launch of their ‘per-second billing’ option. The per-second billing is first among the GSM (global system for mobile communications) operators that extends a greater cost control for its prepaid Cell CARD users by charging them for the exact duration of calls instead of on a per-minute basis. On the per-second billing option of the Cellcard, package users will pay for the exact number of seconds of their call duration, allowing them to pay a nominal amount for short duration calls, which was not possible. With the per-second billing package, all calls by subscribers will be charged by the ‘second’ as opposed to a one-minute block as done today in the industry with no daily fee.

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**In the library**

Latif A. 2004

*The implementation of energy policy in Pakistan*

Karachi, Pakistan: Royal Book Co. 333 pp.

The five-year plans have always put stress on the energy sector developments. However, due to a lacuna in the feasibility of exploitation of resources and the changing political overtones, the energy sector developments retarded to a large extent. The author has analysed the impediments in implementing a part of the energy policy. This book brings together all issues responsible for the setbacks in implementation of policies under political compulsions and international influences with comments that will serve as guidelines for energy authorities as well as experts.

The World Bank. 2004

*Reforming infrastructure: privatization, regulation and competition*


Recognizing the infrastructure’s importance, many countries, over the past two decades, have implemented far-
reaching reforms and restructuring, privatization, and establishment of new approaches to regulation. This book identifies the challenges involved in massive policy redirection within the historical, economic, and institutional context of the developing and transition economies. It also assesses the outcomes of these policy changes as well as their distributional consequences. Drawing on a range of international experiences and empirical studies, it recommends directions for future reforms and research to improve infrastructural performances, identifying pricing policies that strike a balance between the economic efficiency and social equity, suggesting rules governing access to bottleneck infrastructure facilities, and proposing ways to increase access to these services by the poor.

Geller H. 2003
*Energy revolution: policies for a sustainable future*

The author identifies that one of the biggest challenges in the coming years is to overcome the barriers to widespread adoption of clean energy technologies to implement a clean energy revolution. There has been a tremendous amount of experience with policies for advancing energy efficiency and renewable energy technologies over the past few decades. This book reviews the policy experience, including lessons from past efforts to advance energy efficiency and energy use. It also recommends and analyses policies that could be adopted to facilitate a clean energy revolution in future.

On the Web

**TRA (Telecommunications Regulatory Authority)**
The TRA (Telecommunications Regulatory Authority) of Bahrain was established as an independent body and its duties and powers include protecting the interests of subscribers and users, and promoting effective and fair competition among the existing and new licensed operators. This regularly updated website is a collection of consultation papers, licensing documents, orders, market information, publications, news, tenders, links, and discussion groups. It also hosts a newsgroup on consumer advisory issues to facilitate consumers.

**National Telecommunications Regulatory Authority**
The national TRA (Telecommunications Regulatory Authority), Egypt, keeps its users abreast with the latest technologies, formulating policies and safeguarding consumer interests within a regulatory framework. It also increases competition, ensures use of frequency spectrum, and monitors technical and economic efficiency programmes. The website is a rich collection of publications, regulatory documents, rules, legislations, technologies, events, news, articles, and a variety of services.

**Nepal Electricity Authority**
[www.nea.org.np](http://www.nea.org.np)
The NEA (Nepal Electricity Authority) was to remedy the inherent weakness associated with the fragmented electricity organizations with overlapping and duplication of works to achieve efficiency and reliable service. The website is a collection of publications, rules, regulations, notices, news, links, and value-added customer services.

**Assam Electricity Regulatory Commission**
[http://aerc.nic.in/](http://aerc.nic.in/)
The AERC (Assam Electricity Regulatory Commission) was established as a single-member commission in February 2001 to determine the electricity tariff, to regulate power purchase and procurement process, and to promote competition efficiency. The AERC website hosts the commission’s rules, regulations, publications, guidelines, notices, and codes and standards.
Centre for the Study of Regulated Industries
http://www.bath.ac.uk/cri/
The CRI (Centre for the Study of Regulated Industries) is an interdisciplinary research centre investigating how regulation and competition are working in practice in the UK and abroad. It produces authoritative, practical contributions to the regulatory policy and debate. The CRI website focuses on a comparative analyses across the regulated industries, publications, resources, and links.

New developments on the Web

Governance procedures for the liberalized retail electricity market
The Commission for Energy Regulation in Ireland has published a consultation paper on the development of governance procedures for the liberalized retail electricity market in Ireland. The paper outlines the commission’s proposals for governance arrangements, the principles of effective governance, and objectives for coordinated development of the retail market design. The document is available at <http://www.cer.ie/cerdocs/cer05040.pdf>.

National Electricity Plan
Towards fulfilment of the requirement as mandated in Section 3(4) of Electricity Act, 2003, the draft National Electricity Plan of India, covering transmission aspects, has been prepared by the Central Electricity Authority. The draft document is available at <http://www.cea.nic.in/nep/nep-transmission.htm>.

Revised Electricity Grid Code 2005
The CERC (Central Electricity Regulatory Commission) has released the draft revised IEGC (Indian Electricity Grid Code). The grid code has been revised in light of various provisions of the Electricity Act, 2003, and the operational experience gained since February 2000. The draft version is available at <http://www.cercind.org/10062005/draft.pdf>.

Mobile Number Portability
TRAI issued a consultation paper on MNP (mobile number portability) that will allow subscribers to change their service provider while retaining their old telephone number. The MNP is expected to benefit subscribers and increase the level of competition, rewarding operators with the best customer service, coverage, and service quality. The document is available at <http://www.trai.gov.in/conpaper22jul05.pdf>.

Regulateri invites contributions

Regulateri newsletter belongs to its readers and other stakeholders who are interested in advancing, promoting, and sharing the best practices in infrastructure regulation in India and abroad. We sincerely welcome you to help us cultivate and enrich this newsletter by sending us articles, case studies, news, suggestions, etc. We will also welcome feedback on the contents of the newsletter to help us make it more informative.

Please send in your contributions to
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Forthcoming events

21–22 September 2005
Los Angeles, CA, USA

Electric Market Dynamics
Conference Secretariat, Enerdynamics LLC, PO Box 411 165
San Francisco, CA 94141-1165, USA

Tel. 415 777 1007  •  Fax 415 777 2611
E-mail info@enerdynamics.com
Website http://www.enerdynamics.com/section03 ElectricMarketDynamics.asp

18–19 October 2005
Madrid, UK

Energy 2005: Challenges Across Europe
Mark Gillam, Marketforce Communications Ltd, Sycamore House
5 Sycamore Street, London EC1Y 0SG

Tel. +44 0 20 7608 0541, 7608 3222  •  Fax +44 0 20 7490 2296
E-mail mgillam@marketforce.eu.com
Website http://www.marketforce.eu.com

28–30 November 2005
London, UK

The Future of Air Transport
Mark Gillam, Marketforce Communications Ltd
Sycamore House, 5 Sycamore Street, London EC1Y 0SG

Tel. +44 0 20 7608 0541, 7608 3222  •  Fax +44 0 20 7490 2296
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Multi-year Tariffs: issues and experiences in South Asia
Editors: Vivek Sharma and Namrata Mukherjee

At a time when there is a growing recognition of a multi-year tariff framework as opposed to an annual tariff determination, TERI brings out the first authoritative literature on the subject. A useful reference guide for those associated with tariff setting, *Multi-year Tariffs: issues and experiences in South Asia* reflects the emerging views on tariffs, incorporating experiences on the subject not only from India but also from other countries like Pakistan and Brazil.

In the current context of charting out a path for implementation of a multi-year tariff regime, this book is a ‘must-have’ for all regulators, policy-makers, consultants, and stakeholders. It holds special value with the Electricity Act, 2003, which mandates that the electricity regulatory commissions in India be guided by the framework.

**Highlights of the book**

- Review of developments in multi-year tariff framework in South Asia
- Options for multi-year tariff
- Experiences in South Asia and Brazil: case studies
- Viewpoints of experts and eminent regulators on tariff setting, quality of services, regulatory processes, consumer concern, capacity-building

**Please send in your contributions to**

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Authoring by S L Rao, *Governing Power* elaborates the multidisciplinary expertise (linking economics, management, financial and cost accounting, and engineering) that electricity regulatory commissions need to harness to effectively regulate the sector, despite high government ownership, strong utility–government linkages, deep-rooted inefficiencies, and weak commercial attitudes. It tracks the emergence of regulatory law from the orders of regulatory bodies and courts; explores the concept of ‘independence’ and discusses the accountability of independent regulators (an issue not sufficiently explored till now); and suggests directions for future development of independent regulation.

With governments unable to cope with increasing demands for drinking water and sanitation services, private investment and community initiatives are needed to augment their efforts. However, the peculiarity of water and sanitation, in terms of being basic necessities, makes non-governmental participation complex. Recognizing this, the United Nations Development Programme, in consultation with the Department of Economic Affairs, Government of India, commissioned TERI to prepare a discussion paper that would develop a reform agenda for drinking water and sanitation in India.

Building on the paper, this book presents a reform strategy for the drinking water and sanitation sectors in a market-oriented economy, addressing institutional, regulatory, and legislative aspects. This book is meant for professionals in municipal administration and for policy-makers.

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The infrastructure sectors in the South Asian countries are undergoing reforms and restructuring. With a large number of independent regulatory bodies already in place, the new regime is offering formidable challenges to both the regulators and the regulated.

SAFIR, a network of regulatory commissions facilitated by The World Bank, offers expertise for capacity building in the electricity, telecommunications, natural gas, water, and transport sectors.

Having successfully delivered six courses since 2000 to over 400 participants from 14 countries, SAFIR is now organizing its seventh, 9-day, intensive training programme for utility regulators and senior government officials working on the reform of the infrastructure sectors and executives from the public and private regulated infrastructure service providers.

This course is designed to provide participants with a strong understanding of the theory and practice of infrastructure regulation and reform. An attractive feature is the presentation of detailed international and South Asian case studies during the sectoral breakout sessions.

**Themes**

- Reform strategies
- Introducing competition
- Techniques of price regulation
- Financial aspects of regulation
- Institutional design
- Price control case studies

A price control review case study offers an opportunity for hands-on application of what has been learnt. This will cover the main building blocks of price regulation, including asset valuation, cost of capital, incorporation of efficiency measures, and incentive properties of different techniques of price regulation.

There will also be opportunities to interact with regional participants: regulators, government officials, and executives of regulated companies.

The faculty for the course is drawn from ex-regulators, or those currently in the profession, academics, and other experts, who can speak from their personal experiences. A detailed agenda will be available shortly.

For further information, log on to <www.safr.teri.res.in> or contact Anjali Garg

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