

Sustainability of the power sector

Shakil Durrani



The Water and Power Development Authority (WAPDA) was created in 1958 as an autonomous statutory body to develop, operate and regulate electric power and water resources in the country. During the next fifty years the organization successfully developed the massive post-Indus Basin Treaty 1960 replacement works and with the private sector raised the power generating capacity from a hundred plus megawatts to 20,000 MWs. Today there are nearly twenty two million electric consumers and the generating capacity has soared to 35000 MWs.

A couple of decades back the government and the international donors realised that structurally and operationally, WAPDA as a public sector entity, was no longer administratively or financially viable. The power sector was deemed unsustainable economically because of its inefficiencies and the corruption generated by the sheer size of WAPDA. There was widespread customer discontent, budgetary shortfalls and financiers/donors' dissatisfaction.

In November 2007, GOP finally notified the unbundling, separation and corporatization of the power wing of WAPDA into Pakistan Electric Power Company (PEPCO). Earlier it was established in 1998 but remained non-functional.

The original plan and purpose of creating PEPCO was to create an entity for a period of three years responsible for managing and privatising the ten Distribution companies to reduce the financial burden of the state and to ensure greater efficiency in electricity distribution. For inexplicable reasons PEPCO not only inherited the ten Distribution companies but also assumed control of all public sector thermal power generation and the transmission and distribution companies as well. Additionally it assumed a dominant (and calamitous) role in determining future power sector development without regard to the massive costs by involving IPPs/RPPs from the private sector.

Since PEPCO was placed directly under the Ministry of Water and Power which also controlled the Private Power and Infrastructure Board, the latter also lost its independence. In other words a new WAPDA-like organisation was created with immense powers and more so, patronage, but without WAPDA's inbuilt system of tried and tested checks and balances which had previously served the country well for half a century. There were no checks or accountability in PEPCO similar to WAPDA's main decision-making 'Authority' or its 'Central Contract Cell' to objectively evaluate projects and decides all issues on merit. Henceforth an intrusive Federal Government started

blatant micro-management of PEPCO resulting in excruciating economic pains for the country. By establishing PEPCO with vague and indeterminate parameters the underlying objective of privatising/leasing the distribution sector was therefore lost.

The absence of the desired level of institutional restraints on PEPCO and the Ministry of Water & Power (now the Ministry of Energy) was clearly visible to the caring eyes. Placing PEPCO directly under the Ministry of Energy, the policy arm of the government and not an executive implementation entity, was a serious anomaly and was the main reason for the failure of PEPCO.

In a subsequent development, the GOP approved the dissolution of PEPCO in 2012 and the functions were first transferred to National Transmission and Dispatch Company (NTDC) and later to Central Power Purchase Agency (CPPA) making the DISCOs fully independent in theory. These were paper transactions only.

It is hardly surprising that today inefficiencies abound and the circular debt has crossed Rs 2.2 trillion increasing by nearly Rs 500 billion annually once previous interest payments are added. Today well over a third of all electric power supplied is lost because the T&D aggregate losses are nearly 25% while Pepco losses another 15% due to low bill recoveries. It was abundantly clear to independent professionals, and now the government as well, that the power sector regulator, the National Electric Power Regulatory Authority (NEPRA), has largely failed to objectively and independently regulate both the public and the private power sectors. The losers are millions of ordinary consumers and business and industry which pay back-breaking tariffs. It was therefore heartening to note that the recent report of the government's enquiry commission on the functioning of IPPs/RPPs has laid bare the real machinations of the private sector. This should have been NEPRA's responsibility had it functioned according to the book.

The stated objective of separating and privatising the distribution system was to ensure greater financial and administratively sustainable operations. On paper the unbundling of the power sector appeared beneficial but the structurally unsound tier of an unaccountable and irresponsible BOD at the DISCO level with no checks led to its failure. The DISCOs have been accused of rampant corruption, unnecessary procurement, nepotism and poor operation and maintenance. The problems associated with technical losses, theft, non-metered use and uncollected bills can be rectified if the government has the will to take bold decisions.

Way Forward

Three major strategic changes and a number of other tactical reforms are recommended to offset the debilitating losses and mismanagement in the ten DISCOS.

- **Creation of a central supervising Holding and Management Company in Islamabad and placing all DISCOs directly under it.** The company would be responsible for major management decisions and control of DISCOs to ensure efficient performance leading to reduction of technical losses and pilferage and ensuring optimum collection of revenues. The Chairman and the CEO of the company would need to be high-profile professionals while other members of the BOD would consist of technically qualified and experienced personnel with two members representing the government. The present BODs of Discos would cease to exist and would be replaced by functional specialists from the public and private sectors as is the case with Wapda's Authority and also the erstwhile Area Electricity Boards for instance. The day to day control and dictation of the Ministry of Power would end as ex-officio placement of the non-specialist Minister/Secretary, officially or informally, is severely detrimental to robust operation of the system. The State's responsibility for project approval and auditing obligations would remain in place however.
- **Leasing or privatizing gradually the poorly performing Discos or leasing out all loss-incurring Feeders separately in Discos for a period of 10-15 years on the condition that the current revenues would be increased annually by a certain percentage.** There is little justification in leasing/privatizing the better operating Discos however. The lessee would be responsible for upgrading the system with the costs shared with the Discos. This would also prevent the sale or mortgage of expensive real estate by the privatised Discos as happens when an entity is sold. The deficiencies and follies noticed in the privatisation of KESC/K Electric should be avoided. Yearly benchmarks would be determined with the lessees by Discos. Effective accountability in the distribution system and enforcement of a strong legal framework to curb theft of electricity would need to be placed. Digital technology for remote

metering and ensuring optimum collection of revenue would be ensured. The provincial governments must provide the police and the magistrates for the above purpose with the costs and incentives shared by the lessee and Pepco with the provinces.

- **Altering the power generation mix by ensuring that renewable sources (hydro, solar, wind, biogas) generation reaches 75% from the present ratio of 30% in ten to fifteen years.** Some European countries have already reached full renewable generation levels. The import based thermal fuel projects currently generating 60% electricity have to be drastically reduced which currently cost almost US \$5.6 billion in imports. Also a dozen low-efficient thermal plants need to be phased out.

Other Related Issues

- Change of subsidy regime for poor using less than 100 units per month by providing cash grants/ food basket through EHSAAAS programme rather than subsidizing electricity directly. Many countries including Indonesia have similar policies which reduces pilferage.
- Developing competitive market/wheeling to avoid monopolies backed with an effective regulator.
- The DISCOs need to pay the cash itself for the power it purchases from the public and private sector generating companies so that they realize that inability to recover their dues from the consumers would dry up their resources. This happens at most places in India and elsewhere. Initially they should be made responsible for paying a percentage of their purchases which would be raised gradually.
- The development surcharge of 10 Paisas per unit like the Neelum Jhelum project should be doubled under an appropriate nomenclature to finance additional renewable power generation. Recovery of TV license fee is a nominal charge which may be retained as it is cost effective for the government.
- There is urgent need to reform NEPRA, both institutionally and administratively by adding to its professional personnel to safeguard the interests of both the State and the consumers.



Nadeem Haque @nadeemhaque · Feb 10

12 years Pakistan has had an energy problem. We lose billions in energy losses every year. Should the government have constituted a powerful accountable, technical, permanent (not part time) commission to solve the problem?

Yes

86%

No

14%