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Tackling the Energy Crisis

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A new government has taken over in Islamabad. It is, rightly, giving a high priority to addressing the energy crisis, fully mindful that resolving it will take several years. It has announced that to begin with it will settle the circular within the next 60 days. This article attempts to explain the issues that the government will be confronted with while trying to tackle the crisis facing this sector and thereby the economy's growth prospects.

To start with lets try and understand the term 'Circular Debt' in the power sector, since it represents an issue whose solution has seemingly alluded policy makers over the last four years. 'Circular debt' arises when one party not having adequate cash flows to discharge its obligations to its suppliers withholds payments. When it does so, the problem affects other entities in the supply chain, each of whom withholds its payments, resulting in operational difficulties for all service providers in the sector- none of whom are then able to function at full capacity, causing unnecessary load-shedding.

The 'circular debt' numbers reported in the press are the sum of the amounts of each organization's receivables from others. This results in double counting. After all, one party's payables are the other party's receivables, which should cancel out on subtraction. In our case, they don't. There is an unadjusted amount, which the government picks up through the budget. The government informs us that the 'circular debt' is around Rs.500 billion. Moreover, estimates show that this amount is growing by Rs.10 lac a minute!

To be able to understand what the 'present circular debt' number and its daily build up represents let's look at a simplified and abridged version of the supply chain which results in electricity being provided in our homes. Refineries provide oil to oil marketing companies. Most of the crude oil is imported and suppliers abroad have to be paid for them to maintain supplies; in their case there can be no debt beyond the terms agreed for the supply of oil. The oil marketing companies sell oil to the IPPs or the WAPDA owned electricity generation plants (called GENCOs) which produce the electricity and sell it to the government run distribution companies referred to as DISCOs (for example LESCO, PESCO, etc) which provide power to our homes and factories and bill us for this service.

The tariff (price) at which the GENCOs sell to the DISCOs and the tariff at which electricity is supplied to us consumers is determined by NEPRA, after receiving government approval. NEPRA has determined that a tariff of Rs.14 should be charged to consumers of electricity,

whereas the average tariff today is approximately Rs.9, a differential of Rs. 6 per unit of electricity consumed.

The first problem which results in the receivables not cancelling out payables (as argued above) is when the tariff is unable to meet the costs of its generation and distribution. For instance, if the price of oil goes up internationally and tariffs are not revised upwards to account for this increase, there is an element of subsidy whose cost the government has to pick up.

Three-fourths of the above referred build-up of Rs.10 lacs per minute represents the inadequacy of consumer tariffs set by NEPRA to cover the cost of generation, transmission and distribution. When tariffs are not revised for any increase in prices of inputs (like oil), the subsidy is borne by government. Presently, the tariff charged to consumers is Rs.3 per unit less than the cost of generation (excluding the cost of transmission and distribution into our homes, involving both technical losses and theft). The cost of producing an additional unit of electricity from imported oil is Rs.18, while the existing tariff is around Rs.9.50. Increasing load-shedding then makes sense because generation using this resource raises the government's subsidy bill by almost Rs.9 per unit (which could be narrowed considerably, if not eliminated, by replacing oil with imported LNG). By failing to foot this subsidy bill the government builds-up the circular debt.

Three components which partially raise power rates for consumers and partially require budgetary allocations are the following:

a. The technical and managerial inefficiencies of government and the generation and distribution companies, cozy deals struck with rental power plants, over-staffing, free provision of electricity to WAPDA employees (costing consumers Rs 100 million a day), poor equipment maintenance, obsolete technologies (hence, technical losses), mismanagement, corruption, etc. all adding to the cost of electricity provision.
b. The mega issue of electricity theft- especially in DISCOs in Hyderabad, Peshawar, Quetta and FATA; with no one paying in FATA.
c. Poor collection of bills, more than Rs. 200 billion due from federal and provincial agencies. Well-connected individuals and companies not paying bills without being disconnected (Rs 150 billion)-although close to Rs.120 billion of this are "dues" from fictitious consumers- being simply theft in collusion with GENCO staff and reflected/ 'parked' under non-existing consumers and "unmetered connections" (a category created by GENCO staff to facilitate this corruption).

To summarize, the issues are failures to a) revise electricity tariffs on a timely basis; b) prevent electricity theft; and c) ensure collection of billings speedily, disconnecting those not paying their bills; disconnections will also reduce the extent of load-shedding.

So, what is the way forward? The short-term solutions are fairly obvious, “print” money for a one-time settlement of the circular debt, divert generation to IPPs which produce power more efficiently than GENCOs (combined with negotiations on revisions of their contracts), etc. When the government says that it will settle the circular debt by issuing T-Bills to banks, do not take this claim at face value-banks do not have this kind of mpney to give to government, so it will require printing of photographs of the Quaid-e-Azam valuing this amount! However, all, these efforts will only buy us 4-5 months. There are no quick and easy sustainable solutions for ending load-shedding and providing energy at an affordable price. They require fundamental policy adjustments beyond the power sector, political determination to take on powerful interest groups, give and take between provinces, the merger of almost two dozen agencies under one ministry, installation of pre-paid meters, etc. Some of these are being repeated below.

For a variety of reasons it will be difficult to get meaningful private participation in the sector. Therefore, massive government investments in hydel power and coal development (plus upgrading of GENCO equipment and infrastructure for importing LNG and coal) will be required to produce electricity at affordable rates. Each project will take more than 7 years to complete-period beyond the tenure of any government, during which there will be load-shedding, and employment of scarce funds on schemes with limited visibility and no immediate political returns. Such levels of funding will need a combination of enormous tax effort and a major restructuring of the Public Sector Development Program (with Rs1.6 trillion still to be spent on on-going schemes-almost 5 years of annual development expenditure) requiring abandonment of some projects (which could involve penalties for rescinding contracts) and deferment of others (increasing project costs), cutting subsidies on fertilizer, wheat, etc. (with their political costs). Regrettably, there are serious doubts about the present capability of government institutions to implement this formidable agenda.

A decision will also be required on the allocation of the scarce resource- gas- along with its price rationalization, since it is presently one-fourth its international equivalent. Should this heavily “subsidized” gas be used for power generation, as fuel for CNG and industry or for fertilizer production? If fertilizer units are denied gas, fertilizer will have to be imported, requiring a decision on the level of subsidy and the courage to face up to the “cost” of diverting gas from

fertilizer companies where huge investments have been made. But then under our Constitution preference on gas use lies with the province of source.

As argued above, consumers in Punjab pay a higher tariff for greater theft in Sindh, Balochistan and KPK. To address this issue should DISCOs be privatized or transferred to provinces- with electricity being provided at a uniform price at the provincial boundaries for them to determine tariffs? If they are privatized, a first-rate regulator will be needed, a role which today's NEPRA is incapable of performing. All this will require legislation covering NEPRA's future responsibility, empowering provinces to set tariffs, etc. This will have to be routed through the Council of Common Interests, requiring Sindh, KPK and Balochistan to raise tariffs sharply for the higher rate of leakages. A decision will also be required on maintaining supply of 650 MWs from WAPDA to KESC (despite greater load-shedding in other parts of the country) and on whether other consumers should continue to bear the cost of oil provision at subsidized rates to richer Karachiites while they themselves pay for it as "Fuel-Adjustment" charge. All in all, a politically daunting undertaking.