Power play

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The proposals in the Electricity (Amendment) Bill to “reform” the power sector, issued in the midst of a pandemic, threaten to result in higher energy costs, violate long-cherished principles of federalism, and leave India’s most vulnerable to the caprices of the market.

THE power sector was one of the first sectors to fall under the onslaught of the economic liberalisation programme initiated in 1991. Beginning rather inauspiciously with the Enron scandal in the early 1990s, the sector has seen many changes since then. After a prolonged lull, higher private investments in power generation have been made and, more recently, a sharp increase in renewable energy generation. However, in many other respects, the “reforms” that were introduced towards the end of the 20th century, and consolidated in the Electricity Act 2003, have not only failed to provide succour to the sector that has been mired in a perpetual state of crisis, but have considerably worsened that crisis.

The Draft Electricity (Amendment) Bill, (EAB), 2020, ostensibly seeks to address the failure of the reform attempts of the past by re-emphasising the original plan laid out in the Electricity Act, 2003, by the first National Democratic Alliance (NDA) government. It seeks to redress what are seen as “populist dilutions” of the spirit of the reforms by the first United Progressive Alliance (UPA) government as well as many State governments.

The timing of the release of the EAB is itself striking. Curiously, it was notified by the Ministry of Power on April 17, seeking comments, when the country was in the midst of a debilitating lockdown.

There are three major policies that the EAB seeks to push: i) Privatising the electricity distribution companies (DISCOMs) through the introduction of distribution sub-licencees and franchisees; ii) Eliminating cross-subsidies and introducing Direct Benefit Transfer (DBT) to support consumers that State governments may want to directly subsidise iii) Increasing the control of the Central government in the sector by a series of amendments aimed at administrative and regulatory restructuring of State-level institutions.

A major objective of the power sector reforms, which remains unachieved despite repeated attempts over the last 30 years, is the privatisation of the distribution segment of the power system. The erstwhile electricity boards were unbundled into generation, transmission, and distribution companies to facilitate privatisation. In many States, the distribution companies (DISCOMS), which deal with the low voltage (that is, less than

11 kilovolt) infrastructure and metering and billing of end users, were further divided into multiple companies in charge of smaller areas within a State. However, other than in Odisha, Delhi and Mumbai, no other distribution utility could be privatised. Fierce opposition by peasants, power sector workers and even ordinary domestic consumers forced many State governments to hastily scuttle any plans they might have had to privatise this politically important segment of the power sector.

Amongst the ones that did privatise distribution utilities, only Odisha had a large section of rural consumers, and, after multiple failed attempts at private management, electricity distribution has now reverted to the State government. Mumbai and Delhi also have a long history of problems with tariff-setting and power-procurement practices despite being urban agglomerations without the potentially sensitive agrarian reaction to contend with. Moreover, the financial health of DISCOMs that remained state-owned entities has suffered because of the spatial breakdown that was forced on them.

Private companies in general are not interested in supplying electricity to the entire area serviced by a DISCOM, which generally includes rural consumers as well. So state-run utilities are encouraged to also sub-contract out a section of the network to private companies or other agencies, ostensibly to improve efficiency and reduce losses. These agencies, called distribution franchisees, have been tried out in various regions of the country after the Electricity Act 2003.

Predictably, in the first set of experiments with distribution franchisees, private companies were interested in urban agglomerations only. Despite such cherry-picking, the model did not work. While billing and collection efficiency improved in some regions, most franchisees could barely break even and many opted to not extend the contract beyond the first period of franchise. Although these entities could hope for marginal gains from improved billing efficiencies, reducing line losses required capital expenditure, which made the whole idea unattractive for most private companies.

The push for distribution franchisees once again in the EAB, despite this experience, is therefore not based on evidence but on an ideological position that prefers privatisation over public service provision. The EAB also introduces a “distribution sub-licencee”, somewhat ambiguously differentiated from a distribution franchisee as mentioned in the Bill. Neither entity would require a separate licence to distribute electricity and the outcome of both are likely to be similar. There will be cherry-picking; the more attractive urban regions will be privatised, leaving the loss-making rural segments to the state-owned DISCOMs. This may even lead to a further deterioration of the conditions of power supply to rural areas.

The single-minded focus on privatising DISCOMs despite widespread protests from power sector unions, peasant organisations and consumer societies has been justified by citing the sorry state of DISCOM finances and the ever-increasing cost of power supply. However, what is forgotten in the harangue of the “inefficient” and “corrupt”

DISCOMs is that power procurement costs, that is, costs to be paid to electricity generators, constitute more than 80 per cent of the total cost of electricity supply. Transmission and distribution charges account for less than 20 per cent of the all costs.

DISCOMs' woes

One may argue that since DISCOMs decide how much power to procure and from where, they should be held responsible for buying expensive power. But this assumption is faulty because it ignores the fact that DISCOMs have no choice in the matter.

There are structural reasons for high procurement costs, beginning with the power sector reforms themselves, and going on to the poor policy choices made in the corridors of power in Delhi in the past. In the last several years, there has been a consistent mismatch between the projected and actual demand for power. The Central Electricity Authority (CEA), an agency under the control of the Central government, has made grossly inaccurate projections. Shockingly, its forecast of demand for 2019-20 was 40 per cent higher (almost 70 GW) than the actual demand. These exaggerated forecasts have had serious consequences. Many currently operational long-term power purchase agreements (PPAs) between generating companies (NTPC being the primary beneficiary) and DISCOMs are based on these dubious forecasts.

The woes of DISCOMs do not end here. Generating companies that have a PPA with a DISCOM are allowed to recover "capacity charges", that is, the capital expenditure incurred to build the power plant, from the DISCOM, irrespective of the actual amount of electricity being drawn. In a period of low power demand, DISCOMs sell less power to end users and therefore buy less power from generation companies. This leads to low variable costs, that is, cost of generating the required units of power. However, the DISCOMs must still pay a fixed charge so that the generator can pay back the banks which financed the project. For example, NTPC recovered Rs.4,800 crore in capacity charges in 2018-19 from DISCOMs in southern India for its new thermal power plant in Kudgi even though the plant operated at only 22 per cent of its capacity during the year. Such practices impose costs on DISCOMs that arise from circumstances entirely outside their control. How can they then be dubbed inefficient?

On the other hand, newly constructed power plants that do not have agreements with DISCOMs are fast turning into non-performing assets (NPAs) for the banks that financed them. The economic downturn, which is highlighted by poor offtake of power from these plants, has thus hit banks as well, mostly publicly owned ones.

Additionally, the increasing contribution of renewable energy, fostered by fiscal and other incentives, has contributed to the woes of DISCOMs. Solar and wind energy sources are exempt from merit order dispatch; energy offtake from these plants is not dictated by their price. All the electricity generated by renewable energy plants must be absorbed by DISCOMs, irrespective of cost. Although the recent reduction in the price of solar energy has come as a relief, one must remember that the DISCOMs must compulsorily buy not just the new, relatively cheaper, solar energy, but also energy generated by older, more expensive plants.

In Tamil Nadu for example, 1061 Mega Watt (MW) of solar energy was installed before March 2016. Electricity from these plants is bought by distribution utilities at Rs.7 per kilo-watthour (kWh). In sharp contrast, the solar plants installed after March 2019, with a capacity of about 800 MW, cost just Rs.3.05 per kWh. The policy-induced inefficiency means that the state has to forego cheaper thermal power even when it is available in order to purchase all of the expensive solar power from older plants.

It must be noted that DISCOMS have not been given relief from this policy even during the nationwide lockdown, just as they received no support to cover their revenue losses. The Centre has offered loans (Rs.90,000 crore liquidity infusion for the power sector), backed by state guarantees, for the express purpose of paying dues to generators. These loans, which are to be given by the Power Finance Corporation (PFC) and the Rural Electrification Corporation (REC), have been made conditional on so many pre-requisites, in addition to requiring state guarantees, that the PFC, not surprisingly, has said that this Rs.90,000 crore "relief" is likely to be under-utilised by DISCOMS.

To sum up, power procurement costs are high not because of the DISCOMs' inefficiency but because of consequences that arise from a series of policies forced on them. The DISCOMS can be held accountable for basing their power procurement plans on over-optimistic demand forecasts made by the CEA. But should not those making such forecasts be held accountable when their forecasts go awry?

These high costs are passed on to end users, and here DISCOMs are held responsible for inefficient metering and billing, high technical losses, and their inability to recover the cost of electricity that is supplied. High AT&C (Aggregate and Technical and Commercial) losses have been a perennial problem in India. Despite multiple interventions, including the much-welcomed UDAY scheme (Ujjwal DISCOM Assurance Yojana), they remain unaddressed.

Subsidies and DBT

There are multiple issues here. The cost of supplying electricity to low-density rural areas is high. The multiple step-down transformers and long low-tension lines required to supply electricity for agricultural, domestic and other uses in rural areas necessarily result in higher costs. Technical losses in these distribution lines are also high (as resistive losses are inversely proportional to line voltage). On the contrary, supplying electricity to high voltage consumers is cheaper, and densely populated cities with more diversified power consumption patterns can be supplied power at a lower cost.

Moreover, a large section of rural consumers as well as poor households in urban areas are unable to pay the full cost of electricity. So the conundrum for DISCOMS is this: they have to supply electricity to consumers who are expensive to serve but who also cannot afford to pay the full cost of electricity. This makes subsidies necessary. There are two ways of subsidising the cost of supply to consumers: i) cross subsidisation, which means that one category of consumers pays a higher than average tariff to compensate for another category paying lower tariff, and ii) direct subsidies by the State government to compensate the DISCOM for power supply to those consumers it deems worthy of support.

The new amendment seeks to eliminate subsidies in both forms. It has proposed that the State Electricity Regulatory Commissions should decide category-wise tariffs, strictly based on cost to supply power to that category, without considering any subsidies. While the EAB refers differentially to direct and cross subsidy rather ambiguously, the overall idea appears to be to eliminate cross subsidies and replace them with direct subsidies to specifically targeted consumers.

Additionally, direct subsidies must now be transferred by State governments directly to consumers using the Direct Benefit Transfer (DBT) scheme.

Poor consumers—residential, agricultural, and providers of basic amenities such as public health centres and government schools—form a significant proportion of electricity users in most States and cannot afford to pay high costs for electricity.

Most of them currently consume electricity at rates that are cross-subsidised. A report on the performance of state power utilities published by the PFC has estimated that if all this cross subsidy were to be replaced by direct subsidies, the subsidy burden on the States would increase by about 130 per cent.

Given the parlous state of States' finances, expecting them to bear this additional burden is to expect the impossible. States, already reeling under the impact of the dramatic collapse of their revenues, especially under the Goods and Services Tax (GST) regime, are clearly in no position to provide the additional support to DISCOMs.

The resort to the DBT, touted as the panacea for all subsidy-related ills, is likely to exacerbate problems. The poorest consumers of electricity are likely to be affected the most. Administering DBT is difficult, especially with poor information and huge data gaps that inevitably lead to late and ineffective disbursal of benefits, if at all.

The All India Kisan Sabha has drawn attention to the fact that DBT will be meaningless for a majority of "real cultivators"—the landless, the tenants and sharecroppers—because only landowners and pump-set owners would be eligible for the subsidies. This would also apply to working-class households that live on rented premises.

DBT also adds an unnecessary administrative burden. For instance, DBT will require the government to build a database of details of beneficiaries. Currently, subsidy benefits for many consumer categories vary on the basis of actual consumption. The government will thus have to update its database regularly (every month, in fact), aligning it with information from the DISCOMS. If at all benefits to certain consumers must be re-examined, say because of improved economic status, it is much easier to do so within the existing framework, that is, by transferring subsidies directly to the utilities. Timely disbursal of dues by State governments has been a major problem in the past. The distressing fiscal situation is likely to only make matters worse. It is reasonable to assume that under the new administrative regime, transfer of benefits will either not happen in time or not happen at all. In effect, those who need support most are likely to be left in the lurch.

Centralisation of power

The power sector remains one of the few sectors that still contribute to State finances. Responsible for an important input for industrial development, the sector has a significant role in shaping state policy. Nevertheless, the geographic distribution of primary energy sources, both conventional and renewable, makes it incumbent on the Centre to play the critical role of coordinator in order to ensure equitable access to national resources. This is the reason why the sector is appropriately in the concurrent list of the Constitution. However, there is little doubt that the proposed amendments will disproportionately increase the Centre's control over the sector in violation of constitutional safeguards.

A common central committee is to be set up for the appointment of the chairman and members of State Electricity Regulatory Commissions (SERC), the Central Electricity Regulatory Commission, the Appellate Tribunal for Electricity, and the new proposed Contract Enforcement Authority. The composition of the committee will be such that the Centre will have a stronger voice simply by dint of bureaucratic seniority. This flies in the face of all established norms of impartial selection processes, especially for membership in institutions that are expected to perform quasi-judicial functions.

A slew of other amendments have been proposed that will give Central and regional institutions, such as Regional Load Dispatch Centres, far more powers over DISCOMS. The most aggressive step in the ongoing attempt to wrest control from States is the proposed creation of a new Electricity Contract Enforcement Authority (ECEA). This centrally appointed authority will be in charge of ensuring the "sanctity" of contracts, even if iniquitous, a task that was heretofore assigned to the SERC. This is likely to benefit private generating companies, renewable or otherwise, while further reducing any impartial recourse to regulatory authorities that the DISCOMS may have had.

The Narendra Modi government has been trying to push these amendments in the power sector since 2014. However, it has faced opposition from State governments and labour unions. It is particularly disingenuous to try to bulldoze these changes during a national health emergency that has been compounded by a severe recession. It is ironic that the set of proposals, instead of offering relief in these dark times, is likely to only offer more misery.

The abiding lesson of the last 30 years of reforms in the power sector is that the fetish of allowing the free and unhindered play of markets as a solution to problems can only have disastrous social and economic consequences. Electricity is unlike other commodities. It is a key economic input across the economy; but even more importantly, its consumption is critical for human well-being. Ironically, the reforms, undertaken in the name of shedding inefficiencies—measured by the logic of the market in terms of prices—will have one certain consequence: a steep increase in electricity prices. How can a set of reforms, undertaken in the name of improving efficiencies, but which results in much higher prices, be termed efficient?

The centrality of electricity as a critical input is the reason why State governments feel obligated to expand access to power, by means of subsidies if necessary, in order to make it available to all for productive activity as well as for consumption. The derisive dismissal of the political exigency of providing cheap electricity as "populism" ignores the expectation of the polity that the state safeguard and promote production and consumption of electricity across a badly divided economy and society.

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