DISCUSSION NOTE | JUNE 2020 | 062020

Falling Short of Addressing the Real Challenges: Comments and Analysis on the Draft Electricity (Amendment) Bill 2020

Daljit Singh and Rahul Tongia
Brookings India*

BROOKINGS INDIA

QUALITY. INDEPENDENCE. IMPACT.

*All content reflects the individual views of the authors.
Brookings India does not hold an institutional view on any subject.

Summary

Few would dispute that change is required in the legislative and regulatory framework of the power sector in India. To that end, the government has proposed amendments to the Electricity Act of 2003; this being the third series of amendments, and in many ways, less ambitious than previous attempts. However, these amendments do not get to the heart of the problem. Electricity in India is a concurrent subject, under the state and central purview, and many of the challenges today are not simply techno-economic, or even ones of system design, but political. Our analysis finds that incremental steps, sometimes only addressing selected challenges, are unlikely to address root causes, and the Act notwithstanding amendments, does not go far enough to give a direction to the industry where issues of sustainability, technology, market design, and private sector participation will be key.

Recently, problems pertaining to proposed renegotiation of renewable energy (RE) contracts in Andhra Pradesh and defaults by distribution companies (discoms) with respect to payments to generators have drawn attention in media reports. It would be easy to get caught up in finding resolutions to these problems but that would not solve the problems of the sector. Attention must be focused on the bigger challenges. With the already slowing economy being slammed by the COVID-19 pandemic, rapid economic growth has become absolutely important, and a thriving and robust power sector is equally imperative to fuel that economic growth.

There are three major challenges that the power sector is facing. First, there are many features of the Electricity Act of 2003 (EA2003) that have not been implemented or are not working properly. The reasons for these failures must be understood and required corrections made. Second, the power sector is changing rapidly with greater contributions from renewable energy, the presence of distributed energy resources (DER), the expected growth of energy storage particularly in the form of batteries, several new behind-the-meter activities such as electric vehicle (EV) charging and new technologies to control consumption. The legislative and regulatory framework for the power sector must be ready for this dramatically changed future. Third, because of the interconnectedness of the power sector, it is important that the functioning and structure of each sub-sector (fuel markets, wholesale electricity markets, retail electricity markets, generation, transmission, and distribution) is consistent with that of the other sub-sectors. While work continues in each of these subsectors, more often than not, it is being done in isolation, leading to inconsistencies that create technical, economic, or operational obstacles. Even when the average impact is positive, we cannot ignore winners and losers as well as structural distortions. Therefore, developments in the subsectors need to be carried out in a coordinated and consistent manner.

In addition, to the challenges identified above, there are political problems that have led to a significant deterioration of the financial health of discoms, such as, cross-subsidies and low tariffs for agricultural, residential, and small consumers. Stricter regulations with penalties for non-compliance are not likely to solve these problems either, which need to be resolved at the political level using principles of cooperative federalism based on negotiation and discussion. Not only states, but consumers too, have to be taken along.

Against this backdrop, the proposed amendments in the Electricity (Amendment) Bill (EAB) 2020 fall considerably short of addressing these challenges. Some elements of the proposed amendments, such as the creation of an Electricity Contract Enforcement Authority (ECEA) and ensuring payment security seem more focused on addressing the grievances of upstream players rather than addressing the aforementioned problems.

In order to confront revenue shortfalls for discoms, EAB 2020 proposes greater centralization. It proposes to have a Central Selection Committee for Members and Chairpersons of SERCs, CERC, ECEA, and APTEL. This could very likely lead to SERCs peopled with individuals loyal or even beholden to the Centre with little understanding of the local context or language. It could also greatly reduce the effectiveness of SERCs. Centralization is also being pushed by reducing the autonomy of SERCs in setting tariffs, and having instead to rely on the directives in National Tariff Policy, prepared by the Centre.

It is not clear how the proposed amendments will produce the desired outcomes. Ignoring upcoming challenges for the power sector will make the sector unprepared for the future. A coercive approach and greater reliance on Centralization is likely to be strongly resisted by both the States and consumers. This could lead to endless litigation or at best, a stalemate with states covertly resisting policies of the Centre, as in the recent case with the central push towards Open Access or renewable energy (especially rooftop solar). Many of the problems targeted in EAB 2020 can be tackled with existing laws, regulations, and institutions, which may need strengthening. The more ambitious aspects of the amendments are specifically the ones most likely to face resistance. If COVID-19 has created a pause from Business-As-Usual, perhaps we can use this period to strive for not just a “New Normal” but also a robust and future-ready power sector.

In this context, we submitted comments to the Ministry of Power on the proposed amendments. These comments follow this summary and cover the issues discussed here in more detail.

Comments on the Draft Electricity (Amendment) Bill 2020

On April 17, 2020, the Ministry of Power (MoP) issued proposed amendments to the Electricity Act of 2003 as a Draft Electricity (Amendment) Bill 2020 (EAB 2020). MoP solicited comments from all stakeholders on these amendments, initially by May 8, 2020. However, later the deadline for submission was extended to June 5, 2020. We are pleased to submit these comments in response to that solicitation.

Almost no one will dispute that the Indian power sector has been facing problems for quite some time and that change in the legislative and regulatory framework is required. More recently, these problems have been in the spotlight with some states wanting to renegotiate existing contracts with renewable energy (RE) suppliers, and with long delays in payments by distribution companies (discoms) to generators. Some of the proposed amendments seek to address these issues and one can understand the motivation for them.

In our comments, we address each of the major proposed amendments. However, before looking at each proposed amendment in detail, we look at two broader issues. First, in the context of the Prime Minister's announcement of the *Atmanirbhar Bharat Abhiyan*, it is important to ask what is needed to have a robust power sector that will support the push towards rapid development and self-reliance, and whether these amendments move us along that path. Second, we look at the approach for change that underlies the proposed amendments and ask, to what extent, it is likely to result in the desired changes in the sector.

1. Background: State of the Power Sector and the Required Changes

It has been 17 years since the Electricity Act (EA2003) was introduced. It was a holistic and comprehensive attempt to restructure the power sector, and was accompanied by extensive stakeholder involvement. Important changes included delicensing of generation, a mandate to reduce cross-subsidies, a push towards bidding for setting up power plants, Open Access for bulk consumers (above 1 MW), and many more.

However, several important features of it were not implemented. While unbundling has happened in most states, in some cases even before EA2003, EA2003 was to provide an enabling framework for competition whereby discoms could procure power from the least expensive sources, and generators would compete with each other. This has not happened. Unbundling is mostly on paper with most state distribution companies buying power from their respective state generating companies. With many state discoms and state gencos being under the same holding company, they behave not as independent companies but as divisions of the same company. Some states (Tamil Nadu, Punjab and Kerala) have not separated generation from distribution even on paper. Cross-subsidy has not decreased and open access has had limited success. Any major reform of the power sector must start with understanding the reasons for these failures, in particular those related to shortcomings of the EA2003.

Rather than using a piecemeal approach with fixes for individual problems as these proposed amendments are designed to do, a much more comprehensive and holistic approach to reform of the legislative framework of the power sector is required. The proposed amendments seem disproportionally focused on fixing problems that generators are facing, for example the proposal to establish an Electricity Contract Enforcement Authority (ECEA), which we discuss in more detail later. ECEA focuses on helping generators, which is important, but it the raises the question how can we solve problems at one end of the chain without solving problems at the other end, i.e., non-payment *to* discoms? It is worth noting that the largest defaulter is the government, defaulting on both dues for power consumption and timely payment of subsidies.

The power sector, both globally and in India, is undergoing rapid changes. The contribution of renewable energy (RE) to the resource mix is growing and is expected to continue to grow. In addition, this growth will be accompanied by the increasing presence of distributed energy resources (DER) such as roof-top solar (RTS), electric vehicle (EV) charging and other behind-the-meter technologies for energy storage and control of energy consumption by consumers. All these changes will create big challenges for the sector. Increasing contribution of renewable energy (RE) to the generation mix will create operational challenges. Behind-the-meter additions (DER, EV charging, etc.) will create challenges for planning by discoms because these additions will not be under their control and they may not always be aware of their existence. The historical solution to such change was simply over-engineering, and then passing costs through regulated rates of return under the rate base ("aggregate revenue requirement", or ARR). This is not the best solution.

Given these changes, some of them already underway and others expected in the near future, it is important that the legislative and regulatory framework for the power sector be designed for the future. What kind of wholesale electricity markets should India have? Should balancing costs be socialized? How is risk best apportioned? Today it is all passed through downstream. How should we value flexibility? Should we have retail competition or would it better for India, with its price-sensitive population, to have wholesale competition only? Unfortunately, most of the proposed amendments address problems of today. There is little discussion about the future challenges that the power sector will have to face. Therefore, by the time these amendments become effective, they would be addressing problems of yesterday. Our legislative framework must be ready for this new and changed future.

It is also interesting to see how the proposed amendments are responses to complaints from aggrieved parties. Those complaints should definitely be addressed. But there is another way of looking at required reforms: prioritize reforms according to those areas or issues that give the maximum bang for the buck. In the power sector, 70-80% of the costs paid by consumers are due to the cost of generation. So, if we want to lower costs and make electricity more affordable, our first priority should be to have effective wholesale competition in electricity. But oddly, most of the attention in India has been focused on competition at the retail end of the power sector. Work is being done by CERC on developing wholesale markets. However, that work is being done without any reference to effective fuel markets which are essential for effective wholesale electricity markets. There has been almost no discussion about whether pricing and availability of coal is consistent with a vibrant wholesale electricity market. A quick look will show that it is not.

The relationship between the power and coal sectors has been structured in a way that is dysfunctional. There are multiple channels by which power plants get coal, with a bewildering array of pricing regimes. The price that a power plant pays for the same grade of coal at the same location could be very different depending on several factors including public or private ownership, commissioning date of the plant, having or not having a power purchase agreement (PPA) with a distribution company, having an allotted coal block, or winning an auctioned coal block.[1] Clearly such an allocation framework for coal results in a very unlevel playing field, and renders work on wholesale electricity markets meaningless. Experience from other countries has shown fuel competitiveness was key to wholesale market success. For example, the US restructured its natural gas industry before restructuring the electricity industry. Similarly, UK privatized British Gas before privatizing the electric industry.

India needs to develop a blueprint for the desired structure of the power sector. Because of the interconnectedness of the power sector, it is important that the functioning and structure of each sub-sector (fuel markets, wholesale electricity markets, retail electricity markets, generation, transmission and distribution) is consistent with the functioning and structure of the other sub-sectors. While work is going on in each of these subsectors, most of the time it is being done in isolation. In addition to the lack of consistency between the fuel markets and wholesale electricity markets discussed above, some of the other areas or issues where a consistent and coherent approach is required are:

- Design of wholesale markets to address the challenges due to large amounts of RE. Specifically: (1) how to ensure sufficient revenues for operating and investing in crucially required conventional generation, avoiding the "death spiral" and ensuring reliability of the grid; (2) how to provide sufficient incentives for flexible generation; and (3) how to incorporate new technologies such as battery storage.
- Allocation schemes of transmission rights that are consistent with the design of wholesale markets.
- Power procurement practices of distribution companies that are consistent with how wholesale and retail markets are structured.
- Procurement of RE that is consistent with how the responsibility and cost of ensuring flexibility and reliability of the grid will be allocated or shared.
- Pricing of electricity that reflects its granularity by location and time of day, instead of just a focus on Levelized Cost of Energy (LCOE). This will be increasingly important with greater amounts of RE.

Even if everything in the proposed amendments is passed, that will not be sufficient and additional legislation will be required in just a few years. Therefore, the political capital expended to pass these amendments would be better spent on more comprehensive reforms and developing a blueprint for the future power sector. Such a blueprint for the power sector cannot be developed overnight. It should be developed using negotiations, more so consensus, an approach we discuss in more detail in the next section. While the blueprint must be thought out completely, all parts of the blueprint do not have to be carried out simultaneously. Instead, it may be advisable to do it in phases, and therefore, a roadmap will also be needed to realize the blueprint.

[1] For a more detailed discussion on this issue, please see: Daljit Singh, 'Power and Coal: A Dysfunctional Intertwining,' chapter in *Future of Coal in India: Smooth Transition or Bumpy Road Ahead?* Tongia and Sehgal (eds.), Notion Press and Brookings India, *forthcoming.*

2. Approach to Reform Underlying the Proposed Amendments

Underlying the proposed amendments is a belief that making a law, or rule, or regulation along with penalties for non-compliance will be sufficient to bring about the desired changes in the power sector. Experience, however, shows that this is not the case. Many features of EA2003 have not been implemented. Nor have guidelines in successive versions of the National Tariff Policy been followed. More recently, we can see that UDAY has not been very successful in meeting its objectives.

In addition, we see that several of the proposed amendments will lead to greater central control over the power sector. Two examples are the proposal to have a single committee that will select members of the state regulatory commissions, and the proposal to establish an Electricity Contract Enforcement Authority. Such moves for centralization go against the concept of federalism as enshrined in the Constitution, more so for electricity which is explicitly listed as a "concurrent" subject under both central and state purview. In a country, the size and diversity of India, we cannot have a one-size fits all approach.

There could also be some unintended consequences of the approach used in these amendments. They could even lead to newer distortions in the electricity markets as states, in order to avoid action by ECEA or NLDC, show a preference for state-owned plants. Such distortionary preferences could further compound distortions between publicly-owned plants versus private plants, or coal plants versus RE plants.

The current system with its diversity, which can at times be frustrating, does have benefits. It allows the various states to experiment with different approaches to tariff-setting, structure of the sector, ownership patterns, etc. During the Covid-19 pandemic we have seen the benefit of such diversity and freedom in the examples of Kerala and Bhilwara district in Rajasthan, which adopted their own successful approaches and are now models for others. We will need this space and freedom for experimentation in the power sector as we face a very different future with much greater presence of DER and other behind-the-meter technologies, peer-to-peer purchases of power, smart homes and meters, etc.

In addition, it is important to remember that there is great diversity among the states in terms of their per capita income, the share of load due to large consumer and industrial (C&I) consumers, the load shape, and the share due to agricultural load. Clearly these differences will lead to different policy choices regarding issues such as the generation resource mix, the level of cross-subsidy and direct subsidy.

Therefore, instead of a coercive approach with a focus on uniformity, a collaborative approach between the Centre, the States and consumers is more likely to be successful. Many of the problems plaguing the power sector are political in nature: cross-subsidies, low tariffs for agricultural, residential and small consumers. So the solutions also need to be political. Trying to bypass difficult political problems through clever legislative or regulatory fixes does not work. For example, the issue of low tariffs and the resulting poor health of discoms, and attempts to fix it has a long history in India. The issue was recognized in the 1970s and the first attempt at trying to get around the problem was the setting up of NTPC in 1975 because state electricity boards did not have the financial strength to set up new capacity. This was followed in the 1990s by the push for IPPs, again because of inability of states to set up sufficient new generation capacity. That did not solve the problem because state discoms still needed to be financially healthy to be able to pay for power. Then there were three financial restructuring schemes, which some saw as bailouts, and all three did not have much success in improving the financial health of discoms. The last attempt was UDAY which also has not had much success. This long history of failed attempts to solve this problem through legislative or regulatory fixes should convince us that it is time to solve the problem at the political level.

It should also be remembered that low electricity tariffs for agriculture are a consequence of a desire to keep food prices low, through low Minimum Support Prices (MSPs). Making agricultural consumers pay the full cost of electricity is likely to increase the price of food grains throughout the country. The trade-off between food prices and cost-reflective tariffs for electricity needs to be negotiated at the political level. It's a separate reality that only a small sub-section of farmers are the overwhelming beneficiaries of such free power.

Some of these measures towards greater centralization such as having a central selection committee for members and chairpersons of State Electricity Regulatory Commissions (SERCs), tend to separate the decision-making power from political accountability. Combined with making it mandatory to adhere to the guidelines in the Tariff Policy, a state's ability to set electricity tariffs will be severely curtailed, while the political accountability to the electorate on electricity tariffs will remain with the state. We have seen the chaos that can result when this separation between decision-making authority and political accountability occurs, most vividly in the recent political battles between the Delhi Government and the Lieutenant Governor.

The Centre must also recognize that many of these political problems have been difficult for it too. For example, while the Centre admonishes the states for failure to reduce cross-subsidies, it itself has had great difficulty in doing so. The Railways for many years have been subsidizing passenger train travel through increase in rail freight tariffs. This has resulted in rail freight becoming more expensive and consequently much of the freight traffic has shifted to roads, with serious economic and environmental consequences for the country. It is a cruel irony that coal transport which provides almost half of rail freight revenue has become more expensive, increasing the cost of electricity and, in turn, increasing the need for states to cross-subsidize electricity tariffs. Its difficulties in reducing cross-subsidies in the Railways should sensitize the Centre to the difficulties of states in reducing cross-subsidies in electricity. This is in no way meant to condone extensive cross-subsidizing; in fact, we encourage efforts to reduce cross-subsidies as discussed later.

Some of the proposed changes require the trust and cooperation of consumers. Therefore, in bringing about these changes the Centre will need to bring along the States and consumers. It would be naïve to say that such a collaborative approach will be easy. Building of consensus through negotiation and cooperation will be difficult. But given the history of very limited success in reforming the electricity sector, one can see that such a collaborative approach is needed.

Another issue is the process used to introduce these amendments. Generally, the draft of actual legislation or amendments is almost the last step in any legislative change. Any proposed changes are usually initiated with a consultation or discussion paper which outlines what changes the Ministry is considering and the rationale for them. The consultation paper generally lists the pros and cons of different options available to address the problems. The Ministry then solicits comments on the consultation paper. Then based on those comments the Ministry drafts proposed amendments to the Act and again solicits comments. After incorporating comments from stakeholders, the Ministry then finalizes the proposed amendments. Disappointingly, that process has not been followed and instead stakeholders have been asked to comment on the draft amendments without much explanation. The Statement of Objects and Reasons at the end of these proposed amendments provides limited information about why these amendments were being proposed, in spite of some new institutions and proposals being included such as the ECEA and distribution sub-licensees. It would have been a much richer discussion if more detail had been provided on the rationale for the proposed amendments and any alternatives that were evaluated, more so making explicit many of the assumptions, trajectories, and trade-offs that the government must have considered when formulating the Draft.

We now look in detail at each of the major proposed amendments.

3. Electricity Contract Enforcement Authority (ECEA)

The proposed amendments include the establishment of ECEA that “shall have the sole authority and jurisdiction” to adjudicate disputes arising from obligations under contracts for the sale, purchase or transmission of electricity. Currently, the SERCs and the Central Electricity Regulatory Commission (CERC) have the authority and responsibility to adjudicate such disputes,

For the most part, it is best to avoid a proliferation of institutions in the sector. New institutions require additional resources including people with domain expertise, and such people are limited in number in the country. New institutions can also have conflicts about jurisdiction with existing institutions. Furthermore, increasing the number of institutions encourages “forum shopping,” whereby parties take matters to the institution that they expect will give them the most favourable judgement. It is best to avoid adding a new institution every time there is a problem in the performance of an existing institution. It is preferable to instead find ways to improve the functioning of existing institutions.

It should also be noted that while some cases such as the renegotiation of RE contracts in Andhra Pradesh can be easily identified as falling under the jurisdiction of the ECEA because it seems to be just a contractual issue, this may not be so easy in other cases where there is both a contractual component and a public interest component. For example, the dispute involving Tata Mundra and other power plants prompted by the change in law by Indonesia regarding coal pricing, which affected the imported coal price for these plants, involved both contractual and public interest issues.

Whether under the existing system, where SERCs adjudicate disputes or under the proposed system where ECEA would adjudicate them, appeals would in either case go to APTEL. Therefore, rather than create a new institution ECEA, it would be better to strengthen APTEL to make it more effective in dealing with these matters. In this context, the proposed amendments to increase the number of members of APTEL are welcome.

4. Central Selection Committee for Regulatory Commissions, APTEL and ECEA

Currently, the selection of Members and Chairpersons of the SERCs is carried out by a state-specific selection committee. The proposed amendments would have the selections for Members and Chairpersons of all the SERCs, CERC, APTEL and ECEA by a single selection committee. The rationale for this proposal is to bring about uniformity in the selection process.

The Committee will consist of five people, two of whom will be Chief Secretaries of two states (with the two states being changed annually on a rolling basis). This is another example of centralization with too much control over the entire power sector in the country by a single committee of five people dominated by the Central Government. According to Section 78 (9) of the proposed amended Act, the Committee can continue to make appointments even in the presence of some vacancies in the Committee. If the vacancies are from the states, then the Central Government's control would be enhanced even further.

There are other problems with this proposed amendment. SERC members selected by this Committee could very likely be loyal or beholden to the Central Government. Furthermore, they may not understand the local context; and may not even know the local language which is essential for Members and Chairpersons of SERCs. These possibilities would greatly reduce the effectiveness of the Members and Chairpersons of the SERCs.

In addition, a "uniform" selection process may end up selecting regulators who have a uniform approach to regulation. But as discussed earlier, there is great diversity in the conditions in the states and its power sector, and thus a uniform approach may not be appropriate. In fact, there should be space and freedom for experimentation in the power sector. We will need this space and freedom for experimentation in the power sector as we face a very different future with much greater contribution by RE in generation, and a much greater presence of DER and other behind-the-meter technologies, peer-to-peer purchases of power, smart homes and meters, etc. Selection of the same type of people by the Central Selection Committee who are also likely to feel beholden to it, will stifle this freedom and diversity of approaches. Furthermore, over the years, concerns have been raised about the lack of diversity in the composition of SERCs and the lack of "younger" people with domain expertise. Having uniformity in the selection process is likely to lead to even greater uniformity in the type of members and chairpersons of Commissions, today often retirees from other services.

As discussed above, setting up the Central Selection Committee is not necessary and is not a good idea. There are also other problems with proposed amendment regarding the Selection Committee. It is not clear why a sitting or retired Supreme Court judge should be the Chairperson of the Committee. While Supreme Court judges are persons of eminence and possess many sterling qualities, their knowledge of the power sector is likely to be very limited. It would be much better to have a person of eminence from the power sector.

It is also not clear what process or procedures the Committee will follow in selecting members and Chairs of the various ERCs. Will it by unanimity or by voting? If it is by voting, then given that the representatives of the two States will be in the minority, the Centre, if it wanted, could completely control the selection of all the Members and Chairpersons of the SERCs of all the states.

5. National Renewable Energy Policy and Minimum Purchase Obligations

One of the proposals in these amendments is to have a National Renewable Energy Policy (NREP) and to have minimum purchase obligations from RE and hydro sources. EA2003 already has the requirement for the Central Government to develop a National Electricity Policy and a National Electricity Plan. Having both a National Electricity Policy and a NREP is symptomatic of thinking in silos. RE should not be viewed as merely a capacity addition challenge. Because RE needs to be integrated in the power sector, it does not make sense to have two independent policies one for electricity and another for RE. RE policy must be an integral part of the National Electricity Policy.

Another striking aspect of the amendments is the emphasis on targets. We believe targets are useful, but proper frameworks are even more important. It is important to remember that adding large amounts of RE is not the goal in itself, instead the goal is to have clean and affordable electricity. RE is just one resource that helps the country move towards that goal because of its zero or low environmental impacts. But there are other resources such as energy efficiency and demand response that also help the country move in that direction.

Therefore, instead of focusing on targets for individual resource categories, MoP should promote high quality resource planning at the national level and by discoms. Resource plans have a long-term horizon and are developed using software models to select an optimal mix of capacity additions (RE, conventional power, hydro, etc.), power purchases, and other actions to minimize long-term costs while meeting all environmental goals and minimizing risk.

Unfortunately, long-term resource planning is not part of the lexicon of the power sector in India. While there is planning done today, including by Power Committees, these efforts themselves need new tools, methodologies, and frameworks, especially in a more dynamic, multi-stakeholder, and uncertain future. Effective resource planning can be promoted by the following steps:[2]

- Increase awareness of the need for effective long-term resource planning.
- Explicitly include in the EAct, regulation of long-term resource planning by discoms as a function of the SERCs.
- Develop a regulatory framework for resource planning.
- Enhance capabilities of discoms' and SERC staff for resource planning.

As discussed above, rather than RPO targets for different technologies, using effective resource planning with the objective of minimizing total social costs is a superior approach. Rather than obsessing about levelized cost of energy for a particular resource type, a portfolio approach with the goal of minimizing total costs is better. While RPOs for RE have been around for some time, the amendments propose having RPOs for hydro also. RPOs for hydro are not necessary in any case because hydro is a mature technology and does not require RPO support to promote its use. The amount of hydro that a discom selects should be part of its resource plan. A well-developed resource plan will include the optimum amount of hydro based on cost, requirements for ramping, etc. This would naturally depend on the load pattern and resource mix of a discom, and is likely to be different in percentage terms for each discom. The only thing that may be required is tweaks to present procurement and planning that explicitly values non-kilowatt-hour value of hydro thanks to its fast-ramping capability and inherent storage, not to mention time of day pricing to reflect peak versus non-peak power.

The cost of hydro generation is another issue to keep in mind. The capital costs for hydro plants per MW are higher than coal plants or solar plants. But more concerning is the uncertainty around the cost and the time to construct the plants. A recent report by CEA[3] said that of the 36 hydro plants of size greater than 25 MW under construction, almost all were expected to have cost overruns with 20 plants having cost overruns between 75% to 510% of the original estimated cost. Almost all the plants were expected to have time overruns with one plant expected to have an overrun of 20 years.

6. Reduction of Cross-Subsidy and Use of Direct Benefit Transfer for Direct Subsidy

The Statement of Objects and Reasons attached at the end of EAB 2020 cites four objectives on issues related to tariffs, subsidies and cross-subsidies:

- To have cost-reflective tariffs;
- To restrict the deferral of revenue recovery;
- To reduce cross-subsidies;
- To determine tariffs without subsidy which would be paid directly to the consumers by the State Government.

The fourth objective above is to be implemented through Section 62 of the proposed amended Act which requires that SERCs fix tariffs without subsidy and Section 65 requires the respective State Governments to pay in advance the subsidy directly to consumers, and the distribution licensee is to charge the consumers the tariff determined by the respective SERC.

On the issue of reduction of cross-subsidies and surcharge in the proposed amendments, the autonomy of the SERCs and CERC will be greatly reduced and the directives in the National Tariff Policy (NTP) will have far greater weight.[4] Effectively,

[2] For more details, please see: Daljit Singh and Ashwini K Swain, *Fixated on Megawatts: Urgent Need to Improve Power Procurement and Resource Planning by Distribution Companies in India*, Centre for Energy, Environment & Resources, New Delhi, July 2018.
[3] Central Electricity Authority, *Progress of Hydro Plants Under Construction: Quarterly Review 99, October – December 2019*, February 2020.
[4] Newspaper reports indicate possible changes to NTP, but these do not provide details on tricky issues such as progressive tariffs, fixed versus variable costs, LT vs. HT differences, etc. This is before even more subtle differences in "cost to serve" that could reflect consumer differences (e.g., some states have separate rural and urban household tariffs) or time of day pricing.

the authority of SERCs on this issue is proposed to be transferred to the Centre which develops the NTP. Section 178 of the proposed amended Act removes the power of CERC to make regulations on reduction of cross-subsidies and surcharges. Section 181 of the proposed amended Act would keep the power to make regulations on these reductions with SERCs but they would have to do so "as provided in the Tariff Policy." Section 42(2) of the proposed amended Act reinforces this requirement with even greater weight, saying, "…such surcharge and cross subsidies shall be progressively reduced by the State Commission in the manner as may be provided in the Tariff Policy." The current version of Section 42(2) in EA2003 and which is proposed to be replaced says, "…such surcharge and cross-subsidies shall be progressively removed as may be specified by the State Commission."

There is a subtle but important distinction between subsidies and cross-subsidies to keep in mind. The latter are part of Regulator-notified tariffs, but are meant to be reduced to 20% as per the current National Tariff Policy, but that has not happened in many states. With the NTP now likely to carry greater weight, the trajectory of future cross-subsidy reductions is not clear. Would SERCs be required to reduce them to the 20% level, or even further, or even be required to eliminate them? Would these then simply be added to the subsidies paid directly to consumers by the State? Would this cross-subsidy reduction apply even to agricultural users, who are the most heavily subsidized? There is little clarity in EAB 2020 on these issues.

In principle, the proposal to reduce cross-subsidies and instead provide subsidies through direct benefit transfer (DBT) is a good idea. High level of cross-subsidy currently in retail tariffs leads to high commercial and industrial tariffs, which makes it difficult for our industries to compete internationally. This also makes industrial consumers more prone to exit the system either through open access or self-generation, especially using RE, or even theft in some cases. In addition, providing electricity at subsidized rates leads to inefficient use of electricity because the consumer does not get the correct price signal.

However, given the power that is proposed in these amendments to be accorded to the NTP on reduction of cross-subsidies, it is important to have some idea of the additional financial burden that could be imposed on State Governments at various levels of cross-subsidies. Based on data from the Power Finance Corporation (PFC) for FY 2017-18,[5] if NTP required complete elimination of cross-subsidies, it would increase the direct subsidy required from the States by about 130%. The existing burden on State Governments on subsidies is already large (just under 90,000 crore in 2017-18). An additional amount of 130% would be a huge burden on the States. Even if NTP were to require that all tariffs be within 20% of the average cost of supply as it currently does, the average direct subsidy burden for the States would increase by about 50%. Even this would be a severe additional burden on the States. It should be noted that these are national averages and there will be a wide variation between states, with poorer states with low level of industrial load probably having a much higher burden as a percentage. Therefore, any proposed requirement for reduction in cross-subsidies in the NTP must consider the impact that such directives may have on the finances of the states, particularly the poorer ones.

The use of DBT for providing direct subsidies can help remove the incentive to over-use electricity, and if done correctly can lead to win-win outcomes with the consumers also saving money. However, implementation of DBT is not a panacea and raises the following challenges:

- For those living in rented homes, the electricity bill is usually in the name of the landlord, and therefore the direct benefit would go to him and not the tenant. Tenants may pay the full bill but not get any of the direct benefit from the state. A similar problem can occur for farmers who farm someone else's land on contract or sharing basis.
- State governments often are very tardy in making payments. Therefore, a consumer may pay the full bill but not get the benefit (subsidy) from the state government until many months later. For those with limited resources, this could become a serious problem. Today, the same problem may occur for the discom, but it can at least ride it out. Would the discom disconnect a defaulting consumer if the state did not provide DBT on time?
- Some states may not have the resources to pay consumers directly. Currently, such states manage the discoms through innovative financing and only periodic payments.
- Determining the amount of the subsidy (or direct benefit) may not be easy. To encourage efficient use of electricity, the direct benefit should not be based on actual consumption of a household but on a normalized level. This normalized level will need to be calculated for many different types of dwellings which may be difficult, particularly at the start of a DBT program.

[5] Power Finance Corporation, *Report on Performance of State Power Utilities 2017-18*, 2020

Reduction of cross-subsidies and the shift to DBT will be resisted very strongly by the States and consumers. In the past, farmers in some states have resisted even having meters put on their connections, even though they were told they would not have to pay. How can one determine appropriate levels of DBT for farmers without metering? Supply to such users is ostensibly standardized but in practice can sometimes be ad-hoc or even political. Moving to DBT will require negotiations, dialog and trust-building based on principles of cooperative federalism. If instead, the Centre relies on rule by diktat, it is likely to harden the resistance. Resistance may also be expressed in practice (covertly) rather than overtly, just like with Open Access for bulk consumers mandated in EA2003 or rooftop solar by premium customers.

Before full-scale implementation of DBT, there will need to be several pilot projects to understand the issues involved in implementation, and to gauge and understand the responses of consumers. The people most affected by DBT are likely to be the marginalized and those with very limited resources. These same folks are the ones least likely to have the trinity of JAM (Jan Dhan bank accounts, Aadhaar, and mobiles). It is very important that we remember the lessons from the experience of migrant workers during the Covid-19 lockdown. The heart-breaking stories of those workers show how some policies miss the impacts on the marginalized. DBT should be enabled as an option, but it should be implemented on a large scale if, and only if, these issues have been addressed. Hiccups aside, GST rollout was a successful example of bringing stakeholders together in a phased manner.

7. Distribution Sub-Licensee

One of the most puzzling proposals in the amendments is the introduction of distribution sub-licensees (DSLs). These proposed amendments have both franchisees and sub-licensees. However, there are subtle differences between them:

1. Both franchisees and sub-licensees are to be recognized and authorized by the respective licensee to distribute electricity on behalf of the licensee.
2. A franchisee only requires that the SERC be informed about it, but a sub-licensee requires permission of the SERC.
3. Any reference a licensee is supposed to be read as a reference to a sub-licensee. For a franchisee too, a reference to licensee is to be read as a reference to a franchisee; however, with a limitation that it is subject to the provisions of the distribution franchise agreement.
4. Neither a franchisee nor a sub-licensee needs a separate license. However, the licensee remains responsible for distribution of electricity in that service territory in the case of a franchisee, but the proposed amendments are silent on this aspect of responsibility in the case of a sub-licensee.

This proposal needs much greater clarity and transparency. The purpose for introducing a sub-licensee is not clear. The Statement of Objects and Reasons states that these are enabling provisions to address issues related to Sections 126, 135, and 165 of EA2003, when a licensee distributes electricity through another entity. Section 126 deals with assessment and enforcement associated with unauthorized use of electricity. Section 135 deals with theft, and Section 165 deals with land acquisition by entities that are not companies. It is not clear what kind of enabling framework the introduction of a sub-licensee would provide on any of these issues. When one talks of an enabling framework, one also needs to specify what specific desired feature in the sector is to be enabled. Enablement in general does not make sense.

In the spirit of transparency, MoP should explain the purpose of introducing sub-licensees, what kind of enablement is being sought and why. It should also explain the reasons for the subtle differences between sub-licensees and franchisees. Last year there were reports of MoP wanting to introduce retail competition with multiple franchisees and also talk of a National Discom. Is this introduction of a sub-licensee related to those ideas? Is the introduction of a sub-licensee a first step in introducing privatization or perhaps retail competition?

While there are certainly benefits to privatization, and if that is the intended enablement by MoP, it must be done carefully. First, it is important to recognize that it is the prerogative of the respective state government to decide whether and how to privatize distribution in the state. The purpose of the privatization must be carefully understood and stated. The purpose of any potential privatization will determine the basis on which any distribution service territory is to be divided. Questions such as whether the new territories will be exclusively rural or urban or a mix of the two will need to be decided. The process for selecting the private entities who will be the new owners will also need to be decided: will it by competitive bidding, and if so, what will be the bidding parameter?

On the subject of sub-licensees and the introduction of private companies in distribution, it is important to note that there have been many examples of introducing distribution franchisees, a close cousin of sub-licensees, and that the experience has been mixed. Several franchisees have had to be terminated. Privatization of distribution is a vast subject and requires much more engagement between the Government and all other stakeholders. However, from this short discussion here, it

can be seen that introduction of private interests in distribution should not be done arbitrarily or under a dogmatic push, and requires much greater thought.

It would help stakeholders to provide comments on this issue if there was more clarity on it. Not only do shades of grey create confusion, by not making some objectives explicit, one risks unintended consequences, or even expected but unaddressed challenges, such as cherry-picking by new entrants.

8. Tariff Policy and Legislative Power

Tariff-setting applied within a state has been under the purview of the respective SERC, but these amendments appear to give overriding power to policy notifications such as the National Tariff Policy (NTP). Effectively, this seems to give the power of an Act to the NTP without it having undergone legislative scrutiny. Depending on the specificity in the NTP, this could be challenged by the states.

9. Other SERCs Taking Over the Functions of a Non-Functioning SERC

Section 82 (iv) (7) of the proposed amended Act states that the Central Government could, in consultation with the Government of a state with a non-functioning SERC, transfer its function to another Commission. It is disappointing that the proposed amendment talks about "in consultation" with the State Government before transferring the functions but does not say that it will be with the "consent" of the State Government. Such actions violate state rights and also strike at the heart of Indian federalism. Moreover, the other SERC to which the functions will be transferred may have absolutely no understanding of the local context of the target state.

10. Technology Enablement

In addition to the issues above, there are a few smaller suggestions the government should address. Technology is evolving rapidly, and the government should proactively facilitate the enablement of innovative technologies so that these processes do not become roadblocks in the implementation of technologies such as storage, edge-based transactions, etc. For example, it took a notification to clarify that EV charging stations were license-free activities.

11. Remove Multiple Distribution Licensees in Same Area

Section 14 of the EA2003 allows an SERC to grant a license to two or more entities for distribution of electricity through their own distribution network in the same geographical area. India may the only country where multiple distribution licensees ("wires" companies) operate in the same area. While in many countries there is competition in supply with multiple suppliers or supply licensees operating in the same geographical area, as far as we know, all of them treat distribution (the wires business) as a natural monopoly and a single licensee provides the "wires" service in each service territory. It is unfortunate that even though the issue of duplication of resources was discussed before the passage of the Act, this provision was not removed.

Mumbai is one of the few places that operationalized having multiple distribution licensees in the same area. The experiment in Mumbai caused great difficulties for many consumers in that city because of high tariffs and having to move back and forth between licensees. In addition, so many of the issues were litigated all the way up to the Supreme Court, and a great deal of time and money of many people was expended.[6]

The rationale given for this provision in the EAct is that it may have been needed for areas with no or a very deficient network. It is ironic that the examples of multiple licensees have been mostly in urban and well-developed areas, such as Mumbai, while it is not known if it has been implemented in any remote areas with a deficient network since the passage of the Act, other than for SEZs. In any case, if areas with a deficient network were a concern, EA2003 should have restricted it to such areas.

[6] For more details on this issue, please refer to: Daljit Singh, *Competition and Choice in Electricity Distribution in India*, Working Paper, Initiative on Climate, Energy and Environment, Centre for Policy Research, New Delhi, August 2016.

In the Mumbai experiment, the idea of a parallel license morphed into a case of retail competition but with very limited competition with just two players. Neither player was a competitive supplier, instead both were "wires" companies. In a way Mumbai went from a case of regulated distribution monopoly to a quasi-regulated duopoly. Rules were written in an ad-hoc manner along the way about important issues such as: (1) whether there should be a cross-subsidy surcharge; (2) whether there should be a regulatory asset charge; (3) whether the second licensee should be required to develop its own network; and (4) if and how, the second licensee should be prevented from cherry-picking. It seems the regulatory agency was overwhelmed by the challenging conditions.

Given the debacle in Mumbai, the existing provision in Section 14 of EA2003 for multiple distribution licenses in a given geographic area should be removed. At a minimum, this provision should be modified and restricted to only those areas where a distribution network is non-existent or is deficient.

12. Improving Open Access

Almost everyone acknowledges that open access (OA) has met with very limited success. However, most of the attention in improving OA has focused on reducing OA charges such as the cross-subsidy surcharge. However, there are some conceptual issues regarding OA that need to be addressed and this initiative by MoP to review the EA2003 should be taken as an opportunity to examine the basics of OA and reconceptualising it.

Instead of being an avenue to allow large consumers choice of supplier on a sustained basis, OA has become a way to allow such consumers to move back and forth between the discom and the market as and when they want. Not only is this phenomenon unfair to discoms, it also does not allow competitive suppliers to develop a stable customer base, defeating the purpose of OA. The current approach to OA may relieve, to some extent, the burden of cross-subsidization that falls on large consumers, by allowing them access to the market to get lower prices when they can. The high degree of cross-subsidization certainly needs to be addressed. But as discussed earlier in our comments, tariff rationalization is a political problem and therefore, is best solved at the political level. Trying to bring about this change through OA is unlikely to succeed as past experience shows. As a thought exercise, imagine if every consumer eligible for OA went for it. What would happen to the rest of the system, or would surcharges simply have to rise to a commensurate level, negating any value proposition?

The term "open access" itself is a misnomer for consumer choice, muddling the discussion. Open access to the T&D network is required by generators and suppliers, but not by consumers. Choice consumers need only to shop around for the best deal from competitive suppliers and it should be the responsibility of the suppliers to obtain access so that the power can be transferred to the consumers. Therefore, OA requests should only need to be made by suppliers and not by consumers. This distinction may help resolve another issue. For effective competition, OA to the T&D network by suppliers can and should be of any duration - short, medium or long term – so that they can assemble the most efficient mix of resources to serve their customers. However, exercise of choice by a consumer should not be a short-term transaction. Further, while OA is a pre-requisite for choice, consumer choice is more than OA. Choice also requires well-defined rules that govern the relationship between the discom and the consumer exercising choice, defining the rights and responsibilities of each. Not enough attention has been paid to these rules in the EA2003 and state regulations.

The first step in reconceptualising OA is to recognize that service to consumers exercising choice is a distinct service, and not an extension of regulated supply. Large consumers should not be able to treat the discom as a mothership to which they can return whenever market prices rise. In addition, consumers exercising choice should be required to get all their electricity from the supplier of their choice, not just part of it, otherwise the discom has to handle all the variability of load, and that increases the discom's planning burden and cost, and is unfair.

OA for end-consumers should not be a short-term option. Discom tariffs are regulated and fixed for the entire year and thus represent an average over the year. Even an efficient discom will have tariffs that are above the prevailing market price at some times and below it at other times. If a very large consumer is able to cherry-pick the periods when it can get supply from the market, it would result in higher and higher costs for the discom. These additional costs would have to be borne by non-OA consumers many of whom are small consumers, and also often poorer consumers. Furthermore, unlike other markets, because its tariff is regulated and fixed, the discom cannot compete with another supplier by making a counter-offer to retain a consumer.

In states in the US that have allowed choice of supplier, similar concerns have been raised about giving excessive flexibility to consumers to move back and forth between the market and discom service, because discoms find it very difficult and expensive to hedge against the risks posed by these swings in load. In those cases, restrictions have been placed on the time that has to elapse before a consumer can either leave regulated service or return to it, usually of 6-12 months

duration. In India, because regulated tariffs are fixed for a year, a time limit of 12 months should be placed to address the problem of frequent shifting. There should be no restrictions on switching between competitive suppliers. We have a parallel in telecommunications, where mobile number portability has a lock-in period of minimum 90 days,[7] for something without nearly the same level of hardware as electricity.

It is possible that a large consumer may be dropped by its retail supplier for reasons beyond control of the consumer; for example, bankruptcy of the supplier, or its inability or unwillingness to supply. In such cases, while the consumer shops for an alternative supplier, there should be short term service priced to compensate the discom for its cost.

It is time to move beyond past efforts to increase the volume of OA transactions by tinkering with how various OA charges are calculated. Instead this effort by MoP should be taken as an opportunity to reconceptualise OA along the lines discussed here,[8] so that its objectives are achieved.

13. Summary of Conclusions & Recommendations

Few people would deny that there is a need for change in the legislative and regulatory framework of the power sector. The proposed amendments are developed to address some current problems. However, such a piecemeal approach is unlikely to succeed in sufficiently improving the power sector, more so with longer-term challenges in mind. A much more comprehensive and holistic approach is required to first, address deep-rooted structural issues in the power sector, and second, to make the power sector future ready. Even if everything in the proposed amendments is passed that will not be sufficient, and additional legislation will be required in just a few years. Therefore, the political capital expended to pass these amendments would be better spent on more comprehensive and holistic reforms, while simultaneously strengthening existing norms, regulations, and institutions. Given the diversity in the States, a one-size fits all approach to reform is inappropriate. Furthermore, given that many problems are political in nature, simply introducing new laws or regulations with penalties for non-compliance is unlikely to succeed. Instead, it would be best to use an approach based on cooperative federalism, negotiation and discussion to bring States and consumers along.

Unique Opportunity for Significant Reform of the Power Sector

- The Prime Minister's announcement of *Atmanirbhar Bharat Abhiyan* provides the motivation to reform the power sector so that it will support the rapid development of the economy and a more self-reliant India.
- States and their discoms are going through a difficult time due to the Covid-19 pandemic, with hits to both operations (demand) and finance (cash flows).[9] The draft amendments, if implemented now, while they may help some aspects of the electricity value-chain, would exacerbate a number of issues for the discoms and the States, more so given state borrowing enhancements to 5% under FRBM themselves may not be enough. Instead, this time can be used to build consensus and develop a blueprint for a power sector that will support a rapid economic recovery after the Covid-19 pandemic has been controlled.

Need to Move from Fixes to Comprehensive and Holistic Approach to Reform

- The proposed amendments seem to disproportionately address grievances of particular groups – mostly upstream players. Because of the dysfunctional intertwining of sub-sectors in the power sector, addressing concerns of one set of stakeholders leaves others having to bear an additional burden. Therefore, rather than a band-aid approach, the power sector needs a comprehensive and holistic approach to reforms.
- Several features of EA2003 have either not been implemented or have not worked as expected. The reasons for these failures need to be identified and ameliorated to the extent possible.
- The future power sector will look very different from today's sector, with greater amounts of RE, newer technologies such as battery and other types of energy storage, and considerable generation and control behind-the-meter. The legislative and regulatory framework must be ready for these changes.

[7] https://trai.gov.in/sites/default/files/Customer_Guide.pdf

[8] For more details on this issue, please see: Daljit Singh, *Newer Challenges for Open Access in Electricity: Need for Refinements in the Regulations*, Brookings India IMPACT Series No. 042017-02. April 2017.

[9] See R. Tongia (2020), "DisComs post-COVID-19: Untangling the historical challenges, short-term needs, and long-term ambitions", Brookings India Discussion Note May 2020, for details on Discoms and COVID. Available online at https://www.brookings.edu/research/discoms-post-covid-untangling-the-historical-challenges-short-term-needs-and-long-term-ambitions/

- While work is going on in several subsectors, for example in wholesale markets, these developments cannot happen in silos. There needs to be consistency and coherence in the various sub-sectors – fuel markets, generation, wholesale electricity markets, transmission allocation and pricing, distribution and retail markets. Therefore, a blueprint for the future power sector needs to be created so that the different developments are consistent.

Cooperative Federalism More Likely to Succeed Compared to a Top-Down Approach

- Many of the problems in the power sector are political in nature and require political solutions.
- A push from the Centre could lead to endless litigation stymieing the progress in the power sector and economic growth in the country.
- An approach based on cooperative federalism using negotiations, trust-building, and discussion is required to bring states and consumers along.
- Such an approach will not be easy but is needed.

Need to Acknowledge and Value Diversity in the States

- States differ in their per capita income, consumer mix, fraction of load due to agriculture, load shape, and resource mix. Therefore, uniformity in regulatory approaches is not appropriate.
- Diversity allows states to experiment and that facilitates cross-pollination of ideas.

ECEA

- Creating a new institution for every new problem is not advisable. A better approach is to strengthen existing institutions.
- Every new institution will lead to conflicts with existing institutions over jurisdiction resulting in lost time, energy and resources in litigation.
- While cases like the case of RE producers in AP may be easily identified as coming under the jurisdiction of ECEA, other cases involving generators such as the Tata Mundra case involving changes in import coal prices due to change in law in Indonesia may be harder to categorize because it has elements of both a contractual dispute and a public interest issue.

Central Selection Committee

- By controlling the selection of members and chairpersons of SERCs, the Centre would have very high level of control over the entire power sector in the nation. Members and Chairpersons selected by the Committee are likely to be loyal or even beholden to the Centre.
- The selections by this committee will lead to uniformity in the type of people selected to fill these posts, whereas what is needed is much greater diversity in the type of people selected even today.
- Centrally selected SERC members and chairpersons may not have an understanding of the local context in the respective state and may not even know the regional language which is very important for these posts.

National Renewable Energy Policy and RPOs

- There should be one energy policy and there is no need for a separate National Renewable Energy Policy. Otherwise it will promote thinking and acting in silos.
- We need to move away from targets to long term resource planning by discoms with clearly stated objective of reducing emissions and minimizing long-term costs.
- Having hydro RPOs is particularly undesirable. Hydro is a mature technology and does not need support through RPOs. Because each discom has a different load shape and a different resource mix, the amount of hydro needed as a percentage of total generation will be different for the various discoms. There are alternate mechanisms for incentivizing hydro that require the system to recognise the non-kilowatt-hour value proposition hydro provides (flexibility, storage and time of day, ramping, etc.)
- Instead of focusing on RPOs, the EAct should make oversight and regulation of long-term resource planning one of the functions of SERCs.

Reduction of Cross-Subsidies and the Use of DBT to Provide Direct Subsidies

- It is a good idea to reduce cross-subsidies. However, the Centre will need to communicate extensively with the States and consumers to build trust and explain the advantages of doing so.
- Reduction of cross-subsidies will increase the level of direct subsidy the State Governments will have to provide. Our calculations show that attempting to remove the cross-subsidies completely will increase the direct subsidy burden by 130% averaged over the whole country. Even trying to bring all tariffs to within 20% of the average cost of supply will increase the direct subsidy burden by about 50%. These are national averages and the increase could be much greater for some states, particularly the poorer ones. Reduction of cross-subsidies must be done carefully to avoid undue hardship for the states and their more vulnerable consumers.
- The Centre should think of its own difficulties in reducing cross-subsidies in Railways to appreciate the political challenges in addressing such an issue with great electoral consequences.
- DBT is a good idea but will be difficult to implement. The Centre should carry out DBT pilots to understand the challenges and consumers response to it. If DBT is implemented badly, the poor will suffer, so it is particularly important that it is implemented only after all the foreseeable implementation challenges have been addressed.

Distribution Sub-Licensee (DSL)

- The rationale for introducing DSL has not been given adequately.
- If it is to create an enabling framework for privatization, then that must be stated clearly. Privatization in any state should be done carefully with the rationale spelled *a priori*. The areas which are designated for privatization should be carefully selected based on the rationale for privatization. The State Government should decide what mix of rural and urban areas should be combined, if at all. The State Government will also need to set down the process for privatization and what would be bidding parameter, if a competitive bidding process is to be used to select the private operator.
- In any case, much greater transparency is required on the issue of DSLs in the proposed amendments.

Retail Consumer Choice

- While this issue has not been discussed in the proposed amendments, there are two provisions for providing choice in the existing version of EA2003: allowing multiple distribution licensees in the same geographical area; and open access.
- Given the problems that were created in Mumbai due to the parallel license given to both Tata Power and Reliance, this provision should be removed from EA2003.
- For improving open access, instead of focusing only on surcharges, reconceptualization of open access is required so that it is seen not as a way for a large consumer to get cheaper power whenever it wants to. Instead, this should be a relatively long-term choice by a large consumer to get its entire load supplied by a competitive supplier.

QUALITY. INDEPENDENCE. IMPACT.

Brookings Institution India Center

No. 6, Second Floor, Dr. Jose P Rizal Marg, Chanakyapuri, New Delhi - 110021

@BrookingsIndia Brookings.India Brookings India www.brookings.in