On April 17, 2020, the Ministry of Power released the draft Electricity (Amendment) Bill, 2020 - a bill to further amend the Electricity Act, 2003. This is the fourth draft of amendment to the central act and has been proposed to address some recurring issues in the power sector, and to promote commercial incentive for private players to enter the market in the generation, distribution and transmission of electricity.

The policy modifications proposed as part of the amendment bill have raised several concerns and have faced objections and resistance from various stakeholders including state governments. Amidst the ongoing discussions around the bill it is essential to go over its background, relevance and the need for reforms in the power sector.
1. WHAT IS THE CONSTITUTIONAL AND LEGISLATIVE FRAMEWORK OF THE ELECTRICITY SECTOR?

Electricity is the subject matter of the Concurrent List as per the seventh schedule of the Constitution of India, implying that it can be legislated by both the Parliament and the State legislatures. The legislative framework of the electricity sector has been evolving over the years and the parent legislation governing the electricity sector today - Electricity Act, 2003 (EA 2003), is the result of several power reforms that began in the early 1990s.

In 2003, there was not just an amendment of law; there was a radical restructuring of the sector that provided a much larger role for private players. EA 2003 introduced structural reforms and policy changes such as: (i) unbundling monolithic state electricity boards into separate entities for generation, transmission and distribution, (ii) enabling private sector participation and market driven competition, and (iii) directing the establishment of autonomous electricity commissions.

The Act was enacted to consolidate laws relating to generation, transmission, distribution and trading of electricity with the following objectives:

2. WHAT IS THE RATIONALE BEHIND THE PROPOSED AMENDMENTS OF THE ELECTRICITY (AMENDMENT) BILL, 2020?

After 17 years of EA 2003, it must be observed that the sector has not been able to entirely achieve the results it set out to i.e. affordable, economical power and transparency in pricing.
There has been substantial addition to generating capacity and considerable progress of electrification through direct investments, public private partnerships and market development. Yet, the electricity sector continues to grapple with critical issues which include:

(i) Irregularities and tardiness in tariff filings - it has been reported that DISCOMs in 12 out of the 29 states have not filed tariff petitions for FY2020. This has led to substantial non-revision of their tariff.

(ii) Losses faced by distribution companies (DISCOMs) - Discoms reported a near doubling of their financial losses in FY19 to Rs 27,000 crore; and, the discom losses in FY20 is estimated to be around Rs 30,000 crore.

(iii) Dues to power producers - Owing to their financial distress, discoms have been failing to pay power producers on time. As of February, 2020, discoms record overdues to power producers to the quantum of Rs. 80,387 crore. Additionally, there have been recurring instances of power purchase agreements (PPAs) not being honoured. Eg. Madhya Pradesh Power Management Co had cancelled a PPA signed in 2015 for two 50 megawatt (MW) projects. Most recently, the Andhra Pradesh government had made controversial attempts to renegotiate clean energy tariffs for 140 power plants. Some cases of renegotiation of PPAs have also been seen in Uttar Pradesh and Karnataka. These cases can be attributed to the lack of regulatory enforcement of contracts by SERCs.

Above all, it has been felt that few provisions of the Act are unable to cope with the rapid development of the electricity sector. Therefore, to bridge the gaps in the prevailing statutory paradigm and ensure sustainable growth in the sector, it has been thought necessary to further amend the Electricity Act 2003. Yet, the pertinent question remains whether the proposed amendments are adequate, effective, viable and sustainable.

3. WHAT MAJOR CHANGES DOES THE PROPOSED BILL SEEK TO INTRODUCE?

Electricity (Amendment) Bill, 2020 proposes a list of amendments that seek substantial changes to the existing legal and administrative ecosystem. The proposed amendments seek to:

3.1. establish a semi-judicial authority- Electricity Contract Enforcement Authority (ECEA), exclusively to ensure enforcement of contracts related to sale, purchase, and transmission of electricity.
3.2. direct the Central Government to “prepare and notify a National Renewable Energy Policy for the promotion of generation of electricity from renewable sources of energy.” The said policy is to prescribe a minimum percentage of purchase of electricity from renewable and hydro sources of energy. It must be noted that the amendment proposes increased penalties and strict compliance with the prescribed minimum percentage.

3.3. delegate the Central Government with the power to prescribe rules and guidelines to allow and facilitate cross border trade of electricity.

3.4. empower load dispatch centre to oversee the payment security mechanism such that “no electricity shall be scheduled or despatched under such contract unless adequate security of payment as agreed upon by the parties to the contract, has been provided.”

3.5. codify the responsibility of the National Load Despatch Centre to include overall authority for carrying out real time operations and monitoring of national grid, supervision and control of the inter-regional and inter-state transmission of network and grid security, and optimum scheduling and despatch of electricity.

3.6. allow DISCOMs to engage franchisees or sub-distribution licensees for distributing electricity on their behalf in a particular area within its area of supply.

3.7. address the time taken for adoption of tariff and identify timeline for the same.

3.8. expand provision under tariff determination to (a) adopt cost reflective tariff and (b) reduce open access surcharge and cross-subsidies.

3.9. mandate the state government to grant subsidy directly to the electricity consumers in the form of direct bank transfer (DBT).

The draft Electricity (Amendment) Bill, 2020, proposed the above listed amendments and circulated the same for discussion. Subsequently, several stakeholders, with the exception of power producers, have come out in opposition to the proposed amendments.
It must be noted that in 2014 and 2018, there were attempts to bring in similar legislation. However, due to strong opposition from employee unions in the sector and lack of unanimity among other stakeholders on amendments that sought segregation of carrier and content business, the Bills were not introduced in parliament.  

4. WHY ARE SEVERAL STAKEHOLDERS OPPOSING THE BILL?

Power sector employees, engineers, opposition parties, farmer unions and consumer groups are among prominent stakeholders protesting against the draft amendment bill 2020. The proposed amendments have also been subject to resistance by states, including Tamil Nadu, Telangana, Andhra Pradesh, Chhattisgarh and Bihar, among others.

The Bill is largely seen as an attempt to privatise profits and nationalise losses. State governments have come out in opposition as their autonomy is being eroded and the Constitutional provision of electricity being a concurrent subject is being subverted with centralisation of decision making.  

Employee unions have raised concerns around the importance given to contracts, payment-security mechanisms and privatising DISCOMs.

They argue that the Bill is an attempt to secure the interests of the power producers and that privatising the distribution systems would lead to private monopolies replacing public monopolies.  

Amendments that seek to reduce cross-subsidies and cost reflective tariff, are seen as going against the interests of the domestic consumers and farmers. And, consumer groups complain that there is little focus on supply and service quality issues, which are at the heart of consumers' concerns.

Additionally, since the request for comments on this draft Bill had come at time of a global pandemic, COVID-19, most stakeholders also highlight that there has been a lack of adequate scrutiny of the proposed amendments and insufficient representation of stakeholder-interests.
5. WHAT ARE THE CONCERNS AROUND THE PROPOSED AMENDMENTS AND HOW CAN THEY BE ADDRESSED?

5.1. THE AMENDMENT BILL GOES AGAINST CONCURRENT NATURE OF POLICY OF CONSTITUTION OF INDIA AND CENTRALISES DECISION MAKING:

One of the primary concerns around the proposed amendments is that it goes against the spirit of the Concurrent List in the subject matter namely, electricity. This would create an irreconcilable conflict between the union and the state leading to repugnancy through attempts to centralise decision making. Furthermore, it must be recounted that the makers of the Constitution had recognized it early on that electricity needs to be placed in the Seventh Schedule (Concurrent List) for the simple reason that electricity resources planning and development should take place at the state level. This is because each state has its own resource specificity that may be conducive for its own development e.g. wind resources in Tamil Nadu, Chhattisgarh for coal. Although the transmission capacity has grown tremendously due to One Nation One Grid initiative, where electricity can be generated and transmitted from any part of the country, electricity resource planning, development and delivery is still a state specific subject.

Recommendation:

The Central Act has primacy over any state action and it cannot infringe on institutional and policy making decisions of the state government. The existing institutional structure should not be rearranged as state incentives to ensure the growth of local and regional development of electricity will be stalled. With the central government banking on making use of a pool of central generating stations and electricity resources, the development at the state level will take a backseat as there will not be any incentives to promote renewable energy resources, especially rooftop solar.

5.2. THE BILL DOES NOT RECOGNISE THAT LOSSES OR REGULATORY ASSETS ARE AN INHERENT PART OF THE ELECTRICITY SECTOR:

The Amendment Bill 2020 should recognise that regulatory assets are an inherent part of the sector and it should be recouped over several time periods.
The main aim of tariff rationalisation principle in the Amendment Bill is to strengthen cost recovery without any revenue deficit. Therefore, the concept of 'regulatory asset' and 'regulatory liabilities' should be incorporated within the section to allow adaptability to changing technological, investment, political and social situations and cycles. This provision will help plan investments and phase out cross-subsidies.

Electricity sector is a sector where the network is durable and fixed where rents persist and are paid for an ever-growing immovable consumer base. Consumers are linked to the network / the supplier even under this Amendment Bill. While there is a requirement for continuous investment in all parts of the electricity sector, there is every possibility that even the investments required now will outweigh the current spending or purchasing power of the consumer. Under these circumstances, it is impossible to expect immediate or annual recouping of investment or cost recovery without any deficit. Investments, however, can and need to be recovered in several time periods - as the consumer base is immovable and are locked into the network for years.

In *Bses Rajdhani Power Ltd. vs Delhi Electricity Regulatory Commission, 2006*, the Appellate Tribunal for Electricity has stated that creation of Regulatory Asset is a mechanism to carry forward a portion of the revenue requirement for a particular year that has not been included while designing the tariffs for that year. Viewing from a consumer perspective, the Tribunal stated "Regulatory Asset mechanism is resorted mainly to avoid tariff shocks to the consumers in a given year, while at the same time allowing the utility to recover the costs in a reasonable manner so as to protect its interests as well as those of the consumers."

This will prevent unnecessary tariff shocks which will create both political and social repercussions. Further, creation of regulatory assets is an internationally recognised practice.

**Recommendation:**

Regulatory assets should be made part of the Electricity Amendment Bill 2020 and be institutionalised as part of regulatory and utility accounting practices.
5.3. ELECTRICITY CONTRACT ENFORCEMENT AUTHORITY (ECEA) INTRODUCED IN THE BILL, DOES NOT FIT THE GOVERNANCE STRUCTURE:

ECEA has been proposed as a semi-judicial authority over the State Electricity Regulatory Commissions (SERCs) with direct appeal to the Appellate Tribunal for Electricity. Effectively, it will supersede the State Electricity Regulatory Commissions (SERCs) in matters with regards to enforcement of contracts.

This will have two effects:

i. Loss of contract related cases for SERCs: A simple statistical analysis will inform that the main work of the SERCs is contract enforcement and adjudication. If contract adjudication powers are taken away from SERCs, it will also result in loss of revenue as each contract related case carries substantial court fees. Further, it will also result in the SERCs merely setting tariff and developing codes and regulations – in effect a part time job!

ii. Diminished role of a SERC Judicial Member: SERCs have three members – Chairperson, Technical and Judicial. The role of the judicial member is mainly adjudicatory in nature and his or her role has always been surrounding contractual cases in the SERC. With the establishment of ECEA, the adjudicatory power of SERC will be taken away and the role of the judicial member will be made redundant.

Recommendation:

ECEA does not fit into the governance structure as it goes against the Concurrent jurisdiction. Secondly, it will render the SERC useless and disempower them. Therefore, SERCs should be given more power by improving regulatory quality. For example, regulators inter-transfer of commission officials can overcome the political economy hold on regulatory commissions.

5.4. PROPOSED AMENDMENTS LIMIT THE STATES’ ROLE IN PROMOTION OF RENEWABLE ENERGY (RE) DEVELOPMENT:

Special attention to renewable energy development will help reduce the ambiguity w.r.t. diverse RE implementation plan by Centre and States. But at the same time, it must be taken into account that states have varying potential to develop renewable energy. It is important to adopt a state specific approach to outlining policy measures and guidelines while promoting renewable energy.
The existing provisions of EA 2003 already define the functions of the (NLDC) and this is further detailed in the National Load Despatch Centre Rules, 2004 as notified by the Ministry of Power (MoP). The proposed amendment makes provisions to increase the scope of NLDCs functions to ensure complete authority of NLDC to issue instructions w.r.t grid related matters across national geography. Further, there is focus on carrying out the optimum scheduling and despatch in accordance with contracts, paving way for increased emphasis on contract enforcement which does not require a statutory status. The effect of the provision is that it renders state level scheduling and dispatch useless; for, most of the decisions for scheduling will be made at the central level. And, State Load Despatch Centres (SLDCs) will have no power other than scheduling with no planning function or additional function for

**Recommendation:**

The states’ role in the consultative framework should be strengthened to ensure that RPO for every state is determined based on its energy portfolio and ability to add RE capacity. Given the limitations of hydro as an energy source, policy measures and guidelines should be outlined for HPOs instead of giving it statutory status.

**5.5. Additional Functions of the National Load Despatch Centre (NLDC) as Proposed in the Bill Could Lead to Centralisation of Technical Power:**

The rationale behind including Hydro Purchase Obligation (HPO) is questionable, especially considering the environmental implications and human costs involved in large hydro projects. HPO for small hydro upto 25 MW without affecting the ecological surroundings or livelihood can be considered. However, this would be subject to the economically viable hydro power potential in respective states.

HPO: The rationale behind including Hydro Purchase Obligation (HPO) is questionable, especially considering the environmental implications and human costs involved in large hydro projects. HPO for small hydro upto 25 MW without affecting the ecological surroundings or livelihood can be considered. However, this would be subject to the economically viable hydro power potential in respective states.
balancing the grid. This also brings into question the generation at the state level, and, if states’ generation plants will be optimally utilised by the NLDC. This poses a threat of such units becoming non-performing assets (NPA). Furthermore, there is the danger of greater preference for certain power plants over the rest e.g. central generating stations.

**Recommendation:**

NLDC’s functions should be properly reworked to ensure it does not lead to centralisation of technical power. Such functions must be undertaken with joint collaborative decision making between NLDC and SLDCs.

**5.6. THERE IS LACK OF CLARITY W.R.T TO THE ROLE OF THE DISTRIBUTION SUB-LICENSEE AND FRANCHISE AS INTRODUCED IN THE BILL:**

EA 2003 has existing provisions for the distribution licensees to recognise and authorise another entity to distribute electricity on its behalf, within its area of supply. The amendment defines two entities (i) distribution sub-licensee and (ii) franchisee. First, there is no distinction between a franchisee and distribution sub-licensee – with regard to their roles and responsibilities and area of operation. It appears to be left open for interpretation. Secondly, with regard to choosing a franchise the distribution licensee only needs to “inform” the Commission on their franchisee of choice while the modalities of the selection, areas of operation are left to the licensee. These are high value operations and must be regulated better than what is proposed.

Additionally, the proposed distribution sub-licensee raises a few concerns such as:

i. a sub-licensee will be able to choose a specific revenue district where it might only cater to high value consumers,

ii. the sub licensee will operate without any statutory obligation to meet the standards of performance.

iii. there are no clauses which specifically govern either of these newly introduced entities.

**Recommendation:**

Without detailed rules for Universal Service Obligation (USO) for Distribution Sub-licensee and regulatory scrutiny over franchisee, the proposed models are bound to fail. As it stands, the provisions must be extensively reworked for ensuring its success and promoting competition in the electricity market.
5.7. Proposed Amendments Around Tariff Determination Defy Social Policy Objectives:

While it is crucial to focus on reviving the weakening financial health of the DISCOMs, there are a few concerns with adopting tariff determination as proposed in the amendment.

i. Tariff Shock: The proposed amendment delinks SERCs' discretion to differentiate tariff setting for consumers on the basis of load factor, power factor, voltage and total consumption. This would not only disempower SERCs but, would result in tariff hikes and adversely affect social policy objectives and consumer interests. Electricity should be treated as an essential commodity/service and its tariff determination methodology should take into account the socio-economic inequalities across consumer categories. On the contrary, the proposed amendment makes provisions to reduce cross-subsidies and should not be passed.

ii. Direct Benefit Transfer (DBT): While the state government through the DBT mechanism can help improve the financial health of the DISCOMs there are two concerns with adopting such subsidy transfer.

- It is unclear who will disburse the subsidy through the DBT mechanism. If the Central Government opts to disburse, the purview of the state over promoting social policies for its people will be lost. It will amount to centralising of powers by impinging on the Concurrent Jurisdiction.

- Such disbursement would not be in consumer interest as consumers will have to initially pay from their own pockets, after which they will receive the subsidy amount through the DBT mechanism. Consumer categories such as agriculture and domestic consumers might not have the liquidity to support said mechanism.

Implementation of DBT can be highly challenging considering that electricity unlike LPG is not always consumed by the consumer under whom the connection is registered.

Recommendation:

Tariff determination should meet social policy objectives and should not result in tariff shock.
Electricity (Amendment) Bill 2020 should focus on promoting emerging technologies Energy Storage, Internet of Things (IoT), Smart Grids, Artificial Intelligence etc which are in the nascent stage of development. This is akin to the initial development phase of renewable energy where mandatory provision has been put forward (Section 86 (1) (e) of EA 2003). In the same light, the Discoms, Private generators, Transmission and Load Despatch Centres must be given Emerging Technology Obligation (ETO) to ensure either investment or piloting of new technologies as a mandatory process to promote better and more intelligent provision of electricity services for consumers. This will promote an ecosystem of innovation that can foster the rapid development of the electricity sector.

Further, given that electricity is a concurrent subject, SERCs’ discretion should not be delinked from tariff setting. State governments should be mandated to transfer the subsidy amount directly to DISCOMs such that consumers would receive their bills post deduction of subsidy amount. A monitoring and enforcement mechanism should be in place to ensure timely transfer of subsidy.

6. HOW CAN THE ACT ENSURE PROTECTION OF CONSUMER INTERESTS AND A SUSTAINABLE POWER SECTOR?

It is indisputable that there is a need to amend select provisions of EA 2003, owing to persisting issues and rapid developments in the electricity sector. But, there is a strong need for the Electricity (Amendment) Bill 2020 to include provisions that can ensure protection of consumer interests and sustainable growth in the electricity sector.

The Bill should include provisions to:

6.1. MANDATE EMERGING TECHNOLOGY OBLIGATION (ETO) FOR UTILITIES:
- i.e. inclusion of Emerging Technologies – Energy Storage, Internet of Things (IoT), Smart Grids, Artificial Intelligence etc

6.2. PROMOTE GREATER INTEGRATION OF WATER, ENERGY AND AGRICULTURE NEXUS:
It is crucial for the amendment to incorporate provisions to take cognizance of the Water, Energy and Agriculture Nexus where energy usage has a depleting
effect on water resources in different states.

i. Greater coordination: Appropriate sections must be included to ensure that there is proper coordination between electricity, water resources and agriculture Ministries and State Departments to ensure food, water and energy security in the state. These amendments to EA 2003, provide the best opportunity to enable greater resource planning, coordination and data sharing between these departments on the water stressed areas, type of agriculture produce (optimum crop selection) that can be grown in each district depending on water resources, the amount of energy and infrastructure planning for optimum and equitable usage of the said resources.

ii. Water conservation: Provisions should be made for implementation of energy efficient pumping, precision irrigation and appropriate crop selection (no water-intensive crops in water-starved areas). This will go a long way in promoting water security in India.

In summary, appropriate sections should be added to promote water conservation, optimal cropping patterns, water conservation and food security in India.

6.3. ENFORCE DEMAND SIDE MANAGEMENT REGULATIONS:

The Bill should incorporate sections to promote energy efficiency and conservation within utilities. Several Regulators had formulated regulations for demand side management. E.g. Tamil Nadu Electricity Regulatory Commission (TNERC) passed the TNERC (Demand Side Management) Regulations, 2013 with the express objective of "altering the end-use of electricity - whether it is to increase demand, decrease it, shift it between high and low peak periods, or manage it when there are intermittent load demands - in the overall interests of reducing Distribution Licensee's costs." However, it has not been implemented by utilities so far. Implementation of the regulations could result in substantial cost savings and have a positive effect in reducing tariffs for consumers. Therefore, Electricity Amendment Bill 2020 must incorporate provisions to enforce Demand Side Management Regulations to ensure cost savings for utilities.
6.4. INTEGRATE DISTRIBUTION STANDARDS OF PERFORMANCE IN THE BILL:

By and large, DISCOMs have not been adhering to distribution standards of performance. Additionally, penalties to be paid for delay in service provision have not been strictly adhered to. This is despite relevant regulations that have been passed by the respective SERCs in this direction. Distribution standards of performance and provisions to ensure compliance should be made part of the Amendment Bill and sections may be passed accordingly to ensure that utilities serve consumers with highest standards of efficiency.

6.5. PROMOTE GREATER CONSUMER PARTICIPATION AND ENGAGEMENT:

The main reason that competition in the supply market might not work well will be due to the lack of consumer engagement and activity. The Amendment Bill should include an office of consumer advocacy, a statutory body, both at the states and national levels which will represent the consumers of a particular state to participate in matters involving energy services, on behalf of consumers. This is a typical feature of unbundling and promoting greater competition in the utility market and creating a level playing field for all stakeholders - government, regulator, utility and consumers.

For example, in the state of Pennsylvania, the Office of Consumer Advocacy is a state agency that represents the interests of Pennsylvania utility consumers before the Regulators. In Scotland, UK, Citizens Advice and Citizens Advice Scotland hold statutory responsibilities to represent energy consumers in accordance with the Estate Agents and Redress Act 2007.

Consumers need to be engaged at every level within both the utilities space and regulatory space. Further, adequate consumer representation and participation must be ensured at all levels within the utility space - generation, transmission, distribution and supply companies.

6.6. ENHANCE CORPORATE GOVERNANCE:

The Bill should consider and incorporate sections that seek to enhance corporate governance - ownership (share-holding) and control structure of electricity utilities i.e. generation, transmission, distribution and supply companies.
Ownership structure: A section may be added to state that a percentage of shares must be reserved for the public - which may comprise a diverse set of stakeholders including academic institutions, CSOs to enable participation in governance of the utility through shareholding.

Control Structure: Provisions may be added to enable expansion of the Board of the utilities such that nominations from diverse sets of stakeholders find a place in the Board. This will ensure transparency and accountability in operations.

6.7. Ensure Documents and Correspondence are Made Available in the Public Domain Free of Charge:

All actions and operations of the regulator and utilities must be placed on the public domain to promote transparency and accountability. The Bill should mandate disclosure of notes, communications, draft regulations, notifications, any other formal and information communication, including publications, reports, penalties etc. by generation, transmission, distribution and supply licensees and regulators; all these must be placed in the public domain. This will promote scrutiny of operations and create conditions for transparency and accountability of their functioning.

Since the structure of the electricity market will change and more stakeholders will be involved in the regulatory process, all meetings formal and informal, including ex-parte communication between the regulatory commissions and utility may be recorded and placed in the public domain. Monitoring ex-partes communications, such as emails communication and phone calls, are a feature of legislations in various states in the USA. This will ensure that there is no regulatory capture and provide for transparency in 'regulatory conduct'.

6.8. Include Environmental Clearance Power Conditions, Standards and Provide Penalty Provisions:

The Bill should also give due importance to the Environmental Impact Assessment (EIA) process and incorporate provisions that uphold the same in the Amendment Bill 2020. A section should be added to make provisions for penalty in case of environmental damage or loss.
Further, it must be mandated that environment clearance related conditions and standards should also find reference in the power purchase agreement.

Bringing environmental conditions within the Amendment Bill can ensure that any violation of environmental clearance conditions will automatically result in cancellation of Power Purchase Agreement. The only way to ensure that generators adhere to environmental conditions would be to revise the Amendment Bill such that it incorporates environmental clearance standards, conditions and provides penalty provisions for violations and environmental damage.

The Electricity (Amendment) Bill 2020, proposes policy and functional amendments that can reshape the landscape of the electricity sector and make substantial changes to its legal and administrative ecosystem. If enacted, the draft Bill would significantly impact the functioning of the electricity sector.

That said, it must be recognised that there are several gaps between the existing problems in the sector and the solutions proposed in the Bill.

Overall, amending EA 2003 may be a move in the right direction, but there is a strong need to ensure that these amendments are revised such that it mitigates recurring issues in the sector, copes with rapid technological and market developments, protects consumer interests and promotes sustainable growth in the sector.

REFERENCES


Ibid.


Ibid.


10. Ibid.


