Proposed Electricity Act Amendment (2014)

A commentary

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1. Key Challenges in the Sector

Amending the Electricity Act 2003, which governs the power sector structure and policy, is a crucial exercise with far reaching long terms implications. It also is a useful opportunity to change the course of the policy direction, design and implementation, to address critical issues faced by the sector. Therefore, while undertaking such a process it becomes extremely important to assess the immediate as well as long term challenges before the sector. In this context, following are the most important issues in our opinion, which need urgent policy attention.

- 1) Access and reliable supply to available to all: Even after two decades of power sector reforms, more than 300 million people are still left without access to electricity. The governments at both state and central level have undertaken many measures to improve access, but clearly a lot more still needs to be done. Despite having a large-scale electrification program, last mile connections have effectively increased by just 3% in the past 10 years and reliable supply is still out of reach for most households. Even the households that have connections, often get poor quality of supply and service. Rural areas suffer in this regard much more than the urban and semi-urban areas. In supplying power to small rural or BPL consumers, the distribution company loses almost Rs. 4 per unit of sale. This makes the distribution companies reluctant to supply to such consumers and often leads to discriminatory practices in administering load shedding. Hence, in order to make access to quality supply feasible and affordable, the disincentive for supplying to rural and poor consumers needs to be addressed.
- 2) Financial viability of distribution companies remains elusive: In spite of this being the key trigger, as well as the primary objective of the reform exercises, financial viability, especially of the distribution sector, continues to remain elusive. Despite many efforts by the central and state governments in the form of financial assistance, viability gap funding, mandates to ensure tariff revision and energy accounting, financially sustainable operations seems out of reach for most utilities. Moreover, there is no reliable data or assessment of the extent of this issue in the public domain. According to one estimate and media reports, total financial losses of distribution sector, including short-term liabilities, are around Rs. 1,90,000 crore, which is more than 2% of the country's gross domestic product (GDP) at 2010-11 prices. This is five times higher than the sector losses estimated during the introduction of the 2003 Act. Such performance calls for a fundamental review of the 2003 Act implementation as well as design.
- 3) <u>Limited success in promoting competition</u>: Promoting and enabling competition was one of the key objectives of the 2003 Act. However, here again the achievements have been mediocre. Most of the capacity contracted under the bidding route is under litigation and the few players who won most of these contracts are seeking post-facto revision of the competitively discovered tariffs. Similarly, open access could never really take off and distribution franchisees have been mired in controversies. Lack of crucial data makes it difficult to meaningfully assess benefits, if any, from such schemes meant to promote competition and efficiency.

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¹ After accounting for increase in number of households between 2001 and 2011

- 4) Need for strengthening institutional capacity and accountability mechanisms: One of the progressive features of the Electricity Act 2003 was the change it brought about in the sector's institutional framework. The regulatory commissions were made the custodian of public interest and a separate three-tier structure was formulated for dealing with consumer grievances in an expeditious manner. However, the ever-increasing financial crisis is a testimony to the fact that commissions have failed in holding the regulated entities accountable for their performance, and thus have also failed in safeguarding public interest. The independence and accountability of regulatory commissions have also come into question, especially with respect to their manner of appointment and functioning. Further, their narrow interpretation of their own role and mandate has prevented them from taking any meaningful actions towards promoting access to quality supply. Similarly, the grievance redressal system has proved to be too costly and time consuming, with utilities challenging most of the orders in consumer's favor before high courts and thus denying the consumers, both justice and compensation.
- 5) Crucial inter-linkages need to be factored in: Fuels are a crucial input that directly influences electricity pricing. Recent shortages in both domestic coal and gas have resulted in uncertainty as well as increase in electricity prices. Capacity addition has linkages with not just the real demand for power but also with important resources like capital, land, water, fuels and forests. To makes matters worse, our track record has been extremely poor in dealing with issues concerning environment, pollution as well as displacement and associated social issues. Existing analysis shows that the on-going and expected capacity addition is far more than our need. If all such capacity actually comes online, then it is doubtful if it can be utilized. This will not only force us to deal with the challenge of stranded assets and its related economic burden, but more importantly we would have wasted critical resources, which otherwise could have been put to better use. Therefore, it is extremely important to set governance process right so as to prevent and discourage such excessive and unwanted capacity addition. The recent experience of competitively bid projects seeking revision of discovered tariffs, the collusion of the lending agencies who failed to undertake necessary due-diligence, does not lend support to reliance on market mechanism to curb such excesses. Further, the coal sector, which is the mainstay for power generation is also in a flux and is undergoing serious structural, legal and policy changes. These changes can significantly impact the pace and quantum of thermal capacity addition as well as electricity pricing. Given these complex inter-linkages, central policymaking processes needs to be conscious of these serious issues and needs to adopt a coherent and holistic approach towards energy sector.

The above points highlight crucial challenges and areas of sector dysfunction, which need to be carefully understood before bringing about any new or long-term changes. Also in order to be effective, the amendment process should consciously endeavour to remedy these shortcomings in the present scheme of things. In this context, it becomes important to inspect whether and how the proposed amendments engage with these issues.

2. Objectives of Electricity Act Amendment 2014

Above points highlight that it is of utmost importance to undertake a thorough review of the Act implementation (along with the national policies) over the last decade to understand which provisions were useful and effective and which areas need further modification. There needs to be basic clarity regarding issues pertaining to design of the legislation and those emanating from its implementation. Given the nature and extent of the changes that the amendment seeks to bring out, it is critical to have a larger framework to understand how and why the proposed changes are useful and needed in the context of present challenges and past experience.

Unfortunately, there is no background material that elaborates on the aims and objectives of the amendment or explains the analysis and reasoning behind introducing the new sector structure that it wants to create. In the absence of such background material, one is constrained to infer the same, based on the limited insight provided by the statement of objects and interpretation of the proposed bare Act itself. Often, it is not just the Act, but the associated policy formulation that lends clarity and helps understand the broader policy vision. In this context, it was crucial to have drafts of the associated policy documents also in the public domain along with the proposed amendments. This would have helped to fully understand the policy direction, long-term objectives and the possible alternatives that have been considered for dealing with the potential implementation challenges.

However, though the amendment relies on the national policies to deal with several important issues, proposed changes to the same are not in public domain. This makes it difficult to understand how exactly the implementation is envisaged. It also puts serious limitations on undertaking a comprehensive view of the broader scheme of things proposed by the amendment. Based on such constrained analysis and mere reading of the Act along with the statement of objects, the reasons and objectives for the amendment seem to be as follows:

- 1. Carriage and Content separation: This is the key structural change, which the draft amendment is proposing. The objective could be to promote efficiency and provide more choice to consumers. However, the current Act allows distribution open access, which is a way of providing a similar choice to consumers, though initially limited to large consumers having connected load of 1 MW and above. In spite of this provision and directions, policies from the Centre, over the decade of the 2003 Act implementation, most states have shied away from formalising such open access. This is largely because the distribution companies lose significant revenue (and hence cross-subsidy) when such large consumers leave. By introducing multiple supply licensees, the amendment tries to codify this provision and give choice of supplier to a larger category of consumers, who may have a lower connected load than the earlier threshold of 1 MW. However, the disincentive for existing licensees on account of loss of cross-subsidy remains and it is not clear how the same will be addressed.
- 2. Rationalisation of tariff determination: As mentioned earlier, the distribution sector is in deep financial crisis and tariff not being reflective of costs is ascribed to be the key reason for this. The Central Government, through a directive issued by the Appellate Tribunal, has tried to enforce regular tariff revision by all states. However, in spite of such diktat, compliance was only on paper without resulting in any significant changes. Perhaps, based on this experience, the amendment goes a step further by suggesting a mandate for

elimination of revenue gaps, adjustments of fuel related costs on a regular basis, suo-motu tariff revision in absence of timely petitions being filed and so on.

- 3. Promotion of renewable energy: This has been one of the objectives as well as a one of the stated functions of the regulatory commissions, under the current Act. It is further underlined in the amendment through several additional provisions such as, the mandate for a separate renewable energy policy, new renewable energy generation obligations, exemption from cross-subsidy surcharge for open access based on renewable energy sources, exemption from licencing for generating and supplying renewable energy, promotion of net metering and decentralized distributed generation, stronger penalties for non-compliance of renewable energy purchase obligations and so on.
- 4. **Maintenance of grid security:** Anticipating greater role of competition and multiplicity of supply options, the amendment aims at enforcing greater discipline in grid management. Introducing ancillary services, creating spinning reserves, stronger penalties in case of violation of grid code are examples of provisions aimed towards this objective.
- 5. Functioning of Regulatory Commissions: The regulatory Commission is the key institution responsible for implementation of the Act provisions as well as safeguarding consumer interest. The amendment proposes major changes in selection process of the commission members and chairperson, term of office, mandates appointment of consumer representatives, places specific timelines for the period within which the commission should deal with individual cases while also putting in place mechanism for performance review of the commissions.

3. Comments and suggestions:

In the context of the various challenges enumerated in the first section of this commentary, the most important concern is, how the proposed changes would help to alleviate, if not entirely eliminate, most of these challenges. Secondly, it also needs to be assessed whether the proposed changes have enough provisions and legal safeguards to ensure at least the stated objectives of the amendment are met. With these twin objectives, this analysis tries to assess the proposed changes in the following major thrust areas of the amendment:

- Carriage and Content separation
- Open Access, market and maintenance of grid security
- Tariff Determination
- Renewable Energy
- Functioning of Institutions

In the subsequent paragraphs, specific issues along with comments and suggestions regarding each of the above heads are detailed out. These comments are based on following guiding principles, which we believe should be followed while proposing such changes:

- Translating 'Power for All' objective into implementable action plan which ensures access to quality affordable supply for poor and newly electrified households
- Mitigating the possibility of cherry picking of high paying consumers by new supply licensees

- Protecting interests of small consumers by ensuring they alone do not bear the burden arising out of these changes and are not subjected to sudden tariff shocks
- Promoting energy efficiency along with renewable energy
- Ensuring institutional autonomy of the regulatory commissions
- Avoiding needless complexity and thus reducing scope for misinterpretation and unnecessary litigation.

3.1. Carriage and content separation

1. Major changes being proposed:

- a. As per the proposed scheme, post amendment, each area of distribution (as presently, many states have multiple distribution licensees) will have a single distribution licensee responsible for wires and metering, and multiple supply licensees, responsible for supply and billing.
- b. For this change to take place, the state government in consultation with the Centre, will have to implement a transfer scheme and create an intermediary company and incumbent supply licensee(s).
- c. The Centre will specify the functions of the intermediary company, in which all the existing power purchase contracts will be vested and may continue to remain so.
- d. The universal supply obligation will rest with the incumbent supply licensee(s) and subsequent supply licensees will have obligation to supply progressively based on 'load factor', which is to be prescribed by the Central Government.
- e. The amendment also states that at least one of the supply licensees has to be a Government owned company.
- f. The licence term for licence granted under Section 14 has been made flexible and can extend beyond the 25 years limit present in the current Act.

2. Implications:

- a. As per the new scheme of things, the distribution licensee is responsible for the wires business as well as metering, balancing and settlement. In order to accurately measure the quantum of energy injected by all supply licensees and the quantum of actual sales, including those to unmetered consumers, elaborate metering infrastructure will be needed which is currently not present. In this context, the issue of distribution loss estimation becomes extremely critical and in absence of reliable sales data and metering infrastructure, it will not be possible to accurately measure how much power was actually injected by all supply licensees and how much was actually sold. Unfortunately, in spite of more than a decade long insistence in this regard, till date nothing has been done in terms of implementation on ground. Most states have not metered all the 11 kV feeders and even where it is done, reliable technology such as AMR metering has not been used. It is not clear how proposing a structure, which relies even more on the existence of accurate and reliable metering infrastructure, could solve the issue of lack of its presence.
- b. The incumbent supply licensee, being vested with universal supply obligation will become the default supplier for agriculture and rural low-tension

- consumers. As such, it will be financially impacted most, on account of migration of high paying consumers to new supply licensees and open access.
- c. Moreover, as per proposed amendments, it seems subsequent supply licensees do not have to pay any cross subsidy surcharge and as such the incumbent supply licensee will not be compensated for loss in sales if high paying consumers are migrating to other supply licensees.
- d. Even though, the state government is expected to execute the process of carriage and content separation, it has a little say in determining the terms and conditions for the same. For example, even though the state-owned supply licensee will suffer from the most adverse financial consequences of this change, it is not the state government, but the central government that will decide the functions of the intermediary company, in which all existing power purchase contracts also be vested. Thereby, it is the central government, which may decide the allocation of existing power purchase contracts among supply licensees. This imbalance in vesting responsibilities and powers with respect to carriage and content separation between the Centre and the states, coupled with possible adverse financial consequences and increased complexity, may deter states from implementing the new transfer scheme within a year's timeframe, as proposed by this amendment. It is important to note that to formalize the unbundling of the state electricity board, even the prevailing act mandated states to implement similar transfer schemes, which has not been done by any state, except Gujarat.

3. Key issues and suggestions:

- a. Area of supply definition: The relationship of the area of supply with the area of distribution is not clear. One interpretation could be that the area of supply as defined for incumbent supply licensees(s) will set the precedent for subsequent supply licensees' areas of supply (section 51A(2)). However, there is ambiguity regarding whether this would imply that the state government could decide to have multiple incumbent supply licensees as well. This further makes it difficult to understand at what level new supply licensees will emerge and whether they will cater to a given geographical area or a prescribed load profile or a prescribed load profile within a given geographical area. It is crucial to clarify this important issue in a clear and unambiguous manner, as the framework for competition rests on it and it also has implications for cherry picking and universal supply obligation. Therefore, it is also important to ensure that all supply licensees have identical supply areas.
- b. Balancing and settlement to be done by distribution licensee: The distribution licensee will have to do the balancing of input energy, sales and losses, for which it will need reliable and accurate data on all three accounts. In case of any mismatch in the injected energy and the reported distribution losses and sales, the (mostly state owned) distribution licensee will have to suffer. Further, the distribution licensees and the incumbent supply licensees would mostly share a common ownership, which in-turn may create a conflict of interest or hurdles in

ensuring that the settlement mechanism is implemented in an objective and impartial manner. This issue becomes even more serious in light of the financial implications it can impose on the mostly state owned distribution licensees. The proposed amendment does not explicitly deal with these issues.

- Requirement of supply licensee being a government owned company: The proviso to section 14 states that one of the supply licensees shall be a Government controlled company. This creates important distinction between supply areas under publicly owned and privately owned distribution company licence areas. In case of areas such as Mumbai, Delhi, Kolkata, Surat and Ahmedabad etc., which are currently under privately owned distribution licensees, the government will have to proactively take up the responsibility of also being a supply licensee, and till such time that the government acts, these areas may remain private monopolies. Another possibility of the manner in which this provision may pan out is that a government owned company may be created as the incumbent supply licensee and hence, be made responsible for universal supply obligation. In this case, the privately owned company may choose to keep the wires business and just be a subsequent supply licensee which caters to only a certain load profile and is thus absolved of universal supply obligation. This provision is not only unfair to publicly owned companies, but it is also fundamentally at odds with the letter and spirit of the amendment objectives and the faith shown in competition and private ownership, and needs to be corrected.
- d. Railways, Metro and SEZs are deemed licensees: Proposed amendment of section 14 makes these entities deemed licensees without specifying whether they will be deemed as supply or distribution licensees and the definition of their licence areas. The same should be clearly and unambiguously stated.
- e. Supply Obligation: As per Section 51A, subsequent supply licensees have the obligation to supply based on 'load factor', which is to be prescribed by the Central Government. However, the term is not defined in the act and generally refers to ratio of the average load to the peak load in a specified time period. This can be applied to any consumer category and thus makes the interpretation vague and ambiguous. Instead, contract demand could be used which is a more specific measure.
- f. Input based distribution Franchisees: It is not clear if new franchisees for distribution or supply can be set-up under the new scheme of things [Section 2(27)]. There is no rationale for letting supply licensees appoint franchisees, as these licensees have only the duty to supply electricity and have a deemed licence for trading. Hence, this ambiguity should be removed and supply licensees should not be allowed to appoint any franchisees. Further, the amendment proposes to continue the arrangement with existing franchisees as per section 14 (d) but important issues such as which supply tariff will be applicable to franchisee consumers and whether the franchisee revenue should accrue to incumbent supply licensee or the distribution licensee are not clearly dealt with.

- g. <u>Term of licence</u>: Unlike the prevailing act, the licence term as per the amendment can be more than 25 years (Section 15 clause 8). The benefits to consumers, of such discretion given to the regulatory commission are not apparent. In light of fast paced changes taking place in the renewable energy segment, energy storage and new energy technologies, such a provision may in fact lock-in consumers and regulators with obsolete technologies and uneconomical business models and hence is not desirable and should be removed.
- h. Revocation of licence by State Government: According to Section 59A, of the proposed amendment, the state government can recommend the revocation of licence based on a complaint filed before them for not discharging functions assigned by the Act including those with respect to standards of performance. This provision is intended to increase accountability of licensees but any person can currently apply for revocation of licence before the commission on similar grounds under Section 19 of the Act. Such a provision, where the state government can recommend revocation provides undue power to the State Government and seems unnecessary given that similar recourse is present under the existing provisions.

3.2 Open access, markets and maintenance of grid security

1. Major changes being proposed:

- a. All 1MW+ consumers have choice to select supplier under mutually agreed tariffs and conditions as per Section 49, thus making them deemed open access consumers. Additionally, the section 42 requires the state Commission to specify the extent of open access for subsequent phases, presumably for consumers with connected load of less than 1 MW.
- b. The regulatory commission can only determine wheeling charge and other surcharges, but not the tariff of open access consumers.
- c. Cross subsidy surcharge will be determined to meet the cross subsidy requirement in the area of supply.
- d. Cross-subsidy surcharge is applicable only in case of open access and not in case of migration of consumers across supply licensees.
- e. The regulatory commission is also supposed to promote forward and futures contract as per Central Government guidelines and policies.

2. Key issues and suggestions:

a. <u>Eligibility</u>: The section 86 requires state commissions to only determine wheeling and surcharges for open access eligible consumers under section 42 but does not mention anything about open access eligible consumers as per section 49. This can create unnecessary confusion and litigation and hence needs to be clearly dealt with. Therefore, to ensure uniform treatment for all open access eligible consumers, and to eliminate possibility of multiple interpretations, all terms and conditions pertaining to open access must be specified under one section in a clear and unambiguous manner.

- b. <u>Cross-subsidy surcharge (CSS):</u> Loss of a large section of high paying consumers due to open access can impose serious financial burden on the incumbent supply licensee, on account of loss of cross-subsidy. However, the proposed act does not clearly specify that the revenue from cross-subsidy surcharge will accrue to the incumbent supply licensee as cross subsidy is specified for area of supply and not the licensee (Section 42 clause 3). This needs to be clearly stated.
- c. Forward and future contracts: Given the present state of flux in the sector, uncertainty regarding power availability and demand, absence of crucial data in public domain regarding intra-state trading, limited capacity and general lack of interest of the state regulatory commissions in dealing with issues related to power purchase planning, introducing futures can result in increased volatility and uncertainty, which speculators may take advantage of. Therefore, it is evident that the sector is not prepared to introduce such complex instruments such as futures contracts. Till such appropriate time, only forward contracts i.e. Non-Transferable Specific Delivery should be allowed, to help mitigate volumetric and price risk.
- d. Better monitoring of intra-state trade: Given the proliferation of supply licensees and open access consumers that is expected as a result of the amendment, it is crucial to monitor and mandate public sharing of all important and relevant intra-state market transactions. Further, facilitate transparent analysis of all market transactions, the act should also mandate setting up of market surveillance committees at both centre and state level, which should comprise of academics, independent researchers, civil society representatives as well as representatives of licensees and grid operators.
- a. <u>Grid security:</u> Sections 29(6) and 33(5), which deal with the issue of non-compliance with the directions of gird operator, specify penalties only for licensees and seem to exempt open access consumers and generators. This of course is not appropriate as all entities that are a part of the grid system need respect the grid code and all the conditions and directions stipulated by the grid operator. These sections therefore should be corrected to including all entities that are a part of the grid system.

3.3 Tariff Determination

1. Major changes being proposed:

- The state regulatory commission will determine tariff of all the supply and distribution licensees, including the power purchase done by the supply licensees.
- b. The state commission is expected to set category wise ceiling tariffs for supply licensees and to attract new consumers; the licensees are free to sell power at rates lower than the ceiling.
- c. The tariff determination for all licensees should provide for recovery of all prudent costs and revenue gaps are to be eliminated.

- d. As mentioned before, in case of open access the commission will determine only the wheeling charges and cross-subsidy surcharge. No cross-subsidy surcharge would be applicable for migration across supply licensees.
- e. All state commissions are mandated to follow the national tariff policy formulated by the central government, in consultation with state governments.

2. Key issues and suggestions:

- a. <u>Lack of clear principles for tariff determination</u>: The supply licensees are given full assurance of recovery of all prudent costs without any revenue gaps. However, they are free to enter into any bilateral contracts with open access consumers as well as to offer tariff lower than ceiling level for certain class of consumers. Under such circumstances, there needs to be clear principles and provisions to protect the interests of small consumers. In this regard, the following principles need to be clearly stated in the section 61 of the act:
 - i. Tariff for all the regulated consumers shall be computed based on the least cost first principle and the actual merit order despatch of the capacity contracted by the incumbent supply licensee.
 - ii. Only after meeting the entire demand of the regulated consumers, the supply licensee should be allowed to sell surplus, if any, to open access and or other such market based entities.
 - iii. No supply licensee should be allowed to pass through to its regulated consumers any adverse impact arising out of its transactions with open access consumers or other such market based entities.
 - iv. Cost of ancillary services must be determined by the appropriate commission and must not be market determined.
 - v. While determining the cost for supply to be provided by the provider of last resort, factors such as quantum, period and duration of supply, provision of ancillary services and so on, should also be considered.
- b. Tariff determination for supply licensee: The sub-section (1) of Section 51D states: "(1) Subject to the provisions of this section, the prices to be charged by a supply licensee for the supply of electricity by him in pursuance of section 51B shall be in accordance with such tariffs fixed from time-to-time and conditions of his licence." The clause (a) under sub-section (2) of the same section states: "The charges for electricity supplied by a supply licensee in the area of supply shall be—(a) fixed in accordance with the methods and the principles as may be specified by the concerned State Commission;" Further, the sub-section (5) of the same section also states: "(5) The charges fixed by a supply licensee shall be market determined:" To add further to this confusion, section 61(1) which principles of tariff determination states: "(d) safeguarding of specifies consumers' interest and at the same time, recovery of the cost of electricity by the licensees without any revenue deficit in the context of the tariff determined under section 62:" Section 62 in turn states that: "(2) The tariff determined by the Appropriate Commission for a licensee shall provide for recovery of all prudent costs of the licensee approved by the Appropriate Commission in the monthly bills during the tariff period through an appropriate price adjustment formula including wherever applicable the fuel, power purchase and

procurement price surcharge formula as may be specified in the Tariff Policy." All these sections and clauses can be construed to mean that the tariff of all supply licensees and not just the incumbent supply licensee, will effectively be on 'cost plus' basis and not market determined. Apart from being totally in contradiction to the proposed amendment's aims and objectives, this issue is also very problematic in light of the flexibility allowed to the subsequent supply licensees in terms of catering to only a limited segment of consumers based on load profile and not having the burden of universal supply obligation. This in turn could mean that these supply licensees can recover any and all risks and hence the losses that they may incur on account of their market transactions. Given the gravity of the consequences that can result out of such ambiguous provisions, it is of utmost importance to remove all such provisions, which allow the supply licensees any assurance regarding recovery of all prudent costs. Except for any force majeure or change in law event, nature and scope for which should be clearly defined in the act, the supply licensees should not be provided any regulatory assurance regarding cost recovery. Only the incumbent supply licensee that has universal supply obligation and which caters to all the subsidized and non-contestable consumers, should be given the certainty of recovery of all the prudent costs.

c. <u>Ceiling tariff:</u> The proviso to section 51D (5) states: "Provided that the <u>Appropriate Commission shall determine a ceiling charge based on the normative costs and standards of performance</u>, subject to sub-section (3) and sub-section (4) of section 62.

Provided further that the supply licensee shall not charge any amount higher than the ceiling charge as applicable to all consumers in a category." The next sub-section (6) under the same section 51D states: "Notwithstanding anything contained in this Act the supply licensee may, with the prior approval of the Appropriate Commission, charge any amount higher than the ceiling charge as may be mutually agreed with any consumer." Thereafter, the proviso to subsection (1) of section 62 states: "Provided that the tariff determined for retail sale of electricity shall be the ceiling tariff for the respective categories of consumers, the supply licensee shall be entitled to charge any consumer category at an amount lesser than the ceiling tariff, subject to sub-section (3) and also, without in any way affecting the obligation of a supply licensee to pay the intermediary company, the transmission licensee, the distribution licensee and generating company, as the case may be." The requirement of the ceiling to be such that it allows the supply licensee to pay all its dues, defeats the point of it being set on normative basis. Further, it is not clear whether the ceiling would be decided for an area of supply or for each supply licence or for a load factor/load profile. Also, the present provisions allow supply licensees to sell power at rates both below and above the ceiling, rendering it as an ineffective tool for improving efficiency. There is no reason to explicitly allow sale of power at rates higher than the ceiling tariff even when mutually agreed by a particular consumer, as it goes against the very definition of a ceiling. Further, on account of fuel cost increase or any such reason, if a supply licensee incurs losses after declaring tariffs lower the ceiling, the same should not be allowed to be passed on to the regulated consumers.

- d. Retail sale definition: The sections 51D and 62 spell out provisions regarding how the state commission should decide tariff for retail sale of electricity by a supply licensee. However, the term 'retail sale' itself is not defined in the act. Clearly, this can create lot of confusion and can lead to a lot of avoidable litigation. Hence, the term 'retail sale' should be clearly and unambiguously defined in the act. In fact all the complexity and ambiguity that is arising on account of having tariff related provisions under multiple sections such as section 51 and 62 can be eliminated by clearly defining all such provisions under the section 62 alone and there also clearly making a distinction between terms and conditions for tariff determination of incumbent supply licensee and terms for tariff that can be charged by the other supply licensees. While doing so, following factors should be considered.
 - The consumer category wise ceiling tariff for an area of supply should be determined based on the tariff to be charged by the incumbent supply licensee.
 - ii. The commission shall not determine tariffs of any other supply licensees and the same should be based on market principles.
 - iii. Similarly, there should be no regulatory certainty provided to supply licensees for all the costs they incur. This means that if a supply licensee incurs losses while selling power at rates lesser than the ceiling tariff to any given consumer category, these losses cannot be recovered from other regulated consumers.
 - iv. No sale of power at rates higher than the ceiling tariff should be allowed, even on account of fuel adjustment cost. This is extremely essential as the regulators have totally failed in ensuring prudency in power procurement and the multiplicity of buy and sell options created in the proposed framework will make it even harder for the regulators to do this in case of supply licensees. As such, there is grave danger of fuel adjustment cost becoming a mechanism for pass through of undue risks taken by supply licensees for winning certain category of consumers.
- e. <u>Cross-subsidy surcharge:</u> Presently, this charge is applicable only for open access consumers and not in case of migration of consumers amongst supply licensees. As far as the incumbent supply licensee is concerned, any loss of sales to consumers whose tariff is higher than its average cost of supply, will result in loss of cross-subsidy and hence will increase tariffs for other small and subsidized consumers. Therefore, the reasons behind safeguarding loss of cross-subsidy in case of open access but not in case of loss of sales to other supply licensee are not clear, as the consequences of both these developments are the same. Also it is not fair to the incumbent supply licensee, whose regulated small consumers will have to bear the entire burden arising out of such loss of sales. It is not clear how the proposed amendment envisages dealing with such financial loss. Further, the incumbent supply licensee will also have universal supply obligation and based on how load factor is defined and interpreted, it may be the only supplier for small low-tension consumers, agricultural consumers and consumers in rural areas. Given this, it is important to assign a cross-subsidy

surcharge, in case of migration of consumers from incumbent supply licensee to any other supply licensee. While determining such cross-subsidy surcharge any losses on account of transactions of the incumbent supply licensees with open access consumers or market based entities should not be considered.

f. National tariff policy: By its very definition, a policy should be a guiding principle, which defines the overall direction for implementation. However, considering the vast differences amongst states in size, geography, economic conditions, access penetration, health of distribution sector, etc. it is not prudent to impose the same rule for all. States will need a good measure of flexibility in terms of deciding the pace and extent of changes to be introduced. Further, electricity being a concurrent subject, such flexibility is enshrined in the constitution itself. Apart from the questionable legal validity of imposing the tariff policy to be binding on all state commissions, it is not a desirable provision for the above-mentioned reasons and hence should be removed.

3.4 Renewable energy related provisions

1. Major changes being proposed:

- a. New definitions of "decentralised distributed generation", "obligated entity", "renewable energy sources", and "Renewable Energy Service Company", "Smart Grid" have been proposed.
- b. As per the Section 3, a new National Renewable Energy Policy is to be formulated by the central government.
- c. Part 4 of Section 3 also allows for the central government to "notify policies and adopt measures for promotion of Renewable Energy Generation including through tax rebates, generation linked incentive, creation of national renewable energy fund, development of renewable industry and for effective implementation and enforcement of such measures."
- d. Section 4 now mandates the central government to "notify a national policy for harnessing solar power and other forms of renewable energy to ensure electricity to un-electrified rural households and permitting stand alone systems"
- e. The section 7 introduces what is termed as 'Renewable Generation Obligation' (RGO) of at least 10% on new thermal generation. Therefore, all new thermal generation plants will have to install a minimum renewable generation capacity equivalent to 10% of their installed thermal capacity. Old thermal power plants may also be allowed to set up such renewable capacity but only with the concurrence of the power procurers under the existing PPA, wherein such energy shall be bundled and passed through by the regulatory commission.
- f. Proviso 11 of section 14 waives the licence requirement for a person who intends to generate and supply electricity from renewable energy sources.
- g. Sections 29(6) and 33(5), which deals with the issue of non-compliance with the directions of gird operator specifies for penalties for renewable energy generators, as 10% of the penalty for non-renewable energy generators.
- h. For open access based on renewable energy sources, no cross-subsidy surcharge would be levied as per section 42 (4).

- i. Regulatory Commissions as per section 86(c) are now additionally mandated to promote Smart grid, net metering, ancillary services and decentralised distributed generation.
- j. Section 142, which deals with noncompliance of directions by the Appropriate Commission now specifically mentions penalties for non-compliance with Renewable Purchase Obligation or Renewable Generation Obligation.

2. Key issues and suggestions:

- a. Renewable energy policy: This is welcome step, as it provides an opportunity to define a coherent policy vision for the development of the renewable energy sector. The policy should:
 - i. develop clear operational principles of sharing the national renewable energy targets (such as 100 GW solar by 2022 and additional 60 GW wind by 2022) amongst all obligated entities in an equitable manner which takes into account the state specific constraints such as technical capability of the grid, resource base, paying ability etc.
 - ii. outline principles of the equitable sharing of incremental renewable energy costs until generation cost parity is achieved.
 - iii. facilitate least cost procurement of renewables through mechanisms such as reverse competitive bidding, which has been very successful in the solar power procurement.
 - iv. specify operational details of the newly proposed RE fund (under section 3(4)) and detail promotional measures expected under section 3(4).
 - v. facilitate operationalizing net metering and promotion of DDG, esp. for self-consumption.
 - vi. promote inclusive RE project development by addressing local environmental and social issues, especially w.r.t to land use.
- b. Renewable Generation Obligation: The proposed RGO is only an obligation on thermal power plants to set up a minimum of 10% of renewable energy capacity, which in energy terms would amount to only ~2.5% of new energy generation and hence would only marginally add to supply. Additionally,the obligation is to set up the capacity; there is no obligation to purchase that power. Renewable capacity can come up in a large way through the open access route especially with the waiver of CSS and stringent penalties for RPO noncompliance under section 142. Hence it is not necessary to have an additional incentive via RGO. Instead it is best for SERCs to specify an RPO and leave it to the obligated entities to best plan for meeting the same, either through setting up their own plants, purchasing RE power through PPA, through markets or through the REC route.
- c. <u>Spinning reserves</u>: Section 7(1) notes that any generating company may be required to build and maintain a spinning reserve of some capacity while the Statement of Objects and Reasons in section 5(b) mentions that only RE based plants will need to set up spinning reserve. This needs clarification. Indeed the

- need for spinning reserves is at the grid system level and hence should not be mandated for any particular generation plants.
- d. Renewable generation based generation and supply: The requirement of licence for generation and supply of electricity from renewable sources has been waived off (proviso 11, section 14). Hence it is unclear what this entity would be in a legal and regulatory sense if it is not a supply licensee, which in turn may create metering and billing issues and may result in ambiguities regarding such operational obligations and functions/duties. Since the aim is to promote renewable energy based generation, the same can be achieved by treating all consumers who source power from renewable energy sources as deemed open access consumers (irrespective of contracted demand etc.). This might be a better provision as along with promoting renewables it will also ensure that the entities undertaking supply functions are held responsible for their due functions and obligations. Such a provision will also be useful for small scale Decentralized Distributed Generation based on rooftop solar PV plants which could be owned and operated by a third party.
- e. Renewable purchase obligations: This is an existing provision under section 86 (1) (e) but now has been slightly modified to now have the SERC specify the percentage of electricity from renewable sources in the area of supply licensee and not the distribution licensee. There is a new definition of "obligated entity" which "means the distribution licensee or the consumer owning the captive power plant or the open access consumer, as the case may be, which is mandated under section 86 of the Act in order to procure electricity from or any market instrument representing the renewable energy sources." Surprisingly section 86 mentions supply licensee while the definition of obligated entity mentions distribution licensee and more so, the word obligated entity does not even come in the wording of section 86 (1) (e). This aspect needs clarification. Most existing distribution licensees, OA or Captive consumers have not complied with existing RPOs. In an effort to improve compliance with this requirement, penalties in case of such non-compliance have been specifically mentioned under section 142 and have been significantly increased. However, this is a fixed penalty or 1 crore for each contravention, not linked to the extent of non-compliance and hence may not sufficiently deter non-compliance. Instead, a penalty based on average cost of renewable generation applied on the total quantum of non-complied purchase obligation, could be better mechanism to meet intended obligation. Such penalties are already specified by most SERCs under their RPO regulations but have hardly been implemented. There is also lack of clarity regarding whether the penalty for RPO noncompliance under section 142 would be in addition to the penalties specified by the SERCs under their own regulations or that would be the only penalty to be levied. Presently, this matter is under litigation before the appellate tribunal and judgement is reserved. Because of this confusion, the penalties levied presently are not helping in promoting renewable energy generation or sale. This can be changed using the following ways:
 - i. The central commission can be made responsible for designing the penalty structure, which the state commissions will have to follow and

- implement, just as they follow the CERC prescribed escalation index and so on.
- ii. All entities, including captive and open access consumers, and not just licensees should be required to fulfil RPOs.
- iii. The Central Commission should also form a national level renewable energy fund to which all the money collected as a part of the renewable purchase or generation related penalties collected from all entities shall be added.
- iv. Such central fund can be utilised to promote renewable energy generation and supply based on criteria to be defined under the national renewable policy.
- f. Bidding based price discovery: With regard to renewable power pricing, presently most states procure wind power through a feed in tariff while solar power is procured through reverse competitive bidding. Both, the National Tariff Policy and National Electricity Policy recommend competitive bidding based price discovery but leave it to the commissions to determine appropriate time to move to this process. There is ambiguity due to the unclear timeline to implement bidding based price discovery coupled with the lack of clarity over whether bidding guidelines are needed under Section 63. However, most states are doing solar PV based reverse bidding in spite of lack of bidding guidelines as per section 63 for the same. Such un-necessary ambiguity regarding when and where bidding based tariff discovery approach is to be followed should be removed. A transparent price discovery mechanism of reverse competitive bidding, especially for mature renewable technologies such as wind, should be put in place to instil public confidence, and the possible price reduction may further help increase targets and reduce utility resistance.
- g. Renewable Energy Service Company (RESCO): RESCO has been defined in the Act, however that term has not been used anywhere in the Act itself. The waiving of the need for a licensee for generating and supplying renewable energy (Section 14, proviso 11) could possibly have been to facilitate such RESCOs operating and selling distributed renewable power through small scale plants. This needs further clarification.

3.5 Functioning of Institutions

2. Major changes being proposed:

- a. Changes in selection committee: The selection committee for appointing a state regulatory commission member or chairperson to include chairperson or the managing director of a Public Financial Institution.
- b. Delays and vacancies: In case of delay in the constitution of the selection committee for more than two months or in appointment of the chairperson or members of the State Commission for more than five months, the Central Government is to nominate one officer from the Central Electricity Authority, not below the rank of Chief Engineer as ex-officio member. The ex-officio

- member is to continue discharging functions of the member, till the time an appointment is made.
- c. Term of office: Term of office for state regulatory commission members and chairperson is proposed to be reduced from 5 years to 3 years, but reappointment is also allowed.
- d. Review of the functioning of regulatory commissions: The Forum of Regulators (FoR) will periodically set up a committee to review the performance of a regulatory commission. The functions and terms of reference for the committee will be prescribed by the Central Government. On the basis of this committee's report, a member of the said commission could also be removed from office.

3. Key issues and suggestions:

- a. <u>Selection committee composition</u>: The distribution sector is currently in doldrums on account of high level of accumulated financial losses. The banking sector has played a big role in aggravating this crisis by continuing to lend to distribution companies, which were openly and repeatedly flouting regulatory norms. Further, the banks, especially public financial institutions, have also financed many generation projects, which took enormous risks by quoting very low tariff (at times fixed for 25 years), based on highly risky fuel arrangements, to simply win contracts and are into litigation post bidding to revise such tariff. Here again, the banking sector utterly failed in its due-diligence in assessing such projects and has been seeking a bailout. Given the complicity of the banking sector in such serious issues concerning the sector functioning, it is not the least desirable that it should play a role in choosing the sector regulator, as it would clearly be a conflict of interest and certainly is not a good governance measure. If the intent is to make the selection process more objective and free of political influence, following steps can be taken to achieve the same:
 - i. Composition of committee for the selection of the members of the state commission can be as follows:
 - 1. A serving High Court judge nominated by the Chief Justice of the High Court should head the committee,
 - 2. The other members of the committee should include the Chairman of the CERC, the Director of one of the IITs and the chairman of the Central Administrative Tribunal in the State.
 - 3. The State Power Secretary would be the convener of the committee.
 - ii. Composition of committee for the selection of the members of the CERC can be as follows:
 - 1. A serving judge of the Supreme Court should head the selection committee
 - 2. Other members should include the chairman of the UPSC, the chairman of Central Administrative Tribunal at the national level and a Director of IIT as members.
 - 3. Secretary (Power) in Government of India should be its convener.

Such composition of the committee can be more effective in ensuring that the selection process happens in a fair and objective manner.

- b. Selection committee functioning: Given that the institutional autonomy depends up on the process of appointment and the number of governance issues that have been brought to light in this regard in the recent past, it is recommended that the selection committee should be mandated to provide detail reasons for recommendation of candidates, which should be made available in the public domain. Further, the selection committee shall be a standing committee so that any delay in constituting it would not delay the selection process. It shall be the responsibility of the convener of the committee to refer vacancies at least 6 months in advance.
- c. <u>Tenure of Commission members:</u> Given the complexity and uniqueness of every state's power sector and the instruments used by the commission in order to regulate various utilities, a three year period may not provide sufficient time to the Commission members to bring about any constructive changes. This coupled with the possibility of re-appointment, will further erode autonomy and should not be permitted at all. Instead a five-year term without any possibility of reappointment to the same state commission would be a far better approach in our opinion.
- d. Measures to prevent delays in appointment: Deputation of CEA officers as members of the commission may tackle the issue of vacancies but not address the issue of State Government's attempts at influencing the autonomy of the regulatory institution via a delayed appointment process. Instead, in case of vacancies in the State Regulatory Commissions, the selection committee for the central commission should be required to recommend two names and the State Government should be bound to appoint one of the recommended candidates. Further, this provision should also apply to vacancies concerning the commission chairperson and not just the members. Only such a strong provision may act as a serious deterrent for states to avoid delays in appointing the commission members or chairperson.
- e. <u>Ensuring independence</u>: Since the inception of regulatory commissions in the electricity sector, almost 70% of Chairmen of State Electricity Regulatory Commissions were previously members of the state bureaucracy and almost half of the members were previously with regulated utilities. Given the path dependency, there is a high risk of regulatory capture. To allay this risk and still benefit from the knowledge and experience of people who have worked in the sector at state level, the following provision can be introduced.
 - No officer of a regulated utility or the State government should be considered for the post of member or chairperson in the same State commission for at least a period of 2 years following resignation or retirement.

Such provision will also help the commissions to benefit from different state experiences and a wider pool of experts.

f. Review of regulatory commission: The proposal of a FoR committee reviewing the functioning of regulatory commission is not circumspect, as FoR is composed of members of the very institution which it is set to review, creating

potential conflict of interest. Moreover, such a review may not help in improving the functioning of all commissions, as focus could be only on the non-performing ones. This is especially pertinent as it is not clear as to what would be construed as an example of non-performance. The emphasis on non-performance may only highlight actions but may not be helpful to deal with inaction in crucial areas. Further, the proposal is also to use review as a basis for removal of a member, making it a very adversarial process. However, removal on the basis of such review, especially of only members and not chairpersons, may affect institutional autonomy and hence, is not desirable. Alternatively, if the objective of the review is to improve functioning of the institution as a whole, the same can be done in other ways such as the following:

- i. The Appellate tribunal can periodically appoint a panel; say once every two years to review the functioning of the central and all state commissions. By reviewing all commissions, contrasts and differences in performance and best practices can be highlighted, which can greatly help the sector at large.
- ii. Such a panel should be composed of sector experts, think tanks, academics, civil society representatives, etc. and there must not be any conflict of interest.
- iii. The panel should publish the terms of reference for the review and seek public comments on the same. Similarly, the findings and recommendations of the panel should also be finalised only after due public consultation.
- iv. The final review report must be made public and should always be available on the FOR and the commissions' websites.
- v. Apart from providing comparative analysis of the various commissions functioning and decision making, the report should record specific observations and recommendations, if any, which shall be supported with adequate data and analysis.
- vi. In case the review finds sufficiently strong reasons, it can recommend removal of a state or central commission member or chairperson, based on detail documentation of the evidence and analysis that compelled it to arrive at such a severe conclusion.
- vii. If any adverse observations are noted in the final report submitted by the review panel, the tribunal should be entitled to initiate a suo-motu process based on such findings, in which the concerned commission shall have a right to participate. Based on this process, the tribunal can issue specific directions to the concerned state commission, including removal of a member or chairperson, which shall be binding on said state or central commission.

Since the aim is to improve the commission's functioning in general, we feel this broader approach which safeguards autonomy while improving accountability, is better than a selective one aimed at few non-performing commissions, chosen in an ad-hoc manner.

g. <u>Broader mandate for action in crucial areas:</u> Although universal electricity access has been a stated objective of the national electricity policy, there is no

clear mandate for the same to the state commission. Similarly, energy efficiency which is the least cost option for improving supply availability often remains neglected. To ensure action in such crucial areas, the commission's mandate can be broadened in the following ways:

- i. To ensure implementation of the numerous state and central programs aimed at the objective of increasing access, supply and service quality, the state commission must be given a clear mandate to review all such projects being implemented in the state and hold appropriate agencies responsible for their functions.
- ii. Since the aim is to enable not just access, but also supply of reasonably good quality, the commission should actively monitor hours of supply to all households and especially, the rural areas.
- iii. Transparent and equitable distribution of shortages is a crucial area concerning supply availability and should be specifically mandated as most commissions have not taken proactive steps in this regard.
- iv. Given the large expenditure that has been incurred and about to be incurred on feeder separation schemes, the commissions must track supply hours to agriculture as well as non-agriculture rural consumers and publish reports detailing out load management, load relief, impact of scheme on loss estimation and in general explain with data and reasons as to how, if, such schemes have helped the state at large.
- Similar to renewable energy purchase obligations, specific targets for implementing energy efficiency programs/schemes should also be mandated.
- h. Improving public participation: The prevailing Act requires the commissions to undertake public consultation for important issues such as tariff and grant of licence. However, some Commissions have interpreted this term in the narrowest sense and have avoided undertaking any public hearings even in crucial areas of tariff determination. Such approach is highly undesirable, as it prevents the consumers and the society at large from participating in crucial sector process. In order to ensure accountability of the regulators to consumers whose interests they are supposed to protect, and to broaden the scope for public participation by providing a voice to consumers and citizens, the Act should be clearly define the term 'public hearing' and mandate the same for the following type of matters before any commission:
 - i. All tariff related matters concerning distribution, transmission, supply as well as retail sale of power
 - ii. All power purchase planning and procurement related matters
 - iii. Capital expenditure planning, execution and implementation related issues
 - iv. Issues pertaining to access, quality of supply and service and compliance with standards of performance.

Further, to enable representation of public and consumer interest, the commissions shall be required to appoint consumer representatives for all matters before it. The existing clause uses the non-mandatory term 'may' however the amendment states that in the same clause 'shall' should be

changed to 'may', thus creating confusion. This should be clarified and the clause shall be mandatory.

- i. Proceedings before Appropriate Commission: To further improve the regulatory functioning and accountability, the Act should clearly mandate that all orders passed by the commissions shall be reasoned orders. Presently, such requirement is under the conduct of business regulations of most commissions, but having it unambiguously stated in the Act can greatly help to hold the commissions accountable for their decisions. Further, the commissions should also be mandated to publish a statement of reasons along with any rules or regulations notified by it.
- j. Penalty for non-compliance with Section 142: This section empowers the commissions to penalize anyone for non-compliance with its orders, directions or rules or regulations. In the current Act, this section applies to any entity or person who is guilty of such non-compliance. However, the proposed amendments restrict its scope to only a generator or a licensee. Given the proliferation of open access consumers and market-based entities that is expected as a result of the proposed amendment, it would be highly inappropriate to restrict the scope of this important clause. This should therefore be changed to include any person who is guilty of non-compliance with any of the commission's orders, rules or regulations.

3.6 Issues not considered in the amendment

Apart from the number of issues listed above, there are several other provisions of the existing Act, which need further clarity or modification. Few of such issues, which are not addressed by the amendment as listed below.

1. Missing issues and suggestions:

- a. <u>Definitions</u>: The terms such as; 'Tariff', 'Point of supply', 'Single point connection', 'Bulk supply tariff', 'Merchant capacity', 'Village electrification', 'Household electrification', 'Net metering', 'Storage', 'Energy banking', 'Mustrun status', 'Renewable Energy Certificate' and so on are widely used in regulatory orders as well as in the rules and regulations but are not defined in the Act leading to multiple interpretations. All such terms need to be clearly defined in the Act to avoid misinterpretations and unnecessary litigation.
- b. Compliance with CGRF and Ombudsman orders: It is often observed that any order passed in favour of the consumer by the Consumer Grievance redressal Forum (CGRF) or the Ombudsman is often challenged by the utility before the High Court. Many times, though the High Court has not stayed the implementation of the CGRF or Ombudsman order, the utility stops payment of compensation, stating that the matter is before the Court. This forces the consumer to file cases under 142 and 146 before the Commission to claim the compensation that rightfully belongs to them. To avoid this hassle and

- deliberate delay, the Act should clearly state that unless, there is stay against a CGRF or Ombudsman order, the utility should be bound to act as per the same.
- c. Theft and unauthorised usage: Presently, the Act does not distinguish clearly between electricity theft (Section 135) and unauthorized use of electricity (Section 126). The confusion arises from the fact that even the section 135 uses the term 'unauthorized use'. This gives the inspecting officer the discretion to book even a section 126 offence under section 135. This ambiguity leads to harassment of many consumers who are not guilty of theft. The penalty clauses under section 135 are very stringent and should not be applicable for mere unauthorized usage. Hence, there is an urgent need to rectify this issue. To remove this ambiguity, the section 135 should deal strictly with theft of electricity alone and should not use the term 'unauthorized use'.
- d. Crucial data in public domain: The Act has mandated the Central Electricity Authority (CEA) to be the custodian of all the important data in the sector. Section 74 grants CEA the power to demand data and statistics from sector entities. In accordance with this mandate, CEA collates and publishes several reports and data. However, non-compliance with such data request by CEA to sector entities is not punishable under sections 142 or 146.Lack of such deterrence enables utilities and generators to routinely delay submission of crucial data to CEA. To avoid such situation, the mandate of CEA needs to be sharpened by clearly defining the consequences of such non-compliance. Further, to enable the CEA to develop a well-functioning data management Centre, it's power under section 177 need to be enhanced to include powers to formulate rules for collecting, collating and publishing crucial information regarding markets, exchanges, open access transactions, renewable energy generation and purchase, regulatory filings and so on.

Annexure: Section and clause-wise specific comments and suggestions

Section No	Proposed amendment	Prayas Comments
Section 2 - Definitions	(8) "Captive generating plant" means a power plant set up by any person to generate electricity primarily for his own use and includes a power plant set up by any cooperative society or association of persons for generating electricity for use of members of such cooperative society or association, on terms and conditions as may be prescribed by the Central Government from time to time;	Instead the definition should be worded as: "Captive generating plant" means a power plant set up by any person to generate electricity primarily for his own use and includes a power plant set up by any co-operative society or association of persons for generating electricity for use of members of such cooperative society or association, on terms and conditions as may be prescribed by the Central or State Government from time to time;
Section 2 - Definitions	(27) "franchisee" means a persons authorised by a distribution licensee to distribute electricity on its behalf in a particular area within his area of supply;	It should be clarified that this franchisee refers to the franchisees appointed by the distribution licensees, prior to separation of carriage and content.
Section 55 - Use, etc., of meters	(2) For proper accounting and audit in the generation, transmission and distribution or trading of electricity, the Authority may direct the installation of meters by a generating company or licensee at such stages of generation, transmission or distribution or trading of electricity and at such locations of generation, transmission or distribution or trading, as it may deem necessary.	(2) For proper accounting and audit in the generation, transmission and distribution or trading of electricity, the Authority may direct the installation of meters by a generating company or licensee at such stages of generation, transmission or distribution or trading of electricity and at such locations of generation, transmission or distribution or trading, as it may deem necessary.

	Provided that smart meters, as specified by the Authority, shall be installed at each stage for proper accounting and measurement for the purpose of metering and consumption from the point of generation up to such consumers who consume more than the quantity of electricity in a month as prescribed by the Central Government.	Provided that smart meters, as specified by the Authority, shall be installed at each stage for proper accounting and measurement for the purpose of metering and consumption from the point of generation up to such consumers who consume more than the quantity of electricity in a month as prescribed by the Central Government. Energy data from such consumers must be available in the public domain.
Section 66 - Developmen t of market	The Appropriate Commission shall endeavour to promote the development of a market (including trading and forward and futures contract) in power and a market for encouraging energy efficiency in power in such manner as may be specified and shall be guided by the National Electricity Policy, referred to in section 3, and other directions issued by the Central Government in the public interest from time to time	Given the present state of flux in the sector, uncertainty regarding power availability and demand, absence of crucial data in public domain regarding intra-state trading, limited capacity and general lack of interest of the state regulatory commissions in dealing with issues related to power purchase, introducing futures can result in increased volatility and uncertainty, which speculators may take advantage of. Therefore, it is evident that the sector is not prepared to introduce such complex instruments such as futures contracts. Hence the provision for the same should be removed from this clause.
Section 14 - Grant of License	(d) provisio 5 Provided also that the Railways as defined under the Indian Railways Act, 1989 and the Metro Rail Corporation established under the Metro Railways (Operation and Maintenance) Act, 2002 <i>be deemed to be a licensee</i> under this Act, and shall not be required to obtain a licence under this Act;	Not clear whether they will be deemed as supply or distribution licensees or both and how their respective license areas will be defined. The same should be clearly and unambiguously stated.
Section 14 - Grant of License	(d) provisio 7 Provided also that the Government company or the company referred to in sub-section (2) or subsection (4) or sub-section (4A) of section 131 of this Act and the company or companies created in pursuance of the Acts specified in the Schedule or any company or companies as may be notified by the Central Government, shall be deemed to be a licensee under this Act;	Will this company be a supply licensee or a distribution licensee? Should be a supply licensee and the same should be clearly mentioned.

Section 14 - Grant of License	(d) provisio 8 Provided also that the Appropriate Commission may grant a licence to two or more persons for supply of electricity within the same area of supply, subject to the conditions that the applicant for grant of supply licence within the same area shall, without prejudice to the other conditions or requirements under this Act, comply with the additional requirements (relating to the capital adequacy, Credit worthiness or code of conduct) as may be prescribed by the Central Government, and no such applicant, who complies with all the requirements for grant of licence, shall be refused grant of licence on the ground that there already exists a licensee in the same area for the same purpose;	The usage of the word 'within' in the clause gives a sense that license area of the second supply licensee can be smaller than or a sub-set of the incumbent supply licensee. This is not desirable as it can create possibility for cherry picking and will also have implications for supply obligation. Hence instead of 'within' 'for' or other appropriate conjunction should be used.
Section 14 - Grant of License	(d) provisio 9 Provided also that at least one of the supply licensee shall be a Government company or Government Controlled Company;	Such provision prevents competition in areas such as Delhi, Mumbai, Surat, Ahmedabad, etc., which are presently under the control of privately owned distribution licensees. Till such time that the government acts, these areas may remain private monopolies. Another possibility of the manner in which this provision may pan out is that a government owned company may be created as the incumbent supply licensee and hence, be made responsible for universal supply obligation. In this case, the privately owned company may choose to keep the wires business and just be a subsequent supply licensee which caters to only a certain load profile and is thus be absolved of universal supply obligation. Both possibilities are not desirable and not in the spirit of the amendment objectives of furthering competition.

Section 14 - Grant of License	(d) provisio 14 Provided also that in a case where a distribution licensee was undertaking the distribution of electricity, prior to the commencement of the Electricity (Amendment) Act, 2014, for a specified area within his area of distribution through a franchisee such franchisee shall not be required to obtain any separate licence from the State Commission concerned and such distribution licensee shall remain responsible for distribution and supply of electricity in that area of distribution till the expiry of the existing agreement with the distribution and supply licensee of that area	Important issues such as which supply tariff will be applicable to the existing franchisee consumers and whether the franchisee revenue should accrue to incumbent supply licensee or the distribution licensee are not clearly dealt with. The applicable tariff for franchisees should be based on that of the incumbent supply licensee and the incumbent supply licensee shall be responsible for supplying power to the area of franchisee. All these issues need to be clearly dealt with.
Section 15- Procedure for grant of licence	(8) A licence shall continue to be in force for a period of twenty-five years or more as may be specified in the licence, unless such licence is revoked or renewed.	The benefits to consumers, of such discretion given to the regulatory commission are not apparent. In light of fast paced changes taking place in the renewable energy segment, energy storage and new energy technologies, such a provision may in fact lock-in consumers and regulators with obsolete technologies and uneconomical business models, which are not desirable. Hence such discretion should be removed.
Section 51 A	51A. (1) It shall be the duty of the supply licensees to supply electricity in the concerned area of supply in accordance with the provisions of the Act: Provided that till the transfer of the obligation to supply to the incumbent supply licensee, the existing distribution licensee shall have the obligations to continue to supply electricity in the area of supply in accordance with the provisions of the Act with the same rights, privileges and duties of the supply licensee.	In the proviso, it needs to be clearly mentioned that the transfer refers to transfer scheme as per section 131 to avoid confusion and multiple interpretations.

Section 51 A	(2) The Appropriate State Government shall, within a period of one year from the commencement of the Electricity (Amendment) Act, 2014 or within such period as the Appropriate State Government may decide in consultation with the Central Government, provide for separation of distribution and supply of electricity and for such purpose issue appropriate transfer scheme and vest the supply functions in the incumbent supply licensee and the existing power purchase agreements and procurement arrangement in the intermediary company respectively as per the provision of section 131.	It is not desirable to have this clause under this section, which deals with functions of the supply licensee. Instead, for the sake of clarity, all provisions pertaining to design and implementation of the transfer scheme should be under one section i.e. Section 131.
Section 131- Vesting of property of Board and Distributio n Licensee in the State Governme nt	(4A) (a) The State Government shall within the period specified under section 51A draw up a transfer scheme for transfer of such of the functions, the property, interest in property, rights and liabilities of the distribution licensees relating to supply of electricity to a company who shall be the incumbent supply licensee for the concerned area of supply and so far as the existing power purchase Agreements and procurement arrangements, to which the distribution licensee is the beneficiary in the intermediary company and publish such scheme as statutory transfer scheme under the Act.	This clause/section needs further clarity on following two counts: • Rather than limiting the scope to provisions under just the one section, i.e. 51A, the clause should rely on the Act as a whole • Supply functions and the existing power purchase agreements and procurement arrangements should be passed on to the incumbent supply licensee, which has the universal supply obligation
	(4A) (c) The functions of the intermediary company shall be such as may be prescribed by the Central Government.	It would be better if the concerned State Government instead of the Central Government prescribes these functions. The Central Government, through the national policies can chart out the contours of the role it envisages for the intermediary company to perform, but it should leave the specific decisions to the State's discretion. This is essential as it is the state-owned incumbent supply licensee, which will suffer from the most adverse financial consequences of this change. Further, given the concurrent nature of the

		power sector and the imbalance in powers of the Centre and State that this clause creates, it may only further deter the states from implementing the new transfer scheme and hence is not advisable. The term 'load factor' is not defined in the act and generally refers to the
Section 51 B	Provided that a supply licensee other than the incumbent supply licensee shall have the duty to supply electricity progressively based on the load factor of the consumers as specified by the Central Government.	in the act and generally refers to the ratio of the average load to the peak load in a specified time period. This can be applied to any consumer category and thus makes the interpretation vague and ambiguous. Instead of this, contract demand could be used which is a more specific measure.
Section 42	(2) The State Commission shall introduce open access for use of distribution system in such phases and subject to such conditions, (including the cross subsidies, and other operational constraints) as may be specified within one year of the appointed date by it and in specifying the extent of open access in successive phases and in determining the charges for wheeling, it shall have due regard to all relevant factors including such cross subsidies, and other operational constraints.	Provided that all consumers eligible for Open Access under Section 49 should also be considered similarly and the State Commission should determine the charges for wheeling, for these consumers as well with due regard to all relevant factors including such cross subsidies, and other operational constraints.
Section 42	(3) The open access shall be allowed on payment of a surcharge which shall be in addition to the wheeling and other charges payable to the distribution licensee, as compensatory charges determined by the State Commission to meet the requirement of cross subsidy in the area of supply:	It is not clear to whom such cross- subsidy surcharge will accrue. It should accrue to the incumbent supply licensee as it will suffer on account of loss of such sales and it also has universal supply obligation and hence will need the cross-subsidy support.
Section 86 (1)(a)	Provided that where open access has been permitted to a category of consumers under section 42, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of consumers;	The proviso excludes consumers eligible for open access as per section 49 and this can lead to lot of ambiguity and confusion. The same should not be allowed and the section 49 must be clearly mentioned along with section 42.

I Section 61	this has no provision to ensure of small (regulated) consumers ted	consumers shall be computed based on the least cost first principle and the actual merit order despatch of the capacity contracted by the incumbent supply licensee. 2. Only after meeting the entire demand of the regulated consumers, the supply licensee should be allowed to sell surplus, if any, to open access and or other such market based entities. 3. No supply licensee should be allowed to pass through to its regulated consumers any adverse impact arising out of its transactions with open access consumers or other such market based entities. 4. Cost of ancillary services must be determined by the appropriate commission and must not be market determined. 5. While determining the cost for supply to be provided by the provider of last resort, factors such as quantum, period and duration of supply, provision of ancillary services and so on, should also be considered.
Section 62 determine the provis	oropriate Commission shall the tariff in accordance with ions of this Act for—ale of electricity:	The term 'retail sale' is not defined which can create lot of confusion as well as lead to a lot of litigation. The same should be clearly and unambiguously defined in the Act.

Provided that the tariff determined for retail sale of electricity shall be the ceiling tariff for the respective categories of consumers, the supply licensee shall be entitled to charge any consumer category at an amount lesser than the ceiling tariff, subject to sub-section (3) and also, without in any way affecting the obligation of a supply licensee to pay the intermediary company, the transmission licensee, the distribution licensee and generating company, as the case may be.	The consumer category wise ceiling tariff for an area of supply should be determined based on the tariff to be charged by the incumbent supply licensee.
(2) The tariff determined by the Appropriate Commission for a licensee shall provide for recovery of all prudent costs of the licensee approved by the Appropriate Commission in the monthly bills during the tariff period through an appropriate price adjustment formula including wherever applicable the fuel, power purchase and procurement price surcharge formula as may be specified in the Tariff Policy.	The requirement of the ceiling to be such that it allows the supply licensee to pay all its dues, defeats the point of it being set on normative basis. The Commission should ensure that no burden arising out of the dealings of the licensee with the open access eligible consumers should be passed on to the regulated consumers
(3) The Appropriate Commission may require a licensee or a generating company to furnish separate details, as may be specified in respect of generation, transmission, distribution and supply for determination of tariff.	Instead of 'may' the mandatory term 'shall' should be used in this clause. This is important to not allow undue discretion to the commission in terms of deciding which regulated entities should comply with regulatory filings.
(4) The Appropriate Commission shall not, while determining the tariff under this Act, show undue preference to any consumer of electricity but may differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required.	Load factor is a more general term and is not defined in the Act. Instead, contract demand, which is a more specific measure, should be used.

(5) No tariff or part of any tariff may ordinarily be amended, more frequently than once in any financial year, except in respect of fuel and power purchase price adjustment which shall be permitted under the terms of the fuel and power purchase price adjustment formula as may be specified by the Appropriate Commission.	Even on account of fuel cost increase or any such reasons related to power purchase and planning, if a supply licensee incurs losses after declaring tariffs lower that the prescribed ceiling, the same should not be allowed to be passed on to the regulated consumers.
(6) The Commission may require a licensee or a generating company to comply with such procedure as may be specified for calculating the expected revenues from the tariff and charges which he or it is permitted to recover.	Here again discretion to the commission is unwarranted and imprudent. The commission should be mandated to treat all licensees with equal fairness and whether the tariffs of a licensee are determined by the regulator or on market basis, all licensees should be required to submit the essential information pertaining to their operations and performance. Such information will be crucial to evaluate overall scope for reduction of tariff on account of efficiency gains and should not be left to the commission or licensee or generator's discretion, as that can create serious information asymmetries.
(7) If any licensee or a generating company recovers a price or charge exceeding the tariff determined under this section, the excess amount shall be recoverable by the person who has paid such price or charge along with interest equivalent to the bank rate without prejudice to any other liability incurred by the licensee.	It is not clear how such 'excess recovery' will be calculated. To remove all such possibilities of profiteering, following principles should be followed: • The commission shall determine tariffs of only the incumbent supply licensee(s). • The tariffs of all other supply licensees should be based on market principles. • There should be no regulatory certainty provided to supply licensees for all the costs they incur. This means that if a supply licensee incurs losses while selling power at rates lesser than the ceiling tariff to any given consumer category, these losses cannot be

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		recovered from its regulated
		consumers.
		No sale of power at rates
		higher than the ceiling tariff
		should be allowed, even on
		account of fuel adjustment
		cost. This is extremely
		essential as the regulators
		have totally failed in ensuring
		prudence in power
		procurement and the
		multiplicity of buy and sell
		options created in the
		proposed framework will
		make it even harder for the
		regulators to do this in case
		of supply licensees. There is
		grave danger of fuel
		adjustment cost becoming a
		mechanism for pass through
		of undue risks taken by
		supply licensees for winning
		certain category of
		consumers and the same
		should be avoided.
		Given the complicity of the banking
		sector in the serious issues
		concerning the sector functioning, it
		is not the least desirable that it
		should play a role in choosing the
		sector regulator, as it would clearly be
		a conflict of interest. If the intent is to
		make the selection process more
	—(1) The Central Government shall, for	objective and free of political
	the purposes of selecting the Members	influence, following steps can be
	of the Appellate Tribunal and the	taken to achieve the same.
Section 78	Chairperson and Members of the Central	Accordingly, the composition of
	Commission, constitute a Selection	committee for the selection of the
	Committee consisting of—	members of the CERC can be as
	Committee consisting or in	follows:
		A serving judge of the
		Supreme Court should head
		the selection committee
		Other members should
		include the chairman of the
		UPSC, the chairman of Central
		Administrative Tribunal at the
		national level and a Director

		of IIT as members. • Secretary (Power) in Government of India should be its convener.
Section 85	(1) The State Government shall, for the purposes of selecting the Members of the State Commission, constitute a Selection Committee consisting of—	If the intent is to make the selection process more objective and free of political influence, following steps can be taken to achieve the same. Accordingly, the composition of committee for the selection of the members of the state commission can be as follows: • A serving High Court judge nominated by the Chief Justice of the High Court should head the committee, • The other members of the committee should include the Chairman of the CERC, the Director of one of the IITs and the chairman of the Central Administrative Tribunal in the State. • The State Power Secretary would be the convener of the committee.

Section 85	(5A) In case of delay in the constitution of the selection committee for more than two months or in appointment of the Chairperson or Members of the State Commission for more than five months, the Central Government shall be entitled to nominate one officer from the Central Electricity Authority not below the rank of Chief Engineer as ex-officio member of that Commission and to discharge the functions of the member till such time the member is appointed in terms of this section and the member assumes the charge.	Deputation of CEA officers as members of the commission may tackle the issue of vacancies but not address the issue of State Government's attempts at influencing the autonomy of the regulatory institution via a delayed appointment process. Instead, in case of vacancies in the State Regulatory Commissions, the selection committee for the central commission should be required to recommend two names and the State Government should be bound to appoint one of the recommended candidates. Further, this provision should also apply to vacancies concerning the commission chairperson and not just the members. Only such a strong provision may act as a serious deterrent for states to avoid delays in appointment.
Section 89	89. The Chairperson or other Member shall hold office for a term of three years from the date he enters upon his office: Provided that the Chairperson or other Member in the Central Commission or the State Commission shall be eligible for one more term through re-appointment in the same capacity as the Chairperson or a Member in that Commission in which he had earlier held office as such:	Given the complexity and uniqueness of every state's power sector and the instruments used by the commission in order to regulate various utilities, a three year period may not provide sufficient time to the Commission members to bring about any constructive changes. This coupled with the possibility of reappointment, will further erode autonomy and should not be permitted at all. Instead a five-year term without any possibility of reappointment to the same state commission would be a far better approach.

Issues not covered in the proposed 2014 amendment:

Section	Existing clause	Proposed modification
Section 63 -	Notwithstanding anything contained in section 62, the Appropriate Commission shall adopt the tariff if such tariff has been determined through transparent process of bidding in accordance with the guidelines issued by the Central Government.	There seems to be confusion regarding procurement of renewable energy based on competitive bidding. The Act can make this issue explicitly clear by mandating competitive bidding for procurement of renewable energy. The detailed guidelines and procedures could be subsequently prepared by Ministry of New and Renewable Energy or the Ministry of Power, as per the directions under the Act.
Section 78 -	(6) The Selection Committee shall finalise the selection of the Chairperson and Members referred to in sub-section (5) within three months from the date on which the reference is made to it.	In order to improve transparency regarding the appointment process, the Act should specifically mandate the selection committee to issue a report, which explains the reasons for arriving at the final decision, and the same should be required to be maintained in public document.
Section 85 -	(3) The Selection Committee shall finalise the selection of the Chairperson and members within three months from the date on which the reference is made to it.	Here also, the Act should mandate the selection committee to issue a report, which explains the reasons for arriving at the final decision and the same should be maintained in public document.
Section 86 -	(1) The State Commission shall discharge the following functions, namely:	To ensure action in such crucial areas, the commission's mandate can be broadened in the following ways: • To ensure implementation of the numerous state and central programs aimed at the objective of increasing access, supply and service quality, the state commission must be given a clear mandate to review all such projects being implemented in the state and hold appropriate agencies responsible for their functions. • Since the aim is to enable not just access, but also supply of reasonably good quality, the

		commission should actively monitor hours of supply to all households and especially, the rural areas. • Transparent and equitable distribution of shortages is a crucial area concerning supply availability and should be specifically mandated, as most commissions have not taken proactive steps in this regard. • Given the large expenditure that has been incurred and about to be incurred on feeder separation schemes, the commissions must track supply hours to agriculture as well as non-agriculture rural consumers and publish reports detailing out load management, load relief, impact of scheme on loss estimation and in general explain with data and reasons as to how, if, such schemes have helped the state at large. • Similar to renewable energy purchase obligations, specific targets for implementing energy efficiency programs/schemes should
Section 86 -	(3) The State Commission shall ensure transparency while exercising its powers and discharging its functions.	also be mandated. The Commissions must also be required to maintain all their orders, rules, regulations and advice or official correspondence with the concerned Government on their websites in an easily accessible and downloadable format.
Section 92 - Proceedings of Appropriate Commission	(5) All orders and decisions of the Appropriate Commission shall be authenticated by its Secretary or any other officer of the Commission duly authorised by the Chairperson in this behalf.	The Act should mandate that, all orders should be 'reasoned orders' and all proceedings before the commission shall be properly recorded and uploaded on the website. Similarly the commission should be required to publish a statement of reasons along with any rules or

		regulations notified by it.
Section 92 - Proceedings of Appropriate Commission	(6) Every proceeding before the Appropriate Commission shall be decided expeditiously and with the endeavour to dispose the proceedings within one hundred and twenty days and in the event of delay the Appropriate Commission shall record the reasons for delay beyond one hundred twenty days	The time frame should also be applicable to the process of formulating rules and regulation. There should be a time limit, of say hundred and twenty days, after last date for public process, to finalise any rules or regulations.
Section 94 - Powers of Appropriate Commission	(3) The Appropriate Commission may authorise any person, as it deems fit, to represent the interest of the consumers in the proceedings before it.	In order to institutionalise consumer participation, there should be clear mandate for the commission to appoint at least a minimum (say three or four) number of consumer representatives for each distribution licensee. The existing clause uses the non-mandatory term 'may' however the amendment states that in the same clause 'shall' should be changed to 'may', thus creating confusion. This should be clarified and the clause shall be mandatory.
Section 114 - Term of office	The Chairperson of the Appellate Tribunal or a Member of the Appellate Tribunal shall hold office as such for a term of three years from the date on which he enters upon his office: PROVIDED that such Chairperson or other Member shall be eligible for reappointment for a second term of three years:	The provision for reappointment is not desirable from good governance point of view and the same should be removed.
Section 124 -	(1) A person preferring an appeal to the Appellate Tribunal under this Act may either appear in person or take the assistance of a legal practitioner of his choice to present his case before the Appellate Tribunal, as the case may be.	The option of seeking professional assistance should not be limited to legal practitioners and the clause can reworded on the following lines: A person preferring an appeal to the Appellate Tribunal under this Act may either appear in person or take the assistance of any professional consultant, including legal practitioner of his choice to present his case before

		the Appellate Tribunal, as the case may be.
Section 126 -	3[(5) If the assessing officer reaches to the conclusion that unauthorised use of electricity has taken place, the assessment shall be made for the entire period during which such unauthorised use of electricity has taken place and if, however, the period during which such unauthorised use of electricity has taken place cannot be ascertained, such period shall be limited to a period of twelve months immediately preceding the date of inspection.	This power of discretion to use section 135 for unauthorized use, gives inspecting officer undue authority, which can be misused. There have been cases where utility officers have exploited this discretion of interpretation to harass consumers who are not indulging in theft but can be blamed of unauthorized use for which penalty is significantly low. This discretion and hence the ambiguity, should therefore be removed.
Section 135 -	2[(1) Whoever, dishonestly, (e)uses electricity for the purpose other than for which the usage of electricity was authorised, so as to abstract or consume or use electricity shall be punishable with imprisonment for a term which may extend to three years or with fine or with both:	As penalty provisions under theft are very stringent there is need to bring in clarity regarding when such clause becomes applicable. To remove this ambiguity, the section 135 should deal strictly with theft of electricity alone and should not use the term 'unauthorized use'.