

ALL INDIA POWER ENGINEERS FEDERATION



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Submissions to the Standing Committee on Energy by the All India Power Engineers Federation (AIPEF)

1.0 Preamble

It is requested that the duty of Indian Parliament and its Members is to scrutinise issues and policies by questioning WHY and FOR WHOSE BENEFIT? And then to ensure that the best interest of the nation and its citizens is achieved.

The present amendments to the Electricity Act 2003 should be preceded by:

- First there must be comprehensive evaluation of the consequences of change of legislation over a twenty-year span. The evaluation that should be made public as a white paper.
- Next the weakness in the existing system needs to be analyzed and the various options to overcome them worked out.
- Legislation should be the last option and not the first and should be resorted to only if and when necessary. Instead, laws are being amended in a piecemeal basis, notifications are also being issued in a most casual manner.

For example, the Electricity Act 2003 enabled enforceable fixed and complete contracts insisted upon by private generation or transmission companies through PPAs. What was lacking was a rigid and therefore very comprehensive systems technical, legal, regulatory,

financial system etc. Consequently, there was no transparency and that resulted in open scams and avoidable litigation.

The effort of the Electricity Act 2003, was to change the power policy legislation and every institution built. This Act itself has its genesis in the early 90s, when the Indian economic policy was given a new orientation of liberalization and globalization. The following socially purposeful areas are well defined in the Electricity Acts of 1910 and 1948 are conspicuously eliminated both the Electricity Act 2003 and the proposed Electricity (Amendment) Bill 2022:

- Reasonable returns to state owned DISCOMS.
- Only proper expenditure allowed to licensee.
- Straight-line method of depreciation.
- Formulation of new schemes and methodology of their sanctions.
- Techno economic scrutiny by the Central Electricity Authority.

The basic thrust of the policy on which the Electricity Act 2003 was formulated was

1. To isolate and insulate the power sector from the Government, both as an institution of governance and as an investor.
2. To reduce the role of the legislature to that of a listening post.
3. To give the power sector a market orientation based on concepts like competition and trading.
4. To make the power sector attractive to private Indian and foreign investors in lucrative sectors of the industry.

As stated earlier, there has been no serious evaluation of the consequences of the Electricity Act 2003. While formulating the amendments, The Electricity (Amendment) Bill 2022 has completely ignored and failed to address the following disastrous consequences of the parent Act.

- i)** Thirty-four private IPPs that imported equipment from China resulting in many of the units being referred to NCLT and a blow to the indigenous manufacturing units.
- ii)** As of now, nearly 40,000 MW of coal-based plants and 28,000 MW of gas based commissioned capacities are stressed and another 23,000 MW thermal plants under various stages of implementation are shelved.
- iii)** Failure of the Ultra Mega Power Plants (UMPP) that were tendered on lowest tariff, but managed to have the tariff increased as a result of litigation necessitated by their wrong assumptions and dependence on imported coal.
- iv)** Disruption caused to the system during the pendency of the litigation and/or non-resolution of the legal disputes. Glaring examples are, CGPL TATA and UMPP Coastal Mundra
- v)** Non-negotiable PPAs, particularly in respect of Renewable energy units, irrespective of radical changes in the cost of generation resulting in bleeding the distribution companies.
- vi)** Two-part tariff in PPAs that required SEBs to pay even when not consuming a single unit of electricity
- vii)** Renewable energy that has no responsibility for ensuring grid stability.
- viii)** Exponential increase in litigation.
- ix)** Competition and multiple licensees already exist in Mumbai. The experience has been that the rates have gone up substantially rather than reduced. Mumbai is one of the highest tariff areas in the country.
- x)** Sharp Escalation of the costs and tariffs.
- xi)** Huge regulatory assets have been created, particularly in states like Delhi. These pose a serious danger to the ability as well as stability of supply in the future.
- xii)** Large amounts being written off by the public financial institutions particularly the State-owned financial institutions
- xiii)** SEBs were liquidated and the residual DISCOMS have been rendered almost bankrupt. The accumulated losses of DISCOMS have risen multifold as against the losses born by the erstwhile State Electricity Boards that had been unbundled precisely to reduce the losses.

This Electricity (Amendment) Bill 2022 is principally to hand over the distribution business to the private sector on a ‘privatizing profits and socializing losses’ basis. Therefore, the questions that need answers are:

- i) Would tariffs be allowed to be dictated by the market or the profits guaranteed to the MNCs or would they be based on the Indian people's capacity to pay?
- ii) Who would provide the subsidies? Are people being given the only choice, that if they cannot afford power, they may voluntarily cut off their power supply with pre-paid meters?
- iii) Would food security be jeopardized?
- iv) Would the role of the State Governments become inconsequential?

Another issue of vital public concern is that notwithstanding the fact that the electrical power industry has tens of thousands of Crores of rupees investment, millions of consumers and employees, the entire exercise of restructuring is being carried out by current and retired officers of the Indian Administrative Service who lack any in-depth knowledge of the system or the consequences of changes being made and do not own the responsibility for the failure of the reforms. The World Bank and private sector consultants are chartered accountancy firms with no experience of the Indian power system. They have translated the entire exercise of restructuring in a vital infrastructure industry into a financial exercise.

What is of serious concerns is major amendments to the working of the power sector but periodic and ad-hoc notifications of the Govt. of India even without cursory consultations with the stake holders. Examples of these are the notification on import of coal and movement of coal through road and ship. The vested interest, in these notification is very transparent.

2.0 Regulation of power - Basic Fundamentals

The fundamental characteristic of electric power is that it cannot be stored, in any significant measure, and therefore it must be produced and consumed simultaneously, almost instantaneously. This implies:

- a)** On a long-term basis: that the need for power should be anticipated in advance and investments made based on such anticipation. There is a heavy price to be paid for any mistake in anticipation. If there is an underestimation there would be power shortages and in case of an overestimation there would be a lack of returns on investment. Overall planning is therefore an integral of the stability and reliability of a power supply system. Investments based on the vagaries of the market have serious adverse implications as is currently being witnessed in the European Countries.
- b)** On a short-term basis: there would be variations in demand on an hourly, daily and seasonal basis. This implies there has to be a mixture of stations that cater to base load and peak load. (This choice is dictated by the choice of technology; for example, Nuclear power plants have necessarily to run as base load stations and Hydro Power plants provide more flexible peaking power from the best renewable source.) And to ensure stability and reliability there has to be provision for reserves (similar to the RBI maintaining foreign exchange reserves to take care of variations in demand for foreign exchange). With the introduction of renewable energy (primarily solar and wind energy) the variation in supply is very acute almost on a continuous basis. This requires corrective measure to ensure grid stability. In India today the private sector renewable energy have been completely exempt from the responsibility of ensuring grid stability. This is being done entirely by the State generation unit at their cost with no compensation.
- c)** Power Generation being a secondary form of energy, requires continuous supply of fuels fossil or nuclear. These are natural resources (if not available indigenously, they need to be imported) and therefore there is a need to have social control. Every nation evolves for itself a fuel energy balance. Comprehensive planning as was done in the past – Energy Survey Committee; Fuel Policy Committee – have been abandoned in favour of adhocism. As a consequence, dependence on imported fuel for thermal stations and solar panels has increased exponentially. Important lessons need to be learnt from the current energy crisis in Europe as a consequence of sanctions placed on Russia.

3.0 The Bogle of DISCOM losses and therefore inefficiency of DISCOMS.

The entire edifice of both the Electricity Act 2003 and the Electricity (Amendment) Bill 2022 rests on the premise that DISCOMS are loss making and only privatization would make the system efficient and therefore financially viable.

From a detailed analysis of the losses of a State DISCOM (name of State is withheld).

the following glaring facts are evident:

3.1 Losses due to reasons beyond the power of the management

| Sl. No | Details of causation of loss | Period | Amount Rs. Crore |
|--------|--|--------------------------------------|------------------------|
| 1 | Provisions of the Power purchase Agreement – Power surrendered due to fixed costs that implies payment even when no power is drawn | 2014 – 15 till 2022-23 (upto Oct 22) | 5300 |
| 2. | Subsidy not given by the State Government | As on 30.12.22 | 4018 |

Defaulting amounts (in Rs. Crore)

Total Defaulting amounts as on 31.10.2022 Rs. 4800.00

Default due to nonpayment by Government offices Rs. 2800.00

Default due to Court Cases and Dispute Settlement Committee Rs. 450.00

3.2. Operational issues within the control of the management.

Revenue Collection efficiency i.e. Percentage of collection against billing

| Year | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 |
|----------------------------|---------|---------|---------|---------|---------|
| Collection efficiency in % | 92.97 | 100 | 97.35 | 92.60 | 96.86 |

| Year | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 |
|-------------------|---------|---------|---------|---------|---------|
| Dist. Losses in % | 11.05 | 11.28 | 12.01 | 11.38 | 11.65 |
| T&D losses in % | 13.68 | 14.11 | 14.86 | 14.46 | 14.46 |

It needs to be noted that despite a high collection efficiency there are losses.

These losses are primarily due to

- Large amount of transmission at low voltage to provide the vast area and large number of consumers in the agricultural area
- Lack of investment in the distribution network. The failure to make investment is entirely due to defaulting amount to the tune of Rs. 2579.64 Cr. is pending against Govt. Departments and amount of Rs. 446.58 Cr. is held up due to Court cases/DSC Cases.
- There are also pockets of high theft, sometimes even to the extent of 35 %, which are entirely due to political patronage.
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Much is made out of theft and corruption of the employees. The facts given in the table below shows not only that the amounts lost after recovery is insignificant. The

question arises – does one burn down a house in order to overcome the menace of flies

| Year | Revenue leakage (in Crores) | Amount recovered (in Crores) |
|-------------------------|--|---|
| 2019 - 20 | 217 | 195 |
| 2020-21 | 221 | 137 |
| 2021-22 | 194 | 131 |
| 2022-23 (up to June 22) | 69 | 59 |

4.0 Would privatization eliminate the losses and make distribution profitable?

Within the framework of the Electricity (Supply) Act 1948, the loss of revenue to the State Electricity Boards was due to gross violation of the law by State Governments (Sec. 59 of the that laid down that the State Governments shall ensure a 3 % Rate of Return to the State Electricity Boards). The Electricity Act 2003 did not improve the situation, instead it created multiple organizations within the State sector and private sector intrusion into the profitable sections of the industry.

The private sector enjoyed the luxury of returning to the State whenever they incurred losses as witnessed in Odisha where twice the distribution network reverted back to the State. Same has been the case with several franchisees in various states.

Power is a vital infrastructure, more so in a country where two thirds of land is arid and almost 700 million people eke out a living from agriculture. Failure on the power front is certain to result in not only power riots but also food riots. This places a great obligation on this Standing Committee to uphold the national and food security.

The actual expenditure in the Power sector under the various plans, has been several lakh Crores of Rupees. The value of the assets built at this cost, at the current market rate, would be several times more. Hundred percent villages have been electrified. All this is no mean achievement by any standards, national or international. These achievements are a testimony to the vision of the successors of colonial rule, people like Dr. B.R. Ambedkar and Dr. K. L. Rao (the then Ministers in charge of Power in the Govt. of India) who were the architects of today's power system despite. All this was achieved in an era of shortages endemic to a capital short underdeveloped Third World countries like India. Audit and evaluation of the impact of twenty years due to changes in the legislation in Electricity Act 2003 should have preceded the Bill that further amends the Act.

5.0 Wish list of the Private sector

Considering the value of the assets of the industry and the kind of investments required, it is meaningless to argue that the domestic capital would be able to take over these assets or make any meaningful investments, except with the support and funds from the public financial institutions. The Indian Financial institutions are exhausted with huge write-offs and do not have the ability to even meet a fraction of the investment required in the Electricity Supply industry. Government should clearly spell out the investment required in the next twenty years and what are the anticipated sources of funds. As far as the Multinational Corporation (with or without an Indian front) they are interested in investing in taking over the assets of the Indian Power industry at a fraction of the replacement value.

A typical wish list of the private investors would be:

1. Complete freedom to invest in generation that include any size, fuel, location, type of generation (base or peak load; captive or utility), at any capital cost and without considering the foreign exchange implications etc. The consequences of this is evident from the 34 private thermal power stations (Kindly refer to the Thirty-seventh report of the Parliamentary Standing Committee on Energy on Stressed /Non-performing Assets in Electricity Sector)

2. Renewable energy should have no obligation towards ensuring grid stability. It should have the status of Must Run Status irrespective of the cost of generation.
3. A transmission and/or distribution licence that can be used or operated (in other words sold) through another person. No licence for a distributor who want to trade in electricity and/ or generates and distributes electricity in rural areas.
4. Removal of cross subsidies and a surcharge till such period that subsidies are not removed.
5. A generator or trader should be free to supply to any area or any consumer provided wheeling charges are paid.
6. The Central Electricity Authority should be an Authority only in name. The State Governments should have only notional control. All power should be vested in the Central Government.
7. The Regulatory Commissions should work within the framework laid down by the Central Government in matters of policy and tariff, with an appellant authority to keep the Commissions in check.
8. The primary purpose of the Load dispatch centers shall be to ensure payment to the generators.
9. Assets of the Electricity Board should be sold on the basis of draft Standard Bidding Document that was circulated by the Govt. of India.
10. Employees should deem to have been transferred without any recourse to the Industrial disputes Act 1947 or any other law for the time being in force.
11. The role of the legislature should be completely eliminated except as a listening post.
12. Every institution built over the last fifty years and under the existing laws should be abandoned.

The Electricity (Amendment) Bill 2022, read with the parent Act, not only fulfils most of these wishes, but also provides much more. *In section 86 of the principal Act, in sub-section (1), (a) "Provided that the tariff recovers all prudent costs incurred for supply of electricity and also provide reasonable returns on investment and take necessary steps to ensure financial stability of the licensees"*

6.0 Analysis of the Bill

6.1 Shifting the onus of financial stability from the State to the individual consumer.

In a country where almost 77% of consumers are not able to pay the cost to serve, the only purpose behind enforcing prudent costs without subsidies is to ensure the financial stability of the licensees.

The Electricity (Supply) Act, 1948 as well as the Electricity Act, 2003, recognised the conflict of interest between the viability of the electrical power system and the lack of purchasing capacity on the part of the consumers.

Section 59 (1) of the Electricity (Supply) Act 1948 stipulated that the State Electricity Boards should adjust the tariffs in such a manner that the total revenues in any year of account shall, after meeting all expenses properly chargeable to revenues, shall not have a surplus of not less than 3% of the fixed assets of the Board in service at the beginning of the year, or a higher percentage if specified by the state government.

Without exception, all state governments have violated the Electricity Act, 1948. The erstwhile Planning Commission used to publish an annual report on State Electricity Boards, where the monetary value of the violation of the law was tabulated.

The Electricity Act 2003, sought to overcome this problem by prescribing that state governments pay in advance any subsidy to any consumer or class of consumers as may have been determined by the independent regulators.

Both the earlier Acts placed the responsibility of ensuring the financial stability of the service provider on the state. The Electricity (Amendment) Bill 2022, on the other hand, transfers the onus from the state to the individual consumer.

When the state itself was unable to abide by the law, how can an individual enforce the law, particularly when s/he has no financial means?

6.2 Ignoring public interest in formulating legislation

In the All India Power Engineers Federation vs Sasan Power Ltd, the Supreme Court held:

“If there is any element of public interest involved, the court steps in to thwart any waiver which may be contrary to such public interest. On the facts of this case, it is clear that the moment electricity tariff gets affected, the consumer interest comes in and public interest gets affected.”

The 14th report of the Parliament Standing Committee on Energy recorded:

“Electricity amendment Bill 2005” stated, “Committee notes that due to imbalances in the regional economic development in the country and large number of consumers who have no payment capacity in a number of states. In order to provide them power at affordable tariffs minimum support through an initial subsidy in respect of power tariff is necessary. Most of the states are unable to provide a subsidy from their exchequer.”

At the operational level, this obsession to realise the prudent costs plus a reasonable rate of return is to be enforced through pre-paid meters, which can abruptly stop supply. In October 2015, riots erupted in South Africa’s Soweto over the government installing pre-paid meters without the consent of the community.

6.3 Subsidies

The Bill makes it a statutory obligation to progressively reduce and eliminate cross subsidy. It has been possible to provide power to agriculture, rural areas and the urban poor only by resorting to the principle of cross-subsidy. As on date the subsidy to agriculture and domestic sectors are a major component of the total subsidy. In the near future neither of these sectors would be able to pay the cost to serve and subsidies would have to continue. With the enactment of the amendment bill the cross subsidy has to be eliminated and in the

interim a surcharge would be levied. The social and political fallout of elimination of the subsidies to these consumers would be very serious.

6.4 Statutory division between urban and rural India.

The laws prior to the Electricity Act 2003 enabled extensive rural electrification. They have even allowed various models of rural electrical co-operatives and the supply regulated and controlled by institutions like the Panchayats. Rural area has been served by planning the daily load cycle, especially during the irrigation season (It was not surprising that in a agricultural state like Haryana, on some days there would be the world's highest night load peak at 2 a.m.)

What is pernicious in the present policy formula that for the first time since Independence there will be a statutory divide between the two India's, the urban and the rural. "The do it yourself" and "manage yourself the loss making part of the system" is the prescription for rural India. And the world class, ultra-efficient privatised power system is the promise for urban India!! It is a fact that separating rural and urban power systems would enforce costlier power to the farmers and the under-privileged.

The most affected sector on account of this Bill would be the agriculture sector. Should the law not ensure the financial stability of the farmer and food security for the nation? Can the world's most populous nation not give the highest priority to this concern? Let us take the example of Haryana. In FY 2014-15, 72% of the groundwater was extracted by electrical pump sets and 46% of the total subsidies for agriculture were for electricity. What would be the consequence of a law that prescribes the abolition of subsidies?

To grow grains, water is required which is pumped through the use of electricity which is subsidised. Therefore, grain has an embedded subsidy. In 15 years, between 2002-17 Punjab gave the central pool, 290 million tonnes of paddy and wheat, utilising over 450 trillion litres of irrigation water requiring agricultural power subsidy worth Rs 25,000 crore.

In return, Punjab did not get any subsidy from the Union government. Should the government of India not pay subsidies for the grain it procures from Punjab for the public distribution system and other Central sector schemes?

In the matter of subsidies, it is important to learn from recent events. Due to the sanctions that followed the Ukraine war, the cost of electricity in European countries has skyrocketed. For example, in Italy the electricity tariff has increased by 350% in the one year before October this year. In the UK, there has been an increase of almost 250%. These governments are providing huge subsidies to support the consumers.

6.5. Can competition improve efficiency and reduce tariffs?

The obvious question is to ask if competition is possible within the electrical power supply industry. The *Électricité de France SA*, popularly, known as the *EdF*, and a French utility company, said in a debate with the World Bank:

“Modern economic theory tells us that competition is more difficult to introduce in network infrastructure than in other industries, and more difficult in electricity than in other networks. We also know that competition does not streamline regulation but makes it on the contrary more complex and burdensome. Introducing competition creates a ‘half-free, half slave’ sector.... Marginally, the idea beyond our discussion about privatisation and competition may be to open the power sector of developing countries to foreign operators, expertise and capital....”

The reasoning behind this assessment is summarised below.

- Loss of efficiency due to disintegration (loss of optimisation) can be substantial. emergence of private firms in the disintegrated power sector will necessitate a set of "complete contracts" amongst themselves and at all levels. This is not just difficult to achieve but would also be very costly and time consuming. EdF quoted transaction theory in support of this and pointed out that the World Bank proposed disintegration structure is not sufficiently tested.
- For achieving the basic objective of efficiency in the power sector there is no need to forgo the natural advantage of integrated power sector. As power generation involves the highest cost it is important to achieve efficiency in this. Introducing competition in generation (by allowing IPPs) is much less cumbersome than disintegration as proposed by the World Bank.
- EdF also feels that the notion "Public Service" has not been given sufficient attention.
- EdF feels that there should be priorities and a sequence in the restructuring. The first thing is to improve the regulation of monopolies. If that fails then to introduce competition, while taking care that competition does not reduce efficiency.

On July 19, 2022, France announced its plans to fully nationalise EdF. France said that nationalisation of the EdF will increase the security of its energy reserves.

6.6. Is competition possible in India?

On the purchase side, in FY20 the cost of generation and transmission (that is outside the control of the DISCOMS) constitutes about 77% of the cost to serve the final consumer. It is much higher in some states. Even when no power is consumed, the Power Purchase Agreements (PPAs) require that fixed costs amounting to thousands of crores have to be paid. In other words, almost 80% of the cost to serve is outside the control of DISCOMS. How then can multiple licensees provide competition that would reduce costs when they control only 20% of the cost to serve?

On the sales side, while the average cost of supply was around Rs 7.45 per unit, the average tariff charged to agricultural consumers has decreased on average nationally from Re. 0.79 in FY16 to Re. 0.75 in FY20. Commercial consumers paid, on average 12% over the normal. But the quantum of sales was very low for any significant recovery of cross-subsidy. There is constant pressure on DISCOMS to retain consumers by reducing cross-subsidy in order to prevent them from moving towards open access and captive sources.

Multiple licensees would not only deepen the crisis, but also require huge investment in metering and complex IT accounting all of which would increase the cost of supply

The benefits of competition are touted through a comparison with the telecom sector. Besides the fact that mobile services are wireless and electricity is a wired system, every consumer of mobile services – rich or poor – pays the same rate per call, at a rate that is above the cost to serve. Even after willfully and completely destroying the public sector competitor, the BSNL, the government's reforms have only succeeded in essentially establishing an inefficient oligopoly.

In comparison to the rest of the World, due to extensive electrification of villages and agricultural pump sets India has the highest ratio between low tension and high - tension transmission which is partially responsible for the T&D losses and reactive power. The low tension lines across lakhs of villages will remain in the public sector, since the private sector will not be interested in them.

6.7 Multiple Licenses

Even before considering the legislation, it is important that the State Discoms have over the entire territory that they cover, detailed enumeration and evaluation of their assets that have been audited. In the absence of this creating multiple licensees with the proviso of use of

the Discoms assets would only lead to a replication of multiple litigation as has been witnessed in the case of generation.

Other impetus for litigation would be the existence of multiple PPAs within the DISCOM area of service. There is no clarity as to how the liabilities caused by the PPAs, such as paying for power not drawn, would be shared. Lack of clarity and regulation in respect of tariff to be set for different class of consumers supplied at various voltage levels. Would the tariffs reflect the revenue capacity for the various licensees or the entire burden of serving the loss-making section rest on the state owned DISCOMS. Even as it is the various SERCs and appellant Commissions are overburdened. What will be the consequence in terms of time and cost in resolving in conflicting ARRs filed by multiple licenses?

On the granting a license to multiple licensees the Bill provides:

“6. Provided further that if the Appropriate Commission fails to grant the licence or reject the application, as the case may be, within the time so provided, the applicant shall be deemed to have been granted the licence.”

The Bill also provides the Central Electricity Regulatory Commission the powers to grant licenses for distributing electricity in more than one state.

The grant of a license is independent of the purview of the state government since any potential licensee can apply for entry into several states and get the license from the Central regulator. Similarly, ensure delays in the grant of license and get it by default. The grant of license is almost automatic without any parameters.

The Fourth Report of the Standing Committee on Energy on the Electricity Amendment Bill 2014, in the matter of multiple licenses rightly observed:

“Some well-defined parameters should be laid down so as to allay the discretionary and arbitrary powers of the commission. This becomes all the more necessary given the nature of consumer mix in our country. The norms to be laid down should envision equal apportionment of consumers for the purpose of supply of electricity taking into consideration the status of consumers, direct and cross-subsidy being paid to them and also the losses of a technical and commercial nature. This will help in dispelling the apprehension about cherry-picking of consumers by supply licensees.”

Power, it is visualized, would be, based on the dictates of the market, sold and bought like any other commodity through traders from one corner of the country to another. There are no specific rules or restraints laid down in respect of traders, neither are there any powers for the appropriate governments to intervene in power trading even in "extraordinary circumstances".

There is no provision for any form of intervention by the appropriate government even in "extraordinary circumstances" such as situations where load shedding could result in a law-and-order problem. In an interconnected grid where power flow would obey the laws of physics, how the division between rural and urban power supply and/ or trading would be established, is difficult to comprehend, even for experienced power engineers.

6.8 Multiple failures

Experience with the privatization/franchisee of distribution has so far been a total failure. In almost all the cities where privatization/franchisee was attempted – Gaya, Samastipur and Bhagalpur in Bihar, Agra & Greater NOIDA in Uttar Pradesh, Gwalior, Sagar and Ujjain in Madhya Pradesh, Nagpur, Aurangabad and Jalgaon in Maharashtra, –it was a miserable failure and at many places the regulatory commissions were compelled to cancel the franchise.

Having failed on privatization, the Government of Odisha privatised the DISCOMS for the second time in 2020. The Odisha Government must explain why the earlier attempts failed and on what basis is the privatisation being attempted again. What are the lessons of

failure? What has been the experience of multiple licences in Mumbai, which is a high-density and high-revenue distribution area? What has been witnessed is multiple litigations and tariff increases in Mumbai.

7.0. Profits without investment?

Section 42 of the 2022 Bill says that it shall be the duty of all distribution licensees to

(a) ensure an efficient, co-ordinated and economic distribution system in their area of supply: Provided that a distribution licensee may use the distribution systems of other licensees in the area of supply for supplying power through the system of non-discriminatory open access;

(b) give non-discriminatory open access to other distribution licensees on payment of wheeling charges; and

Without making any investment, private licensees would be able to use the vast network built over the last 70 years by paying wheeling charges that would not even ensure recovery of interest on the investment. Would DISCOMS continue to carry the interest on the books, while enabling others to use their network on the basis of wheeling charges?

The Bill provides that the regulators would set the maximum tariff. The maximum tariff would set the ceiling on the wheeling charges. Most networks have high technical losses due to a lack of investment in modernising the system. Whose responsibility would it be to ensure maintenance and modernisation of the existing network and provide for future development, as the load density increases?

8.0 Load Dispatch Centers diverted from their principal role

Earlier drafts of the Bill proposed setting up an Electricity Contract Enforcement Authority. Due to strong opposition, this proposal was dropped in the present Bill. The 2022 Bill requires the load dispatch centres, whose purpose is to regulate the flow of electricity

in intervals of 15 minutes, to dispatch electricity only after verifying that the generators have been paid by the DISCOMS. A rather impractical idea that would ultimately affect the consumers with power cuts and blackouts as it is the frequency would vary from 47 cycles/sec to 53 cycles/sec and there are instances of at least one or two grid failures in a year. It is obvious that those who drafted the bill neither see any difference between these institutions nor do they have any knowledge or experience of the actual operation a power system.

9.0 Avalanche of litigation

There is not a single private generating station which has not gone into multiple litigations and benefitted thereof. Similar would be the case of private distribution licencees

10.0 Questions seeking answers

Every society evolves legislation through an evolutionary process accommodating new concepts and technologies with the optimal use of resources consistent with societal needs. Legislation is resorted to only if and when necessary. The proposed legislation is without a perspective. Several questions beg an answer. For example,

- What would be the long-term policy with respect to privatisation of the electrical power industry?
- Would profit maximisation be the sole objective?
- Would independent power producers be allowed to sell power directly to select consumers through private distribution companies?
- Since DISCOMS are to be liquidated and eventually handed over to the private sector, what would happen to the supply of electricity to rural areas?
- Would tariffs be based on the Indian people's capacity to pay or by the dictates of the market and profits?
- Who would provide subsidies to the sections that do not have the capacity to pay?

- Would the people be given a choice between affordable power with power cuts during peak hours and high priced uninterrupted and reliable power?

There is not even an attempt to answer any of these questions.

CLAUSEWISE ANALYSIS GIVEN IN THE ANNEXURE

CLAUSEWISE ANALYSIS

Comparative statement showing the justification given by the Govt. of India and comments of All-India Power Engineers' Federation (AIPEF) in respect of Electricity(Amendment) Bill, 2022

| SN | Section of the Act | Provisions of the Electricity (Amendment) Bill, 2003 | Provisions of the Electricity (Amendment) Bill, 2022 | Justification given by the Govt. of India | All India Power Engineers' Federation's comments |
|----|--------------------|--|---|---|--|
| 1. | 2(60) | | New Definition (60a) "security of payment" means such security of payment as may be prescribed by the Central Government; Sections proposed for amendment | Definition of 'security of payment' has been proposed so that Rules can be framed for timely payment of dues to ensure financial viability of the power sector. | The provision of supply of electricity is the responsibility of the state govt. and there is no role of central govt. in prescribing rules relating to security of payment. Viability of the power sector is dependent upon a large number of considerations and not Exclusively related to security of payment. |

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| 2 | 8 | (1) Notwithstanding anything contained in section 7, any generating company intending to set-up a hydro generating station shall prepare and submit to the Authority for its concurrence, a scheme estimated to involve a capital expenditure exceeding such sum, as may be fixed by the Central Government, from time to time, by notification | (1) Notwithstanding anything contained in section 7, any generating company intending to set-up a hydro generating station shall prepare and submit to the Authority for its concurrence, a scheme estimated to involve a capital expenditure exceeding such sum, as may be fixed by the Central Government, from time to time, by notification | (1) Notwithstanding anything contained in section 7, any generating company intending to set-up a hydro generating station shall prepare and submit to the Authority for its concurrence, a scheme estimated to involve a capital expenditure exceeding such sum, as may be fixed by the Central Government, from time to time, by notification. (1A) The Authority shall, after examining the scheme, concur on the scheme in such manner as may be prescribed by the Central Government. | As per Constitution of India, rivers and water resources are state subjects except in relation to interstate rivers. The hydro generating stations are mostly owned by the state Govts. River valley projects have multiple functions including irrigation and flood control. The Govt. of India should not be determining the rules on what are primarily State subjects. This clause contravenes the Constitution. The approving/ rule making authority should vest with the respective State Government. |
| 3 | 14 | The Appropriate | The Appropriate Commission may, | It is proposed to amend this section | Specification of there of supply should be left to |

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| | <p>Commission may, on an application made to it under section 15, grant a licence to any person - (a) to transmit electricity as a transmission licensee; or (b) to distribute electricity as a distribution licensee; or (c) to undertake trading in electricity as an electricity trader, in any area as may be specified in the licence: Provided also that the Appropriate Commission may grant a licence to two or more persons for distribution of electricity through their own distribution system</p> | <p>on an application made to it under section 15, grant a licence to any person - (a) to transmit electricity as a transmission licensee; or (b) to distribute electricity as a distribution licensee in an area of supply in accordance with such criteria as may be prescribed by the Central Government; or(c) to undertake trading in electricity as an electricity trader, in any area as may be specified in the licence. Provided also that the Appropriate Commission may grant a licence to two or more persons for distribution of electricity within the same area, subject to the conditions that the applicant for</p> | <p>so that Rules for specifying criteria of area of supply for distribution licensees can be made. To allow use of other distribution licensee's network.</p> | <p>the state govt. since any area of supply has a mixture of consumers rural,urban,industrial that have different terms and conditions of supply and it is not possible for the central Govt. to make criteria which can satisfy the requirement of the entire nation.</p> <p>Rules relating to other distribution licensees network should be the responsibility of the State Govt. for the same reasons as has been stated for the area of supply.</p> <p>The issue of multiple licensees needs to be discussed with the various state govts. Since it is not possible to introduce multiple licensees without affecting both the cost and security of supply.</p> |
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| | | within the same area, subject to the conditions that the applicant for grant of licence within the same area shall, without prejudice to the other conditions or requirements | grant of licence within the same area shall, without prejudice to the other conditions or requirements under this Act, comply with the additional requirements 1. relating to the capital adequacy, credit-worthiness, | | |
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| | <p>under this Act, comply with the additional requirements 1. 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:</p> | <p>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:</p> | | |
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| 4 | 15(6) (b) | "(6) (b) reject the application for reasons to be recorded in writing if such application does not conform to the provisions of this Act or the rules and regulations made thereunder or the provisions of any other Law for the time being in force: | New Proviso after proviso in sub- section (6) (b): Provided further that if the Appropriate Commission fails to grant the license or reject the application, as the case may be, within the time so provided, the applicant shall be deemed to have been granted the license. | Deeming provision to avoid delay in granting license. | There should be no provision of deemed licensing since this will not enable serious consideration as is required for such a major operational decision. |
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| | | Provided that no application shall be rejected unless the applicant has been given an opportunity Of being heard. | | | |
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| 5 | 26 | <p>(National Load Despatch Centre) : ---</p> <p>(1) The Central Government may establish a centre at the national level, to be known as the National Load Despatch Centre for optimum scheduling and despatch of electricity among the Regional Load Despatch Centres</p> <p>(2)The constitution and functions of the National Load Despatch Centre shall be such as maybe prescribed by the Central Government: Provided that the National Load Despatch Centre shall</p> | <p>(National Load Despatch Centre):</p> <p>--- (1) The Central Government may establish a centre at the national level, to be known as the National Load Despatch Centre for optimum scheduling and despatch of electricity among the Regional Load Despatch Centres.</p> <p>(2) The constitution of the National Load Despatch Centre shall be such as may be prescribed by the Central Government: Provided that the National Load Despatch Centre shall not engage in the business of trading in electricity except as mandated by the Central Government for implementation of any scheme to ensure the stability of the</p> | <p>NLDC being empowered to ensure integrated operation of power system in the country We have One nation one grid So this is required for better coordination and optimized operation of the electricity Grid. Enabling provision has been made to allow NLDC to trade electricity for some specific purposes only.</p> | <p>It is too premature to introduce legislation relating to one nation one grid since the system has to stabilize and licensees need to gain expertise about the operational difficulties particularly in respect of trading and interstate trading.</p> |
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| | | not engage in the business of trading in electricity. (3) The National Load Despatch Centre shall be | power system. (3) The National Load Despatch Centre shall be | | |
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| | | <p>operated by a Government company or any authority or corporation established or constituted by or under any Central Act, as may be notified by the Central Government.</p> | <p>operated by a Government company or any authority or corporation established or constituted by or under any Central Act, as may be notified by the Central Government. (4)The National Load Despatch Centre shall- (a) be the apex body to ensure integrated operation of the power system in the country:(b)be responsible for optimum scheduling and despatch of electricity in the country across different States and regions in accordance with the contracts entered into with the licensees or the generating companies: Provided that no electricity shall be scheduled or dispatched under such</p> | | |
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| | | | <p>contract unless adequate security of payment, as may be prescribed by the Central Government, has been made;</p> <p>(c) monitor grid operations and</p> | | |
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| | | | <p>Ensure security of the electricity grid and for this purpose give directions as necessary to Regional Load Despatch Centre or State Load Despatch Centre, as the case may be;</p> <p>(d) exercise supervision and control over the inter-regional and inter-state transmission network; and</p> <p>(e) have overall authority for carrying out real time operations of the electricity grid of the country.</p> <p>(5) The National Load Despatch Centre shall give such directions and exercise such supervision and control over the power system as may be required for the "safety and security of the electricity grid of the country, for ensuring the</p> | | |
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| | | | stability of grid operation and for achieving maximum economy and efficiency in the operation of the power system Throughout the country. | | |
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| | | | <p>(6) The National Load Despatch Centre shall give such directions to State Load Despatch Centre, as may be necessary through the Regional Load Despatch Centre concerned.</p> <p>(7) Every Regional Load Despatch Centre, State Load Despatch Centre, licensee, generating company, generating station, sub-station and any other person connected with the operation of the power system shall comply with the directions issued by the National Load dispatch Centre from time to time.</p> | | |
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| 6 | 28(3)) (a), 32(2)) (a) | (3) The Regional Load Despatch Centre shall (a) be responsible for optimum scheduling and despatch of electricity within the region, in accordance with the contracts entered into with the licensees or the generating | (3) The Regional Load Despatch Centres shall (a) be responsible for optimum scheduling and despatch of electricity within the region, in accordance with the contracts entered into with the licensees or the generating companies operating in the region; Provided that no electricity shall be scheduled | Payment security mechanism in the power sector will ensure timely payment to the generators and transmission companies by distribution companies. Thus, ensuring the viability of the entire value chain of the power sector. Payment security mechanism in the Power sector will ensure timely | The role and responsibilities of the load dispatch centers are clearly defined and should not be changed by adding additional responsibilities. The flow of electricity is determined by the laws of physics and the continuous changes in the demand and supply pattern. Regulation of loads and matching with available supply has to be done in short intervals of 15 minutes. Therefore, it is not feasible or practicable to place any further responsibilities on the |
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| | | <p>companies operating in the region (2) The State Load Despatch Centre shall - (a) be responsible for optimum scheduling and despatch of electricity within a State, in accordance with the contracts entered into with the licensees or the generating companies operating in that State</p> | <p>or despatched under such contract unless adequate security of payment, as may be prescribed by the Central Government, has been made. (2) The State Load Despatch Centre shall – (a) be responsible for optimum scheduling and despatch of electricity within a State, in accordance with the contracts entered into with the licensees or the generating companies operating in that State; Provided that no electricity shall be scheduled or despatched under such contract unless adequate security of payment, as may be prescribed by</p> | <p>payment to the generators and transmission companies by distribution companies. Thus, ensuring the viability of the entire value chain of the power sector.</p> | <p>Dispatch centers.</p> |
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| | | | the Central Government, has been made. | | |
| 7 | 40(c) (ii) | | New Proviso after fourth proviso to be inserted: Provided also that a consumer who requires supply of electricity, where the maximum power to be made available at any time exceeds | New Proviso to enable consumers getting open access directly to inter-state transmission system. | Making one MW, as the unit for open access to interstate transmission system is highly impracticable and undesirable. The limits need to be enhanced so as to restrict open access to only select high consumption units, that too, after considering its impact on the |

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| | | | one megawatt, shall be | | availability and security of supply to the other classes |
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| | | <p>Entitled to get open access to inter- state transmission system in accordance with the regulations made by the Central Commission, on payment of the transmission charges and a surcharge thereon, as may be specified by the State Commission.</p> <p>Explanation. - purposes of section 42, the expression "megawatt" watts means ten lakh watts.</p> | | <p>of consumer. Otherwise, this would lead to privatization of profits and socialization of losses.</p> <p>The respective State Commission should be final authority in making rules for open access as per the requirement of the State.</p> |
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| 8 | 42(1), (4) | <p>(Duties of distribution licensee and open access):</p> <p>(1) It shall be the duty of a distribution licensee to develop and maintain an efficient, coordinated and economical distribution system in his area of supply and to supply electricity in accordance with the provisions contained in this Act.</p> <p>(4) Where Commission</p> | <p>(Duties of distribution licensee and open access):</p> <p>(1) It shall be the duty of all distribution licensees to-</p> <p>(a) ensure an efficient, co-ordinated and economic distribution system in their area of supply;</p> <p>Provided that a distribution licensee may use the distribution systems of other licensees in the area of supply for supplying power through the system of non-discriminatory open access;</p> | <p>Changes proposed to facilitate multiple distribution licensee in the same area This required is to avoid parallel network and optimise usage of the distribution network.</p> | <p>Considering that at present 77% of the consumers are unable to pay the cost to serve, it is undesirable to enable multiple distribution licensees in the same area and create a competition which will for obvious commercial reasons be restricted only to a very small band of consumers at the cost of majority of the consumers. Electricity is to be supplied on wires and the pattern of wireless technologies shall not work in delivery and electricity to the consumers.</p> |
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| | | <p>the permits State a consumer or class of consumers to receive supply of electricity from a person other than the distribution licensee of his area of supply, such consumer shall be liable to pay an additional surcharge on the charges of wheeling, as may be specified by the State Commission, to meet the fixed cost of such distribution licensee arising out of his obligation to supply.</p> | <p>(b) give non-discriminatory open access to other distribution licensees on payment of wheeling charges; and (c) provide supply of electricity to the consumers, in accordance with the provisions of this Act and the rules made thereunder by the Central Government and the regulations made by the Appropriate Commission and in accordance with the model regulations laid down by the Forum of Regulators. (4) Where Commission the permits State a consumer or class of consumers to receive supply of electricity from a person other than the distribution licensee of his</p> | | |
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| | | | <p>area of supply, such consumer shall be liable to pay an additional surcharge on the charges of wheeling, as may be specified by the State Commission, to meet the fixed cost of such distribution</p> | | |
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| | | | <p>Licensee arising out of his obligation to supply.</p> <p>(4A) A distribution licensee shall provide non-discriminatory open access through its distribution system to all distribution licensees having license within the same area of supply, subject to payment of wheeling charges and in accordance with the regulations specified by the Appropriate Commission.</p> <p>(4B) In case any complaint is filed before the Appropriate Commission by any person or if that Commission is satisfied that a distribution licensee has knowingly failed to provide open access through its distribution system to another</p> | | |
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| | | | distribution licensee or hindered it in any manner from using its distribution network, the Appropriate Commission may, after giving the distribution licensee an Opportunity of | | |
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| | | | Being heard, issue such directions as it considers necessary and impose the penalties in accordance with the provisions of This Act. | | |
| 9 | 59 | (Information with respect to levels of performance): (1) Every licensee shall, within the period specified by the Appropriate Commission, furnish to the Commission the following information, namely: - (a) the level of performance achieved under sub section (1) of the section 57; (b) the number of cases in which compensation was made under subsection | (Information with respect to levels of performance): (1) Every licensee shall within the period specified by the Appropriate Commission, furnish to the Commission the following information, namely:- (a) the level of performance achieved under sub section (1) of the section 57; (b) the number of cases in which compensation was made under subsection (2) of section 57 and the aggregate amount of the compensation. (c) the status of | To enable administrative reform through improve corporate governance of licensees. | Since electricity is a concurrence subject the issues of Govt. licensees and guidelines thereof should not be the exclusive prerogatives of the Govt. of India. All information in respect of levels of performance should be made available to the public through the mechanism of RTI. |

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| | | (2) of section 57 and the aggregate amount of the compensation, | compliance of the guidelines issued by the Central Government regarding corporate governance. | | |
| 14 | 61(g) | (g) that the tariff progressively reflects the | (g) the tariff recovers all prudent costs incurred for supply | Proposed to ensure cost—reflective tariff. | In the context of the widespread poverty in India and the inability of 77% of consumers |
| | | 62(1) (d) | (d) retail sale of electricity: Provided that in case of distribution of electricity in the same area by two or more distribution licensees, the | | being able to pay the cost to serve, it is not possible to reduce cross subsidies and to enable tariffs to progressively reflect the cost and supply. This could at best be a goal to be achieved in |

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| | | | Appropriate Commission may, for promoting competition among distribution licensees, fix only maximum ceiling of tariff for retail sale of electricity. | | due course but not as a provision in law. Such a provision will jeopardize not only the food security to the nation but also the social stability since it would amount to Denial of electricity to the farmers and the vulnerable sections of the society. |
| 15 | | | (d) Retail sale of electricity:Provid ed that in case of distribution of electricity in the same area by two or more distribution licensees, the Appropriate Commission shall, for promoting competition among distribution licensees, fix only the maximum ceiling of tariff and the minimum tariff for retail sale of electricity in accordance with the provisions of this Act and the rules made there under by the Central Government: Provided further that in such | "Maximum ceiling tariff as well as minimum tariff being proposed to enable competition on account of multiple distribution companies. This will lead to innovative products and the consumers will benefit out. | As stated already, it is neither administratively, technically nor commercially desirable to introduce the multiple licensees. |

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| | | | ceiling tariff, the cross subsidy, wheeling charges and adjustment in tariff pertaining to the period prior to the introduction of Ceiling tariff, if any, shall be indicated | | |
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| | | | Separately by the Appropriate Commission. | | |
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| 16 | 64(1) | <p>(1)An application for determination of tariff under section 62 shall be made by a generating company or licensee in such manner and accompanied by such fee, as may be determined by regulations</p> | <p>(1) An application for determination of tariff under section 62 shall be made by a generating company or licensee at such time and in such manner and accompanied by such fee, as may be specified by the Appropriate Commission: Provided that the time "specified should be suchthat the new tariff comes into effect from the beginning of the following financial year: Provided further that if an application is not made by a generating company or licensee on time !he State Commission shall, not later than thirty days of the last date specified in the regulations. initiateproceedin gs fordetermination of tariff and call for such</p> | <p>New proviso is proposed to ensure timely determination of tariff, which in turn will result in cost reflective tariff</p> | <p>The issues relating to determination of tariff should be left to the regulatory mechanism and no additional legislative measures are required in this regard.</p> |
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| | | | <p>information, retails and documents as may be required for such determination with the objective of determining the Tariff before the beginning of the financial year. Provided also that, where two or more distribution</p> | | |
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| | | | licensees operate in the same area, the State Commission shall fix the maximum ceiling of tariff and the minimum tariff, suomotu, after calling for requisite information from such distribution licensees. | | |
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SHAIENDRA DUBEY

CHAIRMAN

P RATHNAKAR RAO

SECRETARY GENERAL