

Trends and Way Forward in the State Electricity Sectors, 2021

An Experience Sharing Workshop

5th and 12th October, 2021 | Virtual Workshop



1. Introduction

Prayas (Energy Group) (PEG) organized the fourth edition of the two-day experience sharing workshop on 5th and 12th October 2021. Similar to the third edition, this workshop was also held virtually, as we are gradually recovering from the Covid-19 pandemic. The event was attended by 70 participants representing ten states.

As has been the prevalent practice in previous years, the workshop was aimed at discussing and deliberating the commonalities and differences across states on various aspects related to the power sector. The discussions also included sharing of experiences, challenges, and strategies. To allow for more focused discussions, this year's event was centered around the following themes:

- Power sector policy making- Reflections on recent proposals: In recent times, many proposals have been released with a stated objective to reform the power sector, specifically by the central government. These include draft amendments to the Electricity Act 2003, draft National Electricity Policy, various rules and the Revamped Distribution Sector Scheme (RDSS) scheme. The impact that such proposals can have on the sector as a whole was discussed in detail. The policy-making processes and the jurisdictional issues, given recent developments, were also discussed.
- Agriculture supply: Supply and service quality, metering and demand estimation have always been contentious issues when it comes to agricultural supply. These were discussed extensively during the event, in addition to a discussion on solarisation of agricultural feeders and Direct Benefit Transfer (DBT).
- Energy transition challenge and the public interest agenda: The challenges and opportunities brought about by the transition away from coal impact stakeholders across the power sector. Related issues such as the environmental and social impacts of power plants and associated infrastructure (such as coal mining, power transmission, dumping of solar PV modules, etc.) and the issue of RE integration were discussed. The discussions were broadly held on the role of public participation in policy and regulatory processes, changing institutional structures and the varied responses of states.

The agenda for the workshop and the list of participants is attached as Annexure I and II respectively. Presentations, notes, and materials shared during the workshop are available at: <https://www.prayaspace.org/peg/publications/item/517>.

The workshop proceeded through short context setting presentations from lead discussants, followed by moderated, detailed discussions amongst the participants. The deliberations acknowledged several persistent issues in the sector that were common across states, which need to be addressed through collaborative, concerted efforts. The discussions held during the two-day workshop are summarized in the subsequent sections of this report.

2. Major Deliberations at the Workshop

This section is a compilation of the key issues that were discussed during the different sessions of the workshop.

2.1. Reflections over recent policy proposals for sectoral reforms

a) Jurisdictional and procedural issues with sector decision making

Recent policy proposals by the Ministry of Power (MoP) and their implications on the sector were discussed. The friction between states and centre over their jurisdictional powers, given that electricity is a concurrent subject was commented upon. The discussants agreed that a deliberative consultation with stakeholders has been missing with regards to the proposed reforms such as de-licensing of the distribution sector, rollout of smart meters at the consumer level, open access reforms, etc. It has been further exacerbated by short timelines for submitting comments from the public (usually about two-three weeks), the use of techno-economic and legal language as well as unclear provisions. Floating proposals without adequate prior consultation with sector stakeholders contributes to ad-hoc policy making that does not account for sector realities and future implications. Hence, it was agreed that such an approach to policy-making needs serious reconsideration.

b) Privatisation in power sector

With various proposals nudging the privatisation of DISCOMs, the need and impact of privatisation on the whole power sector was also one of the key issues discussed in the workshop. Few participants pointed towards the massive capacity addition in the country which was driven by private participation in power generation. The government promoted private participation in power generation, assuming that it would lead to faster capacity addition and availability of cheaper electricity. While this was partly achieved, the consequent stranded assets (e.g., UMPPs in Sasan and Mundra) have led to a large financial burden on the consumers in the form of higher fixed charges. The delicensing of the generation sector and active participation of private developers has ballooned the coal fleet in the country since 2003. Hence, there is a dire need to revisit capacity addition strategy, because of the inevitable energy transition taking place across the globe. It was also pointed out that since the enactment of the Electricity Act, 2003 (E Act 2003), the government has been promoting privatisation, without any comprehensive study about its impacts.

Various recent proposals to reform the power distribution sector seem to be a nudge for privatisation. In the discussion, many unsuccessful examples of privatisation were illustrated, especially in the case of Odisha and Mumbai. The experimentation of retail competition in Mumbai is unique. Despite many years of presence of private utilities and a long litigious process, the retail competition in the city remains far from reality. The method deployed for tariff determination for the two DISCOMs in the city - AEML and Tata Power- has resulted in the creation of regulatory assets and challenges of power procurement planning for both these DISCOMs, as a result of frequent migration of consumers from one DISCOM to another. This has also led to other consumer-related issues. For example, addressing network-related complaints by the consumers is delayed when there are different content and carriage service providers.

Odisha has been subject to a lot of experimentation as far as power distribution privatisation is concerned - first privatisation of DISCOMs, then moving back to state-owned DISCOMs and then back again to private

DISCOMs (now, all under the same ownership). Yet, no substantial ground level changes seem to have taken place in the state in terms of power supply and quality.

Despite being skeptical about privatisation, the participants maintained that any attempt of privatisation should be for the betterment of the consumers and protection of their interests at large. Also, any such step should be taken up with wider consultations, especially with the consumers and employee unions.

c) Neglect of core issues

Amid debating the present reform proposals on the ground of merits, some participants questioned the omission of many core issues from the recent proposals, such as prolonged vacancies in statutory bodies like CEA (just 5-6 members out of 14 members) or SERCs, ensuring timely payment of dues to generators (despite the provision of Letter of Credit for payment security and consequences of its default), operational efficiency of DISCOMs and supply quality.

2.2. Public interest issues

a) Role of Regulators

Some participants felt that regulators seem to be moving away from the public interest agenda, towards the interests of certain stakeholders. Their fairness and rationale have been questioned occasionally at various fora such as APTEL and different courts of India. Some others also pointed out that there has been a noticeable change in the approach of regulators, especially while taking into account the views and opinions of the public. The public representations are not considered with seriousness, and hence, the perspectives of consumers and consumer groups are seldom considered as part of decision-making processes. As a result, the public representation at regulatory proceedings is also reducing over time. Further, many agreed that SERCs do not seem to depend on evidence-based decision making for petitions filed for approval of power procurement. For example, in recent times, no petition for PPA approval or capacity addition has been rejected by APERC, despite having sufficient, existing signed PPAs by state DISCOMs and in spite of poor assessment of demand forecasts.

The gross time delay in addressing a policy issue or hearing and passing a judgement (on a petition) by the regulators is worrisome for the sector. Along with this, the regulators seldom monitor the compliance of many standards and regulations issued at central or state level. Some of them such as Fly ash utilization from thermal power plants (TPPs), environmental norms for TPPs, consumer grievance redressal forums, timely filing of tariff petition in certain states and regulations on standard of performance were mentioned during the discussion.

The need to clearly demarcate the powers and roles of courts (High courts and Supreme Court) and ERCs/APTEL was also highlighted. In the absence of this, there is again a time delay in issue resolution, thus greatly hampering the functioning of the power sector. The ongoing litigations related to the distribution system in the city of Mumbai is an example of such a case.

Some participants brought attention to the fact that while there are regulations related to safety of consumers, they are not being implemented in letter and spirit. Accidents are not reported properly. The manner of reporting varies across the states, making it difficult to track accidents in toto. Similarly, the aspect of affordability often gets ignored. The widening economic disparity along with the implications of COVID-19 has

strengthened the need to think about it, now more than ever. The active role of the regulator in the above aspects is extremely crucial.

b) Institutional framework in the light of energy transition

Energy transition calls for more proactive efforts from the regulators at both central and state level, which is currently missing. There is a dire need to evolve a framework that incorporates grid operation, project viability and resource allocation for smoother energy transition. This needs regulatory intervention at an early stage and wider consultation with all stakeholders. The energy transition is going to have far-reaching impacts on consumers, be it on subsidy, retail tariff or quality of supply. In line with this, some participants suggested having at least one expert member on Renewables and Climate Change in the CEA, who can help with better planning of renewables and energy transition at the national level.

Some participants emphasised that the current institutional structure is plagued with technical and managerial lacunae, and thus fails to adequately hold DISCOMs accountable. Consequently, the effective public engagement is getting increasingly limited in some states. Hence, many underscored the need for a proper institutional structure that is able to internalise the needs of energy transition, as well as the other environmental and social costs. There is always a missing link of integrated planning in the power sector, especially when multiple components (like fuel generation, transmission and distribution) are to be considered together. Planning is presently done in silos, with different priorities being given at state and central level. This calls for building up an institution which takes into account the aspect of planning, including that for energy transition. Also, the institution should involve public participation and put out their draft plans for public consultation.

c) Metering

Recently, proposals of smart meter rollout (through Rs. 3 lakh crore Central scheme or amendment in CEA Metering regulations) have not considered ground-level issues of metering. It was felt that the metering status and their operation at the consumer end is quite abysmal. Instead of massive smart meter rollout, the primary focus should be on providing 24*7 reliable power supply to all consumers in the country.

Agricultural metering, in particular, remains a critical issue even after around two decades of the implementation of the EAct 2003, which had envisaged supply of electricity only via meters. Moreover, it was pointed out that even among metered connections, a sizable number of meters do not work. Inventory of meters with DISCOMs is also scarce. The techno-economic viability of installing meters at the consumers' end was questioned by some. Therefore, it was concluded that consumer metering might be difficult to achieve and the use of norms is not the right way to reliably estimate agricultural consumption. Instead, most agreed that energy input data from feeder level AMI meters (as implemented in Maharashtra) is the only dependable source for estimating this consumption.

Some also emphasized issues with Direct Benefit Transfer (DBT) to farmers, especially the delays in subsidy credit to consumer accounts. A few also questioned the ambiguity of DBT when it came to tenants and disconnection at evening and early morning time in case of low or no credit. Furthermore, it was noted that only few states are working on DBT, by conducting pilot projects, albeit at a smaller scale. Thus, there is a need to scale up these pilots, before planning for a massive rollout.

d) Managing agricultural supply

Considering the challenges associated with providing supply to agricultural consumers, there was discussion over exploring other options of power supply to them. Two major discussion points in this regard were solarisation of agricultural feeders and alternatives to the present way of power supply.

Solarisation of feeders (1-10MW solar plant at 11 kV feeder level) was advocated for, which would provide reliable day-time power for the farmers, reduce cost and consequently, save subsidy for the government. This particular policy was initially discussed and adopted by Maharashtra's DISCOM (MSEDCL) in 2016, with a recently set target to build 5000 MW Solar feeder capacity, which is equivalent to powering 14 lakh irrigation pumps. At present, this approach is also one of the components of the KUSUM scheme, with a national target of over 10,000 MW capacity. Some underlined the need for a holistic view in such cases of decentralised RE projects for agricultural supply, as this should not further amplify the problem of surplus power.

There were also suggestions for having a separate agricultural distribution company to properly operate and manage power supply for agricultural consumption. A similar announcement has been made in the state of Rajasthan by the state government recently, however not much seems to be happening in this regard. It was also highlighted that in case of multiple licensees, such as in Mumbai, it is the state licensee that bears the entire burden of agricultural supply, and not the private ones. An alternate suggestion was that a corpus could be instituted that could collect cross-subsidy for agricultural consumers.

2.3. Energy transition challenges

a) Environmental challenges

The transition in the electricity sector, with a shift from fossil fuels towards renewables, is driven by economics, environmental concerns and policy measures. The share of coal in electricity capacity and generation is gradually reducing. Yet, coal will remain significant for the next decade or so. Therefore, in spite of the transition away from fossil fuels, one should not lose sight of the social, environmental and health impacts of coal. The violation of 100% fly ash utilization norms by many thermal power plants is alarming. Very little is being done to check the compliance and take required penal actions. There are also legacy issues caused by non-utilization of fly ash, which has already accumulated to a staggering 1.5 billion tons in the country and is set to rise further with coal remaining dominant in the electricity mix. Further, it was discussed how the much talked about 2015 environmental norms for coal-based power plants turned out to be a case of delay, dilution and gross non-compliance.

b) Energy Modelling

Some insights from power sector modelling exercise for 2030 were discussed. Coal generation is expected to remain flat, while almost all incremental generation would come from solar and wind sources. The impact of other factors, such as the Covid-19 pandemic, energy storage and behavioral changes, were also discussed. A few participants called for caution while modelling the power sector and interpreting its results. Uncertainty, especially in the renewable (RE) sector, is quite large and could drastically impact the results of modelling exercises. Also, the reality could tend to be very different from the modelling results if only central level policies are taken into account, without acknowledging the variability in planning and policy-making across states.

c) RE and integration issues

Many also brought attention to the problems with RE integration in the years to come. Participants stressed the need for stabilisation of scheduling parameters for RE, which is also impacting the efficiency of current thermal power plants. ERCs can take proactive efforts towards agile rule making and planning. Additionally, no detailed plan is in existence with regards to planning the retirement of TPPs. Participants agreed that no new thermal capacity, other than those already in different phases of construction, must be added.

During the discussion, few participants pointed out the issues associated with giving “must run” tag to solar and wind power (despite being infirm power). This affects the scheduling and dispatch of thermal power plants, and even result into backing down of generation from base load plants in the country. There is a need to focus not just on legacy issues but also future problems that may arise due to greater integration of renewables into power grid. Further, many also warned about the lack of scrutiny with regard to RE projects. There is a need to actively think about the potential environmental and social impacts of RE.

3. Way forward

The workshop concluded with an open session where participants reflected on the need for sustained regulatory engagement and in-depth policy analysis, given the continued regulatory and jurisdictional challenges that exist in the power sector.

Many appreciated the state-level insights and experiences shared during the workshop, but underscored the need for increased and active collaboration among civil society actors. Instead of limiting strong regulatory engagement in certain states, there is a need to invest in capacity building of civil society organisations across all states on a long-term basis.

While everyone missed the experience of physically attending the workshop, participants acknowledged that the virtual engagement also proved to be fruitful. The virtual event was able to provide a space for people to reach out to one another and have bilateral interactions in many instances. Going forward, it is hoped that the workshop is able to move towards a more hybrid system, retaining the organic nature of interactions of a physically-held event, while also allowing a more diverse set of participants to have the opportunity to join online.

Annexure I: Agenda for the workshop

Day 1: 5 th October		
	Time	Details
Introduction and Session 1	10.00 AM to 11.30 AM	Topic: Power sector policy making: Reflections on recent proposals Moderator: Ann Josey Discussants: Padamjit Singh (AIPEF), Ashok Pendse (Consumer activist), Maria Chirayil (PEG)
Session 2	11.30 AM to 1.00 PM	Topic: Agricultural supply Moderator: Sreekumar Nhalur Discussants: Thimma Reddy (PMGER), Shantanu Dixit (PEG)
Day 2: 12 th October		
	Time	Details
Session 3	10.00 AM to 11.30 AM	Topic: Energy transition in the context of public interest Moderator: Maria Chirayil Discussants: Suyog Zute (Graduate Engineers Association, MSPGCL), Ashok Sreenivas (PEG), Shripad Dharmadhikary (Manthan)
Session 4 and Conclusion	11.30 AM to 1.00 PM	Topic: Open session Moderator: Sreekumar Nhalur

Annexure II: List of Participants

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