

Minutes of the Conference of the Power Ministers of States and UTs held on 10th – 11th October, 2019 at Tent City, Narmada, Gujarat

1. The tenth Conference of Power and Renewable Energy Ministers of States & Union Territories was held on 11th – 12th October, 2019 at Tent City, Narmada, Gujarat. Following is the gist of discussions held and decisions taken.

2. Secretary (Power) in his welcome address stated that India is no longer a Power deficit country. Country has achieved universal electrification of all the villages and households, leaving some households in LWE affected areas. The focus is now towards making the system viable, reduction of T&D losses and more thrust on renewable energy. We have to meet the challenges, which include reasonable cost of power procurement and supply, creation of Regulatory Assets, unviable subsidies, losses to DISCOMs and State Finance issues.

MNRE:

3. Secretary (MNRE) stated that Hon'ble Prime Minister had made a commitment in the Paris Climate Change Conference, 2015 for reducing the power intensity by 33-35% by 2030 as compared to the level of 2005. Ambitious target of 175 GW of Renewables has been set to be achieved by 2022. In the New York Climate summit, PM has announced that the target would be further increased to 450 GW. Country has 83,530 MW RE capacity and approximate 36000 MW is under installation, scheduled to be completed in the next 3 years. Ministry is aggressively promoting Solar pump sets, both standalone and grid connected.

4. He highlighted that tariffs of Solar, wind, hydro, offshore wind will further come down with advancement of technology. However, challenges such as revisit of PPAs by some States, increasing land cost, meeting Renewal Purchase obligations (RPOs) are to be overcome with the support of the States.

5. Hon'ble Union Power Minister acclaimed the history created by connecting 26.6 million consumers with electricity in record time of 16 months. Power Sector has been able to provide access of electricity to all; the next target would be to ensure 24x7 quality power for all.

6. Hon'ble Union Power Minister stressed that developed power system is a must for a developed Nation and at the same time cautioned that in spite of laudable achievements, there remain important issues concerning Power Sector which need to be addressed. He called upon all stakeholders in the Power Sector to cooperate to meet the challenges as outlined:

- i. Capacity should be added keeping in mind future demand, currently growing at more than 7%.
 - ii. Focus has to be on attracting investments in the power sector through ease of doing business for which sanctity of contract has to be ensured. Payments to Generators, DISCOMs have to be released on time. Today Rs.59000 crore is owed to Generators by the DISCOMs, and Rs.47000 crore is owed to DISCOMs by the States, leading to stressed assets and unwillingness of Bank to finance Power projects.
 - iii. Citizens rights, right of choice to the consumers would be at the centre of future policy initiatives. Inefficient monopolies have to end.
 - iv. Climate change is a serious concern. So renewables would be our focus, along with energy efficiency.
 - v. Making the DISCOM viable is priority. Experience of Gujarat in turning around DISCOMs need to be emulated.
 - vi. Every unit of power needs to be accounted for and States should release the subsidies to the DISCOMs in time.
 - vii. Separation of Agriculture feeders needs to be completed in next one year.
 - viii. Solarization of pump sets and connecting them with grid is planned in a big way. Incentive to farmers to sell power to grid by restricting running of pump sets to 6-8 hours to conserve ground water.
 - ix. New merit order despatch scheduling is coming up. Therefore, more coal is to be given to more efficient plants.
 - x. Since, Government systems are not suited to run retail business, therefore, States may involve private parties in distribution & collection. Each State to have 3 – 4 licensees who would compete and provide defined standard of service. Consumers will have choice to select their vendor.
 - xi. Replacing the current meters with smart prepaid meters will address the challenges of metering, billing and collection. Various innovative financing models such as CAPEX OPEX, TOPEX, are under consideration.
 - xii. Suggestions invited for setting up a centralized agency for introducing smart prepaid meters and keeping the data centralized in a cloud format.
7. Secretary, MNRE mentioned about the pledge made in the Paris Accord on Climate Change and stated that by 2030, 40% of our installed power generation capacity shall be based on non-fossil fuel based sources. He remarked that Hon'ble Prime Minister

in his address at Climate Action Summit has stated that ‘*India’s renewable energy capacity would be increased beyond 175 GW, upto 450 GW*’. He highlighted status and issues of RE Sector as below:

- i. As on 30th September, 2019, a total of 82.58 GW of renewable energy capacity has been installed with capacity of 31.16 GW under various stages of implementation and capacity of 39.11 GW under various stages of bidding. Thus, total renewable energy capacity either installed or under various stages of implementation/bidding is 152.85 GW and Ministry is confident that set target of 175 GW renewable energy capacity will be easily achieved by December, 2022.
 - ii. RE tariff will be lowered further with technological advances such as Hybrid solar-wind plants, offshore wind power, floating solar, etc & being explored.
 - iii. Re-negotiation of PPAs is a major concern and the State Governments are requested to adhere to the provisions of PPAs in letter and spirit.
 - iv. State Governments are requested to ensure Timely payment to generators (RE and conventional power) by DISCOMs on First in First out Basis.
 - v. State Governments are requested to ensure 100% RPO compliance and align RPO trajectory as per M/o Power order. Ministry is proposing to incentivise procurement of RE beyond RPO limits.
8. Hon’ble Minister of State (I/C) emphasized that PPAs needs to be honoured to ensure investor friendly environment in the country.
9. He asserted that consumers have right to generate power for own consumption by setting up own renewable energy plant and open access by paying relevant transmission charges, cross subsidy charges and wheeling charges. Policy in this regard is under formulation. He said that all agricultural pump sets will be solarized in next 3 years under PM-KUSUM scheme to reduce cost of irrigation. Surplus power generated will be sold to DISCOMs as an additional source of income for farmers.
10. Additional Secretary, MNRE made a brief presentation on issues covering; implementation of PM-KUSUM & solar rooftop scheme, RPO compliance, RE projects in border areas, Ultra Mega RE parks, sanctity of PPAs, timely payment to generators & opening of LCs by DISCOMs, must run status of RE power, allotment of land and regulatory issues, etc.
11. After detailed discussion with States/UTs on various issues related to renewable energy sector, Hon’ble Minister directed the following:-

- i. Single window clearance systems may be developed by the States/UTs for sanctioning projects under PM-KUSUM scheme.
- ii. Time limits for providing NET metering connection for solar rooftop plants by DISCOMs should be fixed by States/UTs.
- iii. States/UTs must ensure 100% RPO compliance and penalties may be levied for non-compliance of the same.
- iv. State Governments may form SPV with CPSUs for setting up Ultra Mega RE parks.
- v. States may go for energy storage if found economically viable as of now.
- vi. Ladakh transmission network may be included in proposed GEC phase III.
- vii. In order to keep RE tariff competitive, state governments may not levy any development charges or existing charges, if any, should not be increased.
- viii. State may ensure Must Run Status of Renewable Energy plants and curtailment of renewable energy is resorted to only for grid security reasons & that through transparent process. Renewable power curtailed due to reasons, other than grid security, should be treated as deemed generation and compensated at the contracted tariff.
- ix. State Governments to consider renewable energy as green activity and exempt these projects from purview of Land use or land ceiling acts.
- x. Reserved forest/degraded forest land may be allowed for setting up RE projects. This issue may be discussed with M/o Environment, Forest & CC.
- xi. State Governments are requested to ensure that tariff discovered through competitive bidding process is adopted within a time frame of one month.

(Action: All States/UTs.)

12. Some Suggestions were also received from the State Governments which should be examined by MNRE.

- ✓ **Odisha:** Solar systems being installed in the state should have high structural strength to face high wind speeds during cyclones in coastal areas.
- ✓ **Kerala:** Under component A of PM-KUSUM scheme, lower limit of 500 KW should be decreased to 100 KW for smaller states.
- ✓ **Uttar Pradesh:** Allocation made under PM-KUSUM should be increased. Guidelines/specifications may be issued for empanelment of vendors and equipment by the Ministry under component C.
- ✓ **Maharashtra:** Under component A of PM-KUSUM scheme, upper limit of 2

MW should be raised to 10 MW. Integrated & more efficient pump sets may be installed under the PM-KUSUM scheme. Opening of LCs for RE projects may not be made mandatory for projects under FiT regime.

✓ **Gujarat:**

- Under component A of PM-KUSUM scheme, upper limit of 2 MW should be raised to 4 MW and tariff for these plants may be taken as price discovered in last bid plus additional 20 paise per Kwh. This tariff may be approved by SERC and may be valid for next 6 months. Farmer can set up plants near substations having spare capacity of his choice.
- Instead of putting a limit of Horse Power under component B, a limit of panel capacity at 15 KW should be fixed. Also pump capacity should also be increased from 7.5 HP to 10 HP under PM-KUSUM scheme.
- Capacity not demanded by some states under solar rooftop scheme should be allocated to interested states.
- Opening of LCs for RE projects may not be made mandatory for states with timely payment schedule.

✓ **Tamil Nadu:** IREDA/PFC/REC may be directed to provide loans to DISCOMs to clear pending dues of RE generators.

✓ **Jammu & Kashmir:** States must be incentivised for facilitating ultra-mega RE parks.

✓ **Chhattisgarh:** Pump capacity should also be increased from 7.5 HP under PM-KUSUM scheme.

✓ **Madhya Pradesh:** Surface water pumping may also be included under PM-KUSUM scheme.

✓ **Bihar:** Battery backup may be included in solar rooftop plants for emergency purposes in case of floods in urban areas.

✓ **Sikkim:** For states with abundant large Hydro power and no solar power feasible, RPO calculations may be reworked out.

✓ **Goa:** Setting up Ultra RE parks may not be feasible for smaller states due to land constraints. Appropriate scheme may be designed for smaller states.

✓ **Karnataka:** For states with very high RE share, deviation limits for penalty from ± 250 MW should be increased to ± 500 MW in order to ensure must run status of RE projects.

- ✓ **Tripura:** States with high forest cover are not able to set up large RE projects due to land constraints, hence RPO compliance may be relaxed.
- ✓ **NTPC:** Land charges being levied by the states should be on per unit basis instead of per MW basis.
- ✓ **NHPC:** CPSU may be allowed to set up ultra-mega RE parks on their own without any need of forming SPV.

Distribution:

13. Sh. M.K. Narayan, Joint Secretary (Distribution) highlighted the status of Ujjwal DISCOM Assurance Yojana (UDAY) through a detailed presentation. Highlight of presentation are as below:

- i. States have shown good progress by reducing their AT&C losses and ACS-ARR gaps however, the same is not enough, as targets have not been met. The longer the time of turnaround, the higher would be the accumulation of debt, and financial problems. States were advised to accelerate their loss reduction. **(Action: all States/UTs)**
 - ii. Mounting Government Department dues continue to be a cause of concern. They have increased from Rs 36,900 Crores in FY18 to Rs 41,743 Crores, which indicates that the States are not even paying for the current dues, leading to accumulation of payment dues. States are advised to pay Govt. dues. **(Action: all States/UTs)**
 - iii. Some States have not been increasing tariffs even to the level of normal inflation which is leading to the tariffs not being reflective of true costs.
 - iv. During the presentation it was noted that 96.4% of the subsidy was reported as received, however it was noted that the subsidy is underpaid due to inadequate compensation against unmetered/agri consumers.
 - v. Currently, regulatory assets at the National level are more than Rs. 1,50,000 Crs. As per the proposed New Policy, creation of new Regulatory Assets shall not be allowed.
14. Some comments were received from the State Governments over the mounting dues:
- i. **Telangana** had outstanding Govt. Deptt.' dues of Rs. 7298 Crs in FY19. The State informed that approx. 9000 prepaid meters have been installed in the Government offices that should solve the future problem.
 - ii. State of **Andhra Pradesh** informed that the dues are mainly owed due to two departments namely Rs. 3000 Crs against streetlights and Rs. 1700 Crs against irrigation pumps which led to rise of outstanding dues.
 - iii. The State of **Maharashtra** has reduced their Government Department dues considerably by deducting at least 50% of the expenditure towards electricity bills from the allocation to panchayats and local bodies as a part of the devolution of the 14th Finance commission.

- iv. **Tamil Nadu** requested some financial assistance to liquidate high Gencos dues to which Hon'ble Minister asked the State to submit the proposal.
- v. State of **UP** raised an issue that the benefits accrued to Discoms due to UDAY Program are being adjusted by State Regulators, against regulatory assets.

15. Hon'ble Minister explained that the tariff increases could be moderated if the issues of power theft, non-billing and non-collection are addressed, as these losses have passed on to the consumer in tariffs. A higher tariff due to theft are leading to higher cross-subsidies, and thereby higher costs of power to the industry as well and is adversely affecting the make in India initiative.

16. Hon'ble Minister urged that States to pay Govt. Deptt. dues of Rs. 42,000 Crs, to the DISCOMs, which would de-stress the sector and requested representatives to liquidate the same within a period of six months to wipe out the problem. DISCOMs should in turn arrange to pay the GENCOs in another six months' timeline.

(Action: all States/UTs)

17. Hon'ble Minister of State (I/C) for Power noted that the Billing Efficiency has gone up to 84% in FY19, however this is not sufficient, and efforts are needed to bring billing efficiency to 90% level, leaving 10% maximum for technical losses. **(Action: all States/UTs).**

18. Hon'ble Minister advised that every consumer must be metered and subsidy be disbursed through DBT method. All subsidy claims by the electricity department to Government must be submitted with clear and clean account so that no dispute is there with the State Finance Departments. In this regard Bihar Tariff model was mentioned where the billing of each consumer is having clear cut mention of subsidy amount. **(Action: all States/UTs).**

19. As per PRAPTI Portal, at the end of August 2019, total outstanding dues to Gencos stood at Rs.59,000 Crs which is a cause of stress in the Power Sector. Hon'ble Minister expressed the concern that no investment will come if the Gencos dues are not paid in time. Hon'ble Minister advised that this should be brought to the notice of Chief Ministers, as further continuation of this adverse trend could put the energy supply to the States in jeopardy. **(Action: all States/UTs).**

Smart Metering; Feeder metering and Distribution Transformer metering:

20. Shri Vishal Kapoor, Director (Distribution), Ministry of Power made a presentation on Smart Metering, highlighting points as below:

- i. Advisories have already been issued to all States to convert all existing meters into prepaid smart meters in next three years.
- ii. Standards by BIS and CEA specifications are available now; five nos. laboratories facilities are also available for ratification against standards. There are 38 nos of Smart meter models which have passed the BIS certifications.
- iii. However, the national progress in smart metering is only 0.4% i.e. about 12 lacs smart meters are installed against approx. 24 Crs consumers across the country. As per draft vision document of power sector, trajectory of the smart meters is 2% by FY20, 30% by FY21, 60% by FY22 and 100% by FY23.
- iv. Centralized data management could be done at a national level through an entity. The national entity would also harmonize the interoperability issues through suitable prequalification of meter providers, communication providers and system integrators, with States operating the Advance Metering Infrastructure (AMI) contracts.
- v. Emphasis was laid on operation of the contracts on TOTEX mode to bring in efficient management and control over the AMI throughout the project lifecycle.

21. Hon'ble Minister also emphasized that the Smart metering should be done in prepaid mode only, as usage of prepaid meters by Manipur has resulted in a 50% reduction in losses.

22. Hon'ble Minister advised that all States should complete their Feeder metering and Distribution Transformer metering by end of March, 2020. **(Action: all States/UTs).**

IPDS

23. Action of state government was called for on following issues:

- i. States are expected to complete all IPDS System strengthening work by March 2020. States should also ensure metering of Feeders and Distribution Transformers, along with centralized collection of the meter data for monitoring and analysis. State Discoms to timely file Utilization of IPDS funds on PFMS portal.
- ii. States should submit closures for the completed IPDS system-strengthening projects progressively by March 2020 after reconciliation & submission of As-built Bill of Quantities (BoQ) to get last tranche of GOI grant. All States should ensure rectifications of observations (on Quality of work) as pointed out by Third Party Concurrent Evaluation Agencies (TPCEAs).
- iii. States are expected to expedite award and implementation of IT enablement of smaller towns, sanctioned under IPDS for standard billing solutions, mapping (geo-tagging) of assets.

- iv. States to also ensure timely implementation of ERP projects to improve their operational efficiencies and RT-DAS projects for accurate measurement of reliability parameters at 11 kV level i.e. SAIDI /SAIFI.
- v. In-house capacities of Discom teams are to be developed by the States for regular day to day maintenance and upkeep of IT systems, established under R-APDRP/ state fund.
- vi. Ministry of Power to explore funding of already sanctioned IT / ERP / RT-DAS projects under OPEX model.
- vii. **Assam** to resolve issues related to Data Centre established under R-APDRP so that more IT related projects can be taken up in the NER States. Ministry of Power to convene a meeting to resolve payment contribution related issues and also coordinate upgradation of the data center to the desired standard.
- viii. States to ensure verification and closure of R-APDRP projects by March 2020 to be eligible for funding under any new Distribution scheme of GoI.
- ix. States of Arunachal Pradesh, Odisha, Puducherry and Rajasthan should expedite completion of IT enablement work under R-APDRP so that Third Party verification can be completed in these States. Additional time beyond March 2020 to be granted to J&K for verification keeping in view the ground situation.
- x. States of AP, Gujarat, Kerala, Odisha, Punjab, Telangana, Uttarakhand to undertake Third Party verification of completed SCADA projects under R-APDRP to make them eligible for conversion of Loan into Grant.
- xi. States of AP, NER, Odisha, Punjab, Rajasthan and Tamil Nadu should expedite closure of Part-B projects under R-APDRP.

(Action: concerned States/UTs)

Multiple Supply franchisee Model

24. Presentation on Multiple Supply franchisee Model highlighted the following aspects:
- The model aims to bring competition within the existing framework of Indian Electricity Act 2003, bring efficiency in power procurement and reduce AT&C losses, enable consumer centricity and empowerment to choose the supplier of their choice, improve management control and governance over the supply function, and enable light handed regulations.
 - Business model to create both private and public value to consumers, franchises and the Distribution Companies.
 - Hon'ble Minister suggested that a committee be formed including inputs from four or five leading States to go into the details of the multiple supply franchisee models and submit recommendations. The committee may also take inputs from the consumer organizations.

(Action: Distribution Division, MoP)

Distribution Reforms

25. Shri Ghanshyam Prasad, Chief Engineer (RR), Ministry of Power on the Distribution Reforms related to ‘Right of Consumers’ and ‘Direct Benefit Transfer’ presented proposed amendments to the Tariff Policy 2019 as under:

i) Right of Consumers

- a. The Right of Consumers are (i) Right to get 24x7 power supply and (ii) Right to expect minimum standards of performance.
- b. In case of power cuts above a specified duration and frequency for reasons other than technical faults beyond the control of Distribution Licensees or force majeure events – an appropriate compensation shall be paid by Discoms and credited to the account of the respective consumers with the Discoms.
- c. Distribution licensees shall prepare a power portfolio management policy and get it approved by State Commission to ensure 24x7 power supply to consumers in addition to other measures.

ii) Direct Benefit Transfer

As per the provisions of Section 65 of the electricity act, state governments can give subsidy to any class of consumers to the extent they consider appropriate therefore;

- (a) Appropriate Commission shall determine the tariff without taking into account any subsidy components.
- (b) Any subsidy to be given to any category of consumers shall be given by way of Direct Benefit Transfer directly into their consumer account with the Distribution Licensee to be reflected in the electricity bill of the consumer.

26. It was informed that the **Tamil Nadu** has given certain comments on DBT including payments towards electricity under DBT to Tenant or Owner. It was noted that the proposed formulation in the Tariff Policy addresses the issues raised.

Hydro

27. JS (Hydro), in his opening remarks while making the presentation, stated the following:

28.

- i. Hydropower plays an important role in balancing the grid. In India, with installed capacity of 12.5% hydropower accounts for only 10% of total energy production whereas other hydro-rich countries like Brazil, Norway, Canada etc. have much higher share of hydropower. Out of a total hydro potential of 145 GW available in the

country, only 45.4 GW (including pumped storage plants of 4.8 GW) has been exploited and a further 12.4 GW is under construction.

- ii. Hydro tariff is lowest in the long run as HMoSP (I/C) mentioned that the hydro tariff of Bhakra Hydro Plant is only Rs. 0.35/Unit since last about 40 years.
- iii. Apart from grid balancing benefit, hydropower is useful as peaking power, is useful in night time when solar is not available, has no risk of fuel supply disruption, is economical in the longer run and has longer useful life etc.
- iv. Hydro projects have problems different from other renewable projects - geological issues, long gestation period, rehabilitation issues, non-availability of long term financing and environmental issues.
- v. Union Cabinet recently approved some measures to promote hydropower as notified on 08.03.2019, which include declaring Large Hydro Projects (LHPs i.e. >25 MW) as RE source making green funds available to LHPs, similar to RPO, HPO a separate entity within the existing non-solar RPO. The HPO would be applicable for all obligatory entities including Central, State and private sector LHPs (including PSP). It would cover LHPs commissioned after 08.03.2019 including untied capacities of LHPs commissioned before 08.03.2019 for which no long term HPO has ever been signed prior to that date. The Ministry is in the process of notifying HPO trajectory based on the commissioning schedule of the projects.
- vi. Another measure approved is the flexibility in tariff determination, whereby the consumer, developer and the bankers can mutually agree on a tariff as per their cash flow including back-loading to make the tariff of initial years lower. JS (Hydro) requested hydro rich states to involve MOP for tariff modelling in hydro projects, if required.
- vii. The government has also approved to provide budgetary support for enabling infrastructure (roads/ bridges) and flood moderation components, on case to case basis, to the HEPs. CEA is in the process of formulating guidelines for providing these budgetary supports.
- viii. Recently, some major initiatives have been taken by Government wherein pre-investment activities have been approved for Dibang multipurpose project in Arunachal Pradesh, CCEA approval has been accorded for financial investment in Kiru HEP at J&K and Ratle HEP in J&K has also been revived. Also for the first time, NHPC, a CPSU participated in NCLT bidding and took over a private project viz. Teesta VI HEP in Sikkim which was stalled due to financial reasons.
- ix. Environment Ministry is also looking afresh at hydropower projects and have helped in clearing the pending issues of Subansri Lower Hydro Project(2000 MW) which could be restarted after a long period.
- x. Some State Governments have also taken measures to promote hydro projects and to reduce their tariff. Government of J&K deferred free power and exempted local taxes

to make tariff affordable in some projects. Government of Himachal Pradesh recently signed MOU with three CPSUs for developing 10 hydro projects with relaxations like staggered free power, reimbursement of 50% State GST, allowing pre-construction LADF to be booked under different heads and BOOM/ BOOT for 70 years. HMoSP (I/C) also mentioned that due to 12% free power, hydro projects becomes unviable due to which banks are hesitant to provide loans. Therefore, there is need for many more state governments to defer their free power in order to make the project viable. HMoSP (I/C) advised that steps taken by these State Governments to promote hydro projects, may be circulated to all other hydro-rich states. **(Action: Hydro Division, MoP).**

- xi. **Gujarat** and **Goa** State representatives mentioned that there is a need to purchase hydro power. **Rajasthan** State Representative mentioned that Run-of-the- River (ROR) projects give power for 3-4 hours per day. HMoSP (I/C) mentioned that storage projects like Tehri help in flood moderation and are also environmentally good. He requested state governments to go for storage hydro projects in which the tariffs are lowest in longer run like Bhakra Hydro Project. He directed to circulate the hydro policy made by State of Himachal Pradesh to all other states. **(Action: Hydro Division, MoP).**
- xii. HMoSP (I/C) mentioned that there is need to redesign the contract system with a neutral body to take decision on dispute resolution in a time bound manner. JS (Hydro) mentioned that a recommendation of the CEA headed Committee for 6 months resolution in contractual disputes in HEPs, is under examination at Ministry and CEA. CMD, NTPC further mentioned that financing during the construction and after construction should be handled separately.
- xiii. CMD, NHPC mentioned that HEPs are at far flung in remote areas. These areas are getting developed during the constructions of projects which is appreciated but during the project appraisal the same is not reflected. Also the 1% free power under LADF is not properly utilized by the states. Therefore proper monitoring by the states is required. **(Action: concerned States/UTs)**
- xiv. CMD, PFC mentioned that they are ready to fund for longer periods of 18/20 years to hydro projects and even they have funded Sikkim project for the period of 28 years.
- xv. CMD, THDC requested for support of State Govt. for addressing law and order, clearances, land acquisition and other issues during execution of the projects.
- xvi. **Nagaland** State Representative requested for increase in subsidy for SHP by MNRE citing local tough conditions. HMoSP (I/C) mentioned that 12% free power in SHPs can be avoided by the States and directed MNRE to further examine the issues. **(Action: MNRE)**
- xvii. **Arunachal Pradesh** State Representative mentioned that projects of capacity 4000 MW have been terminated due to no or slow progress by the developers and 2800 MW capacity projects are available to be handed over to other interested developers.

- JS (Hydro) mentioned that the stalled/ terminated projects of the State were examined at length and based on the affordability and public opinion, 14 HEPs have been shortlisted for further discussion with the State Government so that they can be taken up by hydro CPSUs. HMoSP (I/C) directed to expedite the hydropower projects of Arunachal Pradesh State. **(Action: Hydro Division, MoP).**
- xviii. HMoSP (I/C) mentioned that Nepal have also requested India to explore their hydro potential so that they can also increase their per capita as has been done by Bhutan. Therefore, Hydro PSUs can involve themselves to explore the hydro potential of Nepal. **(Action: Hydro Division, MoP).**
- xix. Tamil Nadu representative expressed intention to participate in developing the hydro projects of other states including NE States. JS (Hydro) mentioned that On-river PSPs are costlier than off-river PSPs, therefore states can explore the Off-river PSPs further. CEA representative mentioned that PSP potential needs to be further exploited and therefore States may survey their conventional HEPs and whether these can be converted to storage PSPs. JS (Hydro) informed that one Australian agency has done a study in this regard.
- xx. **Bihar** Government Representative mentioned that many HEPs are multipurpose projects and so all costs should not be loaded on the project costs. JS (Hydro) mentioned that recent Cabinet Decision dated 08.03.2019 has taken care on this aspect.
- xxi. CMD, SJVNL mentioned that states should come forward in deferring the free power and also requested GOI to reimburse its share of GST to the developers.
- xxii. HMoSP(I/C) advised State Governments to take steps to identify and develop commercial viable PSPs.

Ease of Doing Business

29. Shri Ghanshyam Prasad, Chief Engineer (RR), Ministry of Power presented measures taken on the issues related to Ease of Doing Business as below:

Payment Issues

- i. Order on Opening and maintaining of adequate Letter of Credit (LC) as Payment Security Mechanism under Power Purchase Agreements by Distribution Licensees issued by Ministry of Power on 28.06.2019 effective from 1st August, 2019.
- ii. Reduction in tariff on account of pre- payments in the value chain of power sector can be achieved by installation of Pre-paid consumer meter as there will not be any requirement of working capital (presently it is 45 to 60 days).
 - a. On the issue of reduction in tariff on account of pre- payments some States suggested as below:
- iii. Rebate in the tariff be given to States.

iv. Issue of Advance Payment to Generating Projects awarded competitively under Section 63 of the Electricity Act 2003 needs to be properly addressed.

30. It was decided that the Central Commission may issue necessary regulations for reduction in tariff in case of advance payment to the generator. Appropriate commission shall ensure that the generation/transmission tariff is duly adjusted due to the reduction in the working capital requirement. **(Action: CERC / SERCs)**

Implementation of Merit Order Dispatch across the country

- i. For Inter State Generating Station, Merit order Dispatch in the form of Security Constraint Economic Dispatch (SCED) is under progress till 31st March 2020. This has shown substantial savings which are to the tune of approximately Rs 3 Crore/day.
- ii. For implementation of Merit Order Dispatch across the country, a Group has been constituted in Ministry of Power under the Chairmanship of Shri Sanjiv Nandan Sahai, then, Special Secretary, Ministry of Power with members from CERC, CEA, POSOCO and representatives from five States (Gujarat, Uttar Pradesh, Karnataka, West Bengal and Assam). The issues relating to the options for implementation of merit order dispatch across the country are being discussed in the Group. It was shared that the concerns raised by the States are mainly related to two issues i) Impact on POC transmission losses & charges and ii) Issues related to Fuel like Take or pay commitments, Incentive paid for off-take of fuel in excess of the norms specified in the FSA etc.
- iii. Gujarat and Uttar Pradesh have submitted some of the data for a case study being done under POSOCO. Other States were also requested to volunteer for such study which is underway.
- iv. This model needs to be replicated at national level including intra-state generators to get maximum efficiency. However while doing so the concerns of the States needs to be addressed appropriately.
- v. State(s) willing to be part of the group may also write to MoP. States were also requested to give suggestion to make Merit Order Dispatch across the country operational so that there is overall reduction in cost of power purchase.

(Action: all States/UTs)

Pass Through

- i. It was discussed that to build investor confidence and ensure investment in Generation, it is necessary that pass-through of uncontrollable cost to be made appropriately.
- ii. It was shared that suitable provisions regarding the pass-through of costs related to Change-in-Law, Carrying Cost and Late Payment Surcharge have been proposed in the amendments to Tariff policy, which is under approval.
 - a. **(iv) Open Access**
- iii. It was discussed that the concept of Open Access was introduced through Electricity Act, 2003. Section 42 of the Electricity Act requires the open access to be introduced in a time-bound manner. It was deliberated that Open Access to eligible consumers to be granted in a specific time line. A trajectory for reduction in Cross Subsidy surcharge to open access consumers has been proposed in the amendments to Tariff policy. It has now been proposed in amendment to Tariff Policy that surcharge payable by a consumer shall initially be fixed to take care of current level of cross-subsidy and shall be progressively reduced every year by 25% of the prevailing value for that open access consumer.
- iv. States were requested to facilitate open access.

(Action: all States/UTs)

31. Presentation made by Gujarat Govt.

- Hon'ble Minister for Energy, Government of Gujarat shared the experience of Gujarat government in transformation of power sector of Gujarat from a loss making entity in 2002 to profit making entity now.
- Points highlighted included improving PLF to 80-85%, using washed coal and imported coal, setting up gas grid across the state upto Saurashtra region, dramatic reduction in T&D losses, separate feeder for Villages under Gram Jyoti Yojna.
- In order to turn around the generation companies, the generator was persuaded to reduce his ROE, banks reduced the interest and the Government cleared all generation dues in one go.
- The importance of political will was emphasized. Over 20 lakh poles were installed in less than 3 years. Strict and swift action against power theft.

- Best practices being followed include GPRS based Meter Reading machines, women SHG members deployed for meter reading in remote areas, taking on board the employees of Gujarat State Electricity Department before undertaking total restructuring of power sector in Gujarat.

Transmission: Strengthening of Transmission System for 24x7 power

32. The presentation on strengthening of transmission system for 24x7 power was made by Chief Engineer (PSP&A-II), CEA. He gave statistical details of existing power transmission and transformation capacity and the future plan of capacity addition in transmission sector including plan to evacuate power from targeted 175 GW RE in India by 2022. After detailed deliberations, following was decided:

- a) To facilitate mobilization of funds, the states may adopt options like implementation of inter-state transmission project through TBCB route or formation of Joint Venture (JV) with POWERGRID utilizing their strength in terms of their expertise in project management, best practices in project execution, credit worthiness for low cost financing etc. to speed up process of strengthening the intra-state transmission system.
- b) There is need for harmonious strengthening of Intra-State Transmission System (In-STS) by respective states. States need to pro-actively participate in the regional transmission planning activities for strengthening/ augmenting their inter-state transmission system commensurate with the augmentation/ strengthening of ISTS network to cater 24x7 power requirements.
- c) Along with 24x7 power, quality of power is also important so more number of substations along with transformation capacity is required to be established.
- d) Inter-regional transmission capacity needs to be strengthened on continuous basis keeping in view the national level planning to be carried out by CEA so that there is seamless power transfer through ISTS network to meet the long term vision for next 10-15 years.
- e) The transmission charges sharing mechanism need to be reworked on urgent basis to avoid wider difference of rate from among the states.
- f) The states are requested to expedite adoption of guidelines issued by MoP for payment of compensation for obtaining the Right of Way as well as land for substation.

(Action: all States/UTs)

FGD & DeNO_x equipment installation in the TPS

33. Hon'ble MoS for Power raised concerns over the slow progress in FGD installation plans and stated that Ministry of Power would not support for any relaxation of timelines for FGD installation. State Governments of Andhra Pradesh and Bihar expressed concern over increase in cost and enquired if it would be absorbed in the merit order despatch.

34. Secretary (Power) informed that the additional cost due to FGD would not be considered for merit order despatch upto December 2022 and necessary directives have been sent to regulatory commissions. Hon'ble MoS for Power advised power plants to take actions to complete the FGD as it was a regulatory requirement.

(Action: all States/UTs)

Energy Conservation

35. Hon'ble MoSP(IC) mentioned about the huge potential of Energy Efficiency and enumerated the various schemes implemented by Bureau of Energy Efficiency (BEE) and Energy Efficiency Services Ltd. (EESL) with the aim to reduce the emission intensity of our economy. He informed about the savings achieved so far by implementation of these schemes in terms of energy savings and reduction in carbon emissions.

36. DG, BEE made presentations on Energy Conservation specifically related to Energy Conservation Building Code and achievements under PAT. He further requested DISCOMS to comply with the mandatory provisions of Energy Conservation Act, 2001 and PAT Rules. BEE has so far received Monitoring and Verification Report, which is mandatory for PAT compliance, from 18 DISCOMS. After detailed deliberations, following was decided:

- i. DISCOMS from West Bengal, Gujarat, Chhattisgarh, Jammu and Kashmir, Tamil Nadu, Bihar, Jharkhand, Rajasthan, Madhya Pradesh, Arunachal Pradesh and Himachal Pradesh to submit their M&V Reports expeditiously.
- ii. DISCOMS, which are yet to register themselves on the PATNet Portal are requested to do so.

(Action: all States/UTs)

Review of progress on adoption of Energy Conservation Building Code (ECBC) by the States and the UTs

37. DG BEE stated that updated Energy Conservation Building Code (ECBC) 2017 launched by the Hon'ble Minister of State (IC) for Power, Coal, NRE & Mines in June 2017,

sets minimum energy performance standards for commercial buildings having a connected load of 100 kW or contract demand of 120 kVA and above. While the Central Government has powers under the EC Act 2001, the State Governments have the flexibility to modify the code to suit local or regional requirements and notify them. For the adoption of Energy Conservation Building Code (ECBC), DG, BEE said that four major steps have to be taken by the States. i.e; 1) Energy Conservation Building Code (ECBC) amendment, 2) Department and Public consultations, 3) Cabinet approval, and 4) Notification. He mentioned that as on date, 14 States and Union Territories have notified ECBC, out of which, compliance is operational in three States.

38. DG BEE further stated that in order to support implementation of ECBC in the built environment, several enabling measures like establishment of ECBC cells in all the States/UTs, empanelment of ECBC expert architects, development of technical reference material and conformance/compliance check tools, capacity building of various stakeholders like State Designated Agencies (SDA), Municipal corporations, Urban Department, CPWD, state PWD etc. have been taken.

39. Hon'ble MoSP(IC) stated that energy efficiency is very important for the country and every unit of energy saved is equivalent to energy generated. He further stated that our buildings are extremely energy inefficient and have tremendous potential for improvement. Hon'ble Minister of Power stated that with adoption of Energy Conservation Building Code every building can save more than 30% of energy consumption. He explained the concept of Green Buildings and Net-Zero buildings and BEE's recent initiative of star rating of energy efficient buildings.

(Action: all States/UTs)