

## **MINISTRY OF POWER**

### **Government of India**

#### **Minutes of the Conference of Power and NRE Minister's of States/UTs**

**held on 7<sup>th</sup> December, 2017 in New Delhi**

List of participants is annexed.

1. Secretary (Power) welcoming the delegates expressed regret for the cancellation of Power Ministers Conference scheduled for 9<sup>th</sup> – 10<sup>th</sup> November, 2017 at Rajgir due to unavoidable circumstances.. Secretary(Power) stated the issue to be deliberated in the conference include:
  - (i) Electrification of the remaining 2170 villages by March 2018 including difficult villages requiring additional efforts by the States.
  - (ii) Achieving financial and operational turn-around of DISCOMs under UDAY
  - (iii) Achieving universal household electrification under SAUBHAGYA
  - (iv) Undertaking reforms such as introduction of prepaid meters/ smart meters, separation of carriage and content, DBT (Direct Benefit Transfer)
2. Secretary(Power) stated that the actual delivery point was the DISCOMs. He hoped that fruitful deliberations would be held with the DISCOMs and Power Ministers of the States which would result in generation of innovative ideas and solutions to tackle the challenges faced by the power sector.
3. Hon'ble Minister of State (IC) for Power and New & Renewable Energy, Shri R.K. Singh, (hereinafter referred as MoS(IC) while welcoming the delegates to the conference stated that power was the basic requirement for the development of the country. Power sector needed to grow at a higher rate than GDP growth rate of the country. By December 2018, with electrification of every households in the country, 40 million new electricity consumers were expected to be added. The average per capita electricity consumption of about 1100 units in the country was anticipated to at least double within five years.
4. Hon'ble MoS (IC) further informed that by 2030 we have targeted for 30% E-Mobility. With Electric Vehicles the dependency on petroleum products would be reduced which in turn would reduce its import. Renewable energy with better storage technologies would edge out electricity produced by the fossil fuels. We have to focus on strengthening our distribution system, transmission and sub-transmission system to meet our future requirements.

With the aim of providing 24X7 power supply to all at affordable price, huge investment to the tune of Rs. 85,000 crores was being made under various schemes by the Central Government to upgrade/ augment the distribution system and sub-transmission system. The basic problem in the sector which needed to be urgently addressed is to reduce the gap between the energy supplied and energy billed. We need to strengthen the system to reduce transmission and distribution losses. With the goal of 24X7 power supply, the quantum of electricity consumption is likely to increase and so the loss of

electricity. The transmission and distribution losses had to be plugged. The remedies available with DISCOMs to overcome this problem were:

- Doing away with the human interface totally in metering, billing and collection. Create systems for payment for electricity bills through electronic mode.
  - 100% metering of the energy supplied (prepaid metering for small consumers) and Smart Metering for large consumers to enable remote monitoring and auditing of the consumers
  - Adoption of Franchise models
  - Setting up of special police station to control electricity theft and setting up of special courts for speedy redressal of theft cases.
5. The target under UDAY scheme was to reduce the AT&C losses to 15%. He added that Government proposes to amend the Tariff Policy to provide that from January, 2019 losses beyond 15% may not be compensated by increase in tariff.
6. Hon'ble MoS (IC) informed that Government of India is committed to achieving the target of 175 GW installed capacity for Renewable generation by 2022. And by 2030 - 40 % of the country's generation would be from renewable sources. This huge generation would require balancing requirement which could be made available from hydro power and Government is already working on improving the Hydro Policy.
7. Hon'ble MoS (IC) stated that for making MAKE IN INDIA campaign a success, tariff of electricity (basic input for the industry) should be affordable. For this we need to restrict the cross-subsidy upto 20% as provided in the Tariff policy. Subsidy for electricity may also be necessary for the lower strata of the population but it has to be managed through DBT ( Direct Benefit Transfer ) as done in case of cooking gas (LPG).

## **DDUGJY, IPDS AND SAUBHAGYA**

8. Hon'ble MoS (IC), reviewing the progress, pointed out that 42565 crores was sanctioned for DDUGJY in the year 2015 and still only Rs 5128 crores has been released from the fund and there were many projects which were yet to be bid out. The progress made is slow. While for states like J&K (where climate conditions are harsh) and Chhattishgarh(Naxalite areas) slow progress could be understood but for others it was not acceptable and the States needed to gear up.
9. Hon'ble MoS (IC) stated that Pradhan Mantri Sahaj Bijli Har Ghar Yojana –“SAUBHAGYA” a new scheme launched by the Prime Minister is to ensure electrification of all households in the country in rural as well as urban area. Poor households would be provided electricity connections free of cost. Other households would also be provided electricity connections under the scheme on payment of Rs.500 only which shall be recovered by the DISCOMs in ten (10) instalments along with electricity bills. So with implementation of DDUGJY, IPDS and SAUBHAGYA there would be no un-

electrified household in the country. The work of rural electrification and electricity to each household has to be completed by December 2018 barring few States where it would be completed by February or March 2019. Every State needed to do micro analysis of the present progress and take necessary steps to achieve the targets.

10. Joint secretary (Distribution), MoP stated that under the SAUBHAGYA scheme the States need not wait for preparation of DPR. They can straightaway start implementing the scheme by increasing the scope of already awarded projects. Based on the average rate of Rs 500 per household for providing electricity access, advance money can be requisitioned by the State for implementation of the scheme and DPR could be submitted subsequently. Bihar has already developed the mobile app for the same. Survey works in Bihar state had been undertaken by them. In UP it had been assigned to RECPDCL and five states ( MP, Odisha, Chhattishgarh, Assam and Jharkhand ) are getting it done through Department of Post.
11. Hon'ble MoS (IC) recommended wide publicity for SAUBHAGYA scheme through camps, hoardings, social media, formal launch in the State by Chief Ministers, followed by launch in each district and local level. Nodal Officer to whom people can approach for getting electricity connections needed to be publicised along with telephone numbers so that people could approach them in case of any difficulty.
12. Joint Secretary (Distribution), MoP stated that the Restructured Accelerated Power Development and Reforms Programme (R-APDRP), which had been subsumed in IPDS, was not yet closed and about 8% to 10% of the money under the scheme was yet to be released. He requested the States for closure of the projects under RAPDRP.
13. Arunachal Pradesh stated that the progress reflected for their State regarding the DDUGJY was not reflecting the actual progress made by them and the same needed to be corrected. It was clarified that States have to begin using ID and Password of the SAUBHAGYA Portal where they can directly update the progress.
14. Bihar stated that there was delay in award of contracts due to delay in finalisation of technical standards for few items which was finalized only in July 2017. However they would complete their target by December 2018.
15. Chhattishgarh stated that tendering had been completed and they would complete the works by December 2018 except for about 160 villages which were in Naxal affected areas where the works would be completed by February 2019. Chhattishgarh suggested reduction of GST for electrical items from 18% to 12%.
16. Goa stated that they have opened tenders for balance 4 nos. of projects. Hon'ble MoS(IC) pointed out that in many of the past meetings there was no participation from Goa and requested them to participate. Goa informed that there was shortage of officers in Goa to which Hon'ble MoS(IC) assured that they would soon send a panel of officers to Goa from which they could choose.

17. Haryana stated that they were the first State to opt for smart meters. EESL was in the process of buying one million smart meters. UP stated that they were procuring 40 lakh prepaid meters and 1 lakh smart meters and with such aggregation the cost was likely to come down considerably.
18. Himachal Pradesh stated that they had already completed 100% electrification. There were five strengthening schemes which were under evaluation and the delay was due to litigation.
19. J&K informed that under DDUGJY 11 projects were being implemented by PGCIL, 6 projects were sub-judice, one project was being done departmentally and in 4 nos. projects, the response was very poor. Hon'ble MoS(IC) suggested that the State Government should make suitable submission before the Hon'ble Court seeking expeditious decision on pending court cases.
20. Jharkhand stated that all projects had been awarded and would be completed by June 2018.
21. Meghalaya stated that the delay in award of projects was due to prolonged monsoon and some disputes in areas bordering Assam.
22. Mizoram stated that DDUGJY works would be completed by April 2018 and IPDS works by December 2018 except for IPDS works in Aizawl.
23. Orissa stated that in their state bulk of the DDUGJY works was being implemented by NTPC and PGCIL and requested Centre to instruct them to take up the SAGY works. Secretary(Energy) Orissa stated that they have already taken up the works under SAUBHAGYA. Survey was being carried out by Deptt. Of Post. Boxes for new connections have already been put in each Panchayat. More than 10 lakhs applications had been received and after completion of the survey it would be converted into DPR.  
CMD (PGCIL) stated that they would take up SAGY works after getting formal communication from Orissa.
24. Rajasthan raised the issue of technical standards for Distribution Transformers. Principal Secretary(Energy) Rajasthan stated that BEE star rating requirements ( which requires regular certification) were not in sync with the BIS technical standard. Hon'ble MoS(IC) assured to look into the matter.
25. Other States also presented their status of various projects under DDUGJY and IPDS. Hon'ble MoS(IC) stated that main purpose of the review of the schemes state-wise with their Power Ministers was to bring to their notice the status of the schemes as on date, the areas that needed to be focussed so that necessary steps could be taken well in time to achieve the committed targets.

## **UDAY**

26. Joint Secretary (Distribution), MoP making the presentation stated that 27 states and 04 UTs have signed MoU under the UDAY scheme. Analysis of the figures of Profit, ACS-ARR gap, AT&C losses and Energy billed for the FY 16 to FY 18 shows that UDAY had a clear impact towards increase in energy consumption, improvement in operational efficiency and decline in overall losses.

27. Hon'ble MoS(IC) going through the billing efficiency state wise stressed upon the need to go for prepaid and smart metering and removal of human interface by using technology to improve the billing efficiency as well as to bring down the AT&C losses within 15%.
28. Joint Secretary (Distribution), MoP stated that the challenge in the UDAY scheme was that there was data discrepancy between provisional data and finally audited data. In case of some States, the gains made were mainly financial gains (due to decline in interest payouts). Otherwise, the operational efficiency leaves much to be desired. Therefore, this was the area where substantial amount of improvement needed to be achieved. The other challenge was the DISCOMs dues from Government departments which was about Rs 31,465 crores as per latest figures available. As per the provision of UDAY scheme, dues should have been cleared by States by October 2016.
29. Bihar stated that in their State the outstanding dues were of Urban Department for which reconciliation meetings are going on. Chhattishgarh stated that dues were mainly of Panchayats and the money was adjusted in their grants. Punjab stated that they have levied 2% municipal tax and the money received was being used towards adjusting street light dues. Uttar Pradesh stated that in two districts Faizabad and Lucknow, all Government Departments have been directed to install prepaid meters.

After deliberations on the outstanding dues of Government Departments it was decided that Central Government would issue a directive to clear the outstanding electricity dues of Government Departments for the current year and minimum 25% dues of previous years by March 2018.

30. Joint Secretary (Distribution), MoP informed that average power procurement cost of the UDAY participating states in the FY 2017 was Rs. 4.22 per unit. Further analysis shows that some States have even lower procurement cost but their establishment cost was higher. The average establishment cost of UDAY participating states was Rs 0.67 per unit ( 13% of ARR) but for many States, it was higher than the average - upto Rs.1.73 per unit. This brings opportunity of potential savings of about Rs. 10,000 Cr, if the establishment costs were reduced to the extent of average of UDAY States. H.P raised the issue of higher establishment cost due to hilly terrain and scattered population.

Some of the States were of the view that norms for establishment cost for providing electricity per 1000 consumers needs to be worked. After deliberation Hon'ble MoS(IC) directed Central Electricity Authority to work out the norms for establishment cost and submit the details within a week.

31. Punjab stated that they had reduced their power procurement cost by 10 paisa. They were power surplus, so were liable to pay Rs 345 crores as fixed cost to NTPC even without scheduling a single unit of power. Hon'ble MoS(IC) suggested Punjab to write to MoP separately so that the matter could be looked into.

## **24X7 SUPPLY**

32. Joint Secretary (Distribution), MoP stated that the 24X7 SUPPLY FOR ALL aimed to provide reliable and quality 24x7 power to domestic, industrial and commercial consumers by March 2019, and for irrigation pump for 8 to 10 hours a day and access to all unconnected households in five years. The PFA Action Plan includes effective implementation of various schemes under Generation, Transmission, Distribution, Discom health, Renewable Energy, Energy efficiency and capacity building.
33. Hon'ble MoS(IC) stated that vision was to provide 24X7 power for all by March 2019. This is a basic service obligation for the DISCOMs. After March 2019, if there was any load shedding without any reason, there will be penalties except in case of technical faults or Acts of God.
34. Chhattishgarh raised the issue of difficulty in procuring forest clearance for Transmission lines and suggested treating Transmission lines as linear projects as was done in case of road projects.
35. On universalisation of metering, Karnataka stated that maximum cost involved was for software development, storage and communication for which EESL needed to do something. EESL stated that apart from meter procurement they were also involved in development of entire ecosystem for prepaid and smart metering
36. Tamil Nadu stated that they had undertaken a pilot project wherein smart metering was being done for consumers consuming more than 500 units in a month.
37. Secretary(Power), MoP stated that for smart metering, area with high population density should be chosen and the entire ecosystem needed to be developed as it would be cost effective.
38. Joint Secretary (Distribution), MoP stated as a part of promotion for digital payments Govt. of India had set a target for 2500 crores digital transaction for the FY 2017-18 which includes 101 crore digital transaction for power sector. States needed to incentivize digital payments by giving cash back/discount, waiver of convenience fee/MDR charges etc. and promoting digital payments through Bharat Bill Payment System (BBPS), National Payment Corporation of India (NPCI), Bharat QR Code / BHIM app, printing of Bharat QR Code on electricity bills etc.
39. Hon'ble MoS(IC) stated that for the success of MAKE IN INDIA initiative of the Government, cross subsidy had to be capped at 20% of the average cost of supply by the States. States had also to ensure that all subsidy payment were made through Direct Benefit Transfer (DBT).

## **STRENGTHENING OF TRANSMISSION SYSTEM FOR 24X7 POWER**

40. To meet 24x7 power for all in the country, consistent expansion in the Transmission Network and augmentation of transformation capacity are essential. The aggregate inter-regional transmission capacity by the end of 12<sup>th</sup> Plan is 75,050 MW and the expected aggregate inter-regional power transfer capacity by 2021-22 will be 1,18,050 MW. As on Sep'2017, about 3,80,402 ckm of transmission lines

(220 kV & above) and 7,82,830 MVA of Transformation capacity (220 kV & above) exist for transmission of power in the country.

41. A brief presentation was made by the JS (Trans) on 'Strengthening of Transmission System for 24x7 Power: Right of Way (RoW)'. She stated that one of the major issues during construction of transmission lines is acquisition of the RoW. Many projects get delayed because of the developers' inability to acquire land and get timely clearances from all stakeholders. To resolve the compensation issues and to bring uniform methodology for calculation of compensation charges, the Ministry of Power on 15<sup>th</sup> Oct. 2015 issued the Guidelines for payment of compensation towards 'damages' in regard to RoW for Transmission lines. It was informed that these Guidelines have been adopted by 10 States. She also informed that Ministry, further, constituted a Committee to suggest a methodology for payment of compensation relating to RoW in the Urban Areas. The Committee has prepared a Report which has been circulated to the States for their comments and additional input. However, not many States have responded.
42. Secretary (Power) urged the States to send their comments on the Report so that the same may be adopted which would help to reduce the delay in construction of lines. He further requested the States especially Karnataka, Maharashtra and West Bengal to extend necessary assistance including Police protection so that the pending important lines can be completed.

## **REFORMS**

43. A presentation was made by Chief Engineer(RR), MoP on issues like Cross subsidy charges, Time of the day Tariff, Separation of carriage and content and issues in notification of RPO trajectory till 2022 etc.
44. MOS(IC) noted that if tariff is too high, consumers will opt for open access or captive generation. He further expressed that from March, 2019 onwards it may be ensured that the tariff should be within  $\pm$  20% of cost of supply.
45. The recommendation of the Committee report on Tariff simplification and Tariff rationalization was also shared with the States. The States were requested to review the existing tariff categories and bring it down to five primary categories with recommended sub-categories as suggested.
46. On separation of carriage and content, as proposed by Electricity Amendment Bill 2014, the concern expressed by various States had been addressed. The time frame for implementation, was kept as one year as per the bill, which has now been left open to the States. Further adequate checks and balances to safeguard consumer interests shall be provided in the detailed transfer scheme to be prepared by the State Governments. States were requested to suggest a time frame within which the separation of carriage and content can be implemented after the amendment of Electricity Act is notified.

47. Hon'ble Minister expressed that retail consumers should have the choice to choose their power supplier. With separation of carriage and content, service efficiency of the supplier shall improve, it may also result in disappearance of theft of electricity.

#### **RENEWABLE PURCHASE OBLIGATION (RPO): - ISSUES**

48. RPO Trajectory has been notified by MOP applicable till 2018-19. There are certain issues which needs to be deliberated before finalization of RPO Trajectory till 2022 like RPO on “energy or capacity” terms, uniform or state specific RPO, flexibility in meeting RPO targets between Solar and Non-Solar RPO, Hydro as RE source etc.

49. States shared their views of the above issues.

- KERALA has a view that if uniform RPO is notified for all the States then it will have many issues like RE Potential in the State, Land availability, Inter State Transmission Capacity etc. and suggested that these should be State specific RPO.
- UP expressed that RPO should be source neutral and interchangeability to be provided.
- NHPC suggested that large Hydro ( >25 MW) should be considered as Renewable Energy.
- ODISHA had a view that present mechanism of RPO in MU terms is better than RPO in MW terms.
- Captive Plants : RPO should also be applicable on captive plants also.
- Waste heat recovery boiler. Some study may be done if some portion of co-generation exist from other sources also.
- RAJASTHAN : There is already excess capacity of generation in the country. To minimise further additional capacity, we may have all Hydro Projects as RE source, Distributed Generation and co-generation may also be considered to qualify as RPO
- Solar power is coming in a big way and may replace thermal, then RPO may not be required.

50. Hon'ble MOS(IC) expressed that RPO commitment is coming because of country's commitment. Country has made capacity commitment in NDC targets. He further suggested that MW term is basic and compliance is easy.

51. Hon'ble MOS(IC) noted that Legal framework mandated monitoring of RPO obligation by Regulators, but the same was not being done. RE potential is different in different States. The rates achieved will be different for different States depending on the Solar or Wind intensity. Act says that RPO should be in terms of energy.

52. Secy, MNRE suggested that MOP trajectory to be followed, may have to be reworked if we are moving towards MW from MU. Addl Secy, MNRE suggested that RPO should remain in terms of Energy. Solar/non-solar can be combined. RPO in MW terms will not serve the purpose. Addl Secy. MNRE further suggested that SERC may adopt uniform RPO all across country even for private DISCOMs.



### 53. **Energy Conservation Building Codes (ECBC)**

A presentation was made by DG BEE

**Energy Conservation Building Codes (ECBC) prescribe** minimum energy efficiency standards for commercial buildings. These standards were applicable to large commercial buildings (connected load of 100 kW/contract demand of 120 kVA and above). **ECBC 2017 was launched by Hon'ble Minister in June, 2017**

As of now, 11 States had issued notification and 4 had included the same in their building bye laws. 10 States were in advanced stages of issuing notification and rest of the States had to issue the notification within a reasonable time.

Hon'ble Minister advised that all big building should be energy efficient and states should adopt ECBC 2017 and also incorporate the same in the relevant bye-laws.

### 54. **Demand Side Management**

DG, BEE stated that in agriculture sector, Energy could be conserved by installation of energy efficient star labelled pumps. Few states had mandated that all new connections will mandatorily have star labelled pumps. Hon'ble Minister advised that all States may consider mandating that all new pumps should be energy efficient/star labelled.

### 55. **Perform, Achieve and Trade (PAT)**

Perform, Achieve and Trade (PAT) Scheme was launched under the National Mission for Enhanced Energy Efficiency. 478 designated consumers from 8 sectors were given targets to reduce their SEC in the cycle of three years under PAT Cycle-I (2012-2015). DG, BEE stated that most of the designated consumers had done exceedingly well and saving had been converted into Energy Saving Certificates (ESCerts). Trading had started. Designated Consumers who had not achieved targets were non compliant and had to purchase certificates. These Designated Consumers should purchase certificates by 31st December, 2017. Out of 110 non compliant Designated Consumers, 70 Designated Consumers were yet to purchase ESCerts for compliance and out of which 32 were thermal power plants. If they do not purchase ESCerts by 31<sup>st</sup> December, 2017, they would be liable for penalty.

Secretary (P) requested Secretaries of all the States to advise GENCO's to purchase certificates wherever required. NTPC requested to permit trading of certificates within same group of companies. Secretary (P) advised that the purpose of the scheme was to make all units efficient.

### 56. **E- Mobility**

Presentation was made by Shri Saurabh Kumar, MD, EESL.

India had set a target of 30% of total vehicles shall be e-vehicles by 2030.

MD(EESL) informed that we had regulatory gap regarding setting up of charging stations as sale of electricity requires distribution licence. Hon'ble Minister informed that regulatory gap would be plugged soon.

EESL had estimated that Central Govt. had 5 lakh vehicles which can generate demand of 3-4 GWh batteries. This would attract battery manufacturers to set up manufacturing plants in India.

EESL had aggregated demand for 10000 EVs with a range of 130 km per charge. EESL would lease vehicles to Govt at Rs 40,000 pm along with driver or Government Organizations can opt for outright purchase at Rs 11.8 lacs per vehicle which was lowest in the world. AC and DC Charging station were being setup in Delhi. EESL has received request from Andhra Pradesh for EVs and were in discussions with Maharashtra.

57. Cost to operate EVs was Rs 1.25/km at electricity tariff of Rs 8 per kWh. Two models had been selected in the EESL tender for EVs and both were of Indian manufacturers

### **Ministry of New and Renewable Energy**

58. Secretary, MNRE highlighted the major achievements in RE sector, such as: i) installation of RE capacity of 62 GW as on Nov, 2017 (32.7 GW from wind power, 16.6 GW from solar power, 8.2 GW from Bio-power & 4.3 GW from small Hydro Power) against the target of 175 GW RE to be achieved by 2022; ii) commendable achievements in aggregate in offgrid/decentralised renewable energy; iii) record lowest tariff discovered in solar & wind power through reverse auction.
59. Additional Secretary, MNRE made a brief presentation on the "Mission 175 GW RE by 2022 & Solar Sector" where the comprehensive action plan to achieve RE targets and physical progress of solar sector made so far was presented. This was followed with the brief Presentation on issues/points related to Wind Energy & Small Hydro Power Sector by Joint Secretary (BPY), MNRE. Thereafter, Scientist F (DKK), MNRE made a brief Presentation on issues/points related to Bio Energy Sector.
60. Hon'ble MoS(IC) in his address emphasized on the need for fulfillment of commitment made by the country to the United Nations Framework Convention on Climate Change on Nationally Determined Contribution (NDC). Hon'ble Minister directed that major issues in RE(Renewable Energy) sector such as poor compliance of RPO by States/UTs, delay in signing of PPAs, delay in procurement of land for RE projects need to be resolved.
61. After detailed discussions with States/UTs, Hon'ble Minister requested the following:-

- States/UTs to ensure 100% RPO compliance in order to achieve 175 GW RE target on time
- Align RPO trajectory as per notification of Ministry of Power RE procurement trajectory at the State/UT level
- Scheduling of bids at regular interval of time to ensure signing of all PPAs. In this connection, States/UTs may indicate their willingness to allow central agencies like SECI/NTPC to bid on their behalf. If States/UTs bid on their own, they should follow the schedule of bidding laid out nationally.
- Simplification of solar rooftop installation procedure
- States/UTs should honour the PPAs, faster signing of PPAs where bids have been closed. Tariffs are bound to be different from one bid to another depending upon region, so the sanctity of PPAs/bids should be maintained.

The following issues/points regarding renewable energy sector emerged during the session:

## **62. Renewable Purchase Obligations (RPOs)**

States/UTs gave views and suggestions as regard setting RPO targets in terms of installed capacity, merging of Solar & Non Solar RPOs, etc. For the issue of setting RPO targets in term of installed capacity, Hon'ble Minister directed that this issue needs a detailed examination, till then, the present system of RPO targets in energy terms may continue. However, the States/UTs may convert the RPO in energy terms into capacity required depending upon the CUF of the individual RE sources for planning purpose.

## **63. Solar Energy**

- State/UT Governments may procure RE power from other states with high RE resource as Inter State Transmission system charges have been waived off till 2019 & which is proposed to be extended up to 2022.
- State/UT Governments to submit proposals for new solar parks of additional capacity of 20 GW.
- State/UT Governments need to expedite the progress of sanctioned solar parks in their respective States including commitment to buy at least 20% power, timely completion of transmission & other infrastructure, etc.
- Land for solar park may be secured on lease/rental basis in case of difficulty arising in acquiring the land in the States/UTs.
- Due to non-availability of land in few States/UTs, smaller capacity solar parks may be taken up.
- Ministry is finalizing a new scheme for solar rooftop and KUSUM program.
- State/UT DISCOMs may rent rooftops for solar power plant, aggregate its generation and feed it to the grid.
- Solar power plants needs to come up at all metro/railway stations.

- Procedure for establishing Solar Rooftop plant needs to be streamlined by the State/UT Governments.
- The states of Karnataka, Maharashtra, Telangana & Gujarat have already implemented one of the components of KUSUM program. The implementation model may be obtained from these states & the same may be circulated to other states for adoption.
- Possibility of establishing floating solar power plants at Dams/Reservoirs or ash ponds/coal mines may be explored by the State/UT Governments.
- Necessary regulations for Forecasting & Scheduling of solar/wind power may be taken up by State/UT Governments.

#### **64. Wind Energy**

- Non windy states may aggregate their demand for wind power and convey it to Ministry at the earliest.
- Windy states may prepare for bids as per bidding guidelines to be issued soon by the Ministry.
- Non-signing of PPAs by the State DISCOMs affects the confidence of investors in the wind energy sector.
- Timely payment to developers by the DISCOMs must be ensured.
- States/UTs are advised to follow feed in tariff route for wind power projects having capacity less than 25 MW.

#### **65. Small Hydro Power, Bio Energy & other Sectors**

- Slow progress in Small Hydro Power & Bio energy sector is a major concern.
- Despite High capital cost, Small Hydro Power & Bio energy plants need to be taken up as a source of firm RE power for grid balancing.
- Levy of various charges i.e. LADA, allotment/premium fees, demand of free electricity from State/UT Governments for SHP projects may be stopped.
- PPAs are not being signed by the State DISCOMs for Biomass power plants.
- Single window clearance system may be introduced by State/UT Governments for speedy approval/clearances for SHP & Biomass projects.
- Incentive to DISCOMs for achievement above RPO targets is being proposed by the Ministry.
- State/UT Governments to identify at least one city for making it 100% RE city.

#### **66. Suggestions/Responses from State/UT Governments**

The suggestions/responses from various State/UT Governments are as follows:

**Odisha:** Captive thermal power Plants should come under the ambit of RPO mechanism.

**Telangana:** State government has carried out district wise bidding for small solar power plants.

**Karnataka:**

- Captive RE Plants may be made eligible under RPO mechanism.
- Land for smaller solar plants near substations acquired on lease/rental basis from farmers.
- Biomass Power Plants must be given must run status. Tariff for biomass power plants may be determined through bidding route.
- States with high RE installed capacity are being penalised under Deviation Settlement Mechanism (DSM) for frequency deviation

**Kerala:** Use of plastic floaters for floating solar plants has led to decrease in capital cost of floating solar plants.

**Uttar Pradesh:** New solar policy has been approved by the state government.

**Maharashtra:** Model bidding guidelines for other RE sources may be prepared by Ministry as done for solar/wind power.

**Chhattisgarh:** Proposal for additional requirement of standalone solar pumps for LWE districts to be submitted to Ministry.

**Rajasthan:** Possibility of merging of Solar & Non Solar RPOs or flexibility between Solar & Non Solar RPOs may be explored by MNRE/Ministry of Power.

**Gujarat:**

- Ceiling on solar pumps capacity under MNRE scheme was requested to be removed/raised from current level of 5 HP.
- For grid-connected pumps, feeder wise solarisation was suggested.

Thereafter the floor was thrown open to States for their comments.

67. **Hon'ble Minister from Karnataka** raised the issue of coal shortage for thermal power generation. Against FSA, coal is supplied at 85% and under MOU at 25% level only.

Hon'ble Union Minister informed that current coal scarcity is recognised. This is being monitored everyday and Minister is also getting updates every day. Position is improving now and commercial mining is likely to solve the problem in long term. Karnataka requested extension of time for implementation of new environmental norms. Hon'ble Union Minister assured that issue would be taken up with MoEF&CC.

68. Hon'ble Minister from Karnataka stated that transmission charges by PGCIL to Karnataka has increased from 31 paise to 71 paise and are expected to reach – 94 paise next year while other states like Andhra Pradesh and Tamilnadu are paying much less. Hon'ble Union Minister informed that a committee has been formed to look into the issue.

69. **Hon'ble Minister from Sikkim** requested that all hydro projects should be designated as renewable. At present 2200 MW of hydro power being generated in the State.

Under IPDS scheme, out of requested Rs 261 cr, only Rs 15 crore was sanctioned and under DDUGJY only Rs 20 cr has been sanctioned. More funds may be allotted to State.

Hon'ble Union Minister informed that Rs 85 crore has been sanctioned for projects in Sikkim and also advised State to send any further projects for sanction of MoP.

#### **Discussion with Secretaries/Officers from State Governments**

70. **Representative of Govt of Andhra Pradesh** raised the issue of coal shortage and further requested that Hydro policy and KUSUM programme may be finalised at the earliest .

**Representative of Govt of Odisha** expressed need of more testing laboratories. Capacity of SLDCs should be strengthened. A group in MNRE and MoP may look in to it . CEO, POSOCO informed that advanced courses are being run in NPTI. Hon'ble Union Minister advised POSOCO to visit the SLDCs and advise them for future up-gradations.

71. Representative of Govt of Odisha requested that as new technologies are evolving, Ministry of Power may set up a group for next-gen technologies. Considering RoW issues in transmission lines, technical specifications may be issued by CEA/PGCIL for replacing old conductors with upgraded conductors . CMD/PGCIL informed that PGCIL has already done re-conducting in Delhi. Hon'ble Minister advised PGCIL to share specifications with States.

72. **Representative of Govt of Telangana** stated that they are in the process of drafting e-vehicle policy and any policy paper on matter if available may be shared with them. Principal Secretary, Govt of Karnataka informed that Karnataka has already issued policy on e-vehicles and would share the same.

73. Hon'ble Minister concluded the conference stating that Government has clarity on the matter and sense of purpose and would make the Sector more viable and robust in next 1-2 years. Electricity would be affordable, India would work to make planet greener with greater contribution of renewable power in India's energy mix. We would ensure that consumers have ease to get power connection and make payments. Every village would be connected and transmission systems would be strengthened for 24X7 power supply. Tariffs would be rationalised for promoting 'Make In India' for creating more jobs in country. Hon'ble Union Minister thanked all Ministers and officials from states for their active participation and contribution to success of the conference.

74. A gist of major conclusions/recommendation and decisions arising out of the deliberations is given at Annexure.

75. The meeting ended with a vote of thanks to the Chair.

## **Conclusions/Recommendation/Decisions arising out of Power Ministers**

### **Conference held on 7<sup>th</sup> December, 2017**

#### **24x7 Power for All**

1. Electrify all remaining Census inhabited un-electrified villages by December 2017.
2. Provide electricity connections to all willing households by December 2018.
3. Provide infrastructure for seamless power supply to the consumers by March, 2019.
4. States resolve to clear all current years Govt. dues of DISCOMs along with 25% of arrears so that entire old dues are paid by March, 2019.
5. Provide continues support to resolve Right of Way issue for seamless power transfer.
6. Improve quality of power supply and minimize load sheading for non-technical reasons.

#### **Power Reforms**

7. Prepare roadmap for reduction of cross subsidies as per Tariff Policy by March 2018 and bring in Tariff reforms by simplification of Consumer Tariff categories and rationalization of Electricity Tariff.
8. Ensure that DISCOMs enter into PPAs and honour PPAs, particularly for wind and solar sector, where tariff has been discovered through a transparent and competitive bidding process.
9. Ensure compliance of RPO, including compliance through a mechanism of purchase of REC (renewable energy certificates), as per revised Tariff policy and RPO trajectory notified by Ministry of Power on 22.7.2016. States to send suggestion on the future RPO trajectory from 2019-20 to 2021-22.

#### **Promotion of Digital Payments**

10. States resolve to promote digital payments through various measures such as cash incentives, waiving convenience fee, consumer friendly on line payments and promotion of digital payments through various media.

## **Energy Conservation**

11. States resolve to Adopt ECBC 2017 for all new commercial buildings to make them energy efficient
12. Promote use of BEE Star Rated Energy Efficient Pumps for agricultural purpose

## **New and Renewable Energy**

13. Ensure forecasting and scheduling of renewable energy for large scale grid integration by utilizing services of NIWE/other agencies.
14. Set up necessary infrastructure for metering & communication at all substation levels for real time data generation.
15. Submit a trajectory for bidding for solar/wind (mark with annual plan) and participate in scheduled bidding programme.
16. To achieve the RPO target every year.
17. To promote decentralized production of power – learning from models implemented in Karnataka, Telangana, Maharashtra and Gujarat.
18. Submit proposals for solar parks under additional 20000 MW capacity under Solar Park scheme
19. Promote solar rooftops and ensure hassle free grid connectivity
20. Promote solar pumps to replace diesel pumps
21. Participate in Kisan Urja Suraksha evam Utthaan Mahabhiyan (KUSUM) for setting up of 10,000 MW of Decentralized Ground Mounted Grid Connected Solar Power Plants, installation of 17.50 Lakh Stand-alone Solar Pumps and Solarisation of 10 Lakh Grid Connected Agriculture Pumps and 50 Thousand Tube-wells/Lift Irrigation Projects by Financial Year 2021-22, with the objective of providing financial and water security to farmers.
22. Identify at least one city for making it 100% Renewable Energy city.



## **LIST OF PARTICIPANTS**

### **HON'BLE CHIEF/POWER/MINES/NRE MINISTER(s) OF STATEs**

1.	ANDHRA PRADESH	KIMIDI KALA VENKATA RAO MINISTER OF ENERGY
2.	ARUNACHAL PRADESH	TAMIYO TAGA MINISTER OF POWER & NRE
3.	ASSAM	KESHAB MAHENTA WATER RESOURCE & IT MINISTER
		PALLAB LOCHAN DAS MINISTER OF ENERGY
4.	CHHATTISGARH	PREM PRAKASH PANDEY MINISTER OF SCIENCE AND TECHNOLOGY
5.	GOA	PANDURANG MADKAIKAR MINISTER OF POWER
6.	HARYANA	KRISHAN LAL PANWAR MINISTER OF TRANSPORT, HOUSING & JAIL
7.	JHARKHAND	CHANDRESHWAR PRASAD SINGH MINISTER OF URBAN DEVELOPMENT & HOUSING, TRANSPORT
8.	KARNATAKA	D K SHIVAKUMAR MINISTER OF ENERGY
9.	KERALA	M M MANI MINISTER OF POWER
10.	MANIPUR	T H BISHWAJIT SINGH MINISTER OF POWER
11.	NAGALAND	C KIPILI SANGTAM MINISTER OF POWER
12.	ODISHA	PRAFULLA KUMAR MALLIK MINISTER OF ENERGY, STEEL & MINES

13.	SIKKIM	D D BHUTIA MINISTER OF POWER
14.	TAMILNADU	THIRU P. THANGAMANI MINISTER OF ELECTRICITY
15.	TELANGANA	G. JAGDISH REDDY MINISTER OF ENERGY
16.	UTTAR PRADESH	SHRI SHRIKANT SHARMA MINISTER OF POWER,

**U.T. MINISTER's**

17.	PUDUCHERRY	THIRU R KAMALAKANNAN MINISTER OF ELCTRICITY
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**LIST OF PARTICIPANTS (STATES/UTs)**

Sl. No.	Name	Designation/Organisation
1.	Ajay Jain	Pr. Secy, Andhra Pradesh
2.	K. Guravaiah	Asst. PRO, Andhra Pradesh
3.	E.R.T. Kalden	SE(M), Arunachal Pradesh
4.	Mrinal Krishna Chaudhry	Addl. Director, AEDA Assam
5.	Sanjib Goswami	GM, APDCL
6.	Ajanta Kumar Goswami	CGM-Com, APDCL
7.	AshishChoudhury	Liaison Officer, Assam
8.	Jishnu Borua	Pr. Secy, (Power) Assam
9.	Puru Gupta,	MD APDCL Assam
10.	Prtyay Amrit	Pr. Secy, Bihar
11.	R. Lakshmanam	MD, SDPDCL
12.	Siddhartha Pardeshi	Secy, (Energy) Chhattisgarh
13.	Sanjay Goel	Secy, (Power) Goa
14.	Sujit Gulati	ACS, EPD, Gujarat
15.	Ankur Gupta	Pr. Secy(NRE), Haryana
16.	Vineet Garg	Pr. Secy, (Power), Haryana
17.	R. K. Sharma	Dir, HPSFB
18.	Tarun Shridhar	ACS, (Power) Himachal Pradesh
19.	Hirdesh Kumar	Secy, J&K
20.	Sanjay Sharma	Liaison Officer, J&K
21.	Vikas Sharma	- do -
22.	Rahul Purwar	MD, JBVNL, Jharkhand
23.	Rishi Nandan	ESE/CCN, Jharkhand
24.	Aishwary Shukla	ALO cum RE, Jharkhand
25.	P. Ravi Kumar	AES, Karnataka
26.	M. G. Suresh Kumar	APS to Minister, Kerala
27.	Dr. K. Ellangovan	CMD, KSEPL, Kerala
28.	I C P Keshri	Pr. Secy, Madhya Pradesh
29.	N. Sarat Singh	MD, MSPCL, Manipur
30.	L. Priyo Kumar	MD, MSPCIL, Manipur
31.	Shinghajt	MSPDCL, Manipur

32.	S K Sangu	MNREDA, Meghalaya
33.	P. S. Thangkheem	Add. C. S. & CMD MEECL, Meghalaya
34.	K. N. Won	CE(D), Meghalaya
35.	H. Lalengwens	Secy., Mizoram
36.	Khose Sale	CE, Nagaland
37.	Hemant Sharma	Secy, Odisha
38.	Pranod Kumar Behera	PS to Minister, Odisha
39.	J. P. Das	PMU, OPTCL, Odisha
40.	Avirudh Tewari	Pr. Secy, Punjab
41.	Satish Chaudhary	ACS, Punjab
42.	B. S. Siddhu	CE, Punjab
43.	NarjotRandhawa	CED, PEDA
44.	T. S. Sharma	SEMIS, RVNL, Rajasthan
45.	N. T. Bhutia	Secy, Sikkim
46.	PhiguTseringBhutia	CE, Sikkim
47.	VikramKapur	Pr. Secy, Tamil Nadu
48.	GSV Prasad	GM, TSREDCL, Telengana
49.	Raj Kumar	Liaison Officer, Telangana
50.	Alok Kumar	Pr. Secy, Uttar Pradesh
51.	AparnaUpadhyay	MD, UPPCL
52.	SandeepSinghal	Dir(Proj), USVNL, Uttarakhand
53.	C. P. Aggarwal	DGCPO, UREDA, Uttarakhand
54.	S.K. Gupta.	Pr. Secy, West Bengal
55.	SanjeevKumar	Comm. A&N
56.	KannanGopinathan	MD, DNHPDCL, Dadra & Nagar Haveli
57.	S. S. Yadav	Secy, Dadra and Nagar Haveli
58.	M. S. Varsha Joshi	Secy, Delhi
59.	K. K. Verma	Executive Officer, Delhi
60.	Asar Pal Singh	Resident Commissioner, Lakshadweep
61.	D. Ravi	Superintending Engineer, Puducherry

