



भारत सरकार
GOVERNMENT OF INDIA
विद्युत मंत्रालय
MINISTRY OF POWER
केन्द्रीय विद्युत प्राधिकरण



(आई एस ओ : 9001-2000)

CENTRAL ELECTRICITY AUTHORITY

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No.CEA/PLG/DMLF/2/18th EPS/2010

Dated: 27.09.2010

All Members & Special Invitees of 18th EPSC

Subject : Record of Discussions of the brain storming session and 1st meeting of 18th Electric Power Survey Committee (EPSC) held at CBIP, Conference Hall on 27th August, 2010.

Sir,

The record of discussions of the brain storming session and 1st meeting of 18th EPSC held on 27th August, 2010 are enclosed herewith for information & necessary action.

Yours faithfully,

Encl: As above

(Major Singh)
Chief Engineer (DMLF) &
Member Secretary (18th EPSC)
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RECORD OF DISCUSSIONS OF THE BRAIN STORMING SESSION AND 1ST MEETING OF 18TH ELECTRIC POWER SURVEY COMMITTEE (EPSC) HELD ON 27TH AUGUST, 2010.

Central Electricity Authority (CEA) convened Brain Storming Session and 1st meeting of 18th EPSC on 27th August, 2010 to deliberate on issues and aspects related to 18th EPS of the country. The session was attended by members/representatives of 18th EPSC and the eminent experts as special invitees viz. Dr. Kirit Parikh, former Member, Planning Commission and Shri Surya P.Sethi, former Principal Adviser, Planning Commission, Shri T.L. Shankar, Adviser and Project Leader for Power Sector, Administrative Staff College of India (ASCI), Prof. Sanajeev Ghotge of World Institute of Sustainable Energy (WISE), Dr. Leena Srivastava, Sr. Vice President, Shri K.Ramanathan, distinguished fellow, The Energy & Resources Institute (TERI) and Ms. S. Bhavani, Senior Economic Adviser representing Chief Economic Adviser, Ministry of Finance.

The list of the participants is given at Annex. I.

Inaugurating the session, Chairperson, CEA & Chairman of 18th EPSC welcomed the Special Invitees and the members/representatives of 18th EPSC and mentioned that CEA is periodically bringing out Electric Power Survey Reports of the country containing forecast of electricity demand of States for short term and long term. EPS facilitates in planning of electricity sector in generation, transmission and distribution and formulation of plans for infrastructure development. He informed that the 18th EPSC has been constituted to forecast the year wise electricity demand for the terminal years of 12th Plan (2016-17) and perspective demand for terminal years of 13th Five Year Plan (2021-22) and 14th Plan 2026-27. 18th EPS would also study category wise consumption pattern of various categories and assess perspective T&D losses in states. He mentioned that the objective of the session is to deliberate on various aspects pertaining to methodology to be adopted, proforma for collection of input data and action plan for carrying out 18th EPS and to elicit the views/suggestions of eminent experts from various sectors and members of Committee.

He indicated that up to 10th EPS, the survey was carried out annually and from 11th EPS onwards the survey is being carried out on Five Year Plan basis. He stated that like previous EPS Partial End Use Method (PEUM) adopted has given the results which are reasonably accurate, and in 17th EPS the Econometric Model was also considered for validation. He indicated that national vision of reduction in T&D losses, load management and increasing the national per capita consumption to 1000 kWh by 2012 etc. were primarily kept in view at the time of 17th EPS. As the objectives of NEP are yet to be fulfilled hence 18th

EPS would also consider the same goals by interaction with States regarding their plans/policies formulated for achieving the objectives.

He informed that on account of massive growth in urban areas, the electricity demand and consumption pattern of cities have increased thus perspective energy requirements and pattern of growth of load is to be kept in view to plan the growth of infrastructure development 18th EPSC, therefore, also proposes to cover survey of Mega cities (population above 50 lakhs). He touched upon the need for assessment of perspective energy requirements in SEZs under development and National Capital Region (NCR) due to high pace of growth and to facilitate proper planning of infrastructure development in foreseeable future.

Chairman urged the members of State TRANSCOs to coordinate with DISCOMs and ensure to provide the input data to CEA 'on priority' to facilitate completion of EPS studies in the stipulated time frame. He concluded his address by stating that the members while deliberating may focus on methodology to be adopted for 18th EPS – schedule for submission of requisite state level data as required for 18th EPS, power survey for Mega Cities, etc. and mentioning that the views/suggestions of Special Invitees who are eminent experts would be valuable in chartering the course of studies and to address various issues related to the studies.

After inaugural address by Chairperson, CEA, a presentation was made by Shri Major Singh, Chief Engineer, DMLF Division, CEA & Member Secretary of the 18th EPSC.

In the presentation, Member Secretary outlined the historical background of power surveys carried out by CEA, key issues of EPS and comparison of the projections of 17th EPSC with actual power demand and energy requirement. It was indicated that all India deviation for energy requirements during the period 2004-05 to 2009-10 was in the range around 1 to 3% whereas for the peak demand, the deviation was in the range of 3 to 9%. The presentation also outlined various forecasting technique being adopted for electric power survey and the procedures, variables and the limitations of these techniques. It was indicated that partial end use method (PEUM) which is being adopted since 10th EPS is proposed to be used for 18th EPS. He mentioned that the availability of input data is the vital for the studies which is to be primarily coordinated by State TRANSCOs who are required to designate a Nodal Officer for coordination amongst State DISCOMs for submission of the input data as per formats circulated along with the Agenda. He added that the Regional Power Survey Offices (RPSOs) of CEA would coordinate with respective States/TRANSCOs to furnish the data and bring out a preliminary forecast. The schedule of activities for undertaking 18th EPS (given at Annex.II) was discussed as per which the State TRANSCOs are required to provide the input data within three months (up

to November, 2010). The results of the preliminary forecast are programmed to be discussed by 18th EPSC in Feb.,2010.

After presentation, Chairman, 18th EPSC invited the views/suggestions of the members/representatives of various stakeholders viz. States/Utilities/concerned organisations.

The views / suggestions / observations of the members / representatives of 18th EPSC are outlined below:-

TAMIL NADU:

The representative of TNEB informed that the State has already projected the demand up to 2017-18 with growth rate at 8% and accordingly capacity addition programme has been formulated. He mentioned that TNEB has been partially unbundled and it would be difficult to provide the input data within scheduled time frame. The data which is already available will be furnished immediately and additional data would be provided in stipulated period.

MAHARASHTRA:

The representative of MAHATRANSCO informed that most of the requisite data for 18th EPS is already available and will be provided to CEA within the time schedule.

ANDHRA PRADESH:

The representative of AP TRANSCO mentioned that the state have also made the projections for energy requirements by using PEUM. He informed that the requisite data would be provided to CEA within one month.

DELHI:

The representative of Delhi TRANSCO mentioned that there are five DISCOMs out of which three are private agencies and the two are government organizations. He expressed the difficulty to coordinate with all the five DISCOMs but assured that the input data would be provided to CEA within the time frame.

MADHYA PRADESH:

The representative of MPPTCL mentioned that Madhya Pradesh being big state has low density of population and its rural load comprises 60% of the total load with 62 lakhs household connections. He said that the results of 17th EPS for the state are lower as compared to actual energy requirement of State and per capita consumption of state is low. He informed that the state has taken

various steps for load management, improvement of availability, reduction in T&D losses. He requested CEA that the forecast for Madhya Pradesh be carried out by taking into consideration anticipated growth considering constraints. He mentioned that MPTRANSCO will coordinate with DISCOMs and the reliability of the data would need to be ensured before providing to CEA.

Chairperson, CEA intervened at this juncture and explained that increase in per capita energy consumption to 1000 Kwh as per objective of NEP is the national average and some of states may not be able to achieve this figure on account of various constraints and availability of infrastructure. In reply to query regarding achieving the target for reduction in T&D losses, Chairperson pointed out that even though Himachal Pradesh has low density of population, but the state has achieved reduction of T&D losses below 15% and as such, Madhya Pradesh can also formulate the strategy for gradual reduction of T&D losses.

RAJASTHAN:

The representative of Rajasthan stated that the State capital Jaipur is growing at a very rapid pace and separate projections for Jaipur may also be included in the 18th EPS. He cited the constraints in load segregation between rural and urban areas of Rajasthan. He suggested that the energy generation from captive plants which are not connected with Grid may also be considered. As regards furnishing of the input data, the representative mentioned that all efforts would be made to adhere to the schedule of 3 months.

ORISSA:

The representative of the Orissa appreciated the usefulness of the Electric Power Survey in planning in the Power Sector. He indicated that under the new Biju Gram Jyoti programme, the electricity would reach 62 lakhs consumers from the present figure of 28 lakhs. He mentioned that State is also adopting PEUM technique for load forecast which is time tested. He added that Orissa is having a couple of captive power plants who were also supplying huge power to the Grid. He said that Orissa is having high pace of industrial growth and is giving priority to industrial development. The representative suggested that all cities with population above 10 lakhs including the State capital of Orissa viz. Bhubneshwar be considered for Electric Power Survey. He mentioned that there is a gap in actual achievement of APDRP from the targets. He handed over the data/information regarding peak demand projections of state and assured to provide the power requirement details in requisite formats on priority.

BIHAR:

The representative of Bihar State Electricity Board (BSEB) outlined various issues related to prevailing power shortage, manpower shortage and energy deficit and restrictions in supply of power in the State. He also mentioned

about the various constraints in taking up new projects due to law and order problems , delay in ongoing projects, land acquisition related issues. He suggested that in view of such constraints, proper planning of the demand of state cannot be undertaken and the reliable data for power survey also would be difficult to provide. He suggested that due to massive load growth all cities above 25 lakhs population including the capital city Patna may be considered for city level power survey. He suggested that growth rate of 5 to 10% may be considered for electrical demand forecasting. He urged Central Government to look into power related problems and provide assistance to Bihar.

Chairperson, CEA intervened and clarified that the objective of this brain storming session is primarily to deliberate on various points given in the agenda and suggestions of members for consideration by EPS. EPS would facilitate the states in planning the growth of infrastructure to meet the electricity demand and to achieve the objectives outlined in the National Electricity Policy. He added that power being concurrent subject, various steps relating to meet the electricity requirements, capacity addition and development of infrastructure is to be dealt by respective State Governments and the role of Central Govt. is of a facilitator. He requested that the requisite input data for 18th Electric Power Survey may be submitted in time and in the manner in which it is required so that the studies could be completed within the stipulated time frame.

JHARKHAND:

The representative of JSEB indicated that there is no clear demarcation between the rural and urban load of the State. He informed that the energy generation of captive power plants may also be considered by the 18th EPSC. He added that the projection of 17th EPS for the State is on the lower side and assured that the data would be provided as per schedule.

KERALA:

The representative of Kerala State Electricity Board outlined the following issues/constraints regarding EPS:-

- Total projection of a state should be the consolidation of the independent DISCOMs/Licencees operating in the state. Each independent entity should also prepare their projections to make the statewise projections proper.
- licensees need to share their plans and projections with the identical entity operating at the state level. He requested intervention of CEA in this regard.
- The consumer categorization may vary state to state and as such the existing consumer database of each state cannot be used for studies but the same can be evolved either by estimation or by sample study.

- Captive Capacity is being used mostly as a standby source in Kerala and the energy contribution from such sources cannot be predicted.
- Rural-Urban divide in this state is not as that prevalent in other parts of the country. The uniform distribution of population and the conventional cluster type domicile structure is not existing in the state, therefore another major segment fit to be categorized as semi-urban is suggested.
- PCP consumption Target of 1000 units is not achievable in Kerala as major segments of consumers are Domestic & Commercial and the degree of conventional industrialization is not prominent.
- Probable developments are in SEZ and IT Based industries, Techno parks etc. which are not much power intensive.

HARYANA:

The representative of Haryana Power Purchase Centre (HPPC) touched upon the various issues relating to Haryana regarding power deficit, power cuts and system constraints particularly overloading of 11 KV feeders. He indicated that the actual demand of the state is much more than being projected and suggested that the likely demand on account of pending connections may also be taken into consideration to work out realistic forecast. He assured that 95% of the data required for 18th EPS is already compiled and entire data would be submitted to CEA in time.

DADRA & NAGAR HAVELI (D&NH):

The representative of D&NH mentioned that the UT is fully dependent on the power allocated from Central Sector generating stations and 93% of the total load is industrial. He mentioned that the requisite data would be furnished within time frame.

TORRENT POWER:

The representative of Torrent Power stated that the drivers within the various categories of consumers are different and as such, consistency of inputs to be used for projection may vary from state to state. He added that certain assumptions would be required to be made for completing the requisite data for 18th EPS and assured to submit the same to CEA as per schedule.

TATA POWER LIMITED:

The representative of Tata Power mentioned that the Company is a generating company and is also associated with power distribution in Mumbai area and also supplying power to Railways etc. He added that PEUM technique

proposed for the study would be acceptable and the requisite data would be provided within three months.

DAMODAR VALLEY CORPORATION (DVC):

The representative of DVC stated that the projected demand of railways, coal, steel sectors is of vital importance for DVC areas. He indicated that the requisite data would be provided within one month.

THE ENERGY & RESOURCES INSTITUTE (TERI):

Shri K. Ramanathan, Distinguished Fellow, TERI mentioned that PEUM proposed for 18th EPS is fairly in order, but needs to be used in judicious manner. He mentioned that in certain states , categorization of load has changed on account of various policy regulations. He stressed the need to study as to why deviation during last two years was more and suggested that econometric model may not be totally ignored and considered on long term for comparison of the results. He welcomed the proposal to include mega cities in the power survey. He pointed out that energy generation from captive plants is considerable, however, it would be difficult to account for generating plants having installed capacity < 1 MW. He stressed the need to carry out detailed sectoral survey and analysis of the change of pattern of consumption by States. Shri Ramanathan suggested the need to take into consideration the likely results of implementation of the recommendations of National Mission on Enhanced Energy Efficiency (NMEEE).

WORLD INSTITUTE OF SUSTAINABLE ENERGY (WISE):

Prof. Sanjeev Ghotge of WISE highlighted the need to consider energy generation from grid connected as well as off grid Renewable Energy Sources (RES) separately as RES provide 4-5% of energy generation and are set to grow in future. Shri Ghotge also stressed on various points regarding change in policy and regulation under National Action Plan for Climate Change (NAPCC) for consideration by 18th EPSC. He suggested that unconnected households account for 35-40% of total households and additional normative estimation to 400 BU could be considered for such load.

After the discussions with members/representatives of 18th EPSC Chairperson, CEA mentioned that we will be benefited by views and suggestions of eminent experts and invited them to enlighten with their views and guide the Committee.

Dr. Kirit Parikh:

Dr. Kirith Parikh mentioned that some of the DISCOMs/Electricity Boards/Electricity Departments are yet to adopt electronic billing which results in

the gap in revenue and reduces the collection efficiency. He welcomed the initiative to capture structural changes and inclusion of mega cities in the 18th EPS. He mentioned that the mega cities have grown at fast pace but other big cities also developing at very high rate may also grow into a mega cities in due course of time. It will, therefore, be appropriate that sample of all types of cities with different population categories also be considered by the Committee to study x-section of the samples of different sizes and their pattern of growth of consumption categories which would facilitate to plan infrastructure development. Dr. Parikh mentioned that the electricity demand of cities vary and do not follow a uniform pattern as utilization of electricity appliances, their efficiencies, duration of use and other related factors contribute to the pattern of demand. These details would be helpful to firm up the data base for conducting the power survey. Regarding techniques for conducting power survey, Dr. Parikh mentioned that all the three methodologies are inter related and results could be co-related as these are suited for different set of variables required for survey. He suggested that x-section of the pattern of growth of various consumption categories could be studied by these techniques. Dr. Parikh concluded that sectoral analysis for end use methodology may be adopted to study error of projections.

Shri S.P. Sethi:

Shri Sethi mentioned that shortages in the demand being projected are in fact far below than the actual as the demand is governed by number of factors as prices which keep rising & change in elasticity and as such the gap being projected is notional. He mentioned that there is need to build up data base particularly for agricultural sector. He said that the cities are consuming more than the half of the total electrical energy of the country. He suggested that instead of demand forecast, it should be targeted forecast based on the consideration of per capita consumption of a higher order say as 1000 units, the target considered in the 11th Five Year Plan and it should be maintained till the same is achieved. Citing the demand of commercial sector in Delhi, Shri Sethi pointed out that the growth rate has been of the order of 16% which is very high.

Shri Sethi pointed out that the basic data considered for the demand forecast is insufficient and emphasised on the need to consider the state wise sales of DG sets, power cuts not reported and other factors. He said that actual installed capacity of captive plants is much more than being recorded. He mentioned that for healthy system, the PLF should not be above 60 to 65%. He concluded that approach for forecast should not be multiple methods but it must be unified integrating all techniques.

Shri T.L. Shankar:

Shri T.L. Shankar mentioned that SEBs earlier projected the demand to get capacity sanctioned and mentioned that the growth of electricity

ranged between 3 to 4% before 9th plan period. It was, therefore, a strategy to make a projection of 5% increment in the projection of demand. He stated that the demand of any state/country depends on the aspirations of the people. He suggested that there should be separate plan for every state considering the intention of the States and their investment strategies. The forecast must address various objectives set in the policies of the Government and also taken into consideration the present situations. Shri Shankar concluded that partial end use method is a proven technique which had been adopted for the earlier Surveys could be considered for 18th EPS.

After the deliberations following decisions were taken:

- Partial End Use Method (PEUM) to be adopted for 18th EPS. Econometric Model to be used for validation for sectoral studies and creating future data base.
- State TRANSCOs to constitute working groups with representatives of DISCOMs for timely submission of input data in the prescribed formats to CEA by November, 2010. Nodal officers of State TRANSCOs to coordinate with CEA.
- Separate electricity demand projection to be made for mega cities (with population of more than 50 lakhs)
- Considering the high pace of growth of infrastructure in NCR, separate demand forecast for NCR to be undertaken.
- The broad study of pattern of load growth in x-section of cities in different regions to be done to firm up the data base for EPS.

Chairperson thanked special invitees and members of EPSC for their active participation and valuable contribution in the deliberations. He thanked Shri Kanjlia, Secretary, CBIP, Shri S.C Nakra, Director, Shri C.S.Malik, Director and other officers of CBIP and for making excellent arrangements and hosting the meeting.

ANNEX.I

List of Participants of Brain Storming Session and Ist Meeting of 18th Electric Power Survey Committee (EPSC) held on 27.08.2010

Members of Committee:

Central Electricity Authority

1. Shri Gurdial Singh,
Chairperson, CEA & Chairman, 18th EPSC
2. Shri S.M.Dhiman,
Member (Planning), CEA
3. Shri Major Singh,
Chief Engineer & Member Secretary, 18th EPSC

Planning Commission

4. Shri R.K.Kaul,
Joint Adviser (Power)

Power Grid Corporation of India Limited

5. Shri Avinash M. Pavgi,
A.G.M.
6. Shri Nageshwar.Rao,
Engineer (SEF)

National Thermal Power Corporation

7. Shri Vishal Mathur
DGM(CP)
8. Shri S.D.Mathur
AGM

Damodar Valley Corporation

9. Shri M.M.Kumar
Chief Engineer(Commercial)

Rural Electrification Corporation Ltd.

10. Shri V.K.Arora
Executive Director

11. Shri S.K.Gupta
General Manager(T&D)
12. Shri P.J.Thakkar
Executive Director

Himachal Pradesh

13. Shri D.R.Naryal
Superintending Engineer
Himachal Pradesh State Electricity Board

Tamil Nadu

14. Shri A.Balakrishnan
Superintending Engineer (Planning)
Tamil Nadu Electricity Board

Kerala

15. Shri Ramesh Babu
Chief Engineer
Kerala State Electricity Board
16. Mohd.Jaffar
Liaison Officer
Kerala State Electricity Board

Jharkhand

17. Shri S.C.Mishra,
Chief Engineer(C&R)
Jharkhand State Electricity Board

Delhi

18. Shri Ved Mitra
(DGM)
Delhi TRANSCO
19. Shri Raj Bhartiya,
Executive Director
Delhi TRANSCO
20. Shri Roop Kumar
General Manager
Delhi TRANSCO

21. Ms Kiran Saini
DGM
Delhi TRANSCO

Harayan Vidyut Prasaran Nigam Ltd.

22. Shri H.C.Gupta
Superintending Engineer(Planning)
Harayan Vidyut Prasaran Nigam Ltd.
23. Shri A.K.Virdi
Superintending Engineer
Haryana Purchase Power Corporation
24. Shri Harish Chandra Pant
Executive Engineer
Harayan Vidyut Prasaran Nigam Ltd.

Rajasthan Rajya Vidyut Prasaran Nigam Ltd.

25. Shri L.N.Nimawat
Superintending Engineer(P&P)
Rajasthan Rajya Vidyut Prasaran Nigam Ltd.
26. Shri Ashok Vaidya
Assistant Engineer(P&P)
Rajasthan Rajya Vidyut Prasaran Nigam Ltd

Madhya Pradesh

27. Shri Anil Kumar Kanhaua
Executive Engineer(Plg)
MP TRANSCO
28. Shri R.K.Harde
Consultant (Planning)
MP TRANSCO
29. Shri J.S.Pasricha
D.G.M.(S)
MP Power Trading Company Ltd.

Maharashtra

30. Shri A.V.Deo

Superintending Engineer
Maharashtra State Electricity Transmission Co.Ltd.

Andhra Pradesh

- 31 Shri D.R.Vishwanath Rao
Divisional Engineer
AP TRANSCO
- 32 Shri L.Murli Krishna
Asstt.Div.Engineer
AP TRANSCO

Orissa

- 33 Shri A.C.Mallick
Director(Commercial)
GRIDCO

Dadra & Nagar Haveli, Silvassa

- 34 Shri P.S.Dave
Executive Engineer

Sikkim

35. Shri N.T.Bhutia
Chief Engineer
Energy & Power Department
36. Shri P.T.Bhtia
Addl.Chief Engineer
Energy & Power Department

The Energy & Resources Institute (TERI):

37. Shri K.Ramanathan
Distinguished Fellow

Confederation of Indian Industry:

38. Shri Suman Kumar
Director

CESC Limited

39. Shri U.Bhattacharya
Executive Director

Tata Power Co.Ltd.

40. Shri Jagdeep Singh
Asstt.Manager
41. Ms.Nandita Singh
Asstt.Manager

Torrent Power Ltd.

42. Shri Raghu Prakash
V.P.(Corporation Affairs)

Bihar

- 43 Shri G.K.Srivastav
Chief Engineer
Bihar State Electricity Board

SPECIAL INVITEES

44. Dr. Kirit Parikh
Former Member(Planning Commission)
45. Shri Surya P. Sethi,
Former Principal Adviser,
Planning Commission,
46. Shri T.L. Shankar
Adviser and Project Leader for the Power Sector,
Administrative Staff College of India
47. Mrs. S. Bhavani,
Sr. Economic Adviser
Ministry of Finance
- 48 Prof. Sanjeev Ghotge,
Professor & Head of World Institute of Sustainable Energy
- 49 Ms. Leena Srivastava,
Sr. Vice President, TERI

OTHER INVITIES

- 50 Dr.Jaipal Singh
Member(E&C)

- 51 Shri K.N.Garg
Chief Engineer CEA)
- 52 Mrs.Padmaja Mehta
Economist Adviser
CEA.
- 53 Shri R.K.Pahwa
Director, CEA
- 54 Shri S.Biswas
Director
- 55 Shri S.N.Kayal
Director
- 56 Shri C.Shanmugam
Director
- 57 Shri R.K.Goel
Deputy Director
- 58 Shri Hardayal Singh
Deputy Director
59. Bhupinder Singh
Deputy Director
- 60 Shri K.K.Puri
Asstt.Director(I)
61. Shri K.Seshdari
Asstt.Director(I)
- 62 Shri Sovaran Singh
Asstt.Director(I)
63. Shri U.K.Singh
Stat.Inv.
- 64 Shri U.K.Gupta
Stat.Inv.
65. Shri Deepak Kumar
Deputy Director
Regional Power Survey Office.(North)

- 66 Shri D.K.Meena
Asstt.Director
Regional Power Survey Office.(North)
67. Shri J.K.Rathod
Deputy Director
Regional Power Survey Office (West)
- 68 Shri V. Kalyanraman,
Deputy Director
Regional Power Survey Office(South)
- 69 Shri A.Keshavan
Asstt.Director
Regional Power Survey Office(South)
- 70 Shri P.Mazumdar
Deputy Director
Regional Power Survey Office (East)

Central Board of Irrigation & Power

- 71 Shri V.K. Kanjlia,
Secretary
- 72 Shri C.S.Malik
Director(Energy)
- 73 Shri S.C. Nakra
Director

ANNEX.II

| SCHEDULE OF ACTIVITIES OF 18 TH EPS | | | | | | | | | | |
|--|-------------------------------------|---------|--------------------|--------------------|---------|---------------------|---------|---------|---------|---------|
| Sr. No. | Name of the Activity | Aug.'10 | Sep.'10 to Nov.'10 | Dec.'10 to Jan.'10 | Feb.'11 | March'11 to June'11 | July'11 | Aug.'11 | Sep.'11 | Oct.'11 |
| 1 | Brain Storming & 1st Meeting (EPSC) | ■ | | | | | | | | |
| 2 | Data Submission by States | ■ | ■ | | | | | | | |
| 3 | Draft Report | ■ | ■ | ■ | | | | | | |
| 4 | 2nd Meeting (EPSC) | ■ | ■ | ■ | ■ | | | | | |
| 5 | Discussions with States | ■ | ■ | ■ | ■ | ■ | | | | |
| 6 | Revision of Draft | ■ | ■ | ■ | ■ | ■ | ■ | | | |
| 7 | 3rd & Final Meeting (18th EPSC) | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | |
| 8 | Preparation of Report | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| 9 | Publishing of Report | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |