

## PLAN OF ACTION AND PHASING–POWER

S. No.	Policies/Proposals	10 <sup>th</sup> Plan (2002-2007)	11 <sup>th</sup> Plan (2007-2012)	12 <sup>th</sup> Plan (2012-2017)	13 <sup>th</sup> Plan (2017-2021)
1	2	3	4	5	6
1.	<p><u>Future Demand and Augmentation of Power:</u> Additional power generating capacity augmentation in the installed capacity of power plants required by the year 2021 is 23,345 MW for which following recommendations have been made:-</p> <ul style="list-style-type: none"> <li>§ Allocation of power from the new central sector/mega projects to be made by the Ministry of Power.</li> <li>§ Ministry of Power to consider allocation of power from the 15% unallocated quota from the Central sector projects available with the government.</li> <li>§ State Governments to allocate power to their Sub-region from their new State sector projects</li> <li>§ State Governments should ensure the allocated quota to their respective Sub-regions from the present allocation/ generation of power.</li> <li>§ State Governments should enter MOU with power generation companies to ensure requisite allocation of power to the Sub-region simultaneously and expeditiously.</li> <li>§ Efficient and clean technology based power plants should be encouraged/adopted to meet the growing power demand in order to reduce Greenhouse gases (GHG) levels.</li> </ul>	<p>Net generation needs to be augmented by about 4,500 MW by the year 2006-2007.</p>	<p>Net generation needs to be augmented by about 2,600 MW by the year 2011-2012.</p>	<p>Net generation needs to be augmented by about 8,000 MW by the year 2016-2017.</p>	<p>Net generation needs to be augmented by about 8,500 MW by the year 2020-2021.</p>
2.	<p><u>Load Management:</u> Modern techniques for Load Management must be adopted to flatten the load curve and reduce the peak demand in the system to manageable proportion, vis-à-vis availability of generation in the grid through a control room by starting ripple generators, so that breakdown of generation is minimized. This will generate savings in the investment on additional generation of power for peak demand. Similarly, street lighting on National Highways/ State Highways within the NCR can have centrally controlled system for operation through operation of ripple generator. Energy efficient housing should be promoted and the concept of 66 KV underground cable ring main system should be planned</p>	<p>Directions to be issued to the participating States in the first year of the implementation to adopt the policies.</p> <p>CEA and State Government to undertake islanding of NCR after revisiting the system.</p> <p>Follow up and monitoring of implementation of policies to be done.</p>	<p>Follow up and monitoring of implementation of policies to be done.</p>	<p>Follow up and monitoring of implementation of policies to be done.</p>	<p>Follow up and monitoring of implementation of policies to be done.</p>

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	<p>and executed in new townships to provide uninterrupted power supply.</p> <p>It is also proposed that an Islanding Scheme for NCR as second level of Island after NDMC/Delhi will be prepared by CEA and concerned State power utilities after revisiting the scheme which will be implemented by the concerned power utility companies for better load management.</p>				
3.	<p><u>Improvement in Transmission and Distribution:</u> Transmission and distribution system in the region should be improved by properly designing the L.T. distribution system viz. service line &amp; service mains and by providing transformers with adequate capacities, electronic meters, LT/HT breakers conforming to IE Rules and specifications and by promoting communications (automation) in power supply system.</p> <p>State Governments will also carry out periodic audit for identification of technical and commercial losses which will help in improving the transmission and distribution system on a regular basis.</p>	<p>Improvement in the T&amp;D has already been initiated by the State governments of UP and Haryana. At least, 60% of the area of the region should be covered by the end of 10<sup>th</sup> Plan.</p> <p>State Governments will carry out periodic auditing on regular interval.</p>	<p>Remaining 40% of the area of NCR should be covered during the 11<sup>th</sup> Plan period. Capacity augmentation to be done for additional power generation.</p> <p>State Governments will carry out periodic auditing on regular interval.</p>	<p>Capacity augmentation to be done for additional power generation.</p> <p>State Governments will carry out periodic auditing on regular interval.</p>	<p>Capacity augmentation to be done for additional power generation.</p> <p>State Governments will carry out periodic auditing on regular interval.</p>
4.	<p><u>Sub-group within Northern Region Electricity Board:</u> Sub-group within Northern Region Electricity Board should be created for NCR by Ministry of Power to oversee the power supply and periodically discuss the power issues in NCR and make recommendations regarding quality and reliability of power supply in the region.</p>	<p>Sub-group within NCRPB to be created by the Ministry of Power to oversee the implementation of the policies immediately and review of quality and reliability of power supply on regular basis.</p>	<p>Ministry of Power to implement the policies immediately and review of quality and reliability of power supply on regular basis.</p>	<p>Ministry of Power to implement the policies immediately and review of quality and reliability of power supply on regular basis.</p>	<p>Ministry of Power to implement the policies immediately and review of quality and reliability of power supply on regular basis.</p>
5.	<p><u>Sectoral Plans for Power:</u> State Governments concerned will prepare Sectoral Plans for power and incorporate/integrate the same in their respective Sub-regional Plans in order to improve the quality of power supply in their respective Sub-regions.</p>	<p>State Governments concerned will prepare Sectoral Plans for power and incorporate/integrate the same in their respective Sub-regional Plans.</p>	<p>State Governments concerned to review on regular basis.</p>	<p>State Governments concerned to review on regular basis.</p>	<p>State Governments concerned to review on regular basis.</p>

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6.	<u>Promotion for Non-conventional Energy Resources:</u> Emphasis should be given for promoting non-conventional energy resources such as solar energy plants on roof top etc. in big hotels, institutions, commercial buildings, group housing etc. to meet part of power demand.	To be implemented by the respective State Governments through enactment of an Act in this regard in the first year of implementation of the Plan.  Mass awareness to be created among public.	Mass awareness to be created among public.	Mass awareness to be created among public.	Mass awareness to be created among public.
7.	<u>Public-Private Partnership:</u> In view of the huge investment of about Rs.93,380 crores, for the generation of power and Rs.58,000 crores for transmission & distribution, in the year 2021, public/private partnership should be promoted. Commercial approach and simplified procedures for the release of new connections, upgradation of demand load etc. should be adopted by these companies. In order to promote public/private partnership/ Joint Venture companies, the enabling provision in the Power Act may have to be made.	To be implemented by the respective State Governments in this regard in the first year of implementation of the Plan.	To be reviewed and improvement to be made as and when required.	To be reviewed and improvement to be made as and when required.	To be reviewed and improvement to be made as and when required.
8.	<u>Review of Policies and Strategies for Power:</u> In view of the reforms at the national level and technological advancements taking place, the review the Power Sector strategies and policies for NCR should be done at least once in every five years.		Review to be done in the year 2007-2008.	Review to be done in the year 2012-2013.	Review to be done in the year 2020-2021.
9.	<u>Investment Plan:</u> Power requirement in the region would be 23,345 MW by the year 2021 and accordingly there will be need to generate this additional power and strengthen/ expand the transmission and distribution lines in the region. Total investment required for the generation of power by the year 2021 will be Rs.93,380 crores and for strengthening/expansion of transmission and distribution system, it will be Rs.58,362 crores.	Investment requirement for augmenting power generation in the region is Rs.18,052 crores. Constituent State Governments will have to interact with Ministry of Power to get power allocated from Central sector project/mega projects, unallocated quota of Central Government, sign power purchase agreement with power generating companies	Investment requirement for augmenting power generation in the region is Rs.10,196 crores. Constituent State Governments will have to interact with Ministry of Power to get power allocated from Central sector project/mega projects, unallocated quota of Central Government, sign power purchase agreement with States with surplus power or enhance their capacity of power	Investment requirement for augmenting power generation in the region is Rs.31,120 crores. Constituent State Governments will have to interact with Ministry of Power to get power allocated from Central sector project/mega projects, unallocated quota of Central Government, sign power purchase agreement with power generating companies	Investment requirement for augmenting power generation in the region is Rs.34,012 crores. Constituent State Governments will have to interact with Ministry of Power to get power allocated from Central sector project/mega projects, unallocated quota of Central Government, sign power purchase agreement with power generating companies

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		<p>or States with surplus power or enhance their capacity of power generation.</p> <p>Investment of about Rs.11,282 crores will have to be made by States or transmission/distribution companies for improvement and upgradation of transmission and distribution system in the region.</p>	<p>generation.</p> <p>Investment of about Rs.6,372.50 crores will have to be made by States or transmission/distribution companies for improvement and upgradation of transmission and distribution system in the region.</p>	<p>or States with surplus power or enhance their capacity of power generation.</p> <p>Investment of about Rs.19,450 crores will have to be made by States or transmission/distribution companies for improvement and upgradation of transmission and distribution system in the region.</p>	<p>or States with surplus power or enhance their capacity of power generation.</p> <p>Investment of about Rs.21,257 crores will have to be made by States or transmission/distribution companies for improvement and upgradation of transmission and distribution system in the region.</p>