

**MINUTES OF THE CENTRAL ADVISORY COMMITTEE (CAC)**  
**12<sup>TH</sup> MEETING HELD ON 12<sup>TH</sup> FEBRUARY, 2010**  
**AT NEW DELHI**

**VENUE : “MAGNOLIA” HALL, CONVENTION CENTRE**  
**INDIA HABITAT CENTRE, LODHI ROAD**  
**NEW DELHI – 110 003.**

List of participants is attached at *Annexure-I*.

In his opening remarks, Dr. Pramod Deo, Chairperson, CERC welcomed the members of the Central Advisory Committee of CERC and requested them to give their suggestions for possible regulatory and policy interventions for facilitating generation capacity addition. He emphasized that India needed to add generation capacity rapidly for meeting the national objective of ‘power for all’. He said that this would also facilitate implementation of market development initiatives, and open access which was one of the key features of the Act.

A presentation was made by Secretary, CERC (copy at *Annexure-II*) which highlighted the present status on various regulatory initiatives taken/proposed by CERC and the issues for discussion. Thereafter discussion was held on various issues.

**Issue-I : Availability of domestic coal for power generation**

The following views were expressed:

- According to the assessment of CEA, even 15% blending with imported coal would not be adequate to meet the coal requirement in year 2013-14. As far as power sector is concerned, all type of imported coal can be blended in different percentage for use in Indian boilers which could be found out through plant specific studies.
- There was a view that Coal India Limited was not able to meet its linkage commitment and it was also not expanding its capacity despite of sufficient funds availability.
- Captive coal blocks for power sector should be offered for development through competitive bidding on UMPP pattern.
- Delays in environmental/forest clearance was emerging as one of the main barriers in development of coal mines. Ministry of Environment and Forests is raising basic objections after the allotment of coal blocks. Therefore, there is a need to institutionalize a system that only such coal blocks are allotted which are prima facie clear from environmental angle. Further, the target setting for domestic coal based power generation should factor into the availability of such coal mines which are clear from environmental angle.
- The procedure for giving environmental clearance for exploration of coal blocks needed to be simplified so as to expedite geological exploration of coal blocks. The capacity of CMPDI should also be expanded.
- Special efforts should be made for expansion of mines where output can be enhanced. Underground mines could be allotted to foreign

companies with arrangement of mined coal being sold to Coal India Limited.

- E-Auction of coal is raising the prices.
- There was a need to encourage coal imports in those sectors where high cost could be passed on to consumers through market determined prices.
- There was a suggestion that coal should be imported by Coal India Limited and a pooled price be charged from the coal buyers incorporating the prices of imported component and cost of domestically mined component. However, there was also a contrary view that price should not be pooled and competition should be ensured.
- There was a general consensus that an independent regulator for coal sector needed to be constituted and operationalized at the earliest. Some members of the Committee felt that this role should be given to CERC.
- Some members suggested that CERC should suo-motu take up the issue of coal availability for power sector and CIL should be called in such proceedings.
- There was also a view expressed that distribution companies may not be in a financial position to pay for electricity generated through imported coal. It was emphasized that distribution reforms needed to be expedited to revive the financial health of distribution companies.

The representative of the Coal Ministry, a special invitee, said that progress of coal based capacity addition has not been in line with the projections whereas too many linkages have been given on the basis of scheduled commissioning in the Eleventh Plan. He also said that power sector players including NTPC have not made adequate progress on mining of captive coal blocks. He also said that the proposals for environmental clearance are prepared on the basis of forest area as shown in the revenue record whereas MOEF was depending on the density of trees in the area. This needed to be resolved for expediting environmental clearance. He said that E-Auction of coal was reflecting the prices of imported coal and this was a rational market behaviour. He informed that the Planning Commission was considering a proposal for pooling of prices. He said that the underground mines yielded far less quantity as compared to open cast mines. He informed that several steps were being taken for raising the productivity of coal mines but at the same time the power plants running with very high heat rates needed to be reviewed in order to reduce consumption of coal. He agreed that the gap between demand and supply of domestic coal in power sector was likely to increase significantly in future and therefore there was a need to import coal accordingly.

The representative of Ministry of Railways said that the issues relating to port connectivity and availability of rail infrastructure needed to be planned in advance so that projected import of coal could materialise.

**Issue-II & III : Difficulties being faced in tariff based competitive bidding and the need to regulate fuel procurement process.**

The following views were expressed:

- In case of power plants where the tariff is on cost plus basis, the Regulatory Commission definitely needed to have regulatory oversight on fuel the procurement process as the cost of procured fuel is a pass through.
- The bidding guidelines and standard bidding documents for tariff based competitive bidding through Case-1 route should be further expanded so as to provide for bidding based on blended coal and for that purpose, appropriate indices should also be evolved.
- Even for the cost plus tariff stations, suitable indices could be evolved for permitting the cost of imported coal.
- The present escalation index notified by CERC for transmission charges for Case-1 bids should be reviewed as it is causing serious distortion in bid evaluation and possibly it is not correctly reflecting the likely future transmission charges.
- Appropriate arrangement should be devised so that the project developers who have been awarded Case-1 procurement with a domestic coal linkage are allowed cost of imported coal on the basis of CERC escalation index in case Coal India Limited is not able to supply coal in accordance with linkage commitment and importing coal for blending becomes unavoidable.
- The present bidding guidelines for Case-1 procurement require 50% of the land to have been acquired in respect of the capacity for which environmental clearance has been applied. This condition is causing

difficulty in cases of phased construction where the developer obtains environmental clearance for full capacity but acquires land in phases. A similar condition has been imposed in the guidelines requiring coal linkage. Another condition is that proposals for environmental clearance should have been submitted to the final competent authority.

It was suggested that the condition of acquiring land and fuel linkage should apply only for the capacity for which bid is being submitted and not for the full planned capacity of the whole plant. Regarding environmental clearance, it was suggested that it should be made a condition subsequent to signing PPA.

- It was suggested that under Case-1 procurement, purchase of electricity at bus bar of the generating plant needed to be encouraged. The selected bidder should only be required to obtain open access from the Central Transmission Utility. This was suggested in view of the risks being faced by the bidders in procurement queries where the selected bidder was being made responsible for delivery of power at STU interconnection of the procurer.

#### **Issue-IV : Facilitating capacity addition for peaking power supply**

The following views were expressed:

- There was consensus for a separate higher tariff for peaking supply.

- Appropriate tariff structure and regulatory framework needed to be evolved to make peaking power supply available to urban consumers who are willing to pay additional cost. This arrangement was suggested in view of the fact that Discoms are not willing to purchase even the imported coal based power for the whole distribution license area as such in view of high level of losses and lower paying capacity of the rural consumers.
- In view of inadequate availability of natural gas for power sector, LNG should be procured on long term basis and this could be pooled with the natural gas available for power sector to bring the price at reasonable level and to obtain acceptability of peaking power tariffs.
- LNG should be used only for peaking power supply. Such generation capacities are expected to be demanded from middle of the next Five Year Plan.
- It was also proposed that the report of Shri Rakesh Nath Committee on peaking tariff as and when received should be circulated for discussion and comments by the stakeholders.
- It was suggested by NHPC that the cost plus tariff design for hydro power plants should be reviewed with the objective that the hydro power generating companies get adequate return on their equity after taking into account long gestation period of hydro power plants. They also requested for higher tariff for peaking supply. Other suggestions made by them for supporting hydro development were allowing 15% merchant power sale, long term financing and higher ROE on hydro power.

## **Issue-V : Availability of Open Access**

The following views were expressed:

- Presently, the CERC regulations provide connectivity to CTU for hydro power plants for capacity of 250 MW and above. But in the shelf of hydro projects prepared by CEA, large number of power plants are below the size of 250 MW, particularly in the States of North-East and Sikkim where STU system is not adequately developed. It was requested that this issue be examined in the context of national objective of exploitation of all feasible hydro potential.

The representative of CTU said that connecting small sized plants to CTU system was not an optimal solution and it would lead to higher overall transmission costs. They also expressed likely difficulty in scheduling and dispatch of such small sized plants by RLDC.

A suggestion was made that the model of pooling by wind generators could be examined while formulating various options to this problem.

- It was suggested that the development of transmission systems in a region needed to be seen holistically by taking together the augmentation of CTU system and STU systems. Otherwise there

would be serious difficulties on account of inadequacy in State systems.

- Many STUs/SLDCs were still denying open access to IPPs and MPPs. This needed to be dealt with strictly.
- The representative of PSEB requested that IPP should give preference to host State while selling electricity. On this, the legal provisions of the Act which give full discretion to a generating company to sell electricity were pointed out.
- It was suggested that CERC should bring out its regulations under section 36 of the Act early to expedite open access.

### **Other Issues**

The following suggestions were made:

- There was a need to notify some sort of benchmark tariff (which could be tariff for a new NTPC station or a tariff cap for market under section 62 of the Act) so that power plant developers could develop their projects with that as benchmark.
- Trading licensees should also be permitted to deal in renewable energy certificates (REC).
- The Forum of Regulators should also deal with the fuel related issues at State level.

- SERCs should be requested to regularly review the performance of distribution companies, particularly in respect of consumer related issues.
- It was suggested by Ministry of Railways that they should be allowed phased installation of capacitor reactive bank and the State should not insist on full installation right at the beginning.
- It was emphasized that compliance of renewable purchase obligations should be effectively monitored so that there is sufficient demand for RECs. Further, it was suggested that RECs should also be given to standalone renewable energy generating system.

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

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**LIST OF PARTICIPANTS ATTENDED THE TWELTH MEETING**

**OF**

**CENTRAL ADVISORY COMMITTEE (CAC)**

**HELD AT INDIA HABITAT CENTRE, NEW DELHI**

**ON 12<sup>TH</sup> FEBRUARY, 2010**

<b>S. No.</b>	<b>NAME</b>	
01.	Dr. Pramod Deo Ex-Officio, Chairperson, CAC	Chairperson, CERC
02.	Shri Rakesh Nath Ex-Officio, Member, CAC	Chairperson, CEA
03.	Shri S. Jayaraman Ex-Officio Member, CAC	Member, CERC
04.	Shri V.S. Verma Ex-Officio Member, CAC	Member, CERC
05.	Shri R.V. Shahi Secretary (Retd.)	Ministry of Power
06.	Shri Vinod Dhall Former-Member	Competition Commission of India
07.	Shri T.L. Sankar Advisor	Administrative Staff College of India (ASCI)
08.	Dr. Leena Shrivastava Executive Director	The Energy & Resources Institute (TERI)
09.	Shri T.N. Thakur Chairman & Managing Director	PTC India Limited
10.	Shri Satish Jindal Senior Vice-President	JSW Power Trading Company Limited
11.	Shri Bhasker U. Mete President, GEA	Maharashtra State Electricity Power Gen. Corpn. Limited
12.	Shri Kirti J. Amin President	Kisan Vikas Sangh
13.	Shri S.C. Sabharwal Member	Representative of PSEB
14.	Shri V.K. Dutt Additional Member (Electrical)	Representative of Railway Board

15.	Shri Brij Mohan Director	Representative of Dept. of Consumer Affairs
16.	Shri R.N. Nayak Director (Oprns.)	Representative of POWERGRID Limited
17.	Shri Y.K. Sehgal Executive Director (Engg.)	Representative of POWERGRID Limited
18.	Shri M.S. Babu Executive Director (Comml.)	Representative of NHPC Limited
19.	Shri S.N. Geol General Manager (Comml.)	Representative of NTPC Limited
20.	Shri Mahendra Kumar Garg Chief Executive	Representative of Reliance Infrastructure Limited
21.	Shri Praveer Sinha Director (Projects)	Representative of Tata Power Company Limited
22.	Dr. R.P. Singh Vice-Chairman	Representative of Jindal Power Limited
23.	Dr. Sambit Basu Principal (Policy Group)	Representative of IDFC Co. Limited
24.	Dr. Rajesh Kumar	Representative of CUTS
25.	Shri Onkar Nath	Representative of JWALA (NGO dealing in CDM & Renewables)
26.	Shri Alok Kumar Secretary	CERC
	<b>SPECIAL INVITEES</b>	
27.	Shri Alok Perti Additional Secretary	Ministry of Coal
28.	Shri R.K. Mahajan Joint Secretary (LA)	Ministry of Coal

# 12<sup>th</sup> CENTRAL ADVISORY COMMITTEE MEETING (CAC)

## FACILITATING CAPACITY ADDITION



**CENTRAL ELECTRICITY REGULATORY COMMISSION**

# In this Presentation.....



- Overview of Installed capacity in India
- Capacity addition target & achievement in Eleventh Plan
- Agenda

# OVERVIEW

# Sectoral Parameters



➤	Unelectrified rural households (2001 Census)	77.8 million (57%)
➤	Power Supply Position during August 2009 - Energy shortages - Peaking deficit	9.6% 12.6%
➤	Generating plants – PLF (2008-09) All India	77.22%
➤	Generation performance (2008-09)	723 BUs (2.7% growth over corresponding period of previous year)
➤	Cumulative High Voltage Transmission links (220 KV and above)	2,09,072 ckm

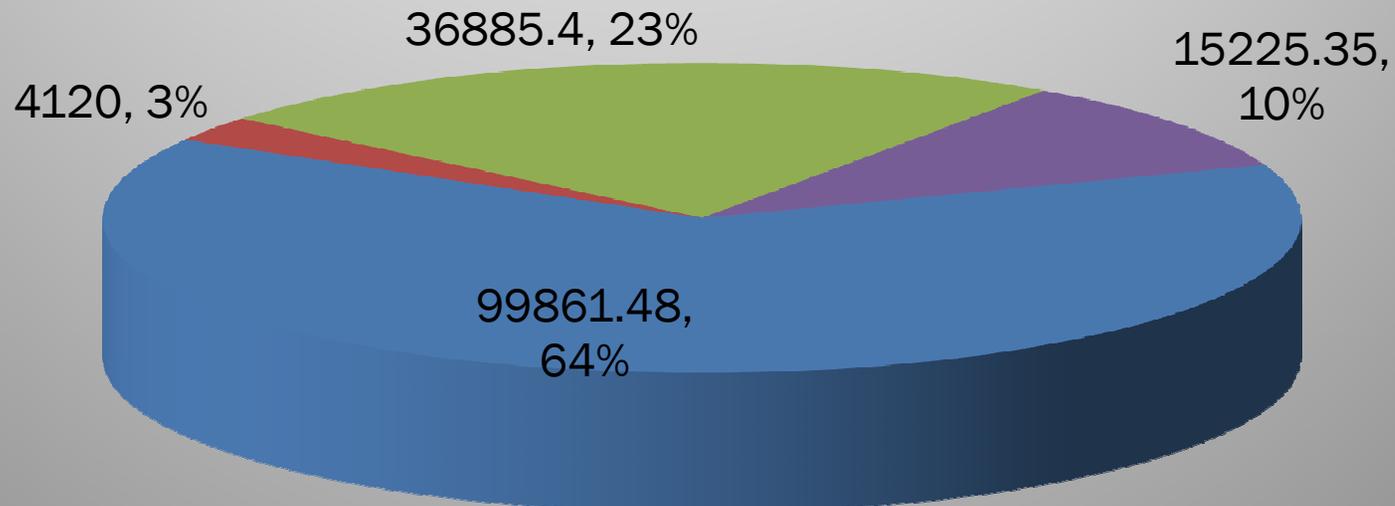
# Installed Generation Capacity in India (end Dec.'09)



TOTAL GENERATION CAPACITY

156092.23  
MW

■ Total Thermal ■ Nuclear ■ Hydro (Renewable) ■ RES\*\* (MNRE)



Source: CEA

Fuel Mix

(As on 31-12-09)

# Installed Generation Capacity in India (end Dec.'09) Contd...

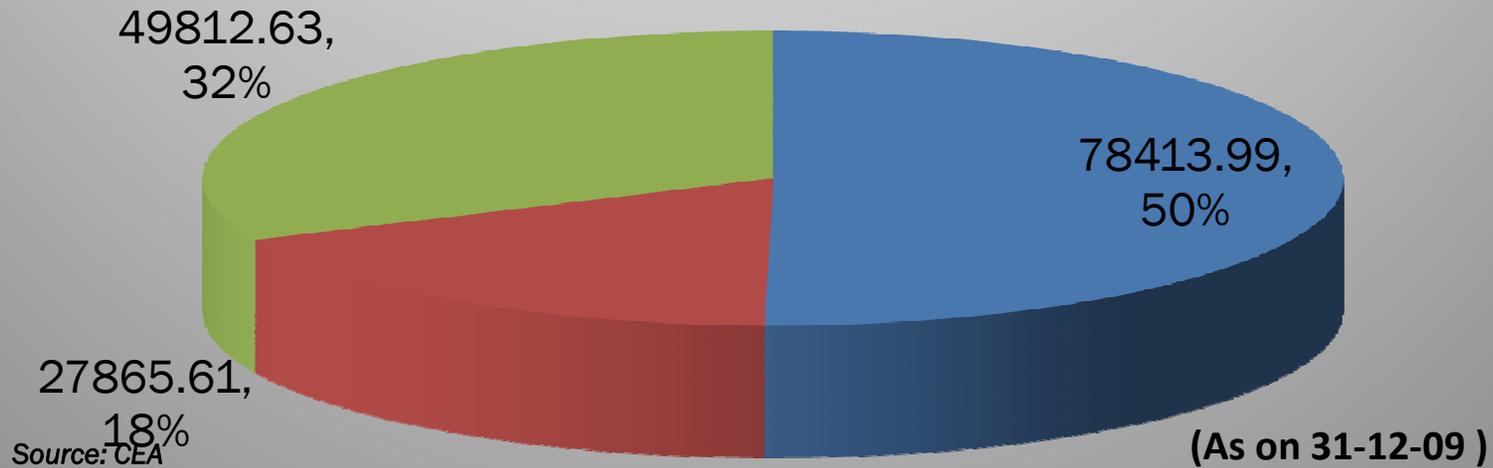


TOTAL GENERATION CAPACITY

156092.23  
MW

## Sector Mix

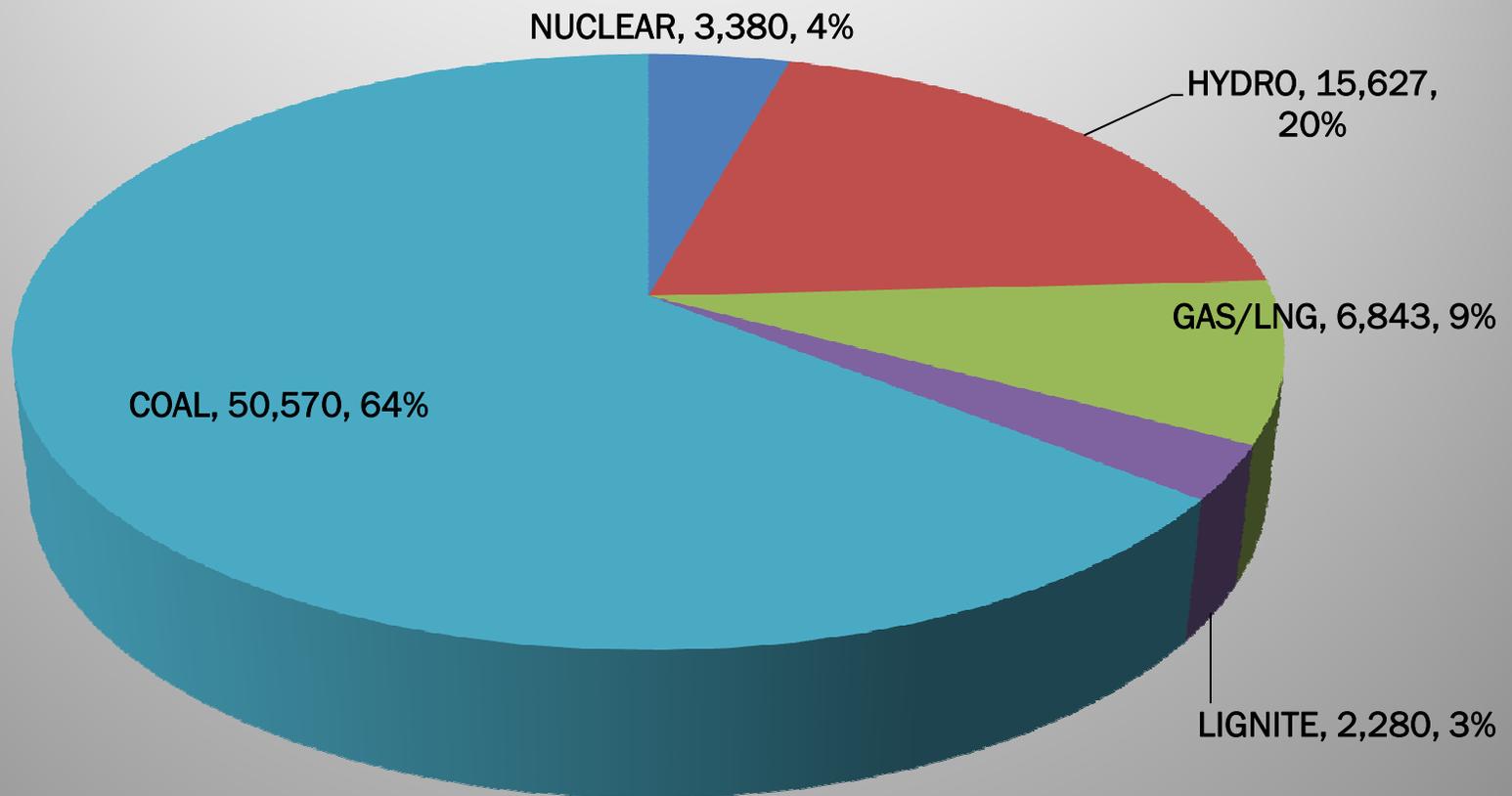
■ State ■ Private ■ Central



**CAPACITY ADDITION TARGET  
&  
ACHIEVEMENT IN 11<sup>TH</sup> PLAN**

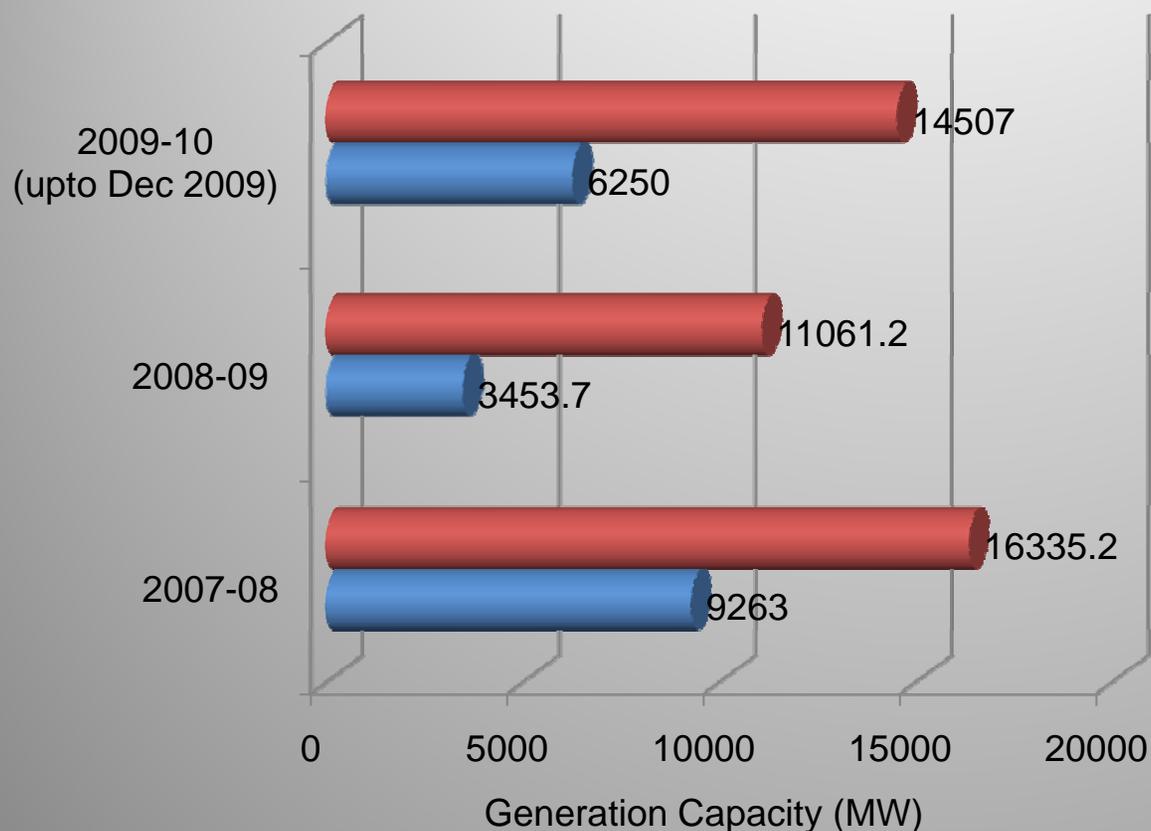
Central Electricity Regulatory  
Commission

# 11<sup>th</sup> Plan Capacity Addition Target



Source:CEA

# Achievement of Capacity Addition during 11<sup>th</sup> Plan



Total Target = 78700 MW

Total Achievement = 18966.7MW  
(Till Dec 2009)

■ Target  
■ Achievement

# AGENDA

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# 1. Policy/regulatory/project support from various concerned agencies are required



- Site/water location
- Fuel allocation and supply
- Transmission facilities and rational transmission pricing
- Adequate payment security and mechanism for third party sale in case of default
- Well functioning markets for merchant/short-term sales
- Special dispensation to support peaking capacity
- Timely supply of equipment/availability of human resource.

## 2. Major initiatives taken by CERC



- Regulatory framework for short-term, medium-term and long-term open access and connectivity to grid.
- Comprehensive power markets regulations
- Regulations on inter-state trading of electricity.

## 2. Major initiatives taken by CERC

contd...



- Unscheduled Interchange (UI) mechanism restructured.
- Revision of trading margin regulation to support innovative financing of projects.
- Tariff for renewable energy sources.
- Renewable Energy Certificate (REC) framework.

### 3. Other Initiatives of CERC in pipeline..



- Draft regulations for granting regulatory approval to CTU for undertaking inter-state transmission system augmentation.
- Draft Regulation on National Transmission Tariff Framework has been circulated.
- Regulations on charges for use of intervening transmission facilities by licensees being finalised.
- Task force (under Chairperson, CEA) for introduction of differential tariff for peak and off-peak hours.

# 4. Issues before CAC



- i. Availability of fuel to the projects which are based on domestic coal linkages.
- ii. Expediting the Case-1 or Case-2 bidding by the distribution licensees.
  - i. Difficulties if any in these biddings being taken up at state level?
  - ii. Is there a need to go for Case-1 bidding based on blended coal in view of the shortages in supply of domestic coal?

# 4. Issues before CAC



- v. Approach for regulation of procurement process for fuel (under cost plus regulation)
  - where such procurement is from sources other than government owned/ government controlled agencies. This would also include captive coal mining.
- vi. Availability of open access required by the generating plants.
- vii. Regulatory framework to support peaking capacities.
- viii. Any other relevant issue.

**Thank You**

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