

STANDING COMMITTEE ON ENERGY (2007-08)

# FOURTEENTH LOK SABHA

**Ministry of Power** 

# **ULTRA MEGA POWER PROJECTS**

# TWENTY SECOND REPORT



LOK SABHA SECRETARIAT NEW DELHI

October, 2007/Asvina, 1929 (Saka)

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# **MINISTRY OF POWER**

# **ULTRA MEGA POWER PROJECTS**

Presented to Speaker, Lok Sabha/Chairman, Rajya Sabha on 15.10.2007 Presented to Lok Sabha on ------Laid in Rajya Sabha on ------



#### LOK SABHA SECRETARIAT NEW DELHI

October, 2007/Asvina, 1929 (Saka)

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# COMPOSITION OF THE STANDING COMMITTEE ON ENERGY (2007-08)

# LOK SABHA

1.	Shri Gurudas Kamat - Chairman
2.	Shri Rashid J.M. Aaron
3.	Shri Kailash Baitha
4.	Shri Gaurishanker Chaturbhuj Bisen
5.	Shri Nandkumar Singh Chauhan
6.	Smt. Anuradha Choudhary
7.	Shri Mohan Jena
8.	Prof. Chander Kumar
9.	Sardar Sukhdev Singh Libra
10.	Shri Sanat Kumar Mandal
11.	Shri Dharmendra Pradhan
12.	Dr. Ravindra Kumar Rana
13.	Shri Kiren Rijiju
14.	Shri Nand Kumar Sai
15.	Shri Vijayendra Pal Singh
16.	Shri M.K. Subba
17.	Shri E.G. Sugavanam
18.	Shri Tarit Baran Topdar
19.	Shri G. Venkatswamy
20.	Shri Chandra Pal Singh Yadav
21.	Shri Kailash Nath Singh Yadav

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- 22. Shri Motilal Vora
- 23. Shri Jesudasu Seelam
- 24. Shri V. Hanumantha Rao
- 25. Shri Keshubhai S. Patel
- 26. Dr. (Shrimati) Najma A. Heptulla
- 27. Shri Veer Pal Singh Yadav
- 28. Shri Sudarshan Akarapu
- 29. Dr. K. Kasturirangan
- 30. Dr. Bimal Jalan
- 31. Shri Syed Azeez Pasha

### SECRETARIAT

- Shri P.K. Bhandari Joint Secretary
  Shri Shiv Kumar Deputy Secretary
  Smt. Juby Amar. Under Secretary
- 3. Smt. Juby Amar Under Secretary

#### COMPOSITION OF THE STANDING COMMITTEE ON ENERGY (2005-06)

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- 5. Shri B. Vinod Kumar

#### 6. Shri Chander Kumar

- 7. Shri Subodh Mohite
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- 16. Shri M.K. Subba
- 17. Shri E.G. Sugavanam
- 18. Shri Tarit Baran Topdar
- 19. Shri G. Venkatswamy
- 20. Shri Chandrapal Singh Yadav
- 21. Vacant\*

#### **RAJYA SABHA**

- 22. Shri Sudarshan Akarapu
- 23. Shri Vedprakash P. Goyal
- 24. Dr. (Smt.) Najma A. Heptullah
- 25. Shri Bimal Jalan
- 26. Dr. K. Kasturirangan
- 27. Shri V. Hanumantha Rao
- 28. Shri Matilal Sarkar
- 29. Shri Motilal Vora
- 30. Shri Jesudas Seelam
- 31.  $Vacant^{\#}$

# Vacancy caused due to retirement of Shri Dara Singh Chauhan, MP Rajya Sabha w.e.f. 2.4.2006

\* Vacancy caused due to death of Shri A.B.A. Ghani Khan Chowdhury, MP Lok Sabha on 14.4.2006

# **COMPOSITION OF THE STANDING COMMITTEE ON ENERGY (2006-07)**

### LOK SABHA

# 1. Shri Gurudas Kamat - Chairman

- 2. Shri Rashid J.M. Aaron
- 3. Shri Kailash Baitha
- 4. Shri Gaurishanker Chaturbhuj Bisen
- 5. Shri Nandkumar Singh Chauhan
- 6. Smt. Anuradha Choudhary
- 7. Shri Mohan Jena
- 8. Prof. Chander Kumar
- 9. Sardar Sukhdev Singh Libra
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- 28. Shri Sudarshan Akarapu
- 29. Dr. K. Kasturirangan
- 30. Dr. Bimal Jalan
- 31. Shri Syed Azeez Pasha

#### **INTRODUCTION**

I, the Chairman, Standing Committee on Energy having been authorized by the Committee to present the Report on their behalf, present this 22<sup>nd</sup> Report (Fourteenth Lok Sabha) on the subject, 'Ultra Mega Power Projects' relating to the Ministry of Power.

2. The Committee held four sittings in all out of which two were devoted to oral evidence of the representatives of the Ministry of Power.

3. The Committee wish to thank the representatives of the Ministry of Power who appeared before the Committee and placed their considered views on the subject. They also wish to thank the Ministry of Power for furnishing the replies on the points raised by the Committee.

4. The Report was considered and adopted by the Committee at their sitting held on 01.10.2007.

5. For facility of reference and convenience, the observations and recommendations of the Committee have been printed in bold letters in the body of the Report.

New Delhi; 8<sup>th</sup> <u>October, 2007</u> Asvina 16, 1929 (Saka) GURUDAS KAMAT, Chairman, Standing Committee of Energy

#### CHAPTER – I

#### **INTRODUCTORY**

#### BACKGROUND

1.1 With 9% plus annual growth of the economy, the energy needs of India are rising sharply. For meeting the growing needs of the economy, generation capacity has to double itself for every ten years in the next three decades at least. However, all the three segments i.e. Central, State and Private had failed to achieve the targeted capacity addition during the 10<sup>th</sup> Plan – against the target of 41,110 MW, the achievement has been only 21180 MW. As such there is a need to develop large capacity projects at the national level to meet the power requirements of the country.

1.2 Keeping this larger canvas in mind, the Ministry of Power launched a unique initiative to facilitate the development of Ultra Mega Power Projects (UMPPs) each having a capacity of 4,000 MW and above, at both the coal pitheads and coastal locations. This initiative, aims at delivering power at competitive cost to consumers by achieving economies of the scale. These UMPPs will employ "super critical technology", which implies plant efficiency levels of up to 38-40% (against 30-35% plant efficiency in practice presently in India) leading to reduction in fuel costs.

1.3 The initiative to develop UMPPs has been taken, as reported by the Ministry of Power, for the reasons: (i) The National Electricity Policy envisage that energy and peaking shortages are to be overcome by 2012. Large size projects being envisaged under this initiative would help in creation of required capacities to meet and sustain this objective. (ii) The electricity and tariff policies under the Electricity Act envisages that future requirement of power needs to be procured competitively. The ultra mega projects are expected to be the first few such projects to come up through tariff based competitive bidding route and thus would encourage state utilities also to take up power projects through this route. (iii) The tariff from large size generation projects would have the benefit of economies of scale and thus the cost of electricity generated from these projects is expected to be reasonable. (iv) With mitigation of risks relating to tie up of land, fuel, water and other statutory clearances envisaged in the initiative, time for completion of these

projects will be considerably reduced and the expected competition should result in lower tariff of electricity from these projects. (v) The size of these projects being large, they will meet the power needs of a number of States through transmission of power on regional and national grid. Further, these UMPPs would require an average investment of around Rs. 16000 to Rs 18000 Crore.

1.4 The policy to encourage private sector participation in the power sector was announced by the Government in 1991. The road for the entry of the private sector was paved by carrying out amendment in the Electricity (Supply) Act, 1948. Though initial response of the private sector was very good but very few projects actually materialised. Some of the reasons were financially weak State Electricity Boards (SEBs), subsidized tariffs to certain consumer categories along with substantial cross subsidies, politicized tariff setting, inadequate off take and payment guarantee mechanisms, etc. Further delay in finalization of various contracts as PPAs, Fuel Supply Agreements, high cost of naptha and other liquid fuel etc., led to the failure of the private sector to achieve the targets during 8<sup>th</sup> & 9<sup>th</sup> Plans. In fact, the plans were quite ambitious, the expectation from private sector was too much, in too little, time. Achievement of the private sector in capacity addition vis-à-vis the targets is as follows:-(in MW)

Plan	Target	Actual
VIIIth	2808	1430
IXth	17588	5061
Xth	7121	1930

1.5 However, the enactment of the Electricity Act, 2003 with provisions such as delicensing generation, open access in transmission & distribution, fully free captive generation, determination of tariff by regulatory commissions, etc. is expected to provide a congenial environment for the increased participation of private sector. Reforms have also been carried out in the States to attract participation by private sector, such as unbundling/corporatisation of SEBs, constitution of SERCs, etc. With this background it is expected that the private sector participation in power sector would substantially increase.

#### **POLICY FRAMEWORK**

1.6 The promotion of competition in the electricity industry in India is one of the stated key objectives of the Electricity Act, 2003 (the Act). Competitive procurement of electricity by the distribution licensees is expected to reduce the overall cost of procurement of power and facilitate development of power markets. Internationally, competition in wholesale electricity markets has led to reduction in prices of electricity and significant benefits for the consumers. As enumerated, hereinafter, various policies framed under the Act further reinforce this position:

#### i) Provisions of National Electricity Policy

1.7 One of the issues sought to be addressed by the National Electricity Policy is 'Competition aimed at Consumer Benefits'. The Policy recognizes that competition will bring significant benefits to consumers; in which case, it is competition which will determine the price rather than any cost plus exercise on the basis of operating norms and parameters. The policy stipulates that all efforts will need to be made to bring the power industry to this situation as early as possible, in the overall interest of consumers.

#### (ii) Provisions of Electricity Tariff Policy

1.8 One of the main objectives of the tariff policy is to promote competition, efficiency in operations and improvement in quality of supply. The policy mentions that introducing competition in different segments of the electricity industry is one of the key features of the Electricity Act, 2003 and that competition will lead to significant benefits to consumers through reduction in capital costs and also efficiency of operations. It will also facilitate the price to be determined competitively.

1.9 The policy inter alia stipulates that all future requirement of power needs to be procured competitively by distribution licensees, except in cases of expansion of existing projects or where there is a State controlled / owned company as an identified developer and where regulators will need to resort to tariff determination based on norms.

# (iii) Guidelines on Competitive Bidding for Determination of Tariff for Procurement of Power by Distribution Licencees

1.10 Sections 61 & 62 of the Act provide for tariff regulation and determination of tariff of generation, transmission, wheeling and retail sale of electricity by the Appropriate Commission. Section 63 of the Act states:

"Notwithstanding anything contained in section 62, the Appropriate Commission shall adopt the tariff if such tariff has been determined through transparent process of bidding in accordance with the guidelines issued by the Central Government."

1.11 The introduction of competition is one of the key objectives of the Electricity Act., 2003. Section 63 provides for the adoption of tariff obtained through competitive bidding in accordance with the guidelines notified by the Central Government. The Tariff Policy notified under the Act in Jan., 2006 envisages that future requirement of power should be procured competitively by the distribution licensees. Guidelines have been issued by GOI through Gazette Resolution dated 19th Jan 2005 under the aforesaid provisions of section 63 of the Act for the procurement of power by distribution licensees.

1.12 The main objectives of these guidelines are promoting competitive procurement, facilitating transparency and fairness, reducing information asymmetry, protecting consumer's interests, enhancing standardization and reducing time for procurement and finally providing flexibility to suppliers on availability of power while ensuring certainty of tariffs for buyers. The guidelines provide both for long term procurement of electricity for a period of 7 years and above and also for medium term procurement for a period ranging from one to seven years.

1.13 The guidelines permit procurement which is location, technology or fuel neutral and also allows development of projects based on specific location or fuel tie-ups.

#### **PROCEDURE FOR DEVELOPMENT OF UMPPs**

1.14 The Ministry of Power has identified Power Finance Corporation (PFC) as the nodal agency for the UMPP initiative. In order to enhance investors' confidence, reduce risk perception and get good response to competitive bidding, PFC has formed nine Shell Companies/special Purpose Vehicles (SPVs) for undertaking the bidding process on behalf of the power procuring (beneficiary) States. The purpose of the SPVs is to carry out the bid process management and obtain various clearances/consents for the projects so that the same are transferred to the successful developer at the time of transfer of SPV to the Developer, who will be selected through a tariff based International Competitive Bidding (ICB). The SPVs have been assigned the following role prior to award of these projects to Developers:

- Appointment of consultants to undertake preparation of Detailed Project Reports (DPRs).
- Acquire land for the project.
- Allocation of fuel linkages/ fuel blocks for pit head projects.
- Getting clearance regarding allocation of water by State Government for pit head locations.
- Approval for use of sea water from Maritime Board/other Government Agencies for coastal locations.
- Appointment of Consultant for International Competitive Bid (ICB) document preparation and evaluation.
- Obtaining various approvals and statutory clearances from the Central Government and State Government (incl. environmental clearances) as are required to be obtained for the project & coal mines.
- Tie-up for off take/sale of power as per provisions of Section 63 of the Act.

1.15 Under the ICB, a two-step process that involves Request for Qualification (RFQ) and subsequently Request for Proposal (RFP) is being followed. The price bids sought during the RFP stage will be analysed to select the successful bidder, with whom the final agreement will be signed. At the end of the bid process, the SPV played a role in getting requisite clearances/approvals relating to the project then it was transferred to the successful bidder.

1.16 Ministry of Power is playing an important role as a facilitator to coordinate with concerned Ministries and State Governments for ensuring coal linkages, environment and forest clearances, and in evolving a proper payment security mechanism with State Govt. /

State Utilities and monitoring the progress of Shell Companies/ SPVs with regard to predetermined timelines.

1.17 The States are required to facilitate various inputs for the UMPPs, such as:

- Providing authorization to PFC/SPV to carry out the bidding process on behalf of distribution utilities.
- Participate through their representatives in various committees for bid process and also are constituent of SPV Board.
- Identification of suitable site.
- Facilitate acquisition of land and implementation of R&R Plan.
- Allocation of water.
- Environment and forest clearances at State level.
- To facilitate PPA and proper payment security mechanism with State utilities.

1.18 In addition, the States have been consulted at various stages of the process including the sale of power, payment security mechanism, drafting of bid documents, association with evaluation process etc. It has been informed by the Ministry of Power that in the last few months several rounds of discussions have been held with states who have agreed to support Ultra Mega Power Projects. Experience of this initiative would facilitate development of state specific projects in the range of 1000-2000 MW through competition on similar lines.

1.19 The Central Electricity Authority in consultation with States has identified 9 sites suitable for development of Ultra Mega Power Projects with a capacity of 4000 MW each. Out of these, 5 are at coastal locations and remaining 4 are pit head sites. The details of sites are as follows:

- a) Five coastal locations:
- i) Mundra in Gujarat
- ii) Krishnapatnam in A.P
- iii) Cheyyur in Tamil Nadu
- iv) Girye in Maharashtra
- v) Tadri in Karnataka

- b) Four pit head locations:
- i) Sasan in M.P.
- ii) Tilaiya in Jharkhand
- iii) Sundergarh (lb Valley) in Orissa
- iv) Akaltara in Chhatisgarh.

1.20 Out of these projects, Mundra in Gujarat and Sasan in Madhya Pradesh have been awarded to the developers.

#### CHAPTER II

#### **DEVELOPMENT PROCESS OF UMPPs**

#### (i) **BIDDING PROCESS**

2.1.1 Guidelines on competitive bidding for determination of tariff for procurement of power by distribution licencees framed under the provisions of the Electricity Act stipulates that the tariff based bidding can be invited by distribution utilities or their authorised representative. This concept of authorised representative has been forming part of Standard Bidding Document as well.

2.1.2 The bid process adopted for development of Ultra Mega Power Projects in the country is in line with guidelines issued by Ministry of Power for procurement of power by distribution utilities through tariff based competitive bidding. The SPVs set up for the development of the UMPPs are conceived as 'Authorised Representatives' and are required to carry out various activities as specified in the guidelines on behalf of the procurers i.e. Distribution Licencees. Accordingly, the State distribution utilities' have provided authorisation to SPVs of Sasan and Mundra UMPP for off-take of power allocated, endorsing the proposed three tier mechanism as detailed below and for taking up tariff based bidding on their behalf.

**Expression of Interest (EoI):** These UMPPs are to be awarded on tariff based competitive bidding. This being a new concept and requiring large investment from domestic as well as international investors, expression of interest (EoI) needed to be invited initially to generate wider awareness and global publicity.

**Two stage Bidding Process:** For the purpose of selection of a developer, a two-stage selection process has been adopted. The first stage of bidding will involve Request For Qualification (RFQ) containing qualifying criteria for selection of bidders to participate in the second stage. The second stage of bidding will invite Request For Proposals (RFP) from the qualified bidders which will further be evaluated by the SPVs with the help of appointed Bid Process Management Consultants. Here it may be noted that the RfQ and

RfP documents are in line with the standard bidding document issued by MoP in this regard in order to take benefit of the provisions of Sec-63 of Electricity Act. In this regard, the Ministry of Power informed that the entire bid process is transparent and involves the bidders at both the stages of RfQ and RfP through Pre- bid Conferences. Such conferences are organized before RfQ to decide the RfQ criteria and before RfP to finalise PPA by considering views of bidders, procurers and financial institutions in the presence of MoP, CERC and CEA.

**Empowered Committee:** A Committee of Purchasing States, Ministry of Power (MoP), Central Electricity Regulatory Commission (CERC), SBI, PFC headed by Member, Central Electricity Authority (CEA) had been formed to finalise RfP/ PPA document to be issued to potential bidders.

**High Level Committee:** consisting of members from Financial Institutions (FIs) and CEA has been constituted to finalise the recommendations submitted by the consultants in both the stages of bidding i.e. RFQ stage and RFP stage. This Committee consists of Member(Thermal) CEA, Director (Projects) PFC and Representatives of FIs (MD SBI, MD IDFC and MD IDBI)

### (ii) ELIGIBILITY CRITERIA FOR BIDDERS

2.2.1 Bidders' Conference for Sasan & Mundra was held at New Delhi on 21/02/2006 and for Girye on 17/04/2006 at Mumbai. The Conference was attended by about 35 companies including Overseas Companies and representative of FIs/ Banks. Major RfQ criteria arrived through consultation are:

• Technical Criteria- The Bidder must meet technical requirement of having experience of developing projects (not necessarily in the power sector) in the last 10 years whose aggregate capital costs must not be less than Rs. 3000 Crore. Out of these projects, the capital cost of at least one project should be equivalent or more than Rs. 500 Crore.

• Financial Criteria- The developer should have:

(i) **Internal Resource Generation**: Equal to at least Rs. 1140 Crore or equivalent US\$ computed as five times the maximum internal resource generated during any of the last five years business operations;

(ii) **Networth**: Rs. 1000 Crore or equivalent US\$. The above computation shall be derived from any of the past three years annual accounts; and

(iii) **Annual Turnover**: Rs. 2400 Crore or equivalent US\$. The above computation shall be derived from any of the past three years annual accounts."

2.2.2 The Committee desired to know from the Ministry as to whether there were any guidelines to debar the companies that had already bagged an UMPP – from bidding for subsequent projects – which were yet to be awarded, the Ministry, in a post-evidence reply submitted as under:

"Presently, the provisions in the RFQ and REP documents for UMPPs do not debar companies that have already bagged an UMPP from bidding for subsequent projects."

2.2.3 On the ongoing proposal of the Ministry of Power to make some changes in the criteria for bidding and the reasons therefor, the Committee were informed:

"The proposed change in the bidding guidelines is for providing option of signing of PPA and other documents before date for submission of bids to give bidders higher degree of confidence in projects where procurers are located in more than one State. The procurers collectively are represented in the evaluation committee."

# (iii) FUNDS REQUIREMENT AND INVOLVEMENT OF FINANCIAL INSTITUTIONS

2.3.1 The Ultra Mega Projects are being developed on super critical technology and CEA has estimated that it would entail substantial investment to the tune of about Rs. **15,000** crore for each project. In this regard, the Committee were informed that from the initial rounds of discussions held with the financial institutions, it emerged that for good

and credible developers and for power projects offering less expensive power debt funding may not emerge as a constraint at all. To keep the financial institutions update about the developments in setting up of Ultra Mega Projects, FIs are being involved at various stages including the final evaluation of the bids. However, development of these large projects would have to have the involvement of large private business groups in our country, who either on their own or through consortiums with parties and agencies from outside could take up implementation of these projects. To keep the financial institutions update about the developments in the setting up of Ultra Mega Projects, FIs are being involved at various stages including the selection of consultants and final evaluation of the bids for the selection of developers.

2.3.2 As regards Final Bid Evaluation for the Selection of Developer, the Committee were informed that the same will be decided by Apex Evaluation Committee which consists of :

- Chairperson/CEO of the lead FI,
- Chairperson, CEA
- CMD, PFC
- Representative of the power purchasers.

# (iv) ROLE OF THE MINISTRY OF POWER

2.4.1 While SPV is acting on behalf of the state utilities, the Ministry of Power is facilitating the whole process through the Power Finance Corporation especially with respect to: -

- Allocation of power to different States from UMPPs in consultation with the States.
- Coal Block Allotment/ Coal Linkage
- Environment/ Forest clearances
- Required support from State Govts. and their agencies
- Co-ordination with concerned Ministries/agencies and State Governments for ensuring:
  - Coal block allotment for pithead projects

- Environment, Forest&other clearances
- Water allocation
- Regular monitoring of progress of UMPPs and facilitate resolving key issues of concern.

2.4.2 The Committee noted that the Ministry of Power would play the role of a facilitator before the project is awarded. On being asked whether the Ministry would play any role or exercise any control after the project has been set up, the Ministry clarified:

"Ministry of Power would continue to monitor the progress of UMPPs with a view to ensure that projects are commissioned well within the time-frame stipulated in the RfP document. There shall be no active role of Ministry of Power after operationalisation of the projects. The selected developer and the concerned procurers shall comply with the provisions of the applicable law in particular grid code as amended from time to time regarding operation & maintenance of the power station and all matters incidental thereto."

### (v) SELECTION OF SITES FOR UMPPs

2.5.1 On being questioned by the Committee about the selection of sites for the development of UMPPs, they were informed:

"Through a preliminary scrutiny by CEA, of a number of potential sites were identified in the country, in the first phase, three projects at pit head site and four projects at coastal locations were identified for development of Ultra Mega Projects. Later two more sites were identified – one each for pit head and coastal locations. The projects at pithead locations will be based on domestic coal whereas those at coastal sites would have the option to use imported coal as fuel."

2.5.2 Again, on being asked about the criteria for selection of site for Ultra Mega Power Projects and how far the potential sites meet the criteria, the Ministry in a written reply submitted:

"i) Due to various techno-economic advantages, pithead & coastal are the most preferred locations for the coal based power plants. While, the pithead

power plants shall use indigenous low-grade non-coking coal available in abundance in the country, the coastal location can use imported coal or a blend of imported and indigenous fuel to have flexibility.

Central Electricity Authority has identified potential sites for very large capacity power plants through specific studies based on the satellite remote sensing data. One such study was carried out for pithead locations through Central Mines Planning & Design Institute (CMPDI), Ranchi. A separate study for coastal plant is being carried out by National Remote Sensing Agency (NRSA) Hyderabad.

ii) Following criteria has been considered while selecting potential sites for the coal based power plants at pithead locations:

- a) Nearness to coal block in case of pithead site.
- b) Accessibility by road, and rail;
- c) Availability of land, water & coal for the rated capacity;

d)Coal transportation logistics;

- e) Availability of corridors for Power evacuation lines.
- f) No significant involvement of forest or Agricultural land.
- g)Preliminary environmental feasibility including R&R requirements, if any;
- h)For coastal sites, nearness to the existing or proposed ports.

(iii) For coastal locations following specific criteria is considered in addition to those relating to land & environmental aspects for the pit head projects:

a) The site need be away from restricted Coastal Regulation Zone area as per MOE&F Notification dated 19.2.1991 as amended upto 3rd Oct. 2001.

b) Nearness to the existing or proposed ports.

2.5.3 In addition to the above, it was specifically stated by the Ministry that the following essential inputs are ensured before selecting a site for ultra mega project of 4000 MW:

- "a) Land of about 2000 acres for main power plant block.
- b) Land of about 1000 acres for dumping unutilized ash for pithead location and about 500 acre for coastal location since ash content in imported coal is

low. It is envisaged that fly ash must be utilized for cement manufacturing and other useful purposes.

- c) Land of about 200-300 acres for construction of colony for housing operation & maintenance staff.
- d) In addition to above, additional land is required for corridor for water and ash pipelines, coal conveyor/ rail lines etc.
- e) Availability of water of about 150 cusecs (cubic feet per second) throughout the year for pithead location based on closed cycle cooling system using cooling tower. In case of non-perennial sources adequate storage of water to be kept.
- f) For coastal location, seawater is to be used for cooling as well as raw water. Desalination of sea water is envisaged to get raw water for boiler make up & other requirement."

### (vi) FUEL ARRANGEMENTS FOR UMPPs

2.6.1 In view of the fact that the projects at pithead locations will be based on domestic coal whereas those on coastal sites would have the option to use imported coal as fuel, the Committee were interested in knowing as to whether Ministry of Power had made any definite plan regarding securing Coal linkages, which was a very vital input for these power projects. The Ministry in a written reply informed:

"Ministry of Power is facilitating the whole process through the Power Finance Corporation especially with respect to:

- a. Coal block allotment
- b. Environment/ forest clearances
- c. Required support from State Govt. & its agencies on various issues.

For the pithead projects, MoP is co-ordinating allocation of captive coal blocks with the Ministry of Coal. In respect of Sasan project, Ministry of Coal has already allocated Mohar, Mohar Amlori and Chhattarsal blocks in the name of Sasan Power Limited. Similarly they have also allocated coal blocks in respect of Orissa Ultra Mega Power Projects as well.

In case of imported coal based projects, the responsibility of arranging fuel linkages from different sources in the international coal market at the most competitive prices rests with the successful bidder."

2.6.2 When asked about the total annual requirement of imported coal for these projects.

"The Annual Requirement of imported coal for one Ultra Mega Power Project of 4000 MW capacity is estimated to be about 12 to 14 million tonnes."

2.6.3 The Committee wanted to know as to whether the same quality coal or different quality of coal would be used in different projects. The witness clarified during evidence held on 04.05.2006:

"The quality of coal could vary because the Indian coal is relatively high in ash content and imported coal has much lower ash content. But our coal has low sulphur whereas the imported coal has higher sulphur content."

2.6.4 The Committee were in particular interested to know whether there would be consistency in the quantity and quality supplied. They were informed:

"The developers are expected to enter into long term coal supply contracts to ensure consistency in the quantity and quality of coal supplied."

2.6.5 When further asked about the strategy which has been formulated to meet the imported coal demand and how the Ministry would ensure that the coal imported will not be diverted for other use, the Ministry in a written reply stated:

"In case of imported coal based projects, bidders will be responsible for arranging fuel linkages from different sources in the international coal market at the most competitive prices.

As per the provisions of Request for Proposal and Power Purchase Agreement developers are expected to secure long term fuel supply agreement and there are ample safeguards in the PPA to ensure that imported coal is not diverted for other uses. Firstly Capital cost of developer is recoverable wholly at 80% availability on year-to-year basis; secondly in case availability is less then 75% apart from loosing capital cost recovery provision of further penalty is put in place. Thirdly under the PPA provision if availability is less then 65% due to any fault of procurer to take the power then procurer though has to pay the capacity charges, the first right on the imported coal which has not been utilized due to lesser utilization of the existing capacity also rests with him."

2.6.6 On being asked about the exact quantum of funds which would be required annually for the import of coal, the Ministry in a written reply informed:

"The total requirement of coal estimated for each imported coal based project is around 12 Million Tonnes per annum. Since the bidders are expected to tie up the fuel supply, the annual expenditure on coal would depend on the fuel supply agreement and the source of coal. However, current market price of coal in the international market is US\$45 per ton."

2.6.7 Making a pertinent observation that India is spending more than 70% on the import of crude oil annually, the Committee wanted to know in particular as to whether the import of coal would not disturb the Balance of Payment position of the country, the Ministry, however, clarified:

"Integrated Energy Policy *inter-alia* recommends, 'India would need to augment domestic production and encourage thermal coal imports to meet its energy needs. The Committee has concluded that along the western and southern coasts of India imported coal is more cost competitive compared to domestic coal and further, imported coal is far more cost competitive compared to imported gas at these coastal locations. Such a cost advantage of imported coal over imported gas is likely to continue for some time in the future.

Thus, *prime-facie*, import of coal would ease pressure on balance of payment as it is intended to replace the imported gas which is much costlier and volatile in the international market. Apart from this direct positive effect on balance of payment, availability of required electricity at cheaper rates would certainly provide distinct edge to Indian industry which could become more competitive and export oriented."

2.6.8 From the replies of the Ministry, it was not clear whether the use of imported coal for coastal projects is mandatory or whether the projects would have the option to use imported coal as fuel. When the clarification was sought from the Ministry. The Ministry stated:

"This is to clarify that the coastal project of Mundra which is at advance stage of bidding is to run on imported coal only. However, the technoeconomic feasibility of using imported coal after blending with indigenous coal is being examined so as to have flexibility in sourcing imported coal vis-à-vis imported coal with indigenous coal. This module could be put into implementation in subsequent coastal locations depending upon the feasibility made available by Central Electricity Authority."

2.6.9 On this issue, during evidence held on 02.11.2006, the Secretary, Ministry of Power, further clarified:

"We are trying to balance coal-based thermal power development both through indigenous coal and coastal based imported coal power stations. That is because though it is claimed that we have huge reserves in the country but it has been demonstrated only to the extent of 50 billion tones. Therefore, we should not be oblivious of the fact that our indigenous resource also is not unlimited. Therefore, a happy blend of both indigenous coal as well as imported coal would stand us apart. That is why our policy is to have a chain of pithead power stations and also coastal power stations and at the same time not being too much in favour of imported coal because it also has the foreign exchange component involved into it."

2.6.10 Again being asked about the views of the Ministry of Power on this, the Ministry in

a written reply submitted:

"The initiative to set up power plants at coastal locations was taken up using imported coal due to following reasons:

- i) Indigenous coal production is not matching with the demand of coal in power sector due to large capacity addition planned. In 2005-06, 10.443 MT of coal was imported and in year 2006-07 (up to 28.02.2007), 9.331 MT of coal has been imported. Further at the end of 11<sup>th</sup> Plan, about 40 MT of coal is required to be imported to meet the capacity addition planned taking into account the production by coal companies and captive mining.
- ii) Although as per proven reserves, we can meet the Country's requirement for next 80 years, it is preferable to conserve the same for future use. Hence it is considered prudent to use imported coal for part of our requirement,
- iii) In coastal locations imported coal is a better option keeping in view transportation logistics,
- iv) Option of using blended coal can also be used in future projects for which issue of limitation on type of coal to be procured and handled is to be resolved."

2.6.11 When asked whether the import of coal will be under any obligation to inform the authority about the quality of coal being imported. The Ministry in a written reply clarified:

"The importer of the coal will not be under any obligation to inform the authority about the quality of coal being imported. The developer will be under obligation to import coal of consistent quality in regard to ash and sulphur content so as to comply with the stipulations of MOEF. The State Pollution Control Board Authorities monitor regularly to have a check on the emissions."

### (vii) AVAILABILITY OF INFRASTRUCTURE FOR DEVELOPMENT OF UMPPs

2.7.1 FICCI has expressed concerns to the Committee that the ports in the country are not large enough to handle import requirements. When the Ministry was asked to clarify the position in this regard, it stated:

"It is true that the existing ports do not have the required facilities to handle the imported coal requirement of the UMPPs. However, the sites for coastal UMPPs are being identified either closer to the existing port where additional facilities could be created to handle the imported coal or closer to such locations where new ports or jetties could be set up to handle the imported coal. In regard to Mundra UMPP, the nearby Adani Port has committed to the creation of additional facilities to handle the imported coal. Similarly, for Krishnapatnam UMPP, the Krishnapatnam Port Company Ltd. has confirmed that they would be able to create additional facilities at their Krishnapatnam Port to handle the imported coal."

### (viii) TARIFF-FIXATION FOR POWER FROM UMPPs

2.8.1 Asked whether SERCs of the Host States will play any role in fixing the yearly tariff for the power obtained from the projects. The Ministry of Power in a written reply explained:

"Under Section 63 of EA 2003, the appropriate Regulatory Commission is to adopt the tariff arrived through tariff based competitive bidding."

2.8.2 During evidence, while explaining the role of Regulatory Commissions, the Secretary, Ministry of Power further elaborated as follows:

"Electricity is a concurrent subject. Just as you have the Central Electricity Regulatory Commission, there are State Electricity Regulatory Commissions in the States. The tariffs to the consumers are settled before those Commissions. Those Commissions will deliberate on this issue. These are public hearings in which the distribution companies have to place before the Commissions in open court as to what has been their procurement process, what is the cost to them, what is the cost to the company and thereafter tariff is fixed. It is very transparent mechanism." 2.8.3 During evidence, held on 02.08.2006, the Committee wanted to know about the per unit cost of power, likely to be obtained from the UMPPs. The Secretary, Ministry of Power stated:

"It would be less than Rs. 2/-. I expect that it would be much less than Rs. 2/- per unit. In the NTPC pithead power stations you are now getting a tariff of 165 to 170 paise."

2.8.4 He further added:

"We expect, in either of the situations whether it is pithead power plants or coastal power plants, the tariff should definitely be less than Rs. 2/-. The cost in case of the pithead power plants would be lower as compared to the coastal areas power plants because of the imported coal component. But in both cases it should be lower than Rs. 2/- per unit of electricity."

2.8.5 When asked as to whether the tariff will be different for pithead & coastal projects, the Secretary, further clarified, during evidence held on 02.08.2006:

"The variation in cost of power in terms of coastal locations would be a factor for competition. It is based on how best the 12 likely bidders are able to tie up their fuel cost and transportation cost. The way we are trying to provide it should lead to similar type of consumption provided the coal colour and the value is the same. But the price would depend on how best they are able to tie up.

Regarding pit-head locations, I think, there is not too much of change in the characteristics of coal in SASAN or in Orissa. Therefore, it should lead to more or less, one or two paise difference in similar types of price per unit of power in terms of pithead power stations. Coastal locations will present a different type of a picture. But there again the competition will drive down the prices."

2.8.6 In the light of the fact, as was informed by the Ministry of Power, that the tariff arrived through the competitive bidding has to be adopted by the Regulatory Commission, the Committee in particular desired to know as to whether the tariff of Rs. 1.19 in case of Sasan Project will go to Regulatory Commission for clarification. The Secretary, Ministry of Power clarified during evidence:

"This was sent to them for adoption and within a few days we expecting their reply."

# (ix) TIME SCHEDULE FOR DEVELOPMENT OF UMPPs

Project	E.O.I.	Issue of RFQ	Issue of RfP (Draft)	Submission of Rfp	Selection of successful Bidder
1. Sasan	31.1.06	31.3.06	22.6.06	07.12.06	31.12.06
2. Mundra	1.2.06	31.3.06	22.6.06	07.12.06	31.12.06
3. Krishnapatnam		12.07.06 (Notice)	15.10.06	15.03.07	30.04.07
4. Orissa-Pit head*		31.07.06	15.10.06	15.03.07	30.04.07

2.9.1 The time-schedule for development of four UMPPs is given by the Ministry of Power is as follows:

\*State agreed 'in principle', formal confirmation regarding site is awaited.

\*The qualified bidders are asking for at least 8 months for preparation in terms of Ec, coal/mining etc. It is proposed to give bidders 5 months after issue of RfP to give their tariff bid.

2.9.2 In the Budget 2006-07, it has been announced that:

"It is our intention to award these projects before 31<sup>st</sup> December, 2006."

2.9.3 In the 'Implementation of Budget Announcements' (2006-07), Department of Economic Affairs, Ministry of Finance while giving the status of implementation of budget announcements has stated:

"The bidding process has been initiated in respect of four projects is Sasan (Madhya Pradesh), Mundra (Gujarat), Krishnapatnam (Andhra Pradesh) and Jharkhand. In respect of Sasan (MP) and Mundra (Gujarat), th financial bids were evaluated on 18.12.2006 and letters of intent were handed over to successful developers on December 28, 2006. For Krishnapatnam Project, successful developer would be finalized by end of April, 2007 and for Jharkhand the date for selection of final developer is July 15, 2007. For other projects necessary inputs from respective States are being tied up.

2.9.4 While explaining the time schedule for the development of UMPPs, the Secretary, Ministry of Power during evidence held on 02.08.2006 had initially stated:

"Two projects we are trying to allot by December, 2006 and two more projects by March-April 2007. These are 800 MW unit projects. There will be some flexibility. Therefore, they will take a little more time, maybe four year. We are allowing them six months for their own preparation and tenders, etc. and then four to five years to complete the project. Within the 11<sup>th</sup> Plan we should definitely get some units of the first crop of the project that we would be allotting."

2.9.5 However, subsequently the Ministry of Power during evidence held on 21.03.2006 stated as follows:

"In respect of the ultra mega projects, a point was made that we had proclaimed that we would do it in the Eleventh Plan. I would not like to comment on that issue at the moment. But as things stand today, keeping in view the work schedule that has gone with those logics and plans, these projects are to give fruit in the Twelfth Plan. Work will begin very soon in the Eleventh Plan but they have to fructify in the Twelfth Plan. In respect of the impact of these projects not coming up on the Eleventh Plan, these projects are not included in the Eleventh Plan target."

2.9.6 As regards the time schedule, the Ministry of Power in a post-evidence reply further elaborated:

"Bid documents for UMPPs provide that first unit would be commissioned not later than 69 months from the effective date of PPA, and balance units within next 24 months i.e., last unit not later than 93 months (7 years & nine months) 93 months for coastal projects and 105 months for pit head projects from the effective date of PPA. According to this prescribed timeline, any UMPP in case of which effective date of PPA has been attained by first quarter of 2009-10 is likely to be commissioned fully within 12<sup>th</sup> Plan (which ends in March, 2017)."

2.9.7 The Ministry, however, added:

"The time-schedule for the development of these Ultra Mega Power Projects depends on:

- a) Time taken in obtaining necessary clearances and identification and acquisition of land for the Project;
- b) Time taken in completion of bidding process; and
- c) Time-schedule for commissioning of various units submitted by the selected bidder in his bid, in accordance with provisions of the bidding documents."

2.9.8 The Committee finally desired to know from the Ministry of Power as to whether all the projects would be operational during the 12<sup>th</sup> Plan. The Ministry of Power submitted:

"According to indicated timeline, all units of the Mundra Ultra Mega Project would be operational during the 12<sup>th</sup> Plan. The Commissioning schedule for Sasan UMPP would depend on the date of transfer of the project to the Selected Developer. The bidding process in respect of Krishnapatnam UMPP and Tilaiya UMPP has started. Given the timeline in the bidding documents, it could be said with fair degree of certainly that four projects shall be operational well within 12<sup>th</sup> Plan. In case of remaining five UMPPs there is again fair chance of completing them within 12<sup>th</sup> Plan. However, firm timelines would be known on completion of bidding process in each case. For this to happen, it is imperative that the concerned States shall provide necessary clearances, particularly site clearance urgently."

#### (x) PRESENT STATUS OF DEVELOPMENT OF UMPPs

2.10.1 On being questioned by the Committee about the status of development of UMPPs, the Ministry informed the Committee that the bidding process in respect of Sasan & Mundra projects was completed on schedule. The following information was, however, submitted:

Project	Issue/Submission of	Issue/Submission	Issue of	Submission of	Selection of
	E.O.I.	of RFQ	RfP	Bid Proposals	Bidder/
					Issuance of
					LoI
1. Sasan					
Target –	31.1.06/28.2.06	31.3.06/15.5.06	30.6.06	22.11.06	31.12.06
Actual –	31.1.06/28.2.06	31.3.06/1.6.06	22.6.06	07.12.06	28.12.06
2. Mundra					
Target –	1.2.06/28.2.06	31.3.06/15.5.06	30.6.06	22.11.06	31.12.06
Actual –	1.2.06/28.2.06	31.3.06/1.06.06	22.6.06	07.12.06	28.12.06

Bidding process in respect of Sasan & Mundra UMPPs.

2.10.2 However, as regards the status obtaining in respect of all the UMPPs, the Ministry in a post-evidence reply added:

"The present status of Nine Ultra Mega Power Projects identified for development is as follows:

- Sasan Ultra Mega Power Project in Madhya Pradesh: Letter of Intent (LOI) has already been issued to Globeleq – Lanco consortium on 28.12.2006 for development of the project.
- ii) Mundra Ultra Mega Power Project in Gujarat: Letter of Intent (LOI) has already been issued to the Tata Power Company Limited on 28.12.2006 for development of the project.
- iii) Akaltara Ultra Mega Power Project in Chhattisgarh: The development of Akaltara UMPP is contingent upon the availability of requisite clearances and confirmation with regard to availability of land and water for the project by the Government of Chhatisgarh.
- iv) Girye Ultra Mega Power Project in Maharashtra: It appears that some local people are agitating against the setting up of Ultra Mega Power Project at Girye project site. The development of UMPP in Maharashtra therefor is contingent upon the availability of requisite clearances and confirmation with regard to availability of land for the project by the Government of Maharashtra.
- v) Tadri Ultra Mega Power Project in Karnataka: It appears that there is some local agitation against the Tadri UMPP. Hon'ble Chief Minister had constituted a committee in May, 2006 consisting of MP, MLAs and other Stake holders, CEA, PFC, Govt. of Karnataka, KPCL, Deputy Commissioner, Uttara Kannada District to examine various issues pertaining to the proposal. It is proposed by the Committee that a study may be carried out to assess impact of the power plant on the environment by a reputed consultant. Further decision will be taken after the Study is carried out.
- Vi) Krishnapatanam Ultra Mega Power Project: The Request for Qualification bid document has been issued on 01.08.2006 and RfP bids by the qualified bidders are to be submitted by 10.04.2007. Letter of Intent to the selected bidder is expected to be issued before 30.04.2007.
- vii) Orissa Ultra Mega Power Project: The development of Orissa UMPP is contingent upon the availability of requisite clearances and confirmation with regard to availability of land and water for the project by the Government of Orissa.
- viii) Tilaiya Ultra Mega Power Project in Jharkhand: Desein Pvt. Limited have been appointed as technical consultants for this project. The Request for Qualification bid document has already been issued on 01.02.2007 and is to be submitted by 20.03.2007. RfP documents are to be issued on 02.04.2007. Submission of RfP document is 02.07.2007. Selection of successful bidder by 15.07.2007.
- ix) Tamil Nadu Ultra Mega Power Project: Site near Cheyyur was identified for setting up of Ultra Mega Power Project in Tamil Nadu subject to feasibility for development of port being established by

government of Tamil Nadu. However Government of Tamil Nadu has now vide letter dated 5.03.2007 intimated that GOTN prefers that the site at Nagapattinam may be considered by CEA for setting of UMPP. The site was not preferred by CEA as the site was low lying and filled with back water from sea. Further, the sea coast near the project site was shallow and setting up of a port would be more expensive. This was also communicated to GOTN by CEA in the meeting taken by Hon'ble Minister of Power, Tamil Nadu on 02.12.2006 wherein Chairperson, CEA also participated."

2.10.3 The Committee noted that for the Krishnapatnam Project, Letter of Intent was to be issued to the selected bidder by 30.04.07. However, the Ministry of Power failed to meet the deadline. The following was submitted before the Committee by the Ministry in a post-evidence reply:

"RfP documents were issued on 10-11-2006. The submission date of Request for Proposal (RfP) for the Krishnapatnam UMPP has been postponed to 25<sup>th</sup> May, 2007. Further progress of bid process will depend on finalization of Rapid EIA Report which is necessary for obtaining the MoEF clearance."

2.10.4 When asked about the reasons for this postponement, the Ministry replied:

"Further progress in the bid process depends on the finalization of the Rapid EIA Report which is a pre-condition for obtaining MoEF clearance. The same is awaited from EPTRI, an agency of Government of Andhra Pradesh."

2.10.5 During evidence, regarding the Mundra Project, the Ministry of Power further added:

- "Letter of Intent (LoI) has been issued to M/s Tata Power Co. Ltd. under Tariff based Competitive Bidding Process on 28.12.2006 is Rs. 2.26/unit (imported coal based UMPP).
- Land for the project has been acquired and all clearances Environmental, CRZ, Sea-water, Civil Aviation, Defence have been obtained. However, forest clearance is under process.
- Adoption of tariff by CERC is expected shortly.
- Power Purchase Agreement (PPA) has been signed on 22.04.2007. The selected bidder has quoted five units of 800 MW each proposed to be commissioned as per following schedule:

Unit No.	Months from PPA signing	Scheduled COD
1	64	22.8.2012
2	70	22.2.2013
3	76	22.8.2013
4	82	22.2.2014
5	88	22.8.2014

However, bidder has an option under PPA to advance the above commissioning schedule.

• Project has been transferred and the documents (PPA etc.) have been handed over to successful bidder, Tata Power Co. on 23.04.2007."

2.10.6 Sasan UMPP was bagged by Globeleq Lanco Consortium who quoted the lowest bid of Rs.1.19/unit. The Ministry of Power had informed the Committee that the LoI was issued on 28.12.2006. The land had also been acquired and Relief and Rehabilitation (R&R) package finalized. All the clearances for this project were also stated to be obtained.

2.10.7 However, in February 2007, Globeleq Ltd. sold its entire 70% stake in Sasan Project to Lanco Infratech and Jindal Steel and Power Ltd.

2.10.8 In the light of this document, the Committee wanted to know the present status of the project in the light of this development. PFC, the nodal agency for UMPPs in a written reply gave details of the present status of this Project as follows:

"M/s Globeleq Singapore Pte Ltd. vide Letter dated 12<sup>th</sup> February, 2007 addressed to Sasan Power Ltd. intimated that its Holding Company, Globeleq Ltd. has sold its entire stake in Globeleq Singapore Pte Ltd. to M/s Prince Stone Investments Ltd., Mauritius (60%) which is also the Holding Company of M/s Lanco Infratech Ltd. (the other partner of the Globeleq – Lanco Consortium) and to M/s Jindal Steel and Power Ltd., India (40%).

Letter dated 14<sup>th</sup> February, 2007 was also received by Sasan Power Ltd. from M/s Lanco Infratech Pvt. Ltd. (Consortium Partner) conveying their willingness to take over Sasan Power Ltd. and to provide Performance Bank Guarantee of Rs. 300 crore latest by 26<sup>th</sup> February, 2007, that is within 60 days of award of LoI.

Letters from L-2 bidder i.e. M/s Reliance Energy Generation Ltd. dated  $5^{th}$ ,  $14^{th}$ ,  $25^{th}$ ,  $26^{th}$  February, 2007, were also received by Sasan Power Ltd. raising a number of issues regarding qualification of successful bidders that is Globeleq – Lanco Consortium and requesting for cancellation of LoI issued to the Consortium and requesting for award of the project to them as the L-1 bidder.

Sasan Power Ltd. *vide* letter dated 20.02.07 sought clarification from M/s Globeleq Singapore Pte. Ltd. The reply was received *vide* their letter dated 23.02.07.

These developments were discussed in the meeting of Board of Directors of Sasan Power Ltd. held on 17.0207 and 26.02.07, wherein it was decided to get the entire matter contractually and legally examined based on which the next course of action would be decided."

2.10.9 The Committee categorically wanted to know from the Ministry of Power as to whether the award of Sasan Project to Globeleq was valid in the light of this development. The Ministry of Power in a post-evidence reply stated:

"The matter is being contractually and legally examined in consultation with the Attorney General of India. A view on the same would be taken after due consideration of the same."

2.10.10 When the Committee further enquired about the status of legal opinion sought, the Ministry in a written reply informed:

"PFC has informed that it has received a communication dated 23.03.2007 from the Central Vigilance Commission (CVC) in which the CVC has informed that it has deputed its officials to examine the tender documents of the Sasan UMPP. Further more, the CVC, vide its letter dated 26<sup>th</sup> March, 2007 addressed to this Ministry has also directed the ..... of this Ministry to conduct an investigation into a complaint received by the CVC regarding the controversy concerning the Sasan UMPP. The CVC has sought the investigation report within 12 weeks from the receipt of its order by this Ministry."

2.10.11 Asked whether the Ministry has received the legal opinion sought by it on the Sasan Project, the Ministry in a post-evidence reply just repeated:

"The matter has been referred to the Ministry of Law and Justice."

2.10.12 The Committee wanted the Ministry to assure them in particular over the per unit cost of production of Rs.1.19 quoted for the Sasan Project by the bidder was financially

viable. On this the Secretary, Ministry of Power during evidence held on 14.05.2007 explained:

"The point that was raised the essence of the argument was that we should come and explain as to whether this 1.19 is viable. There is a clause in the Standard Bidding Document, which says that 'the bidder who has quoted lowest level of tariff as per the evaluation procedure shall be considered for the award. The Evaluation Committee shall have the right to reject all price bids if the rates quoted are not aligned to the prevailing market price.' That option is there for the Evaluation Committee. However, in the present case, you will observe that while one of the bids from Globeleq Lanco was Rs. 1.19 per unit, the other bid was Rs. 1.29. It was not far off.

The efforts of the Ministry of Power and the Power Finance Corporation, which is the nodal agency, have been to procure the lowest possible tariff for the procuring States and ultimately for the consumer. So, that is, in fact, a measure of satisfaction for us and I think, the Evaluation Committee in their own wisdom decided to recommend the issue of LoI to the lowest bidder, and the bid was not rejected. I do not think, at the moment, occasion has arisen for us to explain. In fact, may be if the bid had been rejected, then probably there was a cause to explain why it was rejected or we did not accept it. So, I think, in that situation, I would beg to submit that I do not think that occasion has arisen. The bidder is not obliged to indicate how he has arrived at that figure. He may be having his own entrepreneurial skills, his own strengths and his own future strategic planning. It is a principle of the market that if somebody wishes to enter a market with a certain price to bid or something, he can sustain it because if he cannot sustain it, the loss is his."

2.10.13 Being concerned with the power situation in the country, the Committee wanted to know how long will it take to settle the issues involved in award of the Sasan Project. The Secretary, during evidence held on 14.05.2007 assured the Committee in the following terms:

"There are opinions on both sides; I am talking about the Sasan issue. So, if it had been an issue that was as simple as has been made out that somebody offered 1.19 and let him do it, no. There are certain RFQ requirements in the whole process and that RFQ is meant to give you that confidence whether whoever is quoting is not just shooting from the hip, he has done something in the past, he has executed some projects, he knows what he is talking about. So, those are some of the issues which have a bearing on the legal opinions that are being sought. I would agree with you that we need to expedite legal advice in the matter at the earliest and that has been our request also. I shall certainly communicate the sentiments of this Committee that the process needs to be brought to a logical end at the earliest."

2.10.14 It has been reported that the Empowered Group of Ministers (EGoM) on Ultra Mega Power Projects has declared the Lanco-Globeleq consortium's bid for the Sasan project invalid ab-initio. It, however left the decision on the future course of action on the project to Sasan Power Ltd., the company floated by PFC. The EGoM was set up to resolve the Sasan impasse.

2.10.15 The Board of Sasan Power Ltd. called for a second round of bidding. In this bidding Reliance Power Ltd. (RPL) submitted the lowest tariff of Rs. 1.196 per unit, against bids submitted by NTPC & Jaiprakash Industries. Finally, RPL has been given the Letter of Intent (LoI).

"At present no changes are contemplated in the Guidelines in this regard."

2.10.17 Making an observation on this, all the 9 UMPPs envisaged by the Government are thermal. The Committee wanted to know the reasons for contemplating the development of thermal Ultra Mega Projects and not also hydel considering the fact that there is huge hydro potential in the country, which remains yet to be exploited. The Ministry in a written reply explained:

"There are a number of uncertainties and risks associated with construction of hydro electric projects. It is, therefore, extremely difficult to make bids quoting a precise figure for the cost of power from these projects. Secondly, under the Constitutional provisions, the right of allocation of sites for development of hydro electric projects vests with the States. Further, the distribution companies cannot initiate the process of tariff based bidding without site allocation by the State having control over the site as it is an essential requirement under the Bidding Guidelines of January, 2005 issued by Ministry of Power. The tariff based bidding can be initiated only after allocation of the site by host State for this purpose and availability of a very reliable DPR. This has not happened so far."

2.10.18 Concerned over the slow pace of capacity addition and poor achievement during the 10<sup>th</sup> Plan, Hon'ble Prime Minister announced setting up of a dedicated, professionally

managed National Power Project Management Board in the recently held Conference of Chief Ministers. This Board would keep track of all projects which are to be completed during the 11<sup>th</sup> Plan and will assist State and Central Utilities in ensuring that project implementation milestones are met for every single power project. He also announced, setting up of a Taskforce on hydro power to develop hydro-electric power projects.

2.10.19 The Committee welcome the new initiative of the Ministry of Power to embark on the path of huge capacity addition by way of developing UMPPs. Being a new concept, there are no models to emulate. Hence, the improvements will have to be made by learning through experience. Failure of capacity addition targets in the 8<sup>th</sup>, 9<sup>th</sup> and 10<sup>th</sup> Plan, by the Private Sector leaves much to be desired. The achievement of Private Sector in all these Plans have been less than 30% of the targets. This leaves ample scope for soul searching on the part of Government. The Committee recommend that the factors which led to the debacle of capacity addition targets particularly capacity addition by the Private Sector should be analysed by the Government in depth and corrective steps in way of development of UMPPs be taken in right earnest. Going by the experience in the award of Sasan Ultra Mega Power Project, the Committee feel that certain changes are warranted in the bidding guidelines to plug the loopholes therein, and making them foolproof. In the considered opinion of the Committee, the precious time lost in the Sasan Project on this count is simply disconcerting – considering the immense strategic importance and generation potential of the development of these projects. The Committee desire this project to see light of the day as early as possible. They would further like the Ministry to try in all sincerity and make up for the time lost owing to this controversy so that this project comes up as scheduled earlier.

Further, since the whole purpose of resorting to competitive bidding is to encourage competition, the Committee are of the opinion that the developers who have already bagged a project should not be allowed to bid for another project, on the basis of the same balancesheet on which he has got one project. However, if the balancesheet is so strong that it can meet the eligibility criteria for the two projects together, they may be permitted to bid. Because besides encouraging competition, it will also ensure that the power sector is not monopolized by only a few companies. 2.10.20 The Committee had expressed concern in their 20<sup>th</sup> Report on Demands for Grants of the Ministry of Power for the year 2007-08 as regards the coming up of UMPPs on time was concerned as was envisaged by the Ministry of Power earlier. While taking review of the functioning of the Ministry of Power similar concerns have also been reported to be expressed by the Prime Minister in regard to meeting targets by the Ministry of Power in the setting up of UMPPs.

Thus, the Committee feel deeply concerned with the pace of progress in the development of UMPPs. Initially the Government had announced four UMPPs in the Budget for the year 2006-07, with the intention to award these projects before December, 2006. Out of these, the Government was able to stick to the deadline with regard to only two projects, namely Sasan and Mundra. Both of these projects were awarded before the target of 31<sup>st</sup> December 2006 – though further progress on Sasan project suffered due to the controversy regarding the validity of the award of the project. The remaining two projects – one in Andhra Pradesh and another in Orissa were scheduled for being awarded by 30<sup>th</sup> April 2007. The submission date for RfP for Andhra Pradesh project has been postponed and regarding the project to be developed in Orissa, the site is yet to be finalised.

Later five more projects have been added to the list. However the way in which their development is progressing leaves much to be desired. In most of the cases selection of site is the main reason for delay. There are agitations by local people in Karnataka and Maharashtra and certain technical problems in Tamil Nadu. The Committee feel that the State Governments should have been associated with the selection of sites in the beginning itself to avoid any last minute disagreement on the sites. The Committee desire that the sites for UMPPs should be finalized at the earliest so that these projects can come up within 12<sup>th</sup> Plan as envisaged and promised. The site for UMPPs should be selected only after the State Government has agreed to the same.

The Committee observe that in PPA for Mundra Project 64 months, that is more than five years, have been given to the developers for commissioning the first unit of the power project and the last unit would be commissioned after 88 months, that is after more than seven years from signing the PPA. The Committee feel that in the present age of fast development it should not take such a long time for setting up of these projects.

The Committee further note that this time schedule also depends on time taken in obtaining necessary clearances and acquisition of land for the project; time taken in bidding process and time schedule submitted by the bidder in his bid. There is no time limit fixed within which clearances shall be available and the land shall be acquired. In addition to this, it has been stated that time fixed for start of various units would be calculated from signing of PPA. The Committee, therefore, feel that such an open ended fixation of completion schedule will not serve any purpose. The Committee thus desire that exact dates/periods should be provided for setting up of each project at the time of issue of Letter of Intent and penalties should be provided in case of default so that the projects can be set up in a time-bound manner.

The Committee further desire that there should be proper coordination between the Central and State Governments so that the issues involved in the various projects can be resolved and more so, in future the coordination between the Central and State Governments should begin right from the conceptual stage of the project itself. Considering the urgent need of power, the Committee strongly recommend that these projects should become fully operational by all means in 12<sup>th</sup> Plan itself. Recently constituted National Power Project Management Board should also, in particular, be assigned the responsibility to ensure the timely completion of all these projects. For this, it is very important that this Board should be sufficiently empowered to take project related decisions and also it must be ensured that these are implemented without any bottlenecks from any quarters.

2.10.21 The Committee observe that the sites for the setting up of the coastal projects have been selected by keeping in mind the import of coal for these projects. The Committee, however, observe that the ports at these locations do not have enough infrastructure to handle the huge volumes of the imported coal. The Ministry of Power, while acknowledging this, has stated that at existing ports additional facilities can be created to handle the imported coal and at some locations new ports could also be set up. It implies that the required infrastructure for some of these projects is yet to be developed. The Committee feel that delay in the development of infrastructure can lead to further delay in development of UMPPs, which in turn, can derail the capacity addition targets and jeopardise growth of the economy as such. The Committee, therefore, recommend that all works relating to development of infrastructure particularly the port capacity to handle the huge volumes of imported coal be completed in a time bound manner and the same should be reflected in L.O.I, etc. The Committee also desire that the various project related works which are to be facilitated by SPVs, should also be made available by the time L.O.I is issued to the successful bidder.

2.10.22 The Committee note that the pit head Ultra Mega Power Projects will be based on domestic coal, whereas the coastal projects would be based on the imported coal. The justifications given by the Ministry for using imported coal are that the indigenous resources of coal are limited, which, need to be conserved for the future use and imported coal would be more cost competitive at Western & Southern coasts, as compared to domestic coal.

However, the Committee observe that each project would require around 12-14 million tones of imported coal per-annum. Considering the current market price of coal in the international market, the expenditure on importing coal would thus be quite huge. Though the Mundra Project – the first UMPP to be developed - will run on imported coal only, the Committee desire that techno-economic feasibility study of using imported coal after blending it with indigenous coal, which is being examined, should be expedited and completed at the earliest so that rest of the coastal projects could be planned with the option of using the blended coal. 2.10.23 The Committee observe that all the Ultra Mega Power Projects which have been envisaged by the Government are thermal projects. The Committee note that there is a huge hydro power potential in our country – which yet remains to be exploited. Moreover, use of coal for power generation should be done keeping in mind the future requirement of coal for other purposes as well. Hence, the Committee feel that a policy for hydro Ultra Mega Power Projects should also be formulated by the Government on top priority. In the recently held Conference of Chief Ministers, the Prime Minister had asked the Union Power Minister to set up a Task Force on hydro power to lend special focus on this area. The Committee desire that this Task force be also assigned the task of working out the modalities for the development of hydro based Ultra Mega Power Projects. Development of UMPPs based on hydel power can greatly benefit the North-Eastern region of the country – which abounds in the hydel potential.

### Chapter – III

### **ISSUES INVOLVED IN DEVELOPMENT OF UMPPs**

### (I) FINANCIAL ISSUES

3.1.1. The Committee were interested in knowing about the average investment required for an Ultra Mega Power Project and how these projects are to be funded. The Ministry in a written reply informed as follows:

"Based on the current cost trend in setting up of power projects in the country, it has been assessed that average investment required for these projects will be around Rs. 16000 to Rs. 18000 crore. In case of pithead projects, the cost is assessed keeping in view the integrated nature of project i.e. power plant and coal mining. However, cost of setting up of a power project at coastal site would have different assumptions for calculating the cost These are only tentative assessments and real picture would emerge only after tariff based bidding process in respect of Sasan and Mundra is over and final bidder is selected on the basis of lowest quoted tariff.

With regard to funding issues, it is to mention that Ministry of Power has facilitated discussion with leading banks and FIs and sensitized the financial market about the funding needs of Ultra Mega Power Projects. Financial Institutions have been involved in the bidding process. Beyond this, no budgetary support or grant from either Government of India or States is being envisaged. The onus of tying of funds and also about sources of funds lies with the developer and in this regard Government has no role to play."

3.1.2 Asked whether any incentives and exemptions have been given under Budget 2006-07, for the development of Ultra Mega Power Projects, the Ministry clarified.

"No special incentive or exemptions require to Ultra Mega Projects are being extended through budget or otherwise. However, benefits available to Mega Projects of over 1000 MW unit rating are available to these projects as well."

3.1.3 FICCI has expressed concern that not many private developers of UMPPs may have the capacity to get 30% (Rs.4,500 Crore) in equity. Expressing concern as to whether the Indian Capital Market can support such a huge initiative, the FICCI have expressed the view that we may have to allow unconditional access to international capital markets for

the purpose. When response of the Ministry of Power to the concern expressed by FICCI was sought, the Ministry stated:

"The equity is to be arranged by the selected developers. However, the fact that 16 bids have been received (jointly) for first two UMPPs itself is indicator about the appetite and capability of various bidders."

3.1.4 The Committee wanted to know in case of delay in the development of project whether there was any penalty clause in it. The Secretary, Ministry of Power explained during evidence held on 14.05.2007:

"Rs. 10,000 per MW per day - 4,000 MW into Rs. 10.000 that comes to about Rs.4 crore per day for the 1<sup>st</sup> 60 days, after which it goes up to Rs.6 crore per day."

3.1.5 When asked further about the salient features of the Power Purchase Agreements signed between the Government and State Governments for purchase of power from Mundra & Sasan Power Projects the Ministry added:

"PPA documents have been finalized and have been initialed by the power procuring states and the SPV. The RfQ and RfP documents including the power purchase agreement (PPA) for Sasan and Mundra projects has been issued."

3.1.6 The payment security mechanism, in the Power Purchase Agreement provision in relation to UMPPs, is stated to be made for:

- "Letter of credit (LC) by distribution utilities
- Escrow on the receivables of distribution utilities.
  - In the event of default by any procurer:
- Other procurers have the first right to buy power share for which payment default has occurred.
- In case of unwillingness of other procurers to buy default power, the same can be sold in the All India market through prevailing open access in transmission either directly or through traders.
- If any further power share is still unsold, direct supply to HT consumers as per provisions of the Electricity Act, 2003 to be accepted upfront."

3.1.7 As informed by the Ministry, the salient features of the PPA Sasan and Mundra UMPPs are:

# "Capacity

- > Unit flexibility with the bidder, Super-critical Technology to be used.
- > The contracted capacity (net capacity) between 3500 MW to 3800 MW.
- > COD of the first Unit within 69 months of the signing of the PPA.
- COD of the Power Station with 93 months of the signing of the PPA (for Mundra) and 105 months of the signing of the PPA (for Sasan)
- Tariff
- Capacity Charges
  - Escalable Capacity Charge
  - Non –Escalable Capacity Charge
- Energy Charges
  - Escalable Energy Charge
  - Non-Escalable Energy Charge
- > Forex variation allowed on Energy Charges for Mundra
- Escalable components to be escalated as per escalation rates notified by CERC
- Bidder free to quote firm capacity and energy charges

# • PPA- Payment Security Mechanism:

- ➢ Letter of Credit
  - ✓ 110% of Monthly Tariff Payment
  - ✓ To reduce to 100% on achievement of Trigger Events
- Default Escrow
  - ✓ To cover 100% of Monthly Tariff Payment
  - Tripartite Escrow between Procurers' Lenders, Seller and Procurer to be entered with PPA. Operational 30 days prior to COD. Charge on incremental revenues.
  - ✓ To fall away on achievement of trigger at sellers options.
- Third Party Sale on Payment Default
  - ✓ Recourse on payment default by a Procurer
- Letter of Credit and Escrow Account, if inadequate
- After 7 Days:
  - a. 25% of allocated Capacity of Default Procurer offered to other Procurers: if decline
  - b. Offered to third parties
  - c. Defaulting Buyers to continue to pay Capacity Charges
- After 30 days third party slaes relating to 100% of Allocated Capacity permissible.

# • PPA Penalty for Delay in COD

- Liquidated Damage for each unit @
  - ✓ For 60 days Rs. 10000/ MW per day of delay
  - ✓ There after Rs. 15000/ MW per day of delay
  - $\checkmark$  Limited to 12 months of delay
- > Delay beyond twelve months to lead to termination

# • Equity Lock In Restrictions for the selected bidder in the SPV

- $\blacktriangleright$  51% up to 2 yrs post COD
- > 26% for a period of 10 yrs thereafter
- Lead Member (in case of a consortium) to hold at least 26% for at least 12 years post COD
  - ✓ For each Rs. 50 crore (and not part thereof), non escalable capacity charges shall be varied by 0.267%. Seller to provide documentary proof
- During Operation Period
  - Impact to be determined by CERC whose decision shall be binding
  - Non extension of Mega Power Benefits, change in R&R package deemed to be a change in law."

3.1.8 The Committee desired to know for how long the tariff offered by project developers will continue initially, the Ministry replied:

"The tariff offered is for entire period of PPA (25 Years) of the project."

3.1.9 On being further asked about the different stages/interval when the project developer may request for increase in tariff due to increase in variable costs of the project and whether increase in tariff due to decrease in the efficiency of Plant will be taken into account, the Ministry replied categorically:

"No change in tariff is permitted except on account of escalation as per CERC's declared norms. With decreased availability of plant the capacity charges will be reduced as per PPA."

3.1.10 When asked as to whether there was any provision of buy-back of the project by the Government in case the project developer fails to deliver as per the contract signed and whether the Government was planning to introduce such provision, the Ministry informed:

"There is no provision of buy-back. However, in case of failure of developer, as per provisions of PPA, lenders will have option to step in his shoe to run the plant."

# (ii) TECHNICAL ISSUES INVOLVED IN DEVELOPMENT OF UMPPs

3.2.1 The Committee wanted to know whether the Ministry has explored the availability of latest technology in the world and has tied up for it with any country. The Secretary, during evidence held on 02.08.2006 clarified:

"We will not because in this competitive process, we cannot tie up with a particular supplier. That is left to the bidder. But we can prescribe the technology in terms of being energy efficient. The point is, it should facilitate competition. It should not happen that we prescribe a particular figure which is relevant to only one supplier. There are many manufacturers in the world today who have already come out with more energy efficient power generation systems, turbines etc. We would be prescribing energy efficient technologies for the super thermal power projects and ultra mega power projects."

3.2.2 As reported by the Ministry of Power, the UMPPs were to be based on the supercritical technology. In this light, the Committee were interested in knowing as to whether this technology is presently being used by power projects in the country and is freely available in case it is not how, the same is proposed to be made available to UMPPs, the Ministry of Power in a post-evidence reply submitted:

"The super-critical technology is being used for 660 MW super-ciritcal units at Sipat and Barh TPP of NTPC. The super-critical technology has also been envisaged for large size units in Ultra Mega Power Projects (UMPP) in view of its better efficiency as compared to the conventional sub-critical units and resultant benefits in terms of reduced coal consumption and less environmental pollution. This technology has been in use world wide for many years in Europe, USA, Russia, Japan, China, Korea etc. and over the years the technology has been providing satisfactory performance in terms of availability, reliability and efficiency.

With a view to achieve the large capacity addition programme it is envisaged to use larger unit sizes with super-critical technology for UMPP. There are many manufacturers in the world who provide the boilers and steam turbines based on this technology. However, to ensure indigenous manufacturing capability, BHEL have entered into collaboration with Alstom for manufacture of super-critical boilers. They have ongoing collaboration with Siemens, Germany for super-critical turbo-generators of large size.

The ultra mega power projects are being set up through ICB route and developers are free to source the equipment from any manufacturer including the indigenous manufacturer viz. BHEL. As such, there are no constraints in the availability of super-critical technology for use in UMPPs."

3.2.3 When asked further about the alternatives available, the Ministry informed:

"At present super-critical technology as envisaged for the UMPPs is well proven with adequate manufacturing capabilities in the world. Other alternative is to use Ultra Super-critical Technology which is more efficient but is costlier and not so widely used so far. The ultra supercritcal technology could be used in future if the same is techno-economically established."

3.2.4 During evidence held on 02.11.2006, the Secretary, Ministry of Power, further clarified as follows:

"So far as the super critical issue is concerned, BHEL does not manufacture high pressure and high temperature boiler turbine and generators. Only now they have entered into collaboration for boiler with Alstom and for turbine generators with Siemens. In fact, they even missed 660 mw when we tendered. That is one of our concerns that while the power development capacity should take place in the country our engineering industry should hand-in-hand go on upgrading their design and manufacture capability. But progress cannot stop for that reason. We are facilitating that in a different way. The temperature and pressure that we have put as condition here provides flexibility in terms of unit size. It could be 660 or 800. It is the pressure and temperature parameters that we have prescribed. In fact, this matter was discussed in the Energy Coordination Committee right at the Prime Minister level and it was decided that instead of saying 660 or 800 which reduces the flexibility of competition, it is better we lay down the condition of efficiency of combustion, coal use, head consumed rather than prescribing this."

### (iii) ENVIRONMENTAL IMPACT OF UMPPs

3.3.1 Since UMPPs may have to arrange equity from the International capital Market as well, the Committee wanted to categorically know whether the Ultra Mega Power Project

will adhere to Indian environment regulations or regulations of World Bank. The Ministry in a written reply clarified:

"The Ultra Mega Power Projects will adhere to Indian Environment regulations. No relaxation in this regard has been sought."

3.3.2 When asked about the measures which have been evolved for carbon emission reduction, the Ministry stated:

"The proposed ultra mega power projects will be based on the latest super critical technology which will have higher plant efficiency thereby reduction in the carbon emission.

The thermal power-generating unit proposed to be set up at ultra mega power projects will be of super-critical technology having better thermal efficiency compared to conventional sub critical technology for thermal power generation presently under operation in India. Due to better thermal efficiency the carbon emission will be less. Presently there is no carbon emission reduction technology in use."

3.3.3 The Secretary further explained during evidence held on 02.11.2006:

"In fact, imported coal, in a sense has lesser of ash content and lesser of ash content has environmental advantage. At the same time, we are also saying that ultra mega project would use super critical technology which will consume lesser amount of coal for the same amount of power. That means the thermal efficiency of the power station will be higher. In the range of 660 MW or 800 super critical technology, the heat and coal consumption are less. Less coal consumption means less emission of Carbon dioxide."

3.3.4 On the environment impact aspect of UMPPs, the representative of the Ministry added during evidence held on 02.11.2006:

"When we burn coal two things happen. One is the ash, which is the solid waste disposal issue, is generated and another is Carbon dioxide is emitted in the atmosphere. In these projects because we are using a more efficient technology of higher temperature and pressure, so for the same amount of electricity generated, Carbon dioxide which will go in the air will be little less. That is the first point.

The second point is that, internationally the power stations using coal of 4,000 MW have been in existence at one site for a few decades now. It

has been in operation in other parts of the world for a few decades now. It is not too large for one site.

As far as fly ash utilization is concerned, the Environment Ministry has been pushing of the use of fly ash utilization and the country has made a good progress. The first progress is the Pasadena cement. ISI standards have been prepared. Many cement plants today are taking fly ash from coal fired stations for cement production in many parts of the country. The practice is increasing.

The other use of fly ash is in actual construction, in roads and buildings. In fact, the expectation is that the brick in the manner in which we see it should become obsolete in the country soon enough and we should have either concrete building blocks or fly ash bricks. We are moving in the direction of fuller and fuller utilization of fly ash and it is also a good nutrient in the wasteland. It supports vegetation and it has been demonstrated."

3.3.5 The Secretary, Ministry of Power, further supplemented during evidence held on 02.11.2006:

"I had a meeting with my colleague, the Secretary of the Ministry of Environment and Forests. A presentation was made to the Thermal Expert Committee of the Ministry of Environment and Forests. We are taking all possible precautions so that all environmental norms of our country are met, in terms of PPM, SPM and all emissions. Whatever technology has to be provided, will be provided. It will not create unbearable burden. As I said, so far as the system of 3,000 or 3,600 megawatts etc. is concerned, this country is already used to this."

# (iv) RELIEF AND REHABILITATION ISSUES INVOLVED IN DEVELOPMENT OF UMPPs

3.4.1 Development of UMPPs at some sites involve displacement of the local people. Asked whether Government has formulated any policy for relief and rehabilitation of the people who will be displaced because of the development of Ultra Mega Power Projects, the Ministry in a written reply informed:

"The draft R&R policy formulated for UMPPs based on the national R&R policy has been circulated with the appropriate state authorities. In case of Sasan project the draft R&R policy and the R&R package is being finalized in consultation with the State Government. In Mundra Project, displacement of people is reportedly not involved. Whatever, R&R implications are there are being sorted out in consultation with State Government."

3.4.2 When asked whether the funds required for rehabilitation have been earmarked, the criteria followed in earmarking the same & by whom the R&R cost will be borne out, the Ministry in a post-evidence reply stated:

"The cost of R&R is to be decided by respective State Governments based on National R&R policy or the States policy and the same will be borne by the developer. This has to be factored in the tariff."

3.4.3 On this issue, the Secretary, Ministry of Power during evidence held on 02.11.2006 further clarified:

"We have made a part of our tender document, the National Rehabilitation and Resettlement policy as a condition that every developer will meet the requirement of National Rehabilitation and Resettlement while putting his cost together, because he has to put his tariff. So, while making his costing he has to take full account of what the National Rehabilitation and Resettlement policy is. But to be on a safer side we have made another provision. If for some reason they have to make extra expenditure that will be passed through. The Central Government notified Rehabilitation and Resettlement policy is required to be taken into account at the time of bidding. If there is any change in the policy, that would be appropriately adjusted."

3.4.4 The representative of the Ministry during the evidence held on 02.11.2006, however, further added:

"In terms of relief and rehabilitation package what is happening is that in each project, since this is being done in a particular State, in case of the first two projects what has happened is that, I can assure you that the experience has evolved in the Sassan case in Madhya Pradesh that the Relief and Rehabilitation package has been prepared and the State Government is in the process of approving it and the approved R&R package is in position. The cost of that has been intimated to the bidders with the understanding that if there is an increase in cost, then it will go through the tariff. Similarly for environmental reasons, if there is an additional cost it will go through the tariff. The approved package of rehabilitation also includes the real benefits which the people in the neighbouring areas should get through some local facilities. In case of Madhya Pradesh, this is done.

To some extent it will be project specific and to some extent it would be State specific. Clearly, without working with the State Governments, the projects will not happen. Within the broad parameters of the national policy, it is State and project specific. But within the State Government they need to take uniform standards. They cannot have one package. They cannot have one plant of coal and another plant of steel or something else."

3.4.5 Since the Sasan and Mundra Projects have already been awarded to the bidders, the Committee wanted to know whether the Relief and Rehabilitation policies in connection therewith have been firmed up as yet or not. Since the host States have their own policies as well, when asked whether any role has been assigned to the respective State Governments in this regard, the Ministry in a post-evidence reply submitted:

"The R&R packages for Sasan and Mundra UMPPs have been finalized by the respective State Governments. The cost of such packages was conveyed to the bidders well in advance. Any change in R&R package is to be adjusted in tariff under 'change of law' as per provisions of the PPA. The PPA provides that the State Government authorities would be implementing the resettlement and rehabilitation package ("R&R") in respect of the site for the Project, for which the cost is to be borne by the Seller."

3.4.6 When asked about the specific component of the Relief & Rehabilitation in the projects to be developed at Sasan & Mundra, the Ministry in a post-evidence reply stated:

"The R&R package approximate cost as conveyed by Madhya Pradesh Government & by Gujarat Government for Sasan & Mundra UMPPs respectively is Rs. 136 Crore and Rs. 10 Crore respectively in accordance with National R&R Policy and State R&R Policy. The final R&R cost as decided by respective State Governments will be borne by selected developers and the difference would be covered under the provisions of "Change in Law" in PPA."

### (v) ISSUE OF MONOPOLY

3.5.1 TERI in a note submitted had expressed concern over the monopolization of power sector by the developers of UMPP as follows:

"Government is facilitating the prospective bidders through SPV and by extending commitment of potential buyers in the form of Letter of Credits (LC) and escrow on the receivables of distribution utilities. These conditions also form part of the PPAs. Undoubtedly, such efforts by the government would enhance the prospects of UMPP but at the same time would lack the true competitive business environment. Once they (developer) enter the market, it will become like a monopoly business (with all off-take and payment guarantees already in place). They should be asked to sell certain % of total capacity in the free market as the whole idea of the EA 2003 is to increase the competition in the sector."

3.5.2 In the light of this concern, the Ministry of Power was asked about its plans to ensure that the project developers do not monopolise the power sector, the Ministry in a written reply stated:

"As per the Power Purchase Agreement to be entered between the selected developers and the procurers the entire contracted capacity of the power station shall at all times be for the exclusive benefits of the procurers and the procurers shall have the exclusive right to purchase the entire capacity from the seller at the rates obtained through competitive bidding subject to other provisions of the PPA. The project developer shall not grant to any third party or allow any third party to any entitlement except as per the provisions of the PPA.

The Electricity Act provides for powers to the Regulatory Commission to issue directions as it considers appropriate to a licensee or a generating company if such licensee or generating company enters into any agreement or abuses its dominant position or enters into a combination which is likely to cause or causes an adverse effect on competition in electricity industry."

3.5.3 On this issue, during evidence held on 02.11.2006, the Secretary, Ministry of Power further clarified before the Committee as follows:

"What we are giving is not all that much. Take for example Mundra. We are giving a piece of land and the successful bidder will put up a 4000 megawatt power station putting his equity and so on. He has no monopoly over anything because he is going to sell electricity to some distribution companies in five States. These distribution companies will buy electricity from many other sources. The demand for electricity will keep on rising. By the time this 4000 megawatt comes into position, it will be about 200,000 megawatt. However, the bid is for a price for the supply of electricity for 25 years. So, the price at which this electricity will be purchased is indicated is for 25 years whereas there is an indexation formula as to how indexation will operate. In the bidding process, we are putting some stiff penalties. The first is that I am a successful bidder and I find that I have got the bid very aggressively but my economics is not working out. In that case, there are very tough bank guarantees which he has to give and it can be encashed. The second eventuality is that I have put up a plant and it runs for a few years and then for some reason, I want to get away and so, I come up with a tale of woes. Then at this stage, if he is defaulting in the supply, then this problem is between him and his lenders. At the macro level, if the plant has worked well for three to four years, then it remains a reasonably valuable asset which a prudent management or even with a change of management of promoters can run reasonably well and provide reasonably good electricity.

We have tough penalty clauses and bank guarantees for nonperformance but buy-back issue is not there because it is his money, the lender's money.

It is there in a different way in the case of coal mines rights."

# (vi) ISSUE OF ACCOUNTABILITY

3.6.1 Considering that the Ministry of Power will play role only at the initial stage i.e. till the bidders are selected, the Committee wanted to know who will then be accountable for ensuring, in particular, that the development of projects is smooth and the deadlines are met, the Ministry in a post-evidence reply stated:

"For development of Ultra Mega Projects, project specific Shell Companies as fully owned subsidiaries of PFC have been formulated for the following developmental works till handing over the project to the selected developer:

- 1. Identification of Site in consultation with CEA
- 2. Preparation of Project Report including geo-technical study, topographical survey, area drainage study, socio-economic study, EIA study, water intake study, fuel transport study etc.
- 3. Obtaining environment and forest clearance for the power station.
- 4. Allocation of captive coal blocks in case of pithead projects.
- 5. Tying up water linkages.
- 6. Preparation of Bid documents including PPA, Default Escrow Agreement etc.
- 7. Land acquisition for Power Station and preparation of Resettlement & Rehabilitation package.
- 8. Power System studies to identify the transmission system for evacuation of power.

Once the Project developer is selected, the Shell Company shall be taken over by the selected developer by purchasing 100% of the equity share holding of the Shell Company. Subsequently the project construction shall be governed by the Power Purchase Agreement between the selected developer and the procurers.

As per the PPA it shall be the responsibility of the selected developer to execute the project in accordance with applicable law, the Grid Code, the

terms and conditions of PPA and prudent utility practices and shall make available the contracted capacity to meet the procurers scheduling and dispatch requirements throughout the term of the PPA. The procurers who shall be the distribution licensee/State Utilities/ of the Power Purchasing States shall coordinate and monitor the construction and operation of the project.

Ministry of Power shall facilitate smooth construction of the project by providing any assistance required for obtaining any inputs from Government agencies.

The selected developer has to provide performance guarantee for an aggregate amount of Rs.300 crore and the procurers have the right to encash the same and appropriate in their favour as liquidated damages in case the selected developer fails to commission the units on their scheduled CODs. Additional performance guarantee at the rate of Rs.15 crores per week is required in case of delay in achieving the financial closure."

### (vii) TRANSMISSION & DISTRIBUTION

3.7.1 The Ministry of Power was asked to give details of the plan that has been chalked out by the Ministry of Power regarding the transmission and distribution of power from the UMPPs. The Ministry of Power, in a written reply, stated:

"The responsibility of transmission of power from these projects has not been put with the developer. The developer will be providing the power at the bus bar. PGCIL will be implementing the transmission facilities for these projects. The work on the finalization of transmission system for Sasan and Mundra project has already started and the execution and implementation of transmission lines will be matched with the power plant implementation schedule."

3.7.2 The Secretary, Ministry of Power, further added during evidence held on 02.08.2006 before the Committee:

"So far as these ultra mega-power projects are concerned, we decided that let this be done by Power Grid Corporation of India for which an integrated planning should be done along with the CEA so that evacuation does not become an issue for these investments because they are large investments. So many parallel streams of discussions, to try to find solutions have been started and one such parallel streams of discussions is to discuss with the likely off-takers of this power.

Basically the Ministry of Power facilitates – the PFC is facilitating; but this exercise is being done on behalf of the distribution companies or the

distribution utilities of the State. In Rajasthan, we have 3-4 distribution companies; in Andhra Pradesh, there will be a few distribution companies, we do this. So, we are bringing the SEB distribution companies, the SEBs and the State Governments into the picture."

3.7.3 When asked to give their comments on evacuation of power from UMPP, FICCI was of the view that to ensure viability of Ultra Mega Power Projects, the grid capacity to evacuate and transmit power across States and availability of capacity in case of default to facilitate third party sales has to be greatly enhanced. On being asked about the views of Ministry of Power in this regard and steps being taken by the Ministry to ensure evacuation of power from UMPPs, the Ministry informed as follows:

"Powergrid is carrying out the open access system study. The transmission system will be augmented accordingly to ensure evacuation of power from these UMPPs. Also as per Electricity Act, States have to provide open access by 2009 to consumers having load of more than one MW to allow third party sale by Generation plants."

3.7.4 On this issue the Secretary, Ministry of Power during evidence held on 02.08.2006 explained further:

"We have already started preparing this Central Electricity Authority power system group and the Power Grid Corporation of India because in addition to many uncertainties that go with development of power projects, we do not want the transmission to add one more uncertainty, though the Ministry of Power in future and very soon we are going to put some transmission projects also on competition and private sector investment.

But so far as these ultra mega-power projects are concerned, we decided that let this be done by Power Grid Corporation of India for which an integrated planning should be done along with the CEA so that evacuation does not become an issue for these investments because they are large investments. So many parallel streams of discussions, to try to find solutions have been started and one such parallel streams of discussions is to discuss with the likely off-takers of this power.

Basically the Ministry of Power facilitates – the PFC is facilitating; but this exercise is being done on behalf of the distribution companies or the distribution utilities of the State. In Rajasthan, we have 3-4 distribution companies; we are working on their behalf; in UP we have 3-4 distribution companies; in Andhra Pradesh, there will be a few distribution companies. Wherever the SEBs have been restructured in terms of distribution companies, we do this. So, we are bringing the SEB distribution companies, the SEBs and the State Governments into the picture."

### 3.7.5 He elaborated:

"We are going further. We are also reviewing with every State, not only in the context of ultra-mega project, but as a general approach to the problem of power distribution and transmission in every State. How are they going to work their sub-transmission systems? We are being instrumental in advising almost all the States and we are putting Powergrid or any other Central Electricity Authority to their assistance so that they strengthen their subtransmission and distribution network so that power is pumped into the State. There is necessary distribution of power through sub-transmission system and distribution network." 3.7.6 The Committee note that under the Payment Security Mechanism for UMPPs in case of default by any procurer there is a clause of third party sale. As per this clause other procurers would have the first right to buy power share for which payment default has occurred. However, in case the other procurers are unwilling to buy default power, the same would be sold in the all India market through prevailing 'open access' in transmission either directly or through traders. The Committee, however, feel that for selling it in the market there is need for the speedy and proper implementation of 'open access' in States as envisaged under the Electricity Act, 2003. Further, in order to avail the 'open access' - both for Intra and Inter-State open access, without any infrastructural bottlenecks, the transmission system (national grid) needs to be suitably strengthened and congestion points be removed. Powergrid is stated to be carrying out the open access system study. The transmission system will be augmented accordingly to ensure evacuation of power from these UMPPs. The Committee desire that this study should be completed within a specific time frame so that the transmission system is ready by the time the first unit of UMPPs becomes operational. Further the States, particularly, the States procuring electricity from the UMPPs should be able to provide open access by 2009 as per the Electricity Act, 2003. To achieve this goal, the Committee recommend that all efforts in this direction be made on in a mission mode manner.

The Committee further observe that for successful implementation of such a payment security arrangement, it is essential to speed up the pace of electricity reforms in the States. The Committee feel that improving the commercial viability of the power sector in the States is very important for the success of such a payment security arrangement. The Committee, therefore, recommend that concrete steps be taken in this direction urgently.

Evacuation of power from UMPPs is another area which need attention from the beginning itself as it also needs large investments. The Committee note that PowerGrid Corporation of India Ltd (PGCIL) has been assigned this job. The Committee desire that advance planning and provision of funds should be done by PGCIL in consultation with CEA so that there are no bottlenecks in evacuation of power. The Committee are of the considered opinion that the private investment should be encouraged in this sector. At the same time, the Committee feel that State distribution utilities should be encouraged to take up transmission and distribution network in their respective States. **3.7.7** The Committee note that there is an apprehension of monopolization of power sector by the developers of UMPPs. It has been suggested to the Committee that to encourage competition UMPPs should be asked to sell certain percentage of their capacity in the open market. Also that there should be a provision to buy back/take over of the plant in case the developers resort to some sort of blackmail, etc. The Ministry of Power has informed the Committee that the Electricity Act provides for sufficient powers to the Regulatory Commission to issue directions to the licencee. The Committee, however, feel that this aspect needs to be gone into and desire that specific powers may also be provided to the State Governments to deal with such situations.

The Committee are, however, not satisfied with the view of the Ministry of Power that in case of failure of developer as per provision of Power Purchase Agreement (PPA), lenders will have the option to step in his shoes, to run the plant. The Committee, desire that specific provisions should be made in PPA/LOI as to what action the Government/Regulatory Commission shall be authorized to take in case the promoters of the project fail to perform as per the agreement. The Committee further desire that a report on the status of development of all UMPPs; reasons for delay in their development, if any, and the penalties imposed in case of delays should be furnished to the Committee every 6 months by the Government.

The Committee feel that since the projects will be set up in States and State utilities are the procurers of power generated from these projects, there can be a provision in the contract that in case the developer fails to develop the projects as per the provision of PPA, the respective State Governments would be entitled to take over the project and run it and refer the matter to the concerned Regulatory Commission for final settlement. 3.7.8 The UMPPs will be based on super-critical technology. As stated by the Ministry of Power, there are no constraints in the availability of super-critical technology for use in UMPPs as it is used worldwide. The developers can source the equipment from any manufacturer either from abroad or from indigenous manufacturer. BHEL, the only indigenous manufacturer which provides equipment for power sector, has recently made a foray into manufacturing super-critical technology based equipment by entering into collaboration with Alstom and Siemens. The Committee while noting this with satisfaction desire that such collaborations should be suitably encouraged in the future as well. The Committee feel that Government should encourage other indigenous manufacturers/players since BHEL already has its hands full. The Committee, therefore, recommend that some new companies should also be encouraged to be set up or already existing companies be encouraged to enter into joint ventures with foreign manufacturers of super-critical technology – in order to ensure that this technology is easily available in the country.

3.7.9 Development of UMPPs at some sites would involve displacement of the local people. The Committee note that it has been provided in the tender document that every developer will meet the requirement of National Rehabilitation and Resettlement Policy while putting his cost together. The cost of R&R is to be decided by respective State Governments and the same will be borne by the developer. The Committee further note that packages for Sasan and Mundra UMPPs have been finalized by the respective State Governments. However, the Committee note the provision in PPA that any change in R&R package is to be adjusted in tariff under 'Change in Law' in PPA. The Committee feel that this provision can be misused and the major part of R&R expenditure can be adjusted in tariff by the corrupt officials and the developers. Hence, it is suggested that a limit of say 5 to 7% should be placed to which extent the R&R cost can be adjusted in tariff. If the expenditure exceeds this limit, it should be borne by the State Government and the developer. The Committee also desire that for the remaining projects R&R studies should be done in advance as soon as the sites are finalized so that accurate estimates can be given to the developers at the time of bidding itself.

3.7.10 The Committee note that due care has to be taken of the environment impact of such large UMPPs. These thermal stations are likely to generate huge amount of ash and large carbon dioxide emissions. The Ministry of Power has stated that since these UMPPs shall be using super-critical technology and imported coal with less ash content, the environment impact will be duly taken care of. The Committee desire that there should be strict compliance of environmental norms and ash disposal should be decided in advance of the generation in each case. The Committee further desire that the use of fly ash in cement industry, building of roads etc. and other projects should be encouraged.

#### **CHAPTER – IV**

### ROLE OF THE STATES IN DEVELOPMENT OF UMPPS AND ISSUES RELATED THEREWITH

4.1 As informed by the Ministry of Power, the home State Governments/agencies will facilitate in identification of site & acquisition of land for the Project, in getting water allocation, getting Environment, Forest and SPCB clearance at the State level & finalisation of R&R package. State Governments will also provide local administration's support as and when required and will also coordinate with Maritime Board of the State Government.

4.2 Wherever the State Governments are willing to participate by way of part equity in these projects, it should be possible to provide for the same in the bid conditions while inviting competitive bidding for selecting the developers. This, however, would be optional for the States. In the Shell Companies, which would deal with the initial issues of sanctions, clearances, land acquisition etc, the concerned States have been approached to ascertain their willingness to become equity partners.

4.3 Similarly, States which are likely buyers of electricity generated by these plants have to evolve consensus and basic agreement regarding broad framework of the Power Purchase Agreement with mutual rights and obligations properly structured therein.

4.4 The Ministry has stated that right at the initial stage, the Chief Secretaries/Power Secretaries of the States have been kept apprised of the above initiative with the request that during the initial phase of these projects, for the purpose of investigation etc., necessary support should be provided to the Shell Companies and to CEA and other agencies. In the meeting held on 10<sup>th</sup> July 2006, procuring states agreed to provide funds at the rate of Rs 1 crore per 100 MW for the tentative state wise allocation agreed to , to the SPV as Commitment Advance for temporary infusion as equity in the SPV to enable it to leverage these funds to borrow and pay fully for land acquisition and R&R. The SPV is required to aim at completing land acquisition and obtain full possession of land before the successful bidder takes over the SPV. The successful bidder would be required to buy out

this equity so that funds received from the States could be returned to them. The States have been requested to provide the commitment advance within a month positively.

4.5 The Ministry of Power has informed that representatives of the following State Governments/Utilities have been inducted in SPV Boards of Sasan, Mundra, Krishnapatnam & Tilaiya Projects.

- Sasan UMPP MP, UP and Haryana
- Mundra UMPP Gujarat, Punjab & Maharashtra
- Krishnapatnam UMPP AP, TN&Karnataka
- Tilaiya UMPP Jharkhand, UP, Bihar (awaited)

### **Role of State Government/Agencies**

- Representatives of State governments/Utilities on SPV Boards:-
- Sasan UMPP MP, UP and Haryana
- Mundra UMPP Gujarat, Punjab & Maharashtra
- Krishnapatnam UMPP AP, TN&Karnataka
- Tilaiya UMPP Jharkhand, UP, Bihar (awaited)
- Representatives of State governments/Utilities on SPV Boards of other UMPPs shall be inducted as and when the project takes off.

# (i) ROLE OF STATE GOVERNMENTS IN SELECTION OF SITES FOR UMPPs

4.1.1 The Committee categorically enquired as to whether the local public or their elected representatives have been consulted on the site-specific proposals. The ministry in a written reply submitted:

"Respective State Governments have been kept fully involved in the site selection process. Public Hearing have been held in regard to Sasan and Mundra Ultra Mega Projects and the observations of the local people have been considered by the State Pollution Control Board before recommending the proposals to Ministry of Environment & Forests for clearance. Similar Public Hearings shall be held for other Ultra Mega Projects." 4.1.2 During evidence, the Committee desired to know from the Ministry of Power the role envisaged for the State Governments in the selection of sites for the development of UMPPs. The Secretary, Ministry of Power, during evidence held on 02.08.2006 explained:

"With regard to the question as to whether it starts with a study by the CEA or by the State Government, I would say both. The Central Electricity Authority (CEA) starts identifying different sites. They also get assisted by State electricity Boards and State companies. Then, we send our team. That team sees whether sufficient land is there, whether water can be brought there, whether coal can be brought there and then after they are satisfied, environmentally it should not be an insurmountable problem because compensation of forest will make it totally uneconomical. Then, they come to a conclusion after evaluating a few aspects."

4.1.3 When asked whether the State Government was consulted prior to selection of site, the State Government of Madhya Pradesh in a written reply stated:

"Yes. Based on studies done by CMPDI, two sites in Sidhi District of M.P. i.e. Sasan and Waidhan were identified by government of India. After site visit with Government of Madhya Pradesh officials, Sasan site was selected."

4.1.4 In this context, the Government of Orissa informed:

"Government of India/CEA have intimated to the State Government that they have identified the the site in the districts of Sundergarh/Jharsuguda would be suitable for development of Orissa Ultra Mega Power Project."

4.1.5 However, Government of Chattisgarh in this regard submitted:

"Prior to selection an official team comprising officers from CEA visited the site and on their request State Government provided logistic support such as arrangement for stay, travel and site visit etc. However with regard to selection and finalisation of Akaltara as the site for Ultra Mega Power Project (UMPP) in Chhattisgarh, formal consultation with the State Government were not held. After reaching a final decision on the location of UMPPs, Ministry of Power started holding meetings with the stakeholders to complete formalities related to allocation of power, formation of special purpose vehicle and bid invitation etc."

4.1.6 When the Ministry was asked about the reasons for not holding any formal consultation with the State Government of Chhatisgarh while selecting and finalizing the project site, the Ministry in a written reply stated:

"The site for Akaltara UMPP was identified in consultation with CSEB officials. This was informed to the Government of Chhattisgarh vide CEA letter dated 20.12.2005. Further, the officers of CEA and PFC had held a meeting with Principal Secretary (Energy), Govt. of Chhattisgarh on 9th Dec 2005 at Raipur in his office wherein the whole process of development of UMPP was explained to him and he was requested to confirm the availability of land and water for the identified site. This was followed up with a letter dated 16 January 2006 from CEA to him. The process of development of UMPP in Akaltara is held up for want of specific confirmation from the State Government regarding availability of land and water."

4.1.7 When State Government of Tamil Nadu was asked about the reasons for preferring the site at Nagapattinam rather than at Cheyyur, as identified by the Central Government, the State Government in a written reply explained:

"About 3500 acres of land is available at the Nagapattinam site. Most of the lands are poramboke lands. It is ascertained from the District Collector/Nagapattinam that the lands could be acquired in a very short duration. Further the land cost is cheaper

The Nagapattinam District is an industrially backward area. Setting up of a power project in this district will boost the economy of the region as a whole.

As regards, Cheyyur site, major extent of lands are wet patta lands, with paddy cultivation. As such acquisition of lands may pose problems

In the Principal Secretary, Energy Department, GOTN's D.L.Lr.No.6787/B2/07, dt.5.3.07 addressed to Chairperson, CEA, GOI, the Principal Secretary, Energy Department, GOTN informed the Chairperson, CEA, that the Government of Tamil Nadu is of the opinion that the proposed Ultra Mega Power Project may be put up in Vilundamavadi village, near Thirukuvalai in Nagapattinam District.

The response of Ministry of Power, GOI is awaited."

4.1.8 Due to some agitations by the Local people regarding the selection of Girye as a site for development of UMPP in Maharashtra, the work is held up. The Committee wanted to know how Girye was selected as a site. The representative of the Ministry of Power during evidence held on 14.03.2007 explained:

"It was suggested by the Central Electricity Authority."

4.1.9 The Committee pointed out that the reason why the projects have been struck is because the sites for the projects have been identified by an authority who is not in touch with the State Government and the local problems.

4.1.10 The Ministry of Power explained that the sites were not selected out of the blue. The representative of the Ministry of Power clarified during the evidence held on 14.03.2007, in the following terms:

"We have a Committee comprising the Central Electricity Authority, the CMPDI, the NRSA, and Railways, and we look into the probable sites. After that, detailed investigations are done. This was one of the probable sites. It was not that we have done the detailed analysis, detailed investigation of the site. It is based on initial investigation and it was the probable sites."

4.1.11 The Secretary, Ministry of Power during evidence held on 14.03.2007, added:

"Normally, it is not in total vacuum that these sites are evaluated. First, the project promoting agency does its own scouting. At that stage, they try and see on merits which is the best site. If Government land of that dimension is available somewhere, we will try to go there and we will also see whether a port is nearby, but of course, ultimately if concerned state is not willing, it will never happen."

4.1.12 He further added:

"Even if I may concede for a moment that we have not gone about it in a manner, in a full consultative way, however, the States themselves know the huge energy shortages or some of them know that they are sitting on coal reserves, and if the country has to develop, then the onus lies on them to show some degree of concern, as you have, Sir, for development of power and to suggest, 'okay, if not Girye, let us have Site X,Y or Z.' We would not be found wanting in taking action immediately."

# (ii) AVAILABILITY OF WATER FOR DEVELOPMENT OF UMPPs

4.2.1 Thermal power plants consume large quantities of water. The Committee wanted to know whether feasibility of water availability at various sites has been examined and whether water used for irrigation and drinking will be diverted for use at power plants at any site. The Secretary, Ministry of Power, explained during evidence held on 02.11.2006:

"The process is before a site is offered we try to ascertain both from the State Government and the Ministry of Water Resources and the Central Water Commission that adequate water without affecting the other uses like irrigation and drinking water that is available for the power project because coal-based thermal power project, as the hon. Chairman is fully aware, require water consistently throughout its life. Unless this confirmation is achieved both from the State Government level and the Central Water Commission level. It is not proceeded with. So, that concern has been fully addressed."

4.2.2 When asked, how much water is expected to be required by power projects in Madhya Pradesh & Chattisgarh per day. The Ministry informed as follows:

"Water requirement for Ultra Mega Power Project at Sasan in M.P is estimated to be 3.6 lakhs m<sup>3</sup> per day."

4.2.3 When enquired about the arrangements made by the Government to meet the demand, the Ministry in a written reply submitted.

"For Sasan Ultra Mega Power Project water requirement is envisaged to be met from the Govindbalab Pant Sagar (Rihand Reservoir). State Irrigation Deptt. Government of M.P has confirmed availability of water out of its share. Central Water Commission had conducted inter-state meeting on setting up of 4000 MW Ultra Mega Power Project at Sasan on sharing of water resources of Rihand Reservoir on 6.7.2006.

The proposed source of water for Akaltara Ultra Mega Power Project in Chhattisgarh is Mahanadi and Hasdeo rivers by constructing barrages. The Government of Chhattisgarh is yet to confirm the requirement of water for the Ultra Mega Power Project."

4.2.4 The Committee wanted to know whether water used for irrigation and drinking would be diverted for use at these power plants or not. The Ministry in a written reply clarified:

"As per the discussions held in the inter state meeting called by Central Water Commission the existing utilization of Rihand Water by M.P and Chhattisgarh is 0.472 MAF for irrigation, power etc as against the total allocation of 0.7 MAF to erstwhile M.P. The requirement of Sasan Ultra Mega Power Project is about 0.108 MAF which can be easily accommodated within the overall allocation to erstwhile M.P. As such water being used for existing irrigation and drinking is not proposed to be diverted for Sasan Ultra Mega Power Project.

For Akaltara Ultra Mega Power Project in Chhattisgarh, it is proposed to construct new barrage to harness surplus water during monsoon and hence existing supplies to irrigation and drinking will not be affected."

4.2.5 However, when asked about the Government of Chhattisgarh's objections on the development of UMPP in the State. The Government of Chhattisgarh informed that despite its objection; the Government of India and Government of Madhya Pradesh proceeded ahead with providing water from Rihand river to UMPP at Sasan in Madhya Pradesh.

4.2.6 In light of the objection made, the Ministry of Power was asked about the factual position and its plan of action to resolve this issue. The Ministry in a post-evidence reply stated

"Central Water Commission had conducted Inter State Meetings on sharing of water resources of Rihand reservoir for setting up of UMPP at Sasan. Representatives of Government of Chhattisgarh participated in these meetings. It was stated by the representative of Chhattisgarh Government in these meetings that the division of 0.78 million acre feet of Rihand water allocated to erstwhile M.P. should be on the basis of catchment area and that nearly 85% of the drainage area of Rihand lies in their state. He further stated that Chhattisgarh has no objection regarding the use of water from Rihand reservoir for UMPP provided the basin state would not oppose any project being taken up by Chhattisgarh in the catchment area of the reservoir. CWC had observed that Band Sagar Agreement, 1983 about distribution of water in Sone basin amongst co-basin states is not based on catchment areas lying in the states. Based on the deliberations, it was inter alia decided in the meeting held on 6th July 2006 that the water requirement of 0.109 million acre feet of UMPP could be met from the share of Rihand water of M.P by curtailing their future requirement of 0.216 million acre feet earmarked for medium irrigation projects."

# (iii) ALLOCATION OF POWER FROM UMPPs TO STATES

4.3.1 When asked whether the State Government of Gujarat has signed any agreement regarding procurement of power from the power generated by the Ultra Mega power project in the State, the State Government informed:

"Yes, State Government through GUVNL has signed an Escrow agreement for Procurement of 1900 MW power from power generated by the Mega power project. PPA is also initiated by GUVNL." 4.3.2 In this regard, the Government of Chhattisgarh informed:

"Chhattisgarh has desired firm allocation of power from Ultra Mega Power Project planned in Madhya Pradesh and Gujarat. Despite paying the commitment charges as per the requirement, Chhatisgarh has been denied allocation of power from these projects."

4.3.3 On being enquired about the reasons for denying allocation of power to the State Government of Chhattisgarh in spite of paying the commitment charges, the Ministry of Power explained:

"Chhatisgarh was allocated 250MW from Sasan UMPP. However, due to non-payment of commitment advance within the stipulated time frame, their share from Sasan UMPP was reallocated to MP. Chattisgarh's payment of Rs.2.5 crore received after due date was duly refunded."

4.3.4 Seeking one of the direct benefits from the project, the State Government of Chattisgarh has requested the Centre for higher allocation of power to the host State. When asked about the policy of the Centre to this effect and the response of the Centre to the request made by the Government of Chattisgarh, the Ministry in a post-evidence reply stated:

"Allocation of Power from the UMPP proposed in Chhattisgarh has not yet been made considering the fact that the state government had not confirmed the availability of land and water for the UMPP project proposed in Chhattisgarh state. It may however, be mentioned that major allocation of power from the UMPP is being made to the host state only. Therefore, as and when Chhatisgarh Government conveys its decision with regard to tying up of necessary inputs, allocation from this Project would be decided in consultation with the states while major portion from the Project would be earmarked to Chhatisgarh."

4.3.5 The Government of Orissa has demanded at least 1/3 power from the UMPP to be developed in the State. Asked about the opinion of the Ministry of Power in this regard the Ministry stated:

"From the Orissa UMPP an allocation of 1300 MW has been made to Orissa which is about  $1/3^{rd}$  of the total capacity. The allocation of power is decided on consensus being arrived at in consultation with the States. Allocation of

power largely depends on the considerations of the project being in a particular region and prevailing electricity shortages."

4.3.6 Considering the fact that the host States have demanded higher allocation of power, the Committee wanted to know as to whether any formula has been laid down for allocation of power from UMPPs to the States, the Ministry of Power stated:

"So far as these ultra mega-power projects are concerned, we decided that let this be done by Power Grid Corporation of India for which an integrated planning should be done along with the CEA so that evacuation does not become an issue for these investments because they are large investments. So many parallel streams of discussions, to try to find solutions have been started and one such parallel streams of discussions is to discuss with the likely off-takers of this power.

Basically, the Ministry of Power facilitates – the PFC is facilitating; but this exercise is being done on behalf of the distribution companies or the distribution utilities of the State. In Rajasthan, we have 3-4 distribution companies; we are working on their behalf; in UP we have 3-4 distribution companies; in Andhra Pradesh, there will be a few distribution companies. Wherever the SEBs have been restructured in terms of distribution companies, we do this. So, we are bringing the SEB distribution companies, the SEBs and the State Governments into the picture."

4.3.7 On this issue the Secretary, Ministry of Power further explained during evidence:

"I will cover this point also as to how is the allocation done; this does not follow the Gadgil formula which NTPC is doing. No; all the 14-15 States have shown their interest in buying power. We had several rounds of meetings with these States and we are coming to a consensus as to who will take how much power, etc. because unless we have a tentative idea of the off-take of this power, we would not be able to do a good transmission system project. In Orissa or in Madhya Pradesh where this power will flow, they will put all these inputs into a computer and see how the power system flow will be and see how the transmission lines will emerge. On the basis of the discussions and the consensus that we are arriving at, by now, we have fairly a good idea of how much power these projects will have; it may require some fine-tuning but we have fairly a good idea of how much power would go to whom. We are also looking into the States' ability to service these off-takers of power."

#### (iv) FREE POWER TO HOST STATES

4.4.1 The States of Orissa and Chattisgarh have demanded 12% free power to the host States on the lines of hydro power generation. When asked about the Ministry's views on this, the Secretary, Ministry of Power stated during evidence held on 02.08.2006:

"At the same time, I may like to clarify that this question of free power is not today there in thermal power projects nor in the nuclear power projects. It is only in hydro, where 12 per cent free power policy was introduced by the Government, and that too, under the consideration that good part of this revenue would be utilized to take care of the displacement problems, community development problems in these States and in these areas.

Though we have been discussing with the States that this revenue is not being utilized in that manner, the fact is that 12 per cent free power equivalent revenue goes to the State, but utilization of that revenue for the purpose for which it was primarily meant is not happening. That is a different issue on which we will have a presentation before this august Committee, sometimes later and seek your guidance and assistance as to how to go about it."

4.4.2 He further added:

"If we introduce this system, the whole thing opens up as a Pandora Box and it will mean inevitable excessive increase in tariff; 12 per cent free power means 12 per cent increase in generation tariff across the Board. It will have its effect on distribution tariff in a much bigger way. I am happy to report to this august Committee that the hon. Chief Minister of Orissa did appreciate the point made by our Minister and he is not insisting on it and he says that definitely Orissa would be the one which would host an ultra-mega project. Until that time a decision is taken on any extent of free power, if at all, that will have to be in NDC as national decision. It cannot be in one or other State. So, that point is not there. By virtue of this we are proceeding our effort in Orissa. All the States will be allocated power and that power they could use, they could trade."

4.4.3 Stating that the issue of 12% free power is the cause of delay for finalizing UMPP

at Orissa & Chattisgarh, the Secretary during the evidence held on 02.08.2006 explained:

"As I said, the second pithead power station in Orissa, initially the Chief Minister of Orissa did talk about 12 per cent free power. When this issue was still not resolved, it would not have been wise on our part to publicise. Once that issue has been done, we have some evaluations to do. Last year we sent CEA team. We notify Orissa as soon as confirmation from State is made available. Akaltara, Chattisgarh was another pithead power station but that for the present we have put on hold because State is demanding 12% free power. We are discussing with the Government of Chattisgarh. It has not so far agreed by the State to totally take away that 12 per cent free power request or demand.

With 12 per cent free power, obviously for the reason that I informed the august Committee, it is not possible. We have 80,000 megawatt thermal capacity in the country. We are doing ultra mega-projects and mega-projects in other parts of the country. So, we cannot agree to 12 per cent free power without creating problems all over. We are trying to resolve this issue with the Government of Chhattisgarh. We are trying to tell them that they should not insist on this. I am hopeful that we should be able to resolve this issue and there would not be further delay in Akaltara project."

4.4.4 On the broad issue of consulting State Governments in the entire development process of UMPPs, the Secretary, Ministry of Power during the evidence held on 02.08.2006 submitted before the Committee:

"It is not that we are not consulting them. I may also mention as an approach to this whole subject, we are taking all the State Governments fully into confidence. We have institutionalized the mechanism of discussion at the Chief Secretary and my level. Now we have also institutionalized another mechanism. The Principal Energy Secretary of the State would take a periodic meeting on issues concerning development of this project in so far as State level things are concerned like public hearing for Pollution Control Board, environmental clearance, land acquisition, relief issues, District Forest Officers issues, any certification, water availability and water clearance are concerned. These are the points which were made in the beginning. In this type of initiative we are not taking any chances."

#### (v) INVOLVEMENT OF LOCAL ISSUES IN DEVELOPMENT OF UMPPs

4.5.1 The Committee, during the course of their study visit to Maharashtra and Karnataka found that a number of local issues are holding up the setting up of UMPPs. The local people of Tadri (Karnataka) are not in favour of development of UMPP at Tadri. A delegation led by Smt. Margaret Alva, the MLA and others met the Committee and put forth their point of view on the issue as follows:

"We have already got in the district four hydroelectric power plants, one nuclear power plant; all are in one district. Now a sixth plant is again sought to be located in the same district. Sir, 80 per cent of the district is reserved forest. We have got added to this the huge naval base, the Sea Bird Naval Base. All these projects have taken away whatever land is available to the people. Almost, I think, one-lakh hectares of land has been taken away or submerged or occupied. Thousands and thousands of families are in rehabilitation camps and they have lost their livelihood. This is an area near Tadri, which is one of the most sensitive and ecologically important areas. We realize that power is important, but I think they have to take into consideration the livelihoods of the local people, the environment and the justice of dumping every single power plant in one district which should have been developed otherwise for tourism or something else.

The water resource identified for this project is the river called Agnashini, one of the mother rivers which ecologically is very sensitive and which is identified as one of the hotspots in terms of biodiversity. It gives at least ten lakh families their daily bread in terms of approximately 5000 to 6000 people in traditional fishing in this river; and approximately, 2,000 to 2,500 people harvesting shell crabs.

It also gives livelihood to about 1,500 people in terms of aquaculture and about 1,000 people in salt making. Now, it would bring in harm because of coal dust and fly ash into the river. Apart from this, we have a high security seabird naval base within 15 nautical miles of this project site. This project would entail bringing of coal. It would also be taking iron ore from Bellary, etc. It is one of the most thickly populated area. Here, because of these factors, we have been opposing this."

4.5.2 The Government of Karnataka was asked about the response of the State Government and the Ministry of Power to the objections/concerns of the local people regarding development of the project at the proposed site at Tadadi. The Government of Karnataka informed the Committee as under

"Government of Karnataka has constituted a Committee consisting of MP, MLAs and MLCs of Uttara Kannada District, some Environmentalists and Local Leaders to clarify the doubts in the minds of the Local People and to convince the Local People so that they support for implementation of this project. The process is still on. Most of the opposition to the project is due to ignorance about Thermal power plants. Some Environmentalists and some persons who are involved in Shell collection have given false and misleading information to the local Fishermen and have created a scare that Fishermen will lose their livelihood. The replies of the State Government to the objections are as follows:

- (a) No, adverse impact is expected on surrounding Environment as imported coal with very low Ash content of about 8 to 10% (Indigenous Coal contains about 35% Ash) is proposed to be used with advanced State of Art Technology. Entire fly Ash generated, will be utilized in cement manufacturing units as well as other value added products like bricks etc.,
- (b) MoEF has prescribed certain guidelines and emission norms in line with international practices. These shall be fully complied. Also, Super Critical Units are proposed to be used in the plant so as to minimize emission of flue gases.
- (c) Only make up water will be drawn from the river since closed cycle system with cooling tower are proposed. In this system, there will be no discharge of hot water into river. As such there will not be any impact on aquatic life including fishing. However, this issue and other environmental concern shall be studied in detail during Environmental Impact Assessment Studies and suitable measures shall be taken as per this study report, so that fishing activity will not be affected.
- (d) Collection of Shells in the area acquired by Government of Karnataka, which is under water, may be affected. However, people cannot claim a right to remove shells from Government land.
- (e) This site has been selected, taking into consideration availability of land, possibility of developing Port for importing coal and availability of water. Also, it is away from Ecologically sensitive areas, Archaeological sites and Historical sites, etc.,
- (f) Imported coal with low Ash content is proposed to be used and particulate emission shall be kept much below permissible limits. No such diseases are expected once the particulate emission is kept under control. If it is true that every Thermal power plant causes diseases, then all the Thermal power plants in India would have to be shut down.
- (g) Tree felling for the transmission lines shall be avoided while finalizing the right of way for the transmission lines. In case trees

need to be cut, compensatory afforestration will be done as per MoEF guidelines."

4.5.3 During the study-visit of the Committee in October 2006, the Committee visited the proposed site for the Ultra Mega Power Project at Tadadi (Karnataka). The local MP (Smt. Margaret Alva), MLA, local politicians and local people were present during the on-the-spot visit of the Committee. The Committee were informed that the proposed project site happened to be the second best natural site for paddy growing, after Vietnam. Water at the site was also best suitable for fishery. Area was also quite rich in salt pans. It was also informed to the Committee that if the Tadadi Power Project comes up on this site, around 10,000 families had to be displaced from this area and about 35,000 people might loose their livelihood. The area was also stated to have rich mangrove forests and many good varieties of sea food were also available there. The representatives of all the political parties, almost, in unison opposed the proposed site for the proposed Ultra Mega Power Project and requested the Committee that the same may be shifted at some other suitable place in the State. The Committee put across the concerns and fears of the local people to the officials of State Government and also to the representatives of the Ministry of Power for taking appropriate action in the matter and to chose an alternative site.

4.5.4 The Committee sought clarification from the Ministry as to whether the issues involved in development of Project at Tadri in Karnataka have since been resolved and if not, the action plan being contemplated by the Government in this regard, the Ministry in a written reply submitted before the Committee:

"The local issues involved in the development of project at Tadri are yet to be resolved by the State Government.

Hon'ble Chief Minister of Karnataka had conducted a meeting on 28 May 06 with the M.P, MLAs, MLCs of Uttara Kannada district, environmentalists, representatives of fisherman and other persons from Uttara Kannada district, CEA, PFC and Government of Karnataka to discuss the local issues regarding development of UMPP at Tadri. After hearing all the parties, Hon'ble Chief Minister constituted a Committee consisting of M.P, MLAs and other stake holders CEA, PFC and Government of Karnataka, KPCL, Dy. Commissioner Uttara Kannada District to examine various issues pertaining to the proposal. Three meetings of the Committee have already been held. It has been proposed by CEA/ PFC/ Government of Karnataka that a Study may be carried out to assess impact of the power plant on the environment by reputed consultant. However, no decision in this regard has so far been taken. Parliamentary Standing Committee on Energy had already visited the site on 10.10.2006 and had interaction with the local public. Further action on this project would be taken after the local issues are redressed and Govt. of Karnataka confirms the same."

4.5.5 The Government of Maharashtra informed the Committee that the local people are agitating against the project. When the Committee enquired about the issues involved in Maharashtra UMPP and measures taken or being taken to address them, the Ministry informed:

"Local people have raised environmental issues relating to Alphanso mango which are being addressed by State Govt. Bidding process in respect of Girye UMPP (Maharashtra) is contingent upon clearance from the State Government after resolving the local environmental issues."

4.5.6 The Ministry further added:

"The apprehensions of the local residents are related to the environment impact of the project, particularly with regard to the Alphonso mango crop for which this area is well-known. A consultant, M/s Desien was appointed for environmental studies but was not allowed to carry out the work at site by the local people. In the wake of continuing shortages in the State, Maharashtra Government has been requested again on 10.05.07 to suggest additional sites in the State."

4.5.7 In view of the local issues involved in the setting up of UMPP, the Committee understand that the State Government of Karnataka and Tamil Nadu have suggested some alternative sites to CEA for the purpose.

4.5.8 The Committee observe that development of Ultra Mega Power Projects require support and coordination between the various players involved i.e, the Central Government, State Governments, PFC, project developers, Consultants, etc. Lack of support from any of these players can lead to delay in the development of these projects and as such can derail capacity addition programme and, in turn, economic growth of the country as envisaged – because power is the key driver for any growth agenda set for the country.

The Committee further observe with concern that the Ministry of Power is facing some problems in finalisation of sites in States such as Orisssa, Karnataka and Maharashtra. Though the Ministry has stated that the State Electricity Boards and State Companies are involved while the site is selected, the Committee, however, feel that the involvement of the State Governments has just been a formality. Central Electricity Authority (CEA) which had a major role in selection of sites did not seem to have given a serious thought before selecting project sites. As stated by the Government of Orissa that the Government of India/CEA had "just intimated" to the State Government about the identification of site. It implies that the State Government was not involved in identification of site. Similarly, the Government of Chhattisgarh has stated that no formal consultations with the State Government were held. Regarding the site in Maharashtra, the statement of the Ministry that it was just one of the probable sites and not the final one, raises questions as to the manner in which the Central Government has gone about the selection of sites for the UMPPs. The Committee feel that since the State Governments have better knowledge of the feasibility of making a particular land and other resources available for the

development of power projects – also considering the environmental and other aspects – the State Governments should be involved in the development process of UMPPs right from the conceptual stage. This, in turn, will ensure that the projects are not unnecessarily held up due to land and other related disputes. Further, the sites should be formally announced only when the finality in this regard has been reached – after the due consultation process – with the respective State Government.

The Committee understand that in view of the local issues involved in the setting up of UMPP at Tadri, the Central Government is considering certain alternative sites for the purpose which is in line with what the Committee also felt after their visit at the proposed site for UMPP at Tadri. The Committee recommend that the Ministry of Power takes an urgent action in the matter so that the UMPPs can be established both in Maharashtra and Karnataka at the earliest, at the alternative sites. 4.5.9 The Committee observe that water requirement of Sasan UMPP at Madhya Pradesh will be met from the Govindbalab Pant Sagar (Rihand Reservoir). As stated by the Ministry of Power, water used for drinking and irrigation will not be diverted in this case.

The Committee further observe that there was some dispute between the Governments of Chattisgarh and Madhya Pradesh regarding the use of water, required for Sasan UMPP in Madhya Pradesh. The Government of Chhattisgarh had objected to the use of water of Rihand reservoir for Sasan project. Thereafter, the Central Water Commission had conducted Inter-State Meetings in which it was decided that "the water requirement of 0.109 million acre feet of UMPP could be met from the share of Rihand water of Madhya Pradesh by curtailing their future requirement of 0.216 million acre feet earmarked for medium irrigation projects."

The Committee, therefore, desire that such disputes should be resolved in advance so that the project developer may not have to face any difficulty in availability of water at a later stage. If need be, the concerned States should enter into a written agreement on the use of water for UMPPs, to avoid any controversy in future, which should be then made available to the developer.

The Committee observe that the 'Host States' have demanded a major share 4.5.10 from the power allocated from UMPPs in the States. The Ministry while on its part has assured that major allocation of power is made to the host State only, the Committee, however, note that there is no particular formula for allocation of power and it is done on the basis of consensus arrived at in consultation with the State Governments. The Committee feel that it leaves a lot of scope for bias. The Committee recommend that a formula be devised by the Ministry according to which the host State should get a reasonable share of the power generated from UMPP located therein. This formula be devised by taking into consideration various factors like power shortages in the State, status of infrastructure for evacuation of power, etc. The Committee strongly feel that the allocation on the basis of a formula should be completely objective leaving no scope for any grievance from the States. The Committee further want that the involvement of the State Governments should be maintained by the Centre in the whole process of development of UMPPs.

4.5.11 The Committee are concerned to note that the project at Chhattisgarh is being held up because of the demand of 12% free power made by the Government of Chhattisgarh. The Committee understand that there is no policy regarding giving free power to the Host States from the thermal projects as is the case with the hydro projects. The Committee desire that this point should be impressed upon all the Host States and Chhattisgarh in particular. The delay on account of demand of the Chhattisgarh Government is disheartening. The Committee desire that the matter be taken up with the State Government and the issue be resolved at the earliest. The Committee note that any demand for free power by State would have to be borne by the electricity consumers by way of increased tariff. This may even make the project economically unviable and uncompetitive leading to dropping of the project. The Committee desire that these facts should be clearly brought to the notice of the States which are demanding free power from UMPPs.

The Committee observe that projects at Karnataka and Maharashtra have 4.5.12 been held up due to some objections from the local people of the area. The people of Tadri in Karnataka are against the development of Ultra Mega Project there because of this being an ecologically sensitive area and also in view of the fact that this area already has four hydroelectric power plants and one nuclear plant. The local people also have a fear of losing their livelihood. Now the Government of Karanataka has constituted an Expert Committee on 28.05.2006 consisting of MP, MLAs and other stakeholders, PFC and Government of Karnataka KPCL, etc. to examine various issues involved. In one of the meetings of the Committee, it is learnt that CEA / PFC/Government of Karnataka had proposed that a study be carried out to assess impact of the power plant on the environment by a reputed consultant. However no decision in this regard has so far been taken. The Committee desire that the Expert Committee expedite the process so that clear picture in regard to the development of project emerges. The Committee feel that engaging a consultant to carry out a study, as proposed by CEA / PFC/Government of Karnataka should also be considered by the Expert Committee. In case if it comes out that the development of power project will have an adverse effect on the environment, an alternative site be finalised at the earliest. Similarly in case of Maharashtra where the local people have raised certain environmental issues relating to the growing of Alphanso Mangoes, the Committee desire that the consultant appointed for carrying out environment studies should submit its report at the earliest. Considering the importance of these projects, the Committee strongly recommend that these projects should not be unduly held up and finalised at the earliest in the larger interest of the country.

The Committee also desire that before announcing any site for UMPP, it should be ensured that there is a broad consensus amongst the various stakeholders for a particular site. The cases of generation of opposition after the announcement of sites as that of Tadri in Karnataka and Girye in Maharashtra should not be allowed to happen. The Committee desire that all the local issues should be decided in advance by State Governments, before offering a site to set up UMPP.

NEW DELHI; <u>8<sup>th</sup> October, 2007</u> Asvina 16, 1929 (Saka) GURUDAS KAMAT, Chairman, Standing Committee on Energy

# STATEMENT OF CONCLUSIONS/RECOMMENDATIONS OF THE STANDING COMMITTEE ON ENERGY CONTAINED IN THE REPORT

Sl.	Reference	Conclusions/Recommendations	
No.	Para No.		
	of the		
	Report		
1	2	3	
	2.10.19	The Committee welcome the new initiative of the Ministry of Power to embark on the path of huge capacity addition by way of developing UMPPs. Being a new concept, there are no models to emulate. Hence, the improvements will have to be made by learning through experience. Failure of capacity addition targets in the 8 <sup>th</sup> , 9 <sup>th</sup> and 10 <sup>th</sup> Plan, by the Private Sector leaves much to be desired. The achievement of Private Sector in all these Plans have been less than 30% of the targets. This leaves ample scope for soul searching on the part of Government. The Committee recommend that the factors which led to the debacle of capacity addition targets particularly capacity addition by the Private Sector should be analysed by the Government in depth and corrective steps in way of development of UMPPs be taken in right earnest. Going by the experience in the award of Sasan Ultra Mega Power Project, the Committee feel that certain changes are warranted in the bidding guidelines to plug the loopholes therein, and making them foolproof. In the considered opinion of the Committee, the precious time lost in the Sasan Project on this count is simply disconcerting – considering the immense strategic importance and generation potential of the development of these projects. The Committee desire this project to see light of the day as early as possible. They would further like the Ministry to try in all sincerity and make up for the time lost owing to this controversy so that this project comes up as scheduled earlier. Further, since the whole purpose of resorting to competitive bidding is to encourage competition, the Committee are of the opinion that the developers who have already bagged a project should not be allowed to bid for another project, on the basis of the same balancesheet is so strong that it can meet the eligibility criteria for the two projects together, they may be permitted to bid. Because besides encouraging competition, it will also ensure that the power sector is not monopolized by only a few companies.	
	2.10.20	The Committee had expressed concern in their 20 <sup>th</sup> Report on Demands for Grants of the Ministry of Power for the year 2007-08 as regards the coming up of UMPPs on time was concerned as was envisaged by the Ministry of Power earlier. While taking review of the functioning of the Ministry of Power similar concerns have also	

been reported to be expressed by the Prime Minister in regard to meeting targets by the Ministry of Power in the setting up of UMPPs.

Thus, the Committee feel deeply concerned with the pace of progress in the development of UMPPs. Initially the Government had announced four UMPPs in the Budget for the year 2006-07, with the intention to award these projects before December, 2006. Out of these, the Government was able to stick to the deadline with regard to only two projects, namely Sasan and Mundra. Both of these projects were awarded before the target of  $31^{st}$  December 2006 – though further progress on Sasan project suffered due to the controversy regarding the validity of the award of the project. The remaining two projects – one in Andhra Pradesh and another in Orissa were scheduled for being awarded by  $30^{th}$  April 2007. The submission date for RfP for Andhra Pradesh project has been postponed and regarding the project to be developed in Orissa, the site is yet to be finalised.

Later five more projects have been added to the list. However the way in which their development is progressing leaves much to be desired. In most of the cases selection of site is the main reason for delay. There are agitations by local people in Karnataka and Maharashtra and certain technical problems in Tamil Nadu. The Committee feel that the State Governments should have been associated with the selection of sites in the beginning itself to avoid any last minute disagreement on the sites. The Committee desire that the sites for UMPPs should be finalized at the earliest so that these projects can come up within 12<sup>th</sup> Plan as envisaged and promised. The site for UMPPs should be selected only after the State Government has agreed to the same.

The Committee observe that in PPA for Mundra Project 64 months, that is more than five years, have been given to the developers for commissioning the first unit of the power project and the last unit would be commissioned after 88 months, that is after more than seven years from signing the PPA. The Committee feel that in the present age of fast development it should not take such a long time for setting up of these projects.

The Committee further note that this time schedule also depends on time taken in obtaining necessary clearances and acquisition of land for the project; time taken in bidding process and time schedule submitted by the bidder in his bid. There is no time limit fixed within which clearances shall be available and the land shall be acquired. In addition to this, it has been stated that time fixed for start of various units would be calculated from signing of PPA. The Committee, therefore, feel that such an open ended fixation of completion schedule will not serve any purpose. The Committee thus desire that exact dates/periods should be provided for setting up of each project at the time of issue of Letter of Intent and penalties should be provided in case of default so that the projects can be set up in a time-

	bound manner. The Committee further desire that there should be proper coordination between the Central and State Governments so that the issues involved in the various projects can be resolved and more so, in future the coordination between the Central and State Governments should begin right from the conceptual stage of the project itself. Considering the urgent need of power, the Committee strongly recommend that these projects should become fully operational by all means in 12 <sup>th</sup> Plan itself. Recently constituted National Power Project Management Board should also, in particular, be assigned the responsibility to ensure the timely completion of all these projects. For this, it is very important that this Board should be sufficiently empowered to take project related decisions and also it must be ensured that these are implemented without any bottlenecks from any quarters.
2.10.21	The Committee observe that the sites for the setting up of the coastal projects have been selected by keeping in mind the import of coal for these projects. The Committee, however, observe that the ports at these locations do not have enough infrastructure to handle the huge volumes of the imported coal. The Ministry of Power, while acknowledging this, has stated that at existing ports additional facilities can be created to handle the imported coal and at some locations new ports could also be set up. It implies that the required infrastructure for some of these projects is yet to be developed. The Committee feel that delay in the development of infrastructure can lead to further delay in development of UMPPs, which in turn, can derail the capacity addition targets and jeopardise growth of the economy as such. The Committee, therefore, recommend that all works relating to development of infrastructure particularly the port capacity to handle the huge volumes of imported coal be completed in a time bound manner and the same should be reflected in L.O.I, etc. The Committee also desire that the various project related works which are to be facilitated by SPVs, should also be made available by the time L.O.I is issued to the successful bidder.
2.10.22	The Committee note that the pit head Ultra Mega Power Projects will be based on domestic coal, whereas the coastal projects would be based on the imported coal. The justifications given by the Ministry for using imported coal are that the indigenous resources of coal are limited, which, need to be conserved for the future use and imported coal would be more cost competitive at Western & Southern coasts, as compared to domestic coal. However, the Committee observe that each project would require around 12-14 million tones of imported coal per-annum. Considering the current market price of coal in the international

	market, the expenditure on importing coal would thus be quite huge. Though the Mundra Project – the first UMPP to be developed - will run on imported coal only, the Committee desire that techno- economic feasibility study of using imported coal after blending it with indigenous coal, which is being examined, should be expedited and completed at the earliest so that rest of the coastal projects could be planned with the option of using the blended coal.
2.10.23	The Committee observe that all the Ultra Mega Power Projects which have been envisaged by the Government are thermal projects. The Committee note that there is a huge hydro power potential in our country – which yet remains to be exploited. Moreover, use of coal for power generation should be done keeping in mind the future requirement of coal for other purposes as well. Hence, the Committee feel that a policy for hydro Ultra Mega Power Projects should also be formulated by the Government on top priority. In the recently held Conference of Chief Ministers, the Prime Minister had asked the Union Power Minister to set up a Task Force on hydro power to lend special focus on this area. The Committee desire that this Task force be also assigned the task of working out the modalities for the development of UMPPs based on hydel power can greatly benefit the North-Eastern region of the country – which abounds in the hydel potential.
3.7.6	The Committee note that under the Payment Security Mechanism for UMPPs in case of default by any procurer there is a clause of third party sale. As per this clause other procurers would have the first right to buy power share for which payment default has occurred. However, in case the other procurers are unwilling to buy default power, the same would be sold in the all India market through prevailing 'open access' in transmission either directly or through traders. The Committee, however, feel that for selling it in the market there is need for the speedy and proper implementation of 'open access' in States as envisaged under the Electricity Act, 2003. Further, in order to avail the 'open access' – both for Intra and Inter- State open access, without any infrastructural bottlenecks, the transmission system (national grid) needs to be suitably strengthened and congestion points be removed. Powergrid is stated to be carrying out the open access system study. The transmission system will be augmented accordingly to ensure evacuation of power from these UMPPs. The Committee desire that this study should be completed within a specific time frame so that the transmission system is ready by the time the first unit of UMPPs becomes operational. Further the States, particularly, the States procuring electricity from the UMPPs

	should be able to provide open access by 2009 as per the Electricity Act, 2003. To achieve this goal, the Committee recommend that all efforts in this direction be made on in a mission mode manner.
	The Committee further observe that for successful implementation of such a payment security arrangement, it is essential to speed up the pace of electricity reforms in the States. The Committee feel that improving the commercial viability of the power sector in the States is very important for the success of such a payment security arrangement. The Committee, therefore, recommend that concrete steps be taken in this direction urgently. Evacuation of power from UMPPs is another area which need attention from the beginning itself as it also needs large investments. The Committee note that PowerGrid Corporation of India Ltd
	(PGCIL) has been assigned this job. The Committee desire that advance planning and provision of funds should be done by PGCIL in consultation with CEA so that there are no bottlenecks in evacuation of power. The Committee are of the considered opinion that the private investment should be encouraged in this sector. At the same time, the Committee feel that State distribution utilities should be encouraged to take up transmission and distribution network in their respective States.
3.7.7	The Committee note that there is an apprehension of monopolization of power sector by the developers of UMPPs. It has been suggested to the Committee that to encourage competition UMPPs should be asked to sell certain percentage of their capacity in the open market. Also that there should be a provision to buy back/take over of the plant in case the developers resort to some sort of blackmail, etc. The Ministry of Power has informed the Committee that the Electricity Act provides for sufficient powers to the Regulatory Commission to issue directions to the licencee. The Committee, however, feel that this aspect needs to be gone into and desire that specific powers may also be provided to the State Governments to deal with such situations.
	The Committee are, however, not satisfied with the view of the Ministry of Power that in case of failure of developer as per provision of Power Purchase Agreement (PPA), lenders will have the option to step in his shoes, to run the plant. The Committee, desire that specific provisions should be made in PPA/LOI as to what action the Government/Regulatory Commission shall be authorized to take in case the promoters of the project fail to perform as per the agreement. The Committee further desire that a report on the status of development of all UMPPs; reasons for delay in their development, if any, and the penalties imposed in case of delays should be furnished to the Committee feel that since the projects will be set up in

	States and State utilities are the procurers of power generated from these projects, there can be a provision in the contract that in case the developer fails to develop the projects as per the provision of PPA, the respective State Governments would be entitled to take over the project and run it and refer the matter to the concerned Regulatory Commission for final settlement.
3.7.8	The UMPPs will be based on super-critical technology. As stated by the Ministry of Power, there are no constraints in the availability of super-critical technology for use in UMPPs as it is used worldwide. The developers can source the equipment from any manufacturer either from abroad or from indigenous manufacturer. BHEL, the only indigenous manufacturer which provides equipment for power sector, has recently made a foray into manufacturing super-critical technology based equipment by entering into collaboration with Alstom and Siemens. The Committee while noting this with satisfaction desire that such collaborations should be suitably encouraged in the future as well. The Committee feel that Government should encourage other indigenous manufacturers/players since BHEL already has its hands full. The Committee, therefore, recommend that some new companies should also be encouraged to be set up or already existing companies be encouraged to enter into joint ventures with foreign manufacturers of super-critical technology – in order to ensure that this technology is easily available in the country.
3.7.9	Development of UMPPs at some sites would involve displacement of the local people. The Committee note that it has been provided in the tender document that every developer will meet the requirement of National Rehabilitation and Resettlement Policy while putting his cost together. The cost of R&R is to be decided by respective State Governments and the same will be borne by the developer. The Committee further note that packages for Sasan and Mundra UMPPs have been finalized by the respective State Governments. However, the Committee note the provision in PPA that any change in R&R package is to be adjusted in tariff under 'Change in Law' in PPA. The Committee feel that this provision can be misused and the major part of R&R expenditure can be adjusted in tariff by the corrupt officials and the developers. Hence, it is suggested that a limit of say 5 to 7% should be placed to which extent the R&R cost can be adjusted in tariff. If the expenditure exceeds this limit, it should be borne by the State Government and the developer. The Committee also desire that for the remaining projects R&R studies should be done in advance as soon as the sites are finalized so that accurate estimates can be given to the developers at the time of bidding itself.

3.7.10	The Committee note that due care has to be taken of the
	environment impact of such large UMPPs. These thermal stations are likely to generate huge amount of ash and large carbon dioxide emissions. The Ministry of Power has stated that since these UMPPs
	shall be using super-critical technology and imported coal with less
	ash content, the environment impact will be duly taken care of. The Committee desire that there should be strict compliance of
	environmental norms and ash disposal should be decided in advance
	of the generation in each case. The Committee further desire that the
	use of fly ash in cement industry, building of roads etc. and other projects should be encouraged.
4.5.8	The Committee observe that development of Ultra Mega Power
	Projects require support and coordination between the various players
	involved i.e, the Central Government, State Governments, PFC, project developers, Consultants, etc. Lack of support from any of
	these players can lead to delay in the development of these projects
	and as such can derail capacity addition programme and, in turn,
	economic growth of the country as envisaged – because power is the
	key driver for any growth agenda set for the country. The Committee further observe with concern that the Ministry of
	Power is facing some problems in finalisation of sites in States such
	as Orisssa, Karnataka and Maharashtra. Though the Ministry has
	stated that the State Electricity Boards and State Companies are involved while the site is selected, the Committee, however, feel that
	the involvement of the State Governments has just been a formality.
	Central Electricity Authority (CEA) which had a major role in
	selection of sites did not seem to have given a serious thought before
	selecting project sites. As stated by the Government of Orissa that the Government of India/CEA had "just intimated" to the State
	Government of indua/CEAY had just intillated to the State Government about the identification of site. It implies that the State
	Government was not involved in identification of site. Similarly, the
	Government of Chhattisgarh has stated that no formal consultations
	with the State Government were held. Regarding the site in Maharashtra, the statement of the Ministry that it was just one of the
	probable sites and not the final one, raises questions as to the manner
	in which the Central Government has gone about the selection of sites
	for the UMPPs. The Committee feel that since the State Governments have better knowledge of the feasibility of making a particular land
	and other resources available for the development of power projects –
	also considering the environmental and other aspects - the State
	Governments should be involved in the development process of
	UMPPs right from the conceptual stage. This, in turn, will ensure that the projects are not unnecessarily held up due to land and other
	related disputes. Further, the sites should be formally announced only
	when the finality in this regard has been reached – after the due
	consultation process – with the respective State Government.

	The Committee understand that in view of the local issues involved in the setting up of UMPP at Tadri, the Central Government is considering certain alternative sites for the purpose which is in line with what the Committee also felt after their visit at the proposed site for UMPP at Tadri. The Committee recommend that the Ministry of Power takes an urgent action in the matter so that the UMPPs can be established both in Maharashtra and Karnataka at the earliest, at the alternative sites.
4.5.9	The Committee observe that water requirement of Sasan UMPP at Madhya Pradesh will be met from the Govindbalab Pant Sagar (Rihand Reservoir). As stated by the Ministry of Power, water used for drinking and irrigation will not be diverted in this case. The Committee further observe that there was some dispute between the Governments of Chattisgarh and Madhya Pradesh regarding the use of water, required for Sasan UMPP in Madhya Pradesh. The Government of Chhattisgarh had objected to the use of water of Rihand reservoir for Sasan project. Thereafter, the Central Water Commission had conducted Inter-State Meetings in which it was decided that "the water requirement of 0.109 million acre feet of UMPP could be met from the share of Rihand water of Madhya Pradesh by curtailing their future requirement of 0.216 million acre feet earmarked for medium irrigation projects." The Committee, therefore, desire that such disputes should be resolved in advance so that the project developer may not have to face any difficulty in availability of water at a later stage. If need be, the concerned States should enter into a written agreement on the use of water for UMPPs, to avoid any controversy in future, which should be then made available to the developer.
4.5.10	The Committee observe that the 'Host States' have demanded a major share from the power allocated from UMPPs in the States. The Ministry while on its part has assured that major allocation of power is made to the host State only, the Committee, however, note that there is no particular formula for allocation of power and it is done on the basis of consensus arrived at in consultation with the State Governments. The Committee feel that it leaves a lot of scope for bias. The Committee recommend that a formula be devised by the Ministry according to which the host State should get a reasonable share of the power generated from UMPP located therein. This formula be devised by taking into consideration various factors like power shortages in the State, status of infrastructure for evacuation of power, etc. The Committee strongly feel that the allocation on the basis of a formula should be completely objective leaving no scope for any grievance from the States. The Committee further want that the involvement of the State Governments should be maintained by

	the Centre in the whole process of development of UMPPs.	
4.5.11	The Committee are concerned to note that the project at Chhattisgarh is being held up because of the demand of 12% free power made by the Government of Chhattisgarh. The Committee understand that there is no policy regarding giving free power to the Host States from the thermal projects as is the case with the hydro projects. The Committee desire that this point should be impressed upon all the Host States and Chhattisgarh in particular. The delay on account of demand of the Chhattisgarh Government is disheartening. The Committee desire that the matter be taken up with the State Government and the issue be resolved at the earliest. The Committee note that any demand for free power by State would have to be borne by the electricity consumers by way of increased tariff. This may even make the project economically unviable and uncompetitive leading to dropping of the project. The Committee desire that these facts should be clearly brought to the notice of the States which are demanding free power from UMPPs.	
4.5.12	The Committee observe that projects at Karnataka and Maharashtra have been held up due to some objections from the local people of the area. The people of Tadri in Karnataka are against the development of Ultra Mega Project there because of this being an ecologically sensitive area and also in view of the fact that this area already has four hydroelectric power plants and one nuclear plant. The local people also have a fear of losing their livelihood. Now the Government of Karanataka has constituted an Expert Committee on 28.05.2006 consisting of MP, MLAs and other stakeholders, PFC and Government of Karnataka KPCL, etc. to examine various issues involved. In one of the meetings of the Committee, it is learnt that CEA / PFC/Government of Karnataka had proposed that a study be carried out to assess impact of the power plant on the environment by a reputed consultant. However no decision in this regard has so far been taken. The Committee desire that the Expert Committee expedite the process so that clear picture in regard to the development of project emerges. The Committee feel that engaging a consultant to carry out a study, as proposed by CEA / PFC/Government of Karnataka should also be considered by the Expert Committee. In case if it comes out that the development of power project will have an adverse effect on the environment, an alternative site be finalised at the earliest. Similarly in case of Maharashtra where the local people have raised certain environmental issues relating to the growing of Alphanso Mangoes, the Committee desire that the consultant appointed for carrying out environment studies should submit its report at the earliest. Considering the importance of these	

projects, the Committee strongly recommend that these projects		
should not be unduly held up and finalised at the earliest in the larger		
interest of the country.		
The Committee also desire that before announcing any site for		
UMPP, it should be ensured that there is a broad consensus amongst		
the various stakeholders for a particular site. The cases of generation		
of opposition after the announcement of sites as that of Tadri in		
Karnataka and Girye in Maharashtra should not be allowed to		
happen. The Committee desire that all the local issues should be		
decided in advance by State Governments, before offering a site to set		
up UMPP.		

# MINUTES OF THE 22<sup>ST</sup> SITTING OF THE STANDING COMMITTEE ON ENERGY (2005-06) HELD ON 2<sup>nd</sup> AUGUST, 2006 IN COMMITTEE ROOM 'D', PARLIAMENT HOUSE ANNEXE, NEW DELHI

The Committee met from 1500 hours to 1700 hours.

## PRESENT

Shri Gurudas Kamat - Chairman

## **MEMBERS**

# Lok Sabha

- 2. Shri Gauri Shankar Chaturbhuj Bisen
- 3. Shri B.Vinod Kumar
- 4. Shri Dharmendra Pradhan
- 5. Shri Prashanta Pradhan
- 6. Shri Rabindra Kumar Rana
- 7. Shri J.M. Aaron Rashid
- 8. Shri Kiren Rijiju
- 9. Shri M.Shivanna
- 10. Shri Vijayendra Pal Singh
- 11. Shri M.K. Subba
- 12. Shri E.G. Sugavanam
- 13. Shri Tarit baran Topdar

# Rajya Sabha

- 14. Shri Vedprakash P.Goyal
- 15. Shri Bimal Jalan
- 16. Dr. K. Kasturirangan
- 17. Shri V. Hanumantha Rao
- 18. Shri Motilal Vora
- 19. Shri Jesu Dasu Seelam

# SECRETARIAT

- 1. Shri P.K. Bhandari, Joint Secretary
- 2. Shri B.D. Swan, Deputy Secretary
- 3. Shri Shiv Kumar, Under Secretary

#### **WITNESSES**

#### MINISTRY OF POWER

1.	Shri R.V. Shahi	Secretary (Power)
2.	Shri Ajay Shankar	Addl. Secretary
3.	Shri U.N. Panjiar	Addl. Secretary
4.	Shri Harish Chandra	Joint Secretary
5.	Shri G.B.Pradhan	Joint Secretary
6.	Shri Arvind Jadhav	Joint Secretary
7.	Shri A.K. Kutty	Joint Secretary
8.	Shri Mrutunjay Sahoo	Joint Secretary
09.	Shri Rakesh Nath	Chairperson, Central Electricity Authority
10.	Dr. V.K. Garg	CMD, Power Finance Corporation
11.	Shri Anil Kumar Lakhina	CMD, Rural Electrification Corporation

2. At the outset, the Chairman welcomed a delegation from Karnataka led by Shrimati Margret Alva, Secretary of Ministry of Power and other officials accompanying him to the sitting of the Committee & apprised them of the provision of Direction 58, of Directions by the Speaker.

3. Thereafter, the Committee heard the grievances of the delegation from Karnataka on the proposed site of Ultra Mega Power project at Tadadi in Karnataka. They expressed their apprehensions regarding the development of power project at the proposed site due to many reasons which *interalia* includes, fear of losing their livelihood (as the area has rich paddy fields and is also the best for the fisheries) and non - provision of satisfactory alternate employment, adverse impact on the environment of the ecologically important area and tourism as also non – preferential treatment given to the people of the district with respect to the

power generated from the power projects already located in the district. The Committee were informed that in addition to the four hydroelectric projects and one nuclear power project, this was going to be the sixth power plant in the same district. The delegation also submitted a written memorandum to the Committee to this effect and also invited the Committee to have an on – the – spot study visit of the proposed site for the Ultra Mega Power Project. The delegation wanted this proposed project to be shifted to another more viable area in the State after proper study.

# The delegation then withdrew.

4. Thereafter, the officials of Ministry of Power gave a powerpoint presentation on 'Ultra Mega Power Projects'. It was followed by discussion with them. The following points *interalia* came up for detailed discussion:-

- (i) Share of the concerned States in the power generated by Ultra Mega Power Projects.
- (ii) Environmental impact of these power projects.
- (iii) Criteria for adopting a particular model by the Government regarding developing these power projects.
- (iv) Issues involved in the availability of imported coal.
- (v) Cost at each stage of the development of these projects.

5. The members raised some other queries also which were answered by the representatives of the Ministry of Power.

6. A copy of the verbatim proceedings of the sitting of the Committee has been kept on record.

The Witnesses then withdrew. The Committee then adjourned.

# MINUTES OF THE SECOND SITTING OF THE STANDING COMMITTEE ON ENERGY (2006-07) HELD ON 2<sup>nd</sup> NOVEMBER, 2006 IN COMMITTEE ROOM NO.'139', PARLIAMENT HOUSE ANNEXE, NEW DELHI

The Committee met from 1500 hours to 1615 hours.

# PRESENT

Shri Motilal Vora - In the chair

# MEMBERS

# Lok Sabha

- 2. Shri Kailash Baitha
- 3. Shri Gaurishanker Chaturbhuj Bisen
- 4. Sardar Sukhdev Singh Libra
- 5. Shri Sanat Kumar Mandal
- 6. Shri Dharmendra Pradhan
- 7. Dr. Ravindra Kumar Rana
- 8. Shri Kiren Rijiju
- 9. Shri E.G. Sugavanam
- 10. Shri Tarit Baran Topdar
- 11. Shri Kailash Nath Singh Yadav

# <u>Rajya Sabha</u>

- 12. Shri Sudarshan Akarapu
- 13. Shri Bimal Jalan
- 14. Dr. K. Kasturirangan
- 15. Shri Syed Azeez Pasha
- 16. Shri V. Hanumantha Rao

#### SECRETARIAT

- 1. Shri P.K. Bhandari, Joint Secretary
- 2. Shri B.D. Swan, Deputy Secretary

## **WITNESSES**

## **Ministry of Power**

1.	Shri R.V. Shahi	Secretary (Power)
2.	Shri Ajay Shankar	Addl. Secretary
3.	Shri U.N. Panjiar	Addl. Secretary
4.	Shri Harish Chandra	Joint Secretary
5.	Shri A.K. Kutty	Joint Secretary
6.	Shri Mrutunjay Sahoo	Joint Secretary
7.	Shri Rakesh Nath	Chairperson, CEA
8.	Dr. V.K. Garg	CMD, PFC

2. In the absence of the Chairman, the Committee chose Shri Motilal Vora, a Member of the Committee, under Rule 258 of the Rule of Procedure and Conduct of Business in Lok Sabha to act as Chairman for the sitting. The Chairman, welcomed the representatives of the Ministry of Power to the sitting of the Committee and apprised them of the provisions of Direction 58 of the Directions by the Speaker.

3. The officials of Ministry of Power gave a powerpoint presentation on the subject "Ultra Mega Power Project" which was followed by discussion. The following points were covered in the discussion:-

- (vi) Issues involved in choosing the sites for development of Ultra Mega Power projects.
- (vii) Arrangements made by the Government regarding availability of water for use at various sites.
- (viii) Rehabilitation and resettlement policy of the Government relating to Ultra Mega Power Projects.
- (ix) Issues involved in the import of coal for coastal power projects..
- (x) Power Tariff from these Projects.
- (xi) Use of super-critical technology in the development of these Projects.

- (xii) Environmental impact of these Projects in terms of emission of carbondioxide.
- (xiii) Provision of buyback in the terms and conditions relating to the projects in case they are found to be non-performing/under performing.
- (xiv) Issue of allowing competition throughout instead of allowing only at the initial stage.
- (xv) Role of hydel projects under 'Ultra Mega Power Projects'

4. The members raised some other queries also which were answered by the representatives of the Ministry of Power.

5. A copy of the verbatim proceedings of the sitting of the Committee has been kept on record.

(The Witnesses withdrew and the Committee then adjourned.)

# MINUTES OF THE 11<sup>TH</sup> SITTING OF THE STANDING COMMITTEE ON ENERGY (2006-07) HELD ON 14<sup>th</sup> MAY, 2007 IN COMMITTEE ROOM 'D', PARLIAMENT HOUSE ANNEXE, NEW DELHI

The Committee met from 1500 hours to 1700 hours.

# PRESENT

Shri Gurudas Kamat - Chairman

## **MEMBERS**

#### Lok Sabha

- 2. Shri Kailash Baitha
- 3. Prof. Chander Kumar
- 4. Sardar Sukhdev Singh Libra
- 5. Shri Sanat Kumar Mandal
- 6. Shri Dharmendra Pradhan
- 7. Dr. Ravindra Kumar Rana
- 8. Shri Vijayendra Pal Singh
- 9. Shri M.K. Subba
- 10. Shri Tarit Baran Topdar
- 11. Shri Chandra Pal Singh Yadav

# Rajya Sabha

- 12. Dr. (Smt.) Najma A.Heptulla
- 13. Shri Jesudasu Seelam
- 14. Shri Veer Pal Singh Yadav

#### SECRETARIAT

- 1. Shri P.K. Bhandari, Joint Secretary
- 2. Shri J.S. Chauhan, Deputy Secretary
- 3. Shri Shiv Kumar, Deputy Secretary

# **WITNESSES**

# **Ministry of Power**

1.	Shri Anil Razdan	Secretary (Power)
2.	Shri Harish Chandra	Senior Advisor
3.	Shri Anil Kumar	Addl. Secretary
4.	Shri Ashok Kumar Khurana	Addl. Secretary
5.	Shri G.B. Pradhan	Joint Secretary
6.	Shri Mrutunjay Sahoo	Joint Secretary
7.	Shri A.K. Kutty	Joint Secretary
8.	Shri J.S. Kawale	Joint Secretary
9.	Shri Rakesh Nath	Chairperson, CEA
10.	Dr. V.K. Garg	CMD, PFC

2. At the outset, the Chairman welcomed the representatives of the Ministry of Power to the sitting of the Committee and apprised them of the provisions of Direction 58 of the Directions by the Speaker.

3. The officials of Ministry of Power gave a powerpoint presentation on the subject "Ultra Mega Power Project" which was followed by a discussion thereon. The following points were inter alia covered in the discussion:-

- Provision of penalty clause in case of delays in the development of UMPPs.
- ii) The time-schedule for the development/completion of UMPPs.
- iii) Fuel linkages for these projects.
- iv) Concessions sought by the host States, where these projects are to be located.
- v) Delay in the award of Sasan UMPP.

vi) Role of Central Electricity Regulatory Commission and the State Electricity Regulatory Commission in fixation of tariff for UMPPs.

4. A copy of the verbatim proceedings of the sitting of the Committee has been kept on record.

(The Witnesses withdrew and the Committee then adjourned.)

# MINUTES OF THE 2<sup>ND</sup> SITTING OF THE STANDING COMMITTEE ON ENERGY (2007-08) HELD ON 1<sup>st</sup> OCTOBER, 2007 IN COMMITTEE ROOM 'B', PARLIAMENT HOUSE ANNEXE, NEW DELHI

The Committee met from 1200 hours to 1300 hours.

# PRESENT

Shri Gurudas Kamat - Chairman

# **MEMBERS**

# Lok Sabha

- 1. Shri Kailash Baitha
- 2. Shri Gauri Shankar Chaturbhuj Bisen
- 3. Shri Mohan Jena
- 4. Prof. Chander Kumar
- 6. Sardar Sukhdev Singh Libra
- 7. Shri Sanat Kumar Mandal
- 8. Shri Dharmendra Pradhan
- 9. Dr. Ravindra Kumar Rana
- 10. Shri Kiren Rijiju
- 11. Shri Vijayendra Pal Singh
- 12. Shri Tarit Baran Topdar
- 13. Shri Chandra Pal Singh Yadav

# <u>Rajya Sabha</u>

- 14. Shri Sudarshan Akarapu
- 15. Shri Bimal Jalan
- 16. Dr. K. Kasturirangan
- 17. Shri Sayed Azeez Pasha
- 18. Shri Jesudasu Seelam
- 19. Shri Motilal Vora
- 20. Shri Veer Pal Singh Yadav

#### SECRETARIAT

- 1. Shri P.K. Bhandari, Joint Secretary
- 2. Shri J.S. Chauhan, Deputy Secretary
- 3. Shri Shiv Kumar, Deputy Secretary
- 4. Smt. Juby Amar, Under Secretary

At the outset, the Chairman Standing Committee on Energy welcomed the members to the sitting of the Committee.

2. The Committee then took up for consideration the draft 22<sup>nd</sup> Report on the subject "Ultra Mega Power Projects" pertaining to the Ministry of Power.

3. The Committee adopted the draft Report with minor additions/amendments as suggested by the Members of the Committee.

4. The Committee also authorized the Chairman to finalise the Report after incorporating the changes suggested by the Members of the Committee and also by making conesquential changes arising out of factual verification, if any, by the Ministry of Power and also to present the same to the Hon'ble Speaker, Lok Sabha.

5. The issue of power trading by States in the context of power to be generated by UMPPs and the role of CERC in this regard also came in for focused discussion. It was, however, decided that this issue might be taken up separately by the Committee for which CERC may also be called for oral evidence.

The Committee then adjourned.