

**Government of India
Ministry of Power**

ULTRA MEGA POWER PROJECTS

1. Background

Government of India through Ministry of Power launched the initiative of Ultra Mega Power Projects (UMPPs) i.e. 4,000 MW super thermal power projects (both pit head and imported coal based) in November 2005 with the objective to develop large capacity power projects in India. Power Finance Corporation Ltd (PFC) has been appointed as the Nodal Agency to facilitate the development of these projects. Various inputs for the UMPPs are tied up by the Special Purpose Vehicle (SPV) with assistance of Ministry of Power & Central Electricity Authority (CEA). CEA is involved in selection of sites for these UMPPs.

2. Role of the Ministry of Power

The Ministry of Power is playing a crucial role for the development of the UMPPs by coordinating between various concerned Ministries/Agencies of the Central Government, and with various State Governments/Agencies. Some of the key areas requiring the Ministry of Power's intervention include :-

- Coordination with Central Ministries/Agencies for ensuring:
 - Coal block allotment/coal linkage
 - Environment/forest clearances
 - Water linkage
- Required support from State Governments and their agencies.
- Working out allocation of power to different States from UMPPs in consultation with the States. Facilitating PPA and proper payment security mechanism with State Governments/State Utilities. Monitoring the progress of the SPVs with respect to predetermined timelines.

3. Salient features

3.1. The Ultra Mega Power Projects would use Super Critical Technology with a view to achieve higher thermal efficiency, which results in fuel saving and lower greenhouse gas emissions.

3.2. Flexibility in unit size subject to adoption of specified minimum Supercritical parameters.

3.3. Integrated power project with dedicated captive coal blocks for pithead projects.

4. The Bidding Process

For these projects, as per the provisions of the competitive bidding guidelines, a two stage selection process has been adopted. The first stage of bidding involves Request for Qualification (RfQ) containing qualifying criteria for selection of bidders. The RfQ documents submitted by the bidders are evaluated to identify those bidders who will be eligible to participate in the second stage of the process. The second stage of the bidding process invites Request for Proposals (RfP) from the bidders so qualified. After evaluation of the RfP documents, the successful bidder is identified on the basis of the lowest levelled tariff.

5. Selection of Sites for Setting up of UMPPs

Originally nine such projects had been identified to be taken up, 4 at pithead and 5 at coastal locations. Later few more sites are identified on the requests of the State Governments. CEA/ PFC examine the suitability of location in consultation with the States.

6. Concept of Special Purpose Vehicles (SPVs)

PFC is the nodal agency for the development of these projects. As per the proposed provisions of the Standard Bidding Documents (SBDs), the Ultra Mega Power Project (UMPP) would be executed through a two Special Purpose Vehicle (SPV) structure.

- (i) Operating SPV:** To obtain all the statutory clearances & approvals and carry out the bidding process for the project. This SPV at present held by PFC would be transferred to Selected Bidder. at the end of the bidding process.
- (ii) The Infrastructure SPV:** The captive coal block, the total coal block land along with the land required for the construction of the Power Station and corridor shall be held in the name of the Infrastructure SPV. The Infrastructure SPV at present held by PFC shall be transferred to the Procurers at the end of the bidding process and the land required for the Power Station shall be leased by the Infrastructure SPV to the Operating SPV/Seller. Further, the Infrastructure SPV shall enter into an appropriate agreement with the Operating SPV and appoint the Operating SPV as the Mine Development Operator, so as to enable it, to carry on the mine development operations in the allocated Captive Coal Block Land and utilize the coal mined therein exclusively for the purpose of the Project.

PFC sets up separate two Special Purpose Vehicles (SPVs) for each UMPPs to act as authorized representatives of the procurers (distribution companies of the power procuring States).

The SPVs are responsible for carrying out various activities on behalf of the procurers. Completion of these activities prior to award of the project is considered

necessary to enhance the investor's confidence, reduce risk perception and get a good response to the competitive bidding process. Some of the main activities undertaken by the SPVs are:-

- Appointment of Consultants to undertake preparation of Project Report, preparation of Rapid Environment Impact Assessment Report etc.
- Appointment of Consultants for International Competitive Bidding (ICB), document preparation & evaluation
- To carry out bidding process and award of project
- Initiation of land acquisition process for the project
- Allocation of Coal blocks for pit-head projects
- Getting clearance regarding allocation of water by the State Govt. for pithead locations
- Approval for use of sea water from Maritime Board/ other Govt. Agencies for coastal locations
- Obtain clearance from the State Pollution Control Board, initiate forest clearance etc. as are required for the project and for the coal mines, followed by environment and forest clearances from the Central Government.
- Obtaining geological reports/ other related data from CMPDI for the coal blocks.
- Tie up the off-take/ sale of power

7. Role of States

7.1 From the initial step to the final commissioning of the UMPPs, the role of concerned State Governments is of immense importance. In fact, no major activity can be started without a clear identification of a suitable site by the State Government concerned (including water linkage in case of a pit head project).

7.2 After the site identification, the host State and the other power procuring States are required to continue to play a highly pro-active role. In particular, some of the activities in which the concerned States are required to play a decisive role include implementation of the R&R Plan, provide authorization to the PFC/SPV to carry out the bidding process on behalf of the distribution utilities, participate through its representatives in various committees set up for undertaking the competitive bidding process, facilitate signing of the Power Purchase Agreement, ensure proper payment security mechanism with the distribution utilities etc.

8. Status of Ultra Mega Power Projects (UMPPs)

Initially following nine (9) numbers Ultra Mega Power Projects (UMPPs) were proposed to be set up in different states:

- i) Sasan Ultra Mega Power Project in M.P- coal pithead
- ii) Mundra Ultra Mega Power Project in Gujarat- coastal
- iii) Krishnapatnam Ultra Mega Power Project in A.P.- coastal
- iv) Ultra Mega Power Project in Jharkhand- coal pithead
- v) Ultra Mega Power Project in Chhattisgarh- coal pithead
- vi) Ultra Mega Power Project in Odisha - coal pithead
- vii) Ultra Mega Power Project in Tamil Nadu ...coastal
- viii) Ultra Mega Power Project in Maharashtra- coastal
- ix) Ultra Mega Power Project in Karnataka - coastal

In addition to nine UMPPs originally identified, request has come from some of the state governments for installation of additional UMPPs in their states. These are given below:

- i) Two Additional UMPPs in Odisha
- ii) Second UMPP in Gujarat
- iii) Second UMPP in Jharkhand –Deoghar UMPP
- iv) Second UMPP in Tamil Nadu
- v) UMPP in Bihar
- vi) Beside these, CEA and PFCCL are under discussion with Govt. of Uttar Pradesh for identification of land for proposed UMPP at Uttar Pradesh. Site at Etah has been tentatively identified.

Details of UMPPs initially identified:

A brief detail of these projects is as below:

Out of above originally identified nine (9) UMPPs, four UMPPs namely Sasan in Madhya Pradesh, Mundra in Gujarat, Krishnapatnam in Andhra Pradesh and Tilaiya in Jharkhand have already been awarded to the successful bidders and are at different stage of development. For Tilaiya UMPP, the developer, Jharkhand Integrated Power Ltd (JIPL), a subsidiary of Reliance Power Limited (RPL), has issued notice of termination of Power Purchase Agreement (PPA) on 28.4.2015 citing non transfer of land to the developer by Jharkhand Government. Jharkhand UrjaVikas Nigam Ltd. vide letter dated 19.06.2018 informed that JIPL has been taken over from RPL.

For UMPP in Chhattisgarh, RfQ issued on March 2010 was withdrawn due to coal blocks falling in inviolate area. Government of Chhattisgarh had intimated that they were not keen on setting up of 4000 MW Chhattisgarh UMPP. Accordingly, Chhattisgarh UMPP has been closed.

For UMPP in Maharashtra, project has been closed as of now due to resistance by local people.

For Karnataka UMPP, State Govt. has identified a suitable site in Niddodi village of Mangalore talukaDakshina Kannada District. Ministry of Power has sought decision of Govt. of Karnataka whether they are willing to set up UMPP or not. Response is awaited.

For Odisha UMPP and Cheyyur UMPP, Tamil Nadu, a fresh bid would be issued after finalization of Standard Bidding Documents (SBDs). The SBDs are under finalization.

Awarded UMPPs

Mundra in Gujarat: The project was handed over to the Successful Bidder i.e. Tata Power Company Ltd., on 23.04.2007 at the evaluated levelised tariff of Rs. 2.26367/kWh. Mundra UMPP is fully commissioned.

Sasan in Madhya Pradesh: The project was handed over to the Successful Bidder i.e. M/s Reliance Power Ltd., on 07.08.2007 at the evaluated levelised tariff of Rs. 1.19616/kWh. Sasan UMPP is fully commissioned.

Krishnapatnam in Andhra Pradesh: The project was handed over to Reliance Power Ltd. on 29.01.2008 at the levelised tariff of Rs. 2.33/kWh. The developer has stopped work at site, citing new regulation of coal pricing in Indonesia. Lead Procurer has issued termination notice to the developer. The case is subjudice.

Tilaiya in Jharkhand: The project was handed over to M/s Reliance Power Ltd. (RPL) on 07.08.2009 at an evaluated levelised tariff of Rs. 1.770 per kWh. The developer, Jharkhand Integrated Power Ltd (JIPL), a subsidiary of Reliance Power Limited (RPL), has issued notice of termination of Power Purchase Agreement (PPA) on 28.4.2015 citing non transfer of land to the developer by Jharkhand Government. Jharkhand UrjaVikas Nigam Ltd. vide letter dated 19.06.2018 informed that JIPL has been taken over from RPL.

UMPPs under Implementation:-

- **Cheyur UMPP:** The site at Cheyyur in Kanchipuram district in Tamil Nadu has been identified along with captive port at Panaiyur village. Request for Qualification (RfQ) and Request for Proposal (RfP) issued in 2013 were withdrawn. Standard Bidding documents (SBDs) for UMPPs are being reviewed by Expert Committee constituted under the Chairmanship of Shri PratyushSinha, former CVC. The SBDs are under finalization. A fresh bid would be issued after finalization of SBDs. However, recently Ministry of Power is examining the possibility of setting up Cheyyur UMPP on domestic coal instead of imported coal. For setting up of this UMPP on domestic coal, additional land of about 767 acres for Ash Dyke area would be required. Power Finance Corporation has taken up the matter of identification of additional land for Cheyyur UMPP with the Govt. of Tamil Nadu. Ministry of Coal has been requested to identify the suitable coal blocks.
- **Odisha UMPP:** The site for this UMPP is in village Bedabahal in Sundergarh district. RfQ and RfP issued in 2013 were withdrawn. Standard Bidding documents (SBDs) for UMPPs are being reviewed by

Expert Committee constituted under the Chairmanship of Shri PratyushSinha, former CVC. The SBDs are under finalization. A fresh bid would be issued after finalization of SBDs.

- **Bihar UMPP:** A site at Kakwara in Banka Distt has been identified for setting up of UMPP in Bihar. Infrastructure Special Purpose Vehicle (SPV) namely Bihar Infrapower Limited has been incorporated on 30.06.2015. Operating SPV namely Bihar Mega Power Limited (BMPL) has been incorporated on 09.07.2015. Coal blocks are to be allocated by Ministry of Coal. Min of Power has also requested MoC to expedite firm allocation of enlarged Pirpainti/Barahat coal blocks (with an additional area of 3.2 sq. km) to Bihar Infrapower Ltd., Infra SPV.
- **Deoghar UMPP in Jharkhand:** A site at Husainabad, Deoghar Distt has been identified for setting up of 2nd UMPP in Jharkhand. Operating SPV namely Deoghar Mega Power Ltd and Infrastructure SPV namely Deoghar Infra Limited have been incorporated on 26.4.2012 and 30.06.2015 respectively.

Scarcity of water for Deoghar UMPP is under consideration for some time. Various options viz water from Ajay River Basin, Air Cooled Condenser Technology (ACCT) and Water from Ganga River Basin have been considered and taken up with the Government of Jharkhand.

Ultra Mega Power Projects in various stages of planning:

- (i) 2ndUMPP in Odisha: Site at Bijoyapatna in Chandbali Tehsil of Bhadrak district has been identified.
- (ii) 3rdUMPP in Odisha: Site at Narla&Kasinga sub division of Kalahandi district has been identified. Ministry of Power has sought decision of Govt. of Odisha whether they are willing to set up UMPP or not. Response is awaited.
- (iii) UMPP in UP: A UMPP in Uttar Pradesh is also in consideration. Land has been tentatively identified at Etah district.