



**TELANGANA STATE ELECTRICITY REGULATORY COMMISSION**  
**5<sup>th</sup> Floor, Singareni Bhavan, Red Hills, Hyderabad-500 004**

**O.P.No.01 of 2016**

Dated 27.01.2016

Present

Sri Ismail Ali Khan, Chairman  
Sri H.Srinivasulu, Member  
Sri L.Manohar Reddy, Member

**In the matter of Adoption of tariff u/s 63 – competitive bidding process - DBFOO method by the Southern Power Distribution Company of Telangana State Ltd (TSSPDCL) and the Northern Power Distribution Company of Telangana State Ltd (TSNPDCL) – M/s.TPCIL - Reg.**

**ORDER**

The Southern Power Distribution Company of Telangana State Ltd (TSSPDCL) represented by its Chief General Manager (Comml), Hyderabad, as the lead procurer on behalf of TSDICOMS, has submitted a proposal for procurement of 1000 MW power on Long Term basis for a period of 8 years from the power projects situated within the Southern Region (SR) under the short notice tender vide his Letter No.303, dated 14.05.2015.

2. In the aforesaid letter, TSDISCOMS have anticipated a significant growth in energy demand as a result of the following developments in the State of Telangana:
- (a) Ensuring 24 x 7 hours supply to all categories of consumers except agricultural consumers.
  - (b) Increase in supply hours to agriculture category from the present six hours to nine hours from Financial Year 2016-17.
  - (c) Increase in supply hours to Rural domestic households from the present fifteen hours to twenty four hours from financial year 2016-17.

- (d) Upcoming major projects such as Bayyaram Steel Plant, Water Grid (Supply) Projects, etc.
- (e) Upcoming new Lift Irrigation schemes.

3. Owing to year on year load growth of 8% to 12% arrived by the Planning Wings of TSDISCOMs and TSTRANSCO, there is a projected peak shortfall of power ranging from 2865 MW to 3928 MW in the State of Telangana for the next 8 years, even after considering the ongoing capacity additions from upcoming projects.

4. Considering the significant growth in the demand and energy, it is ascertained that the existing sources of generation are not sufficient to meet such a demand. TSDISCOMS informed that the power supply position is expected to be eased out by FY 2023-24. By that time, the planned projects of TSGENCO are expected to be commissioned. Hence, to cater to the anticipated load growth, TSDISCOMs have estimated that the immediate power purchase requirement on a long term basis is in the order of 1000 MW starting from FY 2015-16.

5. At the behest of the Commission, a presentation was made by the TSDISCOMs, wherein it was brought to the notice of the Commission that there is a transmission corridor constraint from North East Western Grid (NEW) to Southern Region (SR) Grid because of which the proposal is made to procure the power from the existing plants located in the Southern Region. Further, the power plants in Southern Region are by and large are based on the blended coal i.e., domestic coal supplemented with imported coal to the extent of 40%.

6. Considering the above aspects, TSDISCOMs have requested the Commission to accord in-principle approval for procurement of 1000 MW on Long Term basis for eight years from within the Southern Region under the DBFOO model notified by the Ministry of Power, Government of India with the exception of a reduced time frame for the procurement process.

7. The Commission, after careful consideration of the facts and in exercise of the powers conferred on it u/s 86 (1) (b) of the Electricity Act, 2003 vide letter dated 26.05.2015, has approved in-principle the proposal to procure 1000 MW power on a Long term basis strictly as per the standard bidding documents under the Design,

Build, Finance, Own and Operate (DBFOO) model as notified by the Ministry of Power, Government of India.

8. In view of the non-availability of power from the Hinduja Power Plant, the Damodar - Sanjeevaya Power Plant, non-availability of corridor from NEW Grid to SR Grid and to mitigate the shortage of power supply from the existing power plants, the Distribution Licensee, vide its letter dated 02.06.2015, further requested for approval of certain deviations to the Request For Qualification (RFQ) document of Standard Bidding Documents (SBDs) on the following aspects:

- (i) A reduced time line for ensuing the bid process and supply of power at the earliest possible date;
- (ii) Only the power stations located in Southern Region shall be eligible for participation in the competitive bidding process;
- (iii) The power projects which are in advance stage of commissioning shall only be eligible to participate on production of documentary evidence in respect of their readiness to supply power on demand; and
- (iv) Indicative fuel charge may be omitted in the RFQ stage and be included in the Request For Proposal (RFP) stage.

The Commission has approved the above deviations, vide its letter dated 09.06.2015.

9. After completion of the RFQ stage in the bid process, the TSSPDCL, as the lead procurer, further requested for certain deviations in the Model RFP and Power Supply Agreement (PSA) documents vide its letter dated 17.08.2015. Based on its request, the Commission vide letter dated 25.08.2015, had sought certain clarifications stated therein and in response the TSSPDCL submitted a report vide its letter dated 27.08.2015. Based on the report, the Commission vide letter dated 28.08.2015 directed the TSSPDCL to make a power point presentation before the Commission on 29.08.2015 for further clarifications and during the course of presentation certain suggestions were given by the Commission for procuring the power under the DBFOO method.

10. After incorporating the suggestions given by the Commission, the TSSPDCL vide its letter dated 02.09.2015, submitted a draft RFP & PSA documents duly incorporating certain deviations and customising to the requirements of TSDISCOMs.

The Commission after taking into consideration the changes suggested in the draft RFP & PSA in relevant clauses, vide its letter dated 02.09.2015, approved the deviations with the following stipulations:

- (a) To verify the landed cost of the imported fuel vis-à-vis the landed cost of additional fuel (from Domestic sources) and a provision for taking the consent of Discoms (utility) every month before using the imported coal for ensuring that use of high cost imported fuel is reduced to the minimum required level.
- (b) In case of shortage of concessional fuel, the same principle as stated above shall be followed while allowing use of imported/additional fuel or to allow the deemed availability of the plant for recovery of fixed cost by the supplier.
- (c) TSDISCOMs have to draft the PSA in such a manner that Force Majeure clause is not operative in case of shortage of imported fuel upto 40% so as to dissuade the supplier from claiming the benefit of deemed availability.
- (d) The Commission advised the TSDISCOMs to limit the claim on transportation charges, irrespective of the mode(s) of transport to 100% of normal Railway Freight Charges instead of 110% proposed in the draft PSA.

11. The TSSPDCL, being the lead procurer, requested the Commission to approve or adopt the negotiated tariff as quoted by M/s. Thermal Powertech Corporation India Limited (hereinafter referred to as 'TPCIL'), in its letter dated 13.01.2016 and also submitted the bid documents subsequently u/s 63 of the Act, 2003.

12. The Commission examined the bid process and the documents submitted by the TSSPDCL. The Commission has considered it to be desirable to examine the following issues before adoption of the tariff quoted by TPCIL u/s 63 of the Act, 2003 as recommended by the TSSPDCL:

- (i) After evaluation of the bid documents in the RFQ stage, only a single bidder was qualified and was allowed for submission of the RFP document.
- (ii) Justification of tariff offered by the single bidder.

13. Coming to the single bidder, the Commission has noticed that only one bidder was qualified in the evaluation process of the qualification (RFQ Stage) of bidding,

although five (5) bids were received in response to the RFQ stage, in accordance with the terms & conditions notified in the RFQ document. Accordingly, the qualified bidder, M/s. TPCIL submitted the RFP document in which it had offered the tariff comprising of fixed cost and variable cost per unit for a Net capacity of 570 MW.

14. Before adopting the tariff emerging from a single qualified bidder, the Commission has examined the provisions of the Electricity Act, 2003, Guidelines issued by the Ministry of Power, Govt. of India and the powers conferred on it to address the larger public interest, in particular prevailing acute power deficit arising from the bifurcation of the State and location of the power generating companies and corridor constraints. Section 63 starts with a non-obstante clause by excluding the provisions of Section 62. A Distribution Licensee has to procure the power in a transparent process by following the guidelines issued by the Ministry of Power, Govt. of India. Thus, Section 63 stipulates that a Distribution Licensee has to mandatorily follow the bidding process for procuring the power in accordance with the guidelines u/s 63. The Commission is of the view that the bidding process adopted by the lead procurer is transparent in the facts and circumstances of the case and prevailing power position in the territory of Telangana.

(b) The Commission has examined the clause 5.7 of Case-I bidding document of Ministry of Power Resolutions dated 19.01.2005 and also considered the changes made by the Ministry of Power from time to time to the DBFOO model and in particular, the change made in year 2015. The Commission is of the view that the Case-I bidding and the DBFOO model are conceptually same for Long term case bidding with certain modifications. In the facts and circumstances of the case, the Commission is empowered to accept a single qualified bidder in the modified DBFOO model provided the emerging tariff is just and reasonable. The power being a necessity in the modern economy and after careful consideration of the facts and circumstances and in exercise of its powers under Section 86 (1) (b), the Commission has already approved certain modifications sought by the lead procurer in RFQ, RFP & PSA documents.

15. On examination by the Commission, it is found that the bidding process has been carried out in a transparent manner i.e., by publishing in four Daily Newspapers having wide circulation on 16-05-2015. In response to RFQ bid, five (5) bids were received and these bids were evaluated for qualifying the bidders as per the provisions

contained in the RFQ document which resulted in the qualification of a single bidder who has been allowed to submit the RFP document.

16. The Commission noticed that there is a great urgency in procuring the power in the larger public interest, *inter alia*, on the following grounds:

- (a) 9 hours power supply to agriculture sector during the day time to all consumers at a time;
- (b) 24 / 7 hours supply to all consumers in the State except agriculture;
- (c) drinking water supply to all the villages under the unique Water Grid scheme for the entire State;
- (d) power to the new upcoming Lift Irrigation schemes; and
- (e) continuous power supply to the new industries for the development of the State under the Telangana State Industrial Project Approval and Self Certification System (TS-IPASS) which has been announced by the Government of Telangana owing to which there shall be an increase of demand and energy from FY 2015-16.

17. In order to meet the rapid increase in demand and energy, the Commission has accorded permission to TSDISCOMS to procure the power on Long term basis for a period of eight years under the DBFOO method with the short notice tender duly approving the necessary deviations required in RFQ, RFP & PSA documents to meet the challenging situation of managing the power demand in the State.

18. After considering the totality of facts after examining the bid process carried out in a transparent manner u/s 63 and as per the SBD documents, the Commission hereby permits the single bidder who has been found to be eligible in the process of evaluation of RFQ bid documents and for submission of the RFP document.

19. Coming to the tariff offered by the bidder in the proposal for adoption of the tariff u/s 63, the lead procurer stated that M/s. TPCIL has offered a capacity of 570 MW (net) under the RFP document and quoted the tariff of Rs.4.35 / kWh which consists of fixed cost & variable cost as under:

Fixed Cost Rs. 2.84 / kWh  
Variable cost Rs. 1.51 / kWh  
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Total tariff Rs. 4.35 / kWh  
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20. The lead procurer also stated that it had a multiple rounds of negotiations with M/s. TPCIL and after negotiations the final tariff offered is a sum of Rs. 4.15 per kWh after a reduction of Rs. 0.20 per kWh. After negotiations, the final Fixed and Variable cost are as follows:

Fixed cost Rs. 2.64 / kWh  
Variable cost Rs. 1.51 / kWh  
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Total tariff Rs. 4.15 / kWh.  
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21. The Commission before proceeding to adopt the negotiated tariff of Rs. 4.15 per kWh u/s 63 of the Electricity Act, 2003, has considered the following aspects:

(a) The lead procurer furnished the justification on the negotiated tariff by quoting the recent bids which have been accepted under the DBFOO method by APDISCOMs and the Tata Power Ltd., and furnished the following details of tariffs:

State / Discom	Bidder	Quoted fixed charge Rs/kWh	Quoted fuel Charge Rs/kWh	Total Tariff at ex-bus Rs/kWh
AP Bid	East Coast Energy Pvt Ltd (ECEPL)	2.426	1.41	3.836
	NCC Power Projects Ltd (TPCIL Subsidiary)	2.56	1.79	4.35
	Korba West Power Company Ltd	2.95	0.99	3.94
	MB Power Ltd	3.19	1.06	4.25
TATA Power (Delhi Region)	JITPL (L1)	2.75	0.76	3.52
	BALCO (L2)	2.56	0.99	3.55

- i. The lead procurer submitted that the Fixed Charge (Rs / kWh) offered by M/s. TPCIL is competitive as compared to Bids received in Delhi and Andhra Pradesh. The Fuel Charge (VC/kWh) in these states is lower, mainly because the participating power plants are located in coal rich regions of Chhattisgarh and are based on 100% domestic coal. But there

are severe transmission corridor constraints from NEW Grid to Southern Region to be able to procure the power from these plants.

- ii. In contrast, the fuel charge in the current tender corresponds to the blended coal (with 40% limit on supplementing imported coal) and may not be readily comparable as TSDISCOMs cannot have access to cheaper power in NEW grid, since transmission corridor is not available and exception could be the AP tender.
- iii. Coming to the AP Tender, the lead procurer has brought to our notice based on the information available in the public domain that M/s. East Coast Energy Pvt. Ltd (ECEPL) (which offered lower tariff) is under construction and only 30% of the plant construction has been completed and the power plant is not likely to be available in the next few years. While the other bidders have to match 'L1' price as per the DBFOO provisions, 'L2' Bidder i.e., M/s. NCC is the only plant located in SR region which is not subject to the transmission corridor constraints and the tariff quoted as higher than M/s. TPCIL.
- iv. Further, the lead procurer stated that the plants located in SR region are in a position to address the TSDISCOMs immediate power requirements. SR based plants with ready to spare capacity are either based on the blended coal (or) on 100% imported coal. The Tariff from 100% imported coal plants work out to be much higher and fraught with the risk of FOREX fluctuations. Thus any other alternative other than the present bidder would have resulted in a higher price for the DISCOMs.
- v. The lead procurer submitted that the competitive fuel charge will help in ensuring that the power plant is listed at the top of the MOD list and the plant is despatched as a Base Load plant. This will reduce probability of sunk cost due to declared availability.
- vi. The lead procurer has stated that as per the provisions of the draft PPA issued to M/s. TPCIL, the fixed charge will undergo a 2% reduction every year translating into a reduction of about 5 paise per kWh each year.
- vii. By the time some of the TSGENCO plants are available, the fixed charge gets considerably reduced. This mitigates the risk of fixed charge liability on account of non-despatch.

- viii. Subject to market prices of coal, Fuel Charge of M/s. TPCIL will continue to be competitive on account of increase in materialisation of CIL coal and also, Lower Station Heat Rate (SHR) as the power plant stabilises and operational efficiency improves.
- ix. The bidder M/s. TPCIL submitted necessary documentary evidence to substantiate that it had firm and assured fuel linkage from M/s. Coal India Ltd., (domestic supplier) as well as from International Coal supply. The following are the fuel supply arrangements for the power plant as submitted by the lead procurer:

Total contracted capacity under long-term PPAs with DISCOMs	1070 MW (= 500MW + 570MW)
Contracted quantity of domestic coal under FSA with CIL	4.23 MTPA
Maximum plant capacity that can be supported with 100% domestic coal	924 MW
TSDISCOMs entitlement to domestic coal as per the provisions of the DBFOO PPA	75%
Imported coal arrangements for the plant	1.07 MTPA
Comparable market prices of imported coal	USD 38-40 / ton
Ongoing imported coal price under the current FSA of TPCIL	USD 35.37 / ton from FSA with Global coal

- x. By referring to the above table, the lead procurer submitted that as against a maximum capacity of 924 MW, TSDISCOMs have a majority share of 75% in the concessional fuel, thereby the benefit of cheaper concessional fuel shall accrue to the State from both the arrangements i.e., present DBFOO method as well as earlier Case-I bid method.
- xi. The lead procurer stated that M/s. TPCIL has a well secured imported coal FSA from an established International Coal market player i.e., M/s. Global Coal which has the secured mines in various countries including Indonesia thereby further reducing the fuel supply risk of imported coal.

22. The Commission has examined the power purchases made by TSDISCOMs during the current Financial Year (FY 2015-16) upto October 2015 and the average power purchase cost is found to be a sum of Rs.4.43 per unit.

23. Further, the Commission noticed that the cost of power per unit from various thermal power stations is as hereunder:

(i) M/s. Rayalaseema Thermal Power Plant (RTPP) stage - II tariff is more than Rs.4.2 per unit,

(ii) M/s. Kothagudem Thermal Power Station (KTPS) stage – IV is Rs.5.24 per unit,

(iii). M/s. Kothagudem Thermal Power Station (KTPS) Stage-I is Rs.4.12 per unit,

(iv). M/s. National Thermal Power Corporation (NTPC), Vallur is Rs.3.81 per unit,

(v). M/s. National Thermal Power Corporation (NTPC) Aravalli is Rs.6.3 per unit and

(vi) M/s. Neyvelli Lignite Corporation Cost is Rs.4.80 per unit.

24. On comparison with the above tariffs, the proposed supply tariff of M/s. TPCIL is lower and competitive.

25. The Commission has enquired with the Tamil Nadu Generation and Distribution Corporation (TANGEDCO) in respect of tariff in recent bids received by it under the DBFOO (for next 15 years) which is Rs.4.91 per kWh. Thus, the tariff of M/s. TPCIL is found to be reasonable.

26. We are of the view that the negotiations made by the lead procurer on the fixed cost shall help in case of merit order despatch to be implemented on sudden fall in the demand in the State owing to the weather conditions prevailing at relevant time for backing down of the station. The lower fixed cost shall be an advantage as compared to the higher fixed cost.

27. The Commission after examining the average power purchase cost (tariff) of TSDISCOMs upto October 2015, Power Purchase costs of other thermal stations commissioned in recent years, the recent tariff bidding of Tamil Nadu and justification given for the negotiated tariff by the lead procurer (TSSPDCL) on the fixed cost, is of the view that the negotiated tariff offered by M/s. TPCIL and recommended by the lead procurer is fair and reasonable.

28. Hence, this Commission hereby adopts the tariff of Rs.4.15 per kWh u/s 63 of the Electricity Act, 2003, with regard to procurement of power from M/s. Thermal Powertech Corporation India Limited (M/s. TPCIL), for contracted capacity of

570 MW for a period of 8 years from the date of executing the Power Purchase Agreement / Power Supply Agreement (PPA/PSA).

*This order is corrected and signed on this 27<sup>th</sup> day of January 2016.*

**Sd/-**  
**L.MANOHAR REDDY**  
**MEMBER**

**Sd/-**  
**H.SRINIVASULU**  
**MEMBER**

**Sd/-**  
**ISMAIL ALI KHAN**  
**CHAIRMAN**

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