

TAMIL NADU ELECTRICITY REGULATORY COMMISSION
(Constituted under section 82 (1) of the Electricity Act, 2003)
(Central Act 36 of 2003)

PRESENT:

Thiru S.Akshayakumar	Chairman
Thiru G.Rajagopal	Member
	and	
Dr.T.Prabhakara Rao	Member

M.P.No.16 of 2017

Tamil Nadu Generation and Distribution Corporation Ltd.
Represented by the Chief Engineer / Private Power Projects
144, Anna Salai
Chennai – 600 002.

... Petitioner
(Thiru M.Gopinathan
Standing Counsel for TANGEDCO)

Vs.

NIL

...Respondent

Date of hearing : 04-12-2017 and
19-12-2017

Date of Order : 31-01-2018

The M.P.No.16 of 2017 came up for final hearing on 19-12-2017. The Commission upon perusal of the Petition and connected records and after hearing the submissions of the Petitioner hereby makes the following:

ORDER

1. Prayer of the Petitioner in M.P.No.16 of 2017:-

The prayer of the Petitioner in the above M.P.No.16 of 2017 is to –

- (i) approve and ratify for having initiated short term tender process;
- (ii) procure 1000 MW RTC power for the period from 1st February 2018 to 30th April 2018;
- (iii) deviate from the MoP guidelines for the following conditions;
 - a) to modify the billing cycle as monthly billing;
 - b) to delete payment security clause and contract performance guarantee clause in lieu of each other;
 - c) to delete provision for supply from alternate source in view of short duration of contract period;
 - d) to delete change in law clause in view of short duration of contract period;
 - e) to fix the validity of the tender as 30 days excluding the date of bid submission;
- (iv) float tender No.TANGEDC/SHORT/PP 9-2017 for the procurement of 1000 MW RTC power for the period from 1st February 2018 to 30th April 2018 through e Bidding portal (DEEP), as per the enclosed Tender Specification (RfP);

2. Facts of the Case:-

The petition has been filed seeking the approval of the Commission for procurement of 1000 MW RTC power for the period from February 2018 to April 2018 under short-term power purchase.

3. Contentions of the Petitioner:-

3.1. The power position for the summer months of February '18 to April '18 has been reviewed by TANTRANSCO, the assessed Demand and availability are as below:

Month	:	Feb'18 -April'18
Net Availability (sustained)	:	13600 - 14000 MW
Anticipated Demand	:	14800 - 15500 MW
Deficit of about	:	1200 MW to 1500 MW

Based on the above, indent has been given for procurement of 1000 MW RTC from 1st February '18 to 30th April'18. It is proposed to go in for above procurement through DEEP e-bidding Portal of GOI and remaining requirement if any, will be procured through power exchanges on a day to day basis, either on RTC basis or slot basis.

3.2 Monsoon rains had flooded coal mines and affected mining and freight movement during Southwest monsoon. Since September '17, shortfall in coal supplies affected the availability of coal stock in thermal stations all over India. Coal imports have been dispensed with in line with the Resolutions of Conference of Power, New & Renewable Energy and Mines Ministers of States / UTs dated 3rd & 4th May, 2017. Coal stock in TANGEDCO thermal power plants had also come down to critical level of less than 3 days stock. Many units had been kept in reserve due to non-availability of sufficient coal. This made it difficult for TANGEDCO to meet the demand.

3.3. In view of the above, TANGEDCO was able to maintain a sustained generation of around 2000 MW only from State owned thermal power stations with capacity of 4320 MW.

3.4. Availability from CGS stations is also in the range of 3000 MW to 4000 MW, even though the total allocation to TANGEDCO is about 6000 MW. Vallur unit III had been under outage from 04.06.2017 due to fire at Generator CFBC based Neyveli TS II station is also with unstable generation.

3.5. TANGEDCO had contracted 3330 MW under long term. Due to non-commencement of supplies from Utkal plant and due to coal issues, the quantum realized was in the range of about 2000 MW only during September '17 and October-17.

3.6. The hydro generation cannot be run to meet RTC requirement and is being utilised to meet peak requirement

3.7. Medium Term Open Access is yet to be granted for the two amendments to PPA signed (300 MW) for extension of agreement.

3.8. Wind season for 2017 has fully withdrawn with the onset of North East Monsoon and Wind generation is likely to commence during May/June 2018 with the onset of Southwest monsoon.

3.9. Solar power is available only during day time and pattern of availability is as below.

08.00 to 10.00 hrs	-	30 % to 80 %
10.00 to 11.00 hrs	-	80 % to 100 %
12.00 to 13.00 hrs	-	100 %
13.00 to 15.00 hrs	-	100 % to 80 %
15.00 to 17.00 hrs	-	80 % to 10 %

3.10. Kudankulam Nuclear Power Plant unit 2 (1000 MW) is under forced outage from 04.08.2017 due to Stator cooling water Motor trip. As per the SRPC/SRLDC approved plan, overhaul of unit 2 is planned for 75 days from February '18. Since commissioning, literally only one unit is in effective service.

3.11. Therefore, a short term tender (TANGEDCO/SHORT/PP 09-2017) is proposed to be floated for procurement of 1000 MW RTC power for the period 1st February 18 to 30th April 18. As mandated by Ministry of Power, this procurement will be done through MoP's e-bidding portal (DEEP).

3.12 TANGEDCO is also seeking approval for the following deviations from the MOP guidelines in the short term tender, namely, (i) monthly Billing cycle, (ii) deletion of payment security clause viz opening of Letter of Credit, (iii) deletion of Contract Performance Guarantee clause, (iv) deletion of change in law clause and (v) deletion of provision for supply from alternate source, in view of short duration of contract period.

3.13 The tender is called for with Tamil Nadu periphery as Delivery point as per the MOP guidelines and tariff as all inclusive fixed price. Therefore the process of evaluation has been eliminated. Only rate comparison will decide the granting of tender.

3.14 TANGEDCO will approach the Hon'ble Commission on finalizing the tender with the quantum and rate offered by the bidders, etc for tariff adoption by the Commission.

4. Hearing held on 04.12.2017:

4.1 In the hearing held on 04.12.2017, Commission had pointed out that the forecasting details are not accurate and the petitioner was directed to file additional affidavit explaining the basis for arriving the demand forecast and the availability mentioned in the petition.

4.2 Accordingly, the petitioner has filed an additional affidavit on 19.12.2017. In the said additional affidavit dated 19.12.2017, the petitioner has limited the quantum of power procurement through short-term tender to 800 MW RTC for the month of March 2018 and 700 MW RTC for the month of April 2018 and adduced the following reasons:-

4.3 Under case -1, i.e. considering one Kudangulam unit in operation during the period from February 2018 to April 2018, the estimated RTC deficit is 300, 300, 200 MW respectively for the periods February 2018 to April 2018 apart from peak deficit in the range of 600-1100 MW at various blocks during 17-23 hours in a day.

4.4 Under case-2, i.e., considering both units of Kudankulam under forced outage, the estimated RTC deficit is 800, 800, 700 MW respectively for the periods February '18 to April '18, apart from peak deficit in the range of 600-1100 MW at various blocks during 17-23 hrs in a day.

4.5 NPCIL has been addressed to give their plan and commitment of Kudankulam plant availability during February '18 to April '18. Based on NPCIL's commitment, final quantum will be decided and LOI issued.

4.6 Considering Case 2 scenario, Commission may approve the quantum of 800 MW RTC for March '18 and 700 MW RTC for April '18 and anticipated deficit in February '18 will be met through purchase from power exchanges.

4.7 Commission may approve the rate of Rs. 4.31 per kwh to 4.35 per kwh discovered in Reverse Auction of TANGEDCO's tender as the maximum ceiling limit for power procurement for the month of March '18 and April '18.

4.8 It is submitted that the availability considered from TANGEDCO's thermal stations is based on the assumption that 30% of total requirement will be met from imported coal and balance 70% from domestic coal. If there is any short fall in supply of domestic coal, TANGEDCO will come before the Commission for further requirement.

5 Hearing held on 19.12.2017:-

In the hearing held on 19.12.2017, the Superintending Engineer/PPP, TANGEDCO appeared and presented the case. The Commission observed that the availability of powers from ST-CMS has not been considered in their statements. The petitioner agreed that 250 MW from ST-CMS need also to be considered and their requirement for the month of March 2018 and April 2018 will then be revised to 550 MW to 450 MW respectively.

6. Findings of the Commission:-

6.1. The Commission has carefully gone through the submissions made in the petition and the additional affidavit filed by the Petitioner TANGEDCO.

6.2. The Petitioner M/s. TANGEDCO has filed the M.P.No. 16 of 2017 dated 20.11.2017 with a prayer to approve the procurement of 1000 MW Round-the-clock (RTC) power to meet out the deficit of about 1200 MW to 1500 MW for 3 months for the period from 01.02.2018 to 30.04.2018. The remaining quantity, over and above 1000 MW which are proposed to be procured through tender, if required, will be procured through power exchanges viz. IEX / PXIL on day today basis either on RTC basis or Slot basis from 01.02.2018 to 30.04.2018.

6.3. The Commission has meticulously gone through all the documents annexed with the petition filed by TANGEDCO on the power availability from all declared sources item by item as given below:

6.3.1. Own Sources:

6.3.1.1. TANGEDCO has stated that the installed capacity of the State owned thermal power station is 4320 MW. Out of this 4320 MW, TANGEDCO was able to maintain the sustained generation of around 2000 MW only i.e., about 46% of the installed capacity only. The reasons furnished by TANGEDCO are that the monsoon rains had flooded coal mines and affected the mining of coal by Coal India Ltd. (M/s. CIL) and the freight movement by the Railways. It may be stated that since September 2017 shortfall in coal supplies affected the availability of coal stock in Thermal Power Stations all over India. Many stations had been forced to run on part load or shut down due to non-availability of coal. Coal imports have been dispensed with in line with the Resolutions of conference of power, New & Renewable Energy and Mines Ministers of States / Union Territories dated 3rd and 4th May 2014. As a result, coal stock in TANGEDCO's Thermal Power Stations had also come down to critical level of less than 3 days stock. Many units had been kept in reserve due to

non-availability of sufficient coal. This made it difficult for TANGEDCO to meet the demand. In spite of efforts taken to improve the coal supplies, coal stock position continues to remain at critical level even now.

6.3.1.2. The Commission has pointed out TANGEDCO that the occurrence of South West Monsoon during the first week of June every year is the known fact. Flooding of Mines, Coal Mining and Coal movement problem are also well known and this year could not be different from the previous years and the Commission therefore directed TANGEDCO to indicate the coal stock position in its thermal power stations during the last year this time in 2017. Commission has also pointed out that TANGEDCO has gone for immediate procurement of 2.5 lakh tonnes of import coal—1.5 lakh tonnes for Ennore and 1 lakh tonnes for Tuticorin Port. Also TANGEDCO has gone for procurement of 2 million tonnes (20 lakh tonnes) of import coal by Global tender – 1.4 Million Tonnes for Ennore and 0.6 Million Tonnes for Tuticorin. The supply of the import coal from the tendered quantum of 2 million tonnes is to commence from the 1st week of February 2018 as per the schedule.

6.3.1.3. During the hearing on 19.12.2017, the Commission has also drawn attention of the Petitioner to the Coal Ministry's reference in October 2017 which specified that, with the weather improving, the supply chains would soon resume normalcy and the demand for coal would be met, additional coal rakes, specific to those plants that are known to require more coal would be supplied. It also stated that coal stock has improved to 10 to 12 days from the critical stock position because of the supply of more rakes of coal. Thus, the Commission in its hearing on 19.12.2017 has pointed out that the coal stock position is out of danger level now and is improving

and still can be built up adequately till January 2018. Since the power is proposed to be purchased from 01.02.2018 for 3 months there may not be any difficulty to increase the own generation. Therefore the Commission has directed TANGEDCO to have the realistic estimate of the availability of power from own generation from its Thermal Power Stations. TANGEDCO responded that it will file an additional affidavit with further details. Accordingly, in the additional affidavit filed on 19.12.2017 TANGEDCO has revised its estimation of the availability of power of 4020 MW from its own thermal generation out of installed capacity of 4320 MW instead of 2000 MW estimated originally.

6.3.2. Power Purchase:

6.3.2.1. The total allocation of power from the Central Generating Station viz. M/s, NLC, M/s. NTPC, MAPS, Kaiga, KKNPP and NLC, NTPC joint venture projects with TANGEDCO viz. NTPL and NTECL is 6034 MW. Out of the above 6034 MW, TANGEDCO has considered the availability from CGS Stations in the range of 3000 MW to 4000 MW. TANGEDCO stated that Vallur Unit III has been under outage from 04.06.2017 due to fire at Generator. CFBC based Neyveli TS II station is also with unstable generation.

6.3.2.2. Commission questioned the petitioner as to whether the Vallur Unit III (500 MW) which has been under outage from 04.06.2017 would continue to remain under outage till April 2018 or will it be recommissioned. The Commission also enquired whether the Petitioner has written to NTECL to know the status of the rectification of Generator work and whether NTECL has given any letter in writing about the possible date of getting back the Unit III into service. To these points TANGEDCO has responded that no commitment from NTECL has been received but the

correspondence between NTECL and TANGEDCO is on. To another question by the Commission on the Commercial Operation Date (COD) of Stage II of the NTPC Kudgi Power Plant, TANGEDCO has stated that it will ascertain and submit the same by filing an additional affidavit.

6.3.2.3. In the additional affidavit filed by TANGEDCO on 19.12.2017, (TANGEDCO filed the additional affidavit during the course of hearing in the Court). TANGEDCO has revised its estimation of the availability of 4535 MW power from the CGS sources instead of 3000 MW to 4000 MW estimated earlier in the petition.

6.3.2.4. TANGEDCO had also contracted 3330 MW under Case I bidding for a long term contract of 15 years. TANGEDCO submitted that due to non-commencement of supply of 500 MW from M/s. Ind Bharat from its Utkal Plant and also due to coal issues, the quantum realized in the above bidding was in the range of about 2000 MW only during September 2017 and October 2017.

6.3.2.5. Further, the Commission has enquired the Petitioner whether the short supply during September 2017 and October 2017 was due to issues related to non-availability of coal alone and whether the situation of coal problem would continue even in November 2017, December 2017 and January 2018 and whether there is any possibility of the coal supply position increasing before February 2018 since the procurement of short term power purchase is contemplated from 01.02.2018. Also Commission has pointed out that out of 2830 MW (3330 MW – 500 MW) three generators are import coal based and the combined capacity of these three generators based on import coal comes to 1130 MW. The Commission also

enquired the Petitioner whether TANGEDCO will pay the fixed cost for the full capacity of the generators or the actual generation based on the availability of coal.

6.3.2.6. TANGEDCO in their additional affidavit filed on 19.12.2017 has estimated the availability of 3100 MW of power for February 2018 and 3300 MW of power for March 2018 and April 2018 under LTA / MTOA / SWAP category without furnishing any break up for the category wise availability from the sources.

6.3.2.7. TANGEDCO in its petition has stated that Kudankulam Nuclear Power Plant (KKNPP) Unit 2 (1000 MW) is under forced outage from 04.08.2017 due to Stator cooling water motor trip. As per the SRPC / SRLDC approved plan, overhaul of unit 2 is planned for 75 days from February 2018 and since commissioning, literally only one unit is in effective service.

6.3.2.8. It may be pointed out that in general every generator is interested to maximize the revenue by bringing back the plant as early as possible as the prolonged outage will not be in the best interest of any commercial organisation and Commission sought clarification whether there is any correspondence with KKNPP as to the possible date of recommissioning the unit 2 before February 2018. Also Commission has advised TANGEDCO to discuss with KKNPP to examine the possibility of taking the units for overhaul during May – September each year to coincide with the wind season so that the shortage of power on account of the planned overhaul of the plant will not arise. TANGEDCO submitted that they will come back with details.

6.3.2.9. In the additional affidavit filed on 19.12.2017, the Petitioner has stated that quantum of short term power purchase has been reduced from 1000 MW for March to 800 MW for March 2018 and from 1000 MW to 700 MW for April 2018. The power purchase of 1000 MW proposed for the month of February 2018 in its original petition has been completely dropped.

6.3.2.10. The Commission during its hearing on 19.12.2017 while scrutinizing the statement of availability of power and the demand for power, found that the availability of power to the extent of 250 MW from lignite based thermal power plant of M/s. TAQA (STCMS, Neyveli) an IPP with TANGEDCO has not been taken into consideration for estimating of power availability. On being questioned as to why this was not included in the estimation, grid officials of TANGEDCO has submitted that since the power purchase from M/s. TAQA is kept outside the Merit order Despatch (MoD) by the Commission in the Tariff Order No.1 of 2017 dated 11.08.2017 based on the variable cost per unit, it was not included in the availability. The above submission of the TANGEDCO is not acceptable since the variable cost of M/s. TAQA is about Rs.3.30 – 3.40 per unit whereas the proposal to procure the short term power is at the rate of Rs.4.35 / unit which is higher than the rate of M/s. TAQA. The petitioner then agreed that 250 MW from M/s. TAQA also need to be considered for estimation and their requirement for the month of March 2018 and April 2018 will then be 550 MW and 450 MW respectively. TANGEDCO in its additional affidavit filed on 19.12.2017 has also prayed this Commission to accord approval among other things for the rate of Rs.4.31 per unit Kwhr to Rs.4.35 per Kwhr discovered in TANGEDCO's tender as the maximum ceiling limit for power procurement. Thus it is seen for arriving the correct estimation of availability of power, Commission had to

vigorously pursue the Petitioner to avoid the procurement of high cost power or excess power thereby causing additional cost to the exchequer of TANGEDCO, which already is struggling in a financial crisis.

6.4. It is to be noted that TANGEDCO on the date of filing this Miscellaneous Petition on 20.11.2017 in the matter of short term power procurement of 1000 MW RTC power for the period from February 2018 to April 2018 has simultaneously floated the short term tender on the same day i.e. 20.11.2017 and indirectly sought approval and ratification for the procurement of power to meet the anticipated deficit for summer 2018. The e-Reverse Auction of the quoted price was closed on 28.11.2017 in anticipation of the quantity approval from this Commission.

6.5. Incidentally, it may be stated that during 2017 TANGEDCO filed M.P.No. 16 / 2016 seeking quantity approval to procure 350 MW under RTC and 500 MW peak power under short term tender for the period from 01.02.2017 to 15.05.2017 with the maximum ceiling rate of Rs.4 / Kwhr. Subsequently TANGEDCO came up with modified prayer in M.P. No.29 / 2016 stating that in view of the corridor constraint as the available transmission capacity from the NEW region to Southern Region is only 85 MW from 00 hrs. to 6 hours and 18 hours to 24 hours the original prayed quantum of 350 MW RTC and 500 MW peak power may be modified as 632 – 672 MW RTC power from Southern Region as the Southern Region has no corridor constraint. When the adoption petition under Sec. 63 of the Electricity Act 2003 in PPAP 1 / 2017 was filed, TANGEDCO prayed for approval of both 632 – 672 MW RTC power from Southern Region as well as the 350 MW RTC power from the NEW Region also. Since the purchase of 350 MW has already taken place, the Commission had

to regularize the purchase. The above incidence is to point out that the requirement of power was not based on proper estimate. Thus in the absence of proper estimation of demand, TANGEDCO's own power plants as well as cheaper CGS power had to be backed down paying the fixed costs. Therefore the Commission in its order dated. 13-11-2017 directed TANGEDCO to estimate the demand on more scientific basis in future procurement of short term power.

6.6. In the present M.P. No.16 of 2017 also the original prayer of 1000 MW each for 3 months from 01.02.2018 to 30.04.2018 after the Commission's thorough checking and persuasion about the demand and supply forecast, has been modified by TANGEDCO as 550 MW for March 2018 and 450 MW for April 2018. Thus TANGEDCO has withdrawn its prayer for 1000 MW partially for the month of March and April 2018 and the entire 1000 MW for the month of February 2018. Expenses on power purchase are the single largest item of expenditure accounting for more than 70% of the entire revenue from sale of power of TANGEDCO. Though it is the bounden duty of the TANGEDCO to supply the reliable and quality power 24 x 7, TANGEDCO should properly estimate the requirement of power and purchase accordingly so that the power purchase cost is optimized.

6.7. With the above observations, the Commission hereby accords approval for the procurement of 550 MW and 450 MW for the month of March 2018 and April 2018 respectively as submitted by the Petitioner during the hearing on 19-12-2017. Commission also directs that in future the quantity approval may be obtained from the Commission before floating the tender instead of seeking the approval and ratification after floating the tender except under contingent conditions. Commission

also approves the other deviations from the MOP guidelines as prayed for by TANGEDCO both in its original petition as well as the in additional affidavit dated 19-12-2017. The Petitioner is directed to file a separate petition for approval of the tariff for the above procurement of power furnishing full details of the tendering process including details of Evaluation Committee, tariff quoted by the other bidders and a copy of the Power Purchase Agreement.

Ordered accordingly.

7. Appeal :- An appeal against this order shall lie before the Appellate Tribunal for Electricity under section 111 of the Electricity Act, 2003, within a period of 45 days from the date of receipt of the copy of this order by the aggrieved person.

(Sd)
(Dr.T.Prabhakara Rao)
Member

(Sd.....)
(G.Rajagopal)
Member

(Sd.....)
(S.Akshayakumar)
Chairman

/ True Copy /

Secretary
Tamil Nadu Electricity
Regulatory Commission