

**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.26 of 2015**

Tamil Nadu Generation and Distribution Corporation Limited  
Represented by Chief Engineer / Mechanical / Thermal Stations  
144, Anna Salai, Chennai – 600 002.

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

Vs.

Nil ... Respondent

**Dates of hearing: 30-04-2015, 30-12-2015 and 02-06-2016**

**Date of Order: 16-11-2016**

The M.P.No.26 of 2015 came up for final hearing on 02-06-2016. The Commission upon perusal of the Petition and after hearing the submissions of the Petitioner hereby makes the following:

**ORDER**

**1. Prayer of the Petitioner in M.P.No.26 of 2015:**

1.1. The prayer of the Petitioner in the Affidavit dated 03-03-2015 is to permit the units of Ennore TPS and Mettur TPS-II to run continuously so as to meet the grid demand.

**1.2. Modified Prayer in Additional Affidavit of the Petitioner dated 01-06-2016:-**

The prayer of the Petitioner in the above M.P.No.26 of 2015 in the Additional Affidavit is –

- (a) to permit the Units I,II, III and IV of Ennore TPS to run continuously till de-commissioning irrespective of the variable cost to meet the grid demand and as based on the order dated 13-11-2015 of M.P.No.20.
- (b) to ratify and approve the action of TANGEDCO in having run the MTPS-II continuously to achieve stabilization as well as to meet the grid demand from June 2013 to till date.
- (c) to permit MTPS-II to run continuously so as to meet the grid demand since the MTPS-II is in the stabilization phase and the average variable cost of generation is Rs.3.17 only.
- (d) to declare MTPS-II as approved source for purchasing energy by bringing it under MoD.

**2. Submissions of the Petitioner in Affidavit dated 03-03-2015 and Additional Affidavit dated 01-06-2016:-**

2.1. In Suo Moto Tariff Order No.9 of 2014 dated 11-12-2014, the Commission has directed TANGEDCO to take prior approval of the Commission for purchasing energy from unapproved sources vide Summary of Directives.

2.2. The ETPS and MTPS-II have not been approved for dispatch through MoD. But in order dated 13-11-2015 of M.P.No.20 vide para No.5.5 and 5.7, the Commission approved the ARR in respect of ETPS I, II, III & IV till decommissioning of the units. Vide para 5.4 of the aforesaid order, the Commission has approved the

action of Board of TANGEDCO in decommissioning of the Unit-V of ETPS and derating the installed capacity from 450 MW to 340 MW.

2.3. The actual generation of ETPS in MU and the variable cost in Rupees / Unit, upto April 2016 are tabulated below:-

Actual Generation MU: ETPS

April 2014	May 2014	June 2014	July 2014	August 2014	Sep. 2014	Oct. 2014	Nov. 2014	Dec. 2014
98.413	51.185	42.487	54.506	44.345	69.077	49.591	15.065	17.968

Jan 2015	Feb 2015	March 2015	April 2015	May 2015	June 2015	July 2015	Aug. 2015	Sep. 2015
16.680	65.879	29.577	68.281	77.277	54.287	39.540	20.417	26.379

Oct 2015	Nov 2015	Dec. 2015	Jan 2016	Feb 2016	Mar 2016	April 2016
28.329	14.314	15.603	19.904	29.088	35.904	39.737

Plant Load Factor: ETPS

April 2014	May 2014	June 2014	July 2014	August 2014	Sep. 2014	Oct. 2014	Nov. 2014	Dec. 2014
40.20	20.23	17.36	21.55	17.53	28.22	19.60	6.15	7.10

Jan 2015	Feb 2015	March 2015	April 2015	May 2015	June 2015	July 2015	Aug. 2015	Sep. 2015
6.59	28.83	1.49	2.04	1.64	2.72	15.63	8.07	3.46

Oct 2015	Nov 2015	Dec. 2015	Jan 2016	Feb 2016	Mar 2016	April 2016
4.69	10.53	6.17	7.87	12.29	14.19	16.23

Variable cost in Rs, / Unit : ETPS

April 2014	May 2014	June 2014	July 2014	August 2014	Sep. 2014	Oct. 2014	Nov. 2014	Dec. 2014
4.94	5.16	5.26	4.65	5.36	5.34	6.53	6.8	5.78

Jan 2015	Feb 2015	March 2015	April 2015	May 2015	June 2015	July 2015	Aug. 2015	Sep. 2015
6.01	4.94	5.23	4.80	4.75	5.02	5.72	7.25	5.64

Oct 2015	Nov 2015	Dec. 2015	Jan 2016	Feb 2016	Mar 2016	April 2016
6.77	7.88	6.62	6.13	5.84	6.17	5.99

2.4. Out of the five units at ETPS, Units III & IV are now in service generating around 80 MW. Unit I is under shutdown from 13-11-2015 and Unit II condenser tubes are to be replaced. Cost benefit analysis is under scrutiny.

2.5. The Board of TANGEDCO has approved to keep the Unit V under permanent shutdown condition till decommissioning of the Station, vide (Per) FB TANGEDCO Proc. No.70 (Tech.Br.) dated 04-07-2013.

2.6. All the units at Ennore Thermal Power Station have already served their life time and on completion of major R & M works, the above units have served further for more than 10 years. The units are proposed to be decommissioned in a phased manner.

2.7. Under the above circumstances, in order to meet the critical grid demand prevailing in the State and also to beneficially utilize the existing infrastructure and the available manpower at ETPS, the Units I, II, III & IV are to be kept in service irrespective of the variable cost until de-commissioning.

2.8. The COD of Mettur Thermal Power Station – II was declared on 12-10-2013. The station is in the stabilization phase. The actual generation of Mettur Thermal Power Station – II in MU and the variable cost in Rs./ Unit for the year 2014-15 and upto April 2016 is tabulated below:-

Actual generation in MU: MTPS-II

April 2014	May 2014	June 2014	July 2014	August 2014	Sep. 2014	Oct. 2014	Nov. 2014	Dec. 2014
75.44	311.68	220.06	0	253.93	332.49	335.66	306.71	317.6

Jan 2015	Feb 2015	March 2015	April 2015	May 2015	June 2015	July 2015	Aug. 2015	Sep. 2015
129.22	364.71	42.487	362.09	231.40	174.19	310.20	369.84	394.13

Oct 2015	Nov 2015	Dec. 2015	Jan 2016	Feb 2016	Mar 2016	April 2016
400.54	250.75	334.56	329.12	355.59	413.45	409.88

Plant load factor : MTPS-II

April 2014	May 2014	June 2014	July 2014	August 2014	Sep. 2014	Oct. 2014	Nov. 2014	Dec. 2014
17.46	69.82	50.94	0	56.88	76.97	75.19	71.00	71.15

Jan 2015	Feb 2015	March 2015	April 2015	May 2015	June 2015	July 2015	Aug. 2015	Sep. 2015
29.00	90	83.97	83.82	52.05	40.32	69.49	82.85	91.23

Oct 2015	Nov 2015	Dec. 2015	Jan 2016	Feb 2016	Mar 2016	April 2016
89.73	58.04	74.95	73.73	85.15	92.62	94.88

Variable cost in Rs. / Unit: **MTPS-II**

April 2014	May 2014	June 2014	July 2014	August 2014	Sep. 2014	Oct. 2014	Nov. 2014	Dec. 2014
5.37	4.34	4.08	0	4.06	3.06	4.49	3.98	4.06

Jan 2015	Feb 2015	March 2015	April 2015	May 2015	June 2015	July 2015	Aug. 2015	Sep. 2015
4.13	3.83	3.33	3.36	3.28	3.52	3.19	3.15	3.13

Oct 2015	Nov 2015	Dec. 2015	Jan 2016	Feb 2016	Mar 2016	April 2016
3.07	2.72	3.08	3.19	3.10	3.24	2.92

Variable cost of generation is reduced from an average of Rs.3.73 (from April 2014 to March 2015) to Rs.3.17 (from April 2015 to March 2016.)

2.9. Inasmuch as MTPS-II is in the stabilization phase and the variable cost of generation is Rs.3.17 only, it is submitted that it is essential to run the 600 MW Unit of MTPS – II continuously to meet the critical grid demand.

### **3. Findings of the Commission:-**

3.1. We have carefully considered the prayers of the Petitioner which are as follows:

- a) To permit the Units I, II, III & IV of Ennore TPS to run continuously till de-commissioning irrespective of the variable cost to meet the grid demand and based on the order dated 13-11-2015 of M.P. No. 20 of 2014.
- b) To ratify and approve the action of TANGEDCO in having run the MTPS-II continuously to achieve stabilization as well as to meet the grid demand from June 2013 to till date.
- c) To permit MTPS-II to run continuously so as to meet the grid demand since the MTPS-II is in the stabilization phase and the average variable cost of Generation is Rs.3.17 only. and
- d) To declare MTPS-II as approved source for purchasing energy by bringing it under MoD.

3.2. It may be seen that **the first prayer** of the petitioner is for ratification and approval of the Commission to run continuously till de-commissioning irrespective of the variable cost to meet the grid demand and as based on the order dated 13-11-2015 of M.P. No. 20 of 2014.

3.3. **In respect of this prayer Commission** in its Order in M.P.No. 20 of 2014 has already approved that till decommissioning of all the units of the Plant, the actual rate of realization will be allowed for the purpose of ARR. In the said Order, Commission has also specified if sufficient power is available to meet the demand from other sources, where the cost of such power is less than the variable cost of

this power station, the Petitioner by the principle of merit order shall endeavor to curtail or stop availing from the station.

3.4. In view of the above direction already issued in the above M.P., Commission reiterates its stand that whenever the cost of power available is lower than the Variable cost of Ennore Thermal Power Station, TANGEDCO may resort to purchase from other sources in order to reduce the total power purchase cost as the power purchase cost including cost of own generation constitutes around 80% to 85% of the total ARR.

3.5. **In respect of the 2<sup>nd</sup> prayer as to ratify** and approve the action of TANGEDCO in having run the MTPS-II continuously to achieve stabilization as well as to meet the grid demand from June 2013 to till date and **in respect of the 3<sup>rd</sup> prayer** to permit MTPS-II to run continuously so as to meet the grid demand since the MTPS-II is in the stabilization phase and the average variable cost of generation is Rs.3.17/- only it may be noted that as per the additional affidavit filed on 01-06-2016, the variable cost per unit is in decreasing trend i.e. during April 2014 it was Rs.5.37/- per unit and the variable cost gradually reduced to Rs.2.92/- per unit in April 2016.

3.6. The claim of TANGEDCO that MTPS-II is in the stabilization phase is unfounded. The Commercial Operation of the plant was declared on 12-10-2013. As per Regulation 37(vi) (a) of Terms and conditions for Determination of Tariff Regulations, 2005- *"Norms of Operation" the stabilization period for coal based and lignite-fired Generating Stations is 180 days* i.e. as per the Tariff Regulations from the date of Commercial Operation the stabilization period is upto 9-4-2014 only. In



respect of approval of power purchase cost, wherever the Variable Cost is less than the power purchase cost approved in the SMT Order No.9 of 2014, dated 11-12-2014 under Table No.184, such power purchase cost are hereby approved and ratified and wherever the Variable Cost is more than the power purchase cost approved in the SMT Order No.9 of 2014, dated 11-12-2014 under Table No.184, such power purchase cost is hereby approved and ratified to the extent of average rate of realization for the purpose of ARR only as hitherto done in similar cases of power purchases.

3.7. Further, the Commission hereby approves to run the plant continuously depending upon the grid condition with a direction that whenever the cost of own generation is above the power purchase cost approved by the Commission, TANGEDCO shall take prior approval.

3.8. **With respect to the 4<sup>th</sup> prayer** as to declare MTPS-II as approved source for purchasing energy by bringing it under MOD, it is stated that no specific approval of the Commission is necessary so long the Variable cost is less than the cost prescribed in the Merit Order Dispatch stack.

#### **4. 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 a 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