

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

**PRESENT:-**

Thiru.K.Venugopal ..... Member

and

Thiru.S.Nagalsamy ..... Member

**M.P. No.11 of 2012**

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

.. Petitioner  
(Thiru P.H. Vinod Pandian,  
Advocate for Petitioner)

Vs

Nil

....Respondent

**Dates of hearing : 26-04-2012, 02-05-2012 and  
21-05-2012**

**Date of order : 21-06-2012**

M.P.No.11 of 2012 came up before the Commission on 21-05-2012 for final hearing. The Commission upon perusing the above petition and connected records of the case and upon hearing Counsel for the Petitioner and officials of TANGEDCO passes the following

**ORDER**

1. **Prayer in M.P. No.11 of 2012:-**

The prayer in M.P.No.11 of 2012 is,-

- (a) to approve and ratify for operating M/s.GMR, M/s.SPCL, M/s.MPCL and M/s.PPN for dispatching power outside the Merit Order for the month of April, May and June 2012 as submitted in para 13 of the petition ;
- (b) that the purchase of power through traders and from power exchanges at the prevailing market rate may be considered and the directions issued in Table 213 (Power Purchase Summary of the Tariff Order dated 30-03-2012) indicating zero quantity of power purchase through traders may be reviewed.
- (c) to grant an extension time of 120 days from the date of issuance of the above Tariff Order for submission of report on fuel and power purchase cost adjustment from the date of issuance of the above Tariff Order ; and
- (d) to grant an extension time of 120 days from the date of issuance of the above Tariff Order for submission of the study report on computation of consumer category wise and voltage wise cost from the date of issuance of the above Tariff Order.

## **2. Hearing on 26-04-2012:-**

The above M.P.No.11 of 2012 was heard on 26-04-2012. Thirumathi Anciliam Mary, Superintending Engineer/IPP presented the case. She was directed to file affidavit restricting the prayer only for the relaxation of merit order dispatch. The Commission further pointed out that the prayers should be clear to enable the Commission to deal with the issues.

## **3. Hearing on 02-05-2012:-**

3.1. During the next hearing of the above M.P. No.11 of 2012 held on 02-05-2012, the Petitioner was directed to file an additional affidavit covering the following details:-

- (1) Justification for running the liquid fuel fired IPP machines duly taking into account the availability of power from wind generation and power availability from other upcoming stations.
- (2) Justification, based on cost of generation from the sources.
- (3) The provision regarding operating of these units in the PPA conditions, especially running of one machine in each of the power plant and the procedure followed in accepting such operations. Actual dispatch of these units during April 2012.

3.2. During the said hearing held on 02-05-2012, the Commission has observed that separate petitions for other prayers covered in M.P. No.11 of 2012 which are mentioned at items (b), (c), and (d) in para 1 above may be filed by the Petitioner TANGEDCO as they have agreed to withdraw the other prayers. As far as the time extension sought in regard to submission of cost to serve and fuel and power purchase adjustment formula, the Commission is of the view that it is in the interest of the TANGEDCO to expeditiously furnish these details.

#### **4. Contention as set out in M.P. No. 11 of 2012:-**

4.1. In Clause 7.1.20 of the Tariff Order dated 30-03-2012, with respect to M/s.GMR Power Corporation Limited, M/s.Samalpatti Power Corporation (P) Limited (M/s.SPCL), M/s.Madurai Power Corporation (P) Limited (M/s.MPCL) and M/s.PPN Power Generating Company (P) Limited (M/s.PPN), the Commission has approved only the fixed charge payable to the above companies and ordered that wherever the above power stations are to be dispatched outside merit order the Petitioner should get the approval of the Commission. The Commission has further observed that TANGEDCO shall obtain approval of the Commission in advance by furnishing

reasons for such action. In case of emergencies TANGEDCO is permitted to resort to such a practice but will approach the Commission within a week of such action along with the reasons for such action.

4.2. It is presumed that the Commission has passed the above order presuming that considerable energy will be available from other sources to meet out the energy requirement that is to say the Commission in Clause 2.1.445 has considered the Commissioning of some of the ongoing projects to an extent of 1050 MW by March 2012 and other projects of 3250 MW capacity would be progressively added during the year 2012-2013.

4.3. The ongoing projects are getting delayed due to various reasons and adequate initial capacity additions cannot be anticipated before June 2012. Hence with no capacity addition the stoppage of IPPs would worsen the already acute power scenario.

4.4. The Petitioner, TANGEDCO is already under severe power shortage with more than 4,000 MW and they are facing severe hardship in extending the scheduled power supply to the consumers as committed by them.

4.5. The Central Electricity Regulatory Commission is also in the process of narrowing down the operating frequency close to 50 Hz. In this critical power scenario TANGEDCO has obtained two weeks stay on the above said order in the Hon'ble High Court of Madras.

4.6. As ordered by this Hon'ble Commission, the generation from M/s.SPCL, M/s.MPCL and M/s.GMR could not be made zero throughout the year as there is commitment to TANGEDCO to operate the plant at the technical minimum load of 13 MW, 13 Mw, 48 MW respectively against the installed capacity of 105.66 MW, 106 MW, 196 MW.

4.7. If TANGEDCO is forced to violate the grid by overdrawing from the grid at frequency below 49.50 Hz., then it will be viewed seriously by the Hon'ble Central Electricity Regulatory Commission. Suo-Motu orders were already issued by the Hon'ble Central Electricity Regulatory Commission for overdrawal at frequency below 49.5 Hz.

4.8. The generation from M/s.GMR could not be backed down as being done in other IPPs like M/s.MPCL and M/s.SPCL. This is because the location of M/s.GMR is in the load centre of Chennai city and loss of generation from M/s.GMR during the summer may lead to over loading of the transmission lines and auto transformers and may leave main part of the Chennai city in dark.

4.9. The availability of power from the IPPs are very much essential to TANGEDCO and the higher capacity machines like M/s.PPN could not be stopped since this firm quantum power could not be compensated from outside sources due to corridor congestion.

4.10. If the utilization of the high cost IPPs is to be completely restricted without arranging other sources for supplying this power then the scheduled load shedding

in the urban / rural may have to be increased further to a longer duration which enhances the hardship to consumers.

**5. Contention set out in the affidavit filed by the Petitioner:-**

In the affidavit, the Petitioner has stated as follows:-

**Justification for running the high cost IPPs:-**

5.1. The total energy met by Tamil Nadu State Transmission Utility (TN-STU) during the year 2011-2012 is around 77,223 MU. (This includes energy wheeled by captive power / open access consumers whose details are attached as annexure).

This quantum was met through internal resources, CGS and other sources namely:-

(a)	Wind	-	10,858 MU
(b)	High Cost IPPs	-	2,923 MU
(c)	Bilateral purchase from interstate	-	5,559 MU
(d)	Purchase from Power Exchanges	-	1,032 MU
(e)	Purchase from Intrastate	-	5,517 MU

5.2. The unrestricted energy requirement for the same period is 88,489 MU. The deficit was met through load shedding and R & C measures which is 11,266 MU.

5.3. For the period June 2012–May 2012 the anticipated additional energy requirement considering a uniform load growth of 8% works out to 47,042 MU. After taking into account the availability of energy from wind (11,129 MU) and upcoming stations (14,943 MU) the same works out to be 20,970 MU.

5.4. In view of summer season and demand soaring, TANGEDCO was forced to implement additional R&C measures by increasing the power cut to 40% for HT industrial and commercial consumers and introduced power holiday for industrial

consumers. In spite of this, TANGEDCO was forced to introduce unscheduled load shedding for 3 to 6 hours in all parts of state except in capital.

5.5. Also during the month of April 2012 the deficit was more than 2100 MU and wind energy penetration was minimal. As the Tamil Nadu State Assembly was in progress and Board exams were going on, TANGEDCO was left with no other alternative except to run the high cost IPPs to the tune of 365 MU which has brought down the deficit to 1749 MU.

**Justification based on cost of generation:-**

5.6. The cost of generation of high cost IPP for the month of April 2012 is tabulated below:-

Sl. No.	Name of IPP	Fixed Cost in paise	Variable cost in paise	Total cost in paise
1	GMR	101.367	1033.2	1134.837
2	SPCL	174.625	1112.8	1287.425
3	PPN	132.704	811	943.704
4	MPCL	193.323	1112.7	1306.022

The minimum variable cost is Rs.8.11 per unit and maximum is Rs.11.12 per unit. In view of the prevailing deficit scenario to meet the grid requirement the IPPs are dispatched judiciously.

**The Provisions regarding operation of the units as per PPA:-**

5.7. As per PPA, except in the event of an emergency affecting the grid system, no dispatch instructions shall require the company to operate the project at a load below eighty five percent of its rated capacity.

5.8. PPA also provides that TNEB shall not practice any adverse discrimination against the company in the exercise of its discretion or authority under this agreement with respect to dispatching of the project.

5.9. The PPA further provides that unless due to an emergency, if dispatch instructions are issued in contravention of any of the foregoing provisions; TNEB shall indemnify the company for the increased costs relating to any fuel consumption, auxiliary power consumption and other operating cost reasonably incurred by the company in backing down and resuming generation and any such increased costs incurred in connection with the period of reduced generation. TNEB further recognizes and agrees that it will pay for any charges incurred by the company under its Fuel Supply Agreement (FSA) as a result of dispatch instructions that the company cannot otherwise recover under Appendix D of the PPA.

5.10. M/s.GMR has four units of 50 MW each; Samalpatti and Madurai Power have 7 units of 15 MW each. Being diesel engines with LSHS as the fuel stock, the IPPs viz. M/s.GMR, M/s.SPC and M/s.MPC are allowed to operate on a minimum technical limit of (i.e.) 48 MW, 13 MW, 13 MW each to ensure availability of steam for heating of LSHS.

5.11. Regarding M/s.PPN, the dispatch is at a technical minimum of 85% in accordance with the requirement of the grid.

5.12. The actual dispatch during April 2012 against the estimated quantum is less than the quantum for which approval has been sought. Therefore the TANGEDCO

is resorting to dispatch from the liquid fuel fired IPP's judiciously, based on grid condition only. Presently PPN dispatch is kept at zero in view of wind penetration.

5.13. In the affidavit dated 10-05-2012, the Petitioner has prayed for the approval of the Commission for

- (a) Ratification of dispatching of the liquid fuel IPPs for the month of April 2012 as per para (7) of the affidavit.
- (b) dispatching the estimated quantum for the months of May 2012 and June 2012 as per para (9) of the affidavit which TANGEDCO will judiciously consider in giving dispatch as per the requirements of the grid.
- (c) For filing separate petition in respect of other prayers in M.P.No.11 of 2012.

**6. Contentions set out in the Additional Affidavit:-**

6.1. The high cost liquid fuel stations namely, M/s.GMR, M/s.MPC and M/s.SPC have been dispatched judiciously considering the peak and non-peak requirements of the grid. M/s.PPN was backed down on 29-04-2012 due to penetration of wind generation. Subsequent to the fire accident at Mettur Thermal Power Station, M/s.PPN is being dispatched from 10-05-2012. Though M/s.PPN is basically a gas based station, it is running on mixed fuel of gas and naphtha in the ratio 30:70 presently. However, with increased gas production the plant will be considered for dispatch under merit order.

6.2. The actual dispatches of the high cost IPPs during April 2012 and May 2012 are tabulated as follows:-

Name of IPP	April 2012 in MU	May 2012 (upto 27-05-2012 in MU)
M/s.GMR	67	46
M/s.SPC	43	16
M/s.MPC	42	18
M/s.PPN	213	93

## 7. Finding of the Commission

7.1. The Commission in its Tariff Order No. 1 of 2012 dated 30-3-2012 allowed the full fixed cost for the liquid fuel based IPPs operated by M/s GMR, M/s SPCL, M/s.MPCL and M/s.PPN and did not specify any quantum of power to be purchased from these power stations, in view of high variable cost to be incurred and also due to the fact that required quantum of energy is available without the costly power. The TANGEDCO had filed the petition MP No.11 of 2012 on 11<sup>th</sup> April 2012. The matter was listed and heard on 26-4-2012 wherein certain additional inputs were called for as follows:-

- i) Justification for running the liquid fuel fired IPP generators duly taking into account the availability of power from wind generation and power availability from other upcoming stations.
- ii) Justification based on cost of generation from these sources.
- iii) The provision regarding operating of these units in the PPA conditions.
- iv) Actual dispatch of these units during April 2012.

7.2. The details were furnished by TANGEDCO on 11<sup>th</sup> May 2012. The matter was further heard on 21-5-2012 during which Learned Counsel for TANGDECO indicated that they may be permitted to file additional affidavit. This additional affidavit was filed on 30<sup>th</sup> May 2012.

7.3. The Commission has examined the petition, additional affidavit and the oral pleadings.

The prayer of the petitioner is as follows:-

- i) Ratification of dispatching of the liquid fuel IPPs for the month of April 2012.
- ii) Dispatching the estimated quantum for the months of May-12 and June-12 as indicated in para 9 of the affidavit. The TANGEDCO also had confirmed that they will judiciously consider giving dispatch as per requirements of the grid.
- iii) As regards filing of separate petitions on other issues, the TANGEDCO had already filed separate petitions.

7.4. With a view to optimize the power purchase cost, the Commission had allowed the full fixed cost and did not make any provision for purchase of energy from these stations in view of the expected power availability from the upcoming power stations in Tamil Nadu and the high variable cost of the power stations under consideration. Merit Order dispatch is a commonly adopted concept for procuring electricity in an optimal manner. Besides the conventional power plants, wind mills also provide electricity to the state grid of Tamil Nadu. The months in which relaxation is being sought is also covered by availability of wind energy. The main plea of the petitioner is that the ongoing power projects are delayed and have not started producing electricity. The demand for electricity has increased in summer months. There was an accident in the 840 MW Mettur Thermal Power Station due to which the power station was not available for 15 to 20 days in the month of May 2012. Consequent to increased availability of wind energy, sometimes liquid fuel based power station are also kept as standby. Since wind power is of infirm nature,

the petitioner has to run the expensive power projects at times. To meet such conditions, relaxation is sought as follows:-

Name of IPP	April 2012 in MU	May 2012 in MU	June 2012 in MU
M/s GMR	67	70	70
M/s SPC	43	13	13
M/s MPC	42	13	13
M/s PPN	213	234	208
Total	365	330	304

7.5. However, in the subsequent submission dated 30<sup>th</sup> May 2012, the actual dispatches for the month of May 2012 upto 27-5-2012 was indicated as given below:-

Name of IPP	May 2012 (upto 27.05.2012) in MU
M/s GMR	46
M/s SPC	16
M/s MPC	18
M/s PPN	93
Total	173

7.6. While the request for dispatch of these projects for the month of May was 330 MU the actual dispatch upto 27-5-2012 was 173 MU. The Commission observes that for the balance 4 days of May 2012 these stations would have been dispatched with utmost care, with a view to optimize the power purchase cost.

7.7. Keeping in view the contingencies of delay in completion of the on-going projects, increased demand during the summer months, transmission corridor constraints for purchase of power from outside the southern region, the Commission allows the prayer of the petitioner for availing of electricity as follows:-

Name of IPP	April 2012 in MU	May 2012 in MU	June 2012 in MU
M/s GMR	67	46	70
M/s SPC	43	16	13
M/s MPC	42	18	13
M/s PPN	213	93	208
Total	365	173 + dispatches for the balance 4 days at actuals	304

7.8. The Commission has also observed from the website of “tneblcd” that PPN power station is on a standby mode w.e.f. 23-5-2012. In view of the above, the actual dispatch of the liquid fuel stations will have to be much less than 304 MU as prayed for in the petition. Further with the availability of cheaper regulated power and wind energy, dispatch based on merit order shall be followed in letter and spirit.

7.9. With the above observations, MP.No. 11 of 2012 is disposed of. As regards the estimate of power requirement, etc projected in this petition, such details will be dealt with in the proposal for short term power purchase, as and when the petitioner furnishes the details, as called for in the two separate petitions filed before the Commission.

Ordered accordingly.

**8. Appeal:-**

An appeal under section 111 of the Electricity Act, 2003 against this order shall lie to the Appellate Tribunal for electricity within a period of 45 days.

Pronounced in the open court on the 21<sup>st</sup> June 2012.

(Sd.....)  
**(S.Nagalsamy)**  
Member

(Sd.....)  
**(K.Venugopal)**  
Member

/ True Copy /

Secretary  
Tamil Nadu Electricity  
Regulatory Commission

