

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

**PRESENT:-**

ThiruS.Akshayakumar .... Chairman

and

Thiru.G.Rajagopal .... Member

**I.A.No.1 of 2015**  
**in**  
**M.P.No.30 of 2015**  
**and**  
**M.P.No.30 of 2015**

Tamil Nadu Generation and Distribution Corporation Ltd.  
Represented by Chief Engineer / Gas Turbine Schemes  
144, Anna Salai  
Chennai – 600 002.

... Petitioner

Vs.

Nil

.... Respondent

**Dates of hearing : 05-10-2015 and 30-12-2015**

**Date of order : 25-04-2016**

The M.P.No.30 of 2015 filed by TANGEDCO came up before the Commission for final hearing on 30-12-2015. The Commission upon perusing the above petition and the connected records and after hearing the submissions of the Petitioner passes the following order:-

**ORDER**

**1 Prayer of the Petitioner in M.P.No.30 of 2015 is to :-**

i) to condone the delay in filing this petition.

- ii) to approve and ratify the action of this petitioner in having generated real power of 0.7704 MU during the period from May 2014 to March 2015 (upto 24-03-2015) in FY 2014-15 under unavoidable emergency circumstances;
- iii) to approve the real power generation at BBGTPS under extra ordinary circumstances to maintain Grid Stability and Security and during trial run of the units;
- iv) to give liberty to file a fresh petition for FY 2015-16 after generating real power at BBGTPS as and when emergency arises.

(I.A.No.1 of 2015 in the above M.P. has been filed for the prayer of condonation delay in filing this Miscellaneous Petition).

## **2. Contentions of the Petitioner:-**

2.1 The earlier petition M.P.No.32 of 2014 filed before the Commission praying ratification for having generated real power of 0.86546MU in FY 2013-14 and 2.22936 MU in April'14 and approval for generating real power at BBGTPS under extra ordinary circumstances to maintain Grid stability and security and during trial run is pending before the Commission.

2.2 In SMT Order 9 of 2014, power generation at BBGTPS is not allowed under "Merit Order Dispatch" vide clause 4.141 of SMT order and it requires prior approval of the Commission, as per the directive of Commission vide 7.1(h) of the SMT order, fresh petition seeking similar relief as in the M.P.No.32 of 2014 is filed.

2.3 The plant was operated in order to avoid cascade tripping of generating units & EHT / HT feeders and blackout in the area of Chennai city during critical situation thereby maintaining stability of Chennai network.

2.4 At BBGTPS, 4 Units of 30 MW each are available. The units were being operated under unavoidable emergency circumstances in FY 2014-15 as detailed below:-

Month	Generator operated	Units generated in MU (Gross)	Reasons
May 2014	I & II	0.1683	<b>i) 22-05-2014 – 0.0729 MU</b> To save the 230 KV Alamathy Inter connection Transformer – II in 400 KV Alamathy SS & Sriperumpudur Interconnection transformer-I & II at 400 KV Sriperumpudur SS from tripping due to over loading.
	I & II		<b>ii) 26-05-2014 – 0.0943 MU</b> To reduce the load in 230 KV Gummidipoondi-NCTPS feeder from 238 MW to 224 MW due to transmission constraints.
	IV		<b>iii) 28-05-2014 – 0.0011 MU</b> Trial run of Unit-IV after completion of Exhaust duct repair work.
July 2014	III	0.0123	<b>16-07-2014 – 0.0123 MU</b> Trial run after carrying out Hot gas Path Inspection along with Turbine casing crack rectification work.
August 2014	I	0.0263	<b>07-08-2014 – 0.0263 MU</b> To maintain stability of Chennai network.

Feb. 2015	IV	0.0176	<b>14-02-2015 – 0.0176 MU</b> To maintain stability of Chennai network.
March 2015 (upto 24-03-2015)	II & IV	0.5459	<b>17-03-2015 – 0.0577 MU</b> To maintain stability of Chennai network
	I,II & IV		<b>18-03-2015 – 0.1762 MU</b> To meet out Chennai network demand.
	I, II & IV		<b>20-03-2015 – 0.2450 MU</b> 230 KV NCTPS-Alamathy feeder I & 400 KV NCTPS –Vallur feeder-I got tripped due to bad weather condition & sudden formation of Fog. Consequent to that, Unit-III at Vallur Station and Unit-I at NCTPS got tripped. Due to shutdown of Vallur& NCTPS units following 230 KV feeder got tripped: Sriperumpudur-NCTPS feeder Kilpauk-NCTPS feeder NCTPS – Tondiarpet feeder –II
	I		<b>21-03-2015 – 0.067 MU</b> i) NCTPS-Tondiarpet feeder-II got tripped due to fog formation. Consequent to that unit at NCTPS-Stage-II got tripped. Due to that 230 KV NCTPS-Kilpaukfeeder got tripped. ii) Unit – III at ETPS got tripped. iii) Further 230 KV Alamathy-Manali feeder – II got tripped.
<b>Total generation from May 2014 to March 2015 upto 24-03-2015 in FY 2014-15</b>		<b>0.7704</b>	

2.5 The expenditure incurred towards fuel for generating real power of 0.7704 MU during the period from May 2014 to March 2015 (upto 24.03.2015) in FY 2014-15 was Rs.1.58 crore.

2.6 This petition is filed before the Commission for admitting the expenditure incurred towards cost of fuel, during real power generation of 0.7704 MU at BBGTPS during May 2014 to March 2015 (upto 24-03-2015) in FY 2014-15 and the expenditure likely to be incurred towards usage of fuel for future real power

generation, in the TANGEDCO's ARR to be submitted along with the Tariff Petition to be filed before the Commission for tariff revision, otherwise the expenditure made towards fuel for generating real power at BBGTPS could not be reflected in tariff.

2.7 During the tripping and breakdown of vital 230 KV feeders like NCTPS – Tondiarpet feeders 1 & 2, Manali-Alamathy feeders, Manali-Mylapore feeders etc. there would be disturbance in 110 KV network system also causing major Grid disturbance ( to the tune of about 300-400 MW) in Chennai city leading to black out of major essential services like Government Head Quarter's Hospital, Railway traction system, Metro water works, High Court and Secretariat campuses etc. Hence, in order to mitigate the supply failure in the important vicinity of Chennai city, it is very much essential to keep the units in BBGTPS in service to extend supply to vital sub-stations like 230 KV Mylapore, Tondiarpet, Taramani, sub-stations and 110 KV GMR, Chindadaripet, Valluvarkottam& High Court substations.

2.8 On restoration of station supply to the above sub-stations, depending upon the feeder health conditions, 230 KV feeders are gradually normalized with simultaneous restoration of relevant 110 KV feeders according to the Chennai city network loading condition without affecting the stability and security of the system. The restoration process takes about 30 minutes to 2-3 hrs depending upon the severity of the disturbance. After normalizing, the generation units of BBGTPS will be taken out of bar and kept as stand by. In view of the above, the operation of the Generation units in BBGTPS during critical condition is very much required to meet the contingency situation in the Chennai city network in restoring supply to essential services and thus ensuring supply.

2.9 The unit is operated only in the extraordinary circumstances stated above in order to maintain the grid stability. BBGTPS may therefore be considered as a part of grid stability mechanism rather than a power generating station and it may be exempted from the ambit of “Merit Order Dispatch”.

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

3.1. The Commission has considered the prayer of the Petitioner, namely:

- i) to condone the delay in filing this petition.
- ii) to approve and ratify for having generated real power of 0.7704 MU during the period from May 2014 to March 2015 (24-03-2015) in FY 2014-15 under unavoidable emergency circumstances;
- iii) to approve real power generation at BBGTPS under extraordinary circumstances to maintain the Grid Stability and Security and during trial run of the Units;
- iv) to give liberty to file a fresh petition for FY 2015-16 after generating real power at BBGTPS as and when emergency arises.

TANGEDCO in its second prayer has sought for the Commission’s approval and ratification for having generated real power of 0.7704 MU during the period from May 2014 to March 2015 in FY2014-15 under unavoidable emergency circumstances in order to avoid cascade tripping of generating units & RHT/HT feeders and blackout in the area of Chennai city area during critical situation thereby maintaining stability of Chennai network.

3.2. TANGEDCO has furnished the reason for operating the power station month wise i.e. from May 2014 to March 2015 and the reasons seem to be justifiable. Hence, the generation of the real power by the BBGTPS is hereby approved and ratified.

3.3. Further, TANGEDCO has also deposed that the present petition is filed for admitting the expenditure incurred for generating the real power of 0.7704 MU during the period from May 2014 to March 2015 (up to 24.03.2015) in FY 2014-15 amounting to Rs.1.58 Crores. The cost incurred for generating 0.7704 MU is high and the energy available from the BBGTPS is outside Merit Order Dispatch. Further, it is pertinent to mention here that the Commission in previous occasions while allowing the power purchase from high cost IPPs, ETPS and also in respect of BBGTPS has allowed only up to the Average Rate of Realization of the Petitioner for the purpose of Annual Revenue Requirement (ARR). Accordingly, now, in respect of the present Miscellaneous Petition also, Commission allows the power purchase cost only up to the Average Rate of Realization for the purpose of ARR.

3.4. In respect of the third prayer for generation of real power at BBGTPS under extraordinary circumstances to maintain Grid Stability and Security and during trial run of the Units, approval has already been granted in M.P. No.32 of 2014 to allow the machines to operate under trial run to check their healthiness and to keep them ready for emergency purposes.

3.5. In respect of the fourth prayer, as to liberty to file a fresh petition for FY2015-16 after generating real power at BBGTPS as and when emergency arises,

Commission would like to make it clear that as per Directive 7(h) of SMT Order No. 9 of 2014, dated 11-12-2014, TANGEDCO shall take prior approval from the Commission. However, if generation of power is necessitated due to emergent situations, TANGEDCO may take the approval of the Commission subsequently on a case to case basis periodically. However, the delay in filing the present petition is hereby condoned in view of the reasons discussed in para 1 supra.

3.6. With the above Orders of the Commission, the M.P. No.30 of 2015 is disposed off.

**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.....)  
**(G.Rajagopal)**  
**Member**

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

/ True Copy /

Secretary  
Tamil Nadu Electricity  
Regulatory Commission