

order dated 11-01-2011 and other connected Appeals. In the said petition, TANGEDCO submitted the following measures to revoke Restriction and Control measures:-

Measures taken for revoking the Restriction and Control measures:-

2.1.1 Capacity addition:-

The following capacity additions are programmed upto December 2011 as already approved and communicated in the 16th meeting of SRPC held on 30-04-2011.

<i>Sl. No.</i>	<i>Name of the Projects</i>	<i>Scheduled date of commissioning</i>	<i>Availability</i>
1	<i>Neyeli TS – II Expansion Unit I</i>	<i>July 2011</i>	<i>138</i>
2	<i>Simhadri Stage 2 – Unit 3</i>	<i>July 2011</i>	<i>81</i>
3	<i>NTPC-TNEB at Vallur Stage-I Unit I</i>	<i>October 2011</i>	<i>318.75</i>
4	<i>Kudankulam APS Unit-I</i>	<i>December 2011</i>	<i>392.7</i>
	TOTAL		930.45 MW

The following capacity additions have been programmed to materialize before June 2012.

<i>Sl. No.</i>	<i>Name of the Projects</i>	<i>Scheduled date of commissioning</i>	<i>Availability</i>
1	<i>Periyar Vaigai SHEP –II</i>	<i>August 2011</i>	<i>2.5</i>
2	<i>Bhavani Kattalai Barrage – II</i>	<i>August 2011</i>	<i>30</i>
3	<i>Periyar Vaigai SHEP – IV</i>	<i>September 2011</i>	<i>2.5</i>
4	<i>Bhavani Barrage – II</i>	<i>November 2011</i>	<i>155.6</i>
5	<i>Modification of 12 Sugar Mills</i>	<i>October / November / December 2011</i>	<i>155.6</i>

6	<i>Periyar Vaigai SHEP – III</i>	<i>December 2011</i>	<i>4</i>
7	<i>Bhavani Kattalai Barrage – III</i>	<i>January 2012</i>	<i>30</i>
8	<i>NTPC-TNEB at Vallur Stage-I Unit II</i>	<i>March 2012</i>	<i>318.75</i>
9	<i>North Chennai TPS Stage 2</i>	<i>March 2012</i>	<i>510</i>
10	<i>Mettur TPS Stage 3</i>	<i>March 2012</i>	<i>510</i>
11	<i>Neyeli TS – II Expn. Unit II</i>	<i>March 2012</i>	<i>138</i>
12	<i>North Chennai TPS Stage 2</i>	<i>May 2012</i>	<i>510</i>
	TOTAL		2331.35 MW

2.1.2 Power purchase:

- (i) *From private traders - 305 MW + 195 (June 2011)
500 MW (from June 2011 to September 2011)*

It is further proposed to increase this quantum to 125% as tendered quantity if necessary.

- (ii) *Reliability power - 1000 MW during peak hour & 200 MW during non-peak hour for the months June to September 2011.*

- (iii) *Additional from private traders - 500 MW (round the clock) is being finalized.*

- (iv) *GUVNL of Gujarat - 500 MW power for the months of June, July, August 2011.*

- (v) *Case I bidding - 450 MW for 5 years (as approved by this Hon'ble Commission) Tender due for opening on 24-08-2011 and financial bid on 08-09-2011.*

- (vi) *Depending on the requirement, additional capacities are also proposed to be procured through Case I bidding for a period from 3 to 5 years.*

2.1.3 Captive Power Plants:-

The generation from Captive Power Sources upto July 2011 would be of the order of 406 MW.

2.1.4 Non-Conventional energy sources:-

The following capacity additions would materialize on fruition of projects by 31-12-2011 from the following non-conventional energy sources:-

• Wind	:	600 MW
• Co-gen	:	19 MW
• Bio mass	:	34 MW
• Solar Projects	:	7 MW
Total	:	660

2.1.5 Wind Power:-

It is also expected that the infirm power from wind generation will be more active from May 2012 onwards to augment the availability.

2.1.6 *In view of the above, TANGEDCO has submitted to the Commission that the deficit of about 4000 MW would be met by June 2012 which would facilitate lifting of Restriction and Control measures by then. The TANGEDCO has also prayed:-*

- (i) To permit TANGEDCO to implement the Restriction and Control measures until June 2012 when TANGEDCO is poised for self-sufficiency.*
- (ii) It is also submitted to the Commission that periodically the position will be placed for review by the Commission.*
- (iii) It is also submitted that depending on the availability of power, partial relaxation may also be considered whenever the situation permits.*

3. Facts and Background of the Case:-

3.1 The Restriction and Control measures have been in force in the State of Tamil Nadu since 28-11-2008 and an order approving the same was passed by the Commission in MP No. 42 of 2008. At the time of passing the said order, Commission also approved the levy of excess demand and excess energy

charges for violation of R&C measures in force. Since then, excess demand and energy charges are being collected by the Tamil Nadu Electricity Board (the successor entity being TANGEDCO) from those who are violating R&C measures. While so, the Tamil Nadu Spinning Mills Association filed a petition in MP Nos. 4 & 7 of 2010 seeking the Commission to review its order passed in MP No. 42 of 2008 dated 28.11.2008 which enabled the distribution licensee i.e. TANGEDCO to impose the excess demand and excess energy charges on those who violate the R&C measures and Commission passed a clarificatory order on 4-5-2010 thereon. In the said clarificatory order, the Commission upheld the powers of the TANGEDCO to levy excess demand and excess energy charges and also held that excess demand and excess energy charges are also leviable for violation during peak hours as well.

3.2 The said order of the Commission was challenged before the Appellate Tribunal for Electricity, New Delhi in Appeal Nos. 111, 114, 119, 120, 127, 128, 130, 131 and 141 of 2010.

3.3 In its common order in the said appeal, the Hon'ble Appellate Tribunal for Electricity, New Delhi, in para 44 of its Order has directed as follows:-

“44. Having decided the these questions of law regarding excess demand and excess energy charges, we observe that the proposal made by the Electricity Board in Petition No. 42 of 2008 was for Restriction and Control Measures for indefinite period. Such drastic cuts on industrial and commercial establishments that too for indefinite period indicates lack of planning on the part of the Electricity Board to meet the consumer demand. The Act permits regulation of power supply but such regulations have to be

an exception for conditions such as unforeseen outages of generating units or excessive increase in demand of power due to abnormal weather conditions or due to any other unforeseen contingency or event. The system has to be planned for normal planned outages, normal load growth and credible contingencies. The National Electricity Policy lays emphasis for meeting the increasing demand requirements in an optimum manner and well coordinated approach in development of the power sector for providing reliable uninterrupted quality power supply to all consumers. In the interest of the consumers, we direct the State Commission to initiate suo moto proceedings regarding short term, medium term and long term plan for meeting the requirement of power both peak hours and energy in the state of Tamil Nadu. The Electricity Board/Utilities in Tamil Nadu may be directed by the State Commission to submit their comprehensive proposal before the State Commission. We expect this exercise to be completed within a period of six months. The State Commission may also take measure to encourage open access in transmission and distribution so that the consumers could arrange power directly to meet their demands”.

- 3.4 Pursuant to the said order, the Commission had directed the TANGEDCO to file a petition regarding short term, medium term and long term plans for meeting the requirement of power both peak hours and non-peak hours in the State of Tamil Nadu. A comprehensive proposal was called for from the TANGEDCO. Consequent to this direction, the TANGEDCO filed a Miscellaneous Petition on 22nd June 2011 which was numbered as MP No. 15 of 2011. The above petition was very sketchy and did not deal with the issues of short, medium and long term plans but only prayed for implementation of

the restriction and control measures until June 2012 when TANGEDCO is poised for self-sufficiency. The matter was heard on 11-7-2011 and the TANGEDCO was directed to file a revised petition. The revised petition was filed by TANGEDCO on 12th August 2011 and even this revised petition did not address the issues of short, medium and long term in a comprehensive manner. Thereafter, the Commission heard the Chairman, TANGEDCO on 19th August 2011 and passed an order in which the following observations were made by the Commission:-

“A note was submitted by TANGEDCO / TANTRANSCO with regard to the capacity addition of 4640 MW by the end of 2012. A presentation was made by the Director, TANGEDCO, TANTRANSCO. It was explained that during the next five years about 55 Nos. of 230 KV sub-stations will be set up. Two Transmission Corridors at 400 KV level for evacuation of wind power, one from South to North and another from South to West is being planned. One of the Wind Transmission Corridors, according to TANGEDCO is proposed to be taken up under the Public-Private partnership route while the other one is proposed to be funded through REC funding. Additional fund requirement for this line is under discussions with REC. They also explained about setting up of 5 nos. of 400 KV sub-station in and around Chennai to increase the power delivery mechanism for Chennai Metropolitan and surrounding areas. It was further explained that 400 KV Ring Main around Chennai is being expanded with funding from Japanese International Co-operation Agency”.

- 3.5 The TANGEDCO further listed out the medium term, additional power projects to be taken up amounting to 5000 MW. They are North Chennai stage III, North Chennai stage IV, Ennore Annexe and Kundah Pumped storage.

However, list of projects did not include projects like Cuddalore, Tuticorin which are pursued by TANGEDCO. TANGEDCO also clarified that one of the Wind Corridors is proposed to be completed within a period of two years.

3.6 Thereafter the Commission issued the first interim order dated 19-8-2011 directing TANGEDCO to file a comprehensive petition. Paragraph 7 of the said interim order is extracted below:-

“ 7. The Commission directs that an amended petition be filed by TANGEDCO taking into account the following aspects:-

(1) Load forecast for five years and 10 years to address the medium and long term requirements.

(2) Demand Side Management to forecast the load reduction that can be achieved by DSM measures which should be factored as a reduction in the load forecast referred in item (1) above.

(3) Generation Planning – Additional capacity requirement:-

(i) To be met by conventional power such as thermal, hydro and nuclear. This needs to be further divided into own generation, share from Central Sector Generating Stations, UMPPs, IPPs and power procurement through Case 1 / Case 2 bidding under Section 63 of Electricity Act 2003.

(ii) Renewables, such as wind, biomass, bagasse and solar. It is also necessary to forecast the power generation from wind. Wind Energy being infirm in nature will require certain balancing efforts in the form of pumped storage power station or any other form of cost effective energy storage. In the absence of credible cost effective storage of wind energy, trading of surplus energy seems to be an option which should be explored by TANGEDCO.

(iii) Power available through Renewable Energy Certificate route should also be factored in this analysis.

(4) Transmission Planning:-

This should include the associated transmission system with generation projects and sub-transmission system leading upto the distribution network. The basic idea is to ensure that all the additional generation will ultimately reach the load centres thereby extending the supply to every consumer. In the absence of development of transmission and distribution system for meeting the loads, any additional capacity may not reach the consumer.

(5) Distribution Planning:-

Expansion of distribution system for meeting new loads, upgrading the existing distribution system for improving reliability, upgrading of the existing distribution transformers, introduction of HVDS and LT aerial bunched conductors wherever deemed appropriate, metering for the purpose of energy audit and consumer metering, AT&C loss reductions in both technical and commercial respects which may involve technical upgrading and administrative measures are to be taken up.

(6) All the above planning aspects will have to be correlated with the corresponding investment planning and its source of funding and the time frame in which the works will be completed.

(7) TANGEDCO / TANTRANSCO is at liberty to improve the petition over and above what is stated above, for making the petition a comprehensive one.

(8) The amended petition shall be filed by 20th September 2011.

3.7 Consequent to the directions, given in the first interim order extracted above the TANGEDCO has filed a comprehensive petition on 19th September 2011. This petition was heard and admitted by the Commission on 12th October 2011. The petition comprises of two parts, the medium and long term

planning details relating to generation, transmission and distribution. In the short term, the TANGEDCO had prayed for permitting them to implement the restriction and control measures until June 2012 when TANGEDCO is poised for self-sufficiency. The petitioner further submitted that depending on the availability of power, partial relaxation will also be considered by the TANGEDCO whenever the situation permits. The petitioner also submitted that the details will be placed before the Commission periodically for review. This submission probably relates to the planning aspects relating to medium and long term.

3.8 During the hearing on 12th October 2011, the Commission pointed out that the energy available from wind has not been reflected in the entire planning process. Installed capacity of wind in Tamil Nadu being the highest in the country, availability of energy from this source cannot be completely ignored in the planning process, however infirm the wind energy may be. The Commission is of the view that it is necessary to develop a forecasting model immediately by all concerned so that the quantum of energy available from wind is reasonably forecast in the planning process. This will also enable avoiding purchase of excessive quantum of energy from various sources from the open market etc. which otherwise is the case in the present proposal.

3.9 Since one of the prayer relates to restriction and control measures, the Commission has decided to get the views of the stakeholders also before deciding the matter. As regards the proposal for medium and long term planning is concerned, the same could be dealt with by the Co-ordination

Forum constituted under Sub-sec (4) of Section 166 which is reproduced below:-

“(4) The State Government shall constitute a Coordination Forum consisting of the Chairperson of the State Commission and Members thereof representatives of the generating companies, transmission licensee and distribution licensees engaged in generation, transmission and distribution of electricity in that State for smooth and coordinated development of the power system in the state.”

3.10 The Commission will deal with the medium and long term proposals for development of power sector in the State accordingly through the Co-ordination Forum taking into account the detailed provisions contained in Chapter 3 of the TNERC Distribution Code which provides for Distribution System Planning. In view of this, the comprehensive proposal contained in MP No. 15 of 2011 filed by TANGEDCO on 19th September 2011 was hosted in the website of the Commission as well as the TANGEDCO so as to enable the stakeholders to submit their comments to the TANGEDCO and the Commission within a period of 4 weeks from the date of the order. No comments were received till the due date of 01-12-2011. The due date was further extended upto 30-12-2011 to enable interested stakeholders to file their views. Consequent to this, the following stakeholders submitted their views on the comprehensive proposal filed by TANGEDCO.

Sl. No.	Suggestion by	Summary of the views
1	Retired TNEB Engineer (name not mentioned)	The reasons for the losses are mainly poor performance of the motors, lights, welding loads, etc. During 1970-79 TNEB collected Rs.300/- per agriculture service connection for provision

		<p>of capacitor in each service. Had this been implemented 40% of the agricultural demand would have got reduced.</p> <p>TNEB has provided Electronic meters for recording KWH and KVAH for 25 HP and above loads. However, if TNEB charges the same tariff for KVAH units, the revenue will get increased above 30% and consumer will try to reduce KVAH consumption with the result, losses and demand will be reduced considerably. For consumers below 25 HP the tariff may be increased by 30% to compensating the losses since the losses are purely due to inefficient loads. If the agricultural loads are provided with capacitors, it will reduce about 40% of the agricultural demand. Suggestions have also been given for conducting energy audit.</p>
2.	Tamil Nadu Electricity Consumers Association	No suggestion has been given and only a request has been made to provide relief from the R&C measures.
3.	Thiru S. Gandhi, President, PESOT, Coimbatore	<p>1. Objection has been raised to the proposal for power purchase from 1000 MW to 3000 MW. The letter states that though withdrawal of R&C measures is desirable, the best option for TANGEDCO is to choose R&C when the open market price is left unregulated.</p> <p>2. Industries can meet their requirement of power from the market.</p> <p>3. Sharing the cost of power purchase by all categories is unjustified when R&C measures</p>

		<p>have been imposed only on power intensive industries and commercial houses.</p> <p>4.Regulatory assets cannot be carried out from the fourth year as directed by APTEL.</p>
4.	ESSAR Electro Controls	<ol style="list-style-type: none"> 1. Power cut to HT industries may be increased by 5 to 10% and norms for additional sanction should be made stringent. 2. By closing shops in advance during peak hour there is a possibility for reduction in TANGEDCO's power consumption. 3. IT Industry tariff may be increased to meet the financial losses of TANGEDCO as it is the only industry which is running without raw materials. 4. Power holiday from 6 am to 10 pm may be introduced for all customers except hospitals, Government offices, and banks. PSUs and residences from Monday to Saturday 5. Anyone consuming power during said time may be charged four times of the normal tariff. 6. Manufacturing and selling of storage electric water heaters may be banned. 7. Manufacturing and selling DC bulbs may be banned and usage of LED lamps may be promoted. 8. Green houses may be promoted by lowering power tariff for such buildings. 9. Street light intensity during 11 pm to 5 pm may be reduced suitably. Energy audit for all local bodies may be made compulsory. 10. Residential houses having more than 2000

		sq. feet area may be charged at a high slab. 11. Commercial buildings may be installed with solar panels.
5	Hosur Small and Tiny Industry Association	The letter states only the difficulties experienced by the constituent members of the association. It does not address the issue of R&C or improvement of power position.
6	Indian Wind Power Association	1. The addition of 5000 MW without matching evacuation work is disastrous both to the existing wind mills and new wind mills. Therefore, TNEB should create infrastructure and then suitably connect the wind generators. 2. R&C should not be implemented on generators, using non-conventional energy source. 3. There is a need for better understanding of wind blowing pattern and managing evacuation during windy months.
7	Tamil Nadu Spinning Mills Association	Suggestions relate to longer durations of load shedding / tripping, equitable distribution of power, proposal in respect of wind energy captive consumers, exemption from REPO for the power purchase through IEX / third party, extension of evening peak hour by one hour upto 10 pm, strengthening of grid for providing better evacuation, enforcement of quota during evening peak hour, segregation of feeders, etc.
8	Madras Chamber of Commerce	Industrial sector is seriously affected by the existing power cut and hence tariff increase may be made subject to assured/uninterrupted power supply. Demand charges may be made

		uniformly at Rs.200/- per KVA instead of applying varying levels of increase.
9	Team of Engineers Rotary Club	<ol style="list-style-type: none"> 1. KVAH billing may be adopted instead of KWH billing for the industrial sector from 25 HP service. 2. Industries should always maintain PF to maintain their existing consumption. 3. Government can set up thermal power station in all cities in partnership with private sector. 4. Exclusive power plant may be set up for SEZ with support of Central Government.
10	Chennai Metropolitan Slum Dwellers Association	<ol style="list-style-type: none"> 1. CFL bulbs may be distributed as is being done in other states to promote energy conservation. 2. Obsolete and old transformers may be substituted with new transformers. 3. TANGEDCO may undertake reforms, austerity measures etc. 4. Tariff may be increased for places of worship, Government aided institutions, etc. 5. Tariff may be increased for theatres, star hotels, clubs which consume power lavishly. The lavish consumption of energy for meetings may be prevented.
11	Indian Chamber of Commerce and Industry	<ol style="list-style-type: none"> 1. Alternative sources such as solar power wind mills, diesel generating sets, idle power turning of wastes, etc can be tried and implemented.

		<p>2. Energy audit may be introduced with the help of professionals such as CA, ICWA, CS.</p> <p>3. Textile industry is constantly consuming power throughout the year. Therefore a separate tariff for textile industries may be considered.</p>
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3.11 As the views of the above stakeholders did not deal with the issues in its entirety, the Commission decided to give one more opportunity to all stakeholders and accordingly notices were sent to all stakeholders informing that the matter is listed for further proceedings on 23-01-2012 in the court hall of the Commission and requested them to appear in person through authorized representative on that day and offer their views.

3.12 Accordingly in the hearing held on 23-12-2011 the following persons appeared and presented their views:-

1. Thiru Hanumantha Rao, Ex-Member
2. Thiru N.L.Raja, Advocate
3. Thiru Devarajan, Advocate
4. Thiru R.S.Pandiaraj, Advocate
5. Thiru Rahul Balaji, Advocate
6. Thiru Gnanadesikan
7. Thiru Muttiah
8. Thiru Chockalingam, Chief Engineer/TNEB (Rtd)
9. Thiru Akshaya Kumar, Director of TANTRANSCO

3.13 Firstly, Thiru Hanumantha Rao, a former Member of the TNERC spoke on the subject. He observed that the availability of transmission corridor is a constraint for TANGEDCO and that he was not convinced with the load growth of 8% projected by TANGEDCO which, in his opinion is an overestimation.

He also stated that the DSM brought out by TNEB is ambitious and reactive power mechanism is negative in approach. He further observed that while CIL plans to grow only at 4.9%, the energy sector is poised to grow at 8%. He pleaded for dispensing with R&C in stages and was not in favour of drastic withdrawal. He further pointed out that section 23 of the Act may be invoked for equitable distribution and TANGEDCO may be directed to adopt a scientific method of overcoming the power shortage. He further expressed a view that prevention is better than cure.

3.14 Thiru N.L.Raja learned Counsel for TECA argued on behalf of Tamil Nadu Electricity Consumers Association. He expressed the view that the petition filed by TANGEDCO is not in line with the directions of the Tribunal in para 44 of its order. He further stated that the Regulations, while permitting restriction of consumption of energy also postulate that such measures can be taken only under certain exception such as unforeseen circumstance, contingency, etc. He said that the same has not been dealt with by TANGEDCO either in the original petition or in the current petition.

Thiru N.L. Raja also sought to point out that while there is an upward trajectory in all sectors, electricity sector has not been able to catch up and is lagging behind. He further explained that the entire exercise is constructive in nature and not destructive and hence things should be viewed positively. He also observed that the projects commissioned by TANGEDCO are functioning under constraints and added that the generation from wind power has not been factored entirely.

Thiru N.L.Raja also made a mention about the necessity to pressurize TANGEDCO on this issue. He expressed the view that unless there is a pressure on TANGEDCO to address the issue nothing can be done to move ahead. He further requested that TANGEDCO may be dealt with sternly and added that the requirement of law is only tough action thereby indicating that any further extension should not be given automatically. Thiru N.L. Raja also informed the Commission that he was adopting the arguments of Thiru. Hanumantha Rao in all other respects.

Thiru N.L.Raja would contend that the TANGEDCO has to conduct itself as a commercial entity and should be treated as such and that the manner in which the Commission should view TANGEDCO must be no different from that of the private players. He added that intention of Parliament in enacting Electricity Act 2003 is that there should be no discrimination in treatment of public and private utilities. He further stated that the lifting of R&C measures by 30th June 2012 should be a permanent one and towards the said end, he sought assurance from TNEB. He further added that if the TANGEDCO is not able to deliver on its assurances the licence should be suspended. He further added that as a prudent business establishment, TANGEDCO has to supply electricity to those who are willing to pay for the same.

- 3.15 Thiru Devarajan who represented South India Small Spinners Association expressed the view that success of spinning mills depend very much on 90% plant utilization and the TANGEDCO should not discriminate consumers in the

prevailing scenario of electricity shortage. He further argued that there must be equal distribution of electricity and all the consumer should be treated alike. He expressed concern about the load shedding and pointed out that spinning mills are unable to utilize the power on account of load shedding but the industries are still being penalized with excess demand and excess energy charges.

3.16 Thiru R.S.Panidiaraj, advocate, spoke on the need to bridge the gap between demand and power supply. He pointed out that load shedding actually takes place for five hours a day for HT consumers though it is two hours as per existing measures. He further pleaded for creation of different regions for the purpose of enforcement of power cut i.e. he suggested that the State of Tamil Nadu can be divided into different regions for the purpose of enforcement of power cut. He also pointed out that because of unscheduled load shedding it becomes difficult for the industries to plan their production requirements thus leading to payment of idle wages to the labour force which will have no work to do in such conditions. He thus, made his point that manpower planning has become difficult in view of unscheduled load shedding. He further pointed out that power cuts are imposed only on HT consumers and commercial consumers and other segments have been exempted, which in his opinion, is discriminatory. He also brought out the alleged discrimination between Chennai metropolitan area and mofussil areas in the matter of power cut and sought to rectify the same. Such discriminatory power cuts according to him is against the principles of equality enshrined in the Constitution of India and pleaded for treatment of all consumers on equal footing. As regards the

extension of peak hours, he said that it should not be acceded to as it is nothing but an attempt to change the tariff order. He also suggested that industries may be differentiated for the purpose of R&C measures and that special economic zones which are enjoying the exemption need to be brought under R&C on the grounds of principles of equality.

3.17 Thiru Rahul Balaji, advocate argued that the view of TNEB that wind power is not useful is myopic. TANGEDCO makes large amount of money by selling wind power. But it has not paid the wind energy developers for the last one year. According to him this has resulted in shortage of funds leading to slow down in creation of additional capacity. Only when there is an equitable distribution of payment of amount for the power produced, a system can survive, he said. TANGEDCO has to prioritise the collection efforts, he added.

3.18 Thiru Gnanadesikan, TANSITIA compared the growth of generation in the previous years to that of the present and said that the growth has come down by 2000 million units. He further faulted the TANGEDCO for disparity in power cuts between Chennai and other areas. He further stated that the small industries have been severely affected by power cuts and suggested that TANGEDCO may declare weekly power holidays. He pleaded for dispensing with the 15% surcharge for welding power.

3.19 Thiru Muttiah represented the case of Naga Limited. He blamed the TANGEDCO for not making forecast about the availability of transmission

capacity. TANGEDCO has not mentioned about the forecast with regard to the availability of transmission capacity in its petition, he said. He further argued that the question of age and the replacement of the transmission grid has not been discussed in the tariff petition. He pointed out that the forecast relating to demand does not include the capacity of wind and criticized TANGEDCO for having no plan on the growth of wind power.

3.20 Thiru Chockalingam advocated the need to conserve energy to minimize the demand. He further advocated the need to install capacitors for agricultural connections. The cost of installation may cost TANGEDCO Rs.20 crores but it may save 30% of energy amounting to 6000 MW he pointed out. He expressed the view that steps may be taken by TANGEDCO to install capacitors. He further pointed out that energy audit was conducted before the enactment of Electricity Act 2003 but the subject has now been taken over by CEIG who according to him, has no concentration on this. He further said that free electricity connections being given to huts can be reduced. He expressed the view that TANGEDCO needs to produce more energy or save energy to overcome the present power shortage.

3.21 Thiru Akshaya Kumar, Director, TANTRANSCO in his reply to the comments of the stakeholders would submit that the average cost of supply in this State is much higher than any other State i.e. Rs.5.82 / kWhr. T&D loss is low. 100% rural electrification has been achieved by the State of Tamil Nadu. From 1990, there has been no investment in the power sector and that is the reason for the present crisis. In spite of the fact that Tamil Nadu has

extensive network, the T&D loss is low at 18% compared to other states and national average. He further stated that the last power plant was commissioned in 1995 in North Chennai and the power deficit started occurring from 2006 and only in 2008 TANGEDCO started imposing power cut. The power position was good until 2003 and only in 2004 it started to deteriorate.

Even the private power plants are finding it difficult to commission the new plants. MOP has forecast one lakh MW of power but the Nation could not generate even half of it. Power sector is no exception to the market fluctuations. There is a mismatch between demand and supply. He also stated that the legal requirements can be complied with only when there is level playing field.

3.22 In the meantime considering the fact that the entire exercise being a comprehensive one requiring more time for the Commission to complete, a petition was filed by the Commission before the ATE in Interlocutory Application in Appeal No. 111 and connected appeals of 2010 praying the Tribunal to grant time till 28-3-2012 to complete the exercise. In the said Interlocutory Application filed by the Commission, Commission brought out the steps taken by it consequent to the direction of Tribunal and further directions given to the TANGEDCO on the comprehensive exercise in regard to load forecast, DSM, generation planning, transmission planning, distribution planning, etc. The Tribunal passed an order on 7-12-2011 granting time to the Commission to complete the process before 28-3-2012.

4. Finding of the Commission

4.1 The Restriction and Control measures commenced in Tamil Nadu w.e.f. 28-10-2008 consequent to the Order issued by this Commission in Petition No. MP 42 of 2008. This scheme has under gone many changes from time to time based on petitions filed by different consumers / generators. Introduction of Open Access to all HT consumers w.e.f. 17th February 2010 has also changed the impact of R & C measures on consumers. Captive consumption of wind energy and other types of generation is yet another factor which provides some relief to the consumers. The Commission has undertaken this exercise consequent to the Order issued by Hon'ble Appellate Tribunal for Electricity in Appeal No. 111 of 2010 and other connected appeals. The Commission examined the submission of various stake holders and also the arguments extended by the parties in the hearing held on 23-12-2011. Views of the Commission on the submissions of the stake holders are as follows:-

1. Suggestions regarding KVAH billing is worth considering and this matter will be further examined by the Commission separately in its Tariff Order or otherwise.
2. Charging of marginal tariff to industries and commercial houses is not tenable in as much as the entire tariff setting process is based on average pricing, average losses, etc. There are many decided cases to this effect.
3. As regards increasing of power cuts and declaration of power holiday, separate action has been taken by TANGEDCO and such actions are taken w.e.f. 27th February 2012 and 1st March 2012 respectively.

4. The Commission agrees to the suggestion of some stake holders with regard to increasing the usage of CFL lamps with a view to promote energy conservation. This should be pursued vigorously by TANGEDCO.
5. Suggestions regarding tariff formulation is being addressed separately as the Commission is working on a tariff order.
6. Transmission corridors both within the State and between the Southern region and rest of the country is currently very much constrained and there is an absolute need for improving this situation. For this purpose the TANTRANSCO shall take immediate action to conclude contracts for linking the northern and southern parts of Tamil Nadu by 400 KV system. Tenders which are pending with TANTRANSCO should be finalized at the earliest and awarded so that execution of this work is not delayed any further.
7. Extension of peak hours as suggested by TANGEDCO was opposed by the stake holders. This issue has a bearing on tariff in view of the TOD tariff which is prevailing and therefore is not being dealt with in this petition.
8. The issue of non-payment of dues to wind energy developers by TANGEDCO was cited as a reason for slowing down investment in creation of additional wind capacity.

4.2 After considering the written pleadings and the arguments during the hearing, the Commission passes the following Order:-

The restriction and control measures cannot be a permanent one. But at the same time it is possible to lift the restriction and control measures only when sufficient generation capacity is available within the State or sufficient financial resources are available with TANGEDCO for procuring additional power at competitive rates so that adequate power supply can be maintained. Neither

adequate generation and transmission capacity exists in the system nor adequate funds are available with the TANGEDCO at present for procuring power for meeting the entire demand. This problem of non adequacy of generation / transmission facilities is a phenomenon which has occurred over 10 years time period. The only silver lining is that some additional capacity will be getting commissioned during the years 2012 and 2013. The wind season also would be commencing from May 2012 and will last upto October / November 2012. A large number of industrial consumers also enjoy wheeling of electricity from their wind generators for their captive consumption. In addition the wind generators are also enjoying banking of wind energy. TNERC has also enabled all industrial consumers to avail open access w.e.f 17-2-2010 by issuing an amendment to the Open Access Regulations. Since then many industrial consumers, at times varying from 250 to 400 such consumers avail open access of upto 250 to 400 MWs either through traders or through the Power Exchanges. In view of this, problems during the period May to October / November is expected to recede. As some generating units are getting commissioned, albeit with certain delays, the Commission is not inclined to lift the entire R & C measures by end June 2012, as proposed by TANGEDCO in their petition. The Commission is of the view that such an Order for lifting R & C totally by end June 2012 would only create chaos in the distribution of Electricity in the State. Keeping the practical position of commissioning of various units, which are delayed for one reason or the other, the Commission would like to go in for a graded lifting of R & C measures duly linked to the commissioning of various generating units. The following generating units are expected to be commissioned during the course of the years 2012 and 2013.

EXPECTED DATE OF COMMISSIONING OF ONGOING MAJOR PROJECTS				
		capacity	DOC	Availability
1	Neyveli TS II UNIT 1	250	Mar-12	97.75
2	Simhadhri stg ii unit 4	500	Mar-12	80.75
3	NTPC-TNEB Joint Venture Vallur Unit 1	500	Mar-12	295
4	Mettur Thermal stg III unit 1	600	Jun-12	510
5	North Chennai TPS Stage II Unit 2	600	Jun-12	510
6	Neyveli TS II UNIT 2	250	Sep-12	97.75
7	North Chennai TPS Stage II Unit 1	600	Oct-12	510
8	NTPC-TNEB Joint Venture Vallur Unit2	500	Mar-13	295
9	NTPC-TNEB Joint Venture Vallur Unit 3	500	Mar-13	295
10	NLC -TNEB Jt venture at Tuticorin unit 1	500	Jul-13	164.5
11	NLC -TNEB Jt venture at Tuticorin unit 2	500	Jul-13	164.5
				3020.25

4.3 Further, TANTRANSCO should make adequate arrangements for evacuation of all the power generated to respective load centres and further distribution of the same by TANGEDCO to the actual consumption points will have to be properly co-ordinated by both these organization so that there is no gap in delivery of power generated by the generating units to the end consumers. Keeping all the above in view, the Commission would like to order the following schedule for lifting of R & C measures.

4.4 The overall shortage at different points in time as obtained at present is between 2000 to 4000 MWs, as observed from the details available in the website of SLDC. Currently, the Restriction and Control measures envisage 40% reduction in demand during the normal hours and 90% reduction in demand during the peak hours. The corresponding relief available in demand

is about 800 MWs and 750 MWs respectively. Besides this, there is also rotational load shedding for all consumers for a period of two hours in Chennai and for a period of four hours in all other parts of the State. Keeping in view the availability of wind power during the wind season, wheeling of captive generation by consumers, Open Access available to all HT consumers both industrial and commercial and the commissioning of new machines, the Commission decides on the following schedule for lifting of R & C measures duly taking into account the relief that has to be provided to other consumers who are subjected to load shedding.

Normal Hours: The load relief available corresponding to 40% restriction is 800 MW. With the commissioning of every 400 MW capacity, 200 MW relief shall be provided during the normal hours i.e. R & C measures shall be reduced to 30% from 40% with addition of 400 MW installed capacity. 10% additional relief in R & C will be provided with the capacity addition of 400 MW of conventional power capacity. Thus the entire restriction and control measures during the normal hours shall stand lifted when 1600 MW of conventional capacity is added to the Tamil Nadu Electricity System.

Evening Peak Hours: 90% restriction as existing today provides a relief of 700 to 800 MWs. With commissioning of every 400 MW of conventional capacity, 200 MW relief shall be provided in the restriction and control during evening peak hours. In effect, with the addition of 1600 MW of additional conventional power generation, the entire R & C measures of 90% during evening peak hours shall stand withdrawn.

In this arrangement, the consumers who own captive generation, both wind and other types of generation, would get the relief earlier during the wind season commencing from May onwards. The Commission believes that this will be a fair

approach to lifting R & C measures for HT consumers both industrial and commercial. This arrangement would also be providing some relief to other consumers who face load shedding. The expectations of new consumers who are waiting in the queue for new connections could also be satisfied to some extent.

4.5 The TANGEDCO shall also revisit the load shedding pattern in the entire State to make it more equitable.

4.6 The Commission would like to place on record its appreciation of various stake holders who furnished their comments and also appeared before the Commission in expressing their views enabling the Commission to pass this Order.

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.

(Sd/-)
(S.Nagalsamy)
Member

(Sd/-)
(K.Venugopal)
Member

/True Copy/

Secretary
Tamil Nadu Electricity
Regulatory Commission