TAMIL NADU ELECTRICITY REGULATORY COMMISSION

(Constituted under section 82 (1) of the Electricity Act, 2003)
(Central Act 36 of 2003)

PRESENT:-

Thiru.S.Nagalsamy …. Member

and

Thiru.G.Rajagopal …. Member

M.P.No.18 of 2011

JSW Steel Limited
Salem Works
P.O. Potteneri
Mecheri T.K.
Salem District – 636 453.

… Petitioner
(Thiru Rahul Balaji
Advocate for Petitioner)

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Vs

1. Tamil Nadu Generation and Distribution
   Corporation Limited (TANGEDCO)
   Rep. by its Chairman and Managing Director
   NPKRR Maaligai
   144, Anna Salai
   Chennai – 600 002.

2. TNEB
   Rep. by its Chairman
   No.144, Anna Salai
   Chennai – 600 002.

….Respondents
(Thiru Yasod Vardhan,
Senior Advocate for Thiru P.H. Vinod
Pandian Standing Counsel for TANGEDCO)

Dates of hearing : 14-09-2011, 03-11-2011, 02-05-2012, 28-11-2012 and 24-01-2014

Date of order : 19-01-2015

The above M.P.No.18 of 2011 came up for final hearing before the Commission on 24-01-2014. The Commission upon perusing the above petition and the connected records and after hearing the arguments of both parties passes the following order:-

ORDER

1. Prayer of the Petitioner:-

The prayer of the Petitioner is to direct the Respondents to categorize "integrated steel plant" as a continuous process industry thereby permitting the Petitioner to avail of the benefit of the power holiday scheme as set out in para 1 (n) of Memo No.CE/Comm/EE/DSM/F.Power Cut/D.001/2008 dated 01-11-2008 and permit the Petitioner to operate continuously by fixing appropriate demand applicable to continuous process industry without imposition of peak hour restrictions.

2. Facts of the case:-

2.1. The Chief Engineer/Commercial, TNEB issued a Memo No.CE/Comml/EE/DSM/F.Power Cut/D.001/2008, dated 01-11-2008 in the matter of Restriction and Control (R&C) in the use of electricity by HT Industrial and Commercial Services, LTCT Services and LT Industrial Commercial Consumers.

2.2. Instruction I (n) in the said Memo dated 01-11-2014 provided as follows:-

"*In the case of continuous process industries and those HT services which cannot operate with the present level of cut, the Chief Engineer / Distribution concerned can fix such optimum / minimum demand as may be required to operate the industry, but this will be subject to the power supply being made available only for such restricted specified period depending upon the nature of process of the industry so as to keep with the overall capability of the grid".*

2.3. Claiming to be a continuous process industry, the Petitioner has come before the Commission with the prayer in para 1 above.

3. Contention of the Petitioner:-

3.1. The Petitioner is an integrated steel plant, and indeed the only integrated steel plant in the State of Tamil Nadu and is the largest special steel manufacturing facility of long products in the country. The Petitioner has its steel manufacturing works in Salem and this has an annual turnover of Rs.3000 croes. The Petitioner is a significant presence in the State not only in terms of its contribution to the State revenues but also in terms of direct employment of nearly 1000 persons and 2500 people through contractors.

3.2. Steel is usually manufactured in two routes as stated below:-

(a) Primary Route:-

Primary route consists of sintering the ores in the sintering plant and charging them into the blast furnace along with coke, reducing the oxide ore on a continuous basis in blast furnaces. The liquid iron is then subjected to an oxygen refining process for converting liquid pig iron into liquid steel. Further processing is similar to the secondary route in as much as they are processed in ladle refining furnaces and continuous casters. Primary route of manufacturing steel is followed by the Petitioner.

(b) Secondary Route:-

In the secondary route steel is produced by using electric arc furnace and induction furnace using scrap and sponge iron as basic raw material. The steel is

further processed in ladle refining furnace and cast into ingots or sent to continuous casters for further hot roll processing. Such manufacturing units operate batch by batch, and each batch size is defined by the capacity of the furnace.

3.3. The various component units of a primary steel plant (integrated steel plant) such as sintering plant, coke ovens, blast furnace, energy optimization furnace, secondary metallurgy plants, continuous caster and rolling mill have to be operated continuously in order to avoid damages to the units during operation and also to maximize utilization of power. An integrated steel plant requires the several units to be functioning in unison and a failure of one of the component units would have a domino effect, shutting down the whole plant.

3.4. A continuous process industry may be defined as one where raw materials are fed continuously and the products and by products removed continuously. Continuous process industries usually involve a lengthy procedure that may take from 4 hours to 48 hours to start or stop the production process. In a continuous process industry such as an integrated steel plant all component units have to be run continuously in order to ensure optimum operation of the plant as a whole. Stoppage of a single unit could result in derailing the entire process or significant wastage of the end product or both.

3.5. Each of the component units of an integrated steel plant has to run continuously. For instance, the coke ovens of the sort used by the Petitioner are usually run non-stop for 15-20 years once they are started as any reduction in temperature from the standard running temperature of 800 degree Celsius could

lead to collapse of the entire oven structure due to thermal expansion of the silica lining on the interior of the oven.

3.6. Sinter plants can take upwards of 6 hours to start and stop, and a sinter plant is the first step in the production line of an integrated steel plant from where raw material is sent into the blast furnace. Any obstruction at this stage could have an adverse effect on the blast furnace which takes as much as 48 hours to start.

3.7. The blast furnace has to operate continuously for a period of 10 years. Any shut down is planned event and it can take as much 48 hours to re-start the furnace after stoppage. Additionally, the time taken to re-start depends on the interval of the stoppage. On the whole, the blast furnace cannot be started / stopped suddenly without serious negative effects on the operation of the plant, and to the equipment and personnel.

3.8. Continuous casting plant is the unit where the liquid steel sent out from the blast furnace is poured into moulds to form billets and later cut to required lengths. It is imperative that this unit is operated continuously as there is no mechanism to store the liquid steel and it is necessary to cast the molten steel instantaneously. The whole unit is highly integrated and any stoppage requires to be done in a step by step manner stretching over 8 hours to ensure stable operation.

3.9. It is of utmost importance that the integrated steel plant of the Petitioner has a steady and constant supply of power to run the entire unit as it would be impossible tackle a sudden stoppage. The nature of the industry is such that it would take time

on an average between 8 hours and 48 hours to start all the units and get them operating.

3.10. The TNEB was unable to supply sufficient quantity of power from as early as the 2007 and had been imposing unscheduled power cuts and load shut downs to the extent of 10 hours a day and the Petitioner was facing frequent fluctuations in supply and interruptions in power. Hence, the Petitioner was unable to meet out the delivery schedules and was facing problems in labour management and undergoing huge loss in production.

3.11. The TNEB, due to the power shortage in the State had been applying various methods to regulate, reduce and save consumption of electricity. While so, the Government of Tamil Nadu through the Energy Department had issued a Letter No.121 on 22-10-2008 directing imposition of restrictive measures on the consumption of power relying upon Regulation 38 of the Tamil Nadu Electricity Distribution Code, 2004 and inter-alia, directed the TNEB to impose 40% power cut to HT Industrial and Commercial Consumers. Accordingly, the TNEB vide its Memorandum dated 01-11-2008 had announced a 40% cut on the base demand and base energy for all HT Industrial and Commercial Services. In addition to the 40% cut, the TNEB vide the same memorandum also imposed peak hour cuts between 18.00 hours and 22.00 hours limiting quota to 5% of the demand and energy quotation.

3.12. In para 1 (n) of the said Memorandum dated 01-11-2008 an exemption was carved out for continuous process industries. Such industries were permitted to fix optimum / minimum demand within which the industry could be operated and the

same would be supplied in an uninterrupted manner and the industry could run continuously for certain number of days in a month and the rest of the days in the month would be declared power holidays when the basic load for lighting and other essential activities alone would be permitted.

3.13. The Memorandum also carried an annexure that set out the various categories of industries which were classified as continuous process industries. Interestingly, industries involved in cast iron spun pipes, induction melting and oxygen production find a place. In addition to the general Memorandum above, the TNEB had also issued another Memorandum dated 02-11-2008 wherein it had specifically declared steel re-rolling and steel foundry industries using induction furnaces as power intensive continuous process industries and had included them in the list of continuous process industries and extended to them the benefits conferred by para (1) (n) of the earlier memorandum dated 01-11-2008.

3.14. The benefit of the power holiday scheme is that continuous process industries could schedule their operation in such a way that they could operate at optimum within the permitted number of days in a month and shut down for the remaining days instead of being subject to constant fluctuation and stoppage where any meaningful production was impossible due the time taken to start and stop various units.

3.15. Though steel re-rolling mills and steel foundries using induction furnace have been classified as continuous process industries, such categorization has not been conferred on the Petitioner. Some of the various component processes of its

integrated steel production such oxygen production and induction melting have been declared continuous process industries.

3.16. Without being classified as a continuous process industry, the Petitioner cannot avail of the power holiday scheme, which would greatly aid the Petitioner in increasing volume of production and also minimizing losses due to stoppage of work and due to purchase of power from alternative sources.

3.17. In the current situation, the Petitioner has to reduce production during the evening peak hours and resort to generated power for critical operations. Further, the actual ramp down and ramp up takes several hours and when done on daily basis, greatly reduces the actual hours of operation of the plant. The liquid steel processing in the ladle refining furnace is reduced to 25% of the actual volume. Further, as the blast furnace cannot be shut down, the pig iron output from the blast furnace during that period is cast and later re-melted for normal processing, doubling costs and time involved in production.

3.18. The fuel is burnt continuously in the various furnaces eventhough there is no simultaneous production as to ensure that the furnaces are at optimum temperature for production when power supply is restored to normal. The Petitioner has to burn over 20,000 giga calories of fuel annually during the peak hours in anticipation of production upon normal supply. All these various processes only add to the net energy loss from the petitioner's plant and can be avoided if the Petitioner were to be classified as a continuous process industry.

3.19. The power demand to run the Petitioner's unit, in entirety, is about 75 MW. Out of this, the Petitioner is able to satisfy nearly 55 MW of its requirement through captive generation. The Petitioner has been using the power generated from its captive generation plant to power units like the blast furnace which need continuous power supply and which would be adversely affected by power stoppages such as those are scheduled as part of R & C measures. Even after allotting all of its captive generated power for its own consumption, the Petitioner has a requirement of 20 MW which it meets through supply from the TNEB grid. However, the frequent stoppages in the TNEB supply adversely affects other part of its integrated system by increasing thermal stress, lowering life of equipment and refractory linings, and by generally slowing down production through time taken for ramp up and ramp down.

3.20. Some of the process component units such as steel rolling mills and air separation plant are consuming 40 MW and this load is as such classified as continuous process industries in their individual capacity. However, as these component units are not separately connected to the grid the benefits of continuous process industry are not extended to the Petitioner. It is impractical to separate these loads from the centralized system so as to get the benefit of the continuous process industry status. As 20 MW requirement is half of the eligible 40 MW for continuous process industry declaration, the Petitioner may also be given such classification.

3.21. The Petitioner's entire plant has a connected load of 130 MVA of which 80 MV is used for the various component units which are already declared as continuous process industry by the TNEB. The Petitioner would additionally require only 20 MVA in demand and 3 to 5 MW of energy support from TNEB on round the clock

basis. The Petitioner states that declaring the Petitioner as a continuous process industry would not impose any additional burden on the TNEB power supply.

3.22. The Petitioner has been approaching the Industries Department, Energy Department and the TNEB since September 2009 and has not been able to get any positive response from the concerned departments thus far. The Petitioner had approached the Industries Department of the Government of Tamil Nadu and had made a detailed representation dated 05-03-2011 along with necessary documents detailing the nature of production at the Petitioner's plant, the energy demand etc. seeking to be declared as a continuous process industry. In response to this representation, the Petitioner had received a reply from the 1st Respondent herein (TANGEDCO) stating that TNEB does not have authority to declare an industry to be a continuous process industry. The Petitioner has also written to the Secretary to the Government, Industries Department, Government of Tamil Nadu vide its letter dated 23-05-2011 and to the 1st Respondent vide its letter dated 14-06-2011. The Petitioner has not received a favourable reply.

3.23. The Petitioner's manufacturing process is more energy dependent than steel mills using induction furnace (which are already categorized as continuous process industry) and consists of several component units which have to be operated in an highly integrated manner, continuously so as to prevent financial and production losses. Frequent stoppage of Petitioner's production unit due to power fluctuation, apart from causing economic damage, poses a real and significant physical threat to the plant and personnel. The Petitioner if classified as a continuous process industry would be able to avail of the power holiday which would enable to schedule its operation in a manner that maximizes production and financial returns.

3.24. As the Respondents have declared that they do not have the authority to declare a particular category of industry as “continuous process”, the Petitioner is constrained to approach the Commission.

4. Contentions of the Respondents:-

4.1. The prayer of the Petitioner is not maintainable since the Respondent is not the competent authority for categorization of industries, but can be categorized within the purview of the respective departments under the Government.

4.2. The powers and functions of the Distribution Licensee is limited to the regulations stipulated in the Tamil Nadu Electricity Distribution Code. In the normal course, the access to the premises of the consumer’s installation is confined to inspection, testing, repairing or altering the electric supply lines, meters and other fittings etc. to ensure that the consumers’ installation complies with the requirements of the Code, Regulations, rules etc. made under the Electricity laws for maintenance of protection of standards besides to examine if electricity is being used unauthorisedly or illegally.

4.3. Load sanction is being granted initially to all EHT / HT services under commercial tariff only. Only after production of documentary evidence for commencement of industrial activities in connivance with the licence obtained from the concerned Government Departments billing under the related tariff is done. While so, categorizing industries which are in service cannot be done. The Licensee has no authority and locus standi over defining the methodology or processes involved in an industry.

4.4. Continuous process industries were given peak hour exemption based on the categorization listed by PWD G.O.Ms.No.2236, dated 26-12-1985. Although induction melting and arc melting have been listed under the continuous process industries, neither blast furnace heating nor integrated steel have been included. TANGEDCO has only granted approvals for peak hour exemption to continuous process industries in line with the above Government order.

4.5. Various averments made in the petition are self-serving statements for the purpose of achieving the object by means of circumvention of the law and procedure being followed for granting approval. Therefore, the Petitioner has to approach the appropriate forum. The Petitioner is at liberty to approach the concerned Government Department for categorization of its industry as a continuous process industry.

5. Findings of the Commission:-

5.1. The prayer of the petitioner is to direct the Respondents to categorize his "integrated steel plant" as a continuous process industry thereby permitting the Petitioner to avail of the benefit of the power holiday scheme as set out in para I (n) of Memo No.CE/Comm/EE/DSM/F.Power Cut/D.001/2008 dated 01-11-2008 and permit the Petitioner to operate continuously by fixing appropriate demand applicable to continuous process industry without imposition of peak hour restrictions.

5.2. Before analysing the case, we have to ensure whether the Commission has powers to hear the specific case. This case deals with the fixing of supply demand to the petitioner's industry during the restriction and control of power in the state. In this connection, Section 23 of the Electricity Act is reproduced below:

Section 23. (Directions to licensees):

If the Appropriate Commission is of the opinion that it is necessary or expedient so to do for maintaining the efficient supply, securing the equitable distribution of electricity and promoting competition, it may, by order, provide for regulating supply, distribution, consumption or use thereof.

The said Section of the Act empowers the Commission to order on equitable distribution of electricity if the Commission feels that it is necessary to do so for maintaining the efficient supply of Electricity. Therefore, the Commission is the competent authority to hear the parties and issue an appropriate Order on the prayer of the petitioner.

5.3. The respondent has submitted that he has no authority to decide whether a industry is a continuous process industry or otherwise. However, the Chief Engineer Commercial of erstwhile TNEB vide his Memo.No. CE/Comml/EE/DSM /F.PowerCut /D.001 /2008, dated 01-11-2008 has declared a list of industries as continuous process industries. This Memo is an exhaustive order which includes a list of continuous process industries. Though the respondent has now reported that the list containing the continuous process industries was declared based on PWD G.O.M.S.No.2236, such reference was not made in their original Memorandum dated 01-11-2008. It is seen from the records filed by the respondent that the G.O.M.S.No.2236 (PWD) was issued by Government of Tamil Nadu in exercise of powers conferred by Section (3) of the Tamil Nadu Essential Articles Control and Requisitioning Act, 1949 (Tamil Nadu Act XXIX of 1949). After the enactment of the Electricity Act 2003 on 10-06-2003, the issue in question should have been dealt with under the purview of the Electricity Act 2003. The Tamil Nadu Act XXIX of 1949 has not been saved under the Electricity Act 2003. Further on comparing the list of continuous process industries provided in the G.O.M.S.No.2236 and the list

mentioned in the TNEB Memo dated 01-11-2008, it is found that both the lists are not matching with each other. Therefore, it is inferred that the list provided in the Memo No.01-11-2008 has been issued by the TANGEDCO on their own.

5.4. Interestingly, under clause I (n) of the CE Commercial memo dated 01-11-2008, the TNEB empowered their Chief Engineers / Distribution to fix the optimum demand for HT industries which cannot operate with the present level of power cut. Further, based on the representation received from Steel Re-roller and Steel Furnace HT industries, the Chief Engineer Commercial in its Order dated 02-11-2008 has declared that the "Steel Rolling and Steel Foundry Industries" are continuous process industries.

5.5. Though the TANGEDCO has submitted that they have no authority to declare an industry as continuous process or otherwise, they have done so as discussed supra. More importantly they have empowered their Chief Engineers / Distribution to fix optimum demand for HT industries which cannot operate with the present level of power cut vide their Memo dated 01-11-2008. Such being the case, it is not known why the TANGEDCO refused to consider the petitioner's request. The TANGEDCO has already devised rules for considering its consumers for the purpose of providing optimum demand. But their submission that they have no power to classify a industry as continuous power industry or otherwise contradicts its own rules authored by them. This is noted with displeasure. The TANGEDCO cannot apply their own rules discretely and discriminately to their consumers. Even if the petitioners industry has not find a place in the list attached to their memo dated 01-11-2008, the concerned Chief Engineer / Distribution should have considered the petitioner's industry on merit under Clause I (n) of the Chief Engineer / Commercial's Memo dated 01-11-2008 for fixing the optimum demand.

5.6. For the reasons discussed supra, the TANGEDCO is directed to consider the prayer of the petitioner within the purview of their Memo dated 01-11-2008 and give a written reply to the petitioner as per this Order within one month of the issue of this Order.

6. 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.Nagalsamy)
Member

/ True Copy /

Secretary
Tamil Nadu Electricity
Regulatory Commission