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IN THE HIGH COURT OF JUDICATURE AT MADRAS

DATED : 17-11-2021

CORAM

THE HONOURABLE MR. JUSTICE S.M.SUBRAMANIAM

WP No.42274 of 2016

And

WMP Nos.36178 and 36179 of 2016

Superfil Industries Pvt Ltd.,
Represented by its Managing Director,
Mr.S.Narayan,
HT A/C No.2038,
S.No.201/3b, 201/4,
Jaggannadhapuram-2 Village,
Azhlinjivakkam Post,
Thiruvallur District - 600 067.

.. Petitioner

vs.

- 1.The Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO),
Represented by its Chairman and Managing Director,
No.144, Anna Salai,
Chennai - 600 002.
- 2.The Superintending Engineer,
CEDC/North, Anna Salai,
Chennai - 600 002.
- 3.The Chief Financial Controller - Revenue,
(TANGEDCO), No.144, Anna Salai,
Chennai - 600 002.
- 4.The Chief Engineer Commercial,
(TANGEDCO), No.144, Anna Salai,
Chennai - 600 002.
- 5.The Tamil Nadu Electricity Regulatory Commission (TNERC),
TIDCO Office Building,
No.19-A, Rukmani Lakshmipathy Salai,
Marshalls' Road, Egmore,
Chennai - 600 008.

..

Respondents



Writ Petition is filed under Article 226 of the Constitution of India, praying for the issuance of a Writ of Certiorarified Mandamus, calling for the records of the case from the file of the second respondent in Lr.No.SE/CEDC/NEE/GI/AEE/GI/AE/F.F.HT.2038/D.1531/16 dated 15.09.2016 and quash the same and hold as not maintainable under law more specifically under the express provisions made in the CEA (Technical Standards for Connectivity to the Grid) Regulations 2007 under Regulation 2 Clause 8, Clause 34 and Regulation 3 and forbearing the respondents 1 to 3 from raising any demand for payment towards surcharge for not providing harmonic controls by the petitioner who is connected with a 11KV supply line.

For Petitioner : Mr.Lakshmi Sriram

For Respondents-1 to 4 : Mr.L.Jai Venkatesh,
Standing Counsel for TANGEDCO.

O R D E R

The present writ petition has been filed by the petitioner challenging the levy of harmonics compensation charges at 15% of the respective tariff from the High Tension Industrial Consumers (HT-I) and High Tension Commercial Consumers (HT-III), who operate at a voltage level of below 33 kv, namely, 11kv/22kv supply lines.

2. Mr.Lakshmi Sriram, learned counsel appearing for the petitioner in the present writ petition, submitted that the action of the Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO) under the guise of enforcing the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007 (in short "CEA Regulations, 2007") and the Tariff Order of the Tamil Nadu Electricity Regulatory Commission (TNERC), directing all the HT Consumers in the State of Tamil Nadu to install harmonic controls and imposing penalties in the form of 15% surcharge on the CC bills, irrespective of the supply line capacity they are connected to, are beyond the jurisdiction of the powers vested with them, as they do not have the authority of law. It is further contended that the impugned levy of harmonics charges on 11KV/22KV consumers are clearly not leviabale in view the clarification issued by the CEA / Appellate Authority that it cannot be made applicable to consumers who are not bulk consumers i.e. connected with 11kv/22kv supply lines.



Explaining further, it is stated that the CEA is the competent authority to declare the harmonic distortion level for consumers connected with 11kv/22kv supply lines, therefore, the impugned levy of harmonics charges on 11kv/22kv consumers are untenable.

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3. Referring to paragraph 10.1.2 of the Tariff Order No.1, dealing with the harmonics, it is argued that as specified in the Supply Code, when the consumer fails to provide adequate harmonic suppression equipment to avoid dumping of harmonics beyond the limits as specified by the CEA Regulations into Lincensee's distribution system, he is liable to pay the compensation at 15% of the respective tariff and it further says that as and when the consumer brings down the harmonics level within the limit, the compensation chargeable shall be withdrawn, therefore, the measurement of harmonics shall be done by the Distribution Licensee using standard meters/ equipments in the presence of consumers or their representatives and this compensation provision is applicable to HT-I and HT-III category of consumers. Again, this paragraph makes it clear that the TANGEDCO shall give three months notice to all the consumers under these categories stating that they shall pay 15% compensation charges, if the harmonics introduced by their load are not within the limit set by the CEA. Thus, it is clear that the TANGEDCO is only the implementing agency in respect of compensation payable by the consumers, who failed to provide adequate harmonic suppression equipment to avoid dumping of harmonics beyond the limits as specified by the CEA Regulations into Lincensee's distribution system, by giving three months notice to all the consumers and then it also brought to the notice of the TANGEDCO to withdraw from the compensation charges as and when the consumer brings down the harmonics level within the limit. However, till date, the CEA has not fixed what is the permissible limits of harmonics within which the consumers can have the harmonics limits. Therefore, when the distortion level for 11kv/22kv supply lines consumers was not specified clearly, the impugned action of the TANGEDCO directing all the HT consumers to install harmonic control equipments and also imposing penalties at the rate of 15% on the monthly CC bills is wholly misconceived, hence, the same is liable to be set aside.

4. Explaining further, the learned counsel for the petitioner, by referring to Section 50 of the Electricity Act, took a stand that Section 50 allows specification of charges for electricity, but, in respect of tampering, distress or damage to electrical plant or electrical line or meter, entry of distribution licensee or any person acting on his behalf for disconnecting supply or removing the meter, entry for replacing,



altering or maintaining electric lines. However, such power does not allow them for setting of standards for harmonics. The Chief Engineer (Legal), CEA, Ministry of Power, New Delhi, has clarified by his letter dated 10.08.2015, addressed to the learned Additional Solicitor General of India that any consumer, who is connected to below 33 KV to the Distribution System, is not governed by the Grid Standards for connectivity to the Grid. Therefore, when the CEA has made it clear that the CEA Regulations, 2007, with respect to compensation on account of harmonic distortion, is applicable only to those consumers, who are connected at 33 KV or above, admittedly, the petitioner herein, who is receiving supply through 11KV / 22 KV supply lines, does not have potential to pollute the grid supply and does not have substantial adverse impact upon the equipments of other consumers. Therefore, 11KV/22KV consumers are placed outside the scope and purview of Part IV of the Regulations, 2007, and hence, there is no distortion level on harmonics provided and made applicable to them and they are not obligated in any manner to comply with harmonic controls. This apart, in Tamil Nadu, HT consumers are connected with 11 kv or 22kv or 33kv or 110 kv supply lines and when these consumers connected with 11kv and 22 kv supply lines are not not subjected to harmonic control norms, only 33 kv and above supply lines are alone liable to comply with harmonic control norms as per Part IV of the CEA Regulations, 2007.

5. Again, justifying that the petitioner is only consumer, not user nor requester, learned counsel for the petitioner referred to Regulations 2(34) and 2(25) of the CEA Regulations, 2007, to show who are users and requesters. A conjoint reading of Regulations 2(34) and 2(25) i.e. User and Requesters, say that a person such as, Generating Company including captive generating plant or Transmission Licensee or Distribution Licensee or Bulk Consumer, whose electrical plant is connected to the grid at voltage level 33 kv and above. Therefore, in view of Regulations 2(34) and 2(25), either User or Requester, whose electrical plant is connected to the grid at voltage level 33 kv and above, are the persons liable for installation of harmonic control equipments and any violation thereof, penalty can be imposed at the rate of 15% surcharge on the monthly CC bills if it is proved that the harmonics level are going beyond the permissible limits fixed by the CEA. Therefore, it is contended by the learned counsel for the petitioner that the TANGEDCO, without fixing harmonics limits to be adopted by them, cannot take any action against the petitioner to levy the penalty at the rate of 15%.



6. Drawing the attention of this Court to Clause 3 of Part IV of the CEA Regulations, 2007, learned counsel for the petitioner contented that the total harmonic distortion for voltage at the connection point shall not exceed 5% with no individual harmonic higher than 3% and that the total harmonic distortion for current drawn from the transmission system at the connection point shall not exceed 8%. These two limits are to be implemented in a phased manner so as to achieve complete compliance not later than five years from the date of publication of these regulations in the official gazette. Thus, if the respondent is of the view that the limits prescribed in Clause 3 are to be implemented to achieve the balance, they should do it in a phased manner not later than five years from the date of publication of these regulations in the official gazette, but, till date, no such official gazette has been published. In addition thereto, Clause 4 of Part IV says that the voltage unbalance at 33 kv and above shall not exceed 3.0%. Therefore, it is contended that when there is no any limit prescribed for consumers connected to 11kv/22kv supply line, they cannot enforce the levels of harmonics prescribed for the Bulk Consumers namely 33 kv and above, for, the Chief Engineer (Legal), CEA, New Delhi, in his letter dated 10.08.2015, has clarified that any consumer, who is connected to below 33kv to the Distribution System, shall not be covered under Part IV of the CEA Regulations, 2007.

7. In an effort to show that the TANGEDCO has no authority or power to issue the impugned CC Bill, learned counsel for the petitioner, by referring to Section 34 of the Electricity Act, 2003, dealing with Grid Standards, submitted that every transmission licensee shall comply with such technical standards of operation and maintenance of transmission lines in accordance with the Grid Standards as may be specified by the Authority. While-so, Section 2(6) of the Electricity Act, 2003, defines 'Authority' as the Central Electricity Authority referred to sub-section (1) of Section 70. Therefore, the CEA is the only authority established under Section 70 and whose functions are set forth in Section 73 has the exclusive powers under Section 73(d) to specify the Grid Standards for operation and maintenance of transmission lines, which includes the harmonic levels too. However, the TNERC has no power to deal with the levels of harmonics. On the other hand, the TNERC is empowered under the Act and Regulations only to provide the charges/penalty when the levels of harmonics as provided by the CEA are not complied with. Similarly, the TANGEDCO, being a licensee to generate and distribute electricity, cannot choose to enforce additional standard independently in the absence of



any standards set by the appropriate authority, namely, CEA.

8. The learned counsel for the petitioner submitted that at present, there is no provision under the CEA Regulations, 2007, to make the obligation of harmonic controls for 11kv/22kv supply lines consumers and further submitted that the respondents do not have power to enforce the harmonic control norms to 11kv/22kv supply line consumers, when the Chief Engineer (Legal), CEA, New Delhi, in his letter dated 10.08.2015, has clarified that any consumer, who is drawing power below 33 kv supply line, shall not be covered under Part IV of the CEA Regulations, 2007. Moreover, till date, neither the CEA nor any other authority has set forth the level of harmonics for the consumers connected to 11kv/22kv in the manner known to law, therefore, the impugned CC bills issued by the TANGEDCO levying surcharges for not providing harmonic controls from the petitioner who is connected with 11kv and 22kv supply lines are liable to be set aside.

9. Per contra, Mr.L.Jai Venkatesh, learned Standing Counsel appearing on behalf of the TANGEDCO, taking support from Sections 50 and 181 of the Electricity Act, 2002, CEA Regulations, 2007, Regulation 4(1)(iv) of the Tamil nadu Electricity Supply Code, Regulations 9(1) and 13(4) of the Tamil Nadu Electricity Distribution Code, Tamil Nadu Electricity Regulatory Commission's tariff order dated 30.03.2012, 20.06.2013 and the Tamil Nadu Electricity Regulatory Commission's Grid Connectivity and Intra-State Open Access Regulations, 2004, submitted that the levy of harmonics compensation charges at 15% of the respective tariff from the High Tension-1 and High Tension-III consumers who avail supply and operate at voltage level of below 33 KV i.e. 11 KV and 22 KV are a legitimate one.

10. Learned Standing Counsel for TANGEDCO further stated that Section 50 of the Act empowers the Commission to specify the supply code and provides for measures for preventing tampering, distress or damage to electrical plant or electrical lines or meter. Again, Section 86 of the Act clearly gives power to the State Commission to determine the tariff for generation, supply, transmission and wheeling of electricity, and enforce standards with respect to quality, continuity and reliability of service by licensees. Therefore, in accordance with Sections 50 and 181 of the Act, the Tamil Nadu Electricity Regulatory Commission had issued the Tamil Nadu Electricity Supply Code, wherein the Regulation 4(1)(iv) of the Tamil Nadu Electricity Supply Code deals with imposing of additional



charges for harmonics dumping. Explaining further, it is stated that where any equipment installed by a consumer generates harmonics, the consumer shall provide adequate harmonic suppression units to avoid dumping of harmonics into Licensee's Distribution System and the Licensee is at liberty to provide suitable metering equipment to measure the harmonic level pursuant to such harmonic and even if the consumer fails to provide such units, he shall be liable to pay compensation at such rates as the Commission may declare from time to time. Only in exercise of powers conferred by clauses (a)(c)(d) of sub-section (1) of Section 61 and clause (a) of sub-section (1) of Section 86 of the Electricity Act, 2003 (Central Act 36 of 2003) and after examining the comments received from the stake holders and after considering the suggestions and objections received from the public during the public hearings held on 30.01.2012, 02.02.2012, 06.02.2012 and 10.02.2012 as per sub-section (3) of Section 64 of the Act, the Tamil Nadu Electricity Regulatory Commission has passed the order for Generation and Distribution Tariff, vide order No.1 of 2012, dated 20.03.2012. Relevant paragraph, namely 10.2.2, dealing with the Harmonics answers the issue raised by the petitioner stating that when the consumer fails to provide adequate harmonic filtering equipment to avoid dumping of harmonics into Licensee's network beyond the permissible limits as specified by the CEA Regulation, the consumer is liable to pay compensation at 15% of the respective tariff. It further makes clear that as and when the consumer brings down the harmonics within the limit, compensation charges shall be withdrawn, therefore, when the laudable object sought to be achieved has been initiated under the impugned action to avoid the dumping of harmonics beyond the permissible limit, which will in turn help prevention of air pollution, in the larger public interest, the petitioner cannot question the steps taken by the respondent to purify the atmosphere. Moreover, if the petitioner, who is a consumer, is able to provide adequate harmonic suppression equipments to avoid dumping of harmonics beyond the limits as specified by the CEA Regulations, 2007, into the Licensee's Distribution System, they are not liable to pay the compensation at 15% of the respective tariff, however, as and when the consumers fail to do so, they will be liable to pay such compensation.

11. Justifying the impugned action, learned Standing Counsel for TANGEDCO further submitted that by virtue of Sections 50, 86 and 181 of the Electricity Act, 2003, read with, Regulation 4 (1)(iv) of Tamil Nadu Electricity Supply Code and Tariff Order 2012, it can be safely construed that the State has the power to direct the consumers irrespective of their voltage



connections to install harmonic filters and it is mandatory on the part of a consumer to provide adequate harmonic suppression equipment so as to maintain the quality of supply by the Licensee (TANGEDCO) to all the consumers. It is further stated by the learned Standing Counsel for TANGEDCO that when the State Regulatory Authority's Supply Code forms the basis for providing harmonic filters at the load points of the consumers, the State Regulatory Authority's Tariff Order dated 31.03.2012 has a preventive measure to avoid dumping of harmonics into the Licensee's network beyond the permissible limit, therefore, the State Regulatory Authority has also adopted the same limits as set out by the Central Electricity Authority in this regard.

12. It is further stated by the learned Standing Counsel for TANGEDCO that an Expert Committee formed under the convenorship of the Director General/CPRI, constituted by the Central Electricity Board, New Delhi, has given its recommendations to include 11kv and above consumers in the purview of harmonics vide report dated 19.05.1999. Pursuant to the said report, the consumers connected with 11kv/22kv supply lines cannot place an argument before this Court that there is no any harmonic level prescribed by the competent authority for these consumers warranting them to install harmonic filters

13. Continuing his arguments, learned Standing Counsel for TANGEDCO submitted that when the CEA has agreed that those, who are connected to transmission grid availing 33kv and above, should limit 3% of individual voltage harmonic distortion and 8% for total current harmonic distortion, the argument of the petitioner that no harmonic distortion has been prescribed for 11kv/22kv is not correct, since part IV of the CEA Regulations, 2007 states that these limits apply to both bulk consumers and Distribution System, which clearly constitutes the petitioner's case as well. It is further submitted that if the distribution harmonics are to be kept within the limits, then, individual consumers of 11kv/22kv, who are connected to the Distribution System, should limit their harmonics, for, in TANGEDCO, more than 6700 numbers of HT-I and HT-III category of 11kv and 22kv consumers are connected to Distribution System with a sanctioned demand for more than 6500 MVA. Besides, no technology exists in the world to design and filter out the huge quantum of harmonics at the distribution grid location, that are dumped by its thousands of consumers. When 11kv/22kv supply lines consumers are forming major high capacity into the Licensee's Distribution dumping system, they should avoid dumping the harmonics, therefore, to keep the harmonics limit in the Distribution System within the limit prescribed by the CEA, harmonic filters



are to be fixed at the place of origin in the Distribution System, namely, the point of connection to the installation of the consumers where harmonics are generated.

14. It is further submitted by the learned Standing Counsel for TANGEDCO that in TANGEDCO, the demand of the 6700 numbers of HT-I and HT-III category of 11kv/22kv supply lines consumers is more than 6500 MVA, which is higher than 170 numbers of 33kv and above consumers' load of about 1300 MVA, thus, the impact of harmonics by these 11kv/22kv supply lines consumers on the grid are also proportionately higher. Therefore, if 11kv/22kv supply lines consumers are left out of the purview of the harmonic order, as the Distribution System cannot limit the harmonics levels due to the huge quantum and absence of technology, the very purpose of CEA Regulations, 2007, aimed at clearing the Nation's Transmission grid of harmonic pollution and the purpose of the Regulation will be defeated. It is further submitted that in the matters of suppressing the harmonics, no single class of consumers can seek exemption from liability and the CEA Regulations cannot be the criteria to negate the purpose of the TN Electricity Supply Code and Tariff Order. Although the CEA is the authority to specify the standard as per the Electricity Act, 2003, suppression of harmonics into the main system has to be precluded and implemented only by the State Commission, therefore, the impugned levy of harmonics compensation charges is well within the exclusive domain of the State Commission keeping in mind the safety and security of the respective State Grids, otherwise, the very purpose of enacting the CEA Regulations, 2007, will be defeated. When the CEA Regulations, 2007, has not excluded the Distribution System and the CEA has also not specified specific limits for the Distribution System, the applicability of harmonic compensation in respect of 11kv/22kv supply lines consumers is sustainable in law.

15. By placing on record the queries raised by one Mr.G.Ramachandran, and also the clarification issued by the CEA to the said queries, it is submitted that to purify the Distribution System, unit criteria has to be taken to avoid dumping of harmonics into the Licensee's Distribution System, irrespective of the fact whether they are connected to 11kv or 22kv or 33kv and above. As the distribution of electricity is under the purview of the State Government, the State Regulatory Commission has to frame rules for regulating harmonic distortion within the Distribution System in the State for the consumers connected with 11kv/22kv supply lines in conformity with the CEA Regulations, 2007. Therefore, the impugned demands of the



respondent passed in conformity with the CEA Regulations cannot be questioned by the petitioner, as it is the prerogative of the respondent to demand such charges for dumping of the harmonic into the Licensee's Distribution System.

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16. Concluding his arguments, learned Standing Counsel for TANGEDCO submitted that if the contention of the petitioner is accepted that any consumer, who is connected to below 33kv to the Distribution System, is not governed by the Grid Standard and that the CEA Regulations, 2007, with respect to compensation on account of harmonic distortion only to those consumers, who are connected at 33kv and above, then, it goes without saying that the consumers of 11kv and 22kv supply lines are allowed to pollute the system further, which will go against the very object of the CEA Regulations, 2007. With the aforesaid submissions, he has prayed for dismissal of the present writ petition.

17. Learned Standing Counsel for TANGEDCO, by referring to the communication dated 07.09.2015 of the Chief Engineer (Legal), Central Electricity Authority, New Delhi, submitted that the Chief Engineer has agreed with the case of the respondent stating that the control of pollution of grid supply has been started from the large high voltage loads, therefore, the regulations for controlling harmonic voltage/current injection at voltages less than 33kv may also develop depending upon the types of load coming up in future and it may disturb the performance of the equipments of other nearby consumers.

18. Heard the learned counsel appearing on either side and perused the materials available on record.

19. The crux of the issue is, whether the TANGEDCO/TNERC has power to deal with the levels of harmonics and if so, whether they are empowered under the Act and Regulations to levy the harmonics compensation charges at 15% of the respective tariff from the High Tension Industrial Consumers (HT-I) and High Tension Commercial Consumers (HT-III), who avail supply and operate at a voltage level of below 33kv i.e. 11kv/22kv supply lines.

20. Before dealing with the said issue, it is better to know what is harmonics. Harmonics in electrical systems means that current and voltage are distorted and deviated from sinusoidal waveforms. Harmonic currents are caused by non-linear loads connected to the Distribution System. A load is said to be non-linear when the current it draws does not have



the same waveform as the supply voltage. The flow of harmonic currents through system impedances in turn creates voltage harmonics, which distort the supply voltage.

21. In view of the above, since the harmonics have several undesirable effects and affects power quality, on 21.02.2007, the Central Electricity Authority (CEA) introduced a new Regulation and accordingly, its Technical Standards for Connectivity to the Grid Regulations, 2007, came for enforcement. Applicability of the Regulations is provided in Regulation 3, which reads as under:

"3. Applicability of the Regulations - These Regulations shall be applicable to all the users, requesters, Central Transmission Utility and State Transmission Utility."

It is clear from the above that the the said Regulation is applicable only to four categories, namely, Users, Requesters, Central Transmission Utility and State Transmission Utility.

22. In this context, let me find out the meaning given under the CEA Regulations, 2007, for Users and Requesters. Section 2(34) defines the meaning of "User", which is given as under:-

"2(34)-- User means a person such as, a Generating Company including captive generating plant or Transmission Licensee (other than the Central Transmission Utility and State Transmission Utility) or Distribution Licensee or Bulk Consumer, whose electrical plant is connected to the grid at voltage level 33kv and above."

Section 2(25) defines the meaning of "Requester", which is given as under:-

"2(25)-- Requester means a person, such as a Generating Company including captive generating plant or Transmission Licensee (excluding Central Transmission Utility and State Transmission Utility) or Distribution Licensee or Bulk Consumer, who is seeking connection of his new or expanded electrical plant to the Grid at voltage level 33kv and above."



A conjoint reading of the above said provisions show that a person such as, Generating Company including captive generating plant or Transmission Licensee or Distribution Licensee or Bulk Consumer, whose electrical plant is connected to the grid at voltage level 33 kv and above. Therefore, it is clear that the above said Regulations are applicable to only those consumers whose electrical plant is connected to the Grid at the voltage level of 33kv and above, hence, the petitioner, who is connected to the Grid at voltage level of 11kv/22kv supply lines, cannot be made applicable under the said Regulations.

23. Again, to be more clear, it is also pertinent to refer to Section 34 of the Electricity Act, 2003, dealing with the Grid Standards, which is given as under:-

"34. Grid Standards.----
Every transmission licensee shall comply with such technical standards, of operation and maintenance of transmission lines, in accordance with the Grid Standards, as may be specified by the Authority."

It is clear from the above that Section 34 of the Electricity Act, 2003, mandates every transmission licensee to comply with such technical standards of operation and maintenance as may be specified by the Authority, which means, as per Section 2(6) of the Act, the Central Electricity Authority (CEA) is the Authority as referred to in sub-section (1) of Section 70. Thus, the CEA, established under Section 70 and whose functions are set forth in Section 73, has the exclusive powers under Section 73(d) of the Act. It is also pertinent to extract Section 73(d) of the Act, which is given as under:-

"(d) specify the Grid Standards for operation and maintenance of transmission lines."

24. In view of the above legal position, the Central Electricity Authority (CEA), being an Apex Body, is the appropriate authority on the issue of Grid Standards and to ensure both National Grid Code and State Grid Code are consistent and there cannot be any inconsistencies of different standards at the State level. This is purely for the purpose of ensuring uniform operation across the country. It is also an admitted fact that the National Grid Code and the State Grid



Code do not have any provision with regard to harmonics.

25. In this context, it is relevant to refer to Clause 3 of Part IV of the CEA Regulations, 2007, which is given as under:-

"3. Voltage and Current Harmonics --

(1) The total harmonic distortion for voltage at the connection point shall not exceed 5% with no individual harmonic higher than 3%.

(2) The total harmonic distortion for current drawn from the transmission system at the connection point shall not exceed 8%.

(3) The limits prescribed in (1) and (2) shall be implemented in a phased manner so as to achieve complete compliance not later than five years from the date of publication of these regulations in the official Gazette."

Although Clause 3 of Part IV of the CEA Regulations, 2007, says that the total harmonic distortion for voltage at the connection point shall not exceed 5% with no individual harmonic higher than 3% and that the total harmonic for current drawn from the transmission system at the connection point shall not exceed 8%, the limits prescribed as mentioned above shall be implemented in a phased manner so as to achieve complete compliance not later than five years from the date of publication of these regulations in the official Gazette.

26. It is an admitted fact that the CEA Regulations came into force in the year 2007, however, even after a lapse of 9 years, the TANGEDCO has not published any notification in the official Gazette enforcing the consumers, who are connected with 11kv/22kv supply lines, to install harmonic filters so as to levy harmonic compensation charges.

27. Moreover, when this Court directed the learned Standing Counsel for TANGEDCO to get instructions as to whether the consumers connected to a Distribution System irrespective of the capacity of supply they receive including 11kv and 22kv supply lines need to provide harmonic control equipments, as a reply thereto, the Chief Engineer (Legal), Central Electricity Authority, Ministry of Power, New Delhi, in his letter dated 10.08.2015, has clarified that the CEA Regulations, with respect



to compensation on account of harmonic distortions, are applicable to only those consumers, who are connected to 33kv or above, namely, only bulk consumers. For better appreciation, relevant portion of the said communication is extracted below:-

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"This is reference to your letter dated 07.08.2015 on the above subject. It is to inform that almost 305 case are filed in the Hon'ble Court by the petitioners having grievances similar to this case. It is to submit that:

(i) CEA Regulation with respect to compensation on account of harmonic distortions is applicable to only those consumers who are connected at 33kv or above.

(ii) Further any consumer who is connected below 33kv to the distribution system is not governed by the Grid Standards for connectivity to the Grid.

(iii) The Grid is defined under Electricity Act, 2003, stating that the Grid is high voltage backbone system of inter-connected transmission lines, sub station and generating plants.

Therefore, only systems which can directly affect the Grid are covered under such Standards and as such the present petition for the consumers connected at 33kv or above which are defined as Bulk Consumer shall be covered for Harmonic Compensation."

28. Subsequent to the above said communication, one Mr.P.D.Siwal, Secretary to the Central Electricity Authority, New Delhi, issued a clarification on 26.08.2015 with regard to applicability of Part IV of CEA Regulations, 2007. Relevant portion of the said communication is extracted below:

"This has reference to the Part IV of the CEA (Technical Standards for Connectivity to the Grid) Regulations, 2007. It is clarified that:

(iii) The condition of



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voltage and current harmonic as prescribed under Part IV is applicable only to the consumers which are defined as bulk consumers and drawing power at 33kv and above.

(iv) For the purpose of bulk consumer means a consumer who avails supply at voltage of 33kv or above.

Therefore, Part IV of CEA Regulations is applicable only to consumers drawing power at 33kv or above and any consumer who is drawing power below 33kv shall not be covered under Part IV of CEA (Technical Standards for Connectivity of the Grid) Regulations, 2007."

From the above said communications of the Chief Engineer (Legal) as well as the Secretary of the Central Electricity Authority, New Delhi, it is crystal clear that the consumers connected with 11kv/22kv supply lines are placed outside the scope and purview of the Part IV of the CEA Regulations, 2007, and that it has further categorically clarified that 11kv/22kv supply lines consumers are not subjected to harmonic control norms, however, 33kv and above supply lines consumers are alone directed to comply with harmonic control norms. Thus, the impugned demand issued by the respondent/ TANGEDCO directing the petitioner, who is admittedly connected with 11kv/22kv supply lines, is against the CEA Regulations, 2007.

29. Further, it is also pertinent to note that the CEA, who is the Competent Authority, to declare the harmonic distortion levels, has not declared harmonic distortion levels to the consumers connected with 11kv/22kv either through the CEA Regulations, 2007, or by any other relevant provisions. Therefore, until the CEA prescribes any standard of harmonics for 11kv/22kv supply lines consumers and makes them also obligatory for harmonic controls, no obligation can be cast upon the 11kv/22kv supply lines consumers for compliance.

30. Taking support from Sections 50, 86 and 181 of the Act read with Regulation 4(1)(iv) of the Tamil Nadu Electricity Supply Code, to sustain the impugned order levying harmonic charges on the 11kv/22kv supply line consumers. In this context, let me extract below the above said provisions:

50. The Electricity Supply Code :-

The State Commission shall specify an



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Electricity Supply Code to provide for recovery of electricity charges, intervals for billing of electricity charges, disconnection of supply of electricity for non-payment thereof, restoration of supply of electricity, tampering, distress or damage to electrical plant, electric lines or meter, entry of distribution licensee or any person acting on his behalf for disconnecting supply and removing the meter, entry for replacing, altering or maintaining electric lines or electrical plant or meter.

"Section 86 - Functions of State Commission.-

(1) The State Commission shall discharge the following functions, namely:--

(a) determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State: Provided that where open access has been permitted to a category of consumers under section 42, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of consumers;

(b) regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;

(c) facilitate intra-State transmission and wheeling of electricity;

(d) issue licences to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the State;

(e) promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such



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sources, a percentage of the total consumption of electricity in the area of a distribution licensee;

(f) adjudicate upon the disputes between the licensees and generating companies and to refer any dispute for arbitration;

(g) levy fee for the purposes of this Act;

(h) specify State Grid Code consistent with the Grid Code specified under clause (h) of sub-section (1) of section 79;

(i) specify or enforce standards with respect to quality, continuity and reliability of service by licensees;

(j) fix the trading margin in the intra-State trading of electricity, if considered, necessary;

(k) discharge such other functions as may be assigned to it under this Act."

Section 50 of the Act dealing with the Electricity Supply Code statutorily provides for the cases, inter alia, with regard to the tampering of electric lines or meter and method of collection of electricity charges. Similarly, Section 86 of the Act empowers the State Commission to determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk and retail within the State. But, till date, it has not provided for setting up of standards for harmonics charges. Therefore, neither Section 50 nor Section 86 of the Act supports respondent TANGEDCO in the matter of levying of harmonic charges on the 11kv/22kv supply line consumers.

31. Likewise, Section 181 gives power to the State Commission to make Regulations consistent with the Act and Rules to carry out the provisions of this Act. By exercising such power, the Tamil Nadu Electricity Regulatory Commission had issued the Tamil Nadu Electricity Supply Code, wherein the Regulation 4(1)(iv) of the Tamil Nadu Electricity Supply Code, which is extracted below, deals with additional charges for harmonic dumping.

"4.Charges recoverable by the Licensee - The charges, recoverable by the Licensee from the consumers are:-

xxxx

(1). Tariff related charges, namely, -



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(iv). Additional charges for harmonics dumping

Where any equipment installed by a consumer generates harmonics, the consumer shall provide adequate harmonic suppression units to avoid dumping of harmonics into Licensee's distribution system and the Licensee is at liberty to provide suitable metering equipment to measure the harmonic level pursuant to such harmonic. Where the consumer fails to provide such units, he shall be liable to pay compensation at such rates as the Commission may declare from time to time."

In view of Regulation 4(1)(iv) of the Tamil Nadu Electricity Supply Code, although the State has got power to direct the consumers to install harmonic filters irrespective of their voltage connection as stated by learned Standing Counsel for TANGEDCO, the same cannot be sustained in view of non-specification of any standard of harmonics for 11kv/22kv/supply line consumers by the CEA, who, being an Apex Body as per Section 73(d) of the Act, has exclusive powers to specify the Grid Standards for operation and maintenance of transmission lines.

32. Thus, for all the reasons stated above, the impugned demand is quashed. Consequently, the writ petition is allowed. However, there shall be no order as to costs. Consequently, connected miscellaneous petitions are closed.

Sd/-
Assistant Registrar (CS-III)

//True Copy//

Sub Assistant Registrar

Svn

To

1. The Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO),
Represented by its Chairman and Managing Director,
No.144, Anna Salai,
Chennai - 600 002.



2.The Superintending Engineer,
CEDC/North,
Anna Salai,
Chennai - 600 002.

3.The Chief Financial Controller - Revenue,
(TANGEDCO),
No.144, Anna Salai,
Chennai - 600 002.

4.The Chief Engineer Commercial,
(TANGEDCO),
No.144, Anna Salai,
Chennai - 600 002.

5.The Tamil Nadu Electricity Regulatory
Commission (TNERC),
TIDCO Office Building,
No.19-A, Rukmani Lakshmipathy Salai,
Marshalls' Road, Egmore,
Chennai - 600 008.

+1cc to Mr.Lakshmi Sriram, Advocate SR.No.59098

WP 42274 of 2016

KG(CO)
GN(30/11/2021)