THE STATE ELECTRICITY OMBUDSMAN

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APPEAL PETITION No. P/011/2022 (Present: A.S. Dasappan) Dated: 29th April, 2022

Appellant	:	Sri. Biju Joseph, Navya Bakes Confectioneries India Pvt. Ltd., X/66ACAND 68 Moonnamparambu, Karukutty, Angamaly, Ernakulam 683 576
Respondent	:	Deputy Chief Engineer, Electrical Circle, Kerala State Electricity Board Limited., Perumbavoor, Ernakulam Dist.
		Special Officer (Revenue), KSE Board Ltd., Vydyuthi Bhavan, Pattom, Thiruvananthapuram

<u>ORDER</u>

Background of the case:

The appellant is a High Tension (HT) consumer of Electrical Section, KSEB Ltd., Karukutty with Consumer Code LCN 16/9208 and the tariff allotted is HT IA (Industrial). The connected load sanctioned by the Licensee is 285.96 kW and the Contract Demand is 180 kVA. The appellant wants to enhance the connected load to 420.34 kW without changing the Contract Demand 180 kVA. Based on the application of the appellant for the above, inspections were conducted by various levels of Officers of the Licensee and could not find a mutually agreed decision in connected load and lighting load in the premises. The appellant wants to fix light load as 6.013 kW, whereas the respondent's calculation is 35.579 kW / 29.449 / 19.647 kW. Also, the appellant wants to execute the supplementary agreement with revised connected load without further sanction from the Electrical Inspectorate, whereas the respondent insist for sanction from Electrical

Inspectorate for the revised connected load. As such, the appellant filed petition in Consumer Grievance Redressal Forum (CGRF), Central Region, Ernakulam vide OP No. 12/2021-22 and the Forum in its order dated 13-08-2021 dismissed the petition, ordering to execute the supplementary agreement with revised connected load within 15 days from the date of receipt of order.

Not satisfied with the decision of the Forum, the appellant again filed a petition (Review) vide OP No. 43/2021-22 and the Firm in its order dated 07-01-2022, advised the appellant to execute the supplementary agreement and regularize the load with the connected load and light load declared by the appellant and dismissed the petition due to lack of merits. Aggrieved by the decision of the Forum, the appellant filed this appeal petition before this Authority.

Arguments of the appellant:

The appellant is having an HT (1)-A Industrial connection, with Contract Demand 180kVA and Connected Load 285.96kW. The appellant has submitted a completion report with KSEBL on 03.09.2020 for the MV load addition (Additional load-179.872kW, deleted load - 45.447kW, without change in Contract Demand.

The Assistant Engineer along with the Assistant Executive Engineer came to the site on 15.09.2020 and inspected the physically Connected Load. Subsequently a letter was given from the office of the Deputy Chief Engineer, Perumbavoor stating that the light load is 35.579 kW. This load is more than 5% of the Connected Load. On receipt of the same, the appellant immediately informed DCE, Perumbavoor vide letter dated 12.11.2020 that the light load is only 6.013kW. Again, Executive Engineer along with Assistant Engineer and Assistant Executive Engineer come to the site and again verified the load. After their inspection, the appellant received a letter from DCE, Perumbavoor stating that the light load is 29.4449 kW. The appellant doesn't know how the light load get reduced from 35.579 kW to 29.4449 kW.

After taking up the matter with higher Authorities of the KSEBL, DCE, Perumbavoor inspected the site on 02.12.2020 and come to a conclusion that the light load is 19.46kW. Then DCE, Perumbavoor directed the appellant to remove some Air Conditioner and submit the revised completion report with a reduction of approximate 3kW load. As per the direction, the appellant has disconnected approximately 3kW load and submitted revised completion report on 27.01.2021.

After submission of the revised completion report, as per the direction of DCE Perumbavoor, again directed to submit Energization Sanction from Electrical Inspectorate incorporating 3kW deletion of the load. The deleted load is only 0.7% of total Connected Load. The appellant is surprised to know that a reduction of 0.7% in total Connected Load mandates the requirement of Energization Sanction from Electrical Inspectorate.

The CEA Regulation or any other Regulation stipulate the inspection of LT Connected Load up to grass route level by Electrical Inspectorate. The intention of the inspection by Electrical Inspectorate is focused on safety. By disconnecting 3kW load from 420.34kW, approved load will not affect the safety or system stability.

The Supply Code 2014 Reg. 153(4)(B) even permit, "If the additional load in the case of other consumers is of and below ten percent of the sanctioned load, it shall not be reckoned as unauthorized additional load". In an industrial premise it is quite normal and natural to have the variation of the load in downstream circuits. Nowhere in Act, Rule, Regulation or Standards it is mentioned that 3kW load out of 420.34kW should not be disconnected without the permission of Electrical Inspectorate or the License.

The appellant has pointed out this matter with DCE, Perumbavoor many times, but they are not accepting Supply Code Regulation or prayers and directed the appellant to submit the Energization Sanction for 3kW load deletion.

In this circumstance, since there is no other way, the appellant approached CGRF by way of filing a petition on 18.06.2021 with a request to direct KSEBL for and immediate regularization of the load and also for a suitable compensation for the losses enquired to the appellant, in any manner that may be suitable for the occasion.

In the additional submission to the Consumer Grievance Redressal Forum, the appellant pointed out the following: Workers Stay - Kerala State Regulatory Commission Order on OP NO 30/2015 Dated 19.10.2015

The order on OP No 30/2015, highlights Factories Act 1948 were "shelters, Restrooms, Lunch rooms, etc." for the use of worker's/ Factory Employees are confirmed as the part of the Factory.

The Nodal officer of the KSEBL took a stand that the Factory office is not the part of the Factory hence entire load of the office is to be included in Lighting Load. This is because of the ignorance about Factories Act, Labour Laws and Supply Code Regulations. Hence, the appellant brought before CGRF, the order on OP No 30/2015, confirming that the Workers Stay is also a part of Factory and load up to 10% of the total Connected Load of Factory can be used for this purpose.

When "shelters, Restrooms, Lunch rooms, etc.", are part of the Factory, no other explanation is required for the inclusion of Office, Canteens, Cafeteria, Laboratory, Recreation Rooms, Car Parking etc. in the Factory premises are to be a part of the factory. The Factory does not mean the Factory Building and machineries inside. The factory also includes Workers, Labours, Office Staffs, Managers, their Parking Place, Recreation Rooms, etc. That is, Men Machines, Amenities etc. complete.

Since 10% is permitted for other uses related with Factory miner variation in Connected Load need not be considered. The appellant can include Office, Canteens, Cafeteria, Laboratory, Recreation Rooms, Car Parking etc. are part of the Factory and hence this also can be included in 10% permitted for Shelters, Restrooms, Lunch rooms.

BIS Standards for Lighting - National Lighting Code 2010, Code of Practice for Industrial Lighting IS: 6665 -1972 (Reaffirmed 2005),

In the Schedule of tariff and terms and conditions for retail supply of Electricity by Kerala State Electricity Board Limited and all other Licensees with effect from 08-07-2019 to 31-03-2020 approved by Commission the Regulation under the heading "PART B - HIGH TENSION (HT) AND EXTRA HIGH TENSION (EHT) TARIFF" General conditions for HT and EHT Tariff, 7 is as follows: -

In the case of factory lighting and colony supply of HT/EHT (Industrial) consumers, the applicable tariff shall be subject to the following conditions: -

(a) *Factory Lighting.* —When the total connected lighting load of the factory is less than or equal to 5% of the connected load for power, it can be tapped off from the power mains without segregation. When the above lighting load exceeds this limit of 5%, the whole lighting load should be segregated and metered by a sub-meter and lighting consumption in excess over 10% of the bulk supply consumption for power, shall be charged at 20 paise extra per kWh for HT and 10 paise extra per kWh for EHT consumers.

(c) If no segregation is made as specified in clauses (a) or (b) above, the bill amount of the consumer shall be increased for demand and energy charges by 10% for both HT and EHT consumers.

Please note that the above guideline is about the *Lighting Load* above 5% of the total Connected Load. The term *Lighting* is well elaborated in various BIS Codes and Standards. All this focus on Illumination level and Glare Index for a particular type of arrangement, Fixture, Colour of walls, dust concentration etc. Manufactures of the light fittings is providing wattage rating of the light and lumen output with specific Isolex diagrams. Design Engineers select suitable light fittings and will mount it at specific height to get desired Illumination on working plain. They also calculate *Lighting Load* in Watts, for particular applications like factory floor, Office, Canteens, Cafeteria, Laboratory, Recreation Rooms, Car Parking, workers stay, etc. as part of the Factory.

The Indian Standards Code of practice for Industrial Lighting IS:6665-1972 elaborates values of Illumination lux and limiting of Glare Index at various locations in, factory area which include Factory, Canteens, Clock Rooms, Entrance, Corridors, Stairs, Stockyards, Main Entrance, Exit Roads, Car parks, Internal victory roads, etc. This shows that above all are also a part of factory. More than that *Lighting Load* is decided taking into consideration the requirement of required illumination level, for different factories and in different areas. In any Standard or BIS Code of practice it is mentioned that "All those loads which are not intended for the functioning of machineries comes under light load in an industrial tariff':

The Indian Standards "National Lighting Code 2010" elaborates the design of lighting system. The clause: 8.5.2 Rated Power (of a Type of Lamp) — The value

of the power of a given type of lamp 'declared by the manufacturer or the responsible vendor, the lamp being operated under specified conditions. Unit: W

NOTE — The rated power is usually marked on the lamp.

Now we have procedure and proceedings for selection of the correct light fittings according to the purpose of the same in different types of factories and different factory areas. According to the BIS National Lighting Code Lighting System and declared by the manufacturer or the responsible vendor, the lamp being operated under specified conditions. rating of the lamp is marked on the lamp.

Harassing the appellant without observing BIS directives and creating new definitions is non-compliance of the directives. Ombudsman may take up this matter with KSERC and recommend for the actions against the Concerned employees for non-compliance of directives.

After hearing and verifying additional submissions CGRF came out with an order on 13.08.2021, stating that the appellant can execute the connected load enhancement with out inspectorate approval. But they haven't mentioned about the light load calculations and its affect in the billing pattern.

Again, the appellant had filed a Clarification/Review Petition on Order No. CGRF-CR/OP No.12/2021-22/120 Dated 13.08.2021 on 21.10.2021

The main objectives are as follows: -

BIS Standards for Lighting - National Lighting Code 2010, Code of Practice for Industrial Lighting IS: 6665 -1972 (Reaffirmed 2005), is the standards to be followed while calculating lighting.

In the Statement of Fact, KSEBL is referring IS 4648 which is for Residential Electrical Installation. In the petition, the appellant specifically mentioned the lighting load may be calculated as per IS 6665-1972 which is meant for Industrial Lighting.

Also, KSEBL statement of fact, they mentioned the National Building Code 2011 for lighting tariff. The appellant referred so much IS and National Building Code, the appellant cannot find a Code dated 2011 and the specific quote of KSEBL.

There is available National Lighting Code, but KSEBL is not refereeing the same to find out the lighting load.

During the hearing CGRF highlighted that the appellant had submitted a revised light load 19.647kW. The statement and revised load list were submitted due to the pressure of DCE, Perumbavoor. The appellant confirmed that the appellant has taken back the revised load. The light load is being 6.01kW.

In KSEBL statement, they are stating that as per appellant's drawing, it is clearly marked that the light load as below.

Total			5.832kW
d. VDE - 9		CKT 1	1.082kW
c. DB 1 Office		Light &Fan	3.25kW
b. VDB 16		CKT 2	0.5kW
a. VDB 16	-	CKT 1	1kW

The respondent submitted that the light load is only 5.832kW as per drawing. The appellant has submitted that the light load by taking individual light points and the total come to 6.01 kW only.

The split-up details are as follows:

light	load details			
S1 No	Fitting	Watts Q	nty To	tal Watts
1	Tube light	36	30	1080
2	Tube light	18	50	900
3	Tube light	24	70	1680
4	Tube light	20	34	680
5	Ceiling light	15	30	450
6	Ceiling light	12	29	348
7	Led bulb	9	20	180
8	Led bulb	7	25	175
9	Spot light	30	4	120
10	Spot light	40	4	160
11	Spot light	20	2	40
12	Spot light	100	2	200
Total			300	6013

The main fact in the appellant's case is light load calculation dispute. As per appellant, 6.013kW is the light load and KSEBL is claiming 19kW.

Relief Sought

The Ombudsman may:

- 1. direct KSEBL not to disconnect the appellant's supply
- 2. direct KSEBL to execute Supplementary Agreement with revised connected load by considering 6.01kW as light load.
- 3. direct DCE Perumbavoor to workout Lighting Load of Navya Bakery in line with Indian Standard Code of Practice for Industrial Lighting IS:6665-1972 (Reaffirmed 2005) and National Lighting Code 2010 and verifying whether it is 6.01kW. if it is so direct DCE Perumbavoor to execute the agreement accordingly.
- 4. direct DCE, Perumbavoor to execute Supplementary Agreement with revised connected load by considering 6.013kW as light load.
- 5. report this type of consumer harassment to CMD/KSEBL and Chairman/KSERC to prevent the same in future.
- 6. allow compensation.

Arguments of the respondent:

The appellant submitted an application for enhancing the connected load to 420.34 kW from 285.96 kW on 03-09:2020, at 0/0 Assistant Engineer, Electrical Section, Karukkutty without changing the existing contract demand 180 KVA. Along with the application, schedule of connected load is also attached which shows the present load, deleted load, additional load and total final load mentioned. But the light load and power load was not shown as segregated / separated. This caused difficulty to verify the light load as stipulated in the tariff order for HT consumers published in the Extra Ordinary Gazette dated 30/09/2019 in Part B- HT and EHT Tariff vide item No. 7 (a) Factory lighting which stipulate that " when the total connected lighting load of the factory is less than or equal to 5% of the connected load for power, it can be tapped off from the power mains without segregation. When the above light load exceeds this limit of 5%, the whole lighting load should be segregated and metered by a sub-meter" based on the approved drawing, a connected load statement was prepared by the appellant,

but without segregating the light load. The energization sanction from Electrical Inspectorate vide order No.B3-7869/20/20/EIE Dated 27/8/2020 was accorded for a connected load of 420.34kW+60kVAR. Regulation 53 of Kerala Electricity Supply Code 2014 mandates that "*The installations of the premises of HT and EHT consumers shall be energized only after getting the energization approval from the Electrical Inspector.*"

A joint inspection was conducted by Engineers from Electrical Section, Karukutty along with the appellant. An inspection report was received in this office based on the joint physical verification. The report mentioned that the light load was not segregated and verified calculated light load as per letter dtd.16/9/2020 is 35.579kW with a total connected load of 420.34kW. The same was intimated from this office to the appellant on 14/10/2020 and informed the appellant that due to the non-segregation of light load from power load and light load is above 5% of Power load, tariff clause 7 for HT consumer will be applicable. Also, intimated the appellant that the revised schedule of the connected load may be submitted to this office at the earliest so as to form the part of HT agreement in order to make the additional connected load authorized. Hon'ble High Court in WA 803/2014 mandates to get an approval from the Electrical Inspector after inspection and approval by the Board to make a load authorized. Hence, the reminder for the same was sent on 05.11.2020 and also informed to intimate any inconvenience for executing the revised schedule of agreement.

In reply, the appellant intimated that the total light load is only 6.013kW. Based on the request, a re-inspection was conducted by The Executive Engineer, Electrical Division Angamaly on 17.11.2020 as per the direction of 1st respondent for the light load verification and found it as 29.449 kW. The inference of the inspection was intimated to the appellant vide letter dated 24/11/2020 mentioning that all the previous issues are still existing and again requested to execute the schedule to agreement for revising the connected load, and if any doubt/ clarification regarding the matter is required, the same can be clarified from the respondent.

In the meantime. a complaint was received in this office from M/s. Essjay Electro links Pvt Ltd, (A Class Electrical Contractor of HT Consumer) regarding Light load calculation on behalf of the appellant on 26-11-2020. On 01.12.2020 this office had received a letter from Mr. Biju Joseph intimating that they had reduced the light load to 20.507 kW from 29.449 kW by dismantling some unwanted points and also submitted the connected load statement of the light load. Therefore, this office proposed a joint inspection by a team comprising of the 1st respondent and the appellant on 2/12/2020 with prior intimation to the appellant on 27/11/2020. Joint inspection was conducted on 2/12/2020 and the total load was arrived as 23.149 kW (above 5% of power load). A site mahazar was prepared, detailing the light load points. While calculating the light load, the plug points of the production area was discarded and inspection was conducted in presence of the industry owner, Mr. Biju Joseph. Also, it is revealed that the appellant had dismantled some of the light loads before inspection.

Since a mismatch is noticed in the connected load statement submitted by Mr. Biju Joseph and the connected load in accordance with the site mahazar, on 3/12/2020 again requested the appellant to execute the agreements as per the revealed connected load and if the appellant wants to reduce the light load further, this office has requested them to submit a revised connected load. On the same day itself, the appellant intimated that they had reduced some light loads and finalized total light load as 19.647kW. However, even if they reduced the light load it was not reflected in total connected load which remained 420.346kW itself. The issue was also taken up with Chief Engineer, Distribution Central on 23-01-2021. On 27/1/2021, the appellant submitted the load schedule with total reduced connected load as 416.838kW. Chief Engineer, Distribution Central intimated vide letter dated 04-02-2021 that 'as per relevant regulations and safe operation, approval of the Electrical Inspectorate for energization is required for the HT consumer'. Therefore, on 06/02/2021, a letter was sent from this office to the appellant to submit the sanction of the Electrical Inspectorate for the already submitted load on 27/1/2021 since there is a mismatch in the total load as sanctioned earlier by the Electrical Inspectorate. A reminder also was sent on 20/4/2021. On 8/4/2021 a letter received from Director, Distribution & IT

enquiring the present status of the grievance of the appellant. In reply, vide letter dated 10.06.2021 1st respondent intimated that the HT consumer has not submitted the revised as fitted drawing along the load schedule incorporating the deleted load.

With respect to the grievance, KSEBL has made a customer friendly approach constantly with the appellant. KSEBL has not made any financial loss to the appellant. It is almost evident that the appellant has connected the entire load to the system and enjoying the benefit. All the relevant intimations and reply was given to the appellant without delay. The appellant doesn't give any letter directly to KSEBL with respect to the misbehavior attitude of any officers in any occasion. Any threatening to the appellant through letter or even by words has not been done from the respondent's side. KSEBL has no intention to disconnect the supply of the appellant and not served disconnection notice in this regard. In all letters, the respondent has intimated the willingness to enhance the load if the appellant submits all documents as per the provisions of Supply Code 2014. As per the direction from Director IT & Distribution, the Licensee is ready to provide even a 6-month relaxation for submission of approved scheme from Electrical Inspectorate and execute the schedule of agreement with the connected load of 420.34 kW and which was intimated the appellant as part of a consumer-friendly approach.

On 01-12-2020, the appellant came up with a declaration that their light load is 20.507kW. During the inspection of the respondent on 02-12-20, the appellant agreed the light load as 23.149 kW. Later, stated that the appellant has reduced the light load to 19.647 kW vide letter dated 03-12-2020. Subsequently forwarded a connected load statement having a total load of 420.34KW and a light load of 19.647 kW. Later, on 21.1.21 total load was corrected as 416.94 kW but, which is not matching with the total load as approved by the Electrical Inspectorate. This indicates that the issue was existing during the course of inspections and the appellant had a complication in assessing the light load. Also, the office with staff is adjointly functioning in this premises. This also one of the reasons for the higher light load percentage of the industry. In this connection, it may be noted that the panel VDE-16 caters CKt-1 and CKt-2 and which is connected to 1 kW and 0.5 kW respectively for which type of load is not mentioned. The panel DB-1 caters the load in the office and is of the order of 29.62 kW, which is even having an independent Circuit of light and fan of 3.25 KW, exclusively for office room only. The Panel VDE-9 also caters Circuit -1 which is connected to a load of 1.082KW for which also the type of loads is not specified.

Now, it is a matter of formality to regularize the connected load, which is pending. It is true that there is no increase in contract demand and hence the licensee has no issue to connect it to the system. The dispute was raised only after the verification of the connected load by the KSEB officials. Since the segregation of light load and power load was not done it is the duty of the Board officials to ascertain the light load in accordance with the tariff orders. The respondent has tried to convince the appellant through joint inspection, but the appellant tried to reduce the light load by dismantling of some gadgets and there by created a mismatch in the total connected load as approved by the Electrical Inspectorate.

The facts being so, the appellant approached CGRF and the Forum advised the appellant to submit the schedule with a light load of 19.647 KW. The argument of the appellant was that the lighting load includes the sum total of the wattage of lighting fixtures only. The Forum directed KSEBL to sign the HT agreement with 19.647 kW instead of 6.01 KW. Accordingly, the appellant was informed to submit the schedule as per the connected load statements received in KSEB Ltd. having a light load of 19.647 KW. But the appellant filed a review petition before the CGRF and the Forum directed the appellant to execute the agreement with a light load of 19.647KW and with a connected load of 420.3467 kW. The Forum also advised the appellant to segregate the load. But the appellant has not forwarded the schedule to agreement. KSEB Ltd. has no objection to sign the schedule with a light load of 19.647 kW.

CGRF advised the appellant to approach Electrical Inspectorate to work out the light load and also to obtain the sanction for energization in which the lighting load is clearly segregated /separated in accordance with the section 54 and 162(1) of electricity act 2003. Now, it is understood that the appellant is insisting to execute the agreement with a light load as 6.01 kW. It is true that the "National lighting Code elaborates the design of the lighting system however it is not related anything with the tariff. IS-4648 specifically mentions the light load appliances, which states that it is "An appliance having a loading not exceeding 5.0 KW, and in case of its being a motor operated having a motor of rating not exceeding 750W intended for use on circuits in which the operating voltage does not exceed 250volts."

Apart from that the National building Code 2011 (3.4.26) specifically mentions lighting tariff, which states that "Lighting tariff- a tariff applicable to electricity supplies taken mainly for lighting and other small appliances, for example fans and radios. Therefore, all those loads which are not intended for the functioning of the machineries and not directly related with production process comes under light load in an industrial tariff. Kindly advise the appellant to forward the duly signed schedule to agreement to regularize the connected load with a light of 19.647 kW as already intimated to him' in accordance with the CGRF order. It would be appropriate to segregate the load as directed by the CGRF so as to avoid disputes in future.

Therefore, it is prayed that the Ombudsman may be pleased to accept the version of the opposite parties and dismiss the appeal petition with costs.

Analysis and findings:

The hearing of the case was conducted on 13-04-2022 in the office of the Electricity Ombudsman, Edappally, Kochi. Sri. Shaji Sebastian attended the hearing for the appellant. Sri. C.P. Boban, Executive Engineer, Electrical Division, KSEB Ltd., Angamaly and Sri. P. Pradeep, Superintendent, Office of the Special Officer (Revenue) attended the hearing from the respondent's side. On examining the appeal petition, the arguments filed by the appellant, the statement of facts of the respondent, perusing the documents attached and considering all the facts and circumstances of the case, this Authority comes to the following findings and conclusions leading to the decision thereof.

The appellant's premises "Navya Bakers & Confectioneries India Pvt. Ltd." is a High Tension (HT) industrial premises having a sanctioned connected load of 286 kW and Contract Demand of 180 kVA. The appellant made an application before the Licensee on 03-09-2020 for the enhancement of connected load from 286 kW to 420 kW by deleting a portion of the existing load and adding some extra load, thereby the total load comes to 420 kW. The respondent and the other Officers of the Licensee conducted inspection in the premises and found the "light load" in the premises is more than the permissible limit 5% of the total power load requirement of the appellant. As such the Licensee directed the appellant to execute a revised schedule of HT agreement by revising the connected load. In the appeal petition, the appellant's requirement is to execute the HT agreement as such furnished by the appellant since the "light-load" is within 5% of the connected power load, i.e. the connected light load is only 6.013 kW. The argument of the appellant in this case is as follows:

The sanctioned connected load in the premises is 285.96 kW. The appellant wants to enhance the connected load from 285.96 kW to 420.34 Kw and submitted the application with details of load to the Licensee on 03-09-2020. The Licensee conducted inspection in the premises at various level of Officers and found the "light load" connected is more than 5% of the total power load requirement. In each inspection, the Licensee found different values of light load and hence, Officers of the Licensee, who inspected the premises are unaware of identifying and assessing the "light load" in accordance with rules and standards. The "light load" in the premises is only 6.013 kW and details of load were furnished to the Licensee. Moreover, the Licensee insisted to modify the electrical load once approved by Electrical Inspectorate and to obtain revised sanction from the Electrical Inspectorate. The "light load" was connected in the premises and the quantum is calculated in accordance with Indian Standard Code of Practice for Industrial Lighting IS: 6665-192 (Reaffirmed 2005) and National Lighting Code 2010. As such the appellant wants to execute the supplementary agreement with the enhanced connected load and a light load for 6.013 kW.

According to the respondent, the contentions are as follows:

Along with the application for the enhancement of connected load, the appellant had not produced the details of segregation of power load and light load, which led to the difficulty in verification of connected load. The appellant is only eligible for non-segregation of load if the lighting load is less than 5% of the total power load. In the inspection conducted by the respondent and other Officers of the Licensee, the lighting load was found more than 5% of the total power load. Final inspection in the premises was conducted by the Deputy Chief Engineer himself and found light load to the extent of 23.149 kW, which is more than 5% of the total power load. Later the light load was reduced to 19.647 kW and the total connected load remain 420.346 kW. Again, the appellant revised the connected load to 416.94 kW but which is not matching with the total load approved by the Electrical Inspectorate. The National Building Code 2011 (3.4.26) specifically mention lighting tariff, which states that "Lighting tariff – a tariff applicable to electricity supplies taken mainly for lighting and small appliances, for example fans and radios. Therefore, all these loads, which are not intended for the functioning of the machines and not directly related with production process comes under light load in an industrial tariff. As such, the appellant has to execute the supplementary agreement with the light load 19.647 kW.

On analyzing the document file, the following facts are revealed:

On 03-09-2020, the appellant had given an application to the Assistant Engineer, Electricl Section, Karukutty for the enhancement of connected load in the premises from 285.96 kW to 420.34 kW without change of Contract Demand, on the strength of the sanction obtained from Electrical Inspectorate dated 27-08-2020. The details of electrical equipments and its ratings were also furnished by the appellant along with the application to the Assistant Engineer. But the details of "lighting load" is not seen in the statement of connected load prepared by the appellant. On 14-10-2020, the respondent intimated the appellant that the "light load" in the premises is 35.579 kW, which is more than 5% of the total power load and hence, advised the appellant to execute a revised schedule of HT agreement by revising the connected load. In the inspection conducted by the Licensee in the first time found the light load 35.579 kW, in the second inspection, the light load

was 29.449 kW, in the third time the light load was 23.149 kW. From the above inspections, it is revealed that the Licensee has no uniform procedure for arriving at the "lighting load" in a premises.

As directed by the respondent, the appellant removed a portion of lighting load, thereby the lighting load became 19.647 kW and the total connected load 416.838 kW. The deduction of lighting load to the extent of 19.647 kW reflected in total connected load also, hence, the appellant was directed to submit the revised completion report.

Regulation 153 of Kerala Electricity Supply Code 2014 provides, "Estimation and regularization of unauthorized additional load". Regulation 153 (9) : "If it is found that additional load has been connected without any increase in the Contract Demand, steps may be initiated to regularize the connected load in accordance with the provisions in the agreement within a time frame as stipulated by the Licensee". In this case, the appellant had not connected any unauthorized load, even in such cases a consumer who opts demand-based billing is allowed to regularize the load in accordance with the provision in the agreement.

Details of "lighting load" furnished by both the appellant and respondent are as below:

Sr. No.	Fittings	Watts	Quantity	Total Watts
1	Tube light	36	30	1080
2	Tube light	18	50	900
3	Tube light	24	70	1680
4	Tube light	20	34	680
5	Ceiling light	15	30	450
6	Ceiling light	12	29	348
7	Led bulb	9	20	180
8	Led bulb	7	25	175
9	Spot light	30	4	120
10	Spot light	40	4	160
11	Spot light	20	2	40
12	Spot light	100	2	200
	Total		300	6013

Light load details furnished by the Appellant

Sr. No.	Fittings	Watts	Quantity(Nos.)	Total Watts
1	Led light	09	84	756
2	Led Focus light	35	01	35
3	Led Focus light	48	01	48
4	Led Tube light	18	73	1314
5	Led Tube set	36	95	3420
6	Led light	40	01	40
7	Tube (T5)	25	06	150
8	CFL	15	03	45
9	Spot light	50	05	250
10	Lamp	20	02	40
11	Led Light	12	03	36
12	Fan	60	52	3120
13	Pedestal Fan	100	01	100
14	Computer	150	24	3600
15	Photocopier	1500	03	4500
16	1.5 Ton AC	1875	03	5625
17	1 Ton AC	1250	02	2500
18	LED TV	130	01	130
19	Printer Ink Jet	300	02	600
20	Water Cooler	500	01	500
21	6 Amps plug socket	60	44	2640
	Total			29449

Light load details furnished by the Respondent

In the schedule of tariff and terms and conditions of retail supply of electricity by Kerala State Electricity Board Ltd. and all other Licensees w.e.f. 08-07-2019, notified by Hon'ble KSERC under the head "Part B – High Tension (HT) and Extra High Tension (EHT) tariff", General Conditions for HT and EHT tariff,

7. (a) Factory Lighting — When the total connected lighting load of the factory is less than or equal to 5% of the connected load for power, it can be tapped off from the power mains without segregation. When the above lighting load exceeds this limit of 5%, the whole lighting load should be segregated and metered by a sub-meter and lighting consumption in excess over 10% of the bulk supply consumption for power, shall be charged at 20 paise extra per kWh for HT and 10 paise extra per kWh for EHT consumers.

Here, as per the statement of the appellant, the lighting load is 6.013 kW, which is the total wattage of the tube light, ceiling light, LED bulbs and spot lights in the premises. It is to be noted that the lighting load 6.03 kW is 1.46% of the total proposed power load.

As per the statement of the respondent, the lighting load is 29.449 kW, which is the total of the wattage of the LED lights, LED Focus lights, LED tube, LED tube set, Tube Set, CFL, Spot lights, Lamps, Fan, Pedestal Fan, Computer, Photocopier, Air Conditioners, LED TV, Printer, Water Cooler and plug sockets in the premises. In the list of the light load furnished by the respondent, other than lighting is also seen. The total load of 29.449 kW is 7.53% of the total proposed power load. In the statement of the respondent, the load used for lighting purpose of 6.134 kW, which is more or less same to the light load furnished by the appellant. It is also to be noted that 6.134 kW is 1.46% of the total proposed power load. Moreover, the respondent revealed that, the Licensee has no objection to sign the schedule with a light load of 19.647 kW and hence, the percentage of light load will be 4.9% of the total proposed power load. In this case, the appellant can connect a maximum of 20 kW light load limiting 5% of the total proposed power load without segregating power load and light load. It is pertinent to note that, though the revised connected load requested for by the appellant is 420.34 kW, the Contract Demand opted by the appellant is the same as that for the existing connected load 285.96 kW.

The Indian Standard, Code of Practice for industrial lighting provides (IS 6665 – 1972), "Light should serve not only as a production of tool and as aid to safety, but should also contribute to the overall environment conditions of the work space. The lighting system should be a part of a planned environment contributing to the comfort and well-being of the users." In the Code, nothing is provided to incorporate the other electrical equipments with the lighting load. As such, this Authority is of the view that the load used for the lighting purpose only needs to be taken for the calculation of the lighting load.

This Authority is not empowered for initiating disciplinary action against the staff/officers of the Licensee.

Decision: -

From the discussions and conclusions arrived at, which are detailed above, I take the following decision:

The respondent is directed to accept the scheme sanction of Electrical Inspectorate produced by the appellant and take the "lighting load" as 6.134 kW furnished by the respondent in their statement of lighting load. The respondent shall take further action immediately to execute supplementary agreement with the appellant accordingly.

Having concluded and decided as above, it is ordered accordingly. The order of CGRF, Central Region, Ernakulam in OP No.12/2021-'22 dated 13-08-2021 and Review Petition No. 043/2021-22 dated 07-01-2022 are set aside. No order on costs.

ELECTRICITY OMBUDSMAN

<u>P/011/2022/ dated .</u>

Delivered to:

- Sri. Biju Joseph, Navya Bakes Confectioneries India Pvt. Ltd., X/66A-CAND 68 Moonnamparambu, Karukutty, Angamaly, Ernakulam 683 576
- 2. Deputy Chief Engineer, Electrical Circle, Kerala State Electricity Board Limited., Perumbavoor, Ernakulam Dist.
- 3. Special Officer (Revenue), KSE Board Ltd., Vydyuthi Bhavan, Pattom, Thiruvananthapuram

Copy to:

- 1. The Secretary, Kerala State Electricity Regulatory Commission, KPFC Bhavanam, Vellayambalam, Thiruvananthapuram-10.
- 2. The Secretary, KSE Board Limited, Vydhyuthi Bhavanam, Pattom, Thiruvananthapuram-4.
- 3. The Chairperson, CGRF-CR, 220 kV Substation Compound, KSE Board Limited, HMT Colony P.O., Kalamassery, PIN: 683 503.