

**ORISSA ELECTRICITY REGULATORY COMMISSION  
BIDYUT NIYAMAK BHAWAN  
UNIT-VIII, BHUBANESWAR - 751 012  
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Present :      Shri K.C. Badu, Member  
                     Shri B. K. Misra, Member

**Case No. 16/2010**

GRIDCO	.....	<b>Petitioner</b>
- Vrs. -		
Director (Engg.), OERC & others	.....	<b>Respondents</b>

**In the matter of:                      Review of Order (Protocol) on Power Regulation in  
the State vide Commissioner's Order dtd. 14.01.2010  
in Case No. 01/2010.**

**Date of Hearing : 31.03.2010**

**Date of Order : 17.04.2010**

**ORDER**

1. The Commission vide its Order dtd. 14.01.2010 in Case No. 01/2010 had passed an order (Protocol) on Power Regulation in the State under S.23 of the Electricity Act, 2003. At para 24 of the said order the Commission had observed that it will review the order as and when required at appropriate time.
2. M/s GRIDCO had filed an application praying the Commission for review of the aforesaid order of the Commission.
3. Public notice was published in the Samaj and The New India Express inviting suggestions/opinions from the persons who had submitted their suggestions/opinions in Case No. 01/2010 so also from any other interested persons. The following persons/organizations/licensees have submitted their views/suggestions on the matter.
  - (i) North Orissa Chamber of Commerce & Industry, Ganeswarpur Industrial Estate, Balasore

- (ii) WESCO, NESCO & SOUTHCO, CSO, Plot No.N-1/22, IRC Village ,Nayapalli, Bhubaneswar
  - (iii) Central Electricity Supply Utility of Orissa, IDCO Towers, Janpath, Bhubaneswar.
  - (iv) IDCOL Ferro Chrome & Alloys Ltd., Jajpur Road, Dist-Jajpur.
  - (v) Shri R.P. Mohapatra, Plot No.775(Pt), Lane-3, Jayadev Vihar, Bhubaneswar.
  - (vi) OCL India Ltd., Plot No.1129, Near Moon Hospital, Mahanadi Vihar, Cuttack.
  - (vii) Utkal Chamber of Commerce & Industry, N/6, IRC Village, Bhubaneswar.
  - (viii) Ferro Alloys Corporation Ltd., GD-2.10, Chandrasekharpur, Bhubaneswar.
  - (ix) Tata Steel Ltd., Plot No.273, Bhoumanagar, Unit-IV, Bhubaneswar.
  - (x) Confederation of Indian Industries, 8, Forest Park, Bhubaneswar. Balasore Alloys Ltd., 199, Forest Park, Bhubaneswar
  - (xi) M/s.Paradeep Phosphates Ltd., Paradeep,Dist-Jagatsinghpur.
  - (xii) Rourkela Chamber of Commerce & Industry, Chamber Bhawan, By pass Road, Rourkela.
4. The Commission conducted hearing on 31.03.2010 on the matter. The following persons were participated & submitted there views in the hearing.
5. Shri A.C. Mallick, Director (Comm), GRIDCO, Shri J. P. Das, CGM, OPTCL, Shri S. K. Das, DGM, SLDC, Shri S.K. Dasgupta, CEO & Shri K.V. Durgaprasad, CCO, CESU, Shri A.K. Bohra, WESCO, NESCO, SOUTHCO, Shri S.K. Nanda, CII, Shri M.V. Rao, UCCI, Shri R.Pandey & Shri S. Pati, OCL India Ltd., Shri O.P. Singh, PPL, Shri R.P.Mohapatra, Tata Steel, FACOR, Balasore Alloys & IDCOL and also in his personal capacity, Shri G.N. Agrawal, Dist Consumer Forum, Sambalpur.
6. The GRIDCO in its application has submitted the following points for consideration of the Commission.
- (a) To implement an uniform regulations of 25% of power on the average consumption of all the HT and EHT industries.

- (b) To levy Rs.4 (four) per unit for additional consumption over and above the consumption figures as per para (a) above subject to the condition that power is available;
  - (c) Those industries likely to get power from outside having dedicated feeders can do so. They can avail such power through Open Access (OA)/ Power Exchange which GRIDCO/OPTCL/SLDC will assist.
  - (d) Hon'ble Commission in para 23(3) of the order directed to install UFRs in graded frequency at 49.2Hz, 49.4Hz and 49.5Hz in the outgoing feeders of 132/33KV grid S/s of OPTCL. After installation of UFRS, frequent chaotic situation has been reported. In order to safeguard grid collapse, to avoid objection by ERLDC and to maintain grid discipline tripping of some feeders at 49.3Hz and at 49.5Hz may be considered.
7. The representative of OPTCL prayed that they have filed a separate application for review of the Commission's order and the views expressed in that application may be considered by the Commission along with the prayer of GRIDCO. M/s. OPTCL has raised the following two issues for consideration of the Commission.
- (a) allowing OPTCL to deactivate all the UFRs installed on 33KV feeders;
  - (b) directing DISCOMs to strictly remain within the schedule.
8. Shri R.P. Mohapatra raised preliminary objection that as this is a hearing for review of the Commission order dtd. 14.01.10, the quorum for hearing shall be three. The Commission examined the preliminary objection raised by Shri Mohapatra. As per S. 92(1) of the Electricity Act, 2003 the Commission shall observe such rules of procedure in regard to the transaction of business at its meeting (including the quorum at its meeting) as it may specify. Accordingly the Commission has framed OERC (Conduct of Business) Regulations, 2004. According to Reg. 8(b) of the said Regulations, it is clearly stated that the quorum for meeting of the Commission shall ordinarily be two but the Commission may determine by order in writing, the matter which can be heard by a single member. Neither the electricity Act, 2003 nor the Conducts of Business Regulations, 2004 of the Commission, prescribes any quorum for review of its order. The Case No. 01/2010 on power regulation was heard by

two members of the Commission and order was passed on 14.01.2010. The present hearing is also being conducted by the same two members as per the principle laid down in Order 47 Rule 5 of Code of Civil Procedure, 1908. The Commission in its order dtd.14.01.10 at para 24 had clearly stated that at appropriate time, the Commission may review its own order. As such the Commission has the power to review its order suo-motu basing on the information received and considering the latest development in the matter. In the instant case both GRIDCO and OPTCL have filed petition to review the order dt.14.01.2010 in Case No.01/2010 in addition to various representations made to the Commission by the affected industries alleging violation of the order dt.14.01.2010 and seeking clarification and direction to GRIDCO, OPTCL and Distribution Companies.

9. An Order of the Commission issued under S.23 of the Act, 2003 on Power Regulation shall not be treated as a static document. It has to be re-looked by the Commission dynamically depending upon the circumstances and developments with regard to demand and supply situation in the State. In this context the Commission, as a Regulator, has considered the prayer of GRIDCO & OPTCL as necessary feedback to re-look to the matter and bring necessary modification in its Order (Protocol) on Power Regulation. In a strict sense we do not consider the prayer of GRIDCO & OPTCL as stated in their petitions as review but treat them necessary feed backs for appropriate modification on power Regulation Protocol. GRIDCO and OPTCL as major stake holders along with DISCOMs have to play a significant role on Power Regulation in the State.
10. OPTCL has submitted in writing that UFRs have been deactivated as a result of the request from DISCOMs. Instead of hand tripping of industrial feeder for 25% reduction in consumption, relay setting should be appropriately made.
11. OCL submitted that demand charge, load factor, energy charge should be prorated on actual availability.
12. SAIL submitted that demand charges should be based on actual demand. UFR should not be used in dedicated feeder.

13. WESCO/NESCO/SOUTHCO submitted that the allocation of demand by SLDC do not match with the Commission's order dt.14.01.10. They have said that as a result Power Regulation are power holiday on Industries declared by the Govt. of Orissa, there shall be loss of revenue to them. They shall also lose cross subsidy, loss of margin and demand charge for which they have prayed for subsidy.
14. SLDC has submitted that the present shortfall in the State is 300 MW. Through power banking, State shall obtain 141 MW additional power, due to which there shall be less shortfall.
15. The respondents have raised the following points during the hearing.
- CMD, GRIDCO/OPTCL being the Chairman of all DISCOMs has not taken any action for implementation of OERC order dated 14.01.10. Instead of implementing the order in its true letter and spirit, OPTCL is just controlling the power supply to industries and DISCOMs on its sweet will.
  - The consumers are facing power cut as stipulated in the order dt.14.01.2010 of the Commission apart from the normal load shedding due to the provision of UFR at graded frequency. Enhancement of relay setting is required in some feeders to avoid public discontentment.
  - The review petition filed by GRIDCO may be rejected outright as GRIDCO has approached the Commission after almost three months of its pronouncement and also without any significant justification.
  - GRIDCO/OPTCL has neither implemented nor having any intention for implementation of Commission's order, rather effecting regulation of power as per their own decision. Instead of hearing, they should be asked to explain about the non-compliance of Commission's order. Industrial consumers apprehends that even if the Commission pass any order after review, GRIDCO/OPTCL may not obey it.
  - One day power holiday for continuous process industries is not possible because of the nature of production. Further power holiday may necessitate lay-off of workers and loss of revenue to the Govt. As such difficulties are being faced by the continuous process industries.

- Ultimate output of an industry depends upon operation of all its motors. Hence, the proposal of GRIDCO for 25% restriction in case of EHT/HT industries may hamper the industrial production in the State, which in turn, may cause loss of revenue to the State Exchange.
- Arbitrary fixation of Rs.4.00 per unit over and above the energy charges as per tariff is not acceptable. It has no basis to claim such additional high charges.
- From the letter issued by OPTCL to its field E&MR officials with copies to DISCOMs reveals that the proposed 25% restriction has already been implemented by GRIDCO/OPTCL by setting the relays in respective feeders. Hence, it contravenes the Commission's order and appears that GRIDCO, to regularize its actions, has only approached the Commission to put an approval stamp on its wrong actions. Modification of orders of the Commission unilaterally without obtaining the approval of the Commission is a complete violation of statute, hence the Commission may take a view u/s 142 of the Electricity Act, 2003 to impose penalty to restrain GRIDCO from such actions.
- Signature of CMD, GRIDCO and Principal Secretary, Energy, DoE, Govt. of Orissa is missing in the minutes of meeting held on 04.03.10 (annexed with the petition filed by GRIDCO), raising doubts about their actual presence.
- Setting of relays in different feeders is as good as hand tripping, which is against the orders at serial 23(9) of Case No.01 of 2010. Hence such operations should be stopped. There shall be no Relay Setting based on the restricted demand, but penalty may be imposed for drawl in excess of permitted load.
- OPTCL/GRIDCO should be directed not to restrict the industries directly from the Grid S/S without involving/intimating DISCOMs.
- There may not be any requirement of issue of orders on load regulation in the back drop of expecting around 400 MW through banking and 600 MW power from IPP (M/s Sterlite Energy Ltd.) by the State.
- Prior intimation of load restriction is required for industries. OERC may issue clear cut orders on load restriction and monitor it regularly so that unnecessary harassment of consumers can be stopped.

- There should not be any cross subsidy surcharge payable to DISCOMs by Industries under Open Access on drawl up to their respective contract demand.
- Demand charges should be prorated during period of load restriction.
- Unilateral restriction and setting up relays on the basis of current settings instead of MVA and limiting the drawl by industries by OPTCL is highly objectionable. Industries are not even the consumers of OPTCL. This practice should be stopped forthwith.
- 10 to 15 times revision of schedule by SLDC is putting the DISCOMs into trouble.
- Graded UFR although commercially prudent, is not operationally possible in the present DISCOM network.
- Additional charge of Rs.4/-, proposed by GRIDCO is not being substantiated with facts and figures, hence may not be accepted.
- GRIDCO has not submitted any justification, why increase of load regulation of EHT industries from 15% to 25% is required.
- The reason as to why the average consumption for previous months (October, November, December, 2009) should be considered, has not been stated by GRIDCO. The restriction should be on the basis of contract demand only.
- EHT and HT industries having dedicated feeders may be allowed to receive power to the extent of quantum of restriction, by Open Access. However, no Open Access charges should be levied by DISCOMs.
- 20% overdrawl on the restricted contract demand may be allowed during off peak hours without penalty. [vide para 23(4)]
- Industries opting out of Load Regulation, the payment of additional energy charges as per the order dt.14.01.10 shall be payable only if uninterrupted power supply is ensured by the petitioner, GRIDCO.

Heard the Petitioner and other Stakeholders at length.

### **Commission's Observation**

16. We have patiently heard the submissions made by GRIDCO, OPTCL and all the objectors/respondents present during the hearing. We have also carefully perused the written objections/counters and the submissions made. We have also taken note of the latest plan of action envisaged by the State

Govt./GRIDCO regarding the proposal by the State Government to bring power on banking basis from Punjab, Assam, etc. SLDC in its reply submitted on 03.4.2010 has stated that on receipt of 141 MW (150 MW at sending end less loss) net additional power through Power Banking arrangements by GRIDCO from 01.4.2010, the shortfall is supposed to be reduced to 160 MW (approx.) from 300 MW. But due to outage of ISGS (Farraka unit for Annual maintenance) from 01.4.2010 and increase in State's demand due to ongoing summer, the shortfall continued to remain at the same level i.e. to the tune of 300 MW which is likely to increase further in case of outage of any generating unit. In the meantime, GRIDCO in its letter No. 763(9) dated 5.4.2010 addressed to the Distribution companies has intimated that due to the prevailing power situation in the state power regulation up to 1 ½ hour during morning and 1 hour during evening for rural areas may be implemented in stead of 2 hours each during morning and evening period stipulated in the order dated 14.1.2010.

#### **Quantum of Restriction**

17. As per the OERC's order dated 14.1.2010, all HT industries are to reduce their demand by 25% of their contract demand whereas in case of EHT industries are required to restrict their demand by 15% of their contract demand. GRIDCO has proposed that the load restriction of 15% approved by the commission for EHT industries should be revised to 25% as in the case of HT industries. Further while resorting restriction of 25% both in case of HT & EHT industries, the average monthly energy consumption for the month of October, November and December 2009 shall be taken into account as against the contract demand as approved by the Commission.
18. For Bhubaneswar and district headquarters, power restriction had been stipulated for 2 hours during peak drawl period (morning 1 hour + evening 1 hour). That means the requirement of consumption for Bhubaneswar and district headquarters has been restricted by 8.5%. In case of the other urban areas, the restriction is for three hours during the peak drawl hours (2 hours morning + 1 hour evening). In their case the restriction in consumption is of the order of 12.5%. In case of rural areas the restriction is for 4 hours (2 hours in the morning + 2 hours in the evening), which works out to 16.66% in



consumption restriction. As per our order dated 14.01.2010, all HT and EHT industries are undergoing restriction on their contract demand of 25% and 15% respectively. Section 23 of the Electricity Act, 2003 mandates the Commission to secure the equitable distribution of electricity keeping in view the nature of consumption, the quantum of revenue and the need for ensuring development of the economy. The proposal of GRIDCO to enhance the restriction of contract demand from 15% to 25% in case of EHT industries is perhaps uncalled for in view of the recent development, in which GRIDCO is itself trying to draw power on banking basis from other States to reduce the duration of the power restriction. When GRIDCO has communicated to the Commission on its own to reduce the power restriction period in rural areas, there is no justification for enhancing restriction in case of EHT industries from 15% to 25% at this stage when the section 23 of Electricity Act, 2003 envisages equitable distribution of electricity. Further, higher restriction for industries besides being inequitable would cause heavy revenue loss as a result of which the distribution companies would not be able to pay to GRIDCO its dues and GRIDCO in turn to Generators. We, therefore, don't find any justification for enhancing the restriction in Contract Demand from 15% to 25% in case of EHT industries.

19. We, therefore, direct that the Demand Restriction on EHT Industries be kept at 15% and for HT Industries the demand restriction shall be at 25%. Here we also make it clear while imposing 15% restriction for EHT and 25% restriction for HT, the survival load level of individual industries have to be taken into account. The industries who draw power at 132 KV and above shall be treated as EHT industries whereas industries who draw power at 11 KV and above but below 132 KV shall be treated as HT industries.
20. Now, while clarifying the demand restriction, we would like to address the SLDC/GRIDCO's request on energy restriction. SLDC & GRIDCO argued that the State is reeling under the acute energy shortage. There is a shortfall of about 11 to 14 MU per day. Therefore HT and EHT Industries need to be restricted on its normal energy consumption. Only demand restriction in Industries shall not be sufficient without a bar on actual energy consumption, which will only translate as improvement of load factor of the Industry without

any actual reduction on energy consumption. GRIDCO proposes that average of October, November & December, 2009 (unrestricted period) energy drawl be taken as normal energy consumption of any particular industry and statutory restriction be imposed on this permitted figure. The above argument of GRIDCO & SLDC has a force in it. The industry representatives are also in general agreement to co-operate with State in this difficult period of power deficit. However, they argue that permitted drawl of any industry be calculated on the basis of a longer duration say for one year. Due to various restriction the actual drawl of energy during October – December, 2009 has been far below the normal drawl as per the Contract Demand under a power deficit situation. Therefore, Commission approves and directs that for the purpose of restricting 15% for EHT industries and 25% for HT industries, the average monthly drawl of energy during the period January – December, 2009 shall be taken as reference figure to workout the restriction of 15% and 25% for EHT and HT industries respectively. Any over drawl of energy than its restricted energy drawl (entitled energy) during the regulation period shall be paid extra over and above its energy charge approved in RST order of the relevant year.

21. GRIDCO proposes to levy a charge of Rs.4/- per KWH for the additional energy, if any, drawn over and above the permitted energy (i.e. entitled/restricted drawl). In the oral submission during hearing, GRIDCO submitted that the additional energy charge should be collected over and above RST. Industry representative submitted that the energy charge as per RST could be levied up to the permitted energy drawl and the additional energy over and above the permitted energy drawl could be at a small premium rate as fixed by the Commission, subject to maximum of actual cost of procurement of additional energy by GRIDCO from outside the State.

On careful consideration of submission from all stakeholders, we approve that the industry who remains under 15% / 25% RTC restriction, but in a particular month actually draws over and above its monthly entitled energy under power regulation may be levied an additional charge of 60 paise/KWH /100 paise/KWH for EHT and HT industries respectively for the additional energy over and above the RST applicable to these industries as per the prevailing Tariff order. The additional penal charge so collected at 60

paise/KWH / 100 paise/KWH shall be passed on to GRIDCO by DISCOM retaining 2% as service charge. It is, however, be kept in mind that the over drawal of energy on payment of additional charge should be only on valid reason and not to be taken as matter of routine. The entitled energy drawal in a month is to be calculated as the average monthly drawal from January – December 2009 as explained in para-20.

22. Regarding weekly power holiday as envisaged in para 23(20) of our order dated 14.1.2010, we clarify and direct that the weekly power holiday is not applicable to HT & EHT industries for whom 25% and 15% round the clock restriction are being imposed. This weekly power holiday is not applicable to continuous process industries like Ferro Alloys industries, cold storage etc. and those HT and EHT industries for whom 25% and 15% restriction of power consumption is being implemented as clarified in para-19, 20 & 21.

#### **Industries totally opting out of Restriction**

23. Regarding additional tariff of Rs.4 per unit as proposed by GRIDCO over and above the normal tariff for those HT & EHT industries willing to opt out of the round the clock restriction, we find that there may be difficulties in billing and a lot of confusion may arise. Earlier in our order dated 14.1.2010 we have stated that the industries who like to opt out of the restriction altogether, be billed at additional 15 paise/KWH for HT and 10 paise/KWH for EHT on their total drawal of energy and the industries who volunteer for only 10% restrictions be billed at additional 10 paise per KWH on energy charge on the total energy drawl by the industries. This additional amount so collected, will be passed on to GRIDCO by DISCOMs with deduction of 2% as service charges for DISCOMs. Since the cost of generation and cost of procurement of power is increasing day by day, it has not been possible to purchase power and to supply at an additional charge of 15 paise or 10 paise on total drawal as indicated in our order dated 14.1.2010. We direct that the HT and EHT industries who want to opt out of 25% and 15% round the clock restriction shall be billed at an additional 100 paise and 60 paise per KWH respectively on their total drawal of energy. Those industries who volunteer for only 10% restriction be billed at an additional 40 paise per KWH on the total energy drawl by the industries. This additional amount so collected, will be passed on

to GRIDCO by DISCOMs with deduction of 2% of the additional charges as service charges for DISCOMs, which shall be utilised by the DISCOMs for voltage improvement by installing 11 KV capacitor banks in the predominantly rural low voltage areas.

24. The HT and EHT industries exercising option in writing to opt out of round the clock restriction of 25% and 15% of their contract demand or the highest energy drawl during the month of January to December, 2009 which ever is higher shall have to enter into an agreement with GRIDCO regarding the additional cost indicated in para-23 and other associated arrangement to ensure supply of power as per the agreement and recovery of the additional cost through distribution companies. This arrangement would be obviously made in case of only HT and EHT industries having dedicated feeders. In case of HT industries where along with the industries other consumers also draw power, prior written consent with such other consumers is also needed before opting out of 25% restriction of round the clock (RTC). In other words GRIDCO while agreeing to procure power for such HT and EHT industries/consumers must ensure that there is no additional financial impact on the ARR of the GRIDCO as well as the distribution companies (an illustrative example of different scenarios is enclosed).

#### **Open Access during Power Regulation**

25. The industries having dedicated feeders and not willing to the arrangements and stipulations indicated in para-23 & 24 can avail such restricted power through Open Access (OA)/Power Exchange which GRIDCO/OPTCL/SLDC shall facilitate. Such industries can also avail their entire requirement of power through open access/power exchange, if it is feasible. However, the concerned distribution companies are to be financially compensated through payment of cross subsidy as indicated below :-

- (i) If the HT and EHT industries would like to draw power from DISCOM upto the permitted quantity as per the regulation stipulated in para-19 & 20 and draw the balance quantum of power (unrestricted Contract Demand) through OA, then the industry will be liable to pay only

transmission charge and wheeling charge to OPTCL/DISCOM and no cross-subsidy charges shall be payable.

- (ii) If the HT/EHT industries would like to draw its total requirement under OA, then it shall be liable to pay cross-subsidy charge to DISCOM upto its Contract Demand in addition to transmission and wheeling charges to OPTCL and DISCOM.
- (iii) All other conditions of RST order and Open Access Surcharge order shall remain valid.

### **Relay Settings**

26. Implementation of 15% /25% restriction by GRIDCO/OPTCL by settings the relays in dedicated feeders is a misinterpretation of Commission's order dt.14.01.2010. Once the restriction imposed on industries, its Contract demand for billing purpose is deemed to be revised by DISCOMs upto the extent of restriction. However, the industry is free to draw 20% above its Restricted Contract Demand during off-peak period without payment of overdrawl penalty. The off-peak hour for this purpose is defined as 12 midnight to 6 AM of the next day. If the concerned industry overdraws beyond its contract demand (85%/75% of Original Contract Demand) in hours other than off-peak hour it is liable to pay double the penalty demand charge as stipulated in our order dt.14.01.2010 vide para 23(8). We, even fail to understand, how OPTCL fixes the limit of relay settings. If the setting is done at 75% of the Contract Demand then how the industry will be able to draw at 120% at off-peak time and if the setting is done at 120% of 75% of contract demand, then what is the utility of such settings? We, therefore, order that any relay settings, if done by OPTCL in its grid S/S in any dedicated feeder be immediately removed. It is the responsibility of the industries, supplied through dedicated feeder to maintain Grid Discipline. Persistent failure of maintaining Grid Discipline by any EHT industries be reported to the Commission for appropriate action.
27. Considering the practical difficulty in operation of UFR in the distribution feeders at Graded frequency and noting that the grid frequency (NEW Grid) remains below 49.4 Hz for substantial period during the day, we direct that all

UFR settings be revised to 49.2 Hz. In no case over drawl at 49.2 Hz or below should be allowed.

28. Depending on the improvement in the availability of power, the quantum and/or the duration of restriction can be reduced without the approval of the Commission.
29. Other restrictions, stipulations and conditions contained in the order dt.14.01.2010 in Case No.1 of 2010 of the Commission shall be followed with the clarifications and modifications as indicated above.
30. Non-compliance of this order shall be treated as willful violation of the Commission's directives inviting action under Section 142 of the Electricity Act, 2003.

This amended protocol will come into force from 19.04.2010.

Sd/-  
**(B.K. Misra)**  
**Member**

Sd/-  
**(K.C. Badu)**  
**Member**

## Illustrative Examples

### Assumptions:

Average of actual monthly Energy drawal during January-December, 2009 (A)	(KWh)
Monthly Energy entitlement of the industry under Power Regulation (B)	A x 85% for EHT or A x 75% for HT in KWh
The Contract Demand of the industry (C)	(KVA)
Restricted Contract Demand during Power Regulation (D)	C x 85% for EHT or C x 75% for HT in KVA
Demand charges (P)	Rs.200/KVA/Month
Energy charges (Q)	(Rs./KWh at varying load factor)
Additional Energy charges (R)	Rs.0.60 per KWh in EHT or Rs.1.00 per KWh at HT

### Case –I

#### **Industry under Power Regulation (15% Regulation for EHT & 25% Regulation for HT)**

Let the monthly Maximum Demand and Energy drawal of the industry during the month be ‘X’ KVA and ‘Y’ KWh respectively.

Now, there can be four different situations in actual operations

**(i) When Demand (X) and Energy drawal (Y) are within D and B respectively.**

The Demand charges and Energy charges shall be calculated basing on restricted Contract Demand as per current Retail Supply Tariff Order – No Additional charge

**(ii) When Energy drawal Y exceeds B and Demand drawal (X) is within D.**

Demand charges shall be levied as per RST Order.

Energy drawal upto the entitled energy shall be as per current RST Order = Rs(B x Q)

Additional Energy drawal = (Y – B) KWh

Energy charges for additional energy at Additional charge =Rs. (Y – B) x (Q + R)

**(iii) When Maximum Demand drawal (X) exceeds D and Energy drawal (Y) is within B.**

Demand charges = Normal Demand charges + Penal Demand charges as per Order dtd.14.01.2010 =Rs.(X x P) + 2 (X – D)P

Energy charges as per current RST Order = Rs.(Y x Q)

- (iv) When both Demand drawal (X) and Energy drawal (Y) exceeds D and B respectively.

Demand charges = Normal Demand charges + Penal Demand charge as per Order  
dtd.14.01.2010 = Rs.(X x P) + 2 (X – D)P

Energy drawal upto the entitled energy shall be as per current RST Order = Rs(B x Q)

Additional Energy drawal = (Y – B) KWh

Energy charges for additional energy drawal at Additional charge = Rs. (Y–B) x  
(Q+R)

**Note:**

- (i) There shall be no penal demand charges if any consumer exceeds restricted contract demand upto 120% in off-peak hours as per RST Order.
- (ii) While calculating demand charges maximum demand or 80% of the restricted Contract demand whichever is higher shall be taken into consideration.

**Case – II**

**Industries who opt to remain outside the load restriction**

Demand Charges =Rs.(X x P)

Energy Charges =Rs. Y(Q + R) = Additional Energy charge for all the units consumed

**Note:**

- (i) There shall be no penal demand charges if any consumer exceeds contract demand upto 120% in off-peak hours as per RST Order.
- (ii) While calculating demand charges maximum demand or 80% of the contract demand whichever is higher shall be taken into consideration as per RST Order.

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