

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 221/MP/2021

Coram:

**Shri I. S. Jha, Member
Shri Arun Goyal, Member
Shri Pravas Kumar Singh, Member**

Date of Order: 12th January, 2023

In the matter of:

Petition under Section 79 of the Electricity Act, 2003 read with Part 7 of Central Electricity Regulatory Commission (Indian Electricity Grid Code) 2010 seeking clarification on the methodology of sharing of part load compensation as per Regulation 6.3B of the Central Electricity Regulatory Commission (Indian Electricity Grid Code)(Fourth Amendment) Regulations, 2016 read with approved mechanism of compensation vide Order dated 5th May 2017 thereof and its sharing amongst beneficiaries for interstate generating stations such as Maithon Power Limited for capacity tied up on Mega Watt basis.

And

In the matter of:

Maithon Power Limited
Jeevan Bharti, 10th floor, Tower-1,
124, Connaught Circus, New Delhi – 110 001

...Petitioner

Vs

1. Tata Power Delhi Distribution Limited,
33 kV Sub-station, Kingsway Camp, Delhi-110 009.
2. Damodar Valley Corporation,
DVC Towers, VIP Road, Kolkata-700 054.
3. West Bengal State Electricity Distribution Company Limited,
Bidyut Bhawan (8th Floor), Block-DJ, Sector-II, Salt Lake,
Kolkata-700 091.
4. Kerala State Electricity Board Limited,
Vidyuthi Bhavan, Pattom, Thiruvananthapuram, Kerala – 695 004.
5. Tata Power Trading Company Limited,
Corporate Centre, 'A' Block, 34, Sant Tukaram Road,
Carnac Bunder, Mumbai, Maharashtra – 400 006.



6. Eastern Region Power Committee,
6(a) Eastern Region Load Despatch Center,
14, Golf Club Road, Tollygunje, Kolkata-700 033.

7. Western Regional Power Committee,
F-3, M.I.D.C. Area, Marol, Opp. SEEPZ, Central Road,
Andheri East, Mumbai, Maharashtra 400 093.

.... Respondents

Parties Present:

Shri Venkatesh, Advocate, MPL
Shri Ashutosh Kumar Srivastava, Advocate, MPL
Shri Abhishek Nangia, Advocate, MPL
Ms. Isnain Muzamil, Advocate, MPL
Shri Pankaj Prakash, MPL
Shri Shyam Kejriwal, ERPC
Shri Shishir Kumar Pradhan, ERPC
Shri Deepak Sharma, WRPC
Shri Debajyoti Majumder, ERLDC
Shri Ranjit Pal, ERLDC

ORDER

The Petitioner, Maithon Power Limited (MPL) has filed this Petition under Section 79 of the Electricity Act, 2003 ('Act') read with Part 7 of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 ('IEGC'), seeking clarification on the compensation methodology notified under Regulation 6.3B of IEGC and the mechanism for compensation dated 5.5.2017. Accordingly, the reliefs sought by the Petitioner are as under:

- (a) *Provide clarification with regard to the methodology of sharing compensation for the ISGS having capacity contracted in Mega-Watt and not under any predetermined percentage allocation as per sub clause (xiv) of clause 4.1 of part load compensation mechanism.*
- (b) *Direct Respondent No. 6, i.e., ERPC to provide allocation of part load compensation amongst beneficiaries and SCED Mechanism in the manner as being provided for CGS in the Compensation Statement prospectively from the date of interim or final Order in the instant petition in that regard and for the past period i.e., the period since inception of SCED scheme for the Petitioner till such date of interim or final Order; and*
- (c) *Pass such further Order (s) as this Hon'ble Commission may deem fit in the facts and circumstances of the case.*



Background

2. The Petitioner, is a joint venture between Tata Power Company Limited (TPCL) and Damodar Valley Corporation (DVC), holding 74% and 26% equity, respectively. The Petitioner owns and operates the Maithon Right Bank Thermal Power Project having capacity of 1050 MW (2 x 525 MW) (in short, 'the generating station'), located in the Dhanbad District of the State of Jharkhand. The date of commercial operation (COD) of Unit-I and Unit-II are 1.9.2011 and 24.7.2012 respectively.

3. The Respondent DVC and the Respondent KSEBL have executed long term PPAs with the Petitioner supply of 150 MW and 300 MW, respectively. The Respondent TPDDL and the Respondent WBSEDCL have executed long term Power Supply Agreement with the Petitioner, for supply of 300 MW each through the Respondent, TPTCL.

4. On 29.4.2016, the Commission, vide 4th Amendment to the IEGC, introduced Regulation 6.3B, viz., 'Technical Minimum Schedule for operation of CGS / ISGS', whose tariff is either determined or adopted by Commission, wherein, the RPCs were directed to work out a Compensation Mechanism for Station Heat Rate and Auxiliary Energy Consumption, for low unit loading. Subsequently, on the recommendation of the RPCs, the Commission vide its order dated 5.5.2017, issued the Compensation Mechanism for part load operation of the generating station. Thereafter, the Commission vide Suo motu order dated 31.1.2019 in Petition No. 2/SM/2019, introduced Pilot on Security Constrained Economic Dispatch (SCED) mechanism for ISGS that are regional entities and whose tariff is determined or adopted by this Commission for their full capacity. It further stipulated compensation for part load



operation as certified by RPEC, as per provision of IEGC and instructed POSOCO to frame the detailed procedure within a month to operationalize the scheme and submit the same for information. On 29.3.2019, POSOCO notified the final procedure for pilot on SCED for ISGC Pan India in compliance to the Commission's order dated 31.1.2019. On 12.6.2019, the Petitioner was included in the RRAS and SCED mechanisms with effect from 12.6.2019, in light of discussions held between ERPC, NLDC, ERLDC and MPL on 8.5.2019. The SCED mechanism provided for compensation to generating stations, for part load operations (for decrement in the schedule) as certified by RPC, as per provisions of IEGC read with para 6(i) and (ii) of Appendix-II of order dated 5.5.2017.

5. On 10.10.2019, ERPC issued the compensation statement for the months of May 2019 to July 2019 for Eastern Region including the Petitioner as per Regulation 6.3B of the IEGC read with the compensation mechanism and SCED mechanism. Thereafter, the Petitioner pointed out certain errors in the compensation statement issued. Subsequently, on 16.10.2019, ERPC issued revised compensation statement for the Petitioner for the month of June 2019 and July 2019. In the said statement, ERPC had provided overall compensation due to the Petitioner for the month of June 2019 to July 2019. While the allocation out of overall compensation payable from SCED pool was provided, however, the allocation of compensation among the beneficiaries like other ISGS/ CGS was not provided in the statement. Thus, only the allocated compensation pertaining to SCED scheme was provided, thereby making it difficult for the Petitioner to recover the compensation due to lower requisition from the beneficiaries, who were responsible for unit loading lower than 85 % as envisaged in IEGC.



6. For resolution on the above issue, the Petitioner raised concern of not getting full compensation, in the 41st Commercial Sub Committee meeting (CCM) of ERPC held on 27.11.2019, wherein it was concluded that share allocation of Petitioner's project is based on fixed LTA quantum (in MW) to beneficiaries, unlike other CGs which are on percentage basis, based on the allocation done by MOP, GOI. Hence, as per prevailing regulation, the compensation cannot be calculated on percentage basis for the stations, whose share allocation is in MW. Since, no consensus was arrived at the TCC meeting dated 13.12.2019, all the forums, including ERPC, advised the Petitioner to approach the Commission for seeking necessary clarification regarding the methodology of compensation for IPP stations.

Submissions of the Petitioner

7. In the above background, the Petitioner has filed this petition and has made the following submissions:

Re: Applicability of the Compensation Mechanism on the Petitioner

(a) The Petitioner, being an ISGS, has executed PPAs with all its beneficiaries based on its contracted capacity which is on MW basis in contrast to CGS where the contracted capacity is expressed in percentage allocation. The same is due to the fact that the allocation of power from CGs to various States/ UTs are done by MOP, GOI.

(b) Even in the allocation letter issued by MOP, GOI the capacity allocated to the constituents is depicted in two columns, one showing allocation in MW out of the total installed capacity and the second showing allocation converted in (%) terms. The letter also depicts capacity which is unallocated, which in our case will be capacity not contracted. However, this distinction does not have a bearing on the applicability of compensation mechanism envisaged under the IEGC and the Commission's order.

(c) Regulation 6.3B of IEGC relating to technical minimum schedule for operation of CGS/ISGS, whose tariff is determined or adopted with this Commission, also provides for compensation to a generating station for degradation of heat rate and auxiliary energy consumption for part load operation and compensation for secondary fuel oil consumption over and above the norm of 0.5 ml/ kWh for additional startups in excess



of seven and its sharing by the beneficiaries. The Petitioner being ISGS and tariff being determined by this Commission suitably falls under the above regulations.

(d) From the Commission's order dated 5.5.2017 approving the compensation mechanism it emerges that the compensation is to be computed on cumulative basis and need to be shared by the beneficiaries who have requisitioned energy below 85% of their respective entitlement. Further, the sharing of compensation among such beneficiaries is stipulated in the ratio of their un-requisitioned energy below 85% of their entitlement.

(e) From a bare perusal of the definition of term 'entitlement' it emerges that the share of the beneficiary should be either in terms of MW or MWh in the installed capacity/output capability of ISGS. If the thermal plant has been tied up on MW basis, in installed capacity, then as per the definition read with the compensation mechanism there should be no difficulty in working out the allocation of due compensation, of the beneficiaries, since the share of the beneficiaries for its project is in terms of MW. Further, sharing of compensation by beneficiaries is not based on their individual share their percentage in the station, but as per under requisition below 85% of entitlement.

(f) Providing allocation for compensation amongst beneficiaries for CGS, in accordance with this definition, 'entitlement' of beneficiaries in MW is first required to be computed by multiplying their percentage allocation with the installed capacity of CGS, whereas, in the case of the Petitioner, it is directly available in MW terms. Share allocation in (%) is not at all required to be applied in the case of the Petitioner, for entitlement and hence compensation sharing computation.

(g) On a completely erroneous premise, the members of the Eastern pool, during the CCM meeting and in subsequent TCC and ERPC meetings, had expressed contrary view that compensation cannot be calculated for the Petitioner, since its capacity is contracted on MW basis.

Re: Requirement of clarification from this Commission

(h) Though there exists no jurisprudential distinction between the MW allocation and % allocation, a clarification from this Commission is required, as the Petitioner has been deprived of the legitimate compensation, which, it otherwise, is entitled in terms of IEGC and the compensation mechanism. There exists no difference in opinion on total compensation as recognized by ERPC, in the compensation statements, on account of part load operation for CGS and the Petitioner. SCED part of total compensation is also being allocated for CGS/Petitioner and the clarification being sought is only limited to the allocation of total compensation amongst beneficiaries, alike CGS. In the event if no allocation is done, then the Petitioner will fail to reconcile/settle such part load compensation with its beneficiaries.



(i) In the compensation statement issued by ERPC for CGS/ISGS of Eastern Region, the allocation of compensation due from beneficiaries has not been provided for the Petitioners project. The same ought to have been provided in the manner as it is being provided for the CGSs. The Petitioner should not be deprived from the part load compensation due to under requisition of the beneficiaries as per table below:

Period	Total Compensation (in Rs.)	Compensation on account of SCED (in Rs.)	Compensation pertaining to beneficiaries (in Rs.)
For FY 20	30458645	12348390	18110255
For FY 21	11818789	0	11818789
April-May, 2021	0	0	0
Total			29929044

The Petitioner has filed the compensation statements issued by ERPC for the months of February 2020 to March 2020 and for the period from March 2021 to May 2021, recognizing the total compensation and SECD compensation for the Petitioner in Annexure-P/10 to the petition.

Re: Percentage wise allocation of beneficiaries

(j) Alternatively, for the purpose of sharing compensation among beneficiaries, the percentage (%) wise allocation of the beneficiaries, in case of the Petitioner, can be derived by dividing the contacted capacity of the respective beneficiary with the installed capacity of the generating station. The Petitioner's installed capacity is fully tied-up/contracted on Gross Contracted Generation capacity basis (300+300+300+150=1050 MW). The same would not make any variation /distinction in the sharing ratio/allocation of compensation to each beneficiary.

(k) Similar issue was dealt with in Petition No. 28/MP/2016 filed by the Petitioner seeking clarification on computation of Plant Availability for the generating station, whose entire capacity is not contracted and whose capacity is contracted on MW basis, and the Commission vide its order dated 31.8.2017, had directed the ERLDC to schedule power from the generating station and certify the Plant Availability in the manner as being specified by WRLDC for the IPPs (as in order dated 18.5.2017 in Petition No.192/MP/ 2016). Therefore, the issue with regard to the Petitioners project capacity being tied up in MW basis, unlike the CGS is no longer res-integra, as this Commission had already expressed its view on the same, vide the aforesaid orders.

Re: Power to relax and Remove Difficulties under Part 7 of the IEGC

(l) The Petitioner has made out a clear case for this Commission to exercise its powers under Part 7 of the IEGC. The Petitioner has been subjected to severe hardship on account of actions of the Respondent ERPC. Further, due to rejection of ERPC to act upon the issue raised by the Petitioner is causing hardship to the Petitioner, as it is



being deprived of the legitimate dues payable to the Petitioner, in terms of the compensation mechanism approved by this Commission vide order dated 5.5.2017.

Hearing dated 14.12.2021

8. The matter was heard through virtual hearing on 14.12.2021, and the Commission, after hearing the learned counsel for the Petitioner, admitted the petition and directed completion of pleadings in the matter. The Commission also directed the Petitioner to implead WRPC, as party to the petition, and requested WRPC to indicate, in its reply, as to whether the instance, as involved in the present case, has been dealt with by it, and if so, the treatment adopted in such case.

9. In compliance to the above direction, the Petitioner has impleaded WRPC, as party Respondent No.8 to the petition and has accordingly filed the amended memo of parties, on 20.12.2021. The Respondents ERPC and WRPC have filed their replies vide affidavit dated 4.1.2022 and 3.1.2022 respectively and the Petitioner has filled its rejoinder to the reply of WRPC vide affidavit dated 8.4.2022.

Reply of the Respondents

10. As stated, the Respondents ERPC and WRPC have filed their replies and the gist of the same is as under:

Reply of Respondent ERPC

a) ERPC secretariat have been issuing compensation statement for CGS / ISGS station of Eastern Region for heat rate degradation due to part-load operation by beneficiaries below 85% of their entitlement since 17.5.2017. The allocation of beneficiaries of CGS/ISGS are in percentage basis. The Petitioner being an IPP station, participated in SECD and RRAS mechanism from 12.6.2019 vide special meeting of Petitioner, ERPC, ERLDC and NLDC dated 8.5.2019, wherein, it was decided that the Petitioner will get compensation for heat rate degradation on account of SCED down schedule.

b) In the context of Clause 2 of the Mechanism for Compensation for Degradation of Heat Rate, Aux Consumption and Secondary Fuel Oil Consumption, due to part load



operation and multiple start / stop of units, definition of ISGS as per Clause 2(pp) of the IEGC 2010 and the definition of 'Share' as per Clause 2(qqq) of the IEGC 2010, the Petitioner has signed PSA with the beneficiaries in MW basis and not on percentage share basis. Hence, due to lack of clarity, ERPC Secretariat was not in a position to issue Compensation statement of the generating station of the Petitioner (an IPP) for part-load operation on account of un-requisitioned power by beneficiaries, below 85% of their entitlement.

c) Since no consensus was arrived in the meetings before the CCM, TCC and ERPC, the Petitioner was advised to get clarification from this Commission, for issuance of compensation statement by ERPC. The Commission may therefore, advise and issue directions as deemed fit.

Reply of Respondent WRPC

(A) Compensation for degradation of Heat Rate, Aux Compensation and Secondary Fuel Consumption, due to part load operation and Multiple Start / Stop of units with PPAs partly tied up with beneficiaries is being dealt with in WRPC for two IPPs i.e. MB Power Madhya Pradesh Limited (MBPMPL) and Jhabua Power. MBPMPL, having installed capacity of 1200 MW (2x 600 MW), has signed three PPAs i.e. PPA with (a) MPPMCL for 420 MW (35% of 1200 MW), one PPA with UPPCL for 361 MW and (b) PPA with Haryana for power sold by PTC under short term (which is not considered). The PPA with MPPMCL was amended for incorporating compensation clause in terms of Regulation 6.3B (4) of IEGC. However, the PPA with UPPCL does not have clause for compensation due to heat rate degradation.

(B) Jhabua Power, having installed capacity of 600 MW (1*600), has signed four PPAs i.e. two PPAs with MPPMCL for 210 MW (35 % of 600 MW) and two PPAs with KSEB for 204.25 MW. The balance is sold through short term, power exchange etc., The PPAs with MPPMCL do not have any provision for compensation for part load operation, However, the PPAs with KSEB contain provision of compensation for part load operation.

(C) The methodology adopted for calculation of compensation in respect of the IPPs is as under:

- (a) Auxiliary Unit Loading (AUL) is calculated in two different ways - AUL_{LIC} and AUL_{PPA} .
 - (i) AUL_{LIC} - Auxiliary Unit loading at installed capacity. This is to see if the plant was operated below the normative capacity. In this calculation, total scheduled energy of the station is considered along with the total installed capacity of the station. The formula is given as $AUL_{LIC} = (\text{Max of SG \& AG}) / [I.C \times \text{Hours} \times (1 - \text{Aux.Consumption})]$.
 - (ii) AUL_{PPA} - Auxiliary Unit loading at PPA capacity. This is to see if the long-term beneficiaries are responsible for operating the station below normative



capacity by giving less schedule to the station. In this calculation, the scheduled energy for the beneficiaries with PPA only is considered along with the PPA capacity of the station. The formula used is $AUL_{PPA} = (SG_{PPA}) / [I.C_{PPA} \times \text{Hours} \times (1 - \text{Aux. Consumption})]$.

- (iii) Some of the PPAs are signed with gross capacity and some with Ex-bus capacity, therefore for calculation purposes, PPA with ex-bus capacity is converted to Gross capacity, as per formula-Gross installed capacity: $\text{Ex-bus} \times (1 + \text{APC})$,

(b) Indicative example for the above two AULs with 100 MW of installed capacity is as under:

(i) 100 MW installed capacity

- (ii) Auxiliary Power Consumption-5 %
- (iii) Ex-Bus capacity-95 MW
- (iv) Long term beneficiary 1-30% of Gross Installed capacity -No provision of heat rate degradation included in PPA.
- (v) Long term beneficiary 2-20% of Gross Installed capacity- Provision of heat rate degradation included in PPA.
- (vi) Long term beneficiary 3-10% of Gross Installed capacity- Provision of heat rate degradation included in PPA.

(ii) Comparison of AUL for a period of 1 month (SG & AG considered in MW for simplicity)

Case 1- $AUL_{IC} > AUL_{PPA}$

S. No.	AUL	IC / IC _{PPA} (MW)	AEC (%)	Scheduled Generation (MW)	Actual Generation (MW)	AUL (%)
1	AUL _{IC}	100	5	85	85	89.47
2	AUL _{PPA}	60	5	45	-	78.95

- At serial no.1 above, the generator was able to sell almost his entire remaining capacity under short term & Power exchange. Therefore, the plant is operating above normative capacity, though the long-term beneficiaries have scheduled less than 85% of the PPA. Since the station is operating above normative capacity, hence no compensation is eligible.

Case 2: $AUL_{IC} < AUL_{PPA}$

S. No.	AUL	IC / IC _{PPA} (MW)	AEC (%)	Scheduled Generation (MW)	Actual Generation (MW)	AUL (%)
1	AUL _{IC}	100	5	65	65	68.42
2	AUL _{PPA}	60	5	54	-	94.74

- In Case-2, though the AUL of the station is around 68%, the AUL_{PPA} is greater as almost all the long term PPA beneficiaries have scheduled and therefore are not responsible for operating the station below the normative capacity. The station is running below normative capacity due to the generator not able to sell his remaining capacity through short term or power exchange and is solely responsible for running the station below the normative capacity. Therefore, the station is not eligible for compensation.



Case 3: $AUL_{IC} < AUL_{PPA} < 85\%$

S. No.	AUL	IC / IC _{PPA} (MW)	AEC (%)	Scheduled Generation (MW)	Actual Generation (MW)	AUL (%)
1	AUL_{IC}	100	5	65	65	68.42
2	AUL_{PPA}	60	5	40	-	70.18

- In Case-3, the AUL of the station is around 68% whereas, the AUL_{PPA} is almost same since the long term PPA beneficiaries have scheduled less power and the station also has not been able to sell power in short term and power exchange. Therefore, the Generator himself and long-term beneficiaries are responsible for running the station below normative capacity. So, the AUL which is greater of the two is considered for the calculation of degradation in the SHR and APC, since the station is eligible for compensation.
- The two different AULs are calculated to know whether the station is running below normative capacity due to low scheduling by its long-term beneficiaries as detailed in the example above.

(c) AUL_{DC} is also calculated based on the long-term contract entitlement and respective long-term schedule. AUL_{DC} is calculated for computing the ECR_{DC} which is a check to know that degradation is due to station under declaring the capacity. This is because, the effect of less declaration (with respect too normative ex-bus installed capacity), if any, on the SHR and AEC should be to the account of CGS/ ISGS, as per DoP.

(d) DC on bar has been taken as the sum of the DC entitlements of the long term PPA beneficiaries only.

(e) On Bar Installed Capacity = Installed Capacity x Total Hours–Outage Hours in MWhr. Total Installed Capacity of the designated generating station (in MWhr) minus Installed Capacity (MW) of the Unit(s) of the said station under outage (planned or forced outage) and under reserve shut down during the calculation period X outage time.

(f) ECR (Energy Charge Rate) is calculated to find the ECR to be used for compensation. AUL is the loading of station which qualifies for compensation as given under (2)(b).

- (i) ECR (A) for the calculation period shall be calculated using actual values of SHR and Aux Consumption furnished by CGS/ISGS at the end of the calculation period.

$$ECR (A) \propto AUL \times \frac{(SHR)}{(AEC)_{Actual}}$$

- (ii) ECR(N) shall be calculated using normative values of SHR and Aux Consumption.

$$ECR (N) \propto AUL \times \frac{(SHR)}{(AEC)_{Normative}}$$

- (iii) “ECR (DC)” means Energy Charge Rate in ₹/kWh based on degraded SHR and AEC considering average Declared Capacity (DC) as average unit loading during the calculation period.

$$ECR (DC) \propto AUL_{DC} \times \frac{(SHR)}{(AEC)_{Degraded}}$$

- (iv) “ECR (SE)” means Energy Charge Rate in rupees/kWh based on degraded SHR and AEC considering average unit loading of generating station during the calculation period.

$$ECR (SE) \propto AUL_{IC}/IC_{PPA} \times \frac{(SHR)}{(AEC)_{Degraded}}$$



(v) The above ECRs are calculated as per procedure given in the Commission's order dated 5.5.2017.

(g) The $ECR_{SG/SE}$ is compared with ECR_{DC} to ascertain whether the station compensation will be payable or not. Compensation is payable only when $ECR_{sg/se}$ is greater than ECR_{DC} as per the procedure given in order dated 5.5.2017.

For Case 3 as detailed above, suppose the values of ECR as given below:

ECR_N	ECR_A	$ECR_{SG/SE}$	ECR_{DC}	$ECR_{Comp-AUL}$ ($ECR_{SG/SE} - ECR_{DC}$)	$ECR_{Comp-ACT}$ ($ECR_A - ECR_N$)	ECR to be used
2.421	2.531	2.534	2.4210	0.113	0.110	0.110

(h) Since compensation for short term transactions is to be borne by the generator, the compensation for long term beneficiaries schedule energy is calculated and distributed among the long-term beneficiaries. The compensation payable is only for those beneficiaries who are covered under Clause 6.3B (4) of the IEGC, therefore the compensation for other than those covered under Clause 6.3 B(4) is for indicative purposes only and not payable by those long-term beneficiaries.

Compensation calculated based on the schedule of long-term beneficiaries only as given in the indicative Case 3 above, is as follows: $0.110 * 40$ MW (Schedule of long-term beneficiaries only) = 44 lakh.

(i) Indicative example for distribution of compensation based on Case-3 as detailed above is given below:

Station name	Total	Long Term Beneficiary 1	Long Term Beneficiary 2	Long Term Beneficiary 3	SCED	Short term
Scheduled Generation	65	10	14	6	10	25
85% of Entitlement (MW)	85	25.5	17	8.5		34
Compensation (MW) (Entitlement-Schedule) only LT beneficiaries	31	15.5	3	205	10	-
Compensation (in Rs lakh) as calculated above	44	22*	4.26	3.55	14.19	-

*As LT beneficiary 1 has no provision for heat rate degradation in the long term PPA, therefore only LT beneficiary 2 & 3 are liable to pay compensation to the station and compensation shown against LT beneficiary 1 is only for indicative purpose and borne by the generator since it is not covered under Clause 6.3B(4)

(D) The above method is being used for the computation of compensation for the two IPPs. The accounts have been issued for MBPMPL till the month of March 2021 and for Jhabua Power till December, 2020.

(E) The above methodology is being adopted by WRPC for IPPs by following the spirit of Clause 6.3(4) of the IEGC and the DoP, wherever, there is no separate explanation for dealing with such cases, since the generators are eligible to get compensation due



to operations of station below normative capacity, as per regulations.

Rejoinder of the Petitioner to reply of Respondent WRPC

11. The Petitioner vide its rejoinder affidavit dated 8.4.2022 has submitted the following:

(a)The submissions of WRPC may be taken into consideration and ERPC may be directed to follow a similar methodology for computing the allocation of compensation payable by each beneficiary in proportion to their un-requisitioned energy. Both the generating stations referred by WRPC have executed PPAs under Section 63 of the Act.

(b)MBPMPL has amended its PPA to adopt the compensation mechanism as specified in Regulation 6.3B of the IEGC, while there is no such amendment in case of JPL. The requirement for amendment emanates from Regulation 6.3 B(4) of IEGC and is only for generating stations covered under section 63 of the Act. Whereas, the compensation for degradation of Heat Rate as provided under Regulation 6.3B(3) of IEGC is directly applicable to generating stations falling under Section 62 of the Act, without any need for amendment of the existing PPAs. Since the Petitioners generating station is operating under section 62 and its tariff is being determined by this Commission, the compensation mechanism is fully applicable to it, without there being any need for the Petitioner to amend the PPAs.

(c)The procedure adopted by WRPC is similar to what is being adopted by ERPC for computing total compensation. The Petitioner has no grievance with either the methodology or the computation of total compensation done by ERPC. The only prejudice that has been caused to the Petitioner is that out of the total compensation, the part from SCED pool has been given to it, but the part recoverable from beneficiaries has not been allocated to them in the computation statement.

(d)WRPC has given the methodology of allocation of total compensation to SCED and different beneficiaries. In fact, WRPC has allocated the compensation based on proportion of un-requisitioned energy, without any reference to share allocation or % share allocation, as has been stipulated in para 4.1(b) of the Commission's order dated 5.5.2017.

(e)The methodology adopted by WRPC is the same as that prayed by the Petitioner in the present petition that un-requisitioned energy (in MW or MWh) by different beneficiaries can be used to allocate the part payable by beneficiaries out of the total compensation computed by ERPC.

(f) The only situation when %age share is required for allocation is when number of start-ups is more than 7 (as per Appendix-II to order dated 5.5.2017). The percentage shares can be computed from the contacted capacities as the ratio of Gross contacted capacity to the installed capacity. In the present case, till now, the occasion for Secondary Fuel oil compensation has not arisen. In case of any Secondary Fuel oil compensation in future, the Percentage share may be taken based on percentage of Gross contracted capacity to the installed capacity for each beneficiary.



Subsequent developments

(g) The Commission vide its order dated 8.1.2022 in Petition No.408/GT/2020 had trued up of tariff for 2014-19 and determined the tariff of the generating station for 2019-24). In the said order, the Commission had revised the normative Station Heat Rate (SHR) of the generating station of the Petitioner for 2019-24 to 2326 kcal/kwh from 2375 kcal/kWh.

(h) ERPC had published the compensation mechanism for 2019-20 and 2020-21 for the Petitioners plant vide its compensation statements dated 27.4.2020 and 2.7.2021 respectively, which was based on the earlier prevalent SHR of 2375 kcal/kWh.

(i) Since the SHR for 2019-20 and 2020-21 has been revised, the Petitioner has issued letter dated 15.3.2022 requesting ERPC to revise the compensation statement for the said years.

Interlocutory Application No.53/2022

12. During the pendency of the petition, the Petitioner vide affidavit dated 11.7.2022 filed Interlocutory Application (IA No.53/2022) seeking direction upon ERPC to issue revised compensation statements for the years 2019-20 and 2020-21 in terms of the Heat Rate of 2326.3 kcal/kWh as approved by the Commission vide order dated 8.1.2022 in Petition No.408/GT/2020 for the generating station of the Petitioner and also to allocate the same to beneficiaries as per proposed or any other methodology. In addition to the submissions in para 11 above, the Petitioner, in the IA has submitted the following:

(a) There is no bar under the current regulatory regime, which bars revision of compensation statements, except under Clause 9.12, where the retrospective changes in SCED schedules (subject to Clause 9.8 and 9.9) have been barred.

(b) In the present case, the Petitioner is not seeking any revision in either the SCED schedule or the schedule of beneficiaries, but only revision in the compensation amount, with same schedule, and hence, this restriction is not applicable. Except the above, there is no bar on retrospective adjustments of compensation statements particularly when the revision is being sought on account of retrospective revision of Heat Rate by this Commission itself.

(c) This Commission has requisite jurisdiction to grant relief sought in the present application. It is settled principle of law that the something which is not barred by law is allowed. Reliance placed on the judgments of the Hon'ble Supreme Court in Krishna Kishore Firm v. Govt. of AP (1991) 1 SCC 184 and in R.P Gupta v. Prakash Chandra Mishra & Ors (2011) 2 SCC 705.



(d) In the present case, since the Heat Rate has been revised on 8.1.2022, the compensation for the 2019-20 and 2020-21 has to be brought in line with the Heat Rate determined by the Commission.

(e) ERPC may be directed to consider the approved Heat Rate of 2326.03 kCal/kWh of the Petitioner's plant for the purpose of compensation on account of part load operation and to issue the revised compensation statements for the years 2019-20 and 2020-21 along with the allocation of compensation payable by each beneficiary in proportion to their un-requisitioned energy and to SCED pool as submitted. In case of any Secondary Fuel Oil Compensation in future, the percentage share may be taken based on %age of Gross contracted capacity to installed capacity for each beneficiary.

(f) In the present case, the retrospective revision of compensation statement must be carried out by ERPC in terms of the order dated 8.1.2022 issued by this Commission.

(g) The compensation for 2019-20 and 2020-21 based on the Heat Rate of 2326.03 kCal/kWh, as approved *vide* order dated 8.1.2022, works out to Rs 36.55 crore and Rs. 31.91 crore in place of the earlier compensation published by ERPC for Rs. 3.05 crore and Rs. 1.18 crore respectively, based on the earlier prevalent normative SHR of 2375 kCal/kWh. The summary of revised/earlier published compensation for consideration of this Commission is tabulated below:

Period	Total Compensation as computed @ SHR of 2326.03 kCal/kWh (Rs.in cr)	Total Compensation as computed @ SHR of 2375 kCal/kWh and recognized under 'Statement of Compensation' (Rs.in cr)	Compensation received by the Petitioner (Rs.in cr)	Balance amount due (Rs.in cr)
	a	b	c	d = a-c
FY 20	36.55	3.05	1.23	35.32
FY 21	31.91	1.18	0.00	31.91
FY 22	0.00	0.00	0.00	0.00
Total	68.46	4.23	1.23	67.23

13. Accordingly, the Petitioner has prayed that ERPC may be directed to issue revised compensation statements for the years 2019-20 and 2020-21, in terms of the approved Heat Rate of 2326.03 kCal/kWh of the Petitioner's plant, and also to allocate the same to beneficiaries as per the proposed or any other methodology.

Hearing dated 29.7.2022

14. During the hearing, the learned counsel for the Petitioner made detailed oral submissions as raised in the petition/application. He also submitted that the IA is required to be allowed and is to be taken on record, prior to proceeding with the present



case. The learned counsel added that the methodology proposed by WRPC (in its reply) for sharing of part load compensation among the beneficiaries is agreeable to the Petitioner. The representative of ERPC submitted that it has already filed its response in the matter and further pointed out that with regard to the compensation to the Petitioner, no consensus could arrive among the beneficiaries. In response to the observations of the Commission that in view of the subsequent developments, the Petitioner ought to file a fresh Petition the learned counsel for the Petitioner sought liberty to file a separate Petition and requested for adjustment of the filing fees paid in the IA. Accordingly, the Commission disposed of the said IA granting liberty to the Petitioner to file separate Petition seeking revised compensation for the years 2019-20 and 2020-21 and also directed that the filing fees paid in the IA may be adjusted against the Petition to be filed in future. In the above background, order in the petition was reserved.

Analysis and Decision

15. We have examined the matter. It is pertinent to mention that the present petition was filed by the Petitioner seeking the relief(s) in paragraph 1 above, in the context of the Compensation statements dated 27.4.2020 and 22.7.2021 published by ERPC for the Petitioner's plant for the years 2019-20 and 2020-21, based on the prevalent SHR of 2375 kcal/kWh. However, during the pendency of this petition, the Commission issued tariff order dated 8.1.2022 in Petition No. 408/GT/2020 in respect of the generating station of the Petitioner, wherein, the SHR was revised to 2326.03 kcal/kWh. Though the above facts were placed on record by the Petitioner in its rejoinder dated 8.4.2022, it had also filed IA No.53/2022 bringing the subsequent developments, which was disposed of, with a direction to approach the Commission, with a separate petition, as stated in para 13 above. Though the IA was disposed of as aforesaid, in our view, the



computation of compensation considering the revised SHR based on Commission's order dated 8.1.2022 (instead of the prevalent SHR), is necessary for proper determination of the tariff and further it will not cause any prejudice to the Respondents. Accordingly, the order of the Commission in the hearing dated 29.7.2022, disposing of the IA, is recalled. Therefore, the IA No. 53/2022 filed by the Petitioner, is restored on record and the submissions made therein have been considered along with the main petition, for final disposal.

16. The Petitioner in the main petition, has sought clarification on the methodology of sharing of compensation amongst the beneficiaries as per Regulation 6.3(B) of the IEGC and the Compensation mechanism approved by the Commission vide order dated 5.5.2017. Regulation 6.3B of the IEGC, 2010 provides as under:

“6.3B – Technical Minimum Schedule for operation of Central Generating Stations and Inter-State Generating Stations

- 1. The technical minimum for operation in respect of a unit or units of a Central Generating Station of inter-State Generating Station shall be 55% of MCR loading or installed capacity of the unit of at generating station.*
- 2. The CGS or ISGS may be directed by concerned RLDC to operate its unit(s) at or above the technical minimum but below the normative plant availability factor on account of grid security or due to the fewer schedules given by the beneficiaries.*
- 3. Where the CGS or ISGS, whose tariff is either determined or adopted by the Commission, is directed by the concerned RLDC to operate below normative plant availability factor but at or above technical minimum, the CGS or ISGS may be compensated depending on the average unit loading duly taking into account the forced outages, planned outages, PLF, generation at generator terminal, energy sent out ex-bus, number of start-stop, secondary fuel oil consumption and auxiliary energy consumption, in due consideration of actual and normative operating parameters of station heat rate, auxiliary energy consumption and secondary fuel oil consumption etc. on monthly basis duly supported by relevant data verified by RLDC or SLDC, as the case may be.*
- 4. In case of a generating station whose tariff is neither determined nor adopted by the Commission, the concerned generating company shall have to factor the above provisions in the PPAs entered into by it for sale of power in order to claim compensations for operating at the technical minimum schedule.”*



17. Also, the relevant provisions of the Compensation Mechanism regarding the sharing of Heat rate and Auxiliary power consumption, among beneficiaries, as approved vide order dated 5.5.2017, is extracted below:

“4. Mechanism for working out compensation

4.1 Compensation for degradation of Heat Rate (SHR) and Auxiliary Energy Consumption (AEC)

(i) The mechanism is based on relevant provisions of Grid Code and Tariff Regulations of the Commission, as notified from time to time.

(ii) The Compensation shall be worked out for a month on cumulative basis considering degradation in SHR and AEC based on Average Unit Loading subject to reconciliation at the end of the year.

xxxx

(vi) Average Unit loading shall be used for getting increase in SHR and AEC in accordance with the Regulations and for gas based generating station as per step (v) above.

Provided that no compensation for SHR degradation or increase in AEC shall be payable if the Average unit loading for the generating station for the computation period works out more than or equal to 85%.

(xiv) Final Compensation payable by kth beneficiary for the calculation period ending nth month

(a) No compensation shall be payable by a beneficiary if it has requisitioned at least 85% of its entitlement during the calculation period.

*(b) The compensation amongst other beneficiaries shall be **shared in the ratio of un-requisitioned energy below 85% of their entitlement** i.e. compensation payable by kth beneficiary for the calculation period ending nth month*

$$FCB_{kn} = Comp_n \times \frac{UE_{kn}}{\sum_k UE_{kn}}$$

*Where UE_{kn} is un-requisitioned energy of kth beneficiary **below 85% of its entitlement** during the calculation period ending nth month.*

(xv) However, adjustments shall be carried out for compensation already paid for calculation period ending (n-1)th month Net compensation payable/receivable by kth beneficiary for the nth month

$$NCB_{kn} = FCB_{kn} - FCB_{k(n-1)}$$

If NCB_{kn} is negative, this is amount payable by CGS/ISGS to the beneficiary and vice versa. This way reconciliation would automatically take place at the end of the Financial Year.”

“4.2 Calculation for Secondary Fuel Oil consumption:

xxx

(vi) Compensation (in terms of Rupees) shall be shared amongst the beneficiaries in the following manner:

*Compensation payable by beneficiary i
= $\{Ni \times Ai / \sum (Ni \times Ai)\} \times$ Compensation payable to CGS/ISGS*



Where

N_i = Number of start-ups attributable to the beneficiary.

A_i = Weightage Average Percentage share of the beneficiary in the generating station”

18. Regulation 7 of the IEGC, 2010 provides for the following:

“(1) Nothing in these Regulations shall be deemed to limit or otherwise affect the power of the Commission to pass such orders as may be necessary for meeting the ends of justice or to prevent the abuse of the process of the Commission.

(2) Nothing in these Regulations shall bar the Commission from adopting in conformity with the provisions of the Act, a procedure, which is at variance with any of the provisions of these Regulations including summary procedures, if the Commission, in view of the special circumstance of a matter or class of matters and for reasons to be recorded in writing, deems it necessary or expedient for so dealing with such a matter or class of matters.

(3) Nothing in these Regulations shall bar the Commission to deal with any matter or exercise any power under the Act for which no regulations have been framed, and the Commission may deal with such matters, powers and functions in a manner it thinks fit.

(4) The Commission may by general or special order, for reasons to be recorded in writing, and after giving an opportunity of hearing to the parties likely to be affected by grant of relaxation, may relax any of the provisions of these regulations on its own motion or on an application made before it by an interested person”.

19. The Respondent ERPC in its reply dated 4.1.2022, has referred to the various ERPC meetings and sought the advice /clarification of this Commission with regard to allocation of part load compensation among the beneficiaries of an ISGS/IPP having capacities, in terms of MW basis and not on percentage basis. The Respondent WRPC, which was impleaded in the matter, has, in its reply dated 3.1.2022 explained the methodology followed by it, for allocating the compensation for degradation of Heat Rate, Auxiliary Compensation and Secondary Fuel oil consumption, due to part load operation and multiple start/stop of units with PPAs, for partly tied up capacity with the beneficiaries, in respect of two IPPs viz., MBPMPL and JPL along with illustrative examples. The Petitioner in its rejoinder dated 8.4.2022, while pointing out that the compensation mechanism is fully applicable to it without any need for amendment to the PPAs (as per clause 3 of Regulation 6.3(B) of IEGC), has submitted that the procedure



adopted by WRPC is similar to what is being adopted by ERPC for computing the total compensation.

20. It is pertinent to mention that the Commission, vide its 4th amendment dated 29.4.2016 to IEGC has introduced Regulation 6.3B viz., Technical Minimum Schedule for operation of CGS / ISGS, whose tariff is either determined or adopted by this Commission. Subsequently, the Commission vide its order dated 5.5.2017 had issued the Compensation mechanism for part load operation of the generating stations, as stated above. Accordingly, ERPC has been issuing compensation statement for CGS / ISGS stations of the Eastern Region, wherein allocation has been made on percentage basis, for heat rate degradation due to part-load operation by beneficiaries below 85% of their entitlement. Thereafter, the Commission vide Suo motu order dated 31.1.2019 in Petition No. 2/SM/2019 had introduced Pilot on Security Constrained Economic Dispatch (SCED) for ISGS, which are regional entities and whose tariff is determined or adopted by this Commission for their full capacity. Based on this, POSOCO on 29.3.2019 has issued a detailed procedure for implementation of SCED scheme which was effective from 1.4.2019.

21. Admittedly, the generating station of the Petitioner, which is an IPP, has long term PPAs with the beneficiaries, on MW basis (and not on percentage basis) and the tariff of the same is being determined by this Commission. Also, the generating station of the Petitioner was included under SCED from 12.6.2019. Based on this, ERPC has been issuing total compensation statements for CGS, including the compensation for SCED and recoverable from each beneficiary. However, the Petitioner, though has no grievance with either the methodology or computation of total compensation worked out



by ERPC, is mainly aggrieved by the non-allocation of the compensation payable by each beneficiary, in proportion to their un-requisitioned energy, as is being done by WRPC. The Petitioner, during the hearing, has submitted that it is agreeable to the methodology proposed by WRPC, for sharing of part load compensation among the beneficiaries. It is pertinent to mention that in Petition No.192/MP/2016 filed by JPVL (IPP) amongst other, to direct the WRLDC/WRPC to certify the availability/PAFM of the Petitioner`s power station forthwith, the Commission vide interim order dated 18.5.2017 had directed WRLDC/WRPC to put in place the methodology proposed by it to facilitate the certification of declared capacity of the generation station to RPC with effect from 1.6.2017. Thereafter, in Petition No.28/MP/2016 filed by the Petitioner seeking clarification on the methodology of computation of availability for interstate generating stations for which capacity has been tied up in MW basis, the Commission had directed ERPC to schedule power from the Petitioners plant and certify the plant availability, as specified by WRLDC for IPPs. The relevant portion of the order dated 31.8.2017, is extracted below:

*“18. Clause 1 of Regulation 21 is applicable for Central Generating Station and Inter State Generating Stations wherein share in the entire capacity is allocated on percentage basis by the MOP, GOI. **Unlike in the case of CGS/ISGS, in respect of IPPs like the Petitioner, allocation is not done by MOP but their capacity is tied up on megawatt basis with different beneficiaries and a portion of capacity may remain untied even for a long period of time.** It is however noticed that in respect of Central Generating Stations like Korba stage-III and Farakka stage-III each having 500 MW capacity, 75 MW remained unallocated and the Commission had determined tariff of these stations in terms of the provisions of the 2009 Tariff Regulations. It is in this background that the Commission while specifying the terms and conditions for determination of tariff for the period 2014-19 had incorporated Clause 5 under Regulation 6, which provides as under:*

xxxxx”

19. In the backdrop of the above, a methodology for computation of capacity charges in respect of the generating stations of IPPs like the Petitioner whose entire capacity has not been contracted is required to be addressed. It is noticed that in a similar case (Petition No. 192/MP/2016) filed by Jaiprakash Power Limited (JPVL) it has been prayed for, amongst others, for a direction on WRLDC/ WRPC to certify



*the availability / PAFM of its 1320 MW (2 x 660 MW) coal-based power project in the State of Madhya Pradesh. In the said case, WRLDC had not considered the certification of DC and PAF on the ground that JPVL had contracted part capacity of the generating station and that the provisions of the Regulations and IEGC do not permit the same. Subsequently, after deliberations and based on the advice of the Commission, WRLDC vide affidavit dated 15.3.2017 has suggested a methodology for prospective certification of DC and computation of PAF for IPPs who are ISGS and whose capacity has not been fully contracted. According to this, the station PAF determined by respective RPCs/ denominator of the **PAF calculation may be the “contracted capacity” instead of “installed capacity”**. In terms of this methodology, a format for data submission by IPPs has also been specified by WRLDC. It is further observed that the Commission after hearing the parties in Petition No. 192/MP/2016 on 18.5.2017 had directed WRLDC to put in place the methodology proposed by it to facilitate certification of DC of the generating station to RPCs with effect from 1.6.2017. As the prayer of the Petitioner and the issues raised in the instant petition are similar to the case of JPVL in Petition no. 192/MP/2016, we are of the considered view that the interim direction made in the case of JPVL as above shall be made applicable in the instant case also...”*

22. In our considered view, the percentage (%) shares of the generating station can be computed from the contracted capacities, as the ratio of the gross contracted capacity to the installed capacity of the generating station of the Petitioner. In the above background and keeping in view the methodology adopted by the WRPC for IPPs of the Western Region, we direct ERPC to determine the beneficiary wise compensation in line with the 'Mechanism for Compensation for Degradation of Heat Rate, Aux Consumption and Secondary Fuel Oil Consumption, due to part load operation and Multiple Start / Stop of units' issued by the Commission vide order dated 5.7.2017. Also, considering the fact that the Commission vide its order dated 8.1.2022 in Petition No.408/GT/2020 had approved the Station Heat Rate of 2326.03 kcal/kWh, from 1.4.2019 onwards, instead of the SHR of 2375 kcal/kwh considered earlier, we direct ERPC to revise the total compensation statements for the generating station, including the compensation associated with each beneficiary, for the period from 2019-20 onwards, considering the revised SHR approved as above. The prayers of the Petitioner, is disposed of in terms of the above.



23. Petition No. 221/MP/2021 is disposed of in terms of above.

**Sd/-
(Pravas Kumar Singh)
Member**

**Sd/-
(Arun Goyal)
Member**

**Sd/-
(I. S. Jha)
Member**

