MAHAVITARAN
Maharashtra State Electricity Distribution Co. Ltd.

(A Govt. of Maharashtra Undertaking)
CIN: U40109MH2005SGC153645

MAHARASHTRA STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED
Prakashgad, Plot No. G-9, Anant Kanekar Marg,
Bandra (E), Mumbai – 400 051
☎ (O) 022 - 6985 2230
✉ ceppmsedcl@gmail.com | www.mahadiscom.in

Ref. No: CE/PP/CERC/27656 Date: 06.09.2024

To
The Secretary,
Central Electricity Regulatory Commission,
3 rd & 4th Floor, Chandralok Building,
36, Janpath, New Delhi -110 001

Subject: Submission of comments /suggestions on *'Draft Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (First Amendment) Regulations, 2024'.*

Reference: Public Notice No. L-1 /268/2022/CERC by Hon'ble CERC dated 2nd August 2024

Respected Sir,

This is in reference to above cited subject, please find attached herewith MSEDCL's comments /suggestions /objections *on 'Draft Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (First Amendment) Regulations, 2024'*

It is requested to consider these comments/ suggestions while finalizing the *'Draft Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (First Amendment) Regulations, 2024'.*

Thanking you,

Chief Engineer (Power Purchase)
MSEDCL

Copy submitted with respect to:

1. The Director (Commercial), MSEDCL, Mumbai
2. The Executive Director (Commercial), MSEDCL, Mumbai

COMMENTS ON CENTRAL ELECTRICITY REGULATORY COMMISSION (TERMS AND CONDITIONS OF TARIFF) (FIRST AMENDMENT) REGULATIONS, 2024

Clause	Notified Regulations	Draft First Amendment	MSEDCL Comments
3 (Add 9A)	*N/A*	*"Bank Rate" means the one-year Marginal cost of lending rate as specified by the State Bank of India from time to time or any replacement thereof for the time being in force plus 100 basis points."*	The existing CERC Tariff Regulation 2024 provides for computation of carrying/holding cost equivalent to one-year SBI MCLR rate plus 100 basis points. The aforesaid rate has now been termed as "Bank Rate" and is replaced at all the relevant clauses in the Regulation. This clause is merely an introduction of terminology and hence does not have any material impact on the finances of Distribution Licensees.
9 (5)	*In case the generating company or the transmission licensee files the application as per the timeline specified in sub-clause (1) to (4) of this Regulation, carrying cost* ***at the simple interest rate of 1-year SBI MCLR plus 100 basis points*** *shall be allowed from the date of commercial operation of the project:*	*In case the generating company or the transmission licensee files the application as per the timeline specified in sub-clause (1) to (4) of this Regulation, carrying cost* ***at the bank rate*** *shall be allowed from the date of commercial operation of the project:*	
10 (6)	*Subject to Sub-Clause (7) below, the difference between the tariff determined in accordance with clauses (3) and (5) above and clauses (4) and (5) above, shall be recovered from or refunded to, the beneficiaries or the long term customers, as the case may be, with simple interest at the rate equal to* ***the 1 year SBI MCLR plus 100 basis points*** *prevailing as on 1st April of the respective year of the tariff period, in a maximum of six equal monthly instalments;*	*Subject to Sub-Clause (7) below, the difference between the tariff determined in accordance with clauses (3) and (5) above and clauses (4) and (5) above, shall be recovered from or refunded to, the beneficiaries or the long term customers, as the case may be, with simple interest at the rate equal to* ***the bank rate*** *prevailing as on 1st April of the respective year of the tariff period, in a maximum of six equal monthly instalments;*	
10 (7)	*Where the capital cost approved by the Commission on the basis of projected additional capital expenditure exceeds the actual trued up additional capital expenditure incurred on a year to year basis by more than 10%, the generating company or the transmission licensee shall refund to the beneficiaries or the long term customers as the case may be, the tariff recovered corresponding to the additional capital expenditure not incurred, as approved by the Commission, along with*	*Where the capital cost approved by the Commission on the basis of projected additional capital expenditure exceeds the actual trued up additional capital expenditure incurred on a year to year basis by more than 10%, the generating company or the transmission licensee shall refund to the beneficiaries or the long term customers as the case may be, the tariff recovered corresponding to the additional capital expenditure not incurred, as approved by the*	

	*simple interest at 1.20 times **of the rate worked out on the basis of 1 year SBI MCLR plus 100 basis points** as prevalent on 1st April of the respective year.*	*Commission, along with simple interest at 1.20 times **the bank rate** as prevalent on 1st April of the respective year.*	
36 (3) (d)	*The Security Expenses, Capital Spares individually costing more than Rs. 10 lakh and Insurance expenses arrived through competitive bidding for the transmission system and associated communication system shall be allowed separately after prudence check:* *Provided that in case of self-insurance, the premium shall not exceed **0.09%** of the GFA of the assets insured;* *Provided that the transmission licensee shall submit the along with estimated security expenses based on assessment of the security requirement, capital spares and insurance expenses, which shall be trued up based on details of the year-wise actuals along with appropriate justification for incurring the same and along with confirmation that the same is not claimed as a part of additional capitalisation or consumption of stores and spares and renovation and modernization.*	*The Security Expenses, Capital Spares individually costing more than Rs. 10 lakh and Insurance expenses arrived through competitive bidding for the transmission system and associated communication system shall be allowed separately after prudence check:* *Provided that in case of self-insurance, the premium shall not exceed **0.12%** of the GFA of the assets insured;* *Provided that the transmission licensee shall submit the along with estimated security expenses based on assessment of the security requirement, capital spares and insurance expenses, which shall be trued up based on details of the year-wise actuals along with appropriate justification for incurring the same and along with confirmation that the same is not claimed as a part of additional capitalisation or consumption of stores and spares and renovation and modernization.* ***Provided that the self-insurance premium shall be transferred to a separate fund for utilization to meet the claims, and the expenditure incurred or utilized from the self-insurance fund shall be made available to the Commission as and when directed.***	The Hon'ble Commission has not provided any basis for increase in self-insurance premium from 0.09% to 0.12% of GFA. It is submitted that the insurance premium is an expenses to insure the asset of the licensees. The Hon'ble Commission is kindly requested to take into account the premium that is charged on similar assets as per current market conditions. The Hon'ble Commission is also requested to compare the recently discovered quotes of premium charged by third party insurers on such assets with the proposed premium of 0.12% of the GFA and accordingly allow the premium which is lower of the two options.
37 (2)	*The generating company shall, after the date of commercial operation of the integrated mine(s) till the input price of coal is determined by the Commission under these regulations, adopt the notified price of Coal*	*The generating company shall, after the date of commercial operation of the integrated mine(s) till the input price of coal is determined by the Commission under these regulations, adopt the notified price of*	No Comments

	India Limited commensurate with the grade of the coal from the integrated mine(s) or the estimated price available in the investment approval, whichever is lower, as the input price of coal for the generating station: ***Provided that the difference between the input price of coal determined under these regulations and the input price of coal so adopted prior to such determination, the quantity of coal billed shall be adjusted in accordance with Clause (4) of this Regulation.***	*Coal India Limited commensurate with the grade of the coal from the integrated mine(s) or the estimated price available in the investment approval, whichever is lower, as the input price of coal for the generating station:* ***Provided that the generating company may plead for an interim input price in its petition, which may be allowed by the Commission up to 90% of the claimed input price after the first hearing of the application;*** ***Provided further that the difference between the input price of coal determined under these regulations and the input price of coal either adopted by the generating company in terms of this sub-regulation or the interim input price allowed by the Commission in terms of the first proviso to this sub-regulation shall be recoverable or payable in accordance with sub-regulation (4) of this Regulation.***	
37 (4)	*In case of excess or short recovery of input price under Clauses (2) or (3) of this Regulation, the generating company shall refund the excess amount or recover the shortfall amount, as the case may be, with simple interest at the rate equal to **1-year SBI MCLR plus 100 basis points** prevailing as on 1st April of the respective year of the tariff period, in six equal monthly instalments.* *Provided that such interest shall be payable till the date of issuance of the Order and no interest shall be allowed or levied during the period of six-monthly instalments.*	*In case of excess or short recovery of input price under Clauses (2) or (3) of this Regulation, the generating company shall refund the excess amount or recover the shortfall amount, as the case may be, with simple interest at the rate equal to **the bank rate** prevailing as on 1st April of the respective year of the tariff period, in six equal monthly instalments.* *Provided that such interest shall be payable till the date of issuance of the Order and no interest shall be allowed or levied during the period of six-monthly instalments.*	The existing CERC Tariff Regulation 2024 provides for computation of carrying/holding cost equivalent to one-year SBI MCLR rate plus 100 basis points. The aforesaid rate has now been termed as "Bank Rate" and is replaced at all the relevant clauses in the Regulation. This clause is merely an introduction of terminology and hence does

	*Provided that in case there is a delay in filing the Petition for determination of input price as per the timelines specified under Regulation 9 of these regulations, no carrying cost shall be allowed to the generating company or the mining company for such delay and in such cases the carrying cost at the simple interest rate of **1-year SBI MCLR plus 100 bps** shall be allowed from the date of filing of the Petition.*	*Provided that in case there is a delay in filing the Petition for determination of input price as per the timelines specified under Regulation 9 of these regulations, no carrying cost shall be allowed to the generating company or the mining company for such delay and in such cases the carrying cost at the simple interest rate of **the bank rate** shall be allowed from the date of filing of the Petition.*	not have any material impact on the finances of Distribution Licensees.
50	*The input charges of coal or lignite shall be recovered as under:* *Input Charges = [Input Price x Quantity of coal or lignite supplied] + Statutory charges, as applicable;* *Provided that where the energy charge rate based on the input price of coal from integrated mine(s) exceeds 20% of the energy charge rate **based on the notified price of Coal India Limited for the commensurate grade of coal in a month, prior consent of the beneficiary(ies) shall be required to be obtained by the generating company;*** *Provided further that where such consents of beneficiaries are not available, the input price of coal from such integrated mine(s) shall be so fixed that the energy charge rate based on the input price of coal from integrated mine(s) does not exceed by more than 20% of the energy charge rate **based on the notified price of Coal India Limited for the commensurate grade of coal in a month;*** *Provided also that the energy charge rate based on the input price of coal does not lead to a higher energy*	*The input charges of coal or lignite shall be recovered as under:* *Input Charges = [Input Price x Quantity of coal or lignite supplied] + Statutory charges, as applicable;* *Provided that where the energy charge rate based on the input price of coal from integrated mine(s) exceeds 20% of the energy charge rate **based on the price of alternate coal available to the station in a given month, the generating company shall obtain prior consent from the beneficiary(ies);*** *Provided further that where such consents of beneficiaries are not available, the input price of coal from such integrated mine(s) shall be so fixed that the energy charge rate based on the input price of coal from integrated mine(s) does not exceed by more than 20% of the energy charge rate **based on the price of alternate coal available to the station in a given month**;* *Provided also that the energy charge rate based on the input price of coal does not lead to a higher energy*	It is submitted that Coal India Limited is the apex body for coal mining & sales in India backed by Govt. of India. The rate of coal notified by Coal India is considered to be a benchmark price of coal in India. Even in various tenders floated for procurement of power, the base price of coal is considered as the notified price of coal published by Coal India. Owing to all such above factors, the energy charge that is to be allowed shall be a factor of the notified price of Coal India rather than any random price of alternate coal that is available to the power station. Further, to ensure prudence check of the energy charge, it is always rational to link the price of coal to Coal India notified prices. It is therefore requested

	charge rate throughout the tenure of the power purchase agreement than that which would have been obtained as per terms and conditions of the existing power purchase agreement.	*charge rate throughout the tenure of the power purchase agreement than that which would have been obtained as per terms and conditions of the existing power purchase agreement.*	to kindly retain the existing clause.
51	*Adjustment on account of Shortfall of Overburden Removal (OB Adjustment):* *(1) The generating company shall remove overburden as specified in the Mining Plan.* ***(2) In case of a shortfall of overburden removal during a year, the generating company shall be allowed to adjust such shortfall against excess of overburden removal, if any, during the subsequent three years.*** ***(3) In case of excess of overburden removal during a year, the generating company shall be allowed to carry forward such excess for adjustment against the shortfall, if any, during the subsequent three years.***	Regulation 51 of the Principal Regulations shall be substituted by following: *Adjustment on account of Shortfall of Overburden Removal (OB Adjustment):* *(1) The generating company shall remove overburden as specified in the Mining Plan.* ***(3) In case of a shortfall or excess of overburden removal during a year, the generating company shall be allowed to adjust such shortfall or excess, as the case may be, if any, during the remaining years of the tariff period till 31.3.2029.*** ***Provided that –*** ***a) the excess overburden as on 31.3.2029, if any, on account of the reasons not attributable to the generating company, shall be allowed to be carried forward beyond the end of the tariff period at the time of true up of the input price;***	In case excess overburden is not attributable to the generating company, then in such case it is requested that the cost of overburdening may be recovered from the Mine Developer and Operator, since quality control is joint

	(4) ***Where the shortfall of overburden removal of any year is not made good by the generating company in accordance with Clause (2) of this Regulation****, the adjustment on account of the shortfall of overburden removal (OB Adjustment) for that year shall be worked out as under:* *OB Adjustment = [Factor of adjustment for shortfall of overburden removal during the year] x* ***[Mining Charge during the year + Operation and Maintenance expenses during the year]*** *Where,* *i) Factor of adjustment for the shortfall of overburden removal during the year shall be computed as under:* ***[(Actual quantity of coal or lignite extracted during the year x Annual Stripping Ratio as per Mining Plan) - (Actual quantity of overburden removed during the year/ Annual Stripping Ratio as per Mining Plan)]/ (Annual Target Quantity)****;* *ii) Annual Stripping ratio is the ratio of the volume of overburden to be removed for one unit of coal or lignite as specified in the Mining Plan.*	***b) the generating company shall submit the details of the adjustment of overburden at the end of the tariff period for the purpose of truing up.*** *(2)* ***Where the overburden removed in a year is less than the overburden to be removed as per the year wise schedule of extraction given in mine plan,*** *the adjustment on account of the shortfall of overburden removal ("OB Adjustment") for that year shall be worked out as under:* ***a) If Mine Developer and Operator is appointed:*** *OB Adjustment = [Factor of adjustment for shortfall of overburden removal during the year] x* ***[Mining Charge during the year]*** ***b) If Mine Developer and Operator is not appointed:*** *OB Adjustment = [Factor of adjustment for shortfall of overburden removal during the year] x* ***[Operation and Maintenance expenses during the year]*** *Where,* *i) Factor of adjustment for the shortfall of overburden removal during the year shall be computed as under:* ***[(Annual Stripping ratio as per mining plan) - (Actual Stripping ratio based on the actual quantity of coal and overburden removed during the year)] / (1+Annual Stripping Ratio as per Mining Plan)****;*	responsibility of Mine Development and the Generator. It is submitted that in case the MDO is not appointed, the OB Adjustment factor shall be linked to only the O&M expenses related to mining activity and not the entire O&M expenses incurred by the generator as the OB adjustment factor would get inflated to the extent of the entire O&M expenses of the generator. Therefore, the calculation of OB adjustment where MDO is not appointed, it

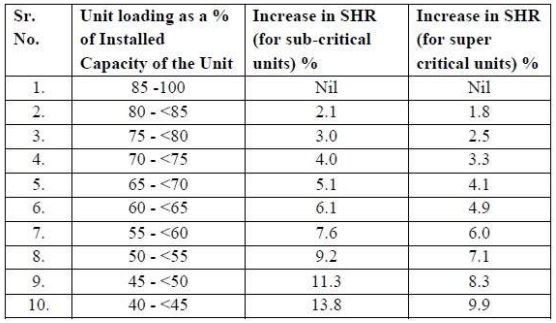
	iii) Mining Charge is the charge per tonne of coal or lignite paid by the generating company to the Mine Developer and Operator engaged by the generating company for mining, wherever applicable. *iv) Mining Charge and Operation and Maintenance expenses shall be in terms of Rupees per tonne corresponding* ***to the Annual Target Quantity.*** *(5) The provisions of this Regulation regarding adjustment on account of shortfall of overburden removal shall not be applicable in case of the integrated*	*ii) Annual Stripping ratio is the ratio of the volume of overburden to be removed for one unit of coal or lignite as specified in the Mining Plan.* *iii) Mining Charge is the* ***quoted*** *charge per tonne of coal or lignite paid by the generating company to the Mine Developer and Operator engaged by the generating company for mining, wherever applicable,* ***without the OB adjustment as per contract with the Mine Developer and Operator.*** *iv) Mining Charge and Operation and Maintenance expenses shall be in terms of Rupees per tonne corresponding* ***to the stripping ratio and annual quantity of coal and overburden as per the mining plan.*** ***v) Where the generating company has engaged the Mine Developer and Operator for mining and the OB Adjustment is carried out as per the contract with the Mine Developer and Operator, the net OB adjustment as per this regulation shall be computed on the basis of the difference between the OB adjustment as per Regulation 51(4) of this regulation and the OB adjustment as per the contract of the generating company with the Mine Developer and Operator:*** ***Provided that if the OB adjustment as per the contract with the Mine Developer and Operator exceeds the OB adjustment as per Regulation 51(4), the OB adjustment shall be treated as NIL.***	is requested to consider the following formula: *OB Adjustment = [Factor of adjustment for shortfall of overburden removal during the year] x [Operation and Maintenance expenses* ***incurred during the year to the extent of mining activity only***

	mine(s) allocated through an auction route under the Coal Mines (Special Provisions) Act, 2015.	*(4) The provisions of this Regulation regarding adjustment on account of shortfall **or excess** overburden removal, **as the case may be,** shall not be applicable in case of the integrated mine(s) allocated through an auction route under the Coal Mines (Special Provisions) Act, 2015."*	
55	*Quality Measurement: The quality of coal or lignite supplied from the integrated mine(s) shall be measured at the loading point through third party sampling as per the guidelines and procedure specified by **the Ministry of Coal, Government of India** and records of such measurement of quality of coal shall be made available to the beneficiaries on demand.*	*Quality Measurement: The quality of coal or lignite supplied from the integrated mine(s) shall be measured at the loading point through third party sampling as per the guidelines and procedure specified by **the Central Government** and records of such measurement of quality of coal shall be made available to the beneficiaries on demand.*	It is submitted that Coal India is an apex body for mining and sales of coal in India and therefore, the guidelines specified by the Ministry of Coal, Government of India may continue to be considered as a standard benchmark guideline for third party sampling. It is therefore requested to retain this clause as in the existing Regulations.
64	*Provided that the weighted average price of alternative source of fuel shall not exceed 30% of base price of fuel computed as per **clause (5)** of this Regulation and in such case, prior permission from beneficiaries shall not be a pre-condition, unless otherwise agreed specifically in the power purchase agreement:*	*Provided that the weighted average price of alternative source of fuel shall not exceed 30% of base price of fuel computed as per **clause (6)** of this Regulation and in such case, prior permission from beneficiaries shall not be a pre-condition, unless otherwise agreed specifically in the power purchase agreement:*	No comment.
70 (A) (b)	*83% for coal and lignite based generating stations completing 30 years from COD **as on 31.03.2024**;*	*83% for coal and lignite based generating stations completing 30 years from COD **as on 31.03.2024 or thereafter**;*	No comment.
70 (B) (b)	*83% for coal and lignite based generating stations completing 30 years from COD **as on 31.03.2024***	*83% for coal and lignite based generating stations completing 30 years from COD **as on 31.03.2024 or thereafter***	No comment.
70 (E) (a)	*For Coal-based generating stations except at (b) below:*	*For Coal-based generating stations except at (b) below:*	No comment.

<table>
<tr>
<td></td>
<td>
<table>
<tr><th>S. No.</th><th>Generating Station</th><th>With Natural Draft cooling tower or without cooling tower</th></tr>
<tr><td>(i)</td><td>200-300 MW series</td><td>8.50%</td></tr>
<tr><td>(ii)</td><td>300/ 330/ 350/ 500 MW and above</td><td></td></tr>
<tr><td></td><td>Steam driven boiler feed pumps</td><td>5.25%</td></tr>
<tr><td></td><td>Electrically driven boiler feed pumps</td><td>8.00%</td></tr>
<tr><td>(iii)</td><td>600 MW and above</td><td></td></tr>
<tr><td></td><td>Steam driven boiler feed pumps</td><td>5.25%</td></tr>
<tr><td></td><td>Electrically driven boiler feed pumps</td><td>8.00%</td></tr>
</table>
Provided that for thermal generating stations with induced draft cooling towers and where ball and tube-type coal mill is used, the norms shall be further increased by 0.5% and 0.8%, respectively:

Provided further that Additional Auxiliary Energy Consumption as follows shall be allowed for plants with Dry Cooling Systems:
<table>
<tr><th>Type of Dry Cooling System</th><th>(% of gross generation)</th></tr>
<tr><td>Direct cooling air cooled condensers with mechanical draft fans</td><td>1.0%</td></tr>
<tr><td>Indirect cooling system employing jet condensers with pressure recovery turbine and natural draft tower</td><td>0.5%</td></tr>
</table>
Note: The auxiliary energy consumption for the unit capacity of less than 200 MW sets shall be dealt with on a case-to-case basis.
</td>
<td>
<table>
<tr><th>S. No.</th><th>Generating Station</th><th>With Natural Draft cooling tower or without cooling tower</th></tr>
<tr><td>(i)</td><td>200-300 MW series</td><td>8.50%</td></tr>
<tr><td>(ii)</td><td>500 MW and above</td><td></td></tr>
<tr><td></td><td>Steam driven boiler feed pumps</td><td>5.25%</td></tr>
<tr><td></td><td>Electrically driven boiler feed pumps</td><td>8.00%</td></tr>
<tr><td>(iii)</td><td>600 MW and above</td><td></td></tr>
<tr><td></td><td>Steam driven boiler feed pumps</td><td>5.25%</td></tr>
<tr><td></td><td>Electrically driven boiler feed pumps</td><td>8.00%</td></tr>
</table>
Provided that for thermal generating stations with induced draft cooling towers and where ball and tube-type coal mill is used, the norms shall be further increased by 0.5% and 0.8%, respectively:

Provided further that Additional Auxiliary Energy Consumption as follows shall be allowed for plants with Dry Cooling Systems:
<table>
<tr><th>Type of Dry Cooling System</th><th>(% of gross generation)</th></tr>
<tr><td>Direct cooling air cooled condensers with mechanical draft fans</td><td>1.0%</td></tr>
<tr><td>Indirect cooling system employing jet condensers with pressure recovery turbine and natural draft tower</td><td>0.5%</td></tr>
</table>
Note: The auxiliary energy consumption for the unit capacity of less than 200 MW sets shall be dealt with on a case-to-case basis.
</td>
<td></td>
</tr>
<tr>
<td>70 (E) (b)</td>
<td>
For other Coal-based generating stations:
<table>
<tr><td>(i)</td><td>Tanda Thermal Power Station</td><td>12.00%</td></tr>
<tr><td>(ii)</td><td>Chandrapur TPS (2x250 MW) (DVC)</td><td>9.50%</td></tr>
</table>
</td>
<td>
For other Coal-based generating stations:
<table>
<tr><td>(i)</td><td>Tanda Thermal Power Station</td><td>12.00%</td></tr>
<tr><td>(ii)</td><td>Chandrapur TPS (2x250 MW) (DVC)</td><td>9.80%</td></tr>
</table>
</td>
<td>No comment.</td>
</tr>
<tr>
<td>70 (G)</td>
<td>Clause (G) shall be added after Clause (F)</td>
<td>(G) Compensation for the operation of generating station below normative plant availability factor
(1) The generating stations whose tariff is determined by the Commission under Section 62 of the Act shall be compensated for degradation of station heat rate and auxiliary energy consumption, consumption of additional secondary fuel oil due to loading below the normative plant availability</td>
<td>The Govt. of India has announced the target to achieve Net Zero emissions in the Country by 2070. Also, the Govt. of India plans to install 500 GW of RE by 2030 which will contribute to around 50% of the installed capacity in the</td>
</tr>
</table>

		factor specified under Regulation 70(A) of these regulations. *(2) The compensation for degradation under regulation (1) of this regulation shall be borne by the entity which has caused the plant to be operated at schedule lower than the corresponding Normative Plant Availability Factor.* *(3) The compensation for the station heat rate and auxiliary energy consumption shall be worked out in terms of energy charge rate.* *(4) For the purpose of compensation under regulation (1) of this regulations, the degradation of gross station heat rate (SHR) over and above the norms specified under Regulation 70(B) of these regulations shall be considered as under:* *a) For coal or lignite based generating stations:*  *b) For gas or liquid fuel based generating station:* *(i) Module/ plant operating in CCGT mode:*	Country. To meet such targets, Ministry of Power, Govt. of India has also notified the RPO targets to be met by states from various RE sources. In view of such notifications, all the states within the Country have started procuring maximum RE power to meet its future demand. The State Government of Maharashtra has also introduced a scheme for solarisation of AG feeders namely MSKVY 2.0 which will provide power supply to AG consumers during the day time. Entire AG consumption will be shifted during the day. Another scheme namely the Lift Irrigation Scheme (LIS) also plans to install solar to meet demand of Lift Irrigation consumers. In view of the above, all states including Maharashtra are increasing their RE capacity to meet their individual target of RE addition. To promote large hydro stations, Govt. of India has also notified separate HPO

Sr. No.	Unit loading as a % of Installed Capacity of the Unit	Increase in SHR (for sub-critical units) %	Increase in SHR (for super critical units) %
1.	85 -100	Nil	Nil
2.	80 - <85	2.1	1.8
3.	75 - <80	3.0	2.5
4.	70 - <75	4.0	3.3
5.	65 - <70	5.1	4.1
6.	60 - <65	6.1	4.9
7.	55 - <60	7.6	6.0
8.	50 - <55	9.2	7.1
9.	45 - <50	11.3	8.3
10.	40 - <45	13.8	9.9

Sr. No.	Module/ plant loading as % of installed capacity	Increase in SHR (for module/ plant) (%)
1.	85 -100	Nil
2.	80 - <85	2.5
3.	70 - <80	5
4.	60 - <70	8
5.	50 - <60	12

(ii) Module/ plant operating in Open Cycle mode:

Sr. No.	Module/ plant loading as % of installed capacity	Increase in SHR (for module/ plant) (%)
1.	85 -100	Nil
2.	80 - <85	3
3.	70 - <80	7
4.	60 - <70	11
5.	50 - <60	16

(5) For the purpose of compensation under regulation (1) of this regulations, the degradation of auxiliary energy consumption (AEC) over and above the norms specified under Regulation 70(E) of these regulations shall be considered as under:

a) For coal or lignite based generating stations:

Sr. No.	Unit loading as a % of Installed Capacity	% degradation in AEC admissible
1.	85 -100	Nil
2.	80 - <85	0.5
3.	70 - <80	1.1
4.	60 - <70	1.8
5.	50 - <60	2.5
6.	40 - <50	3.2

b) For gas or liquid based generating stations:

targets and has categorised Large Hydro stations under RE power.

Owing to all such above factors, huge amount of RE is expected to come up in the next 2-3 years.

However, it is to be noted that due to the infirm nature of RE power it is necessary to retain non-conventional sources to provide firm power to support the grid during variation in supply pattern of RE and variation in demand pattern of consumers. Also, during the peak demand period and when RE is not actively generating, the demand is mainly catered by conventional energy generating plants. As such, the power portfolio of Discoms will always be a mix of conventional and non-conventional sources.

In order to accommodate the infirm nature of RE power, the conventional generation need to be backed down and ramped up at specific times in 24-hour

Sr. No.	Module/ plant loading as % of installed capacity	% degradation in AEC admissible
1.	85 -100	Nil
2.	80 - <85	0.25
3.	70 - <80	0.50
4.	60 - <70	0.80
5.	50 - <60	1.20

(6) The additional compensation for secondary fuel oil consumption shall be permissible over and above seven (7) start / stop in a year for the generating station under Unit Shutdown in terms of Regulation 47 of the Grid Code Regulations 2023. For the purpose of compensation under regulation (1) of this regulation, the secondary fuel oil consumption per start up shall be considered based on the following norms or actual, whichever is lower:

Unit Size (MW)	Secondary fuel oil consumption per start up (Kl)		
	Hot	Warm	Cold
200/210/250 MW	20	30	50
500 MW	30	50	90
660 MW	40	60	110

Additional specific secondary fuel oil consumption of 0.2 ml/ kWh shall be provided for units operating below 55% unit loading.

(7) The financial gains computed, after taking into account compensation, over and above the actual energy charges shall be shared between the generating station and the beneficiaries in the ratio of 1:1. in accordance with the procedure to be

cycle and even during seasonality changes.

The backing down of thermal power generation units will only increase with time as the RE capacity which is under the execution phase will get commissioned in the near future.

The Central/State Govt. are providing the necessary push for infusion of huge amount of RE power into the grid and therefore the backing down of thermal generation will always prevail/increase with time as RE power surges in to the grid.

In view of the increase in RE capacity, the Distribution Licensees are compelled to back down the thermal generation below normative availability as and when required to accommodate RE capacity and to maintain grid stability.

It is further submitted the 4th amendment to Indian Electricity Grid Code provides for compensation in SHR and AEC below normative

		issued by NLDC with the approval of the Commission. *(8) There shall be a reconciliation of the compensation at the end of the financial year considering actual weighted average operational parameters of station heat rate, auxiliary energy consumption and secondary oil consumption.* *(9) The change in the schedule of power under the provisions of Central Electricity Regulatory Commission (Ancillary Services Operations) Regulations, 2022 shall not be considered for compensation.* *Procedure stipulating the mechanism to work out the compensation for degradation of heat rate, auxiliary consumption and secondary fuel oil consumption due to part load operation and multiple start and stop of units of the generating station shall be issued by the NLDC separately with the approval of the Commission.*	availability as per the following slabs *% Loading* | *% SHR increase (super critical)* | *% SHR increase (sub-critical)* *75-84.99* | *1.25* | *2.25* *65-74.99* | *2.0* | *4.0* *55-64.99* | *3.0* | *6.0* *% Loading* | *% AEC degradation allowed* *75-84.99* | *0.35* *65-74.99* | *0.65* *55-64.99* | *1.00* As seen from the above table, the compensation allowed is only under 3 slabs and with maximum compensation of SHR up to 6% and AEC up to 1.00%. However, in the proposed clause, the number of slabs have been increased to 9 from 3 slabs and maximum compensation of SHR is

<table>
<tr><td></td><td></td><td></td><td>increased to 13.8% from 6%. The AEC degradation is also increased to 3.2% from existing 1%. The compensation therefore proposed is exorbitantly high with respect to existing levels and without any justification for such increase. It is submitted that the proposed amendment will put a huge financial impact on the finances of Distribution Licensees due to the increase in slabs and the increase in percentage of compensation, and also considering the factor of RE integration. It is therefore submitted to kindly modify such clause in line with existing 4th amendment to Indian Electricity Grid Code which will avoid unnecessarily burdening the Distribution Licensees and retail consumers with huge cost.</td></tr>
<tr><td>71 (A) (4)</td><td>Based on the above, the Normative annual plant availability factor (NAPAF) of the hydro generating stations already in operation shall be as follows: -
<table><tr><th>Station</th><th>Type of Plant</th><th>Plant Capacity No. of Units x MW</th><th>NAPAF (%)</th></tr><tr><td>Karcham Wangtoo</td><td>ROR with Pondage</td><td>4x261.25</td><td>90</td></tr></table></td><td>Based on the above, the Normative annual plant availability factor (NAPAF) of the hydro generating stations already in operation shall be as follows: -
<table><tr><th>Station</th><th>Type of Plant</th><th>Plant Capacity No. of Units x MW</th><th>NAPAF (%)</th></tr><tr><td>Karcham Wangtoo</td><td>ROR with Pondage</td><td>4x261.25</td><td>87</td></tr></table></td><td>No comment.</td></tr>
</table>