

Before the Maharashtra Electricity Regulatory Commission, Mumbai

Additional submission in Case no: 227 of 2022

Date: 30<sup>th</sup> January 2023

**ADDITIONAL SUBMISSION BY PRAYAS (ENERGY GROUP)**

MSPGCL replied to objections/queries raised by PEG in Case 227 of 2022, as part of its submission on MSPGCL's MTR petition for the control period FY20-FY25. This response has provided clarity on some aspects of our submission, but others require further understanding. Towards this, Prayas (Energy Group) has the following additional comments:

**1. GCV Variation**

MSPGCL in its reply has raised issues with coal quality in response to multiple points raised by PEG. For instance, not only does MSPGCL discuss slippages in coal quality as part of its Reply to Objection 3 (on coal quality), it also uses it to explain coal supply issues, financial impact, lower O&M norms, and even the need for import blending. The relevant sections from MSPGCL's reply are reproduced below:

*"[Reply to Objection 1]*

*a) Typical coal supply issues :*

*a. The coal supply for MSPGCL is predominately supplied by WCL. **WCL has the poor quality of coal due to typically geological reasons high ash content, lower GCV, wet and muddy coal. [...]***

*b) Lower O&M normative norms:*

*a. **MSPGCL submits that poor quality of coal resulting in deterioration of equipments, hence need for higher Repairs and maintenance, as a result more outages. [...]***

*d) Coal being unregulated sector:*

*[...] b. Currently, in India it is a monopolistic condition, as Coal India Ltd and its subsidiary are the only coal supplier in India. **In absence of coal Regulator, no control on pricing as well as quality issues.***

*c. MSPGCL has repeatedly raised these issues with the coal companies and always tried to resist the unilateral price hikes/ add-on price decisions imposed by CIL. MSPGCL has even raised its concerns to GoM as well as to GoI. However, **there is no significant improvement in the coal quality situation.***

*d. Moreover, the impractical regulatory expectations leading to fuel cost disallowance for MSPGCL. **Severe persistent grade slippage observed in loading end to unloading end. In spite of this, the Hon'ble Commission has introduced restricted margin on loading end GCV and unloading end GCV gap. This has resulted in much increased fuel cost loss since FY 20-21.***

*e. Above issues are adding to the financial difficulties of MSPGCL. **MSPGCL is facing issue of getting improved GCV coal as expected under Regulations, hence resulting in almost Rs.1200-1500 Crore every year.***

*[Reply to Objection 2]*

*c) Further, in view of growth in coal production projected by Ministry of Coal, objector has stated that there would not be requirement of imported coal in view of adequate availability of domestic coal. **MSPGCL has already mentioned in present Petition that due to poor quality of coal, MSPGCL will required to use imported***

*coal for blending in order to meet required heat content for respective stations. MSPGCL also submit that the utilisation of imported coal would be within the permissible limit for usage of alternative coal as allowed in MERC MYT Regulations.*

*[Reply to Objection 3]*

*a) It is submitted that though it is assumed that the variation between loading end (Eq) and unloading end (ARB) GCV is the risk of MSPGCL, the ground realities are much different. Hence it is already admitted by the Hon'ble Commission that there are some grade slippage to be expected and thus allowed slippage up to 300 kcal/kg. However, such GCV loss is beyond the control of MSPGCL. Hence, the Hon'ble Commission has already allowed the relaxation in GCV loss of 330 kcal/kg as per Regulations and additional relaxation of 300 kcal/kg for FY 22-23 as provided in Case No. 180 of 2020.*

*b) The above said additional relaxation of 300 kcal/kg was provided in view of actual GCV loss for the past period and stated that allowable GCV loss will be review during MTR process and accordingly will approve for the balance control period, i.e. FY 23-24 and FY 24-25.*

*c) MSPGCL is taking necessary efforts to control/minimise the GCV loss which are already detailed out in para 10.4.1.1 of the Petition. However, despite of such efforts actual GCV loss at average level of 800 kcal/kg and in certain stations it is at level of 900-1000 kcal/kg.*

*d) In view of effort being taken by MSPGCL to minimise GCV loss, it would not be appropriate to state that grade slippage not to be allowed.*

*[Reply to Objection 4]*

*b) MSPGCL has considered imported coal over e-auction, as **imported coal has better grade of coal which is required for blending to achieve the desired GCV of coal for operating of the unit.** MSPGCL also submits that utilisation of imported coal will be done within permissible limit mentioned by the Hon'ble Commission.”*  
**[Emphasis added]**

MSPGCL clearly recognises the serious impact of coal quality on its operations and finances. Therefore, it becomes especially critical for MSPGCL to take its responsibility to ensure minimal slippages in coal quality more seriously. However, its actions do not reflect this, as explained below:

- a. If MSPGCL is not satisfied with the quality of coal at loading point, according to the FSA, it should have resorted to the dispute resolution mechanism outlined in Para 4.7.3 (ii)(d) of its FSA. According to its petition, MSPGCL has not resorted to this provision. Moreover, the GCVs at loading point as provided in annexure 4 of the Fuel Utilisation Plan (FUP) (which is included as Annexure 16 of the MTR petition) indicate that in most cases, the GCV at loading point is satisfactory<sup>1</sup>. This clearly indicates that MSPGCL is satisfied with the quality of coal at loading point.
- b. Since the ownership and risk of the coal transfers to MSPGCL at loading point as per Para 7 of the FSA, any change in quality of coal from then is the sole responsibility of MSPGCL. Passing on GCV loss costs to consumers, on account of MSPGCL not being able to fulfil its responsibilities would not be appropriate.
- c. MSPGCL's initiatives to address the issue of GCV variations, as summarised in Para 10.4.1.1 and annexures to the FUP documents in its MTR petition, primarily consist of inquiries and letters to CIMFR seeking an explanation for loss of GCV between loading and unloading points. However, it

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<sup>1</sup> Though MSPGCL has raised concerns about how the sampled GCV in some mines are higher than the declared grade, this is the case for only 6 out of 24 mines (as per Annexure 4 of the FUP).

does not seem to have made any effort to track the coal from loading to unloading end, or initiating a discussion with the concerned transport agencies (Railways, or other modes) to see how such a loss of coal quality could be plugged. CIMFR is a technical agency capable of measuring coal quality and it is highly unlikely that it would be able to explain why there is such a huge loss between loading and unloading points, because the loss is most likely due to what happens *between* the loading and unloading points, and not what happens *at* the loading and unloading points.

Therefore, unless MSPGCL can identify genuine causes beyond its control which it has taken sufficient efforts to address, we continue to maintain that it has no valid grounds to claim relaxation in costs due to coal quality variation between loading and unloading points and unduly burden electricity consumers.

On this matter MERC, in Orders 296 of 2019 and 180 of 2020, observes:

*“[296 of 2019]*

*7.11.14 The Commission is of the view that if entire GCV loss is allowed, then there will be no incentive for MSPGCL to control the GCV loss. Hence, the Commission allows the relaxation of 225 kCal/kWh in loss of GCV in addition to 300 kCal/kg as per MERC MYT Regulations, 2019, for FY 2020-21. Further, the Commission feels that MSPGCL should gradually try to reduce the GCV loss and accordingly approves the relaxation for subsequent years with some improvement in GCV as follows: [..]*

*[180 of 2020]*

*28.41 The Commission will decide the relaxation for last two years of the Control Period i. e. FY 2023-24 and FY2024-25 based on the submission of actual data during the MTR Petition. However, the Commission also directs MSPGCL to take all the necessary and adequate steps to minimize the grade slippage and submit the efforts taken by MSPGCL during the MTR Petition for considering the relaxed norms approved in this Order on its merit.” [Emphasis added]*

As can be seen from the MTR petition, MSPGCL has not been able to abide by MERC’s directives to gradually minimize the grade slippage despite it being their responsibility as per the contract. As recognised by the Commission in Order 296 of 2019, allowing such relaxations in GCV leaves little incentive for MSPGCL to control GCV loss, and could lead to litigation. Thus, we request that the Commission does not permit any additional relaxations and even reconsider such relaxations.

## 2. Coal washing

It is good to note that the data submitted to MSPGCL in response to objection 7 includes Rs/Mcal values for washed and raw coal, which was not present in its MTR petition. The provision of such values makes it possible to clearly compare and assess the cost/benefit of coal beneficiation, as required by the Commission.

However, it is challenging to assess the actual cost impact on account of discrepancies in data as reported in format F2.2. This is apparent in the case of Chandrapur 8-9 where the price of washed coal is shown as being lower than that of raw coal. Even in cases where this is not the case, such as for Koradi 8-10, the difference in cost between raw and washed coal is shown as being only lower by around Rs. 200/tonne, but Table 122 and 123 of the MTR petition indicate that the actual costs of washed coal is actually much higher.

Additionally, in its response, MSPGCL states that given improvement in coal quality after washing, the Rs./kcal for washed coal is lower than that of raw coal. But it should be noted that such comparison is made between GCV of washed coal and GCV of coal as received. However, if MSPGCL would fulfil its responsibility and limit quality loss between loading and unloading, such coal washing, and costs incurred on account of it, could be

avoided. This is because GCV of washed coal is comparable to that of raw coal at the loading point. For instance, in the case of Koradi 8-10, GCV of washed coal as received is 3942 kcal/kg which is comparable to 3948 kcal/kg, the GCV of raw coal as billed (for audited actual between 1 Apr 2021 and 10 Oct 2021).

Thus, given the above—and in light of the fact that adhering to coal quality as per the provisions in the Regulations (300 kcal/kg during transit and 125 kcal/kg stacking loss) can result in estimated reduction in energy costs by around Rs. 1,800 to 2,000 Crore, over the remaining control period—the Commission should not permit any relaxation in coal quality beyond that in the Regulations.

### 3. Response to Objection 2

- To reply a) & b): We would like to clarify that the savings in ARR estimated in our submission have been arrived at through reductions in the energy charges for thermal generation alone (as recorded for each plant in Format F2.2) and do not consider any reduction in fixed charges. Therefore, the estimates submitted are valid. PEG would be happy to provide further details of these calculations if needed.
- To reply c) & d): MSPGCL states that *“due to poor quality of coal, MSPGCL will required to use imported coal for blending in order to meet required heat content for respective stations”*. Firstly, as discussed above, if MSPGCL is able to fulfil its responsibility and maintain coal quality that has been paid for, it is unlikely to need blending to improve heat content for respective stations. Secondly, in the petition, MSPGCL repeatedly mentions the need for coal imports to deal with shortages and not to improve coal quality. In contrast, in its response to our submission, MSPGCL mentions the need for imports to improve GCV. Thirdly, if the need for imported coal is to improve GCV (and not to avoid shortages), then the quantities of imported coal mentioned in the data formats are extremely high, indicating projected imports are intended to meet shortages and not just improve quality. However, as discussed in Para 2.1 of PEG’s submission, it is highly unlikely that MSPGCL will need to import coal to meet shortages. Fourthly, in the unlikely event of shortages, e-auctions should be the preferred source, since it is much cheaper than imported coal, as mentioned in Para 4(b) of PEG’s submission.

### 4. Fuel Utilisation Plan

According to MSPGCL’s reply to Objection 4, MSPGCL did not get any FUP approved during the MYT approval process and it has been uploading monthly details of FAC on its website. However, as per MERC’s MYT Regulations 2019, MSPGCL was required to prepare a FUP for the control period, the final approval of which by the Commission was to be contingent on public consultation. The relevant regulations are included below:

*“40.1 The Generating Company shall prepare and submit Fuel Utilisation Plan for the Control Period commencing on April 1, 2020, along with the Petition for determination of Tariff for the Control Period from April 1, 2020 to March 31, 2025, in accordance with Part A of these Regulations, to the Commission for approval.*

*40.5 The Commission shall approve the Fuel Utilisation Plan and rationalise the variable cost of generation for Generating Unit/Station based on such Plan and suggestions and comments received from the beneficiary/ies for the Control Period as part of its Order on the MYT Petition”*

However, such an FUP was not submitted and approved as part of the MYT order, though the presence of such an FUP and associated data could have greatly aided in pre-empting and planning for the shortage that occurred in Apr-May 2022.

Additionally, MSPGCL is expected to publish information on its website on a monthly basis regarding its fuel utilisation and costs, which could be used by the Commission to determine prudence of such fuel costs. The relevant regulations are reproduced below:

*“40.6 A Generating Company shall maintain data of actual performance of Unit/Station wise Fuel Utilisation vis-à-vis Fuel Utilisation plan approved by the Commission, along with justification for variation between approved and actual fuel utilisation plan and, shall put up such data within fifteen days from the end of each month, on the internet website of the Generating Company. [...]*

*40.9 At time of truing up of respective year, the Commission shall scrutinise the implementation of actual Fuel Utilisation Plan vis-à-vis approved plan, deviations, if any, and justification submitted by a Generating Company thereon and; may disallow the variable cost of generation on account of operational inefficiencies in utilisation of fuel.” [Emphasis added]*

However, MSPGCL does not publish such data on its website. We request the Commission to direct MSPGCL to regularly publish such data on its website and request the Commission to use the data to strictly scrutinise MSPGCL’s cost and allow only prudent costs.

#### 5. Additional capitalisation for adhering with MoEFCC norms

Significant additional capitalisation to the tune of Rs. 12,000 crores are projected by MSPGCL in the remaining control period for adhering to revised MoEFCC emission norms. While adhering to these norms is important, prudence of expenditure to meet these norms is also important. In the interests of transparency, we request the Commission to conduct a public process towards final true-up of such costs.

6. We request the Commission to accept this additional submission on record and to allow us to make an oral submission during the public hearing on this matter.

Maria Chirayil and Ashok Sreenivas  
Prayas (Energy Group), Pune

Place: Pune  
Date: 30<sup>th</sup> January 2023

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